DCN Conference Solutions
Data Brochure

BOSCH
Invented for life

Congratulations with your new Data Brochure!

It is with great pride that we present to you the DCN Conference Solutions Data Brochure!
The Data Brochure shows our complete DCN product range, including:

- DCN Wireless discussion units
- DCN Next Generation discussion and conference units
- DCN central equipment
- DCN software solutions
- DCN accessories

In this data brochure you can also find the new DCN Central Control Unit which further enhances the functionality of our DCN Next Generation and DCN Wireless systems.

The new CCU allows a mix of wired and wireless delegate units in one single system, facilitating easy extension of DCN Next Generation systems to meet changing needs simply by adding DCN Wireless discussion units. Just one CCU is capable of controlling up to 245 wired and 245 wireless delegate units. Moreover, an Ethernet connection to the control PC provides far greater flexibility in locating the PC. The number of trunk outputs is also increased from 2 to 3 to provide greater flexibility in connecting wired delegate units, and the cables can be secured to the trunk outputs with cable locking clamps (DCN-DISCLM) to prevent them from being accidentally pulled out – an important consideration especially in temporary venues where cables trailing over the floor may be stepped on.

In addition, several cost-saving features have been added to the CCU. Output power has been increased, enabling the CCU to drive more delegate units, reducing the need and expense of additional power supplies in larger systems. And the CCU is also capable of being configured as a master, eliminating the expense of a dedicated network controller in large multi-CCU systems (with up 4000 delegate units).

Using the new CCU also enhances the DCN Wireless part, including advanced 128-bit AES Rijndael encryption that provides optimum protection against eavesdropping – important for security-sensitive venues. In addition, the wireless system now includes a voice activation mode in which microphones are automatically switched on when the delegates speak (enabling spontaneous, open discussions between delegates). A special VIP list of delegates with enhanced privileges can also be programmed into the system giving them priority in speaking. And when used together with the

Complete DCN product range

Conference Software Suite, PIN-code recognition is also available, meaning delegates can each be assigned their own seating position and a PIN code that they must enter when they take their seats to get access to their delegate unit and register their attendance.

Also in this data brochure you can find our full range of software solutions such as the powerful Conference Software Suite including the new Simultaneous Interpretation and Message modules, as well as other software solutions such as the Meeting Recorder software to digitally record meetings on the hard disk of a PC.

Having these products with their new enhanced features will help us to further strengthen our position in the conference market.

In addition to our product offering, Bosch offers excellent support, to enable you to help your customers find the perfect solution for their particular situation. A key element in our support is training and we offer a great variety of training sessions. We can also help you in particular projects with special requirements by offering customized solutions and/or project support.

For more information on our product range, or for sales support and training, please visit our website (www. boschsecurity.com) or contact your local Bosch representative. An address list per country is included in this Data Brochure.

Once again we thank you for your support and hope you will be able to put the DCN Conference Solutions Data Brochure to good use.

With kind regards,

Bosch Security Systems

Superior security, safety and communication products: stressing quality, innovation and support.

For over 100 years, the Bosch name has stood for quality and reliability. Bosch is the global supplier of choice for innovative technology, backed by the highest standards for service and support.

A tradition of innovation

We have a long tradition of attaching top priority to innovation. To achieve this, we invest more than 10 percent of our sales volume in R&D. Around the world, the Bosch Group has more than 34,000 research and development associates continuously working to develop new products, systems and innovative manufacturing processes, as well as to improve existing products.

The results are impressive: Bosch files an average of over 3800 patents a year, putting it among the world's top filers.

Committed to your success

Integral to our success are an in-depth understanding of our partners' and customers' needs and a commitment to delivering solutions that add real value and offer your customers a greater return on their investment. We make sure that all Bosch security, safety and communication products are efficient and user-friendly — and thus easier for you to sell.

Quality comes first

Our company's founder, Robert Bosch, set the standard. He wrote "I have constantly tried to make products that prove themselves superior in every respect ..." His motto was "sell the best of the best". Our strict adherence to this principle down to this day ensures the reliability of our products from day one. We use only the very best materials, purchased according to strict criteria. In-house quality control standards support our core processes of development, production, logistics and purchasing.

Global and local service you can count on

As part of the Robert Bosch Corporation, we are one of the world's largest manufacturers of security, safety and communication products. Our worldwide network of highly trained support technicians is always near at hand, responding quickly and effectively to meet your needs as they arise. The **Bosch Security Academy** also holds local training courses to keep you optimally informed about all our products and technologies.

Long-term partnerships

Our goal has always been to build long-term, sustainable relationships with our partners and customers. With Bosch behind you, you can look forward to many years of successful and profitable partnership.

Great variety

You can choose from a great variety of Security, Safety and Communications Products and Systems: Video surveillance -- including video over IP and Intelligent Video Analysis --, Intrusion, Access control and Fire alarm, Public Address and Voice evacuation, Management systems, Professional audio, Conference systems and Care solutions.

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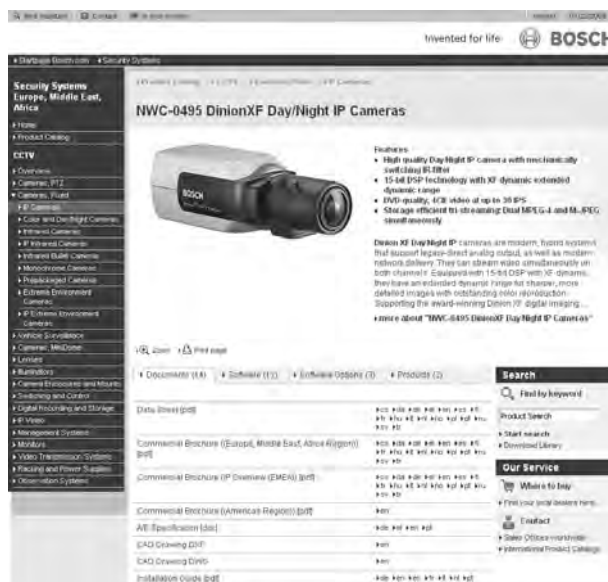www.boschsecurity.com/ua

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DCN Conference Solutions

Features

▸ **Optimized structure and efficiency in meetings**

▸ **Up to 31 interpretation channels, plus floor**

▸ **Full range of voting facilities**

▸ **Flexible interfacing with 3rd party devices**

▸ **Easy system expansion with wired and wireless units**

The Bosch Digital Congress Network (DCN) brings the benefits of innovative digital technology to discussion and conference systems.

It is the first entirely digital system of its kind, and offers versatility, high audio quality and data transmission while providing complete control over conference proceedings.

Whether you build a wired set-up (using DCN Next Generation units), a wireless set-up (using DCN Wireless units) or create a strong combination by mixing both, the DCN system puts you in total control of your conference environment.

The documentation within this chapter gives background information on the complete product line.

Introduction

World's first fully digital conference system, enhanced for even higher performance

The Bosch Digital Congress Network brings the benefits of innovative digital technology to discussion and conference systems. It is the first entirely digital system of its kind, and offers versatility, high audio quality and data transmission while providing complete control over conference proceedings. Operation and installation are highly simplified, with modern, user-friendly control software and flexible management facilities for all types of conferences. Whether you install a wired set-up (using DCN Next Generation units), a wireless set-up (using DCN Wireless units) or create a strong combination by mixing both, the DCN system puts you in total control of your conference environment. It is suitable for events from small, informal gatherings up to international multi-lingual conferences.

Digital performance with user-friendly software control

The system meets every requirement of modern conference management. Facilities include basic microphone management, delegate identification and registration, electronic voting, information distribution and display, and extensive simultaneous interpretation. The DCN is above all user-friendly. With the appropriate software modules, a single operator can control and monitor even the largest of conferences.

Modular system approach

By simply daisy-chaining DCN Next Generation wired units or adding DCN Wireless units, any configuration can be put together. This modular structure means a system can be tailored for conferences at all levels. Systems are easily extended by adding more equipment like audio expanders or software modules.
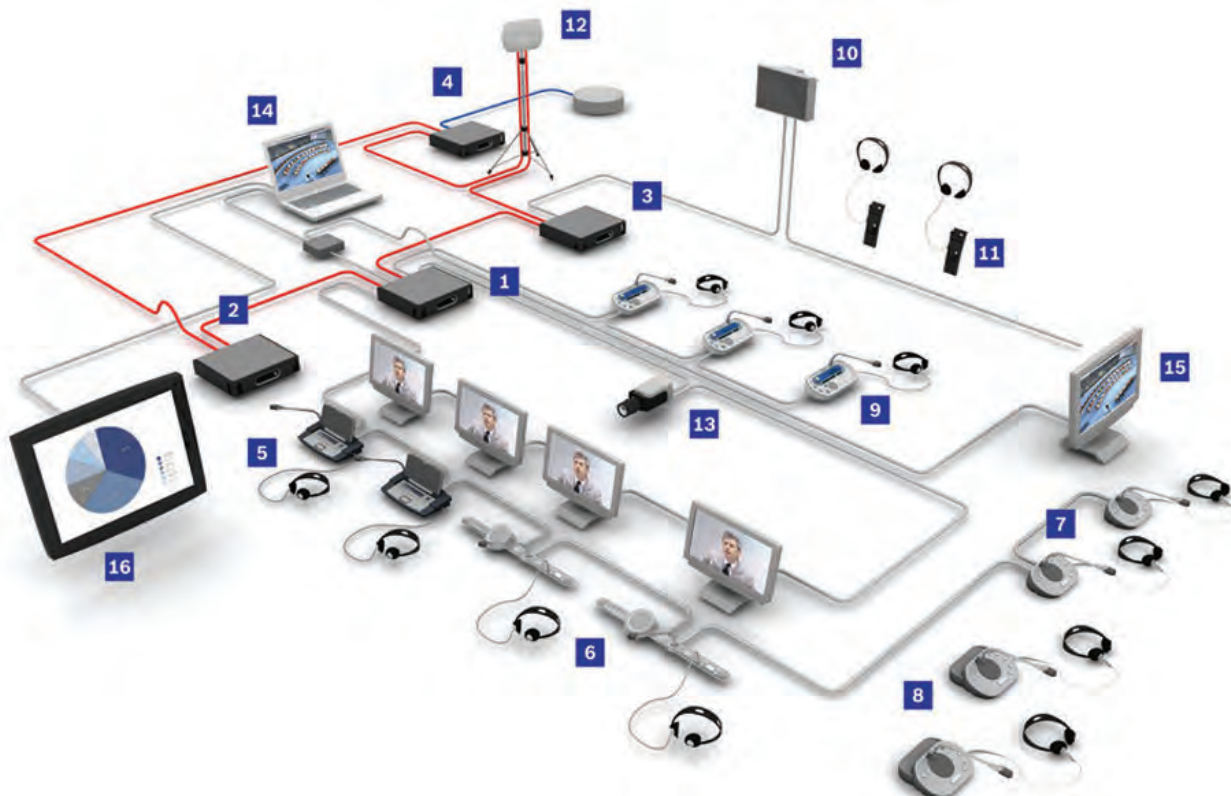
System network

1. Central Control Unit
2. Digital Audio Expander (audio-logging)
3. Integrus Transmitter
4. CobraNet™ unit
5. Concentus units
6. Flush-mount units
7. Wired discussion units
8. Wireless discussion units
9. Interpreter desks
10. Integrus radiator
11. Integrus receivers
12. Wireless Access Point
13. Camera
14. DCN control software
15. Touchscreen
16. LCD video screen

Range of equipment

The Bosch DCN range includes wired and wireless conference units, central control units, wireless access point (WAP), simultaneous interpretation and language distribution equipment, conference control software, information provision and installation equipment. This is complemented by external equipment such as PCs, monitors, booster amplifiers, loudspeakers and printers, all of which are easily integrated into the DCN system.

Advanced audio coupling

Via the optical network, a variety of audio couplings are possible, including coupling small systems with a few languages into a large system with as many as 31 languages. It is also possible to extract and insert both digital (AES/EBU or SPDIF) and analog audio. Other advanced audio coupling techniques include CobraNet™. CobraNet™ is a combination of software, hardware and network protocol that allows distribution of many real-time, high-quality digital audio channels over an Ethernet network using CAT5 cables. CobraNet™ makes it easy to distribute audio in buildings and connect the DCN system to other audio CobraNet™-compatible devices such as audio recorders and audio mixers.

Contribution equipment

Contribution equipment covers the units that participants use to take part in a conference. Depending on the type of contribution unit, participants can listen, speak, register a request-to-speak, receive screen messages, hold private conversations with other participants via an intercom, take part in electronic voting and receive simultaneous interpretation of the floor language.

Chairman units have a microphone priority system that temporarily mutes all active delegate microphones.

Excellent speech intelligibility

The advanced digital technology delivers excellent audio performance with no loss in signal quality or level. Each unit receives an audio signal of consistently high quality, which makes a significant contribution to speech intelligibility. The DCN system virtually eliminates problems associated with conventional systems, such as background noise, interference, distortion and cross talk.

The DCN Wireless units are also protected against interference from mobile equipment using Bluetooth or microwave signals. What's more, the system is mobile phone-proof, so participants can leave their mobile phones switched on during meetings without disrupting the discussion system signal.

Reduced installation costs

Fast, cost-saving installation is an important benefit of the DCN system. DCN Next Generation units use thin, flexible, twin coaxial cables to carry all the system's digital signals, eliminating the need for costly and vulnerable multi-core cables. The cables are easily run through existing ducting and cable conduits. They can simultaneously carry up to 32 high-quality contribution channels and 32 high-quality distribution channels.

Wireless convenience in all aspects

When using DCN Wireless discussion units, conferences and seminars can be set up with a great degree of freedom thanks to the system's flexible design. The WAP can be mounted on a wall, ceiling or tripod, and is easily positioned for best technical or aesthetic effect. Individual wireless discussion units can be added or rearranged by simply picking them up and moving them. With minimal time required for set-up or break-down, multiple events can be planned in sequence with virtually no delays. The DCN Wireless gives great support to conferences and seminars anywhere people meet.

Simple battery maintenance is essential for a wireless application. Discussion units use lithium-ion batteries with little or no charge degradation during their long life. A fully charged battery lasts approximately 20 hours, which is far longer than most meetings or conferences. Batteries have a short recharge time – as little as a few hours – and as only the battery packs need to be removed; the discussion units can remain in place. Furthermore, each unit has a patent-pending "sleep mode" to conserve power consumption during longer breaks. And, with the remote overview available via the Conference Software, an administrator can view the battery and signal statuses of all active discussion units.

Secure and stable wireless communication

The system makes use of secure wireless communication with 128-bit AES (Advanced Encryption Standard) Rijndael encryption. The intelligent system even features automatic subscription blocking.

Further subscriptions are prevented even if the administrator forgets to close the subscription process.

The WAP is linked to the CCU using Bosch's proprietary optical network, which provides digital optical communication and power supply over a single cable. Secure wireless communication between the WAP and the discussion units is in the 2.4 GHz band, which is license-free worldwide.

Simultaneous interpretation and language distribution equipment

The DCN system has comprehensive simultaneous interpretation and language distribution facilities that enable it to meet the demands of multilingual conferences.

All interpretation facilities are integrated into the basic system concept, with interpretations using the same digital trunk line cabling as all other system functions. It is relatively simple to integrate language facilities into existing DCN Next Generation or DCN Wireless systems. The simultaneous interpretation system enables both direct and auto relay interpretation modes to cater for less familiar languages. Each interpreter desk has an output for the normal (primary) language and another for alternative languages.

Up to 31 different languages

The DCN Next Generation interpreter desk accommodates up to 31* language channels, plus the original floor language, all with an audio-bandwidth of 20 kHz. A maximum of six desks can be installed per interpreter booth.

When used in a stand-alone system, its built-in microprocessor is manually programmed to allocate language channels, channel routing and interlocks. In operator-controlled systems, the desk can be configured, controlled and monitored using the dedicated software module for simultaneous interpretation.

* The first 10 channels can be distributed through the DCN Wireless discussion units, the other channels are available throughout the rest of the system.

Wired or wireless language distribution

The DCN system offers a choice for language distribution. When used in combination with DCN Next Generation delegate units, language distribution can be via the system cabling, and languages are accessed and selected using channel selector units or delegate units with built-in channel selection facilities.

When using the DCN Wireless discussion units, language distribution is via the secure wireless signal and participants can receive the language channels with the built-in channel selectors in the units.

In addition, the Integrus digital infrared (IR) language distribution system can be used to distribute languages throughout the conference venue using IR transmitters and radiators. Access is by means of personal infrared receivers with headphones.

Integrus System for wireless language distribution

Integrus is connected via the optical network to the DCN system to distribute all 32 languages with IR-digital technology that conforms to IEC 60603 part 7. IR digital technology ensures maximum sound quality with a signal-to-noise ratio of 80 dB. Integrus also incorporates a special operation mode to couple rooms. This means that multiple systems located in separate rooms can provide exactly the same language. For more information about Integrus, see the Integrus Data Brochure.

Central control equipment

The Central Control Unit (CCU) forms the heart of the conference management system. The CCU can operate stand¬alone to provide automatic conference control, or be controlled by an operator via a PC when more extensive management is required.

The CCUs can control up to 245 DCN Next Generation wired and 245 DCN Wireless contribution units* (such as delegate and chairman units, interpreter desks). If more capacity is required, CCUs can be stacked together to support up to 4000 microphone positions*. CCUs can also provide power for a number of contribution units. The maximum number depends on the type of contribution units used in the application.

* Requires the DCN-CCU2

Central Control Unit

Fully automatic conference proceedings

In standalone mode, the CCU does not require operator control and automatically manages conference proceedings. It offers basic microphone management, simultaneous interpretation and voting facilities, as well as 32 high-quality audio channels. This effectively allows unsupervised control of even large, international conferences.

Operator control via a PC

For extended functionality, the CCU also offers operator control via a PC using an Ethernet cable. A comprehensive range of software modules is available for PC-controlled DCN systems. These modules run under Microsoft Windows, and integrate conference preparation, management and control into this operating system. Any combination of modules can be installed to satisfy specific system requirements.

Information and hall displays

A major strength of the DCN system is its ability to distribute information to conference participants quickly and efficiently for all requirements. A wide range of displays is supported, from personal LCD screens to video equipment for venue broadcasting.

In wired applications, the Concentus chairman unit and the Concentus Full Function delegate units can be used. These are equipped with a graphic LCD screen which displays delegate information, voting time, public and personal messages, microphone status and multilingual user instructions. These screens can display languages such as Chinese that use non-European characters. Interpreter desks are equipped with backlit LCD screens.

Automatic camera control

The DCN system can automatically show an image of the current speaker on flat screens or large projection screens in the main hall, lobby, interpreters' booths, breakout rooms or anywhere else required. Delegate information appears along with the image. For a general overview of all delegates, the system can switch to fixed-angle cameras. Camera control and configuration is automatic, so the system can be run without an operator. Bosch AutoDome cameras are ideal for this application and are especially useful when video conferencing between sites. Camera control ensures that participants always have appropriate details on the current speaker.

Applications

Application examples

Bosch Security Systems

Example 1

Small meetings

Shopping list
1. Discussion units with voting feature
2. Chairman unit with voting feature
3. Central control unit
4. Modular AutoDome
5. Bosch Plena Public Address System with XLA 3200 Line Array Loudspeakers

Guiding and controlling the discussion

Delegates request the floor by pressing the microphone button. Multiple requests are automatically placed on a waiting list by the CCU. The chair can register requests to speak and can override delegates with a priority key, which sounds an "attention" tone and mutes all delegate microphones. The system also includes a 'voice mode' which does not require the delegates to use the microphone on/off switch. This facilitates faster discussions.

Collecting and tallying votes

The system supports five kinds of voting: parliamentary, for/against, multiple choice, opinion polling and audience response.

The Concentus chairman unit can be used to start and stop voting with the voting script and results are displayed on the unit's graphic LCD panel. Voting can also be controlled remotely, by an operator using a PC or touch screen, and results can be exported, in real-time and in various formats, to numeric hall displays or large screens.

Supporting video - without an operator

An image of the current speaker, including the speaker's name, can be displayed on all monitors including those used for video conferencing.

Example 2

Advanced International conferences

Shopping list

1. Flush-mount units with card-reader module
2. Flush-mount chairman unit with card-reader module
3. Interpreter desks
4. Integrus receivers
5. Integrus radiator
6. PC and touchscreen with DCN Control Software

Note The interpreter booths shown in the drawing are for illustration purposes only and do not represent a real situation. Requirements with respect to sound insulation and other general characteristics of interpreter booths are specified by ISO (the International Organization for Standardization) in: ISO 2603 - Fixed booths for simultaneous interpretation. ISO 4043 - Mobile booths for simultaneous interpretation.

Adding software controls

Advanced software functions give operators an added level of control. There are features for configuring authorizations, making agendas, listing delegates, programming ID cards, synoptic layouts and electronic voting.

Registering attendance

Attendance registration enables delegates to identify themselves at the entrance or at their conference unit.

Delegate positions can be equipped with ID card readers that accept PIN-codes. For high-security situations, the DCN Concentus and DCN flush-mount units can be extended with a fingerprint reader for biometric verification.

Simultaneous interpretation

When language interpretation is needed, soundproof booths can be equipped with DCN interpreter units. Each interpreted language is automatically distributed to headphones connected to delegate units or flush-mount channel selectors. To give delegates greater freedom of movement, interpreted languages can also be directed to wireless Integrus pocket receivers.

Example 3

Keeping pace with your changing needs

Shopping list

1. Concentus delegate units
2. Concentus chairman unit
3. Wired discussion units
4. Wireless discussion units
5. Wireless access point
6. Battery pack chargers
7. DCN interpreter desk
8. Integrus receivers
9. Integrus radiator
10. Central control unit
11. Digital audio expander
12. CobraNet™ unit
13. Integrus transmitter
14. DCN control software

Note The interpreter booths shown in the drawing are for illustration purposes only and do not represent a real situation. Requirements with respect to sound insulation and other general characteristics of interpreter booths are specified by ISO (the International Organization for Standardization) in: ISO 2603 - Fixed booths for simultaneous interpretation. ISO 4043 - Mobile booths for simultaneous interpretation.

Staying flexible with wired and wireless options

A DCN system can be built using wired or wireless units, or any combination of the two. When combined, the system has the unique benefits of both unit types. Wired systems can be extended with wireless discussion units for larger conferences or difficult to reach positions. For even larger setups, more CCUs can be added and, no matter what the configuration, advanced software functions make it easy to operate.

Expanding the possibilities

The DCN conference elements can be joined together in any number of ways. The interpretation system can be combined with an Integrus system, for wireless distribution of up to 32 language channels. Plus, the entire setup can be interfaced to third-party systems, including broadcast, building management, and public address facilities. As a customized solution, individual touch screens can be added for voting functions and for instant access to online data.

Streaming content to remote participants

Using the Internet, the system can provide off-site delegates with full access to audio, video and data, so they can follow speeches, view presentation slides, see the live meeting video, get voting results, retrieve messages, and more.

Example 4

Location friendly

Shopping list

1. Wireless discussion unit
2. Wireless dual discussion unit
3. Central control unit
4. Wireless access point
5. Battery pack charger
6. DCN control software

Location Friendly

With superb sound and speech quality of up to 20 kHz, the DCN Wireless Discussion System allows participants to speak and listen with ease. Bosch has gone to great lengths to design a system that is easy to use and adaptable to changing situations and requirements. A basic discussion unit allows delegates to talk and listen, while a dual discussion unit is a cost-effective solution which serves two delegates simultaneously. The system includes also a 'voice mode' which doesn't require the delegates to use the microphone on/off button and allow faster discussions. Chairman's functionality can easily be added to a unit to allow a chairman to overrule delegates with the touch of a button. Featuring an award-winning Wireless Access Point (WAP), this discussion system can be installed, rearranged and operated with virtually no impact on the integrity of the location.

Whether the venue is large or small, multiuse or historical, the DCN Wireless Discussion System by Bosch offers organizations unparalleled functionality and flexibility.

Example 5

Full featured wireless system

Shopping list

1. Wireless discussion unit with voting
2. Central control unit
3. Wireless access point
4. Battery pack charger
5. Modular AutoDome
6. DCN control software
7. DCN interpreter desk

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Voting

For interactive situations where polling and voting are important, discussion units with voting functionality can be used in the DCN Wireless Discussion System. The operator can start, stop and suspend voting via the DCN control software on a personal computer or via a touch screen. Voting results can be synoptically displayed on various kinds of screens and logged when necessary. The DCN control software also allows for anonymous voting, displaying the total result. The Concentus chairman unit can be used to start, stop and suspend voting, with the voting script and results displayed on the unit's graphic LCD panel.

Interpretation

With a 10-language capacity, the system is designed so that delegates can follow the meeting in their preferred language. This is why certain DCN Wireless Discussion units come equipped with a channel selector and headphone jack. This makes it ideal for international 'dinner meetings' where cables can be highly inconvenient.

Automatic Camera Control

The system can automatically show an image of the current speaker on monitors or projection screens in the main hall, interpreters booths, or anywhere else required. Camera control is automatic, so no full-time operator is required. This makes the system also highly suitable for Video Conferencing, which is good news for the environment. For this application Bosch AutoDome cameras are ideal.

Wireless Discussion Units

The DCN Wireless system is designed to be the most flexible discussion system available, the DCN Wireless Discussion System by Bosch offers the perfect solution for challenging locations such as multi-user venues and historical buildings. The wireless system lets owners of multi-use venues provide better, more effective service to their customers. With minimal time required for set-up or breakdown, multiple events can take place in sequence, enabling better and more effective use of space.

The DCN Wireless Discussion System has been intelligently designed to be as user friendly as possible, whether the user is a system operator, chairman or participant. Discussion units are comfortable and intuitive to use. The system is built with high-end finishing materials, giving it a timeless and discrete look. The design includes changeable rims (charcoal black, matte or glossy metal and silver), meaning that you can modify each discussion unit to fit in with its environment.

The Wireless Discussion Units communicate with the Wireless Access Point (WAP) by means of secure wireless communication with 128-bits AES Rijndael encryption. It uses one of the three non-overlapping-carriers in the 2.4 GHz band, which is license-free worldwide. The WAP is linked to the CCU using Bosch's proprietary optical network, which provides digital optical communication and power supply over a single cable.

For extra confidentiality an automatic blocking function prevents subscription of unauthorized Wireless Discussion Units to the system.

The Wireless Discussion Units ares available with dark colored bases. All units have a pluggable microphone (supplied separately) available in short and long stem length versions. The microphones have flexible stems for ease of use. Special rugged suitcases that accommodate complete systems are available for storage and transport.

The Wireless Discussion Units range from units with standard discussion functionality, to versions with a channel selector and voting that enable contributing delegates to take part in the decision making process, a vital aspect of modern conferencing. The Discussion units have 4 different operation modes. All Discussion units can be used either for normal delegates or as a chairman unit. The third mode is dual use, in which two delegates each have their own microphone button for individual identification. The fourth mode is auxiliary control. In this mode, the delegate has an extra button next to the microphone button, which can be used as an usher call, for example.

Wireless Discussion Units overview

	Single delegate	Chairman	Dual use	Auxiliary	Pluggable microphone	Channel Selector	Voting
DCN-WD-D	•	•			•		
DCN-WDD-D	•	•	•	•	•		
DCN-WDV-D	•	•		•	•		•
DCN-WDCS-D	•	•			•	1	
DCN-WDDCS-D	•	•	•	•	•	2	
DCN-WDVCS-D	•	•		•	•	1	•

All Wireless Discussion Units are delivered with a single delegate button. For the chairman, dual and auxiliary mode two different sets of buttons are available: Dual use buttons and chairman buttons. The chairman buttons can also be used for auxiliary control. The buttons are easily removed using a special tool (supplied with the buttons). Sets of buttons must be ordered separately.

Replacing the buton

Button types:
1. Single use button
2. Dual use button
3. Chairman or Auxiliary control button

Discussion units with short microphones

High capacity rechargeable lithium-ion battery pack for Wireless Discussion Unit

All Wireless Discussion Units are delivered without the pluggable microphones. These microphones have to be ordered separately. Two different lengths of pluggable microphones are available. Rechargeable high capacity battery packs and rims need to be ordered separately as well. Several rims are available in different finishes. The rims can be mounted without any tools.
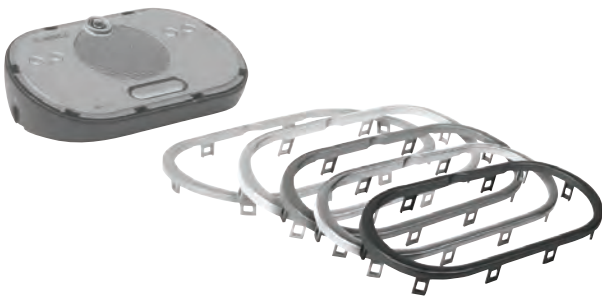
Rims to be mounted on the discussion unit

The rechargeable battery is the power source of the wireless discussion units. The battery is a high capacity Lithium-ion type, capable of providing up to 20 hours typical use from a full charge, while fully charging the battery pack from empty takes just 3 hours. The microprocessor controlled lithium-ion cells avoid the charge degradation issues associated with other rechargeable battery types.

DCN-WD-D Wireless Discussion Unit

Features

▸ **Used as delegate or chairman unit**

▸ **Separate battery pack, easy to change and charge**

▸ **Advanced power saving techniques**

▸ **Low susceptibility to electromagnetic interference**

▸ **Auto microphone-off**

▸ **Auto-search for own network**

▸ **Auto switch-off when out of range**

To the participant the most important part of a conference system is the discussion unit. Bosch has built on the elegant design of the DCN Next Generation discussion units to create a new series of wireless discussion units with unrivalled looks and features.

The DCN-WD-D Wireless Discussion Unit enables participants to speak, register a request-to-speak, and listen to the speaker.

Functions

Speech intelligibility

Maximum speech intelligibility is guaranteed at all times. Operating in the 2.4 GHz (license free) band, the wireless discussion units produce crystal-clear sound due to a very high signal-to-noise ratio and antenna diversity. This means the signal is transmitted along different propagation paths, ensuring optimal receipt. The system is also protected against interference from mobile phones and other equipment that makes use of Bluetooth or microwave signals.

Security

Wireless communication means extra security considerations. The DCN Wireless system and discussion units therefore feature 128-bits AES encryption to prevent eavesdropping and unauthorized access. Encryption ensures the information within the system remains confidential.

Microphones

A socket is provided to connect the pluggable microphones which are available in short and long stem versions (DCN-MICS and DCN-MICL, to be ordered separately).

Headphones and loudspeakers

The unit also accommodates two headphone connections, so the speaker can be heard clearly even with excessive background noise. To prevent acoustic feedback the built-in loudspeaker is muted when the microphone is on. If enabled, the headphones volume is also automatically reduced to prevent acoustic feedback when the microphone is on.

Rims and buttons

Different rims are available to allow matching with the interior (DCN-DISR, to be ordered separately).

The unit can be used as:

- a single delegate unit
- a dual delegate unit
- a chairman unit (DCN-DISBCM chairman buttons, to be ordered separately)
- a single delegate unit with auxiliary button (to be used as an usher call, for example).

Battery maintenance

Simple battery maintenance is essential in a wireless system. A unique feature of Bosch's wireless discussion units are the separate rechargeable battery packs (DCN-WLIION, to be ordered separately). These Lithium-ion battery packs can be removed and replaced in a matter of seconds, providing maximum flexibility in recharge scheduling.

Controls and Indicators

On front

- Microphone button with a red or green illuminated ring. Red indicates microphone is active, green indicates request-to-speak accepted
- Headphone volume control buttons

On rear

- Out-of-range indicator
- Battery low indicator

Under base

- Recessed 'De-init' switch
- Mode select switches (delegate, chairman, etc.)

Interconnections

- Socket for pluggable microphone
- Two 3.5 mm (0.14 in) headphone sockets stereo jack type
- DC power input from DCN-WPS (accessible when battery pack is removed)

Certifications and Approvals

Region	Certification
Europe	CE

Technical Specifications

Electrical

Frequency response	30 Hz - 20 kHz
Headphone load impedance	>32 ohm <1k ohm
Output power	2 x 15 mW/32 ohm

Mechanical

Mounting	Tabletop
Dimensions (H x W x D)	
without microphone	61 x 190 x 160 mm (2.4 x 7.5 x 6.3 in)
Weight	
without battery	485 g (1.07 lb)
with battery	700 g (1.54 lb)
Color top	Silver (RAL 9022)
Color base	Charcoal (PH 10736)

Ordering Information

DCN-WD-D Wireless Discussion Unit
pluggable microphone, dark base, wireless; microphone, rims and batteries to be ordered separately

DCN-WD-D

Accessories

DCN-MICS Pluggable Short Microphone
length 310 mm (12.2 inch), silver

DCN-MICS

DCN-MICL Pluggable Long Microphone
length 480 mm (18.9 inch), silver

DCN-MICL

DCN-DISRH-SR Rim High Gloss Silver (10 pcs)
silver, high gloss, 10 pieces

DCN-DISRH-SR

DCN-DISR-SR Rim Silver (10 pcs)
silver, 10 pieces

DCN-DISR-SR

DCN-DISR-D Rim Dark (10 pcs)
dark, 10 pieces

DCN-DISR-D

DCN-DISRMH Rim Metal High Gloss (10 pcs)
metal, high gloss, 10 pieces

DCN-DISRMH

DCN-DISRMS Rim Metal Semi Gloss (10 pcs)
metal, semi gloss, 10 pieces

DCN-DISRMS

DCN-DISBCM Buttons Chairman (10 sets)
10 sets

DCN-DISBCM

DCN-WLIION-D Battery Pack for Wireless Discussion Units
charcoal color, lithium-ion, 7.2 VDC, 4800 mAh

DCN-WLIION-D

DCN-WPS Power Supply for Wireless Discussion Units
not approved for some countries

DCN-WPS

Ordering Information

DCN-FCWD10 Flight Case for 10 Wireless Discussion Units
light grey, can hold 10 wireless discussion units and 2 charging units

DCN-FCWD10

DCN-WDCS-D Wireless Discussion Unit with Channel Selector

Features

▸ **Used as delegate or chairman unit**

▸ **Channel selector with number and abbreviated channel name**

▸ **Separate battery pack, easy to change and charge**

▸ **Advanced power saving techniques**

▸ **Low susceptibility to electromagnetic interference**

▸ **Auto microphone-off**

▸ **Auto search for own network**

▸ **Auto switch-off when out of range**

To the participant the most important part of a conference system is the discussion unit. Bosch has built on the elegant design of the DCN Next Generation discussion units to create a new series of wireless discussion units with unrivalled looks and features.

The DCN-WDCS-D Wireless Discussion Unit with Channel selector enables participants to speak, register a request-to-speak, listen to the speaker or to an interpreter of their choice.

Functions

Speech intelligibility

Maximum speech intelligibility is guaranteed at all times. Operating in the 2.4 GHz (license free) band, the wireless discussion units produce crystal-clear sound due to a very high signal-to-noise ratio and antenna diversity. This means the signal is transmitted along different propagation paths, ensuring optimal receipt. The system is also protected against interference from mobile phones and other equipment that makes use of Bluetooth or microwave signals.

Security

Wireless communication means extra security considerations. The DCN Wireless system and discussion units therefore feature 128-bits AES encryption to prevent eavesdropping and unauthorized access. Encryption ensures the information within the system remains confidential.

Channel selector

The unit has a built-in channel selector that makes it suitable for discussions in which more than one language is used, and simultaneous interpretations are available. The channel selector includes two up-and-down channel select keys, and a display showing the number and the abbreviation of the languages. This enables rapid selection of the required language channel.

Microphones

A socket is provided to connect the pluggable microphones which are available in short and long stem versions (DCN-MICS and DCN-MICL, to be ordered separately).

Headphones and loudspeakers

The unit also accommodates two headphone connections, so the speaker can be heard clearly even with excessive background noise. To prevent acoustic feedback the built-in loudspeaker is muted when the microphone is on. If enabled, the headphone volume is also automatically reduced to prevent acoustic feedback when the microphone is on.

Rims and buttons

Different rims are available to allow matching with the interior (DCN-DISR, to be ordered separately).

The unit can be used as:

- a single delegate unit
- a dual delegate unit
- a chairman unit (DCN-DISBCM chairman buttons, to be ordered separately)
- a single delegate unit with auxiliary button (to be used as an usher call, for example).

Battery maintenance

Simple battery maintenance is essential in a wireless system. A unique feature of Bosch's wireless discussion units is the separate rechargeable battery packs (DCN-WLIION, to be ordered separately). These Lithium-ion battery packs can be removed and replaced in a matter of seconds, providing maximum flexibility in recharge scheduling.

Controls and Indicators

On front

- Alphanumeric display for language channel selection with number and abbreviated channel name
- Channel up and down selection buttons
- Microphone button with a red or green illuminated ring:
  - Red indicates microphone is active

- green indicates request-to-speak accepted
- Headphone volume control buttons

On rear

- Out-of-range indicator
- Battery low indicator

Under base

- Recessed 'De-init' switch
- Mode select switches (delegate, chairman, etc.)

Interconnections

- Socket for pluggable microphone
- Two 3.5 mm (0.14 in) headphone sockets stereo jack type
- DC power input from DCN-WPS (accessible when battery pack is removed)

Certifications and Approvals

Region	Certification
Europe	CE

Technical Specifications

Electrical

Frequency response	30 Hz - 20 kHz
Headphone load impedance	>32 ohm <1k ohm
Output power	2 x 15 mW/32 ohm

Mechanical

Mounting	Tabletop
Dimensions (H x W x D)	
without microphone	61 x 190 x 160 mm (2.4 x 7.5 x 6.3 in)
Weight	
without battery	495 g (1.10 lb)
with battery	710 g (1.57 lb)
Color top	Silver (RAL 9022)
Color base	Charcoal (PH 10736)

Ordering Information

DCN-WDCS-D Wireless Discussion Unit with Channel Selector pluggable microphone, dark base; microphone, rims and batteries to be ordered separately	**DCN-WDCS-D**
Accessories	
DCN-MICS Pluggable Short Microphone length 310 mm (12.2 inch), silver	**DCN-MICS**
DCN-MICL Pluggable Long Microphone length 480 mm (18.9 inch), silver	**DCN-MICL**
DCN-DISRH-SR Rim High Gloss Silver (10 pcs) silver, high gloss, 10 pieces	**DCN-DISRH-SR**

Ordering Information

DCN-DISR-SR Rim Silver (10 pcs) silver, 10 pieces	**DCN-DISR-SR**
DCN-DISR-D Rim Dark (10 pcs) dark, 10 pieces	**DCN-DISR-D**
DCN-DISRMH Rim Metal High Gloss (10 pcs) metal, high gloss, 10 pieces	**DCN-DISRMH**
DCN-DISRMS Rim Metal Semi Gloss (10 pcs) metal, semi gloss, 10 pieces	**DCN-DISRMS**
DCN-DISBCM Buttons Chairman (10 sets) 10 sets	**DCN-DISBCM**
DCN-WLIION-D Battery Pack for Wireless Discussion Units charcoal color, lithium-ion, 7.2 VDC, 4800 mAh	**DCN-WLIION-D**
DCN-WPS Power Supply for Wireless Discussion Units not approved for some countries	**DCN-WPS**
DCN-FCWD10 Flight Case for 10 Wireless Discussion Units light grey, can hold 10 wireless discussion units and 2 charging units	**DCN-FCWD10**

DCN-WDD-D Wireless Dual Discussion Unit

Features

▸ **Two separate headphone connections with individual volume control**

▸ **Useable as single/dual delegate or chairman unit**

▸ **Separate battery pack, easy to change and charge**

▸ **Advanced power saving techniques**

▸ **Low susceptibility to electromagnetic interference**

▸ **Auto microphone-off**

▸ **Auto-search for own network**

▸ **Auto switch-off when out of range**

To the participant the most important part of a conference system is the discussion unit. Bosch has built on the elegant design of the DCN Next Generation discussion units to create a new series of wireless discussion units with unrivalled looks and features.

The DCN-WDD-D Wireless Dual Discussion Unit enables participants to speak, register a request-to-speak, and listen to the speaker.

Functions

Speech intelligibility

Maximum speech intelligibility is guaranteed at all times. Operating in the 2.4 GHz (license free) band, the wireless discussion units produce crystal-clear sound due to a very high signal-to-noise ratio and antenna diversity. This means the signal is transmitted along different propagation paths, ensuring optimal receipt. The system is also protected against interference from mobile phones and other equipment that makes use of Bluetooth or microwave signals.

Security

Wireless communication means extra security considerations. The DCN Wireless system and discussion units therefore feature 128-bits AES encryption to prevent eavesdropping and unauthorized access. Encryption ensures the information within the system remains confidential.

Microphones

A socket is provided to connect the pluggable microphones which are available in short and long stem versions (DCN-MICS and DCN-MICL, to be ordered separately).

Headphones and loudspeakers

The unit also accommodates two separate headphone connections with individual volume control on either side of the unit, allowing one unit to serve two delegates. It can be converted to a full dual-use unit by replacing the microphone button with two separate buttons for individual microphone control and individual delegate identification (DCN-DISBDD dual-use buttons, to be ordered separately).

To prevent acoustic feedback the built-in loudspeaker is muted when the microphone is on. If enabled, the headphones volume is also automatically reduced to prevent acoustic feedback when the microphone is on.

Rims and buttons

Different rims are available to allow matching with the interior (DCN-DISR, to be ordered separately).

The unit can be used as:

• a single delegate unit
• a dual delegate unit
• a chairman unit (DCN-DISBCM chairman buttons, to be ordered separately)
• a single delegate unit with auxiliary button (to be used as an usher call, for example).

Battery maintenance

Simple battery maintenance is essential in a wireless system. A unique feature of Bosch's wireless discussion units are the separate rechargeable battery packs (DCN-WLIION, to be ordered separately). These Lithium-ion battery packs can be removed and replaced in a matter of seconds, providing maximum flexibility in recharge scheduling.

Controls and Indicators

On front

• Microphone button with a red or green illuminated ring (red indicates microphone is active, green indicates request-to-speak accepted)*
• Two individual headphone volume control buttons

On rear

• Out-of-range indicator
• Battery low indicator

Under base

• Recessed 'De-init' switch
• Mode select switches (delegate, chairman, etc.)

Interconnections

• Socket for pluggable microphone

- Two 3.5 mm (0.14 in) headphone sockets stereo jack type
- DC power input from DCN-WPS (accessible when battery is removed)

* When unit is used in Dual Delegate mode, this function is available individually.

Certifications and Approvals

Region	Certification
Europe	CE

Technical Specifications

Electrical

Frequency response	30 Hz - 20 kHz
Headphone load impedance	>32 ohm <1k ohm
Output power	2 x 15 mW/32 ohm

Mechanical

Mounting	Tabletop
Dimensions (H x W x D)	
without microphone	61 x 190 x 160 mm (2.4 x 7.5 x 6.3 in)
Weight	
without battery	500 g (1.10 lb)
with battery	715 g (1.57 lb)
Color top	Silver (RAL 9022)
Color base	Charcoal (PH 10736)

Ordering Information

DCN-WDD-D Wireless Dual Discussion Unit dual delegate, pluggable microphone, dark base, wireless; microphone, rims and batteries to be ordered separately	**DCN-WDD-D**
Accessories	
DCN-DISBDD Buttons Dual Use (10 sets) 10 sets	**DCN-DISBDD**
DCN-MICS Pluggable Short Microphone length 310 mm (12.2 inch), silver	**DCN-MICS**
DCN-MICL Pluggable Long Microphone length 480 mm (18.9 inch), silver	**DCN-MICL**
DCN-DISRH-SR Rim High Gloss Silver (10 pcs) silver, high gloss, 10 pieces	**DCN-DISRH-SR**
DCN-DISR-SR Rim Silver (10 pcs) silver, 10 pieces	**DCN-DISR-SR**
DCN-DISR-D Rim Dark (10 pcs) dark, 10 pieces	**DCN-DISR-D**
DCN-DISRMH Rim Metal High Gloss (10 pcs) metal, high gloss, 10 pieces	**DCN-DISRMH**

Ordering Information

DCN-DISRMS Rim Metal Semi Gloss (10 pcs) metal, semi gloss, 10 pieces	**DCN-DISRMS**
DCN-DISBCM Buttons Chairman (10 sets) 10 sets	**DCN-DISBCM**
DCN-WLIION-D Battery Pack for Wireless Discussion Units charcoal color, lithium-ion, 7.2 VDC, 4800 mAh	**DCN-WLIION-D**
DCN-WPS Power Supply for Wireless Discussion Units not approved for some countries	**DCN-WPS**
DCN-FCWD10 Flight Case for 10 Wireless Discussion Units light grey, can hold 10 wireless discussion units and 2 charging units	**DCN-FCWD10**

DCN-WDDCS-D Wireless Discussion Unit with Dual Channel Selector

Features

▸ **Used as (dual) delegate or chairman unit**

▸ **Dual channel selector with number and abbreviated channel name**

▸ **Separate battery pack, easy to change and charge**

▸ **Advanced power saving techniques**

▸ **Low susceptibility to electromagnetic interference**

▸ **Auto microphone-off**

▸ **Auto search for own network**

▸ **Auto switch-off when out of range**

To the participant the most important part of a conference system is the discussion unit. Bosch has built on the elegant design of the DCN Nex Generation discussion units to create a new series of wireless discussion units with unrivalled looks and features.

The DCN-WDDCS-D Wireless Discussion Unit with Dual Channel selector enables participants to speak, register a request-to-speak, listen to the speaker or to an interpreter of their choice.

Functions

Speech intelligibility

Maximum speech intelligibility is guaranteed at all times. Operating in the 2.4 GHz (license free) band, the wireless discussion units produce crystal-clear sound due to a very high signal-to-noise ratio and antenna diversity. This means the signal is transmitted along different propagation paths, ensuring optimal receipt. The system

is also protected against interference from mobile phones and other equipment that makes use of Bluetooth or microwave signals.

Security

Wireless communication means extra security considerations. The DCN Wireless system and discussion units therefore feature 128-bits AES encryption to prevent eavesdropping and unauthorized access. Encryption ensures the information within the system remains confidential.

Channel selector

The unit has two built-in channel selectors that makes it suitable for discussions in which more than one language is used, and simultaneous interpretations are available. The channel selector includes two up-and-down channel select keys, and a display showing the number and the abbreviation of the languages. This enables rapid selection of the required language channel.

Microphones

A socket is provided to connect the pluggable microphones which are available in short and long stem versions (DCN-MICS and DCN-MICL, to be ordered separately).

Headphones and loudspeakers

The unit also accommodates two headphone connections, so the speaker can be heard clearly even with excessive background noise. To prevent acoustic feedback the built-in loudspeaker is muted when the microphone is on. If enabled, the headphone volume is also automatically reduced to prevent acoustic feedback when the microphone is on.

Rims and buttons

Different rims are available to allow matching with the interior (DCN-DISR, to be ordered separately).

The unit can be used as:

- a single delegate unit
- a dual delegate unit
- a chairman unit (DCN-DISBCM chairman buttons, to be ordered separately)
- a single delegate unit with auxiliary button (to be used as an usher call, for example).

Battery maintenance

Simple battery maintenance is essential in a wireless system. A unique feature of Bosch's wireless discussion units is the separate rechargeable battery packs (DCNW-LIION, to be ordered separately). These Lithium-ion battery packs can be removed and replaced in a matter of seconds, providing maximum flexibility in recharge scheduling.

Controls and Indicators

On front

- Two alphanumeric displays for language channel selection with number and abbreviated channel name
- Two individual channel up and down selection buttons
- Two individual microphone buttons with a red or green illuminated ring:
    - Red indicates microphone is active

- green indicates request-to-speak accepted*
- Two individual headphone volume control buttons

On rear

- Out-of-range indicator
- Battery low indicator

Under base

- Recessed 'De-init' switch
- Mode select switches (delegate, chairman, etc.)

Interconnections

- Socket for pluggable microphone
- Two 3.5 mm (0.14 in) headphone sockets stereo jack type
- DC power input from DCN-WPS (accessible when battery pack is removed)

* When unit is used in Dual Delegate mode, this function is available individually.

Certifications and Approvals

Region	Certification
Europe	CE

Technical Specifications

Electrical

Frequency response	30 Hz - 20 kHz
Headphone load impedance	>32 ohm <1k ohm
Output power	2 x 15 mW/32 ohm

Mechanical

Mounting	Tabletop
Dimensions (H x W x D)	
without microphone	61 x 190 x 160 mm (2.4 x 7.5 x 6.3 in)
Weight	
without battery	515 g (1.14 lb)
with battery	730 g (1.61 lb)
Color top	Silver (RAL 9022)
Color base	Charcoal (PH 10736)

Ordering Information

DCN-WDDCS-D Wireless Discussion Unit with Dual Channel Selector pluggable microphone, dark base; microphone, rims and batteries to be ordered separately	DCN-WDDCS-D
Accessories	
DCN-MICS Pluggable Short Microphone length 310 mm (12.2 inch), silver	DCN-MICS
DCN-MICL Pluggable Long Microphone length 480 mm (18.9 inch), silver	DCN-MICL
DCN-DISRH-SR Rim High Gloss Silver (10 pcs) silver, high gloss, 10 pieces	DCN-DISRH-SR
DCN-DISR-SR Rim Silver (10 pcs) silver, 10 pieces	DCN-DISR-SR
DCN-DISR-D Rim Dark (10 pcs) dark, 10 pieces	DCN-DISR-D
DCN-DISRMH Rim Metal High Gloss (10 pcs) metal, high gloss, 10 pieces	DCN-DISRMH
DCN-DISRMS Rim Metal Semi Gloss (10 pcs) metal, semi gloss, 10 pieces	DCN-DISRMS
DCN-DISBCM Buttons Chairman (10 sets) 10 sets	DCN-DISBCM
DCN-WLIION-D Battery Pack for Wireless Discussion Units charcoal color, lithium-ion, 7.2 VDC, 4800 mAh	DCN-WLIION-D
DCN-WPS Power Supply for Wireless Discussion Units not approved for some countries	DCN-WPS
DCN-FCWD10 Flight Case for 10 Wireless Discussion Units light grey, can hold 10 wireless discussion units and 2 charging units	DCN-FCWD10

DCN-WDV-D Wireless Discussion Unit with Voting

Features

▸ **Five voting buttons**

▸ **Usable as delegate or chairman unit**

▸ **Separate battery pack, easy to change and charge**

▸ **Advanced power saving techniques**

▸ **Low susceptibility to electromagnetic interference**

▸ **Auto microphone-off**

▸ **Auto-search for own network**

▸ **Auto switch-off when out of range**

To the participant the most important part of a conference system is the discussion unit. Bosch has built on the elegant design of the DCN Next Generation discussion units to create a new series of wireless discussion units with unrivalled looks and features.

The DCN-WDV-D Wireless Discussion Unit with Voting enables participants to speak, register a request-to-speak, listen to the speaker, and vote.

Functions

Speech intelligibility

Maximum speech intelligibility is guaranteed at all times. Operating in the 2.4 GHz (license free) band, the wireless discussion units produce crystal-clear sound due to a very high signal-to-noise ratio and antenna diversity. This means the signal is transmitted along different propagation paths, ensuring optimal receipt. The system is also protected against interference from mobile phones and other equipment that makes use of Bluetooth or microwave signals.

Security

Wireless communication means extra security considerations. The DCN Wireless system and discussion units therefore feature 128-bits AES encryption to prevent eavesdropping and unauthorized access. Encryption ensures the information within the system remains confidential.

Microphones

A socket is provided to connect the pluggable microphones which are available in short and long stem versions (DCN-MICS and DCN-MICL, to be ordered separately).

Voting

The unit has five voting buttons. The yellow indicator rings around the voting buttons confirm vote selections.

Headphones and loudspeakers

The unit also accommodates two headphone connections, so the speaker can be heard clearly even in situations with excessive background noise.

To prevent acoustic feedback the built-in loudspeaker is muted when the microphone is on. If enabled, the headphones volume is also automatically reduced to prevent acoustic feedback when the microphone is on.

Rims and buttons

Different rims are available to allow matching with the interior (DCN-DISR, to be ordered separately).

The unit can be used as:

• a single delegate unit
• a dual delegate unit
• a chairman unit (DCN-DISBCM chairman buttons, to be ordered separately)
• a single delegate unit with auxiliary button (to be used as an usher call, for example).

The unit has five voting buttons. The yellow indicator rings around the voting buttons confirm vote selections.

Battery maintenance

Simple battery maintenance is essential in a wireless system. A unique feature of Bosch's wireless discussion units are the separate rechargeable battery packs (DCN-WLIION, to be ordered separately). These Lithium-ion battery packs can be removed and replaced in a matter of seconds, providing maximum flexibility in recharge scheduling.

Controls and Indicators

On front

• Five voting buttons with indicator rings around the buttons
• Unit activity / delegate presence indicator
• Microphone button with a red or green illuminated ring. Red indicates microphone is active, green indicates request-to-speak accepted
• Headphone volume control buttons

On rear

• Out-of-range indicator

- Battery low indicator

Under base

- Recessed 'De-init' switch
- Mode select switches (delegate, chairman, etc.)

Interconnections

- Socket for pluggable microphone
- Two 3.5 mm (0.14 in) headphone sockets stereo jack type
- DC power input from DCN-WPS (accessible when battery is removed)

Certifications and Approvals

Region	Certification
Europe	CE

Technical Specifications

Electrical

Frequency response	30 Hz - 20 kHz
Headphone load impedance	>32 ohm <1k ohm
Output power	2 x 15 mW/32 ohm

Mechanical

Mounting	Tabletop
Dimensions (H x W x D)	
without microphone	61 x 190 x 160 mm (2.4 x 7.5 x 6.3 in)
Weight	
without battery	505 g (1.11 lb)
with battery	720 g (1.58 lb)
Color top	Silver (RAL 9022)
Color base	Charcoal (PH 10736)

Ordering Information

DCN-WDV-D Wireless Discussion Unit with Voting voting, pluggable microphone, dark base, wireless; microphone, rims and batteries to be ordered separately	**DCN-WDV-D**
Accessories	
DCN-DISBDD Buttons Dual Use (10 sets) 10 sets	**DCN-DISBDD**
DCN-MICS Pluggable Short Microphone length 310 mm (12.2 inch), silver	**DCN-MICS**
DCN-MICL Pluggable Long Microphone length 480 mm (18.9 inch), silver	**DCN-MICL**
DCN-DISRH-SR Rim High Gloss Silver (10 pcs) silver, high gloss, 10 pieces	**DCN-DISRH-SR**
DCN-DISR-SR Rim Silver (10 pcs) silver, 10 pieces	**DCN-DISR-SR**
DCN-DISR-D Rim Dark (10 pcs) dark, 10 pieces	**DCN-DISR-D**

Ordering Information

DCN-DISRMH Rim Metal High Gloss (10 pcs) metal, high gloss, 10 pieces	**DCN-DISRMH**
DCN-DISRMS Rim Metal Semi Gloss (10 pcs) metal, semi gloss, 10 pieces	**DCN-DISRMS**
DCN-DISBCM Buttons Chairman (10 sets) 10 sets	**DCN-DISBCM**
DCN-WLIION-D Battery Pack for Wireless Discussion Units charcoal color, lithium-ion, 7.2 VDC, 4800 mAh	**DCN-WLIION-D**
DCN-WPS Power Supply for Wireless Discussion Units not approved for some countries	**DCN-WPS**
DCN-FCWD10 Flight Case for 10 Wireless Discussion Units light grey, can hold 10 wireless discussion units and 2 charging units	**DCN-FCWD10**

DCN-WDVCS-D Wireless Discussion Unit with Voting and Channel Selector

Features

▸ **Used as delegate or chairman unit**

▸ **Channel selector with number and abbreviated channel name**

▸ **Five voting buttons**

▸ **Separate battery pack, easy to change and charge**

▸ **Advanced power saving techniques**

▸ **Low susceptibility to electromagnetic interference**

▸ **Auto microphone-off**

▸ **Auto search for own network**

▸ **Auto switch-off when out of range**

To the participant the most important part of a conference system is the discussion unit. Bosch has built on the elegant design of the DCN Next Generation discussion units to create a new series of wireless discussion units with unrivalled looks and features.

The DCN-WDVCS-D Wireless Discussion Unit with Voting and Channel selector enables participants to speak, register a request-to-speak, listen to the speaker or to an interpreter of their choice, and vote.

Functions

Speech intelligibility

Maximum speech intelligibility is guaranteed at all times. Operating in the 2.4 GHz (license free) band, the wireless discussion units produce crystal-clear sound due to a very high signal-to-noise ratio and antenna diversity. This means the signal is transmitted along different propagation paths, ensuring optimal receipt. The system is also protected against interference from mobile phones and other equipment that makes use of Bluetooth or microwave signals.

Security

Wireless communication means extra security considerations. The DCN Wireless system and discussion units therefore feature 128-bits AES encryption to prevent eavesdropping and unauthorized access. Encryption ensures the information within the system remains confidential.

Channel selector

The unit has a built-in channel selector that makes it suitable for discussions in which more than one language is used, and simultaneous interpretations are available. The channel selector includes two up-and-down channel select keys, and a display showing the number and the abbreviation of the languages. This enables rapid selection of the required language channel.

Microphones

A socket is provided to connect the pluggable microphones which are available in short and long stem versions (DCN-MICS and DCN-MICL, to be ordered separately).

Headphones and loudspeakers

The unit also accommodates two headphone connections, so the speaker can be heard clearly even with excessive background noise. To prevent acoustic feedback the built-in loudspeaker is muted when the microphone is on. If enabled, the headphone volume is also automatically reduced to prevent acoustic feedback when the microphone is on.

Rims and buttons

Different rims are available to allow matching with the interior (DCN-DISR, to be ordered separately).

The unit can be used as:

- a single delegate unit
- a dual delegate unit
- a chairman unit (DCN-DISBCM chairman buttons, to be ordered separately)
- a single delegate unit with auxiliary button (to be used as an usher call, for example).

The unit has five voting buttons. The yellow indicator rings around the voting buttons confirm vote selections.

Battery maintenance

Simple battery maintenance is essential in a wireless system. A unique feature of Bosch's wireless discussion units is the separate rechargeable battery packs (DCN-WLIION, to be ordered separately). These Lithium-ion battery packs can be removed and replaced in a matter of seconds, providing maximum flexibility in recharge scheduling.

Controls and Indicators

On front

- Alphanumeric displays for language channel selection with number and abbreviated channel name
- Channel up and down selection buttons
- Five voting buttons with indicator rings around the buttons
- Unit activity / delegate presence indicator
- Microphone button with a red or green illuminated ring:
    - Red indicates microphone is active
    - green indicates request-to-speak accepted
- Headphone volume control buttons

On rear

- Out-of-range indicator
- Battery low indicator

Under base

- Recessed 'De-init' switch
- Mode select switches (delegate, chairman, etc.)

Interconnections

- Socket for pluggable microphone
- Two 3.5 mm (0.14 in) headphone sockets stereo jack type

DC power input from DCN-WPS (accessible when battery pack is removed)

Certifications and Approvals

Region	Certification
Europe	CE

Technical Specifications

Electrical

Frequency response	30 Hz - 20 kHz
Headphone load impedance	>32 ohm <1k ohm
Output power	2 x 15 mW/32 ohm

Mechanical

Mounting	Tabletop
Dimensions (H x W x D)	
without microphone	61 x 190 x 160 mm (2.4 x 7.5 x 6.3 in)
Weight	
without battery	520 g (1.15 lb)
with battery	735 g (1.62 lb)

Color top	Silver (RAL 9022)
Color base	Charcoal (PH 10736)

Ordering Information

DCN-WDVCS-D Wireless Discussion Unit with Voting and Channel Selector Voting, pluggable microphone, dark base; microphone, rims and batteries to be ordered separately	**DCN-WDVCS-D**
Accessories	
DCN-MICS Pluggable Short Microphone length 310 mm (12.2 inch), silver	**DCN-MICS**
DCN-MICL Pluggable Long Microphone length 480 mm (18.9 inch), silver	**DCN-MICL**
DCN-DISRH-SR Rim High Gloss Silver (10 pcs) silver, high gloss, 10 pieces	**DCN-DISRH-SR**
DCN-DISR-SR Rim Silver (10 pcs) silver, 10 pieces	**DCN-DISR-SR**
DCN-DISR-D Rim Dark (10 pcs) dark, 10 pieces	**DCN-DISR-D**
DCN-DISRMH Rim Metal High Gloss (10 pcs) metal, high gloss, 10 pieces	**DCN-DISRMH**
DCN-DISRMS Rim Metal Semi Gloss (10 pcs) metal, semi gloss, 10 pieces	**DCN-DISRMS**
DCN-DISBCM Buttons Chairman (10 sets) 10 sets	**DCN-DISBCM**
DCN-WLIION-D Battery Pack for Wireless Discussion Units charcoal color, lithium-ion, 7.2 VDC, 4800 mAh	**DCN-WLIION-D**
DCN-WPS Power Supply for Wireless Discussion Units not approved for some countries	**DCN-WPS**
DCN-FCWD10 Flight Case for 10 Wireless Discussion Units light grey, can hold 10 wireless discussion units and 2 charging units	**DCN-FCWD10**

DCN-WLIION-D Battery Pack for Wireless Discussion Units

Certifications and Approvals

Region	Certification
Europe	CE

Technical Specifications

Electrical

Output Voltage	7.2 VDC
Capacity	4800 mAh

Mechanical

Dimensions (H x W x D)	61.5 x 136 x 22 mm (2.4 x 5.5 x 0.9 in)
Weight	215 g (0.47 lb)
Color	Charcoal (PH 10736)

Ordering Information

DCN-WLIION-D Battery Pack for Wireless Discussion Units charcoal color, lithium-ion, 7.2 VDC, 4800 mAh	**DCN-WLIION-D**

Accessories

DCN-WCH05 Charger for 5 Battery Packs charcoal color, re-charge up to 5 DCN-WLIION battery packs	**DCN-WCH05**

Features

▸ **Long service life without charge degradation**

▸ **20 hours typical use from a full charge**

▸ **Fully recharges in 3 hours**

▸ **Built-in microprocessor controls charging cycle**

▸ **Lithium-ion technology**

This rechargeable battery is the power source of the wireless discussion units.

The battery is a high capacity Lithium-ion type, capable of providing up to 20 hours typical use from a full charge. Fully charging the DCN-WLIION from empty takes just 3 hours.

Lithium-ion cells avoid the charge degradation issues associated with other rechargeable battery types. This offers maximum flexibility for scheduling recharges (no requirement to fully discharge batteries before recharging).

The 'intelligent' battery has a built-in microprocessor to control charging current and prevent overloading.

Functions

Controls and Indicators

• Charge capacity LEDs and push-to-test button

Interconnections

• Power / charge connector

DCN-WCH05 Charger for 5 Battery Packs

Technical Specifications

Electrical

Supply Voltage	100 - 240 VAC +/- 10 % 50 – 60 Hz
Maximum power consumption	190 W

Mechanical

Dimensions (H x W x D)	340 x 195 x 82 mm (13.4 x 7.6 x 3.2 in)
Weight (without batteries)	1.4 kg (3.08 lb)
Color	Charcoal (PH 10736)

Ordering Information

DCN-WCH05 Charger for 5 Battery Packs charcoal color, re-charge up to 5 DCN-WLIION battery packs	**DCN-WCH05**
DCN-WCH05-JP Charger for 5 Battery Packs (JP) Japanese version	**DCN-WCH05-JP**
DCN-WCH05-US Charger for 5 Battery Packs (US) US version	**DCN-WCH05-US**

Features

▸ **Simultaneous charging of up to 5 battery packs**

▸ **Recharges from empty in 3 hours**

▸ **Loop-through mains connector**

▸ **Auto-ranging PSU, 100 – 240 VAC**

This unit can simultaneously re-charge up to 5 DCN-WLIION battery packs. The charging status of each pack is shown on individual charge capacity indicator LEDs.

The unit is suitable for tabletop use, or can be wall-mounted.

The loop-through mains voltage connector allows a maximum number of charging units to be connected in series to share from the same mains outlet:

• A maximum 5 chargers can be connected in series for 100 - 127 VAC, 50 - 60 Hertz regions

A maximum 10 chargers can be connected in series for 220 - 240 VAC, 50 - 60 Hertz regions.

Functions

Controls and Indicators

• Charge capacity indicator LEDs on each bin
• Mains power indicator LED

Interconnections

• Mains supply connector
• Loop-through mains connector

Battery pack charging connector

DCN-MICS/L Pluggable Microphone Short/Long Stem

DCN-MICS / DCN-MICS-D	100 g (0.22 lb)
DCN-MICL / DCN-MICL-D	115 g (0.25 lb)
Color top	
DCN-MICS / DCN-MICL	Silver (RAL 9022)
DCN-MICS-D / DCN-MICL-D	Dark (graphite gray)

Ordering Information

DCN-MICS Pluggable Short Microphone length 310 mm (12.2 inch), silver	**DCN-MICS**
DCN-MICS-D Pluggable Short Microphone Dark length 310 mm (12.2 inch), dark	**DCN-MICS-D**
DCN-MICL Pluggable Long Microphone length 480 mm (18.9 inch), silver	**DCN-MICL**
DCN-MICL-D Pluggable Long Microphone Dark length 480 mm (18.9 inch), dark	**DCN-MICL-D**

Features

▸ **Uni-directional microphone on adjustable stem**

▸ **Built-in plop and windshield**

The innovative, stylish and ergonomically designed microphone with an adjustable stem simply plugs directly into a Discussion unit, Concentus, flush-mounted Microphone Connection panels or Interpreter desk. It has a uni-directional response for optimum performance even in noisy conditions, and has low susceptibility to interference from mobile phones.

Functions

Controls and Indicators

• Red or green illuminator. Red indicates microphone is active, green indicates request-to-speak accepted

Interconnections

• Connector to plug and fasten the microphone

Technical Specifications

Mechanical

Mounting	Plug and fasten into Discussion units, Concentus, flush mounted Microphone connection panels and Interpreter desks
Length	
DCN-MICS / DCN-MICS-D	310 mm (12.2 in)
DCN-MICL / DCN-MICL-D	480 mm (18.9 in)
Weight	

DCN-DISBDD Buttons Dual Use (10 sets)

DCN-DISBCM Buttons Chairman (10 sets)

DCN-DISBDD buttons for Dual Use Discussion Units replace the single microphone button on a discussion unit when used in dual delegate mode.

DCN-DISBCM buttons for Chairman Discussion Units replace the single microphone button on a discussion unit when used in chairman mode. These buttons can also be used for the discussion unit in auxiliary control mode.

Technical Specifications

Mechanical

Mounting	Click and fit on any Discussion unit
Color	Silver (RAL 9022)

Technical Specifications

Mechanical

Mounting	Click and fit on any Discussion unit
Color	Silver (RAL 9022)

Ordering Information

DCN-DISBDD Buttons Dual Use (10 sets)   **DCN-DISBDD**
10 sets

Ordering Information

DCN-DISBCM Buttons Chairman (10 sets)   **DCN-DISBCM**
10 sets

DCN-UPTK Upgrade Toolkit

Features

▸ **Easy upgrade of the wireless discussion unit**

▸ **USB powered and interfaced**

▸ **Easy to install and use**

▸ **Saves functional compatibility issues between DCN wireless discussion units**

The DCN-UPTK Upgrade Toolkit is used to upgrade software of a single DCN wireless discussion unit (DCN-WDx).

Upgrade software is controlled via the DCN Download & License Tool.

The DCN-UPTK Upgrade Toolkit, is USB powered and is installer / user friendly. It consists of a small box with the required built-in hardware and software interfaces, plus one standard USB-connection cable and one DCN-wireless-discussion-unit-connection-cable.

Functions

Controls and Indicators

• Green LED, next to USB connector, indicates USB power for DCN-UPTK available
• Green LED, next to 14-pole connector, indicates the DCN-WDx is powered and switched on

Interconnections

• USB (2.0 compatible) standard connector and cable to PC
• 14-pole flat-cable connector and cable to the DCN wireless discussion unit

Certifications and Approvals

Region	Certification
Europe	CE
Safety according	IEC 60950
EMC according	EN 55022 ITE
	EN 55024 ITE

Parts Included

Quantity	Components
1	USB connection cable
1	WDU connection cable

Technical Specifications

Electrical

Power supply DCN-UPTK	USB powered
Power supply wireless discussion units	DCN-WLIION or
	DCN-WPS

Mechanical

Dimensions (H x W x D)	70 x 120 x 35 mm (2.76 x 4.72 x 1.38 in)
Weight	400 g (0.88 lb)
Color	Charcoal 10736

Ordering Information

DCN-UPTK Upgrade Toolkit   **DCN-UPTK**
to upgrade software of a single DCN wireless discussion unit

DCN-RCWD10 Roller Case for 10 Wireless Discussion Units

Technical Specifications

Mechanical

Dimensions (H x W x D)	695 x 765 x 500 mm (27.4 x 30.1 x 19.7 in)
Weight (empty)	26.4 kg (58.2 lb)
Color	Light grey

Ordering Information

DCN-RCWD10 Roller Case for 10 Wireless Discussion Units
light grey, can hold 10 wireless discussion units and 2 charging units

DCN-RCWD10

Features

- ▸ **Holds 10 wireless discussion units, including microphones**
- ▸ **Also holds 2 battery chargers and 10 batteries**
- ▸ **Side panel, which must be removed during charging, can be stored in the top lid**
- ▸ **Easily transportable on fitted wheels**
- ▸ **Robust construction with reinforced corners**
- ▸ **Shaped foam interior simplifies packing**

The DCN-RCWD10 Roller Case accommodates up to 10 wireless discussion units with fitted microphone, long or short stem (one extra storage position can be used for a spare unit).

The case can also hold 2 DCN-WCH05 charging units which slot into place and are easily accessed by removing the side panel (always leave this panel off when charging the batteries).

Fitted wheels allow for easy transportation.

Parts Included

Quant.	Component
1	DCN-RCWD10 Roller Case for 10 Wireless Discussion
6	Screws to fix mounting brackets of chargers

DCN-FCWD10 Flight Case for 10 Wireless Discussion Units

Features

▸ **Holds 10 wireless discussion units and microphones**

▸ **Also holds 2 battery chargers and 10 batteries**

▸ **Easy to move using the handgrip and wheels**

▸ **Robust construction with reinforced corners**

▸ **Shaped foam interior simplifies packing**

The DCN-FCWD10 Flight Case accommodates up to 10 wireless discussion units complete with battery packs and microphones (long or short stems).

The case can also hold 2 DCN-WCH05 charging units and is provided with an extra handgrip and wheels for easy transportation.

Technical Specifications

Mechanical

Dimensions (H x W x D)	820 x 500 x 300 mm (32.3 x 19.7 x 12 in)
Weight (empty)	13.8 kg (30.4 lb)
Color	Light grey

Ordering Information

DCN-FCWD10 Flight Case for 10 Wireless Discussion Units light grey, can hold 10 wireless discussion units and 2 charging units	DCN-FCWD10

DCN-DISR Rims for Discussion Units

A rim completes the discussion units. A variety of rims with different finishes are available to allow matching with any interior.

Technical Specifications

Mechanical

Mounting	Click and fit on any discussion unit
Color base	
DCN-DISRH-SR	Silver (RAL 9022) high gloss
DCN-DISR-SR	Silver (RAL 9022)
DCN-DISR-D	Charcoal (PH 10736)
DCN-DISRMH	High gloss metal
DCN-DISRMS	Semi gloss metal

Ordering Information

DCN-DISRH-SR Rim High Gloss Silver (10 pcs) silver, high gloss, 10 pieces	**DCN-DISRH-SR**
DCN-DISR-SR Rim Silver (10 pcs) silver, 10 pieces	**DCN-DISR-SR**
DCN-DISR-D Rim Dark (10 pcs) dark, 10 pieces	**DCN-DISR-D**
DCN-DISRMH Rim Metal High Gloss (10 pcs) metal, high gloss, 10 pieces	**DCN-DISRMH**
DCN-DISRMS Rim Metal Semi Gloss (10 pcs) metal, semi gloss, 10 pieces	**DCN-DISRMS**

DCN-WPS Power Supply for Wireless Discussion Units

Mechanical

Dimensions (H x W x D)	65 x 57 x 28 mm (2.56 x 2.24 x 1.10 in)
Weight (per package)	approx. 100 g (0.22 lb)
Color	Black

Ordering Information

DCN-WPS Power Supply for Wireless Discussion Units not approved for some countries	**DCN-WPS**

Features

▸ **Powers wireless discussion units if no battery pack is present**

The DCN-WPS power supply enables wireless discussion units to be used without a battery.

The DCN-WPS does not provide any battery charging capability (a DCN-WCH05 charging unit is required). The unit comes complete with a 1.5 m cable and international mains supply connectors (Euro, UK, Rest of World).

Note For countries where the EU- and UK-connector cannot be used, attach the 'Rest of World' connector to your own supplied cable (this cable must have a connector according to IEC 60 320 part 1 version C7 on the DCN-WPS-side; and a commonly used connector for your country on the other side).

Certifications and Approvals

Region	Certification
Europe	CE

Technical Specifications

Electrical

Rated input voltage	100-240 VAC (50 – 60 Hz), 150 mA
Rated output voltage	9 VDC (500 mA)

Wired Discussion Units

Wired Discussion units

Discussion units are typically used for smaller and medium sized conferences. The units are ideal when a flexible system configuration or portable conference facilities are required. All units are easily plugged into or removed from the system cabling, which enables the configuration to be set up quickly and efficiently. The Discussion unit is available with light- or dark colored bases. Most units have a pluggable microphone (supplied separately) available in short and long stem length versions. The microphones have flexible stems for ease of use. The unit can be free-standing or fixed using mounting screws. The units can also be flush mounted in more permanent installations. Special rugged suitcases that accommodate complete systems are available for storage and transport. The units are connected in a simple daisy-chain configuration. Alternatively, they can be connected using a single cable and a trunk splitter to link the units to the system cabling, with connectors neatly hidden in the units themselves. This 'one cable' aspect of the DCN Next Generation system means there is no untidy mess of wires at the back of the units. It is especially advantageous for TV coverage, where the backs of the units are on show. The Discussion units range from standard Discussion with a fixed microphone to Discussion units with pluggable microphone, a channel selector and voting that enable contributing delegates to take part in the decision making process, a vital aspect of modern conferencing. The Discussion units have 4 different operation modes. All Discussion units can be used either for normal delegates or as a chairman unit. The third mode is dual use, in which two delegates each have their own microphone button for individual identification. The fourth mode is auxiliary control. In this mode, the delegate has an extra button next to the microphone button, which can be used as an usher call, for example.

Discussion units overview

	Single delegate	Chairman	Dual use	Auxiliary	Pluggable microphone	Channel Selector	Voting
DCN-DISS	•	•					
DCN-DISL	•	•					
DCN-DISD	•	•	•	•	•		
DCN-DISCS	•	•			•	1	
DCN-DISDCS	•	•	•	•	•	2	
DCN-DISV	•	•		•	•		•
DCN-DISVCS	•	•		•	•	1	•

All units are delivered with a single delegate button. For the chairman, dual and auxiliary mode two different sets of buttons are available: Dual use buttons and chairman buttons. The chairman buttons can also be used for auxiliary control. The buttons are easily removed using a special tool (supplied with the buttons). Sets of buttons must be ordered separately.

Replacing the button

Button types:
1. Single use button
2. Dual use button
3. Chairman or Auxiliary control button

Discussion units with long and short microphones

The Discussion units with pluggable microphone are delivered without microphones. These microphones have to be ordered separately. Two different lengths of pluggable microphones are available.

All Discussion units are supplied without rims. The rims must be ordered separately. Several rims are available in different finishes. The rims can be mounted without any tools.

Rims to be mounted on the discussion unit

To secure the loop trough cable of the Discussion unit, cable clamps can be used.
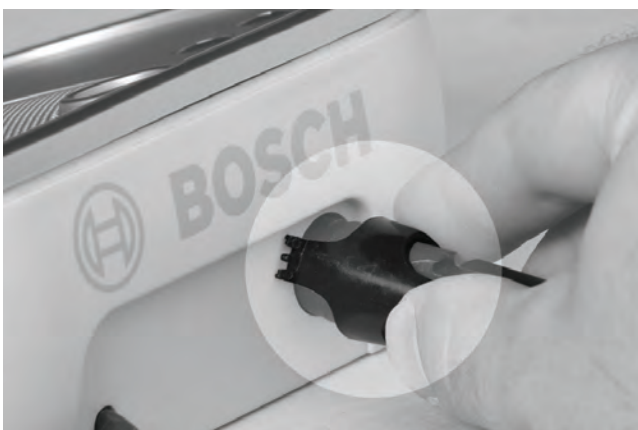
Mounting the cable clamp

DCN-DISS / DCN-DISL Discussion Unit with fixed Microphone

Features

▸ **Low susceptibility to mobile phone interference**

▸ **Compact, attractive and ergonomic design**

▸ **Fixed microphone**

▸ **Built-in loudspeaker**

▸ **Usable as delegate unit or chairman unit**

The Discussion Unit with fixed Microphone enables participants to speak, register a request-to-speak and listen to the speaker. The microphone stem is flexible. The unit also accommodates two headphone connections, so the speaker can be heard clearly even in situations with excessive background noise. The built-in loudspeaker is muted when the microphone is on to prevent acoustic feedback. Rims are available in a range of colors to match the interior (DCN-DISR, to be ordered separately).

Functions

- Headphone output level reduction to prevent acoustic feedback (active when listening to the floor and when the microphone is on)
- The unit can be used a delegate unit or as a chairman unit (DCN-DISBCM chairman buttons to be ordered separately).
- To lock the loop-through cable, a cable clamp is available (DCN-DISCLM, to be ordered separately).
- The unit is available with two different microphone lengths and in light and dark colored bases.

Controls and Indicators

- Microphone with red or green indicator

- Microphone button with a red, green or yellow illuminated ring. Red indicates microphone is active, green indicates request-to-speak accepted, and yellow indicates 'VIP'
- VIP indicator is lit when the delegate is part of the notebook (only available if PC Software is used)
- Headphone volume control buttons
- Recessed 'De-init' switch

Interconnections

- Two 3.5 mm (0.14 in) stereo jack type headphone sockets
- 2 m (78.7 in) cable terminated within a molded six-pole circular connector.
- Six-pole circular connector for loop-through connections

Certifications and Approvals

Region	Certification
Europe	CE

Technical Specifications

Electrical

Frequency response	30 Hz to 20 kHz
Headphone load impedance	> 32 ohm < 1kohm
Output power	2 x 15 mW/32 ohm

Mechanical

Mounting	Tabletop (portable or fixed mounting) and flush mounting

Dimensions (H x W x D)	**(without microphone)**
Tabletop	61 x 190 x 116 mm (2.4 x 7.5 x 4.6 in)
Flush mounted	6 x 190 x 120 mm (0.2 x 7.5 x 4.7 in)

Microphone lengths	
DCN-DISS	300 mm (11.8 in)
DCN-DISL	470 mm (18.5 in)

Weight	
DCN-DISS	880 g (1.94 lb)
DCN-DISL	895 g (1.97 lb)

Color top	Silver (RAL 9022)
Color base	
DCN-DISS-L	Light Grey (RAL 000 7500)
DCN-DISS-D	Charcoal (PH 10736)
DCN-DISL-D	Charcoal (PH 10736)

Bosch Security Systems

Ordering Information

DCN-DISS-L Discussion Short Microphone Light short microphone, light base	**DCN-DISS-L**
DCN-DISS-D Discussion Short Microphone Dark short microphone, dark base	**DCN-DISS-D**
DCN-DISL-L Discussion Long Microphone Light long microphone, light base	**DCN-DISL-L**
DCN-DISL-D Discussion Long Microphone Dark long microphone, dark base	**DCN-DISL-D**
Accessories	
DCN-DISRH-SR Rim High Gloss Silver (10 pcs) silver, high gloss, 10 pieces	**DCN-DISRH-SR**
DCN-DISR-SR Rim Silver (10 pcs) silver, 10 pieces	**DCN-DISR-SR**
DCN-DISR-D Rim Dark (10 pcs) dark, 10 pieces	**DCN-DISR-D**
DCN-DISRMH Rim Metal High Gloss (10 pcs) metal, high gloss, 10 pieces	**DCN-DISRMH**
DCN-DISRMS Rim Metal Semi Gloss (10 pcs) metal, semi gloss, 10 pieces	**DCN-DISRMS**
DCN-DISBCM Buttons Chairman (10 sets) 10 sets	**DCN-DISBCM**
DCN-DISBDD Buttons Dual Use (10 sets) 10 sets	**DCN-DISBDD**
DCN-DISCLM Cable Clamp (25 pcs) 25 pieces	**DCN-DISCLM**

DCN-DISD Basic Discussion Unit

Features

▸ **Low susceptibility to mobile phone interference**

▸ **Compact, attractive and ergonomic design**

▸ **Pluggable microphone**

▸ **Built-in loudspeaker**

▸ **Usable as delegate unit, dual delegate unit, chairman unit or single delegate unit with auxiliary button**

The Basic Discussion Unit enables participants to speak, register a request-to-speak and listen to the speaker. A socket is provided to connect the pluggable microphones (DCN-MICS and DCN-MICL, to be ordered separately).

The unit also accommodates two separate headphone connections with individual volume control on either side of the unit, allowing one unit to serve two delegates. It can be converted to a full dual-use unit by replacing the microphone button with two separated microphone buttons for individual microphone control and individual delegate identification (DCN-DISBDD dual-use buttons, to be ordered separately).

Functions

- Headphone output level reduction to prevent acoustic feedback (active when listening to the floor and when the microphone is on). When unit is used in Dual Delegate mode, this function is available individually
- Built-in loudspeaker speaker is muted when the microphone is on to prevent acoustic feedback
- Unit can be used as a single delegate unit, as a dual delegate unit, as a chairman unit (DCN-DISBCM chairman buttons, to be ordered separately) or as a single delegate unit with auxiliary button

- Different rims are available to allow matching with the interior (DCN-DISR, to be ordered separately)
- The versatile auxiliary button can be used as an usher call, for example
- To lock the loop-through cable, a cable clamp is available (DCN-DISCLM, to be ordered separately)
- Unit is available in light and dark colored bases

Controls and Indicators

- Microphone button with a red, green or yellow illuminated ring. Red indicates microphone is active, green indicates request-to-speak accepted, and yellow indicates 'VIP' (when unit is used in Dual Delegate mode, this function is available individually)
- VIP indicator is lit when the delegate is part of the notebook (only available if PC Software is used)
- Two individual headphone volume control buttons
- Recessed 'De-init' switch

Interconnections

- Socket for pluggable microphone
- Two 3.5 mm (0.14 in) stereo jack type headphone sockets
- 2 m (78.7 in) cable terminated within a molded six-pole circular connector.
- Six-pole circular connector for loop-through connections

Certifications and Approvals

Region	Certification
Europe	CE

Technical Specifications

Electrical

Frequency response	30 Hz to 20 kHz
Headphone load impedance	> 32 ohm < 1k ohm
Output power	2 x 15 mW/32 ohm

Mechanical

Mounting	Tabletop (portable or fixed mounting) and flush mounting
Dimensions (H x W x D)	**(without microphone)**
Tabletop	61 x 190 x 116 mm (2.4 x 7.5 x 4.6 in)
Flush mounted	6 x 190 x 120 mm (0.2 x 7.5 x 4.7 in)
Weight	800 g (1.76 lb)
Color top	Silver (RAL 9022)
Color base	
DCN-DISD-L	Light Grey (RAL 000 7500)
DCN-DISD-D	Charcoal (PH 10736)

Ordering Information

DCN-DISD-L Discussion Light pluggable microphone, light base, micro-phone and rims to be ordered separately	DCN-DISD-L
DCN-DISD-D Discussion Dark pluggable microphone, dark base, micro-phone and rims to be ordered separately	DCN-DISD-D

Accessories

DCN-DISBDD Buttons Dual Use (10 sets) 10 sets	DCN-DISBDD
DCN-MICL Pluggable Long Microphone length 480 mm (18.9 inch), silver	DCN-MICL
DCN-DISBCM Buttons Chairman (10 sets) 10 sets	DCN-DISBCM
DCN-DISRMS Rim Metal Semi Gloss (10 pcs) metal, semi gloss, 10 pieces	DCN-DISRMS
DCN-DISRMH Rim Metal High Gloss (10 pcs) metal, high gloss, 10 pieces	DCN-DISRMH
DCN-DISR-D Rim Dark (10 pcs) dark, 10 pieces	DCN-DISR-D
DCN-DISRH-SR Rim High Gloss Silver (10 pcs) silver, high gloss, 10 pieces	DCN-DISRH-SR
DCN-MICS Pluggable Short Microphone length 310 mm (12.2 inch), silver	DCN-MICS
DCN-DISR-SR Rim Silver (10 pcs) silver, 10 pieces	DCN-DISR-SR
DCN-DISCLM Cable Clamp (25 pcs) 25 pieces	DCN-DISCLM

DCN-DISCS Discussion Unit with Channel Selector

Features

▸ **Low susceptibility to mobile phone interference**

▸ **Compact, attractive and ergonomic design**

▸ **Pluggable microphone**

▸ **Channel selector with number and abbreviated channel name**

▸ **Built-in loudspeaker**

▸ **Usable as delegate or chairman unit**

The Discussion Unit with Channel Selector enables participants to speak, register a request-to-speak and listen to the speaker. A socket is provided to connect the pluggable microphones (DCN-MICS and DCN-MICL, to be ordered separately). The unit has a built-in channel selector that makes it suitable for discussions in which more than one language is used and simultaneous interpretations are available. The channel selector includes two up and down channel select keys and a display showing the number and the abbreviation of the languages, enabling rapid selection of the required language channel.

Functions

- Headphone output level reduction to prevent acoustic feedback (active when listening to the floor and when microphone is on)
- The built-in loudspeaker speaker is muted when the microphone is on to prevent acoustic feedback.
- A variety of rims (DCN-DISR, to be ordered separately) are available, so the unit can be matched to the interior

- The unit can be used a delegate unit or as a chairman unit (DCN-DISBCM chairman buttons, to be ordered separately)
- To lock the loop-through cable, a cable clamp is available (DCN-DISCLM, to be ordered separately)
- The unit is available in light and dark colored bases

Controls and Indicators

- Alphanumeric display for language channel selection with number and abbreviated channel name
- Socket for pluggable microphones (DCN-MICS or DCN-MICL)
- Microphone button with a red, green or yellow illuminated ring. Red indicates microphone is active, green indicates request-to-speak accepted, and yellow indicates 'VIP'
- VIP indicator is lit when the delegate is part of the notebook (only available if PC Software is used)
- Headphones have volume control buttons
- Recessed 'De-init' switch

Interconnections

- Socket for pluggable microphone
- Two 3.5 mm (0.14 in) stereo jack type headphones sockets
- 2 m (78.7 in) cable terminated with in a molded six-pole circular connector.
- Six-pole circular connector for loop-through connections

Certifications and Approvals

Region	Certification
Europe	CE

Technical Specifications

Electrical

Frequency response	30 Hz to 20 kHz
Headphone load impedance	> 32 ohm < 1k ohm
Output power	2 x 15 mW/32 ohm

Mechanical

Mounting	Tabletop (portable or fixed mounting) and flush mounting
Dimensions (H x W x D)	**(without microphone)**
Tabletop	61 x 190 x 116 mm (2.4 x 7.5 x 4.6 in)
Flush mounted	6 x 190 x 120 mm (0.2 x 7.5 x 4.7 in)
Weight	800 g (1.76 lb)
Color top	Silver (RAL 9022)
Color base	
DCN-DISCS-L	Light Grey (RAL 000 7500)
DCN-DISCS-D	Charcoal (PH 10736)

Ordering Information

DCN-DISCS-L Discussion Channel Selector Light pluggable microphone, light base, microphone and rims to be ordered separately	**DCN-DISCS-L**
DCN-DISCS-D Discussion Channel Selector Dark pluggable microphone, dark base, microphone and rims to be ordered separately	**DCN-DISCS-D**

Accessories

DCN-MICS Pluggable Short Microphone length 310 mm (12.2 inch), silver	**DCN-MICS**
DCN-DISR-D Rim Dark (10 pcs) dark, 10 pieces	**DCN-DISR-D**
DCN-DISBCM Buttons Chairman (10 sets) 10 sets	**DCN-DISBCM**
DCN-DISBDD Buttons Dual Use (10 sets) 10 sets	**DCN-DISBDD**
DCN-DISRMH Rim Metal High Gloss (10 pcs) metal, high gloss, 10 pieces	**DCN-DISRMH**
DCN-DISR-SR Rim Silver (10 pcs) silver, 10 pieces	**DCN-DISR-SR**
DCN-DISRMS Rim Metal Semi Gloss (10 pcs) metal, semi gloss, 10 pieces	**DCN-DISRMS**
DCN-DISRH-SR Rim High Gloss Silver (10 pcs) silver, high gloss, 10 pieces	**DCN-DISRH-SR**
DCN-MICL Pluggable Long Microphone length 480 mm (18.9 inch), silver	**DCN-MICL**
DCN-DISCLM Cable Clamp (25 pcs) 25 pieces	**DCN-DISCLM**

DCN-DISDCS Discussion Unit with Dual Channel Selector

Features

- ▶ **Low susceptibility to mobile phones**
- ▶ **Compact, attractive and ergonomic design**
- ▶ **Pluggable microphone**
- ▶ **Two channel selectors with number and abbreviated channel name**
- ▶ **Built-in loudspeaker**
- ▶ **Usable as delegate unit, dual delegate unit, chairman unit or single delegate unit with auxiliary button**

The Discussion Unit with Dual Channel Selectors enables participants to speak, register a request-to-speak and listen to the speaker. A socket is provided to connect a pluggable microphone. The unit has two built-in channel selectors with headphone connections with individual volume controls on either side of the unit, allowing one unit to serve two delegates. The channel selectors make it suitable for discussions in which more than one language is used and simultaneous interpretations are available. Each of the channel selectors includes up and down channel select keys and a display showing the number and the abbreviation of the channel name, enabling rapid selection of the required language channel.

Functions

- • Headphone output level reduction to prevent acoustic feedback (active when listening to the floor and when the microphone is on). When unit is used in Dual Delegate mode, this function is available individually

- • The unit can be a full dual use unit by replacing the microphone button with two separated microphone buttons for individual microphone control and individual delegate identification (DCN-DISBDD dual use buttons, to be ordered separately)
- • The built-in loudspeaker is muted when the microphone is on to prevent acoustic feedback.
- • Two lengths of microphones are available (DCN-MICS and DCN-MICL, to be ordered separately)
- • Different colored rims are available to allow matching with the interior, (DCN-DISR, to be ordered separately)
- • The unit can be used as a single delegate unit, as a dual delegate unit, as a chairman unit (DCN-DISBCM chairman buttons, to be ordered separately) or as a single delegate unit with an auxiliary button
- • The versatile auxiliary button can be used as an usher call, for example
- • To lock the loop-through cable, a cable clamp is available (DCN-DISCLM, to be ordered separately)
- • The unit is available in light and dark colored bases

Controls and Indicators

- • Two alphanumeric displays for language channel selection with number and abbreviated channel name
- • Microphone button with a red, green or yellow illuminated ring. Red indicates microphone is active, green indicates request-to-speak accepted, and yellow indicates 'VIP'(when unit is used in Dual Delegate mode, this function is available individually)
- • VIP indicator is lit when the delegate is part of the notebook (only available if PC Software is used)
- • Two individual headphone volume control buttons
- • Recessed 'De-init' switch

Interconnections

- • Socket for pluggable microphone
- • Two 3.5 mm (0.14 in) stereo jack type headphones sockets
- • 2 m (78.7 in) cable terminated within a molded six-pole circular connector.
- • Six-pole circular connector for loop-through connections

Certifications and Approvals

Region	Certification
Europe	CE

Technical Specifications

Electrical

Frequency response	30 Hz to 20 kHz
Headphone load impedance	> 32 ohm < 1k ohm
Output power	2 x 15 mW/32 ohm

Mechanical

Mounting	Tabletop (portable or fixed mounting) and flush mounting
Dimensions (H x W x D)	**(without microphone)**
Tabletop	61 x 190 x 116 mm (2.4 x 7.5 x 4.6 in)
Flush mounted	6 x 190 x 120 mm (0.2 x 7.5 x 4.7 in)
Weight	800 g (1.76 lb)
Color top	Silver (RAL 9022)
Color base	
DCN-DISDCS-L DCN-DISDCS-D	Light Grey (RAL 000 7500) Charcoal (PH 10736)

Ordering Information

DCN-DISDCS-L Discussion Dual Channel Selector Light pluggable microphone, light base, microphone and rims to be ordered separately	**DCN-DISDCS-L**
DCN-DISDCS-D Discussion Dual Channel Selector Dark pluggable microphone, dark base, microphone and rims to be ordered separately	**DCN-DISDCS-D**
Accessories	
DCN-DISBDD Buttons Dual Use (10 sets) 10 sets	**DCN-DISBDD**
DCN-DISBCM Buttons Chairman (10 sets) 10 sets	**DCN-DISBCM**
DCN-DISRMS Rim Metal Semi Gloss (10 pcs) metal, semi gloss, 10 pieces	**DCN-DISRMS**
DCN-DISRMH Rim Metal High Gloss (10 pcs) metal, high gloss, 10 pieces	**DCN-DISRMH**
DCN-MICL Pluggable Long Microphone length 480 mm (18.9 inch), silver	**DCN-MICL**
DCN-DISR-D Rim Dark (10 pcs) dark, 10 pieces	**DCN-DISR-D**
DCN-DISR-SR Rim Silver (10 pcs) silver, 10 pieces	**DCN-DISR-SR**
DCN-DISRH-SR Rim High Gloss Silver (10 pcs) silver, high gloss, 10 pieces	**DCN-DISRH-SR**
DCN-MICS Pluggable Short Microphone length 310 mm (12.2 inch), silver	**DCN-MICS**
DCN-DISCLM Cable Clamp (25 pcs) 25 pieces	**DCN-DISCLM**

DCN-DISV Discussion Unit with Voting

Features

▸ **Low susceptibility to mobile phone interference**

▸ **Compact, attractive and ergonomic design**

▸ **Pluggable microphone**

▸ **Five voting buttons**

▸ **Built-in loudspeaker**

▸ **Usable as a delegate unit or as a chairman unit**

This Discussion Unit with Voting enables participants to speak, register a request-to-speak, listen to the speaker and vote. A socket is provided to connect the pluggable microphones (DCN-MICS and DCN-MICL, to be ordered separately). The unit has five voting buttons for all types of voting. The yellow indicator rings around the voting buttons are used to prompt users to register their presence, to start voting and to confirm their votes. When the unit's attendance LED is yellow, it indicates the delegate is present.

Functions

- Headphone output level reduction to prevent acoustic feedback (active when listening to the floor and when the microphone is on)
- The unit accommodates two headphone connections, so the speaker can be heard clearly even in situations with excessive background noise
- The built-in loudspeaker is muted when the microphone is on to prevent acoustic feedback
- A variety of rims are available, so the unit can be matched to the interior. (DCN-DISR, to be ordered separately).

- The unit can be used a delegate unit, as a chairman unit (DCN-DISBCM chairman buttons to be ordered separately) or as a delegate unit with auxiliary button. The auxiliary button is a versatile function, which can be used as an usher call for example
- To lock the loop-through cable, a cable clamp is available (DCN-DISCLM, to be ordered separately)
- The unit is available in light and dark colored bases

Controls and Indicators

- Five voting buttons with indicator rings around the buttons
- Unit activity/delegate presence indicator
- Microphone button with a red, green or yellow illuminated ring. Red indicates microphone is active, green indicates request-to-speak accepted, and yellow indicates 'VIP'
- VIP indicator is lit when the delegate is part of the notebook (only available if PC Software is used)
- Headphone volume control buttons
- Recessed 'De-init' switch

Interconnections

- Socket for pluggable microphone
- Two 3.5 mm (0.14 in) stereo jack type headphone sockets
- 2 m (78.7 in) cable terminated within a molded six-pole circular connector
- Six-pole circular connector for loop-through connections

Certifications and Approvals

Region	Certification
Europe	CE

Technical Specifications

Electrical

Frequency response	30 Hz to 20 kHz
Headphone load impedance	> 32 ohm < 1k ohm
Output power	2 x 15 mW/32 ohm

Mechanical

Mounting	Tabletop (portable or fixed mounting) and flush mounting
Dimensions (H x W x D)	**(without microphone)**
Tabletop	61 x 190 x 116 mm (2.4 x 7.5 x 4.6 in)
Flush mounted	6 x 190 x 120 mm (0.2 x 7.5 x 4.7 in)
Weight	800 g (1.76 lb)
Color top	Silver (RAL 9022)
Color base	
DCN-DISV-L	Light Grey (RAL 000 7500)
DCN-DISV-D	Charcoal (PH 10736)

Ordering Information

DCN-DISV-L Discussion Voting Light pluggable microphone, light base, micro-phone and rims to be ordered separately	**DCN-DISV-L**
DCN-DISV-D Discussion Voting Dark pluggable microphone, dark base, micro-phone and rims to be ordered separately	**DCN-DISV-D**

Accessories

DCN-DISRMS Rim Metal Semi Gloss (10 pcs) metal, semi gloss, 10 pieces	**DCN-DISRMS**
DCN-DISR-SR Rim Silver (10 pcs) silver, 10 pieces	**DCN-DISR-SR**
DCN-DISRH-SR Rim High Gloss Silver (10 pcs) silver, high gloss, 10 pieces	**DCN-DISRH-SR**
DCN-MICS Pluggable Short Microphone length 310 mm (12.2 inch), silver	**DCN-MICS**
DCN-MICL Pluggable Long Microphone length 480 mm (18.9 inch), silver	**DCN-MICL**
DCN-DISRMH Rim Metal High Gloss (10 pcs) metal, high gloss, 10 pieces	**DCN-DISRMH**
DCN-DISR-D Rim Dark (10 pcs) dark, 10 pieces	**DCN-DISR-D**
DCN-DISBDD Buttons Dual Use (10 sets) 10 sets	**DCN-DISBDD**
DCN-DISBCM Buttons Chairman (10 sets) 10 sets	**DCN-DISBCM**
DCN-DISCLM Cable Clamp (25 pcs) 25 pieces	**DCN-DISCLM**

DCN-DISVCS Discussion Unit with Voting and Channel Selection

Features

▸ **Low susceptibility to mobile phone interference**

▸ **Compact, attractive and ergonomic design**

▸ **Pluggable microphone**

▸ **Five voting buttons**

▸ **Channel selector with number and abbreviated Channel name**

▸ **Built-in loudspeaker**

▸ **Usable as a delegate unit or as a chairman unit**

The Discussion Unit with Voting and Channel Selector enables participants to speak, register a request-to-speak, listen to the speaker and vote. A socket is provided to connect the pluggable microphones (DCN-MICS and DCN-MICL, to be ordered separately). The unit has five voting buttons for all types of voting. The yellow indicator rings around the voting buttons are used to prompt users to register their presence, to start voting and to confirm their vote. When the unit's attendance LED is yellow, it indicates the delegate is present.

The unit has a built-in channel selector, which makes it suitable for discussions in which more than one language is used and simultaneous interpretations are available. The channel selector includes up and down channel select keys and a display showing the number and the abbreviation of the languages, enabling rapid selection of the required language channel.

Functions

- Headphone output level reduction to prevent acoustic feedback. (active when listening to the floor and when the microphone is on)
- The built-in loudspeaker is muted when the microphone is on to prevent acoustic feedback
- A variety of rims (DCN-DISR, to be ordered separately) are available to allow matching to the interior,
- The unit can be used as a delegate unit, as a chairman unit (DCN-DISBCM chairman buttons to be ordered separately) or as a delegate unit with auxiliary button. The versatile auxiliary button can be used as an usher call, for example
- To lock the loop-through cable, a cable clamp is available (DCN-DISCLM, to be ordered separately)
- The unit is available in light and dark colored bases

Controls and Indicators

- Five voting buttons with indicator rings around the buttons
- Unit activity / delegate presence indicator
- Alphanumeric display for language channel selection with number and abbreviated channel name
- Microphone button with a red, green or yellow illuminated ring. Red indicates microphone is active, green indicates request-to-speak accepted, and yellow indicates 'VIP'.
- VIP indicator is lit when the delegate is part of the notebook (only available if PC Software is used)
- Headphones volume control buttons
- Recessed 'De-init' switch

Interconnections

- Socket for pluggable microphone
- Two 3.5 mm (0.14 in) stereo jack type headphone sockets
- 2 m (78.7 in) cable terminated within a molded six-pole circular connector.
- Six-pole circular connector for loop-through connections

Certifications and Approvals

Region	Certification
Europe	CE

Technical Specifications

Electrical

Frequency response	30 Hz to 20 kHz
Headphone load impedance	> 32 ohm < 1k ohm
Output power	2 x 15 mW/32 ohm

Mechanical

Mounting	Tabletop (portable or fixed mounting) and flush mounting
Dimensions (H x W x D)	**(without microphone)**
Tabletop	61 x 190 x 116 mm (2.4 x 7.5 x 4.6 in)
Flush mounted	6 x 190 x 120 mm (0.2 x 7.5 x 4.7 in)
Weight	800 g (1.76 lb)

Color top	Silver (RAL 9022)
Color base	
DCN-DISVCS-L	Light Grey (RAL 000 7500)
DCN-DISVCS-D	Charcoal (PH 10736)

Ordering Information

DCN-DISVCS-L Discussion Voting Channel Selector Light pluggable microphone, light base, microphone and rims to be ordered separately	DCN-DISVCS-L
DCN-DISVCS-D Discussion Voting Channel Selector Dark pluggable microphone, dark base, microphone and rims to be ordered separately	DCN-DISVCS-D
Accessories	
DCN-MICS Pluggable Short Microphone length 310 mm (12.2 inch), silver	DCN-MICS
DCN-DISBDD Buttons Dual Use (10 sets) 10 sets	DCN-DISBDD
DCN-DISBCM Buttons Chairman (10 sets) 10 sets	DCN-DISBCM
DCN-DISRMS Rim Metal Semi Gloss (10 pcs) metal, semi gloss, 10 pieces	DCN-DISRMS
DCN-DISRMH Rim Metal High Gloss (10 pcs) metal, high gloss, 10 pieces	DCN-DISRMH
DCN-DISR-D Rim Dark (10 pcs) dark, 10 pieces	DCN-DISR-D
DCN-DISR-SR Rim Silver (10 pcs) silver, 10 pieces	DCN-DISR-SR
DCN-DISRH-SR Rim High Gloss Silver (10 pcs) silver, high gloss, 10 pieces	DCN-DISRH-SR
DCN-MICL Pluggable Long Microphone length 480 mm (18.9 inch), silver	DCN-MICL
DCN-DISCLM Cable Clamp (25 pcs) 25 pieces	DCN-DISCLM

DCN-DISR Rims for Discussion Units

A rim completes the discussion units. A variety of rims with different finishes are available to allow matching with any interior.

Technical Specifications

Mechanical

Mounting	Click and fit on any discussion unit
Color base	
DCN-DISRH-SR	Silver (RAL 9022) high gloss
DCN-DISR-SR	Silver (RAL 9022)
DCN-DISR-D	Charcoal (PH 10736)
DCN-DISRMH	High gloss metal
DCN-DISRMS	Semi gloss metal

Ordering Information

DCN-DISRH-SR Rim High Gloss Silver (10 pcs) silver, high gloss, 10 pieces	**DCN-DISRH-SR**
DCN-DISR-SR Rim Silver (10 pcs) silver, 10 pieces	**DCN-DISR-SR**
DCN-DISR-D Rim Dark (10 pcs) dark, 10 pieces	**DCN-DISR-D**
DCN-DISRMH Rim Metal High Gloss (10 pcs) metal, high gloss, 10 pieces	**DCN-DISRMH**
DCN-DISRMS Rim Metal Semi Gloss (10 pcs) metal, semi gloss, 10 pieces	**DCN-DISRMS**

DCN-MICS/L Pluggable Microphone Short/Long Stem

DCN-MICS / DCN-MICS-D	100 g (0.22 lb)
DCN-MICL / DCN-MICL-D	115 g (0.25 lb)
Color top	
DCN-MICS / DCN-MICL	Silver (RAL 9022)
DCN-MICS-D / DCN-MICL-D	Dark (graphite gray)

Ordering Information

DCN-MICS Pluggable Short Microphone length 310 mm (12.2 inch), silver	**DCN-MICS**
DCN-MICS-D Pluggable Short Microphone Dark length 310 mm (12.2 inch), dark	**DCN-MICS-D**
DCN-MICL Pluggable Long Microphone length 480 mm (18.9 inch), silver	**DCN-MICL**
DCN-MICL-D Pluggable Long Microphone Dark length 480 mm (18.9 inch), dark	**DCN-MICL-D**

Features

▸ **Uni-directional microphone on adjustable stem**

▸ **Built-in plop and windshield**

The innovative, stylish and ergonomically designed microphone with an adjustable stem simply plugs directly into a Discussion unit, Concentus, flush-mounted Microphone Connection panels or Interpreter desk. It has a uni-directional response for optimum performance even in noisy conditions, and has low susceptibility to interference from mobile phones.

Functions

Controls and Indicators

• Red or green illuminator. Red indicates microphone is active, green indicates request-to-speak accepted

Interconnections

• Connector to plug and fasten the microphone

Technical Specifications

Mechanical

Mounting	Plug and fasten into Discussion units, Concentus, flush mounted Microphone connection panels and Interpreter desks
Length	
DCN-MICS / DCN-MICS-D	310 mm (12.2 in)
DCN-MICL / DCN-MICL-D	480 mm (18.9 in)
Weight	

DCN-DISBCM Buttons Chairman (10 sets)

DCN-DISBDD Buttons Dual Use (10 sets)

DCN-DISBCM buttons for Chairman Discussion Units replace the single microphone button on a discussion unit when used in chairman mode. These buttons can also be used for the discussion unit in auxiliary control mode.

DCN-DISBDD buttons for Dual Use Discussion Units replace the single microphone button on a discussion unit when used in dual delegate mode.

Technical Specifications

Mechanical

Mounting	Click and fit on any Discussion unit
Color	Silver (RAL 9022)

Technical Specifications

Mechanical

Mounting	Click and fit on any Discussion unit
Color	Silver (RAL 9022)

Ordering Information

DCN-DISBCM Buttons Chairman (10 sets)   **DCN-DISBCM**
10 sets

Ordering Information

DCN-DISBDD Buttons Dual Use (10 sets)   **DCN-DISBDD**
10 sets

DCN-DISCLM Cable Clamp (25 pcs)
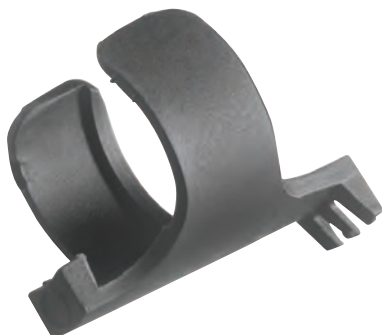
The cables can be secured to the DCN-CCU2 trunk outputs using the DCN-DISCLM cable clamp to prevent them from being pulled out accidentally.

Technical Specifications

Mechanical

Mounting	Click and fit on any Discussion unit
Color	Charcoal (PH 10736)

Ordering Information

DCN-DISCLM Cable Clamp (25 pcs)   **DCN-DISCLM**
25 pieces

DCN-FCDIS Flight Case for 10 Discussion Units

Features

‣ **Rugged construction with reinforced corners**

‣ **Simplifies packing and unpacking**

‣ **Easy to carry and store**

The DCN-FCDIS Flight Case for Discussion units accommodates 10 Discussion units with attached microphones.

Technical Specifications

Mechanical

Dimensions (H x W x D)	430 x 665 x 255 mm (16.9 x 26.2 x 10 in)
Weight	9.3 kg (20.5 lb)
Color	grey

Ordering Information

DCN-FCDIS Flight Case for 10 Discussion Units   **DCN-FCDIS**
can hold 10 discussion units with microphones

Concentus Units

Tabletop Concentus units

Concentus units are typically used for larger conferences. The units are ideal when a flexible configuration or portable facilities are required. All units are easily plugged into or removed from the system cabling, which enables the conference system to be set up quickly and efficiently. The unit has a pluggable microphone (supplied separately) available in either short or long stem versions. The microphones have flexible stems for ease of use. The unit can be free-standing or fixed using mounting screws. The Concentus units can also be flush-mounted in more permanent installations. Storage and transport is simplified by rugged suitcases that accommodate complete systems.

The units can be connected in a simple daisy chain configuration. Alternatively, they can be connected using one thin cable and a trunk splitter to connect the unit to the system cabling, with connectors neatly hidden in the units. This 'one cable' aspect of the DCN Next Generation system means there is no untidy mess of wires at the back of the units. This 'clean' configuration is especially advantageous for TV coverage, where the backs of the units are on show.

The Concentus units range from standard Concentus units to Concentus with chip card reader, graphic LCD screen and channel selector, up to chairman units with a priority key and advanced options. All Concentus units provide voting facilities that enable contributing delegates to take part in the decision making process, a vital aspect of modern conferencing.

Concentus units overview

	Pluggable microphone	Channel Selector	Voting	Graphical LCD	ID-card reader	Chairman
DCN-CON	•		•			
DCN-CONCS	•	•	•			
DCN-CONFF	•	•	•	•	•	
DCN-CONCM	•	•	•	•	•	•

DCN-CON Concentus Basic

Features

▸ **Low susceptibility to mobile phones**

▸ **Compact, attractive delegate unit**

▸ **Built-in fold-away flat-panel loudspeaker**

▸ **Five voting buttons**

▸ **Cable connections located underneath the unit**

▸ **External present and fraud contact**

The DCN-CON is the standard delegate conference unit that enables delegates to speak, register a request-to-speak, register a response request, listen to the speaker and vote. It has low susceptibility to interference from mobile phones. A socket is provided to connect the pluggable microphones (DCN-MICS and DCN-MICL, to be ordered separately). The flat-panel loudspeaker offers superior acoustics with minimal feedback, thus increasing intelligibility. It is automatically muted when the microphone is activated. When the unit is not being used, the loudspeaker panel conveniently folds down. There are five voting buttons for all kind of voting. An external contact is available to connect external fingerprint readers.

Functions

Controls and indicators

- Built-in, fold-away, flat-panel loudspeaker, automatically muted if the microphone is on
- Microphone 'on/off' or 'request-to-speak' button
- 'Microphone on' indicator at the top of the loudspeaker
- Tri-color indicator above the microphone button:
  - Red 'Microphone on' indicator

  - Green 'Request-to-speak' confirmation indicator
  - Yellow 'VIP' indicator. 'VIP' LED is lit when the delegate unit is part of the notebook, which is only available when PC control software is used
- Five voting buttons with yellow LED confirmation indicators These can be used to register:
  - PRESENT, YES (+), NO (-), ABSTAIN (X), (parliamentary voting)
  - Numerals: 1 to 5 (multiple choice or opinion polls)
  - Rating scale: - -, -, 0, +, ++ (audience response)

Connections

- Socket for pluggable microphone
- 2 m (78.7 in) cable terminated in a molded six-pole circular connector
- Six-pole circular connector for loop-through connections
- Eight-pole modular jack connector for Intercom Handset LBB 3555/00 and external present and Fraud contact e.g. a fingerprint reader

Certifications and Approvals

Region	Certification
Europe	CE

Technical Specifications

Mechanical

Mounting	Tabletop (portable or fixed mounting) and flush mounting
Dimensions (H x W x D)	**(without microphone)**
Tabletop	50 x 275 x 155 mm (2.0 x 10.8 x 6.1 in)
Flush mounted	30 x 275 x 155 mm (1.2 x 10.8 x 6.1 in)
Weight	1.4 kg (3.1 lb)
Color top	Charcoal (PH 10736) with silver (RAL 9022) panel
Color base	Charcoal (PH 10736)

Ordering Information

DCN-CON Concentus Basic pluggable microphone, voting, microphone to be ordered separately	**DCN-CON**
Accessories	
DCN-MICL Pluggable Long Microphone length 480 mm (18.9 inch), silver	**DCN-MICL**
DCN-MICS Pluggable Short Microphone length 310 mm (12.2 inch), silver	**DCN-MICS**

DCN-CONCS Concentus Channel Selector

Features

▸ **Low susceptibility to mobile phones**

▸ **Compact, attractive delegate unit**

▸ **Built-in, fold-away, flat-panel loudspeaker**

▸ **Five voting buttons**

▸ **Cable connections located underneath the unit**

▸ **External present and fraud contact**

The DCN-CONCS is similar to the DCN-CON Standard Delegate Unit, but includes a built-in language channel selector. This makes it suitable for conferences where more than one language is used and simultaneous interpretations are available. The channel selector includes up and down select keys and a 2-digit display with backlighting, enabling rapid selection of the required language channel. Channel selection is automatically limited to the number of language channels available. The flat-panel loudspeaker offers superior acoustics with minimal feedback, thus increasing intelligibility. When the unit is not being used, the loudspeaker panel conveniently folds down.

Functions

Controls and Indicators

- Channel selector with channel number display with back lighting and channel select keys (up/down)
- Headphone volume control on each side of the unit
- Built-in fold-away flat-panel loudspeaker, automatically muted if a microphone is on
- Microphone 'on/off ' or 'request-to-speak' button
- 'Microphone-on' indicator at the top of the loudspeaker

- Tri-color indicator above the microphone button:
  - Red microphone on indicator
  - Green 'Request-to-speak' confirmation indicator
  - Yellow 'VIP' indicator. 'VIP' is lit when the delegate unit is part of the notebook, which is only available when PC control software is used
- Five voting buttons with yellow LED confirmation indicators These can be used to register:
  - PRESENT, YES (+), NO (-), ABSTAIN (X), (parliamentary voting)
  - Numerals: 1 to 5 (multiple choice or opinion polls)
  - Rating scale: - -, -, 0, +, ++ (audience response)

Interconnections

- Socket for pluggable microphone
- 2 m (78.7 in) cable terminated in a molded six-pole circular connector
- Socket for external microphone or headset microphone
- Six-pole circular connector for loop-through connections
- Eight-pole modular jack connector for Intercom Handset LBB 3555/00 and external present and fraud contact e.g. a fingerprint reader
- Left and right 3.5 mm (0.14 in) stereo jack type headphones sockets
- Connection 3.5 mm (0.14 in) for external microphone or stereo jack type headset microphone

Certifications and Approvals

Region	Certification
Europe	CE

Technical Specifications

Electrical

Headphone connection	
Frequency response	30 Hz to 20 kHz
Load impedance	> 32 ohm
Output power	2 x 15 mW/32 ohm

Headset connection	
Frequency response	30 Hz - 20 kHz
Load impedance	> 32 ohm
Output power	2 x 15 mW/32 ohm
Nominal microphone input level	7 mVrms
Overload microphone input level	> 124 mVrms

Interface data	
Recommended external microphone type (or headset microphone)	
Element	Electret-condenser
Polar pattern	Omni directional
Operating voltage	5 VDC
Sensitivity	62 dB at 1200 ohm (0 dB = 1 V/mbar at 1 kHz)

Frequency response	100 Hz to 14 kHz
Connector	3.5 mm (0.14 in) jack mono or stereo

Mechanical

Mounting	Tabletop (portable or fixed mounting) and flush mounting
Dimensions (H x W x D)	**(without microphone)**
Tabletop	50 x 275 x 155 mm 2.0 x 10.8 x 6.1 in)
Flush mounted	30 x 275 x 155 mm (1.2 x 10.8 x 6.1 in)
Weight	1.4 kg (3.1 lb)
Color top	Charcoal (PH 10736) with silver (RAL 9022) panel
Color base	Charcoal (PH 10736)

Ordering Information

DCN-CONCS Concentus Channel Selector pluggable microphone, voting, channel select, 2 headphone sockets, microphone to be ordered separately	**DCN-CONCS**

Accessories

DCN-MICL Pluggable Long Microphone length 480 mm (18.9 inch), silver	**DCN-MICL**
DCN-MICS Pluggable Short Microphone length 310 mm (12.2 inch), silver	**DCN-MICS**

DCN-CONFF Concentus Full Function

Features

▶ **Low susceptibility to mobile phones**

▶ **Compact, attractive delegate unit**

▶ **Built-in fold-away flat-panel loudspeaker**

▶ **Five voting buttons**

▶ **Cable connections located underneath the unit**

▶ **External present and fraud contact**

The top-of-the-range, multi-functional delegate unit meets the demands of even the largest conferences. It provides facilities for speaking, registering a request-to-speak, registering a request-to-respond, listening, voting, selecting language channels, chip card reading and displaying conference and user-related information. It has low susceptibility to interference from mobile phones. It is stylistically and functionally similar to the DCN-CONCS Delegate Unit with Channel Selector, but also includes a chip card reader and a graphic display with backlighting. When a chip card is inserted into the card reader, the graphic LCD screen automatically displays user-related information in the language assigned to the delegate chip card. The graphic LCD screen has permanent backlighting, and can display characters from complex European languages or icon-based-scripts such as Chinese. Channel selection is automatically limited to the number of language channels available. The flatpanel loudspeaker offers superior acoustics with minimal feedback, so increasing intelligibility. When the unit is not being used, the loudspeaker panel conveniently folds down.

Functions

Controls and Indicators

- Channel selector with channel number display with back lighting and channel select keys (up/down)
- Headphone volume control on each side of the unit
- Graphic LCD screen. Typical displays include:
  - button description
  - multi-lingual user instructions
  - information on the number of current speakers
  - request-to-speak information and confirmation
  - voting results
  - remaining/elapsed speech time
  - public and personal messages
  - additional user information
- Five button with LED indicators (for use in combination with the graphic LCD screen). The soft buttons can provide users with display information such as messages, conference- and microphone user-related information. Depending on the application software the five soft buttons can be used as voting buttons with confirmation indicators (yellow LEDs), enabling the user to register:
  - PRESENT, YES(+), NO (-), ABSTAIN (X), (parliamentary voting)
  - Numerals: 1 to 5 (multiple choice or opinion poll voting)
  - Rating scale: - -, - 0, +, ++ (audience response)
- Identification and access control by card reader with or without PIN
- Identification and access control by card reader with or without PIN
- Built-in fold-away flat-panel loudspeaker, automatically muted if a microphone is on
- Microphone 'on/off ' or 'request-to-speak' button
- 'Microphone on' indicator at the top of the loudspeaker
- Tri-color indicator above the microphone button:
  - Red microphone on indicator
  - Green 'Request-to-speak' confirmation indicator
  - Yellow 'VIP' indicator. 'VIP' is lit when the delegate unit is part of the notebook, which is only available when PC control software is used

Interconnections

- Socket for pluggable microphone
- 2 m (78.7 in) cable terminated in a molded six-pole circular connector
- Socket for external microphone or headset microphone
- Six-pole circular connector for loop-through connections
- Eight-pole modular jack connector for Intercom Handset LBB 3555/00 and external present and fraud contact e.g. a. fingerprint reader
- Left and right 3.5 mm (0.14 in) stereo jack type headphones sockets
- Connection 3.5 mm (0.14 in) for external microphone or stereo jack type headset microphone

Certifications and Approvals

Region	Certification
Europe	CE

Technical Specifications

Electrical

Headphone connection

Frequency response	30 Hz to 20 kHz
Load impedance	> 32 ohm
Output power	2 x 15 mW/32 ohm

Headset connection

Frequency response	30 Hz - 20 kHz
Load impedance	> 32 ohm
Output power	2 x 15 mW/32 ohm
Nominal microphone input level	7 mVrms
Overload microphone input level	> 124 mVrms

Interface data

Recommended external microphone type (or headset microphone)

Element	Electret-condenser
Polar pattern	Omni directional
Operating voltage	5 VDC
Sensitivity	62 dB at 1200 ohm (0 dB = 1 V/mbar at 1 kHz)
Frequency response	100 Hz to 14 kHz
Connector	3.5 mm (0.14 in) jack mono or stereo

Mechanical

Mounting	Tabletop (portable or fixed mounting) and flush mounting
Dimensions (H x W x D)	**(without microphone)**
Tabletop	50 x 275 x 155 mm (2.0 x 10.8 x 6.1 in)
Flush mounted	30 x 275 x 155 mm (1.2 x 10.8 x 6.1 in)
Weight	1.4 kg (3.1 lb)
Color top	Charcoal (PH 10736) with silver (RAL 9022) panel
Color base	Charcoal (PH 10736)

Ordering Information

DCN-CONFF Concentus Full Function pluggable microphone, voting, channel select, 2 headphone sockets, graphical display, microphone to be ordered separately	**DCN-CONFF**

Accessories

DCN-MICS Pluggable Short Microphone length 310 mm (12.2 inch), silver	**DCN-MICS**
DCN-MICL Pluggable Long Microphone length 480 mm (18.9 inch), silver	**DCN-MICL**

DCN-CONCM Concentus Chairman

Features

▸ **Low susceptibility to mobile phones**

▸ **Compact, attractive delegate unit**

▸ **Built-in, fold-away, flat-panel loudspeaker**

▸ **Five voting buttons**

▸ **Cable connections located underneath the unit**

▸ **External present and fraud contact**

The stylish and ergonomically designed chairman unit has all the necessary facilities to enable the user to chair a conference. It has low susceptibility to interference from mobile phones Similar in appearance to the DCN-CONFF Delegate Unit, the DCN-CONCM Chairman Unit includes a microphone priority button. When pressed, the priority button causes all currently active delegate microphones to be temporarily or permanently switched off, allowing the chairman to take control of the meeting. The chairman unit can also be used to start, stop or suspend voting, cancel a request-to-speak, turn off all active microphones and recall messages for display. A graphic LCD screen with permanent backlighting can display characters from complex European languages or icon-based scripts such as Chinese. Channel selection is automatically limited to the number of language channels available. The flat-panel loudspeaker offers superior acoustics with minimal feedback, so increasing intelligibility. When the unit is not being used, the loudspeaker panel conveniently folds down.

Functions

Controls and Indicators

- Priority key which causes an optional chime tone to sound while temporarily or permanently muting all active delegate units. The chairman microphone remains active as long as the priority button is pressed.
- Channel selector with channel number display with back lighting and channel select keys (up/down)
- Headphone volume control on each side of the unit
- Graphic LCD screen. Typical displays include:
  - button description
  - multi-lingual user instructions
  - information on the number of current speakers
  - request-to-speak information and confirmation
  - voting results
  - remaining/elapsed speech time
  - public and personal messages
  - additional user information
- Five button with LED indicators (for use in combination with the graphic LCD screen). The soft buttons can provide users with display information such as messages, conference- and microphone user-related information. Depending on the application software the five soft buttons can be used as voting buttons with confirmation indicators (yellow LEDs), enabling the user to register:
  - PRESENT, YES(+), NO (-), ABSTAIN (X), (parliamentary voting)
  - Numerals: 1 to 5 (multiple choice or opinion poll voting)
  - Rating scale: - -, - 0, +, ++ (audience response)
- Identification and access control by card reader with or without PIN
- Built-in fold-away flat-panel loudspeaker, automatically muted if a microphone is on
- Microphone 'on/off ' or 'request-to-speak' button
- 'Microphone on' indicator at the top of the loudspeaker
- Tri-color indicator above the microphone button:
  - Red microphone on indicator
  - Green 'Request-to-speak' confirmation indicator
  - Yellow 'VIP' indicator. 'VIP' is lit when the delegate unit is part of the notebook, which is only available when PC control software is used

Interconnections

- Socket for pluggable microphone
- 2 m (78.7 in) cable terminated in a molded six-pole circular connector
- Socket for external microphone or headset microphone
- Six-pole circular connector for loop-through connections
- Eight-pole modular jack connector for Intercom Handset LBB 3555/00 and external present and fraud contact e.g., fingerprint reader
- Left and right 3.5 mm (0.14 in) stereo jack type headphones sockets
- Connection 3.5 mm (0.14 in) for external microphone or stereo jack type headset microphone

Certifications and Approvals

Region	Certification
Europe	CE

Technical Specifications

Electrical

Headphone connection	
Frequency response	30 Hz to 20 kHz
Load impedance	> 32 ohm
Output power	2 x 15 mW/32 ohm

Headset connection	
Frequency response	30 Hz - 20 kHz
Load impedance	> 32 ohm
Output power	2 x 15 mW/32 ohm
Nominal microphone input level	7 mVrms
Overload microphone input level	> 124 mVrms

Interface data	
Recommended external microphone type (or headset microphone)	
Element	Electret-condenser
Polar pattern	Omni directional
Operating voltage	5 VDC
Sensitivity	62 dB at 1200 ohm (0 dB = 1 V/mbar at 1 kHz)
Frequency response	100 Hz to 14 kHz
Connector	3.5 mm (0.14 in) jack mono or stereo

Mechanical

Mounting	Tabletop (portable or fixed mounting) and flush mounting
Dimensions (H x W x D)	(without microphone)
Tabletop	50 x 275 x 155 mm (2.0 x 10.8 x 6.1 in)
Flush mounted	30 x 275 x 155 mm (1.2 x 10.8 x 6.1 in)
Weight	1.4 kg (3.1 lb)
Color top	Charcoal (PH 10736) with silver (RAL 9022) panel
Color base	Charcoal (PH 10736)

Ordering Information

DCN-CONCM Concentus Chairman pluggable microphone, voting, channel select, 2 headphone sockets, graphical display, priority key, microphone to be ordered separately	**DCN-CONCM**

Accessories

DCN-MICL Pluggable Long Microphone length 480 mm (18.9 inch), silver	**DCN-MICL**
DCN-MICS Pluggable Short Microphone length 310 mm (12.2 inch), silver	**DCN-MICS**

DCN-MICS/L Pluggable Microphone Short/Long Stem

DCN-MICS / DCN-MICS-D	100 g (0.22 lb)
DCN-MICL / DCN-MICL-D	115 g (0.25 lb)
Color top	
DCN-MICS / DCN-MICL	Silver (RAL 9022)
DCN-MICS-D / DCN-MICL-D	Dark (graphite gray)

Ordering Information

DCN-MICS Pluggable Short Microphone length 310 mm (12.2 inch), silver	**DCN-MICS**
DCN-MICS-D Pluggable Short Microphone Dark length 310 mm (12.2 inch), dark	**DCN-MICS-D**
DCN-MICL Pluggable Long Microphone length 480 mm (18.9 inch), silver	**DCN-MICL**
DCN-MICL-D Pluggable Long Microphone Dark length 480 mm (18.9 inch), dark	**DCN-MICL-D**

Features

- ‣ **Uni-directional microphone on adjustable stem**
- ‣ **Built-in plop and windshield**

The innovative, stylish and ergonomically designed microphone with an adjustable stem simply plugs directly into a Discussion unit, Concentus, flush-mounted Microphone Connection panels or Interpreter desk. It has a uni-directional response for optimum performance even in noisy conditions, and has low susceptibility to interference from mobile phones.

Functions

Controls and Indicators

- • Red or green illuminator. Red indicates microphone is active, green indicates request-to-speak accepted

Interconnections

- • Connector to plug and fasten the microphone

Technical Specifications

Mechanical

Mounting	Plug and fasten into Discussion units, Concentus, flush mounted Microphone connection panels and Interpreter desks
Length	
DCN-MICS / DCN-MICS-D	310 mm (12.2 in)
DCN-MICL / DCN-MICL-D	480 mm (18.9 in)
Weight	

LBB 3555/00 DCN Intercom Handset

Technical Specifications

Mechanical

Mounting	Tabletop or wall-mounted using the 2 screw holes on the cradle
Dimensions (H x W)	53 x 210 mm (2.08 x 8.26 in)
Weight	250 g (0.55 lb)
Color	Charcoal (PH 10736)

Ordering Information

LBB 3555/00 DCN Intercom Handset with coiled handset cable with 2 m reach, six-pole RJ45 connector	**LBB3555/00**

Features

▸ **Ideal for intercom applications**

▸ **For use with all Concentus and Dual Delegate Interface**

▸ **Can be permanently mounted to wall, chair or tabletop**

Lightweight and compact, this robust and attractively styled handset and cradle enables private 2-way conversation between conference participants. The handset is hard-wired to the cradle by a coiled cable, 0.5 m (19.6 in) long when coiled, and 2 m (78.7 in) uncoiled. The cable is terminated with a six-pole RJ45 connector for connection to Concentus and Dual Delegate Interface. When used in permanent installations, the unit is easily mounted to a tabletop or wall using the two screws.

Functions

Interconnections

• Six-pole RJ45 socket

Certifications and Approvals

Region	Certification
Europe	CE

DCN-FCCON Flight Case for 10 Concentus Units

Features

▸ **Rugged construction with reinforced corners**

▸ **Simplifies packing and unpacking**

▸ **Easy to carry and store**

▸ **Shaped foam interior**

The DCN-FCCON Flight Case accommodates 10 Concentus units. There is also a special cover compartment for housing 10 microphones (standard and long).

Technical Specifications

Mechanical

Dimensions (H x W x D)	430 x 665 x 255 mm (16.9 x 26.2 x 10 in)
Weight	9.3 kg (20.5 lb)
Color	Dark grey

Ordering Information

|	
DCN-FCCON Flight Case for 10 Concentus Units can hold 10 Concentus units with micro-phones	**DCN-FCCON**

Flush Mounted Units

The broad range of DCN Next Generation flush mounted equipment is used for creating individual system contribution units for custom solutions. Flush mounted equipment is ideal for use in permanent installations where portability is not required. It can be installed into either tabletops or seat arm rests.

The DCN Next Generation flush-mount range won the prestigious iF product design award and it's available in high-style silver and dark charcoal finishes matching different decors.

All conference functions and facilities of tabletop contribution units are also available in flush mounted versions. Because of the modular set-up it offers great flexibility; depending on the required functionality, a selection of the different flush mounted units can be made.

Mounting

The units can be mounted in wood or metal. When mounting into a metal surface, the click-to-fit mechanism available on all flush-mounting units is used to secure the units into cut-outs on tabletops or the arm rests of seats.
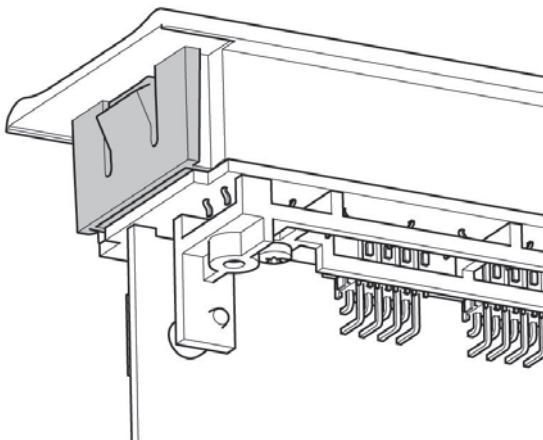
Click-to-fit mechanism

When mounting into a wooden surface the units are secured by using DCN-FCOUP Couplings. First the Couplings have to be placed into surface, and then the units are clicked into the Couplings. To place the DCN-FCOUP Couplings at the correct position, the DCN-FPT Flush Positioning Tool can be used.

How to use the flush position tool

In the examples below, several flush mount configurations are shown. They range from a basic solution with only a hand microphone to a complete solution for chairman with voting and intercom.

Configuration with basic microphone functionality
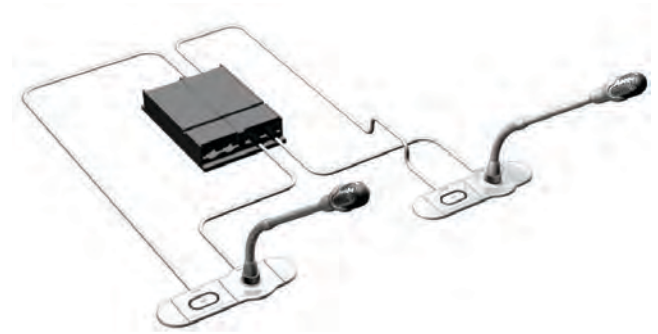
Flush mount configuration with dual microphones
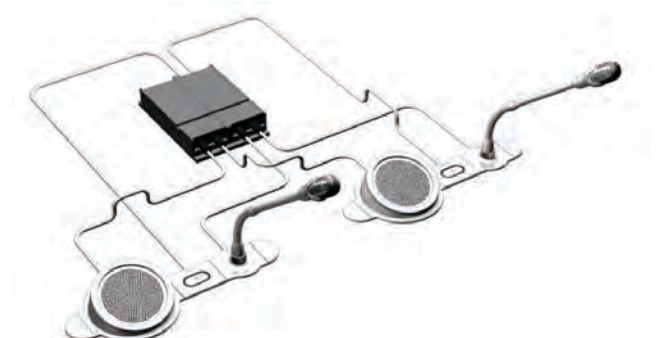
Flush mount configuration with dual microphones and loudspeakers
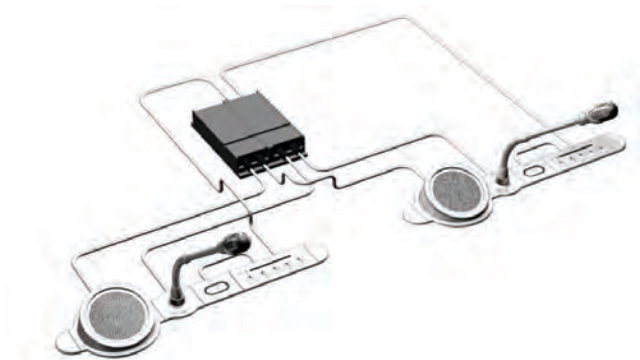
Flush mount configuration with dual microphones, loudspeakers, voting and ID-card readers
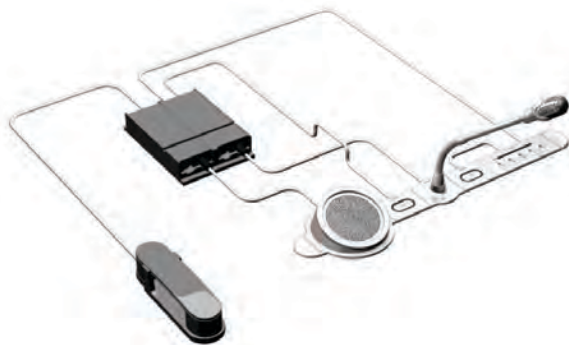
Flush mount configuration with chairman priority control, microphones, loudspeaker, voting, ID-card reader and Intercom

DCN-DDI Dual Delegate Interface

Features

▸ **Dual Delegate mode for two microphones and two voting and card panels**

▸ **Two microphone/line inputs**

▸ **Outputs to headphones or loudspeakers**

▸ **Range of mounting options**

▸ **Use for entrance/exit registration**

▸ **Shared microphone with dual microphone control**

The Dual Delegate Interface is intended for use in flush mounted custom solutions. It enables a number of functions to be added, making it suitable for chairmen and delegates. Such functions include facilities for connecting a Voting Panel, with or without a Card reader (DCN-FVCRD and DCN-FV). In addition, two separate audio inputs are provided that can also be used as line inputs. Each input can be assigned its own seat number, allowing the DCN-DDI to serve two delegate positions.

Settings are available to assign the Dual Delegate Interface for use as a delegate unit, a dual delegate, chairman unit, entrance/exit unit or ambient microphone. The ambient microphone is located in the conference venue, and automatically switched on when no other delegate unit or chairman unit microphones are active. In this way, interpreters always have audio contact with conference venue.

Functions

- The loudspeaker output is switched off when the corresponding input is switched on
- The unit can be mounted free-standing on a tabletop, mounted on a wall, or discreetly mounted into tabletops or into the arm rests of chairs, etc.

- The unit is suitable for Hand-Held Microphones (DCN-FHH) or Pluggable Microphones (DCN-MICS, DCN-MICL) with Microphone Connection Panel (DCN-FMIC) and Microphone Control Panel (DCN-FMICB)
- The unit provides a single connection for an Intercom Handset (LBB 3555/00).

Controls and Indicators

- Three Switches per input with the following possibilities:
  - Microphone or line selection
  - Asymmetrical microphone input, symmetrical microphone/ line input, or symmetrical microphone input with phantom power selection
  - Input attenuation selection of 0, 6, 12 or 18 dB +/- 3 dB input level fine adjustment potentiometer per input Interconnection
- Remote control inputs (switches) and outputs (LEDs) matching the DCN microphones and control panels
- Switch to select the different modes of the DCN-DDI:
  - Dual delegate
  - Chairman
  - Dual delegate, one microphone
  - Dual delegate, muted loudspeakers
  - Single delegate
  - Entrance/Exit
  - Ambient microphone

Note   To use the entrance/exit mode, PC control software is also required.

Interconnections

- Two RJ11 connectors for Microphone Control Panel DCN-FMIC, Priority Panel DCN-FPRIOB, Voting Panel DCN-FV, Voting and Card Panel DCN-FVCRD
- RJ11 connector for Intercom Handset LBB 3555/00
- Two balanced audio inputs for line (0 dB), or microphone (-60 dB) sources, with or without a phantom power supply (2 x eight-pole 262° DIN-type socket)
- Six-pole circular connector for loop-through system cabling
- 2 m (78.7 in) cable terminated with a molded six-pole circular connector
- Two 3.5 mm (0.14 in) stereo jack sockets for connection to headphones or to loudspeaker panel (DCN-FLSP).

Certifications and Approvals

Region	Certification
Europe	CE

Technical Specifications

Mechanical

Mounting	On wall, under tabletop or seat, in arm rest or in cable duct
Dimensions (H x W x D) (excl. cables)	35 x 100 x 170 mm (1.4 x 3.9 x 6.7 in)
Weight	500 g (1.10 lb)
Color	Charcoal (PH 10736)

Ordering Information

DCN-DDI Dual Delegate Interface   **DCN-DDI**
for flush mounted custom solutions

DCN-FHH Hand Held Microphone

Features

▸ **Light, portable microphone**

▸ **Built-in plop and windshield**

▸ **On/off switch and LED status indicators**

The DCN-FHH is a uni-directional, condenser microphone with built-in plop and windshield. It comfortably fits into one hand and is ideal for applications where the speaker is on the move. Two of these microphones can be connected to the Dual Delegate Interface DCN-DDI.

Functions

Controls and Indicators

- Condenser microphone with built-in plop and windshield
- Microphone on/off or request-to-speak button
- 'Microphone on' indicator (red LED)
- 'Request-to-speak' confirmation indicator (green LED)

Certifications and Approvals

Region	Certification
Europe	CE

Technical Specifications

Mechanical

Mounting	Using clamp LBC 1215/01 the microphone may be mounted on a stand, wall or on a chair
Dimensions (H x W)	215 x 30 mm (8.5 x 1.2 in)
Cable length	
DCN-FHH	5 m (16.4 ft)
DCN-FHH-C	Coiled 0.4 m (1.3 ft), un-coiled 1.4 m (4.6 ft)
Weight	350 g (0.77 lb)
Color	Charcoal (PH 10736)

Ordering Information

DCN-FHH Hand Held Microphone cable length 5 m (16.4 ft)	**DCN-FHH**
DCN-FHHC Hand Held Microphone with coiled cable, length un-coiled 1.4 m (4.6 ft)	**DCN-FHHC**

DCN-FMIC Flush Microphone Connection Panel

Features

▸ **Stylish and modern design (IF award)**

▸ **Channel selector output level control**

The Microphone Connection Panel connects the pluggable microphone DCN-MICS and DCN-MICL to one of the audio inputs to the Dual Delegate Interface (DCN-DDI).

The Microphone Connection Panel also has an output which controls the output level of the channel selector. This means that when the microphone is active, the output level of the channel selector is reduced to prevent acoustic feedback.

Functions

Interconnections

- 2 m (78.7 in) cable terminated with eight-pole 262° DIN-type plug
- Connector to control output level reduction of the channel selector (AMP173977-2 socket)

Technical Specifications

Mechanical

Mounting	Click-to-fit in a metal panel with a thickness of 2 mm, or in combination with DCN-FCOUP couplings and DCN-FEC end caps in any surrounding
Dimensions (H x W x D)	40 x 50 x 50 mm (1.57 x 1.97 x 1.97 in)
Weight	10 g (0.02 lb)
Color	
DCN-FMIC	Silver (RAL 9022)
DCN-FMIC-D	Dark (graphite gray)

Ordering Information

DCN-FMIC Flush Microphone Connection Panel flush mounted, silver, microphone to be ordered separately	**DCN-FMIC**
DCN-FMIC-D Flush Microphone Connection Panel Dark flush mounted, dark, microphone to be ordered separately	**DCN-FMIC-D**
Accessories	
DCN-MICS Pluggable Short Microphone length 310 mm (12.2 inch), silver	**DCN-MICS**
DCN-MICS-D Pluggable Short Microphone Dark length 310 mm (12.2 inch), dark	**DCN-MICS-D**
DCN-MICL Pluggable Long Microphone length 480 mm (18.9 inch), silver	**DCN-MICL**
DCN-MICL-D Pluggable Long Microphone Dark length 480 mm (18.9 inch), dark	**DCN-MICL-D**

DCN-FMICB Flush Micro-phone Control Panel

Technical Specifications

Mechanical

Mounting	Click-to-fit in a metal panel with a thickness of 2 mm, or in combination with DCN-FCOUP couplings and DCN-FEC end caps in any surrounding
Dimensions (H x W x D)	40 x 50 x 50 mm (1.57 x 1.97 x 1.97 in)
Weight	200 g (0.44 lb)
Color	
DCN-FMICB	Silver (RAL 9022)
DCN-FMICB-D	Dark (graphite gray)

Ordering Information

DCN-FMICB Flush Microphone Control Panel flush mounted, silver	**DCN-FMICB**
DCN-FMICB-D Flush Microphone Control Panel Dark flush mounted, dark	**DCN-FMICB-D**

Features

▸ **Stylish and modern design (IF award)**

▸ **Microphone on/off button**

▸ **Colored status indicator ring**

The Microphone Control Panel is connected to the Dual Delegate Interface (DCN-DDI) via one of the RJ11 control inputs.

Functions

Controls and Indicators

• One microphone control button
• Three-color illuminated ring around the microphone button which can show the following states:
  - Red - microphone is active
  - Flashing red* - last minute of speech time is active
  - Green - the delegate is listed in the request list
  - Flashing green - the delegate is the first in the request list and the next one to get the floor
  - Yellow* - the delegate is part of the Notebook and can control its microphone without interaction of the operator

* Only available with PC Control Software.

Interconnections

• 2 RJ11 connectors: one for connection to Dual Delegate Interface (DCN-DDI), and one for loop through

DCN-MICS/L Pluggable Microphone Short/Long Stem

DCN-MICS / DCN-MICS-D	100 g (0.22 lb)
DCN-MICL / DCN-MICL-D	115 g (0.25 lb)
Color top	
DCN-MICS / DCN-MICL	Silver (RAL 9022)
DCN-MICS-D / DCN-MICL-D	Dark (graphite gray)

Ordering Information

DCN-MICS Pluggable Short Microphone length 310 mm (12.2 inch), silver	**DCN-MICS**
DCN-MICS-D Pluggable Short Microphone Dark length 310 mm (12.2 inch), dark	**DCN-MICS-D**
DCN-MICL Pluggable Long Microphone length 480 mm (18.9 inch), silver	**DCN-MICL**
DCN-MICL-D Pluggable Long Microphone Dark length 480 mm (18.9 inch), dark	**DCN-MICL-D**

Features

▸ **Uni-directional microphone on adjustable stem**

▸ **Built-in plop and windshield**

The innovative, stylish and ergonomically designed microphone with an adjustable stem simply plugs directly into a Discussion unit, Concentus, flush-mounted Microphone Connection panels or Interpreter desk. It has a uni-directional response for optimum performance even in noisy conditions, and has low susceptibility to interference from mobile phones.

Functions

Controls and Indicators

• Red or green illuminator. Red indicates microphone is active, green indicates request-to-speak accepted

Interconnections

• Connector to plug and fasten the microphone

Technical Specifications

Mechanical

Mounting	Plug and fasten into Discussion units, Concentus, flush mounted Microphone connection panels and Interpreter desks
Length	
DCN-MICS / DCN-MICS-D	310 mm (12.2 in)
DCN-MICL / DCN-MICL-D	480 mm (18.9 in)
Weight	

DCN-FPRIOB Flush Priority Panel

Features

▸ **Stylish and modern design (IF award)**

▸ **Priority on/off button**

▸ **Red microphone on indicator**

The Priority Panel is connected to the Dual Delegate Interface (DCN-DDI) to one of the RJ11 control inputs.

Functions

Controls and Indicators

• One microphone control button
• Red illuminated ring around the microphone button to indicate that priority is active

Interconnections

• 2 RJ11 connectors one for connection to DCN-DDI Dual Delegate Interface and one for loop through

Technical Specifications

Mechanical

Mounting	Click-to-fit in a metal panel with a thickness of 2 mm, or in combination with DCN-FCOUP couplings and DCN-FEC end caps in any surrounding
Dimensions (H x W x D)	40 x 50 x 50 mm (1.57 x 1.97 x 1.97 in)
Weight	200 g (0.44 lb)
Color	
DCN-FPRIOB	Silver (RAL 9022)
DCN-FPRIOB-D	Dark (graphite gray)

DCN-FLSP Flush Loud-speaker Panel

Features

▸ **Stylish and modern design (IF award)**

▸ **Angled for better intelligibility**

This loudspeaker panel is intended for use in combination with the Dual Delegate Interface (DCN-DDI). It consists of a loudspeaker behind a round grille.

Functions

Interconnections

• 2 m (78.7 in) cable terminated with a 3.5 mm (0.14 in) stereo jack

Technical Specifications

Mechanical

Mounting	Click-to-fit in a metal panel with a thickness of 2 mm, or in combination with DCN-FCOUP couplings and DCN-FEC end caps in any surrounding
Dimensions (H x W x D)	40 x 100 x 100 mm (1.57 x 3.94 x 3.94 in)
Weight	203 g (0.45 lb)
Color	
DCN-FLSP	Silver (RAL 9022)
DCN-FLSP-D	Dark (graphite gray)

Ordering Information

DCN-FLSP Flush Loudspeaker Panel flush mounted, silver	**DCN-FLSP**
DCN-FLSP-D Flush Loudspeaker Panel Dark flush mounted, dark	**DCN-FLSP-D**

DCN-FV Flush Voting Panel

Features

▸ **Stylish and modern design (IF award)**

▸ **External 'Present' contact**

▸ **LED vote confirmation indicators**

▸ **LED unit active indicator**

The Flush Voting Panel allows attendance registration and six types of voting: parliamentary, audience response, multiple choice, opinion poll, rating and for/against.

The Flush Voting Panel has an external present contact, which can be used for an external present or fraud switch. Fingerprint readers are typical for the external present contact use.

The Flush Voting Panel can be click-to-fit mounted in a metal panel with a thickness of 2 mm, or can be mounted in combination with DCN-FCOUP coupling pieces and DCN-FEC end caps in any surface. The Flush Voting Panel is connected to the Dual Delegate Interface (DCN-DDI).

Functions

Controls and Indicators

Front

- Five voting buttons with yellow confirmation indicators to prompt the user to indicate presence, to vote and to confirm registration of what is voted. The buttons and indicators work as follows:
  - Yes (+), no (-) and abstain (x) (used for attendance registration, parliamentary voting and for/against)
  - Numerals 1 to 5 (used for multiple choice, opinion polls and rating)

- Rating scale: - -, -, 0, +, ++ (used for audience response)
- One blue LED unit active indicator to show that the system is in normal operation

Interconnections

- Two RJ11 connectors: one for connection to DCN-DDI Dual Delegate Interface, and one for loop through
- Connector for an external present contact (AMP173977-3 socket)

Technical Specifications

Mechanical

Mounting	Click-to-fit in a metal panel with a thickness of 2 mm, or in combination with DCN-FCOUP couplings and DCN-FEC end caps in any surrounding
Dimensions (H x W x D)	40 x 100 x 40.68 mm (1.57 x 3.94 x 1.68 in)
Weight	81 g (0.18 lb)
Color	
DCN-FV	Silver (RAL 9022)
DCN-FV-D	Dark (graphite gray)

Ordering Information

DCN-FV Flush Voting Panel flush mounted, silver	**DCN-FV**
DCN-FV-D Flush Voting Panel Dark flush mounted, dark	**DCN-FV-D**

DCN-FVCRD Flush Voting ID Card Panel

Features

▸ **Stylish and modern design (IF award)**

▸ **Identification with ID card**

▸ **External Present contact**

▸ **LED vote confirmation indicators**

▸ **LED unit active indicator**

The Flush Voting ID Card Panel has the same functionality as the Flush Voting Panel (DCN-FV) with the addition of an ID card reader.

The ID card reader enables identification of delegates to the DCN Next Generation system, as well as providing a convenient facility that ensures only authorized delegates can participate in voting sessions or general conference proceedings such as microphone use. The unit is connected to the Dual Delegate Interface DCN-DDI.

Functions

Controls and Indicators

Front

- Five voting buttons with yellow confirmation indicators to prompt the user to indicate presence, to vote and to confirm registration of what is voted. The buttons and indicators work as follows:
  - Yes (+), no (-) and abstain (x) (used for attendance registration, parliamentary voting and for/against)
  - Numerals 1 to 5 (used for multiple choice, opinion polls and rating)
  - Rating scale: - -, -, 0, +, ++ (used for audience response)

- One blue LED unit active indicator to show that the system is in normal operation. The yellow LED indicates the validity of the ID card

Interconnections

- 2 RJ11 connectors, one for connection to DCN-DDI Dual Delegate Interface and one for loop through
- Connector for an external present contact (AMP173977-3 socket)

Technical Specifications

Mechanical

Mounting	Click-to-fit in a metal panel with a thickness of 2 mm, or in combination with DCN-FCOUP couplings and DCN-FEC end caps in any surrounding
Dimensions (H x W x D)	40 x 100 x 73.53 mm (1.57 x 3.94 x 2.89 in)
Weight	104 g (0.23 lb)
Color	
DCN-FVCRD	Silver (RAL 9022)
DCN-FVCRD-D	Dark (graphite gray)

Ordering Information

DCN-FVCRD Flush Voting ID Card Panel flush mounted, silver	**DCN-FVCRD**
DCN-FVCRD-D Flush Voting ID Card Panel Dark flush mounted, dark	**DCN-FVCRD-D**
Accessories	
DCN-IDCRD ID Card (100 pcs) standard credit-card format, set of 100	**DCN-IDCRD**

DCN-FVU Flush Voting Unit

Features

▸ **Stylish and modern design (IF award)**

▸ **Allows parliamentary voting, numerals and rating scale**

▸ **Easily mountable**

▸ **Direct loop through connection to the DCN network**

▸ **Economic solution for positions which only require voting facilities**

The Flush Voting Unit allows attendance registration and six types of voting: parliamentary, audience response, multiple choice, opinion poll, rating and for/against.

The yellow LED confirmation indicators prompt the user to indicate presence and to vote and to confirm registration of what is voted.

The blue LED unit active indicator shows that the system is in normal operation. The blue LED flashes when the unit detects a communication fault.

The combination of the voting unit with the end caps forms a very stylish design, which fits in both modern and traditional meeting rooms.

The direct connection to the DCN network cable results into an economic solution for positions which only require voting facilities

Functions

Controls and Indicators

Front

- Five voting buttons with yellow confirmation indicators to prompt the user to indicate presence, to vote and to confirm registration of what is voted. The buttons and indicators work as follows:
  - Yes (+), no (-) and abstain (x) (used for attendance registration, parliamentary voting and for/against)
  - Numerals 1 to 5 (used for multiple choice, opinion polls and rating)
  - Rating scale: - -, -, 0, +, ++ (used for audience response)
- One unit active indicator. A constant lit blue LED indicates that the system is in normal operation. The blue LED flashes when the unit detects a communication fault

Back

- One de-init/init button

Interconnections

- 1 m (39.4 in) DCN cable terminated with a molded six-pole male circular connector
- 1 m (39.4 in) DCN cable terminated with a molded six-pole female circular connector for loop-through connection to the DCN network

Note   An unused output cable must be terminated with an LBB 4118/00 Termination Plug.

Technical Specifications

Mechanical

Mounting	Click-to-fit in a metal panel with a thickness of 2 mm, or in combination with DCN-FCOUP couplings and DCN-FEC end caps in any surrounding
Dimensions (H x W x D)	40 x 100 x 79.42 mm (1.57 x 3.94 x 3.12 in)
Weight	250 g (0.55 lb)
Color	
DCN-FVU	Silver (RAL 9022)
DCN-FVU-D	Dark (graphite gray)

Ordering Information

DCN-FVU Flush Voting Unit direct loop-through connection to DCN network, flush mounted, silver	**DCN-FVU**
DCN-FVU-D Flush Voting Unit Dark direct loop-through connection to DCN network, flush mounted, dark	**DCN-FVU-D**
Accessories	
LBB 4118/00 DCN Termination Plug use with opened-ended DCN cabling	**LBB4118/00**

DCN-FCS Flush Channel Selector

Features

▸ **Stylish and modern design (IF award)**

▸ **Automatically adapts to available channels**

▸ **Built-in "Silent" function**

▸ **No audio output until the headphone is connected**

▸ **Flush mountable in tabletops, on top or at the front, or in arm rests of seats**

The Flush Channel Selector is a compact and stylish single-user audio channel selector for listening by headphone. It provides a choice of up to 32 high-quality audio channels used for distribution of interpretation and floor channels.

Functions

• Built-in "Silent" function; no audio output until one of the keys has been pressed to eliminate audible noise from the headphones when not in use
• Upon insertion of a headphone the default "floor" channel (channel 0) is selected with a comfortable headphone volume and the dimmed backlighting is activated

Controls and Indicators

• Two push-buttons (up/down) for channel selection
• Two push-buttons (up/down) for headphone volume control
• Backlit 2-digit LCD for channel number indication Interconnection

Interconnections

• 3.5 mm (0.14 in) stereo jack headphone connector
• Connector for external headphone
• 2 m (78.7 in) cable with a molded six-pole circular connector

Six-pole circular connector for loop-through interconnection

Technical Specifications

Electrical

Frequency response	30 Hz - 20 kHz
Headphone Load impedance	> 32 ohm < 1 k ohm
Output power	2 x 15 mW/32 ohm

Mechanical

Mounting	Flush mounted
Dimensions (H x W x D)	40 x 100 x 78.67 mm (1.6 x 3.9 x 3.1 in)
Weight	0.3 kg (0.66 lb)
Color	
DCN-FCS	Silver (RAL 9022)
DCN-FCS-D	Dark (graphite gray)

Ordering Information

DCN-FCS Flush Channel Selector flush mounted, silver	**DCN-FCS**
DCN-FCS-D Flush Channel Selector Dark flush mounted, dark	**DCN-FCS-D**
Accessories	
LBB 3443/00 Lightweight Headphones high quality sound reproduction, lightweight, replaceable ear pads and normal cable	**LBB3443/00**
LBB 3443/10 Lightweight Headphones Durable Cable high quality sound reproduction, lightweight, replaceable ear pads and durable cable	**LBB3443/10**
LBB 3441/10 Under the Chin Headphones With 1.2 m (4 ft) cable terminated with 3.5 mm (0.14 in) right-angled gold-plated stereo jack plug.	**LBB3441/10**
LBB 3442/00 Single Earphone Lightweight single earphone, 1.2 m (3.94 ft) cable terminated with 3.5 mm (0.14 in) right-angled mono gold-plated jack plug.	**LBB3442/00**
LBB 3015/04 High Quality Dynamic Headphones Durable, dynamic headphones.	**LBB3015/04**
DCN-TTH Table Top Housing (10 pcs) to hold flush mount units, charcoal, set of 10	**DCN-TTH**

LBB 3555/00 DCN Intercom Handset

Features

▸ **Ideal for intercom applications**

▸ **For use with all Concentus and Dual Delegate Interface**

▸ **Can be permanently mounted to wall, chair or tabletop**

Lightweight and compact, this robust and attractively styled handset and cradle enables private 2-way conversation between conference participants. The handset is hard-wired to the cradle by a coiled cable, 0.5 m (19.6 in) long when coiled, and 2 m (78.7 in) uncoiled. The cable is terminated with a six-pole RJ45 connector for connection to Concentus and Dual Delegate Interface. When used in permanent installations, the unit is easily mounted to a tabletop or wall using the two screws.

Functions

Interconnections

• Six-pole RJ45 socket

Certifications and Approvals

Region	Certification
Europe	CE

Technical Specifications

Mechanical

Mounting	Tabletop or wall-mounted using the 2 screw holes on the cradle
Dimensions (H x W)	53 x 210 mm (2.08 x 8.26 in)
Weight	250 g (0.55 lb)
Color	Charcoal (PH 10736)

Ordering Information

LBB 3555/00 DCN Intercom Handset **LBB3555/00**
with coiled handset cable with 2 m reach, six-pole RJ45 connector

DCN-FBP and DCN-FBPS Blank Panel

Features

▸ **Stylish and modern design (IF award)**

▸ **50 mm or 100 mm wide**

The blank panel neatly closes off a slot in a flush mounted unit that is not in use. The panel can be removed if a future expansion requires the available slot. Two different panel widths are available: 100 mm (DCN-FBP) and 50 mm (DCN-FBPS).

Ordering Information

DCN-FBP Flush Blank Panel Long (10 pcs) 100 mm wide, flush mounted, silver, set of 10	**DCN-FBP**
DCN-FBP-D Flush Blank Panel Long Dark (10 pcs) 100 mm wide, flush mounted, dark, set of 10	**DCN-FBP-D**
DCN-FBPS Flush Blank Panel Short (10 pcs) 50 mm wide, flush mounted, silver, set of 10	**DCN-FBPS**
DCN-FBPS-D Flush Blank Panel Short Dark (10 pcs) 50 mm wide, flush mounted, dark, set of 10	**DCN-FBPS-D**

Technical Specifications

Mechanical

Mounting	Click-to-fit in a metal panel with a thickness of 2 mm, or in combination with DCN-FCOUP couplings, DCN-FEC end caps, in any surrounding
Dimensions (H x W)	
DCN-FBP(-D)	40 x 100 mm (1.57 x 3.94 in)
DCN-FBPS(-D)	40 x 50 mm (1.57 x 1.97 in)
Weight	
DCN-FBP(-D)	17 g (0.04 lb)
DCN-FBPS(-D)	9 g (0.02 lb)
Color	
DCN-FBP, DCN-FBPS	Silver (RAL 9022)
DCN-FBP-D DCN-FBPS-D	Dark (graphite gray)

DCN-FEC Flush End Cap (50 pcs)

Features

▸ **Stylish and modern design (IF award)**

Matching end caps give a finishing touch to the flush mounted devices. Two end caps are needed per flush mount position.
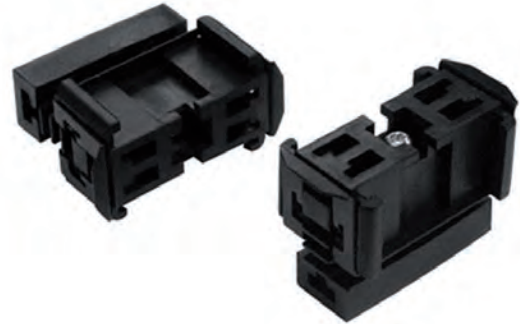
Technical Specifications

Mechanical

Mounting	Click-to-fit in DCN-FCOUP couplings
Dimensions (H x W)	40 x 20 mm (1.57 x 0.79 in)
Weight	2 g (0.004 lb)
Color	
DCN-FEC	Silver (RAL 9022)
DCN-FEC-D	Dark (graphite gray)

Ordering Information

DCN-FEC Flush End Cap (50 pcs) flush mounted, silver, set of 50 pcs	**DCN-FEC**
DCN-FEC-D Flush End Cap (50 pcs) flush mounted, dark, set of 50 pcs	**DCN-FEC-D**

DCN-FCOUP Flush Coupling (50 pcs)

The couplings are used to connect flush mount panels and end caps.
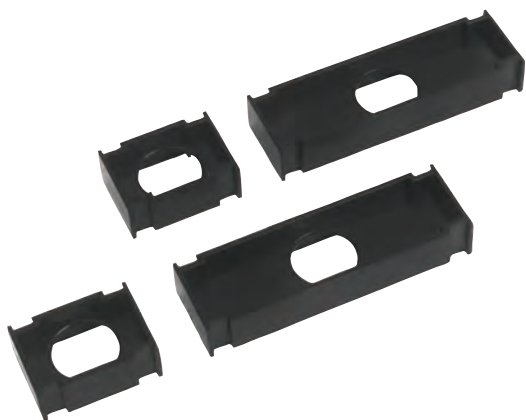
Technical Specifications

Mechanical

Mounting	Screw in to cutout in tabletop
Weight	12 g (0.027 lb)
Color	Black

Ordering Information

DCN-FCOUP Flush Coupling (50 pcs) for flush mounted units, set of 50	**DCN-FCOUP**

DCN-FPT Flush Positioning Tools (2 sets)

DCN-TTH Table Top Housing (10 pcs)

This tool enables the flush mount elements to be easily positioned.

This housing enables the flush mounted panels to be used in tabletop applications. The panel simply clicks into place in the housing. It is used with the DCN-FVU voting unit, but it can also be used for other flush mounted units such as the DCN-FCS Channel selector for 32 channels.

For permanent applications, the housing can be fixed to the tabletop.

Technical Specifications

Mechanical

Weight	31 g (0.068 lb)
Color	Charcoal (PH 10736)

Ordering Information

DCN-FPT Flush Positioning Tools (2 sets)   **DCN-FPT**
for flush mount couplings

Technical Specifications

Mechanical

Mounting	Free-standing or fixed to the tabletop
Dimensions (H x W x D)	80 x 120 x 105 mm (3.15 x 4.72 x 4.13 in)
Weight	243 g (0.54 lb)
Color	Charcoal (PH 10736)

Ordering Information

DCN-TTH Table Top Housing (10 pcs)   **DCN-TTH**
to hold flush mount units, charcoal, set of 10

DCN-FET Flush Extraction Tools
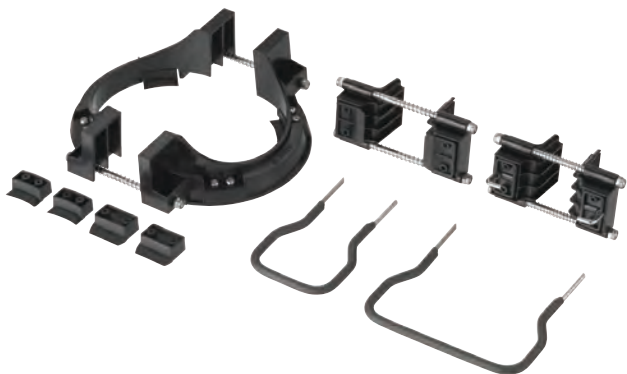
Features

▸ **Easy panel extraction without damaging and scratching**

▸ **Panel extraction from top or bottom**

DCN-FET flush extraction tools are used to easily extract flush mounted panels.

Parts Included

Quantity	Components
1	Tool for top extracting 50 or 100 mm (1.97 or 3.94 in) panels
1	Tool for top extracting DCN-MIC panel
1	Tool for top extracting DCN-FLSP panel
1	Set of spare blocks
1	Tool for bottom extracting 50 mm (1.97 in) panels
1	Tool for bottom extracting 100 mm (3.94 in) panels

Technical Specifications

Mechanical

Color	Black
Material	ABS/Metal

Ordering Information

DCN-FET Flush Extraction Tools   **DCN-FET**
to extract flush mounted panels

Interpretation and Language Distribution

Bosch simultaneous interpretation and language distribution equipment satisfies the demands of today's multilingual conferences, from informal bilingual group discussions up to full-scale international congresses where many simultaneous interpretations are required. The modular design of the interpretation and distribution products means a made-to-measure interpretation system can be constructed using a combination of system elements. Expanding or reducing the system for other conferences is quickly and easily achieved.

The product range covers virtually all interpretation requirements. The interpreter desks accommodates up to 31 different languages, and can be used stand-alone or as part of an integrated, operator-controlled system. When used stand-alone, the built-in microprocessor allocates language channels, channel routing and interlocks. In operator-controlled systems, the desk is used in combination with dedicated Simultaneous Interpretation software (DCN-SWSI) to form an integrated interpretation network. The Simultaneous Interpretation module facilitates presetting and monitoring interpretation status in such a system. It can accommodate direct and relay interpretations, and has facilities for the creation of 31 interpreter booths, each with up to six interpreters. Delegate contribution units and channel selection units are available with facilities to select the required interpretation.

Interpretation and Language Distribution

Both wired and wireless language distribution is possible in DCN systems. Wired language distribution involves using the DCN system cabling to distribute interpretations to conference participants. The interpretation(s) can be listened to via headphones connected to a channel selector unit, or via a contribution unit with a built-in channel selector. Rapid channel selection is accomplished using up and down select keys. Channel selection is

automatically limited to the number of language channels available. Up to 31 interpretations plus the floor language can be accessed.

Integrus system for wireless language distribution

An infrared wireless system is also available for conference venues. It offers excellent sound quality as well as freedom of movement for conference participants. Up to 32 channels can be distributed, and high security is ensured as infrared cannot pass through walls. The number of delegates able to receive signals from the infrared system is theoretically unlimited. For further information on Bosch infrared language distribution equipment, please refer to Integrus Databrochure.

DCN-IDESK Interpreter Desk

Features

▸ **Low susceptibility to mobile phone interference**

▸ **Ergonomic design with features for visually impaired**

▸ **Up to 31 interpretation channels and the original floor language with an audio bandwidth of 20 kHz**

▸ **A graphic LCD with backlighting for bright information display in dark conditions**

▸ **5 pre-select keys for relay languages with activation indication at the display**

▸ **Compliant to ISO 2603**

The DCN-IDESK is a single-user interpreter desk with a stylish and modern design. It fully conforms to internationally agreed standards. Clear positioning per functional area of the desk controls allows intuitive operation without mistakes.

A socket is provided to connect the pluggable microphones (DCN-MICS and DCN-MICL, to be ordered separately).

Functions

- A maximum of six desks can be installed per booth
- Tabletop and flush mountable
- Pluggable microphone (DCN-MICS)
- Ergonomic design

Controls and Indicators

- A and B output channel with status and selection indication at the display
- All channels have channel number, language names and quality level indicated at the display
- Features for visually impaired such as a small bump on the middle button, and beeps to indicate microphone on/off and double relay selected

- Built-in loudspeaker with language channel selector
- Speech timer to indicate elapsed time of interpretation
- Speak slowly facility to alert the current speaker to slow down
- Help request to an operator or usher
- Booth telephone and intercom indicator
- Automatic headset selection when headset connected
- Easy programming via menus on the display after entering the programming mode
- Microphone key with surrounding red "on-air" indicator and green for "booth not in use"
- Mute key
- Help key
- Slow (speak slowly) key
- Operator and chairman intercom call keys
- Message key with yellow LED indicator
- Telephone and Intercom call yellow LED indicators
- A and B channel engaged yellow LED indicators
- Rotary step control for channel settings (and other functions).
  Pressing this button sets the selection to the first available channel
- LCD with backlighting showing selected and activated output channel with channel numbers and abbreviated language names
- Loudspeaker rotary volume control
- Headphone rotary volume control
- Headphone rotary bass and treble tone controls
- Beep on/off key
- Five Relay language pre-select keys
- Floor/auto-relay key with green LED indicators
- Rotary step control (same as for speaking section) to select the relay languages for the relay pre-select keys and the loudspeaker channel. Pressing this button sets the selection to the first available channel
- LCD with backlighting, showing selected relay language with channel numbers, abbreviated names and quality indicators. Also the selected loudspeaker channel with abbreviated name is shown

Interconnections

- Socket for pluggable microphone
- Headphone or headset connector (five-pole 180° Din type socket wired according to IEC 574-3)
- 6.3 mm (0.25 in) and 3.5 mm (0.14 in) stereo jack headphone connectors
- 2 m (78.7 in) DCN cable with molded six-pole circular connector
- Six-pole circular socket for loop-through connection to the DCN network
- Eight-pole modular jack connector for connection to booth telephone, intercom and booth on-air sign

Technical Specifications

Electrical

Headphone connection	
Frequency response	30 Hz - 20 kHz
Load impedance	> 32 ohm
Output power	2 x 30 mW/32 ohm

Headset connection	
Frequency response	30 Hz - 20 kHz
Load impedance	> 32 ohm

Output power	60 mW/32 ohm
Nominal microphone input level	7 mVrms
Overload microphone input level	> 124 mVrms

Mechanical

Mounting	Free-standing or mounted on a table
Dimensions (H x W x D) (with microphone)	82 x 330 x 170 mm (3.2 x 13 x 6.7 in)
Slope	25 degrees
Weight	1.3 kg (2.87 lb)
Color top	Silver (RAL 9022)
Color base	
DCN-IDESK-L	Light grey (RAL 000 7500)
DCN-IDESK-D	Charcoal (PH 10736)

Ordering Information

DCN-IDESK-L Interpreter Desk Light with light base, microphone to be ordered separately	**DCN-IDESK-L**
DCN-MICL Pluggable Long Microphone length 480 mm (18.9 inch), silver	**DCN-MICL**
DCN-MICS Pluggable Short Microphone length 310 mm (12.2 inch), silver	**DCN-MICS**
DCN-IDESK-D Interpreter Desk Dark with dark base, microphone to be ordered separately	**DCN-IDESK-D**
DCN-MICL Pluggable Long Microphone length 480 mm (18.9 inch), silver	**DCN-MICL**
DCN-MICS Pluggable Short Microphone length 310 mm (12.2 inch), silver	**DCN-MICS**
Accessories	
DCN-MICL Pluggable Long Microphone length 480 mm (18.9 inch), silver	**DCN-MICL**
DCN-MICS Pluggable Short Microphone length 310 mm (12.2 inch), silver	**DCN-MICS**

DCN-MICS/L Pluggable Microphone Short/Long Stem

DCN-MICS / DCN-MICS-D	100 g (0.22 lb)
DCN-MICL / DCN-MICL-D	115 g (0.25 lb)
Color top	
DCN-MICS / DCN-MICL	Silver (RAL 9022)
DCN-MICS-D / DCN-MICL-D	Dark (graphite gray)

Ordering Information

DCN-MICS Pluggable Short Microphone length 310 mm (12.2 inch), silver	**DCN-MICS**
DCN-MICS-D Pluggable Short Microphone Dark length 310 mm (12.2 inch), dark	**DCN-MICS-D**
DCN-MICL Pluggable Long Microphone length 480 mm (18.9 inch), silver	**DCN-MICL**
DCN-MICL-D Pluggable Long Microphone Dark length 480 mm (18.9 inch), dark	**DCN-MICL-D**

Features

▸ **Uni-directional microphone on adjustable stem**

▸ **Built-in plop and windshield**

The innovative, stylish and ergonomically designed microphone with an adjustable stem simply plugs directly into a Discussion unit, Concentus, flush-mounted Microphone Connection panels or Interpreter desk. It has a uni-directional response for optimum performance even in noisy conditions, and has low susceptibility to interference from mobile phones.

Functions

Controls and Indicators

• Red or green illuminator. Red indicates microphone is active, green indicates request-to-speak accepted

Interconnections

• Connector to plug and fasten the microphone

Technical Specifications

Mechanical

Mounting	Plug and fasten into Discussion units, Concentus, flush mounted Microphone connection panels and Interpreter desks
Length	
DCN-MICS / DCN-MICS-D	310 mm (12.2 in)
DCN-MICL / DCN-MICL-D	480 mm (18.9 in)
Weight	

DCN-FCIDSK Flight Case for 2 Interpreter Desks

Features

▸ **Rugged construction with reinforced corners**

▸ **Simplifies packing and unpacking**

▸ **Easy to carry and store**

The DCN-FCIDSK Flight Case for the DCN-IDESK Interpreter Desk accommodates 2 desks, 2 DCN-MICS microphones and accessories such as headsets, headphones and tabletop reading-lights.

Technical Specifications

Mechanical

Dimensions (H x W x D)	235 x 530 x 385 mm (9.3 x 20.9 x 15.2 in)
Weight	6 kg (13 lb)
Color	Light grey

Ordering Information

DCN-FCIDSK Flight Case for 2 Interpreter Desks can hold 2 interpreter desks with microphones and accessories	**DCN-FCIDSK**

Headphones

An extensive range of headphones is available for use with conference equipment. The options vary from a single lightweight earphone to high quality headphones with solid ear pads or washable soft ear pads. Additionally, an inductive loop neckband is available for coupling to a hearing aid.

HDP-LWN Lightweight Neckband Headphone

Ordering Information

HDP-LWN Lightweight Neckband Headphone	**HDP-LWN**
High-quality sound reproduction, lightweight, replaceable ear pads.	

Accessories

HDP-LWNEP Earpads for neckband headphone (50 pairs)	**HDP-LWNEP**
Replacement foam ear pads.	

Features

▸ **Comfortable neckband stereo headphone**

▸ **Lightweight with high quality sound reproduction**

▸ **Replaceable ear pads**

▸ **Right-angled stereo gold-plated jack plug**

Functions

Interconnections

- 1.3 m (4.25 ft) cable terminated with gold-plated 4.5 mm (0.14 in) right-angled stereo gold-plated jack plug

Certifications and Approvals

Region	Certification
Europe	CE

Technical Specifications

Electrical

Impedance	32 ohm per earpiece
Audio frequency response	20 Hz to 20 kHz (± 3 dB)
Power handling capacity	30 mW
Sensitivity (1 kHz)	111 dB SPL/earpiece at 1 mW/earpiece

Mechanical

Weight	56 g (0.12 lb)
Finish	Charcoal (PH 10736) with silver

LBB 3443 Lightweight Headphones

Features

▸ **Lightweight with high quality sound reproduction**

▸ **Replaceable ear pads**

▸ **Available with normal or durable cable**

▸ **Separate available solid washable ear pads**

▸ **Right-angled gold-plated jack plug**

Functions

These headphones can be fitted with an optional set of washable ear pads.

Washable ear pads

Interconnections

- 1.3 m (4.25 ft) cable terminated with gold-plated 3.5 mm (0.14 in) angled stereo jack plug

Certifications and Approvals

Region	Certification
Europe	CE

Technical Specifications

Electrical

Impedance	32 ohm per earpiece
Audio frequency response	50 Hz to 20 kHz (-10 dB)
Power handling capacity	50 mW
Sensitivity (1 kHz)	98 dB SPL/earpiece at 1 mW/earpiece

Mechanical

Weight	70 g (0.16 lb)
Finish	Charcoal (PH 10736) with silver

Ordering Information

LBB 3443/00 Lightweight Headphones high quality sound reproduction, lightweight, replaceable ear pads and normal cable	**LBB3443/00**
LBB 3443/10 Lightweight Headphones Durable Cable high quality sound reproduction, lightweight, replaceable ear pads and durable cable	**LBB3443/10**

Accessories

LBB 3443/50 Foam Ear Pads for LBB 3443 (50 pairs) replacement foam ear pads	**LBB3443/50**
HDP-LWSP Solid Ear Pads for LBB 3443 (50 pairs) washable replacement ear pads	**HDP-LWSP**

LBB 3442/00 Single Earphone

Features

▸ **Lightweight single earphone**

▸ **Left or right ear use**

▸ **Right-angled gold-plated jack plug**

Functions

Interconnections

• 1.2 m (3.94 ft) cable terminated with 3.5 mm (0.14 in) jack plug

Technical Specifications

Electrical

Impedance	32 ohm
Audio frequency response	100 Hz to 5 kHz (-10 dB)
Power handling capacity	5 mW
Sensitivity (1 kHz)	114 dB SPL/earpiece at 1 mW/earpiece

Mechanical

Weight	25 g (0.06 lb)
Color	Dark grey

Ordering Information

LBB 3442/00 Single Earphone   **LBB3442/00**
Lightweight single earphone, 1.2 m (3.94 ft) cable terminated with 3.5 mm (0.14 in) right-angled mono gold-plated jack plug.

LBB 3441/10 Under the Chin Headphones

Features

▸ **Lightweight stereo headphones**

▸ **Ergonomic design for use under the chin**

▸ **Replaceable ear tips**

▸ **Right-angled, gold-plated stereo jack plug**

Functions

Interconnections

● 1.2 m (4 ft) cable terminated with 3.5 mm (0.14 in) right-angled gold-plated stereo jack plug.

Certifications and Approvals

Region	Certification
Europe	CE

Technical Specifications

Electrical

Impedance	150 ohm per earpiece
Audio frequency response	50 Hz to 5 kHz (-10 dB)
Power handling capacity	60 mW
Sensitivity (1 kHz)	107 dB SPL/earpiece at 1 mW/earpiece

Mechanical

Weight	33 g (0.07 lb)
Color	Black

Ordering Information

LBB 3441/10 Under the Chin Headphones With 1.2 m (4 ft) cable terminated with 3.5 mm (0.14 in) right-angled gold-plated stereo jack plug.	**LBB3441/10**

Accessories

LBB 3441/50 Ear Tips for LBB 3441 (500 pairs) for LBB 3441	**LBB3441/50**

HDP-ILN Induction Loop Neckband

Features

‣ **Lightweight**

‣ **Used with 'T-coil' hearing aids**

‣ **Gold-plated jack plug**

Functions

This induction loop neckband can be used with:

• Integrus receivers
• CCS800 unit
• DCN unit

The neckband magnetically couples the sound signal from the headphone output to a 'T-coil' hearing aid.

Interconnections

• 0.9 m (3ft) cable terminated with a 3.5 mm (0.14 in) gold-plated jack plug.

Technical Specifications

Mechanical

Weight	45 g (0.10 lb)
Color	Charcoal with silver

Ordering Information

HDP-ILN Induction Loop Neckband   **HDP-ILN**
Lightweight neckband.

LBB 3015/04 High Quality Dynamic Headphones

Ordering Information

LBB 3015/04 High Quality Dynamic Headphones Durable, dynamic headphones.	**LBB3015/04**

Accessories

LBB 9095/50 Ear pads for LBB 3015 LBB 9095 (25 pairs) 25 pairs	**LBB9095/50**

Features

▸ **Durable, dynamic headphones**

▸ **Replaceable ear pads**

▸ **High-quality sound reproduction**

▸ **Gold-plated stereo jack plug**

Functions

Interconnections

• 1.5 m (5 ft) cable terminated with a 3.5 mm (0.14 in) stereo jack plug

Certifications and Approvals

Region	Certification
Europe	CE

Technical Specifications

Electrical

Impedance	720 ohm per earpiece
Audio frequency response	250 Hz to 13 kHz (-10 dB)
Power handling capacity	200 mW
Sensitivity (1 kHz)	
97 dB SPL/earpiece at 0 dBV/system	
96 dB SPL/earpiece at 1 mW/earpiece	

Mechanical

Weight	110 g (0.24 lb)
Color	Dark grey

LBB 9095/30 Interpreter Headphones

Features

▸ **Durable and dynamic**

▸ **Replaceable ear pads**

▸ **High-quality sound reproduction**

Lightweight, dynamic headphones for direct connection to DCN-IDESK Interpreters Desk.

Functions

Interconnections

• 2.2 m (7 ft) cable terminated with a 6.3 mm (0.25 in) stereo jack plug

Certifications and Approvals

Region	Certification
Europe	CE

Technical Specifications

Electrical

Impedance	720 ohm per earpiece
Audio frequency response	250 Hz - 13 kHz (-10 dB)
Power handling capacity	200 mW
Sensitivity (1 kHz)	97 dB SPL/earpiece at 0 dBV/system
	96 dB SPL/earpiece at 1 mW/earpiece

Mechanical

Weight	125 g (0.28 lb)
Color	Black/grey

Ordering Information

LBB 9095/30 Interpreter Headphones Lightweight, dynamic headphones.	**LBB9095/30**

Accessories

LBB 9095/50 Ear pads for LBB 3015 LBB 9095 (25 pairs) 25 pairs	**LBB9095/50**

Central Equipment

The Central Control Unit DCN-CCU2 or DCN-CCUB2 forms the heart of the conference management system. Both CCUs can operate standalone to provide automatic conference control, or be accessed by an operator via a PC when more extensive management is required.

In combination with the DCN-WAP, the DCN-CCU2 also forms the heart of a DCN Wireless system, or wireless flexibility can be added to a wired DCN Next Generation system for temporary system expansion.

The DCN-CCU2 can control up to 245 wired contribution units (such as delegate and chairman units, interpreter desks) and up to 245 wireless discussion units. If more capacity is required, multiple DCN-CCU2s can be connected to each other to control up to 4000 microphone positions.

The DCN-CCUB2 can control up to 245 wired contribution units and cannot be extended with wireless units or multiple CCUs.

Both CCUs can also provide power for a number of contribution units. The maximum number depends on the type of contribution units used in the application.

Advanced audio coupling using the DCN-CCU2

Via the optical network, a variety of audio couplings are possible, including coupling small systems with a few languages into a large system with as many as 31 languages.

It is also possible to extract and insert both digital (AES/EBU or SPDIF) and analog audio. Other advanced audio coupling techniques include CobraNet™.

CobraNet™ is a combination of software, hardware and network protocol, which allows distribution of many real-time, high-quality digital audio channels over an Ethernet network using CAT5 cables.

CobraNet™ makes it easy to distribute audio in buildings and connect the DCN system to other audio CobraNet™-compatible devices such as Audio Recorders and Audio Mixers.

DCN-CCU2 Central Control Unit

Features

▸ **For DCN Next Generation or DCN wireless systems, or a combination of the two**

▸ **In single-CCU; maximum 245 wired contribution units, plus 245 wireless delegate units**

▸ **For multi-CCU systems, with up to 30 CCU's and a total of 4000 contribution units**

▸ **Voice activated microphone mode for wired and wireless systems**

▸ **Ethernet connection for configuration and control computers**

The Central Control Unit (CCU) includes features for controlling wired and wireless delegate microphones, distributing simultaneous interpretation and conducting voting sessions, all without an operator.

In combination with a PC, this control unit brings greater sophistication to conference control. Users can access an extensive range of software modules, each with a specific function in controlling and monitoring a conference. These modules greatly expand the capacity to manage a conference. In the event of PC failure, this control unit will revert to its stand-alone operation mode, enabling the conference to proceed.

Functions

- For DCN Next Generation or DCN wireless systems, or a combination of the two (Maximum one DCN-WAP per system)
- Basic microphone management facilities
- Four operational microphone modes:
  - Open: microphone button control with request-to-speak (Auto)
  - Override: microphone button with override of activated microphones (FIFO)
  - Voice: voice activated microphones
  - Push-to-talk (push and hold button to speak)
- Number of open microphones between 1 and 4
- Configuration of CCU and system via a display and a single rotary push button

- Basic voting control for parliamentary voting procedure. Delegates can register 'Present', 'Yes', 'No' and 'Abstain'. The Concentus Chairman unit can start, stop and suspend the voting. The total results can be displayed on hall displays and on the LCD screens of the units
- A page function which activates a voting tone. With this tone the chairman can indicate that a voting round is about to start
- Simultaneous interpretation function with 31 language channels plus one floor channel
- Distribution of up to 10 language channels plus floor to DCN wireless discussion units
- Distribution of up to 31 language channels plus floor to Integrus receivers, DCN wired channel selectors
- Basic intercom function with function to assign intercom operator and intercom chairman (both can be called from the interpreter desk)
- Stand-alone automatic camera control
- Extended conference facilities when using control PC software or remote controllers
- Adjustable sensitivity for the audio inputs
- Adjustable level for the audio outputs
- Audio insertion facility to connect external audio processing devices or telephone couplers
- The CCU can be assigned a unique name by the installer for easy identification
- VU meter readings to monitor audio inputs and audio outputs. The audio can be monitored using a headphone
- 19" (2U) housing for tabletop or rack mounting
- Handgrips for easy transportation

Controls and Indicators

Front

- Power on/off switch
- 2 x 16 Character LCD display for status information and configuration
- Rotary control to navigate through the LCD menus

Back

- Three red LED overload indicators for the DCN network outputs
- Two red LED overload indicators for the optical connections
- Green and yellow LED indicating Ethernet activity

Interconnections

Front

- One stereo headphone output 3.5 mm (0.14 in)

Back

- Euro power socket with built-in fuse
- Three DCN outlet sockets including locking facility for connection of units
- Two optical network connections for connection of Integrus, various audio expanders, CobraNet interfaces and Wireless Access Point
- Two three-pole XLR balanced audio line inputs with galvanic separation
- Two stereo Cinch unbalanced audio line inputs
- Two three-pole XLR balanced audio line output with galvanic separation
- Two stereo Cinch unbalanced audio line outputs
- One Ethernet connection for Control PC, Open Interface or slave CCU
- One RS-232 serial data connectors for controlling cameras

- One error switch, galvanic separated cross-over switch to trigger external equipment in case of errors detected by the CCU

Parts Included

Quantity	Component
1	DCN-CCU2 Central Control Unit
1	Set of mounting brackets for 19" rack
1	Set of feet
1	System installation and user instruction on DVD
1	US power cord
1	Euro power cord

Technical Specifications

Electrical

Supply voltage	100-240 Vac 50-60 Hz
Power consumption	360 W
DCN system supply	40 Vdc, max 85 W per DCN socket
Optical network supply	40 Vdc, max 65 W
Total power supply	320 W
RS-232 connection	1 x nine-pole Sub-D female socket
Frequency response	30 Hz - 20 kHz (-3 dB at nominal level)
THD at nominal level	< 0.5 %
Cross talk attenuation	> 85 dB at 1 kHz
Dynamic range	> 90 dB
Signal-to-noise ratio	> 87 dBA

Audio inputs

XLR nominal input	-12 dBV (+/- 6 dB)
XLR maximum input	+12 dBV
Cinch nominal input	-24 dBV (+/- 6 dB)
Cinch maximum input	+0 dBV

Audio outputs

XLR nominal output	-12 dBV (+6 / -24 dB)
XLR maximum output	+12 dBV
Cinch nominal output	-24 dBV (+6 / -24 dB)
Cinch maximum output	+0 dBV

Mechanical

Mounting	Tabletop or mounted in a 19" rack
Dimensions (H x W x D)	
for tabletop use, with feet	92 x 440 x 400 mm (3.6 x 17.3 x 15.7 in)
for 19" rack use, with brackets	88 x 483 x 400 mm (3.5 x 19 x 15.7 in)
in front of brackets	40 mm (1.6 in)
behind brackets	360 mm (14.2 in)
Weight	7.9 kg (17.5 lbs)
Color	Charcoal (PH 10736) with silver

Ordering Information

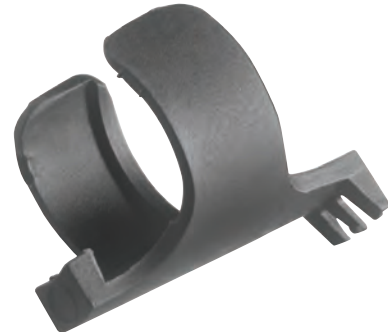|	
DCN-CCU2 Central Control Unit Controlling of delegate microphones, distributing simultaneous interpretation and conducting voting sessions.	**DCN-CCU2**

DCN-CCUB2 Central Control Unit Basic

Features

▶ **Cost effective solution for basic DCN Next Generation systems**

▶ **Maximum 245 wired contribution units**

▶ **Ethernet connection for configuration and control computers**

The Central Control Unit (CCU) includes features for controlling wired delegate microphones, distributing simultaneous interpretation and conducting voting sessions, all without an operator.

In combination with a PC, this control unit brings greater sophistication to conference control. Users can access an extensive range of software modules, each with a specific function in controlling and monitoring a conference. These modules greatly expand the capacity to manage a conference. In the event of PC failure, this control unit will revert to its stand-alone operation mode, enabling the conference to proceed.

Functions

- For wired DCN Next Generation systems
- Basic microphone management facilities
- Four operational microphone modes:
  - Open: microphone button control with request-to-speak (Auto)
  - Override: microphone button with override of activated microphones (FIFO)
  - Voice: voice activated microphones
  - Push-to-talk (push and hold button to speak)
- Number of open microphones between 1 and 4
- Configuration of CCU and system via a display and a single rotary push button
- Basic voting control for parliamentary voting procedure. Delegates can register 'Present', 'Yes', 'No' and 'Abstain'. The Concentus Chairman unit can start, stop and suspend the voting. The total results can be displayed on hall displays and on the LCD screens of the units
- A page function which activates a voting tone. With this tone the chairman can indicate that a voting round is about to start

- Simultaneous interpretation function with 31 language channels plus one floor channel
- Distribution of up to 31 language channels plus floor to DCN wired channel selectors
- Basic intercom function with function to assign intercom operator and intercom chairman (both can be called from the interpreter desk)
- Stand-alone automatic camera control
- Extended conference facilities when using control PC software or remote controllers
- Adjustable sensitivity for the audio inputs
- Adjustable level for the audio outputs
- Audio insertion facility to connect external audio processing devices or telephone couplers
- The CCU can be assigned a unique name by the installer for easy identification
- VU meter readings to monitor audio inputs and audio outputs. The audio can be monitored using a headphone
- 19" (2U) housing for tabletop or rack mounting
- Handgrips for easy transportation

Controls and Indicators

Front

- Power on/off switch
- 2 x 16 Character LCD display for status information and configuration
- Rotary control to navigate through the LCD menus

Back

- Three red LED overload indicators for the DCN network outputs
- Green and yellow LED indicating Ethernet activity

Interconnections

Front

- One stereo headphone output 3.5 mm (0.14 in)

Back

- Euro power socket with built-in fuse
- Three DCN outlet sockets including locking facility for connection of units
- Two stereo Cinch unbalanced audio line inputs
- One three-pole XLR balanced audio line output
- Two stereo Cinch unbalanced audio line outputs
- One Ethernet connection for Control PC or Open Interface
- One RS-232 serial data connectors for controlling cameras

Parts Included

Quantity	Component
1	DCN-CCUB2 Central Control Unit Basic
1	Set of mounting brackets for 19" rack
1	Set of feet
1	System installation and user instruction on DVD
1	US power cord
1	Euro power cord

Technical Specifications

Electrical

Supply voltage	100-240 Vac 50-60 Hz
Power consumption	295 W
DCN system supply	40 Vdc, max 85 W per DCN socket
Total power supply	255 W
RS-232 connection	1 x nine-pole Sub-D female socket
Frequency response	30 Hz - 20 kHz (-3 dB at nominal level)
THD at nominal level	< 0.5 %
Cross talk attenuation	> 85 dB at 1 kHz
Dynamic range	> 90 dB
Signal-to-noise ratio	> 87 dBA

Audio inputs

Cinch nominal input	-24 dBV (+/- 6 dB)
Cinch maximum input	+0 dBV

Audio outputs

XLR nominal output	-12 dBV (+6 / -24 dB)
XLR maximum output	+12 dBV
Cinch nominal output	-24 dBV (+6 / -24 dB)
Cinch maximum output	+0 dBV

Mechanical

Mounting	Tabletop or mounted in a 19" rack
Dimensions (H x W x D)	
for tabletop use, with feet	92 x 440 x 400 mm (3.6 x 17.3 x 15.7 in)
for 19" rack use, with brackets	88 x 483 x 400 mm (3.5 x 19 x 15.7 in)
in front of brackets	40 mm (1.6 in)
behind brackets	360 mm (14.2 in)
Weight	7.9 kg (17.5 lbs)
Color	Charcoal (PH 10736) with silver

Ordering Information

DCN-CCUB2 Central Control Unit Basic   **DCN-CCUB2**
Controlling of delegate microphones, distributing simultaneous interpretation and conducting voting sessions.

DCN-DISCLM Cable Clamp (25 pcs)

The cables can be secured to the DCN-CCU2 trunk outputs using the DCN-DISCLM cable clamp to prevent them from being pulled out accidentally.

Technical Specifications

Mechanical

Mounting	Click and fit on any Discussion unit
Color	Charcoal (PH 10736)

Ordering Information

DCN-DISCLM Cable Clamp (25 pcs)   **DCN-DISCLM**
25 pieces

DCN-WAP Wireless Access Point

Features

▶ **Secure wireless communication with 128-bits AES Rijndael encryption**

▶ **Single cable to power WAP and communicate with CCU**

▶ **Mountable on ceiling, wall, or floor stand for best reception**

▶ **Typical range 30 m (100 ft)**

▶ **Compact and elegant award winning design**

The DCN Wireless Access Point (WAP) links the central control unit (CCU) and the wireless discussion units by means of secure wireless communication with 128-bits AES Rijndael encryption. It uses one of the three non-overlapping-carriers in the 2.4 GHz band, which is license-free worldwide. For extra confidentiality an automatic blocking function prevents subscription of unauthorized wireless discussion units.

The WAP is linked to the CCU using Bosch's proprietary optical network, which provides digital optical communication and power supply over a single cable. The second optical network connector on the WAP allows the system network to be expanded from a single branch to a redundant loop configuration. In this 'loop-through' configuration, DCN Wireless can be interfaced with compatible Bosch equipment such as Audio Expanders, CobraNet™ interfaces and the Integrus language distribution system.

The WAP award winning design enables it to be placed unobtrusively on a wall, ceiling, or floor stand by using the universal mounting bracket.

Functions

Controls and Indicators

• LEDs show status of wireless system

Interconnections

• Two optical network connections (second connection can be used in 'loop-through' network)

Certifications and Approvals

Region	Certification
Europe	CE

Installation/Configuration Notes

DCN-WAP mounted on a LBC 1259/01 floor stand

Technical Specifications

Electrical

Power consumption	4 W

Mechanical

Mounting	Ceiling, Wall or Floor Stand (using included bracket)
Dimensions (H x W x D) with bracket	59 x 284.5 x 201 mm (2.3 x 11.2 x 7.9 in)
Weight with bracket without bracket	907 g (2 lb) 643 g (1.4 lb)
Color	Light grey (RAL 000 7500)

Ordering Information

DCN-WAP Wireless Access Point light grey color, universal mounting bracket included	**DCN-WAP**

Accessories

LBC 1259/01 Universal Floorstand Lightweight aluminum construction, foldable, M10 x 12 reducer flange.	**LBC1259/01**
DCN-WFCCCU Flight Case for CCU and WAP light grey, can hold two central control units, or one central control unit, wireless access point and optical cable	**DCN-WFCCCU**

LBC 1259/01 Universal Floorstand

Adaptable

The floorstand is standard supplied with a 36 mm (1.42 in) reducer flange with an M10 x 12 threaded pin to mount different sized equipment, and with an M10 knob to fix the Wireless Access Point mounting bracket.

Accessories

For storage and ease of transport, a carrier bag is available with two inside compartments with separate zippers for holding two universal floorstands (LBC 1259/01). The bag, with Bosch logo, is made from sturdy black weather-proof nylon. Two handles are fitted for carrying the bag by hand or over the shoulder.

LM1-CB Carrier Bag (optional)

Features

▸ **Multi-purpose, lightweight aluminum stand**

▸ **For mounting a loudspeaker, wireless access point or Integrus radiator**

▸ **Double-braced folding base**

▸ **Reducer flange for different mountings**

▸ **Hand-adjustable**

▸ **Carrier bag for two pieces as optional accessory**

This universal floorstand provides effective mounting solutions for loudspeaker installations, a Wireless Access Point of the DCN-Wireless system, or a radiator of the Integrus digital language distribution system. They are manufactured and finished to the same high standards as all Bosch products, assuring excellent quality and guaranteed compatibility throughout the range. The LBC 1259/01 is suited to a wide range of applications where a secure yet transportable mounting solution is required.

Functions

Adjustable and safe

The LBC 1259/01 floorstand is hand-adjustable using a spring-loaded locking screw for heights between 1.4 and 2.2 m (4.6 and 7.2 ft). An extra safety bolt on the support can be tightened to ensure the stand remains extended.

This lightweight stand has a double-braced folding base for extra strength, and a wide leg span to ensure stability.

Installation/Configuration Notes

LBC 1259/01 with DCN Wireless Access Point, LBB 451x/00 Infra--red Radiator and XLA 3200 Line Array Loudspeaker

Parts Included

Quantity	Component
1	LBC 1259/01 Universal Floorstand
1	36 mm (1.42 in) reducer flange with (M10 x 12) threaded pin
1	M10 securing knob for WAP mounting bracket
2	Metal filler rings

Technical Specifications

Mechanical

Length: standing	1.4 to 2.2 m (4.6 to 7.2 ft)
Length: folded	1.24 m (4.06 ft)
Width: legs extended	1.32 m (4.33 ft)
Width: legs folded	130 mm (5.1 in)
Weight	4.8 kg (10.58 lb)
Max. centric load	50 kg (110.2 lb)
Material	Aluminum/steel
Color	White aluminum (RAL 9006) with black parts
Tube diameter	35 mm (1.37 in)

Carrier bag accessory

Dimensions (L x D)	1.25 m x 27 mm (49 x 1.06 in)
Weight	750 g (1.65 lb)
Color	Black with light grey handles
Material	Nylon

Ordering Information

LBC 1259/01 Universal Floorstand   LBC1259/01
Lightweight aluminum construction, foldable,
M10 x 12 reducer flange.

Accessories

LM1-CB Carrier Bag for two floorstands   LM1-CB
Carrier Bag

DCN-EPS Extension Power Supply

Features

▸ **Easy to connect to DCN**

▸ **Maximum supply power of 255 W**

▸ **Built-in DCN network splitter allows installation at any convenient point in the system cabling**

▸ **Loop-through cabling**

▸ **Switches on automatically when the CCU is switched on**

▸ **All outputs are protected against short circuit**

▸ **Freestanding on a tabletop or mounted in a 19" rack**

The Extension Power Supply unit is used in combination with a CCU to supply extra power to the DCN network.

Functions

Controls and Indicators

• "Power on" LED indicator
• Three indicators to indicate DCN outlet overload (red LEDs)

Interconnections

• Euro power socket with built-in fuse holder
• 2 m (78.7 in) DCN cable with molded six-pole circular connector
• Six-pole circular socket for loop-through connection to the DCN network
• Three DCN outlet sockets for connection of units, plus extension power supplies. Each socket is protected against short-circuit (3 x six-pole circular sockets)

Parts Included

Quantity	Component
1	DCN-EPS Extension Power Supply
1	Power cord 1.7 m (66.9 in)

Technical Specifications

Electrical

Supply voltage	105, 115, 125, 220, 230, 240 VAC
Power consumption	350 W
DCN system supply	40 VDC, max 85 W per DCN socket

Mechanical

Mounting	Free-standing on a tabletop or mounted in a 19" rack unit (required 2U, 19" width)
Dimensions (H x W x D)	100 x 220 x 308 mm (3.9 x 8.7 x 12.1 in)
Weight	8.3 kg (18.3 lbs)
Color cabinet	Charcoal (PH 10736)
Color handles	Charcoal (PH 10736)

Ordering Information

DCN-EPS Extension Power Supply for all regions except North-America	**DCN-EPS**
DCN-EPS-UL Extension Power Supply UL/ CSA for the North-America region	**DCN-EPS-UL**
DCN-EPS-JP Extension Power Supply (JP) Japanese version	**DCN-EPS-JP**

LBB 4402/00 Audio Expander

Features

▸ **Stylish and modern design (IF award)**

▸ **Room coupling facility**

▸ **Versatile audio distribution facility**

▸ **Optical network for coupling to the CCU**

▸ **Redundant network capability**

The audio expander can contribute audio to and distribute audio from the system. Typical applications are room coupling and audio distribution.

Functions

- Redundant network cabling can be either single branch or redundant loop
- Audio line inputs (of which 2 can be configured as microphone input) for floor and interpretation channels
- Audio line outputs for floor and interpretation channels
- Flexible routing of floor and interpretation channels
- Adjustable sensitivity for the audio inputs
- Adjustable level for the audio outputs
- Configuration of the Audio Expander via a display and a single rotary/push button
- Each Audio Expander can be assigned a unique name by the installer for easy identification
- VU meter readings to monitor audio inputs and audio outputs. The audio can be monitored using a headphone
- 19" (2U) housing for table top or rack mounting
- Handgrips for easy transportation
- The unit is powered from the network

Controls and Indicators

- 2 x 16 Character LCD display for status display and configuration of the Audio Expander

- Rotary/push control to navigate through the LCD menus

Interconnections

Front

- One stereo headphone output 3.5 mm (0.14 in)

Back

- Two optical network connections for connecting to the CCU
- Four three-pole XLR balanced audio line inputs with galvanic separation
- Four stereo Cinch unbalanced audio line inputs
- Four three-pole XLR balanced audio line outputs with galvanic separation
- Four stereo Cinch unbalanced audio line outputs
- Eight control inputs to enable audio inputs and audio outputs
- Five control outputs to indicate channel engaged state

Certifications and Approvals

Region	Certification
Europe	CE

Technical Specifications

Electrical

Supply voltage	24 to 48 VDC
Power consumption	7.6 W (DC)
Frequency response	30 Hz to 20 kHz (-3 dB at nominal level)
THD at nominal level	<0.5%
Crosstalk attenuation	>85 dB at 1 kHz
Dynamic range	>90 dB
Signal-to-noise ratioo	>87 dBA

Audio line inputs

XLR nominal input	0 dBV (±6 dB)
XLR maximum input	+12 dBV
Cinch nominal input	+12 dBV (±6 dB)
Cinch maximum input	0 dBV

Audio mic inputs

Nominal input	57 dBV (±6 dB)
Maximum input	26 dBV
Phantom supply	12 V ±1 V at 15 mA

Audio line outputs

XLR nominal output	12 dBV (+6 / -24 dB)
XLR maximum output	+12 dBV
Cinch nominal output	24 dBV (+6 / -24 dB)
Cinch maximum output	0 dBV

Mechanical

Dimensions (H x W x D)	
for tabletop use, with feet	92 x 440 x 400 mm (3.6 x 17.3 x 15.7 in)
for 19" rack use, with brackets	88 x 483 x 400 mm (3.5 x 19 x 15.7 in)
in front of brackets	40 mm (1.6 in)
behind brackets	360 mm (14.2 in)
Weight	7 kg (15.4 lbs)
Mounting	Tabletop, 19"-rack
Color	Charcoal (PH 10736) with silver

Ordering Information

LBB 4402/00 Audio Expander   LBB4402/00
Inserts external audio into the system and extracts audio from the system.

PRS-4DEX4 Audio Expander Digital

Interconnections

Front

• One stereo headphone output 3.5 mm (0.14 in)

Back

• Two optical network connections for connecting to CCU
• Two 3-pole XLR AES/EBU stereo inputs for 2 audio channels per input
• Two Cinch SPDIF stereo inputs for 2 audio channels per input
• Two 3-pole XLR AES/EBU stereo outputs for 2 audio channels per output
• Two Cinch SPDIF stereo outputs for 2 audio channels per output
• Eight control inputs to enable audio inputs and audio outputs
• Five control outputs to indicate channel engaged state

Features

▸ **Stylish and modern design (IF award)**

▸ **Room coupling facility**

▸ **Versatile audio distribution facility**

▸ **AES/EBU or SPDIF**

▸ **Sample-rate converters (8 – 96 kHz)**

▸ **Optical network coupling**

▸ **Redundant network capability**

Certifications and Approvals

Region	Certification
Europe	CE

Parts Included

Quant.	Component
1	PRS-4DEX4 Digital Audio Expander
1	Set of mounting brackets for 19" rack
1	Set of feet
1	Set of connectors

The digital audio expander can contribute audio to and distribute audio from the system. Typical applications are room coupling and audio distribution.

Functions

• Automatic Gain Control
• Audio input channels for floor and interpretation channels
• Audio output channels for floor and interpretation channels (16-bit 44.1 kHz)
• Flexible routing of floor and interpretation channels
• Configuration of the Digital Audio Expander via a display and a single rotary push button
• Each Digital Audio Expander can be assigned a unique name by the installer for easy identification
• VU meter readings to monitor audio inputs and audio outputs. The audio can be monitored using headphones
• 19" (2U) housing for tabletop or rack mounting
• Handgrips for easy transportation
• Unit is powered from the network

Controls and Indicators

• 2 x 16 Character LCD display for status display and configuration of the Audio Expander
• Rotary control to navigate through the LCD menus

Technical Specifications

Electrical

Supply voltage	24 to 48 VDC
Power consumption	6 W
Frequency response	30 Hz - 20 kHz
THD at nominal level	< 0.5 %

Mechanical

Mounting	Tabletop or mounted in a 19" rack
Dimensions (H x W x D)	
for tabletop use, with feet	92 x 440 x 400 mm (3.6 x 17.3 x 15.7 in)
for 19" rack use, with brackets	88 x 483 x 400 mm (3.5 x 19 x 15.7 in)
in front of brackets	40 mm (1.6 in)
behind brackets	360 mm (14.2 in)
Weight	6 kg (13.2 lbs)
Color	Charcoal (PH 10736) with silver

Ordering Information

PRS-4DEX4 Audio Expander Digital
contribute audio to and distribute audio from
the system

PRS-4DEX4

LBB 4404/00 CobraNet Interface

Controls and indicators

- 2 x 16-character LCD display for status display and audio channel routing of the CobraNet™ Interface
- Rotary control to navigate through the LCD menus

Interconnections

Front

- One stereo headphone output 3.5 mm (0.14 in)

Back

- Two optical network connections
- Two RJ45 Ethernet connectors for the CobraNet™
- Eight control inputs to enable audio inputs and audio outputs for floor and interpretation channels
- Five control outputs to indicate channel engaged state

Certifications and Approvals

Region	Certification
Europe	CE

Features

▶ **Stylish and modern design (IF award)**

▶ **Room coupling facility**

▶ **Versatile audio distribution facility**

▶ **CobraNet™ compatible using Ethernet**

▶ **Optical network for coupling to the CCU**

▶ **Redundant network cabling**

The CobraNet™ Interface can interface audio from the DCN system to a CobraNet™ network using standard Ethernet networks. Typical applications are room coupling and audio distribution over long distances.

CobraNet™ is a registered trademark of Peak Audio, a Division of Cirrus Logic, Inc.

Functions

- Redundant network cabling can be either single branch or redundant loop
- Flexible routing of floor and interpretation channels
- Configuration of the CobraNet™ Interface audio channel routing via a display and a single rotary push button
- Automatic Gain Control
- Configuration of the CobraNet™ Interface with software tools included
- Each CobraNet™ Interface can be assigned a unique name by the installer for easy identification
- VU meter readings to monitor audio inputs and audio outputs. The audio can be monitored using a headphone
- 19" (2U) housing for table top or rack mounting
- Handgrips for easy transportation
- The unit is powered from the network

Technical Specifications

Electrical

Supply voltage	24 to 48 VDC
Power consumption	10.5 W (DC)
Frequency response	30 Hz to 20 kHz
THD at nominal level	<0.5%

CobraNet™

Physical layer	Ethernet
Channels	4 in / 4 out per interface Max 64 on CobraNet™
Compliance	IEEE 802.3
Audio Transport	16 / 20 / 24-bit
Sample Rate	48 kHz
Latency	5.33 ms

Mechanical

Dimensions (H x W x D)

for tabletop use, with feet	92 x 440 x 400 mm (3.6 x 17.3 x 15.7 in)
for 19" rack use, with brackets	88 x 483 x 400 mm (3.5 x 19 x 15.7 in)
in front of brackets	40 mm (1.6 in)
behind brackets	360 mm (14.2 in)
Weight	7 kg (15.4 lbs)
Mounting	Tabletop, 19"-rack
Color	Charcoal (PH 10736) with silver

Ordering Information

LBB 4404/00 CobraNet Interface   **LBB4404/00**
network protocol for real-time uncompressed
digital audio distribution over industry stand-
ard 100Base-T Ethernet networks.

DCN-FCCCU Flight Case for 2 Central Control Units

Features

▸ **Robust construction with reinforced corners**

▸ **Easy to carry and store**

▸ **Shaped interior**

▸ **Holds up to two 19" units**

The DCN-FCCCU flight case accommodates two 19" units,
e.g. 1 central control unit (CCU) + 1 transmitter or 1 audio
expander unit.

Technical Specifications

Mechanical

Dimensions (H x W x D)	510 x 460 x 290 mm (20.1 x 18.1 x 11.4 in)
Weight	6 kg (13.2 lb)
Color	Light grey

Ordering Information

DCN-FCCCU Flight Case for 2 Central   **DCN-FCCCU**
Control Units
can hold two 19" units (CCU, audio expand-
er, transmitter)

Bosch Security Systems   **www.boschsecurity.com**

DCN-WFCCCU Flight Case for CCU and WAP

Features

▸ **Robust construction with reinforced corners**

▸ **Easy to carry and store**

▸ **Shaped interior**

▸ **Holds WCCU, WAP and network cabling**

The DCN-WFCCU Flight Case provides a secure transportation and storage solution for:

• a Wireless Central Control Unit, Wireless Access Point and optical network cable
• 2 x Wireless Central Control Units (if dividing foam partition is removed from case)

Technical Specifications

Mechanical

Dimensions (H x W x D)	480 x 510 x 295 mm (18.9 x 20.1 x 11.46 in)
Weight	6 kg (13.2 lb)
Color	Light grey

Ordering Information

DCN-WFCCCU Flight Case for CCU and WAP light grey, can hold two central control units, or one central control unit, wireless access point and optical cable	DCN-WFCCCU

PRS 1AIP1 IP Audio Interface

Features

▸ **All-in-one solution for audio transport on IP-networks**

▸ **Supervised control inputs and outputs**

▸ **Supports re-broadcasting**

▸ **Configurable audio delay on the output for loudspeaker alignment**

▸ **Easy to install and configure via standard web-browser**

▸ **EN 60849 compliant IP solution**

The PRS-1AIP1 is a universal, IP-based audio device supporting VoIP and Audio over IP applications. It is an ideal solution for bridging audio and contact closures over long distance LAN and WAN networks, e.g. in and between conference centers and/or in remote interpretation applications. It extends and interfaces to DCN systems and non-network based traditional conference and public address systems without the need for a PC during operation.

The unit has analog audio inputs and outputs for easy interfacing. One audio input can be switched to microphone sensitivity with built-in microphone supervision. Also, the control inputs offer cable and connection supervision.

Control inputs and outputs can be used to pass channel engaged events to the DCN system.

Functions

Audio

Multiple audio formats are supported: single channel, full duplex 16-bit PCM or G.711 for very low latency, and two-channel send or receive MP3 for high quality audio with various sample rates and compression settings.

The unit provides two balanced line inputs and two balanced line outputs. One of the inputs can be configured as balanced microphone input with a phantom power supply for electret / condenser microphones. The output level is configurable.

A configurable audio delay can be used to artificially delay the playback of audio for loudspeaker alignment.

Audio Routing

Audio signals can be routed in uni-cast to up to 16 receivers, preconfigured or on activation of control inputs. Receivers are able to re-broadcast the incoming audio stream to other receivers. In case the interfaces are on the same LAN also broadcast is supported.

In PCM and G.711 (uLaw and aLaw) full duplex audio interfacing between two units is possible.

Control inputs and outputs

The unit has eight control inputs. Eight control outputs have dry relay contacts. Control inputs can be routed to control outputs for remote actions or to pass on fault information between audio transmitter and receiver, in both directions. Control inputs can also be configured to change the audio routing.

An additional dry relay contact is provided for fault indication of the unit, including a high temperature fault situation.

Network Interfaces

The unit interfaces to 10 and 100 Mbit Ethernet networks and announces its IP-address that was given by a DHCP server. It can also search the network for a free IP-address or can be given a static IP-address. A second Ethernet connection is available to support network redundancy.

An RS 232 interface is build-in to communicate additional serial data over the IP network.

Power Supplies

Two power supply connections are provided as main input and backup input with supervision of both supplies.

Controls and Indicators (front)

• Reset button, recessed
• Two status indicator LEDs for network
• Eight status LEDs for control inputs

Interconnections (rear)

• Eight control inputs on Euro-connector
• Eight control outputs on Euro-connector
• Fault relay output on Euro-connector
• Two balanced audio inputs on Euro-connector (one line input, one line / microphone input)
• Two balanced audio outputs on Euro-connector
• Two Ethernet connections on RJ45
• RS 232 on Sub-D
• RS 485 on Euro-connector (future use)
• Main power supply on jack
• Backup power supply on Euro-connector

Certifications and Approvals

Safety	acc. to IEC 60065-98
Immunity	acc. to EN 55103-2 / EN 50130-4 / EN 55024
Emissions	acc. to EN 55103-1 / EN 55022
Emergency	acc. to EN 60849

Parts Included

Quantity	Component
1	PRS-1AIP1 IP Audio Interface
1	Power supply
1	Set of connectors

Technical Specifications

Electrical

External power supply 1	18 to 56 VDC
External power supply 2	18 to 56 VDC
Power consumption	8 W max

Microphone input

Sensitivity	-48.5 to -26 dBV
Impedance	1360 ohm
Frequency response	100 Hz to 15 kHz
S/N	>60 dB
Supervision detection	Electret: 0.4 – 5 mA Dynamic: 120 – 1300 ohm

Line Inputs

Sensitivity	-16.5 to +6 dBV
Impedance	22 kohm
Frequency response	20 Hz to 15 kHz
S/N	>70 dB
Pilot tone detection level (input 2 only)	-30 dBV

Line outputs

Level	6 dBV max
Pilot tone level (output 2 only)	-20 dBV (20 kHz)

Audio formats

MPEG 1-layer 3 (MP3)	32, 44.1 and 48 kHz sample rate
	Encoding up to 192 kbps VBR
	Decoding up to 320 kbps (stereo)
MPEG 1-layer 2	16, 22.05 and 24 kHz sample rate
G.711	uLaw, aLaw at 8, 24 or 32 kHz sample rate
PCM	16-bit at 8, 24 or 32 kHz sample rate

Control inputs — 8 x

Connectors	Removable screw terminals
Operation	Closing contact (with supervision)

Control / fault outputs — 8 x / 1 x

Connectors	Removable screw terminals
Operation	Make contact (SPST, voltage free)
Rating	24 V, 0.5 A

Ethernet

Connector	Dual RJ45, DTE-pinout
Standard	802.3i / 802.3u
Speed	10 / 100 Mbps, auto-negotiation
Flow	Full / half-duplex, auto-negotiation
Protocol	TCP/IP, UDP, RTP, IGMP, DHCP, SNMP

RS 232

Connector	9-pin Sub-D male, DTE-pinout
Pinout	300 to 115.200 Baud
Setting (default)	9600, 8, N, 1

Mechanical

Dimensions (H x W x D)	216 x 38 x 125 mm(8.5 x 1.5 x 4.92 in) (half 19” wide)
Weight	0.7 kg (1.5 lb)
Mounting	Stand-alone or in 19”-rack with additional frame
Color	Silver with Charcoal

Environmental

Operating temperature	-5 ºC to +50 ºC (+23 ºF to +122 ºF)
Start-up temperature	0 ºC to +50 ºC (+32 ºF to +122 ºF)
Storage temperature	-20 ºC to +70 ºC (-4 ºF to +158 ºF)
Humidity	15 to 90 %
Air pressure	600 to 1100 hPa

Ordering Information

PRS-1AIP1 IP Audio Interface universal, IP-based audio device supporting VoIP and Audio over IP applications.	**PRS-1AIP1**

Conference Software Suite

Conference Software Suite (DCN-SW range*)

Bosch is introducing a new, state-of-the-art software suite for its DCN Next Generation Conference System and Wireless Discussion System. Remarkably ergonomic, this software suite makes it simpler than ever to set up and manage meetings and conferences. Featuring sophisticated interfacing options, the software has been created according to the very latest technology standards. Flexible both in operation and in its range of functionality, the Bosch DCN Conference Software Suite offers powerful support and control in a user-friendly package. As the Conference Software Suite is being introduced in phases, not all functionality is available at the moment. In cases when required functionality is missing in the new Conference Software Suite, the classic PC software will be an alternative.

Except DCN-SWSMV which is a dedicated software application for smaller systems. See next chapter for more information about the DCN-SWSMV (Smart Control Software)

Software Overview

The following table provides an overview of the software modules available for the new Conference Software Suite and classic software portfolio. Refer to the classic PC software chapter if required functionality is not yet available in the new Conference Software Suite.

	Suite	Classic
Microphone Management	•	•
Synoptic Control	•	•
System Installation	•	•
Parliamentary Voting	•	•
Delegate Database	•	•
Simultaneous Interpretation	•	•
Attendance Registration	•	•
ID Card Encoding	•	•
Message Distribution	•*	•
Video Display	•	•
Camera Control	•**	•
Multi-PC	•	•
Multi-Voting		•
Text/Data Display		•
Intercom		•

Available functions overview
* Only speak-slowly and help indicators
** Stand Alone Camera Control software

Available languages

Catalan
Chinese (simplified)
Dutch
English
French
Finnish
German
Hungarian
Italian
Japanese
Korean
Lithuanian
Norwegian
Polish
Portuguese
Russian
Spanish
Swedish
Thai

Available languages overview

Activating software

The DCN software (both suite and classic) is protected with a license key. The license key depends on the CCU and the set of software modules. This means that an individual license key is required per CCU.

DCN-SW Conference Software Main Module

1	DCN-SW Server
2	Vote results print application
3	Remote Configuration application
4	Remote Operator application (Multi PC license required)
5	Touch screen
6	Ethernet connections
7	CCU2 (single)
8	CCU2 (master)
9	Bosch optical network
10	CCU2 (slave)

Features

▸ **Meeting & Agenda**

▸ **User management**

▸ **Client server solution**

▸ **Optimized for Microsoft Windows 7**

▸ **Off-line configuration**

▸ **Multi PC**

▸ **Supports DCN Next Generation or DCN Wireless Discussion System**

▸ **On-screen help facility**

The DCN-SW Conference Software Main Module is used as a platform on which all other software modules run. Basic functions are included where others can be added depending on the functionality required.

System Overview

The DCN-SW Conference Software Main Module is build as a client server solution and consists of four software components:

• The server provides management, control and monitoring of the DCN Next Generation System or DCN Wireless Discussion system.
• The configuration application provides system installation and meeting preparation.
• The operator application provides system monitoring and meeting control.
• The print application provides printing of voting results.

All DCN-SW applications can, but not necessary need to be run on separate computers and integrate seamlessly with each other. This allows the possibility for assigning functionality to different users and/or PCs – for instance, let one or more users configure the set-up and register delegates (configuration application), and another person actually control the meeting on a separate pc (operator application). Contextual help file provides instant support for all applications.

Functions

The server

• Monitor and control of the conference data.
• It runs on the background and links all applications.
• SQL database stores all data and settings.
• Status report of database connection and system connection.
• Error logging for quick diagnostics.

Configuration application
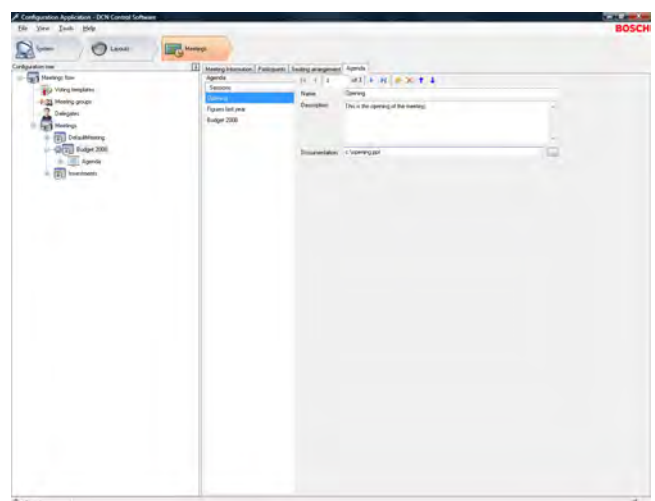
• Easy step-by-step pre-configuration which makes it exceptionally ergonomic.
• Off-line system configuration.
• Administrator user management: defining users and user groups with group privileges like view- and control rights.

- Installer system setup: defining seats and synoptic layouts.
- Operator meeting preparation: voting templates, participating delegates, authorizations for each meeting, the agenda, lists of speakers and voting scripts.

Operator application
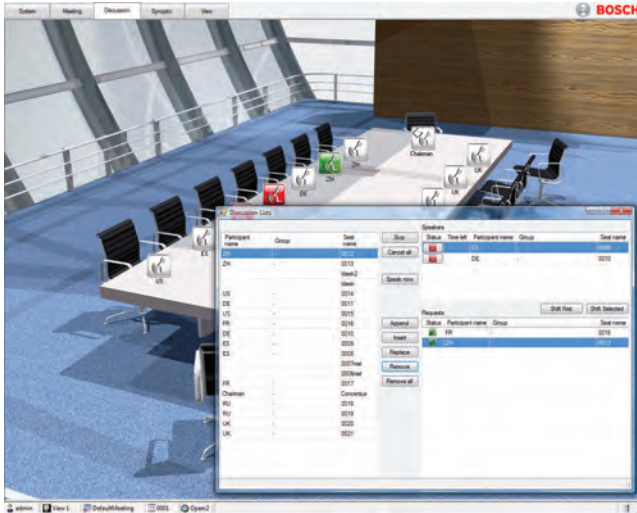
- Full meeting control.
- Touch screen optimized.
- Ribbon technology giving the user a graphical representation of all main functions, which makes it very intuitive to use.
- Functionality depending on user rights and system license.
- Synoptic microphone control, voting results, Individual microphone sensitivity control, battery status and signal status.
- Ergonomically designed synoptic shapes and shadings help the color-impaired people to distinguish different statuses.
- Quick-links to jump instantaneously to configuration application to make adjustment to the pre-configuration.

Print application
- Automatic printing of voting results

Installation/Configuration Notes

License

DCN-SW is license activated and comes which an authorization code which includes synoptic control with basic microphone control functionality. Activation is done via the license website.

The configuration application can be used independent of the additional licenses as where the operator application does need the license to control the conference system.

Running the operator application on a separate PC requires DCN-SWMPC.

Parts Included

Quantity	Component
1	DVD includes:
	DCN-SW Conference Software Main module
	Authorization code including synoptic control
	Setup wizard that can selectively install all components (Server-, Configuration-, Operator- and Print- application) in all supported languages

---

Technical Specifications

Maximum number of client PCs	20
Supported operating system	Windows 7 Home Premium (32 and 64 bits) or above or Windows Vista Home Premium(32 or 64 bits) or above All with the latest service packs and updates.
Required open TCP port for client PCs	9461
PC requirements	
Single CCU	Dual core processor (2.66 GHz) and 2 GBytes internal memory for single PC systems and for the server PC in multi PC systems. Dual core processor (2.66 GHz) and 1 GBytes internal memory for client PC's in multi PC systems.
Multi CCU	Quad core processor (2.40 GHz) and 2 GBytes internal memory for single PC systems and for the server PC in multi PC systems. Dual core processor (2.66 GHz) and 1 GBytes internal memory for client PC's in multi PC systems.

Ordering Information

DCN-SW Conference Software Main Module a platform on which all other Conference software modules run	**DCN-SW**

Software Options

DCN-SW-E Conference Software Main Module E-code Electronic authorization code. Only valid for the EMEA region.	**DCN-SW-E**

Bosch Security Systems

DCN-SWMM Conference Software Microphone Management
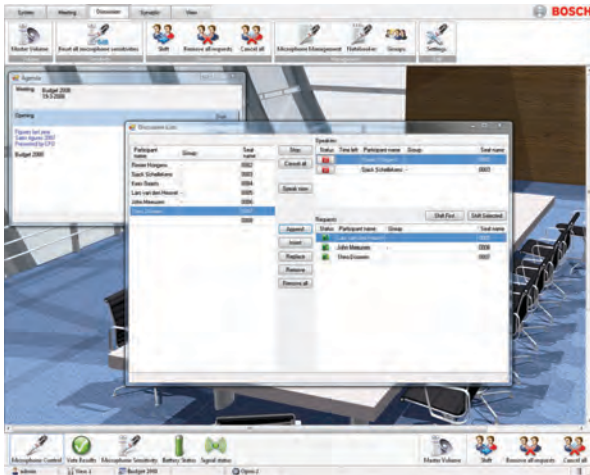
Features

▸ **Prepare request-to-speak lists**

▸ **Group and individual speech timers**

▸ **Notebook**

DCN-SWMM Conference Software Microphone Management is the way to efficient control microphones in a conference and provides the user a powerful and easy-to-use tool that covers all aspects of microphone management.

Functions
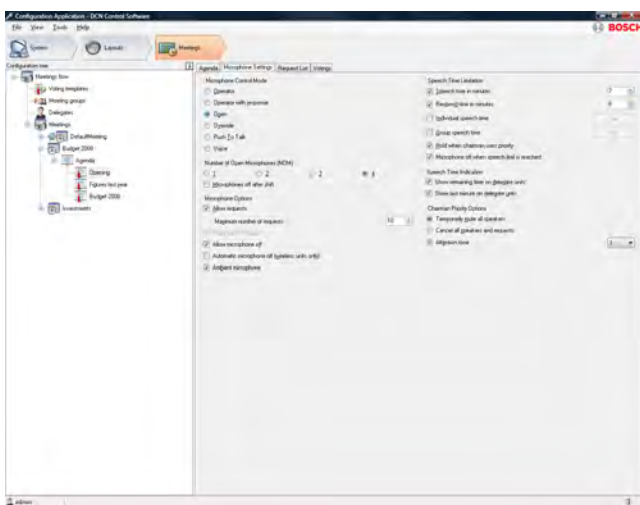
Function screenshot

Preperation

The operator prepares how the discussion will take place using the configuration application. Microphone settings can be defined for every entry in the meeting agenda. Settings available are: microphone mode, number of active microphones, request-to-speak list, individual and group speech timers and many more.

During the actual meeting the operator can choose to run the set-up as pre-configured, or make adjustments in real-time.

Microphone Management

Microphone Management offers a number of microphone control options. This has a bearing on both how the Microphone Management module operates and how the conference itself proceeds. These options are:

- Control by operator with request-to-speak list (manual).
- Control by operator with request-to-speak list and response list.
- Control by delegate with request-to-speak list (open).
- Control by delegate with override of other delegate microphones (first-in, first-out).
- Control by delegate with voice activation.
- Control by delegate with Push-To-Talk.

Each mode allows a different level of both operator and delegate microphone control, so all general conferences can be covered. For example, smaller, informal discussions require very little operator microphone control, so a mode such as microphone control by delegate would be ideal. For a full-scale international conference with hundreds of participants, control by operator with request-to-speak list would be more appropriate. The operator can specify whether one, two, three or four normal delegate microphones can be active simultaneously. It is also possible to specify whether delegates are allowed to cancel requests-to-speak or switch their microphones off. The amount of time delegates are allowed to speak can be defined for the current speaker, response speaker, individual delegates and for delegate groups.

Notebook

It is also possible to give delegates additional microphone activation privileges, which means they do not have to join the request list and can enjoy certain other privileges not granted to other delegates. The microphone type must be specified for the notebook. The possibilities are:

- 'Chair' for chairman microphones.
- 'Button' where delegates activate their microphones by pressing their microphone button (in this mode the 'VIP'LED of the contribution units is illuminated).
- 'Operator' where the microphones of more active delegates are activated by the operator.
- 'Voice' where the microphones are voice activated.
- 'PTT' where microphones are activated by using Push-To-Talk.

Both DCN Next Generation and DCN Wireless systems automatically recognize an assigned chairman unit and will automatically add it to the notebook.

Parts Included

Quantity	Component
1	Authorization code

Ordering Information

DCN-SWMM Conference Software Microphone Management can only be used in combination with DCN-SW	**DCN-SWMM**	

Software Options

DCN-SWMM-E Conference Software Microphone Management E-code Electronic authorization code. Only valid for the EMEA region.	**DCN-SWMM-E**	

DCN-SWPV Conference Software Parliamentary Voting

Features

▸ **Complete operator control of parliamentary voting sessions**

▸ **Extensive motion preparation facilities**

▸ **Output voting results to printers**

▸ **Wide range of vote-related parameter options**

The DCN-SWPV Conference Software Parliamentary Voting is a software module designed to control and to prepare parliamentary voting.

Functions
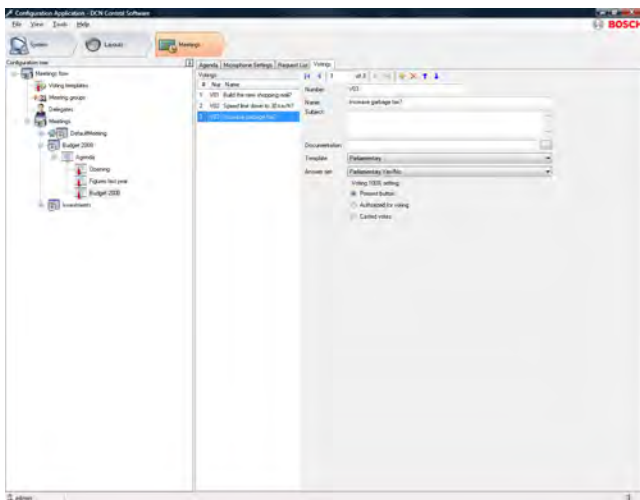
Vote preparation

Applications

The software covers a number of functions including vote preparation, specifying vote-related parameters, and starting and controlling voting.

In the configuration application voting is prepared as in the operator application the voting can be started and results can be shown.

Voting

Voting is an optional part of every agenda entry. Voting can consist of a number of proposals or motions, each of which will be voted on.

The preparation of the voting is done in two steps. First a template needs to be defined. The template contains more general settings like automatic print, secret, majority and many more. Secondly a single vote can be created. Now the number, name subject, template and answer set must be defined. Also a link to a document can be defined which can be activated from the operator application. This document can be used as extra information for a specific vote.
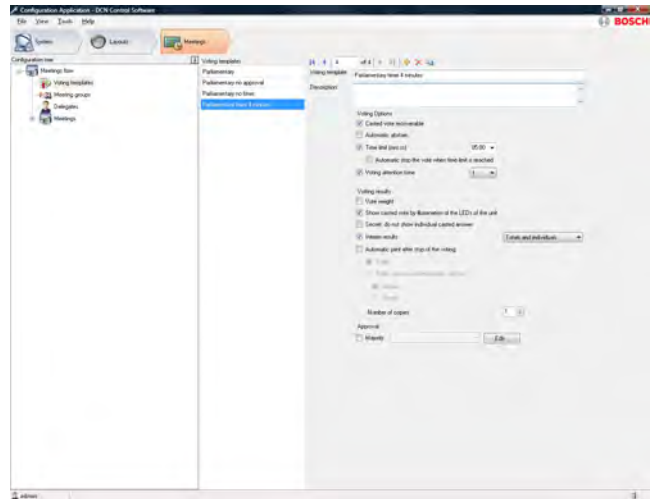
Voting template

Operator

The operator selects the desired vote from the prepared voting list and starts the vote; participants can use their units to register votes. The operator has full control over the voting procedure, and can stop or suspend a vote at any time. It is also possible to start a vote which is not prepared before (ad-hoc voting).

Display

The software program offers the possibility of displaying cast answers and the final result of a vote on the PCs screens. Optional delegate units with a display facility can display the vote results. There is also a facility of automatically print-out the vote results once the vote is completed.

Parts Included

Quantity	Component
1	Authorization code

Ordering Information

DCN-SWPV Conference Software Parliamentary Voting   **DCN-SWPV**
can only be used in combination with DCN-SW. DCN-SWDB is required if individual vote results are required.

Software Options

DCN-SWPV-E Conference Software Parliamentary Voting E-code   **DCN-SWPV-E**
Electronic authorization code. Only valid for the EMEA region.

DCN-SWDB Conference Software Delegate Database
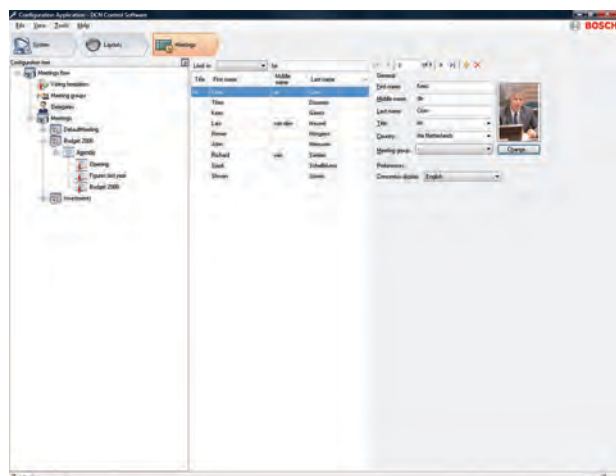
Features

▸ **Comprehensive database information for all delegates**

▸ **Re-use of delegate information across meetings**

▸ **Define vote and microphone authorization for each individual participant**

The DCN-SWDB Conference Software Delegate Database allows users to compile a comprehensive database of information relating to delegates. During the meeting preparation stage the delegates can be assigned to the meeting as participants. The advantage of this method is that delegates participating in multiple meetings only need to be entered once and can be assigned to any desired meeting without re-entering the same delegate information again.

Functions

Database

All information is entered via the configuration application, before or during conference proceedings. A considerable amount of data can be specified for each conference participant. All delegate specific information like: delegate name, delegate country, delegate group and delegate unit display language, can be re-used and does not need to be re-entered for every meeting.

At meeting preparation it is possible to grant or deny authorization to individual delegates in a specific meeting for microphone, and voting use; also the voting weight can be defined.

Data Input

All delegate information is input via the configuration application. For some entries (first name, last name) the only restriction is the number of characters entered. For other entries (country, group, etcetera.), the input can easily be selected from a list of options that is presented by the system. This option list is automatically controlled by the system. When the user enters a text it is automatically added to the list.

User rights

By defining the correct user rights a delegate information entry PC client can be created. This entry client can be placed at the lobby of a conference hall entrance, where the registration officer can enter delegate information and assigning the delegate to the desired meeting.

Parts Included

Quantity	Component
1	Authorization code

Ordering Information

DCN-SWDB Conference Software Delegate Database   **DCN-SWDB**
can only be used in combination with
DCN-SW

Software Options

DCN-SWDB-E Conference Software Delegate Database E-code   **DCN-SWDB-E**
Electronic authorization code. Only valid for the EMEA region.

DCN-SWSI Conference Software Simultaneous Interpretation

Features

▸ **Operator control of interpreter microphones**

▸ **Configure and control interpretation facilities**

▸ **Monitor interpreter activities**

▸ **Adjust individual microphone sensitivity of interpreter desks**

The DCN-SWSI Simultaneous Interpretation software module is essential for international conference venues. The simultaneous interpretation software module is used to prepare simultaneous interpretation, control facilities and monitor interpreter activities during a conference. It accommodates 31 interpreter booths, each with up to 6 interpreter desks.

Functions

Configuration application

In the configuration application, the operator defines the maximum number of system channels to be used for interpretation.

The operator can prepare the interpretation settings for each meeting. These settings consist of the following: number of interpretations, language channel names, interpreter microphone interlock mode, enabling / disabling of speak slowly, and floor distribution.

Icons representing the interpreter desk and the booths can be placed on the synoptic layout for controlling and status information.

Operator application

The operator can view the status of the interpretation in two ways. One is the Interpretation Distribution status list. This list is an overview of all interpretation languages, and contains the following: channel number, translating booth and desk number, and channel quality.

Operators may also use the synoptic layout, which features interpreter desk and booth icons. The operator may control the microphone and microphone sensitivity of interpreter desks via the synoptic layout.

Ordering Information

DCN-SWSI Conference Software Simultaneous Interpretation

DCN-SWSI

Can only be used in combination with DCN-SW. Supports the preparation of simultaneous interpretation facilities and the monitoring of interpreter activities during a conference.

DCN-SWMD Conference Software Message Distribution

Features

▸ **Speak-slowly request**

▸ **Help request of delegates and interpreters**

The Message Distribution module indicates to the operator or chairman that an interpreter has requested the floor to speak slowly, and also indicates to the usher that a delegate or interpreter is requesting help.
The speak slowly and help request are shown on the operator application.

Functions

Speak-slowly request

If the floor is speaking too fast during a meeting, an interpreter issues a speak-slowly request. This request is shown on the operator application used by an operator or chairman.

After receiving the request, the chairman can instruct the floor to speak more slowly. For privacy reasons, it is not possible to see which interpreter issued the request.

Help request

If a delegate or interpreter needs help during a meeting, a help request can be issued. The usher can see which interpreter needs help via the synoptic layout of the operator application. The usher then marks the request as being handled.

After the delegate or interpreter has been served, the usher marks the help request as finished.

Note   The functions Speak-slowly request and Help-request are only working in combination with DCN-SWSI.

Ordering Information

DCN-SWMD Conference Software   DCN-SWMD
Message Distribution
Can only be used in combination with
DCN-SW. Speak-slowly and help request also
requires DCN-SWSI.

DCN-SWID Conference Software ID Card Encoding

The ID-card Encoding module is used for encoding ID-cards. ID-cards are used to identify delegates during a meeting. The ID-card Encoder (USB) (DCN-IDENC) and DCN-SW Conference Software Main module are required to produce ID-cards.

Ordering Information

DCN-SWID Conference Software ID Card Encoding software module for producing ID cards. Can only be used in combination with DCN-IDENC, DCN-SW and DCN-SWDB. Can not be used with the DCN Wireless Discussion System (DCN-WCCU).	**DCN-SWID**
DCN-SWID-E Conference Software ID Card Encoding E-code Electronic authorization code. Only valid for the EMEA region.	**DCN-SWID-E**
DCN-IDENC ID Card Encoder (USB) used in combination with the ID Card Encoder (DCN-SWID), DCN-SW and DCN-SWDB software modules	**DCN-IDENC**
DCN-SW Conference Software Main Module a platform on which all other Conference software modules run	**DCN-SW**
DCN-SW-E Conference Software Main Module E-code Electronic authorization code. Only valid for the EMEA region.	**DCN-SW-E**
DCN-SWDB Conference Software Delegate Database can only be used in combination with DCN-SW	**DCN-SWDB**

Ordering Information

DCN-SWDB-E Conference Software Delegate Database E-code Electronic authorization code. Only valid for the EMEA region.	**DCN-SWDB-E**

DCN-IDENC ID Card Encoder (USB)

Features

▸ **USB (2.0) supported**

▸ **ID card supported (DCN-IDCRD)**

▸ **Supported by DCN-SW and LBB 4190/00**

The ID Card Encoder (USB) is used to encode ID cards (DCN-IDCRD). It is used in combination with the following Conference software modules: ID Card Encoder (DCN-SWID), Delegate Database (DCN-SWDB) and Conference Software Main module (DCN-SW).

The DCN-IDENC can also be used with the LBB 4181/00 from software version 2.80 onwards.

Certifications and Approvals

FCC part 15 Class B, UL, CE, VCCI
EMV 2000 Level 1

Technical Specifications

Electrical

Power supply	Through USB bus
Indication on top of unit	One dual state green LED
Operating System	XP, Server2003, Vista
ID card supported	DCN-IDCRD

Mechanical

Cable	1.5 m long with USB type A connector
Dimensions (H x W x D)	10 x 70 x 70 mm (0.39 x 2.8 x 2.8 in)
Weight	60 g (0.13 lb)

Environmental

Operating temperature	0 ° to +50 °C (+32 ºF to +122 ºF)
Storage temperature	-20 ° to +60 °C (-4 ºF to +140 ºF)
Relative humidity	15% to 90%

Ordering Information

DCN-IDENC ID Card Encoder (USB) used in combination with the ID Card Encoder (DCN-SWID), DCN-SW and DCN-SWDB software modules	**DCN-IDENC**
DCN-SWID Conference Software ID Card Encoding software module for producing ID cards. Can only be used in combination with DCN-IDENC, DCN-SW and DCN-SWDB. Can not be used with the DCN Wireless Discussion System (DCN-WCCU).	**DCN-SWID**
DCN-SW Conference Software Main Module a platform on which all other Conference software modules run	**DCN-SW**
DCN-SW-E Conference Software Main Module E-code Electronic authorization code. Only valid for the EMEA region.	**DCN-SW-E**
DCN-SWDB Conference Software Delegate Database can only be used in combination with DCN-SW	**DCN-SWDB**
DCN-SWDB-E Conference Software Delegate Database E-code Electronic authorization code. Only valid for the EMEA region.	**DCN-SWDB-E**

Accessories

DCN-IDCRD ID Card (100 pcs) standard credit-card format, set of 100	**DCN-IDCRD**

DCN-IDCRD ID Card (100 pcs)

Features

▸ **Attractive design**

▸ **Ample space for a name or other delegate personal information**

▸ **Clear instructions showing how to insert the card into a reader**

These standard credit-card format ID cards are used by delegates to identify them to the DCN Next Generation system. This can be a pre-requisite for access to contribution units and activities such as attendance registration and voting.

Technical Specifications

Mechanical

Dimensions (H x W)	85 x 54 mm (3.3 x 2.1 in)

Ordering Information

DCN-IDCRD ID Card (100 pcs)　　　　　　**DCN-IDCRD**
standard credit-card format, set of 100

DCN-SWAT Conference Software Attendance & Access

Features

▸ **Attendance Registration using ID-card with or without PIN-code, or present button**

▸ **Access Control using ID-card with or without PIN-code or PIN-code only**

▸ **All data instantly available to operator**

▸ **Print function to reproduce data**

The Attendance Registration & Access Control software module is used to register attendance of delegates in a conference meeting, and to control access to the conference facilities in the conference room.

Functions

The functionality of Attendance Registration & Access Control software falls into two categories:

Attendance Registration:

It is possible to specify entrance requirements that delegates have to meet before entering the meeting. This normally means delegates have to insert an ID-card in a card reader, either at the entrance to the meeting or at the conference unit. Registration at a conference unit can also be done by pressing the 'Present' button.
It is possible to display lists on-screen of all 'present' and 'absent' delegates, and print hard copies.

Access Control:

The settings specified for Attendance Registration can be used for access control. This means that although delegates can enter the meeting, they cannot use any of the conference unit's facilities (such as microphone and voting) without access requirements. Access is controlled by means of ID- cards, with or without PIN-code (free seating). There is an option whereby delegates register attendance at the entrance using an ID-card reader, and a specific conference unit is than made available for them (fixed seating).

Access control can be done on the conference unit only by ID-card with or without PIN-code or PIN-code only (fixed seating).

Ordering Information

DCN-SWAT Conference Software Attendance & Access used for registering and accessing facilities in the conference room. Can only be used in combination with DCN-SW and DCN-SWDB software modules. Can not be used with the DCN Wireless Discussion System (DCN-WCCU).	**DCN-SWAT**
DCN-SWAT-E Conference Software Attendance & Access E-code Electronic authorization code. Only valid for the EMEA region.	**DCN-SWAT-E**
DCN-SW Conference Software Main Module a platform on which all other Conference software modules run	**DCN-SW**
DCN-SW-E Conference Software Main Module E-code Electronic authorization code. Only valid for the EMEA region.	**DCN-SW-E**
DCN-SWDB Conference Software Delegate Database can only be used in combination with DCN-SW	**DCN-SWDB**
DCN-SWDB-E Conference Software Delegate Database E-code Electronic authorization code. Only valid for the EMEA region.	**DCN-SWDB-E**

DCN-SWSMD Conference Software Streaming Meeting Data

The content of each stream can be freely defined so that each PC software Client receives only the required meeting data.

The streams are protected meaning that only authorized PC software clients can receive the streams.
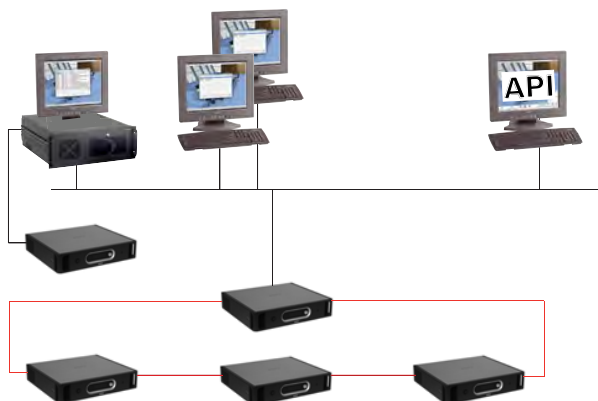
Functions

A great diversity of activities can be streamed. The main items are:

- Start/Stop meeting, speakers list, request list, vote results both Individual and totals, participating delegates.
- Filters are available to define the content of a stream; e.g. if only voting activity is required in the stream all other information can be filtered out.
- Activities are queued before they are sent to the stream. The size of the queues are free definable.
- Client authorization is controlled by a list of allowed IP addresses. Clients with unknown IP addresses will not be able to receive the stream.
- Example C-Sharp source code and software developer manual available on DCN-SW DVD

Features

▸ **XML streams for easy processing and logging**

▸ **Interface to video client applications to display meeting data by using video screens or video projectors**

▸ **Video client application available on DCN-SW DVD**

▸ **Example C-Sharp source code available on DCN-SW DVD**

▸ **Software developer manual available**

Conference Software Streaming Meeting Data is an interface to provide meeting data such as current speakers, request lists, vote results and other information to video screens or video projectors.

Ordering Information

DCN-SWSMD Conference Software Streaming Meeting Data To be used as an interface to provide meeting data such as current speakers, request list, vote results and other information to video screens or video projectors. Can only be used in combination with DCN-SW Conference Software main module.	**DCN-SWSMD**
DCN-SWSMD-E Conference Software Streaming Meeting Data E-code Electronic authorization code. Only valid for the EMEA region.	**DCN-SWSMD-E**
DCN-SW Conference Software Main Module a platform on which all other Conference software modules run	**DCN-SW**
DCN-SW-E Conference Software Main Module E-code Electronic authorization code. Only valid for the EMEA region.	**DCN-SW-E**

System Overview

Conference Software Streaming Meeting Data unlike other Conference Software modules does not require any user interaction of an operator; it consists of a software interface from the Conference Software Server to any number of client applications.

The interface consists of streams containing meeting data in XML format. Every time an activity (e.g. microphone on/off, start/stop vote) takes place data is send over the XML stream.

The stream can be picked up by a video client application which is connected to a video screen or a video projector to display the meeting data.

DCN-SWAPI Conference Software API

Features

▸ **Exchange and synchronize delegate and participants information with 3rd party systems**

▸ **Import of vote scripts**

▸ **Encoding ID cards solution for 3rd party systems**

▸ **Example C-Sharp source code available**

▸ **Extensive software developer manual available**

DCN-SWAPI is deployed as Microsoft.Net components to be used by 3rd party applications to modify, add, remove and update a subset of the DCN-SW configuration data.

System Overview

A 3rd party application will be connected to the DCN-SW Conference Software server as a client in the same way as the DCN-SW Configuration Application does.

All changes applied through the DCN-SWAPI affect the meeting- configuration and currently active meeting immediately.

All changes applied to the configuration data of a currently active meeting, will be actualized immediately to the operational state of the system.

Functions

- Add or remove delegates to the system. This implies per delegate:
  - Definition of title, first, middle and last name
  - ID-card assignment
  - Assignment to a group (e.g. political party)
  - Language assignment

- Update delegate information
- Encode ID-card for a delegate (in combination with DCN-SWID)
- Assign or remove delegates as participant to or from a prepared or active meeting. This implies per participants:
  - Assignment to the meeting
  - Assignment to a seat
- Add or remove votes to/from a voting script of a prepared or active meeting. This implies per voting:
  - Assignment to voting script
  - Definition of voting template to use
  - Definition of voting answer set to use
  - Definition of voting 100% setting
- Update voting information in a voting script of a prepared or active meeting
- Example C-Sharp source code and extensive software developer manual available on DCN-SW DVD

Ordering Information

DCN-SWAPI Conference Software API to be used by 3rd party applications to modify, add, remove and update a subset of the DCN-SW configuration data. Can only be used in combination with DCN-SW Conference Software module. Can not be used with the DCN Wireless Discussion System (DCN-WCCU).	**DCN-SWAPI**
DCN-SWAPI-E Conference Software API E-code Electronic authorization code. Only valid for the EMEA region.	**DCN-SWAPI-E**
DCN-SW Conference Software Main Module a platform on which all other Conference software modules run	**DCN-SW**
DCN-SW-E Conference Software Main Module E-code Electronic authorization code. Only valid for the EMEA region.	**DCN-SW-E**

DCN-SWMPC Conference Software Multi PC

Features

▸ **Remote operator application**

The DCN-SWMPC Conference Software Multi PC Module is needed when more than one PC is required to operate a meeting running on a DCN Next Generation or DCN Wireless system.

Functions

General

The DCN-SWMPC Conference Software Multi PC Module enables the use of multi operator applications running on multi PCs in a network.

Running configuration application on multi PCs does not require this module.

Parts Included

Quantity	Component
1	Authorization code

Ordering Information

DCN-SWMPC Conference Software Multi PC can only be used in combination with DCN-SW	**DCN-SWMPC**

Software Options

DCN-SWMPC-E Conference Software Multi PC E-code Electronic authorization code. Only valid for the EMEA region.	**DCN-SWMPC-E**

Smart Control Software

Smart Control Software

DCN-SWSMV Synoptic Microphone and Voting Software

Features

▸ **Synoptic room overview for monitoring and controlling the microphones**

▸ **Voting control with individual results**

▸ **Real-time voting results displayed in Microsoft PowerPoint®**

▸ **On-screen help in many languages**

The DCN-SWSMV Synoptic Microphone and Voting Software provides a range of conference facilities when used in combination with a DCN Wireless or DCN Next Generation system. The available functions include automatic seat assignment, synoptic microphone monitoring and control, and voting management.

Functions

Ease of use

Although it offers many powerful features, the software is extremely easy to use thanks to its innovative design. The application moves away from traditional control panels and buttons and replaces them with a highly intuitive graphic user interface. All functions are controlled from a single window making the software suitable for touch screen operation. The software features on-screen help in most major languages.

User interface

The user interface is based on a graphical representation of the conference venue. When a device is connected to the system it is automatically recognized and an icon is created for it on the on-screen room layout. The icons display information about device status and can be used by the operator to select individual devices for remote control functions. If a device becomes disconnected from the system, a red cross is displayed on top of its icon to alert the operator.

Operating modes

The Synoptic Microphone and Voting Software can operate in the following modes, depending on the required task:

- Assignment mode allows you to assign names to microphone icons. The positions of the icons on the room layout can also be changed using the standard windows 'drag & drop'.
- Microphone control mode allows you to observe and control the state of each individual microphone. Microphones can be switched on and off, or placed in the 'request to speak' queue.
- Battery and signal view mode shows the remaining battery charge time and the signal strength for each wireless discussion unit
- Voting result mode shows individual results in different colors according to votes cast

Note   The different symbols in the various modes are specially designed so that they are also easily identified by persons with the visual disability of color blindness.

Parliamentary and real-time voting

The application provides parliamentary voting functionality. The system operator can summon delegates to vote, as well as starting and stopping voting sessions. Final vote results can be automatically printed or exported to a file; the software can also be configured to send real-time voting information to Microsoft PowerPoint® for display.
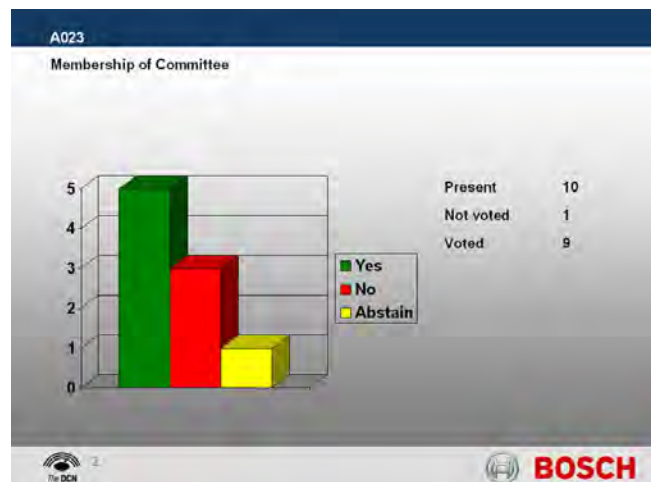
Real-time voting results in Microsoft PowerPoint®

Installation/Configuration Notes

Used in combination with a DCN Wireless or DCN Next Generation system.

Technical Specifications

Supported operating system	Windows 7 Home Premium (32 and 64 bits) or above or Windows Vista Home Premium(32 or 64 bits) or above All with the latest service packs and updates.

Ordering Information

DCN-SWSMV Synoptic Microphone and Voting Software
include automatic seat assignment, synoptic microphone monitoring and control, and voting management

DCN-SWSMV

Software Options

DCN-SWSMV-E Synoptic Microphone and Voting Software E-code
Electronic authorization code. Only valid for the EMEA region.

DCN-SWSMV-E

Meeting Recorder Software

Meeting Recorder Software.

DCN-MR Meeting Recorder
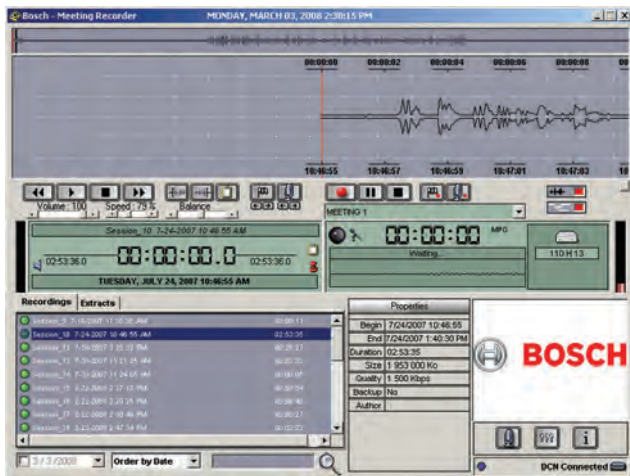
Features

▶ **Recording in PCM/WAV, WMA or MP3 audio format**

▶ **Stereo track can be used for bilingual recording**

▶ **Ability to attach speaker names in the audio file**

▶ **Network sharing of audio files**

The Meeting Recorder can be used in combination with CCS 900, DCN Next Generation or DCN Wireless systems.

The DCN-MR Meeting Recorder software is designed for recording and playback purposes during a meeting or conference.

Recording is done on the hard drive of a computer in PCM/WAV, WMA or MP3 format.

Functions

Recording

The Meeting Recorder can record two analog audio channels. In most cases one audio channel is sufficient to record the floor language. However, in some (bilingual) applications it is ideal to record two channels simultaneously.

Attach speaker names

The name of the current speaker can be attached in the audio file, during or after the meeting. This can be done manually or automatically. Manually by simply double clicking on the delegates name in list. Automatically when the DCN-MR is coupled with the DCN Central Control Unit². For automatic attaching of the speaker names, the delegate names must be assigned to the corresponding microphone numbers. Additional conference information, such as the agenda or meeting minutes can also included in the audio file.

² Open interface LBB 4187/00 or streaming meeting data DCN-SWSMD additional required

Playback

Recorded files can be played back for listening or transcribing. While the audio file is played the name of the speaker (if available) and time-information can be displayed in a window of the text editor. In case two audio sources are recorded, they are recorded as one stereo file. When the balance slider is in the far left position (or right), only the left (or right) channel is heard during playback. When the balance slider is in middle position both audio channels are heard (stereo) making this product ideal for interpreter training applications.

Transcription

Although transcription is possible through the Meeting Recorder, the optional DCN Transcription Module (DCN-MRT) is especially suited for it. The DCN-MRT is in fact the same software as the DCN-MR but without the recording function.

For easy control during transcription; start, stop, fast-forward/rewind, an optional transcription foot pedal is available (DCN-MRFP).

Ease of use

Although it offers many powerful features, the software is easy to use. The intuitive graphic user interface is divided into recording, playback, visualization and files sections.

Installation/Configuration Notes

Installation

The DCN-MR Meeting Recorder software is supplied on DVD and can be installed on one or more computers.

The software is designed to be used on a computer network. This gives the possibility, for example, to install a Meeting Recorder next to the DCN CCU, while storage of the files is done in parallel on a server via the computer network. Persons responsible for transcription can have access from their computer via the network to the files on the server.

Licence

Licensing of the Meeting Recorder is done with USB dongle. The Meeting Recorder software can be installed on more computers. As soon the USB dongle is plugged-in, the software is ready to use with the applicable licenses. This makes it very flexible, with a minimum of effort and cost.

For demonstration purposes, the DCN-MR software can be used to make or play recordings of five minutes maximum without the dongle.

Parts Included

Quantity	Component
1	DCN-MR Meeting Recorder software on DVD
1	USB dongle (blue)
1	Audio connection cable

Technical Specifications

Recording formats	(max. sample rate)
	WMA (128 kbps)
	PCM / WAV (48 kHz)
	MP3 (256 kbps)
System platform	Windows 7 Home Premium (32 and 64 bits) or above or Windows Vista Home Premium(32 or 64 bits) or above

Ordering Information

DCN-MR Meeting Recorder used with the DCN-MR or DCN-MRT	**DCN-MR**
Accessories	
DCN-MRT Transcription Module used with DCN-MR or CCS-CURD	**DCN-MRT**
DCN-MRFP Transcription Foot Pedal used with the DCN-MR or DCN-MRT	**DCN-MRFP**

DCN-MRT Transcription Module
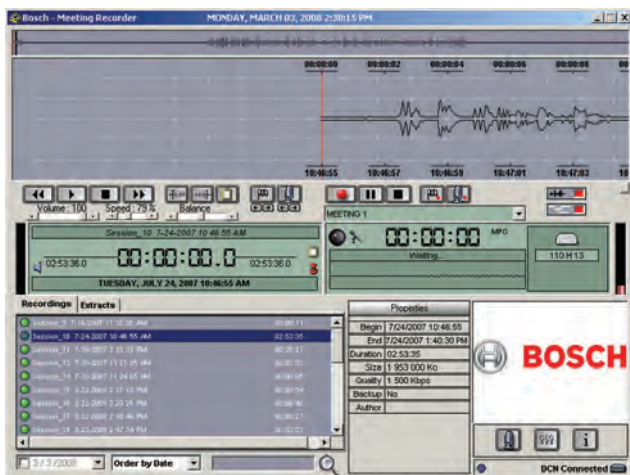
Features

▶ **Transcription of Meeting Recorder and CCS 900 files**

▶ **Can play PCM/WAV, WMA or MP3 audio formats**

▶ **Network sharing of audio files**

▶ **Easy copying or extracting (parts) of audio files**

The DCN-MRT Transcription Module software is designed for playback and transcription of Meeting Recorder or CCS 900 recordings.

The DCN-MRT can play PCM/WAV, WMA or MP3 formatted files.

Functions

Transcription

The DCN-MRT transcription module is especially suited for playback and transcription of Meeting Recorder or CCS 900[1] recordings. The DCN-MRT is in fact the same software as the DCN-MR but without the recording function.

For easy control during transcription; start, stop, fast-forward/rewind, an optional transcription foot pedal is available (DCN-MRFP).

[1] *CCS 900 recordings from CCS-CURD*

Playback

Recorded files can be played back for listening or transcribing. While the audio file is played the name of the speaker (if available) and time-information can be displayed in a window of the text editor. The DCN-MR Meeting Recorder can record two audio channels as stereo file. When the balance slider is in the far left position (or right), only the left (or right) channel is heard during playback. When the balance slider is in middle position both audio channels are heard (stereo) making this product ideal for interpreter training applications.

Extracting

Parts of recorded files can be easily extracted and optionally exported. In case the names of the speakers are available in the recording, easy retrieval of parts of a specific speaker are possible.

Ease of use

Although it offers many powerful features, the software is easy to use. The intuitive graphic user interface is divided into playback, visualization and files sections.

Installation/Configuration Notes

Installation

The DCN-MRT Transcription Module software is supplied on USB dongle and can be installed on one or more computers.

The software is designed to be used on a computer network. This gives the possibility, for example, to install a Transcription Module next to the DCN Central Control Unit, while storage of the files is done in parallel on a server via the computer network. Persons responsible for transcription can have access from their computer via the network to the files on the server.

Licence

Licensing of the Transcription Module is done with USB dongle. The Transcription Module software can be installed on more computers. As soon the USB dongle is plugged-in, the software is ready to use with the applicable licenses. This makes it very flexible, with a minimum of effort and cost.

For demonstration purposes, the DCN-MRT software can be used to play recordings of five minutes maximum without the dongle.

Parts Included

Quantity	Component
1	DCN-MRT Transcription Module
1	USB dongle (yellow)

Technical Specifications

System platform	Windows 7 Home Premium (32 and 64 bits) or above or Windows Vista Home Premium(32 or 64 bits) or above

Ordering Information

DCN-MRT Transcription Module	**DCN-MRT**
used with DCN-MR or CCS-CURD	

Accessories

DCN-MRFP Transcription Foot Pedal	**DCN-MRFP**
used with the DCN-MR or DCN-MRT	

DCN-MRFP Transcription Foot Pedal

Features

▸ **Hands-free control**

▸ **User-programmable pedals**

▸ **Rugged and reliable construction**

▸ **USB connection**

▸ **Pedal pressing security**

The DCN-MRFP Transcription Foot Pedal is used for easy control of start, stop, fast-forward and rewind during transcription of audio recordings.

The Transcription Foot Pedal is connected via the USB port of the computer and is configured for the DCN Meeting Recorder or DCN Transcription Module software (DCN-MR or DCN-MRT).

Functions

Controls

For easy control during transcription; start, stop, fast-forward/rewind; three foot pedals are provided which are configured in the Meeting Recorder or Transcription Module software. The pedals are mechanically secured against accidentally depressing more than one pedal.

Certifications and Approvals

Region	Certification
Europe	CE

Installation/Configuration Notes

Connection

The DCN-MRFP Transcription Foot Pedal is connected via USB.

Parts Included

Quantity	Component
1	DCN-MRFP Transcription Foot Pedal

Ordering Information

DCN-MRFP Transcription Foot Pedal
used with the DCN-MR or DCN-MRT
    DCN-MRFP

Various software applications

Various software applications.

DCN-SWIND Individual Channels

Recorder trigger

The digital output contact of the connected Audio Expander or Cobranet Interface becomes automatically active as soon as the presence of the individual channel signal has been recognized. The output contact is threshold configurable in the Audio Expander and Cobranet Interface.

Ordering Information

DCN-SWIND Individual Channels Routes an individual delegate microphone audio signal to an audio channel of the DCN system. Can not be used with the DCN Wireless Discussion units and DCN-DDI/DCN-DIS in dual mode.	**DCN-SWIND**
DCN-SWIND-E Individual Channels E-code Electronic authorization code. Only valid for the EMEA region.	**DCN-SWIND-E**

Features

▸ **Easy routing of individual audio channels**

▸ **Up to 26 Individual Channels can be defined**

The Individual Channels software is used to route individual delegate microphone audio signals to the DCN system audio channels. These individual audio channels can only be received by Audio Expanders or Cobranet Interfaces.

Functions

Individual Channels

A typical application for the Individual Channels software is to individually record a selected number of microphones in a courtroom environment (witness protection often needs unrecognizable audio).

The individual channels share the DCN audio channels with interpretation channels. A maximum of 26 individual channels can be used.

Route Individual Channels

When a delegate audio signal is assigned as an individual channel it is routed to a specific DCN audio channel and available on the output of an Audio Expander or Cobranet Interface. Optionally, it is then sent to an external audio processing device (e.g. distortion/vocoder) and returned to the audio input of the CCU, Audio Expander or Cobranet Interface. Delegate units which are used in Voice Activation mode, dual mode and all wireless units can not be assigned to an individual channel.

LBB 4187/00 Open Interface

The DCN Open Interface allows remote control of selected DCN functions via third party equipment and control software. Control data exchange between the DCN system and the remote control device or system is carried out via the Ethernet port on the CCU.

Ordering Information

LBB 4187/00 Open Interface
allows remote control of selected DCN functions via third party equipment and control software

LBB4187/00

Software Options

LBB 4187/00-E Open Interface E-code
Electronic authorization code. Only valid for the EMEA region.

LBB4187/00-E

Cameras and Accessories

Cameras and Accessories

Transfer and exchange of information is a vital element in conferences, from small informal gatherings to international multi-lingual conferences with hundreds of delegates. Audio systems have traditionally been at the heart of conferences because a basic requirement of such gatherings is that all present can clearly hear what is being said, in a language they understand. But with increasing sophistication in conference management, it is possible to incorporate visual elements, thus adding an extra dimension to conference proceedings.

There is an extremely wide range of visual equipment suitable for use with the DCN system. This visual equipment, combined with the facilities offered by the Bosch DCN, provides each type of conference venue with the possibility to fulfill even the most demanding wishes of its customers. The DCN system combines excellent audio quality with a wide range of visual presentation possibilities. Many integral conference management functions, such as voting information and results, messages and microphone status, can be displayed in the conference venue. The type of display used, such as a video projector or LCD flat screen, depends on the number of people who have to access the information.

Video cameras are also widely used in many venues. They can show the delegates in a conference venue and allow both internal viewing and external distribution to broadcasting organizations. All these cameras have the flexibility to enable them to be used in venues ranging from small meeting rooms to parliaments and large commercial conference venues.

This section contains a summary of Bosch products suitable for use as video elements in a DCN system.

Bosch also supplies many more own-brand and third-party products for this purpose. For more information, please contact your local Bosch representative.

The DCN system can operate with a range of Allegiant Video Switchers. These units are used in combination with Allegiant Keyboards and the DCN Automatic Camera Control software to configure a camera switching system. This ensures that speaking delegates are always automatically displayed on flat screens or large displays. An outline is given below of the Allegiant Video Switchers available. The LTC 8200 is recommended for DCN. This allows up to 16 cameras to be connected, and has five video outputs. Information about other Allegiant Video Switchers and CCTV equipment can be found in the CCTV Data Book and relevant data sheets.

DCN-SWSACC Standalone Automatic Camera Control
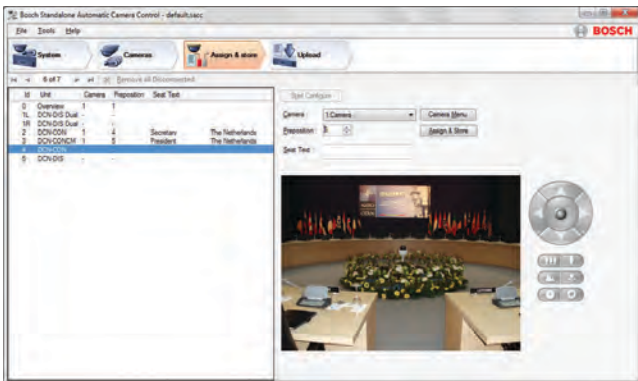
Features

▸ **On-screen Pan, Tilt and zoom control**

▸ **Supports Windows 7**

▸ **For use with DCN Next Generation and DCN Wireless Discussion Systems**

▸ **Print-out of configuration setting**

▸ **On-screen help facility**

DCN-SWSACC Standalone Automatic Camera Control of the DCN Conference systems interfaces with the Bosch Allegiant or Autodome. It selects fixed or movable cameras to be activated to display the current active speaker at a conference.

Functions

When a chairman or delegate microphone is activated on the DCN Conference system equipment, the camera assigned to that position is activated. When none of the microphones are active, an overview camera is automatically selected. The image can be displayed on projectors or other screens together with information about the current speaker if required (such as delegate identification). The system operator has a dedicated screen, which also displays information about which camera is active. This system provides an extra dimension to conference proceedings.

The DCN-SWSACC software runs on a PC which is temporarily connected to configure the DCN Next Generation or DCN Wireless Discussion System and the Bosch Allegiant or Autodome.

With this PC the camera positions can be defined using the on-screen Pan, Tilt and Zoom control and stored as prepositions in the Autodome camera. At the same time a delegate position is linked to a camera preposition.

When all delegate positions are linked to camera prepositions the configuration needs to be uploaded to the DCN Conference system where it will be stored persistent in the CCU.

The configuration file can be printed and stored on the temporarily PC for later use. In case help or more information is needed the on-screen help can be activated from the software.

After configuration the PC is removed and Bosch Allegiant or Autodome is directly connected to the DCN Conference system.

Technical Specifications

Electrical

Supported DCN systems	DCN Next Generation version 2.68 or higher
	DCN Wireless Discussion System version 2.68 or higher
Supported operating systems	Windows 7 Home Premium (32 and 64 bits) or above.
	Windows Vista Home Premium (32 and 64 bits) or above.
PC requirements	Dual core processor (2.66 GHz) and 2 Gb internal memory.
	At least one serial port (2 serial ports are preferred).
	In case a PC without serial ports is used one or two separate USB to serial port converters are needed.

Mechanical

Dimensions (H xW x D)	240 x 180 x 46 mm
Weight	0.375 kg

Ordering Information

DCN-SWSACC Standalone Automatic Camera Control
interfaces DCN Conference systems with the Bosch Allegiant or Autodome.

DCN-SWSACC

LTC 8200 Allegiant Video Switcher

Features

▸ **16 camera inputs and five video outputs**

▸ **Control of AutoDome® Series dome cameras**

▸ **Compact single bay construction**

The LTC 8200 Allegiant Video Switcher provides automatic camera switching in conference venues. It is easily configured using the DCN Next Generation Automatic Camera Control software, and an Allegiant Keyboard. It ensures that cameras are automatically switched to cover the speaking delegate in conferences.

The LTC 8200 has 16 video inputs for connecting cameras. Either fixed or dome cameras can be connected. There are also five video outputs used to connect hall displays or monitors.

Up to four Allegiant Keyboards can be connected.

Functions

Controls and Indicators

• 48-character on-screen display

Interconnections

• 16 x BNC Video inputs
• 5 x monitor outputs
• Console, RS232 port for external PC or control interface (CCU of DCN system) - 9-pin D-type connector
• Biphase out, multiple ports (12 for LTC 8200) for camera control - removable screw terminal connection blocks.
• Keyboards, Multiple ports (4 for LTC 8200) for keyboard connection - 6-pin RS485 ports for Allegiant Keyboard use.

Technical Specifications

Electrical

LTC 8200/50

Rated voltage	220 to 240 VAC (50/60 Hz)
Voltage range	198 to 264 VAC
Power consumption	50 W
LTC 8200/60	
Rated voltage	120 VAC (50/60 Hz)
Voltage range	100 to 140 VAC
Power consumption	**50 W**
LTC 8200/50 and LTC 8200/60	
Video input signal	0.5 Vpp to 2 Vpp (composite negative sync.)
Gain	Unity ± 2 % (75 W)
Video bandwidth (-3dB)	25 MHz

Mechanical

Mounting	**Rack mounting brackets included**
Dimensions (H x W x D)	40 x 440 x 305 mm (1.7 x 17.3 x 12 in)
Weight	4 kg (8.8 lbs)

Ordering Information

LTC 8200/50 Allegiant Video Switcher rated voltage 220 to 240 VAC (50/60 Hz)	**LTC8200/50**
LTC 8200/60 Allegiant Video Switcher rated voltage 120 VAC (50/60 Hz)	**LTC8200/60**

LTC 8555/00 Allegiant Keyboard

Features

▸ **Full-function, ergonomically-designed keyboard**

▸ **Variable speed joystick control**

▸ **48-character on-screen display**

The LTC 8555/00 Allegiant Keyboard is used with the LTC 8200 Allegiant Video Switcher. It provides a convenient means of operating and configuring the switcher. It is equipped with a variable-speed pan and tilt joystick control for positioning cameras, and also has an attractive screen for displaying camera information.

Functions

The Allegiant Keyboard and Allegiant Video Switcher are used with the DCN Next Generation Automatic Camera Control software. A range of Allegiant Keyboard accessories is available, including a keyboard extension cable, keyboard extension kit and keyboard rack mount kit.

Controls and Indicators
- Joystick control
- On-screen display

Technical Specifications

Mechanical

Dimensions (H x W x D)	51 x 220 x 155 mm (2 x 8.7 x 6.1 in)
Weight	0.55 kg (1.2 lbs)

LTC 5136 Autodome Controller

Power consumption	**6 W**
Mechanical	
Dimensions (H x W x D)	**101 x 220 x 155 mm** **(4 x 8.7 x 6.1 in)**
Weight	0.55 kg (1.2 lbs)

Ordering Information

LTC 5136/51 AutoDome Controller with 16 outputs for AutoDomes or for Allegiant Receiver/Drivers units, 230 VAC, 50/60 Hz	**LTC 5136/51**
LTC 5136/61 AutoDome Controller with 16 outputs for AutoDomes or for Allegiant Receiver/Drivers units, 110 VAC, 50/60 Hz	**LTC 5136/61**

Features

▸ **Full-function, ergonomically-designed keyboard**

▸ **Variable speed joystick control**

This AutoDome® Controller provides the same functionality as an Allegiant Keyboard and Allegiant video switcher to configure and control a Bosch AutoDome® system. It is required in DCN Next Generation systems with Direct Camera Control to preposition an AutoDome® system. The AutoDome® is temporarily connected for this purpose to the AutoDome® Controller for setting the prepositions as required for the different DCN Next Generation microphone units. After positioning the settings, the AutoDome® system is connected to the DCN Next Generation CCU. The AutoDome® Controller is also needed to change the programmed pre-positions when required.

Functions

Controls and Indicators
- Joystick control
- On-screen display

Technical Specifications

Electrical

LTC 5136/51

Rated voltage	220 to 240 VAC (50/60 Hz)
Voltage range	195.5 to 253 VAC
Power consumption	6 W
LTC 5136/61	
Rated voltage	120 VAC (50/60 Hz)
Voltage range	105 to 132 VAC

AutoDome 300 Series PTZ Camera System

Features

- ▸ **High-speed PTZ dome**
- ▸ **Fully interchangeable CPUs, cameras, housings, communications, and mounts**
- ▸ **Choice of 540 TVL 36x day/night night camera with 128x wide dynamic range or 26x and 18x day/night cameras**
- ▸ **Optional hybrid operation provides simultaneous analog (coax) and IP connectivity**
- ▸ **Advanced privacy masking**
- ▸ **Advanced alarm control with rules engine**
- ▸ **UTP transmission standard on all analog models**
- ▸ **Cable compensation extends cabling distances**
- ▸ **Multi-protocol capable**

Bosch's AutoDome modular camera system is a revolutionary new concept in dome cameras and is ideal for conference venues. More than just a series of cameras, it's a dome platform built around a system of intelligent, interchangeable modules that allow you to update camera functionality quickly and cost-effectively.

300 Series highlights

The AutoDome 300 Series includes support for 18x, 26x, and the industry-leading 36x day/night PTZ cameras, and several advanced features – including an alarm management "rules" engine and privacy masking.

The AutoDome 300 Series supports a variety of standard and optional video and data transmission methods, including Bilinx (over coax and UTP), fiber, and even TCP/IP over Ethernet. Remote control, configuration, and firmware updates can also be performed over these cables, offering you unparalleled control of your cameras.

Cable compensation provides extended coaxial and UTP distance runs while preventing the image quality degradation caused by signal losses from long cable lengths.

Functions

Direct Camera control

The DCN system can be used in the Direct Camera Control (DCC) mode. A single AutoDome system is then directly connected to a CCU for automatic camera control. The video output of the AutoDome system is connected to a monitor or other video display device. The DCC mode is available both for DCN Next Generation stand-alone systems without a control PC and for DCN Next Generation systems with control PC. Setting AutoDome system pre-positions in DCN Next Generation systems with DCC requires use of AutoDome controller, both for DCN Next Generation stand-alone systems and PC-controlled DCN Next Generation systems. The DCC mode can only be used in combination with:

- • A Bosch AutoDome
- • Central Control Unit DCN-CCU2 or DCN-CCUB2

High-performance PTZ day/night cameras

Image control and quality are integral aspects of any PTZ dome system, and the AutoDome delivers. The 300 Series is available with a choice of 18x, 26x, or an industry-leading 36x optical zoom lens, and all 300 Series systems offer a full 12x digital zoom. The 18x and 26x cameras provide 470 TVL (NTSC) or 480 TVL (PAL), and the 36x camera provides a full 540 TVL of horizontal resolution for outstanding clarity and image detail. The 36x camera also incorporates technology that dramatically improves the dynamic range by 128 times. Also known as WDR (wide-dynamic range), it results in clear image reproduction in extreme high-contrast environments.

The AutoScaling (proportional zoom) and AutoPivot (automatically rotates and flips the camera) features ensure optimal control.

Day/night capabilities and outstanding sensitivity make 300 Series cameras exceptional performers in all lighting conditions. In low light, these cameras automatically switch from color to monochrome by removing the IR filter to boost infrared illumination sensitivity, while maintaining superior image quality. For operation in the darkest conditions, the SensUp control feature automatically extends the shutter speed to as much as one second. This increases sensitivity by more than **50** times.

With super-quick, 360° per-second pan and tilt speeds, the AutoDome 300 Series outperforms other domes in its class. The 300 Series supports 99 pre-positions and two styles of guard tours: preset and record/playback. The preset tour can handle up to 99 pre-positions with a configurable dwell time between pre-positions; the order and frequency with which each preset is visited can be

customized. The AutoDome 300 Series also provides support for two recorded tours, which have a combined duration of 15 minutes of movement. These are recorded macros of an operator's movements, including pan, tilt, and zoom activities, and can be played back continuously.

For more information about cameras, refer to the CCTV Data Book.

Ordering Information

AutoDome® 300 Series PTZ Camera System Contact your Bosch Security Systems, Inc. representative for complete ordering information.	**VG4-300**
VG4312CCS AutoDome 300 Series PTZ Day/Night Analog PAL, 18x, in ceiling, clear dome	**VG4-312-CCS**
VG4312PCS AutoDome 300 Series PTZ Day/Night Analog PAL, 18x, indoor, clear dome, without wall arm	**VG4-312-PCS**

Accessories

VG4-A-PA2 Pendant Arm Mount with 230 VAC Transformer Pendant arm mount with power supply box for AutoDome Series cameras with a 230 VAC transformer, white	**VG4-A-PA2**

LTC 0455 Series Color Camera

Features

▸ **1/3-inch format CCD imager**

▸ **High sensitivity**

▸ **Easy to install**

▸ **Accepts AC or DC voltages**

The LTC 0455 series are compact rugged, 1/3-inch image format digital color CCD cameras. They are ideal for overview cameras in conference venues. Their superior sensitivity, high resolution and picture quality provide optimal performance in virtually all situations. The LTC 0455 cameras also come with a lens wizard that automatically detects the type of lens installed and provides an OSD guide that allows the installer to easily adjust the lens level and focus without special tools or filters.

Functions

Bilinx Technology

The LTC 0455 series cameras incorporate Bilinx. Bilinx is a bidirectional communication capability embedded in the video signal of all Bosch Dinion cameras. With Bilinx, technicians can check status, change camera settings and even update firmware from virtually anywhere along the video cable. Bilinx reduces service and installation time, provides for more accurate set-up and adjustment, and improves overall performance. In addition, Bilinx uses the standard video cable to transmit alarm and status messages, providing superior performance without additional installation steps.

Technical Specifications

Electrical

Model No.	Rated Voltage	Voltage Range	System
LTC 0455/11	12 VDC 24 VAC 50 Hz	10.8-39 VDC 12-28 VAC 45-65 Hz	PAL
LTC 0455/21	12 VDC 24 VAC 60 Hz	10.8-39 VDC 12-28 VAC 45-65 Hz	NTSC
LTC 0455/51	230 VAC 50Hz	85-265 VAC 45-65 Hz	PAL
LTC 0455/61	120 VAC 60Hz	85-265 VAC 45-65 Hz	NTSC

Power Consumption	**4 W, excluding lens**
Imager	Interline transfer CCD, 1/3-inch image format

Active Pixels

PAL Models	752 H x 582 V
NTSC Models	768 H x 494 V

Mechanical

Connectors	- Video Output: BNC - Video/DC-iris connector: 4-pin EIA-J

Power	
LTC 0455/11 and LTC 0455/21	Push type connectors, polarity independent, isolated from video output terminals
LTC 0455/51	2-wire power cord with Euro plug
LTC 0455/61	2-wire power cord with polarized plug
Camera mounting	Top and Bottom, 1/4-inch 20 UNC
Lens mounting	C and CS
Dimensions (H x W x D)	58 x 66 x 122 mm (2.28 x 2.6 x 4.8 inch) including connectors
Weight	0.45 kg (0.99 lb)

For more information about cameras, refer to the CCTV Data Book

Ordering Information

LTC 0455/11 Dinion Color Camera 1/3-inch, 540 TVL, PAL, DSP, 12 VDC/24 VAC, 50 Hz	**LTC0455/11**
LTC 0455/21 Dinion Color Camera 1/3-inch, 540 TVL, NTSC, DSP, 12 VDC/24 VAC, 60 Hz	**LTC0455/21**
LTC 0455/51 Dinion Color Camera 1/3-inch, 540 TVL, PAL, DSP, 230 VAC, 50 Hz	**LTC0455/51**
LTC 0455/61 Dinion Color Camera 1/3-inch, 540 TVL, NTSC, DSP, 120 VAC, 60 Hz	**LTC0455/61**

UML Series 17-, 19-, 20-inch High-performance LCD Flat Panel Monitors

Features

▸ **High-resolution–500 TVL, 1600 x 1200 (UML-202-90) or 1280 x 1024 (UML-192-90 and UML-172-90)–image**

▸ **Picture-in-Picture or split screen function for viewing video on the PC screen**

▸ **Analog RGB, digital DVI, and digital HDMI inputs**

▸ **Two (2) composite BNC inputs and loop-through outputs**

▸ **Y/C (S-video) and loop-through video and audio inputs**

▸ **Long-life fluorescent backlight maintains optimal screen brightness (300 cd/m^2) throughout monitor life**

▸ **3-D comb filter and de-interlace circuitry for high quality video**

▸ **Trigger and Auto Switching features allow the monitors to change input sources**

▸ **Easy to use controls with remote and on-screen menu display**

▸ **Front panel control lockout**

The Bosch family of high-performance LCD monitors are high-resolution (SXGA / UXGA), high-performance liquid crystal display (LCD) video display monitors which can be used as an operator display with the DCN Automatic Camera Control software.

Available in an ergonomic and aesthetically pleasing design, these state-of-the-art monitors include a color thin film transistor (TFT) active matrix LCD panel.

Technical Specifications

Electrical

	UML-172-90	UML-192-90	UML-202-90
Rated Voltage	110/230 VAC, 50/60 Hz	110/230 VAC, 50/60 Hz	110/230 VAC, 50/60 Hz
Voltage Range	90-256 VAC	90-256 VAC	90-256 VAC
Power at Rated Voltage	<45 W	<50 W	70 W
Sync Format	PAL/NTSC	PAL/NTSC	PAL/NTSC
LCD Panel	TFT LCD	TFT LCD	TFT LCD
Screen Size (H x V)	338 x 270 mm (13.3 x 10.6 in.)	376 x 301 mm (14.8 x 11.9 in.)	408 x 306 mm (16 x 12 in.)
Viewable Picture Area	17 in. (432 mm) measured diagonally	19 in. (483 mm) measured diagonally	20.1 in. (511 mm) measured diagonally
Pixel Pitch: (H x V)	0.264 x 0.264 mm (0.01 x 0.01 in.)	0.294 x 0.294 mm (0.01 x 0.01 in.)	0.255 x 0.255 mm (0.01 x 0.01 in.)
Resolution	1280 x 1024 pixels, 500 TV lines typical	1280 x 1024 pixels, 500 TV lines typical	1600 x 1200 pixels, 500 TV lines typical
Aspect Ratio	5:4	5:4	4:3
Display Colors	16.7 million colors	16.7 million colors	16.7 million colors
Response Time	< 5 ms (typical)	< 5 ms (typical)	< 16 ms (typical)
Backlight	Two (2) cold cathode fluorescent tubes, rated life 50,000 hours, at 50% brightness	Four (4) cold cathode fluorescent tubes, rated life 50,000 hours, at 50% brightness	Six (6) cathode fluorescent tubes, rated life 45,000 hours, at 50% brightness

Mechanical

	UML-172-90	UML-192-90	UML-202-90
Cabinet Material	Front and Chassis: electrolytic galvanized iron		Front: ABS plastic Chassis: electrolytic galvanized iron
Finish	Charcoal black		
Mount	Wall mounting compatible with standard bracket, 100 mm centers, M4 thread		

Dimensions (W x H x D)

	UML-172-90	UML-192-90	UML-202-90
Monitor	389.7 x 348.9 x 74.5 mm (15.3 x 13.7 x 2.9 in.)	428.5 x 379.0 x 79.5 mm (16.9 x 14.9 x 3.3 in.)	460.4 x 395.1 x 81.0 mm (18.1 x 15.5 x 3.19 in.)

Weight

	UML-172-90	UML-192-90	UML-202-90
Monitor	5.86 kg (12.9 lb)	6.36 kg (14.0 lb)	7.50 kg (16.5 lb)

Environmental

	All Models
Operating Temperature	0℃ to 40℃ (32℉ to 104℉)
Storage Temperature	−20℃ to 60℃ (−4℉ to 140℉)
Humidity	10%-90%, non-condensing

For more information about monitors, refer to the CCTV Data Book.

Ordering Information

UML-172-90 17-inch Color LCD Display Monitor 17-inch (432 mm) color LCD monitor, 1280 X 1024 resolution, VGA, DVI, HDMI, CVBS, audio, 120/230 VAC, 50/60 HZ	**UML-172-90**
UML-192-90 19-inch Color LCD Display Monitor 19-inch (483 mm) color LCD monitor, 1280 X 1024 resolution, VGA, DVI, HDMI, CVBS, audio, 120/230 VAC, 50/60 HZ	**UML-192-90**
UML-202-90 20-inch Color LCD Display Monitor 20-inch (501 mm) color LCD monitor, 1600 X 1200 resolution, VGA, DVI, HDMI, CVBS, audio, 120/230 VAC, 50/60 HZ	**UML-202-90**

Accessories

UMM-LW-30B Swivel/Tilt Wall Mount Swivel/Tilt wall mount for flat panel LCD monitors, black	**UMM-LW-30B**
UMM-LW-20B Fixed Wall Mount Fixed wall mount for flat panel LCD monitors, black	**UMM-LW-20B**
UMM-LCDUB-RM Rack Mount Bracket for LCD Monitors Supports dual 8.4-in. and single 8.4- to 19-in. LCD monitors in a standard VESA rack cabinet	**UMM-LCDUB-RM**

Information Displays

Information Displays

A flexible and versatile display system is important for distributing information in conference venues. Bosch information displays provide a quick and effective means of informing participants and audience of the status of events such as conference arrangements, room allocation, changes in the agenda, advertising spots, interpretation distribution, microphone status, voting information and results, and up-to-date news.

Within this range of information displays are products to match the requirements of almost any conference, from small-scale informal discussions to large-scale multi-lingual conferences.

Personal displays

The basic DCN Next Generation personal display system is housed in Concentus units and consists of a graphical LCD display for displaying text messages in almost every available font. They display information generated by DCN software modules as well as text to describe the contribution unit soft key functions. LCD technology has also been applied in the development of compact displays that can be built into tabletops or the backs of seats, providing an ideal solution for personal information presentation to selected delegates or groups of delegates or interpreters. These displays are an unobtrusive solution for displaying live or recorded video material, adding a valuable extra dimension to delegate information facilities connected to a separate cable system.

Video display using Streaming Meeting Data

Conference Software Streaming Meeting Data (DCN-SWSMD) (used together with a Video client application) is an interface to provide meeting data such as current speakers, request lists, vote results and other conference related information to video screens or video projectors.

Video projectors are ideal for large audiences or longer distance viewing. These systems allow high quality display of any live or recorded video material as well as computer generated graphics and text.

This way of displaying information is used in the majority of the conference systems. Please find more information about this solution in the Conference Software Suite chapter.

Hall displays

Next to the above described video display possibilities, the DCN system supports also numeric, alphanumeric and geographic hall displays.

Hall displays provide information (like voting results and other text and conference-related data) clearly and effectively to a large number of conference participants. In this chapter you will find more information about the Data Distribution Board (DCN-DDB) which is needed to connect a hall display to the DCN system.

DCN-DDB Data Distribution Board
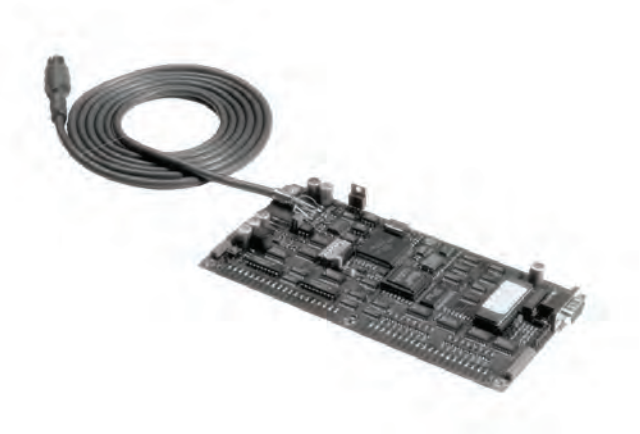
- External initialization button and LED
- 8-bit parallel data input and output
- Nine-pole D-sub socket for RS232 output

Technical Specifications

Electrical

External supply	7.5 – 35 VDC.

Mechanical

Dimensions (H x W)	100 x 200 mm (3.93 x 7.87 in)

Ordering Information

DCN-DDB Data Distribution Board   **DCN-DDB**
Used to provide the data communication link
to the DCN Next Generation

Features

▸ **Drives hall displays**

▸ **Allows transparent data transport for remote control of external equipment**

▸ **Speak slowly and help indicator control**

The DCN-DDB is a printed circuit board that is used with digital equipment such as hall displays, recorder systems and camera controllers to provide the data communication link to the DCN Next Generation. Transparent data transport between data communication boards in the DCN Next Generation system is possible, i.e. for remote control of slide projectors, lights, blinds, projection screens etc. It is intended for mounting in external equipment, and includes an RS232 communication port with a baud rate of 9600 or 1200 baud - selectable by an onboard dip switch. Opto-couplers isolate it from the DCN Next Generation system. It can be powered by DCN Next Generation system supply or an external power source. Other function is to control indicators to show speak slowly and help request from interpreters. When the interpreter presses the speak slowly or help button another output control of the DDB is activated, which can control an indicator of the chairman or operator's position.

Functions

Controls and Indicators

- Initialization button with LED indication

Interconnections

- 2 m (78.7 in) cable terminated with a molded six-pole circular connector
- Multi-pole PCB connector for:

Installation Equipment

The range of installation accessories greatly simplifies system installation by the use of readymade cables with connectors for both trunk cables and optical network cables. Splitters allow cables to be split and run in diverse directions, which mean contribution units and central equipment can be located precisely where they are required in a conference venue. Dedicated optical network interfaces are available to make it possible to run the system signal and data over great distances. Installation equipment is used for both fixed and portable installations.

LBB 4114/00 DCN Trunk Splitter

The Trunk Splitter is used in conjunction with the system installation to divide the trunk-line cabling, thus allowing system installers to optimize layout of the trunk-line and contribution equipment to suit the conference venue.

The Trunk Splitter comes complete with cable restraining clamps and includes mounting holes for fixing to a floor or wall.

Functions

Interconnections

- 2 m (78.7 in) long cable terminated with a molded six-pole circular connector
- Six-pole circular connector for loop-through connections
- 2 x six-pole circular connector for trunk cable splitting and pulse regeneration purposes

Certifications and Approvals

Region	Certification
Europe	CE

Technical Specifications

Mechanical

Mounting	Floor, cable duct or wall mounting
Dimensions (H x W x D)	35 x 49 x 140 mm (1.4 x 1.9 x 5.5 in)
Weight	0.3 kg (0.66 lb)
Color	Charcoal (PH 10736)

LBB 4115/00 DCN Tap-Off Unit
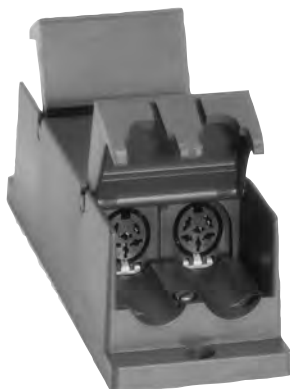
Mechanical

Mounting	Floor, cable duct or wall mounting
Dimensions (H x W x D)	35 x 49 x 140 mm (1.4 x 1.9 x 5.5 in)
Weight	0.3 kg (0.66 lb)
Color	Charcoal (PH 10736)

Ordering Information

LBB 4115/00 DCN Tap-Off Unit	**LBB4115/00**
2 m (78.7 in) cable, charcoal	

The Tap-Off Units create short-circuit proof tap-off points on the trunk line cabling. Each tap-off point allows for connection of up to five channel selector panels or one tabletop contribution unit such as Discussion unit, Concentus unit or Interpreter Desk. A Tap-Off Unit consists of two tap-off points. The Tap-Off Unit comes complete with cable restraining clamps and includes mounting holes for fixing purposes.

Functions

Interconnections

- 2 m (78.7 in) cable terminated with a molded six-pole circular connector
- Six-pole circular connector for loop-through connections
- 2 x six-pole circular connector for trunk cable splitting and pulse regeneration purposes
- Short-circuit proof tap-off points at the system cable

Certifications and Approvals

Region	Certification
Europe	CE

Technical Specifications

Electrical

Max power at Tap-offs	4.5 W each

LBB 4116 Series DCN Extension Cables

Cable terminated at both ends with a molded six-pole circular connector (male and female). The extension to the type number gives the length of the cable.

Technical Specifications

Mechanical

Dimensions (dia.)	6 mm (0.24 in)
Material	PVC
Color	Grey

Ordering Information

LBB 4116/02 DCN Extension Cable 2m 2 m (6.6 feet), terminated with connectors	LBB4116/02
LBB 4116/05 DCN Extension Cable 5m 5 m (16.0 feet), terminated with connectors	LBB4116/05
LBB 4116/10 DCN Extension Cable 10m 10 m (33.0 feet), terminated with connectors	LBB4116/10
LBB 4116/15 DCN Extension Cable 15m 15 m (49.2 feet), terminated with connectors	LBB4116/15
LBB 4116/20 DCN Extension Cable 20m 20 m (66.0 feet), terminated with connectors	LBB4116/20
LBB 4116/25 DCN Extension Cable 25m 25 m (82.0 feet), terminated with connectors	LBB4116/25

LBB 4116/00 DCN Installation Cable 100m

LBB 4117/00 DCN Cable Locking Clamp (25 pcs)

The LBB 4116/00 is a 100 m (328 ft) roll of cable identical to DCN Extension cable assembly, but without the connectors.

Matching clamps for male/female cable connectors such as those on the DCN Extension Cable (LBB 4416). One clamp per male/ female connector required.

Certifications and Approvals

Region	Certification
Europe	CE

Ordering Information

LBB 4117/00 DCN Cable Locking Clamp (25 pcs) set of 25	**LBB4117/00**

Technical Specifications

Mechanical

Dimensions (dia.)	6 mm (0.24 in)
Material	PVC
Color	Grey

Ordering Information

LBB 4116/00 DCN Installation Cable 100m 100 m (328 feet), without connectors	**LBB4116/00**

LBB 4118/00 DCN Termination Plug

LBB 4119/00 DCN Connectors (25 pairs)

The termination plug is specially designed for use with opened-ended DCN cabling.

The set DCN Connectors contains 25 female and 25 male connectors that can be used with the 100 m (328 ft) DCN Installation Cable LBB 4116/00.

Certifications and Approvals

Region	Certification
Europe	CE

Ordering Information

LBB 4118/00 DCN Termination Plug   **LBB4118/00**
use with opened-ended DCN cabling

Ordering Information

LBB 4119/00 DCN Connectors (25 pairs)   **LBB4119/00**
25 female and 25 male connectors

LBB 4410/00 Optical Network Splitter

Technical Specifications

Mechanical

Mounting	2 screws in bracket
Dimensions (H x W x D)	200 x 82.5 x 28.9 mm (7.8 x 3.2 x 1.1 in)
Weight	0.3 kg (0.66 lb)
Color	Charcoal grey

Ordering Information

LBB 4410/00 Network Splitter tap off two branches from the optical network cable run.	**LBB4410/00**

Features

▸ **Redundant network connection**

▸ **Powered externally (48 VDC) or from the CCU**

▸ **External power is not fed into the main cable run**

▸ **Automatically powered from the external power supply**

▸ **Maximum power feed to tap-off outlets can be reduced**

▸ **Repeater function to extend the cable length by 50 meter (164 ft)**

The optical network splitter is used in conjunction with the system installation to tap off two branches from the optical network cable run.

Functions

Controls and Indicators

- Power on indicator
- Error indicator
- 2 LEDs for diagnostics
- Jumpers to select maximum power fed to the tap offs

Interconnections

- 2 optical network connection for main run
- 2 optical network connection for tap off
- External power supply connector

LBB 4414/10 Fiber Interface Without Address

Features

▸ **Redundant network connection**

▸ **Powered externally (48 VDC) or from the CCU**

▸ **Automatically powered from the external power supply**

The fiber interface is used in conjunction with the system installation to convert from plastic optical network cable to glass optical fiber and vice versa.

Functions

Controls and Indicators

- Power on indicator
- Error indicator
- 2 LEDs for diagnostics
- 2 control inputs (for future use)

Interconnections

- 1 optical network connection for plastic optical fiber
- 1 optical network connection for glass optical fiber
- External power supply connector

Technical Specifications

Mechanical

Mounting	2 screws in bracket
Dimensions (H x W x D)	200 x 82.5 x 28.9 mm (7.8 x 3.2 x 1.1 in)
Weight	0.3 kg (0.66 lb)
Color	Charcoal grey

LBB 4416 Series Optical Network Cables

This is a special cable with 2 plastic fibers for data and audio communication and 2 copper cores for the power supply. The cable is supplied with the network connectors fitted. This cable can be used to connect the CCU to audio expanders.

The network cables are supplied in different lengths. The extension (/xx) on the type number indicates the length of the cable. Only the LBB 4416/00 is without connectors. The connectors are available separately (LBB 4417/00).

Certifications and Approvals

Region	Certification
Europe	CE

Ordering Information

LBB 4416/00 Network Cable 100m without the network connectors fitted	LBB4416/00
LBB 4418/00 Cable Connector Tool Kit Optical fiber cable connector tools	LBB4418/00
LBB 4417/00 Set Network Connectors (20 pcs) 20 connectors that can be used with the network cable.	LBB4417/00
LBB 4416/01 Network Cable Assembly 0.5m with the network connectors fitted	LBB4416/01
LBB 4416/02 Network Cable Assembly 2m with the network connectors fitted	LBB4416/02
LBB 4416/05 Network Cable Assembly 5m with the network connectors fitted	LBB4416/05

Ordering Information

LBB 4416/10 Network Cable Assembly 10m with the network connectors fitted	LBB4416/10
LBB 4416/20 Network Cable Assembly 20m with the network connectors fitted	LBB4416/20
LBB 4416/50 Network Cable Assembly 50m with the network connectors fitted	LBB4416/50

LBB 4417/00 Set Network Connectors (20 pcs)

The set contains 20 connectors that can be used with the network cable LBB 4416/00 to make up to ten custom cables. The cable/connector toolkit LBB 4418/00 is required for assembly.

Certifications and Approvals

Region	Certification
Poland	CNBOP
Safety	acc. to IEC 60065 / EN 60065
Immunity	acc. to EN 55103-2 / EN 50130-4 / EN 50121-4
Emissions	acc. to EN 55103-1 / FCC-47 part 15B
Emergency	acc. to EN 60849 / EN 54-16 / ISO 7240-16
Maritime	acc. to IEC 60945

Ordering Information

LBB 4417/00 Set Network Connectors (20 pcs) 20 connectors that can be used with the network cable.	**LBB4417/00**
Accessories	
LBB 4416/00 Network Cable 100m without the network connectors fitted	**LBB4416/00**

LBB 4418/00 Cable Connector Tool Kit

Parts Included

Quantity	Component
1	Standard cutting pliers
1	Stripping pliers
1	Crimping pliers
1	Plastic optical fiber cutting/stripping tool
1	Plastic optical fiber positioning and indent tool
1	Torx screw driver
1	Spare cutting system

Ordering Information

LBB 4418/00 Cable Connector Tool Kit Optical fiber cable connector tools	**LBB4418/00**
Accessories	
LBB 4418/50 Spare Cutting System (2 pcs) two replacement cutting systems for LBB 4418/00	**LBB4418/50**

LBB 4419/00 Cable Couplers (10 pcs)

Cable couplers are used to couple LBB 4416/xx network cable assemblies for extension.

Certifications and Approvals

Safety	acc. to IEC 60065 / EN 60065
Immunity	acc. to EN 55103-2 / EN 50130-4 / EN 50121-4
Emissions	acc. to EN 55103-1 / FCC-47 part 15B
Emergency	acc. to EN 60849 / EN 54-16 / ISO 7240-16
Maritime	acc. to IEC 60945

Ordering Information

LBB 4419/00 Cable Couplers (10 pcs)   LBB4419/00
used to couple LBB 4416/xx network cable assemblies for extension.

Classic PC Software

Classic Software (LBB 4170 to LBB 4190)

The classic software is a range of software modules for wired DCN Next Generation systems using the DCN-CCU and DCN-NCO. Please note that the classic software is not compatible (and so will not work) with the new DCN-CCU(B)2 and also it will not work with DCN Wireless.

	Classic PC Software	Conference Software Suite	Smart Control Software
DCN-CCU	•	•	•
DCN-CCUB	•	•	•
DCN-WCCU			•
DCN-NCO	•	•	•
DCN-CCU2		•	•
DCN-CCUB2		•	•

Compatibility overview

Available languages

See the following table for available languages.

Chinese (simplified)
Chinese (traditional)
Czech
Dutch
English
Finnish
French
German
Italian
Japanese
Russian
Slovenian
Spanish
Swedish

Available languages overview

Activating software

The DCN software (both suite and classic) is protected with a license key. The license key depends on the CCU and the set of software modules. This means that an individual license key is required per CCU.

DCN-CCU Central Control Unit

Features

▸ **Stylish and modern design (IF award)**

▸ **Control for up to 245 Contribution units**

▸ **Control for an unlimited number of channel selectors**

▸ **2 x 32 high quality audio channels**

▸ **PC control facility**

▸ **Optical network coupling**

▸ **Redundant network capability**

The Central Control Unit (CCU) includes features for controlling delegate microphones, distributing simultaneous interpretation and conducting voting sessions, all without an operator.

In combination with a PC, this control unit brings greater sophistication to conference control. Users can access an extensive range of software modules, each with a specific function in controlling and monitoring a conference. These modules greatly expand the capacity to manage a conference. In the event of PC failure, this control unit will revert to its stand-alone operation mode, enabling the conference to proceed.

Functions

- Basic microphone management facilities
- Four operational microphone modes:
  - Open: microphone button control with request-to-speak (Auto)
  - Override: microphone button with override of activated microphones (FIFO)
  - Voice: voice activated microphones
  - Push-to-talk (push and hold button to speak)
- Number of open microphones between 1 and 4

- Basic voting control for parliamentary voting procedure. Delegates can register 'Present', 'Yes', 'No' and 'Abstain'. The Concentus Chairman unit can start, stop and suspend the voting. The total results can be displayed on hall displays and on the LCD screens of the units
- A page function which activates a voting tone. With this tone the chairman can indicate that a voting round is about to start.
- Basic simultaneous interpretation function with as many as 31 language channels plus one floor channel
- Basic intercom function with function to assign intercom operator and intercom chairman (both can be called from the interpreter desk)
- Stand-alone automatic camera control
- Extended conference facilities when using control PC software or remote controllers
- Adjustable sensitivity for the audio inputs
- Adjustable level for the audio outputs
- Audio insertion facility to connect external audio processing devices or telephone couplers
- Configuration of CCU and system via a display and a single rotary push button
- The CCU can be assigned a unique name by the installer for easy identification
- VU meter readings to monitor audio inputs and audio outputs. The audio can be monitored using a headphone
- 19" (2U) housing for tabletop or rack mounting
- Handgrips for easy transportation

Controls and Indicators

Front

- Power on/off switch
- 2 x 16 Character LCD display for status information and configuration
- Rotary control to navigate through the LCD menus

Back

- Two red LED overload indicators for the DCN network outputs
- Two red LED overload indicators for the optical connections
- Voltage selector

Interconnections

Front

- One stereo headphone output 3.5 mm (0.14 in)

Back

- Euro power socket with built-in fuse
- Two DCN outlet sockets for connection of units, plus extension power supplies. Each socket is protected against short-circuit (2 x six-pole circular sockets)
- Two optical network connections for connection of Integrus, various audio expanders or a network controller
- Two three-pole XLR balanced audio line inputs with galvanic separation.
- Two stereo Cinch unbalanced audio line inputs
- Two three-pole XLR balanced audio line output with galvanic separation.
- Two stereo Cinch unbalanced audio line outputs
- Two RS-232 serial data connectors for PC control, and controlling cameras and diagnostics

Parts Included

Quantity	Component
1	DCN-CCU Central Control Unit
1	Set of mounting brackets for 19" rack
1	Set of feet
1	System installation and user instruction on CD ROM
1	Power cord

Ordering Information

DCN-CCU Central control unit for all regions except North-America	**DCN-CCU**
DCN-CCU-UL Central Control Unit UL/CSA for the North-America region	**DCN-CCU-UL**
DCN-CCU-JP Central Control Unit (JP) Japanese version	**DCN-CCU-JP**

Technical Specifications

Electrical

Supply voltage	115/230 V +/- 10 %
Power consumption	170 W
DCN system supply	40 VDC, max 65 W per DCN socket
Optical network supply	40 VDC, max 65 W
Total supply power	130 W
RS-232 connection	2 x nine-pole Sub-D female socket
Frequency response	30 Hz - 20 kHz (-3 dB at nominal level)
THD at nominal level	< 0.5 %
Cross talk attenuation	> 85 dB at 1 kHz
Dynamic range	> 90 dB
Signal-to-noise ratio	> 87 dBA

Audio inputs

XLR nominal input	-12 dBV (+/- 6 dB)
XLR maximum input	+12 dBV
Cinch nominal input	-24 dBV (+/- 6 dB)
Cinch maximum input	+0 dBV

Audio outputs

XLR nominal output	-12 dBV (+6 / -24 dB)
XLR maximum output	+12 dBV
Cinch nominal output	-24 dBV (+6 / -24 dB)
Cinch maximum output	+0 dBV

Mechanical

Mounting	Tabletop or mounted in a 19" rack
Dimensions (H x W x D)	
for tabletop use, with feet	92 x 440 x 400 mm (3.6 x 17.3 x 15.7 in)
for 19" rack use, with brackets	88 x 483 x 400 mm (3.5 x 19 x 15.7 in)
in front of brackets	40 mm (1.6 in)
behind brackets	360 mm (14.2 in)
Weight	7 kg (15.4 lbs)
Color	Charcoal (PH 10736) with silver

DCN-NCO Multi CCU Network Controller

Features

▸ **Stylish and modern design (IF award)**

▸ **Connection of up to 30 Central Control Units**

▸ **Control of up to 1500 delegate positions**

▸ **2 x 32 high quality audio channels**

▸ **PC control facility**

▸ **Optical network coupling**

▸ **Redundant network capability**

The network controller forms the heart of a multi CCU system.

The network controller includes features for controlling delegate microphones, distributing simultaneous interpretation and conducting voting sessions, all without an operator.

In combination with a PC, this control unit brings greater sophistication to conference control. Users can access an extensive range of software modules, each with a specific function in controlling and monitoring a conference. These modules greatly expand the capacity to manage a conference. In the event of PC failure, this control unit will revert to its stand-alone operation mode, enabling the conference to proceed.

Functions

- Basic microphone management facilities
- Four operational microphone modes:
  - Open: microphone button control with request-to-speak (Auto)
  - Override: microphone button with override of activated microphones (FIFO)
  - Voice: voice activated microphones
  - Push-to-talk: push and hold button to speak

- Number of open microphones between 1 and 4
- Basic voting control for parliamentary voting procedure
- Delegates can register 'Present', 'Yes', 'No' and 'Abstain'. The Concentus Chairman unit can start, stop and suspend the voting. The total results can be displayed on hall displays and on the LCD screens of the units
- A page function which activates a voting tone. With this tone the chairman can indicate that a voting round is about to start
- Basic simultaneous interpretation function with as many as 31 language channels plus one floor channel
- Basic intercom function with function to assign intercom operator and intercom chairman (both can be called from the interpreter desk)
- Stand-alone automatic camera control
- Extended conference facilities when using control PC software or remote controllers
- Adjustable sensitivity for the audio inputs
- Adjustable level for the audio outputs
- Audio insertion facility to connect external audio processing devices or telephone couplers
- Configuration of network controller and system via a display and a single rotary push button
- The network controller can be assigned a unique name by the installer for easy identification
- VU meter readings to monitor audio inputs and audio outputs. The audio can be monitored using a headphone
- Loudspeaker and headphone connection for audio monitoring.
- 19"(2U) housing for tabletop or rack mounting
- Handgrips for easy transportation

Controls and Indicators

Front

- 2 x 16 Character LCD display for status information and configuration
- Rotary control to navigate through the LCD menus

Back

- Power on/off switch

Interconnections

- Euro power socket with built-in fuse
- Two optical network connections for connection of Central Control Units, Integrus transmitters or various audio expanders
- Two three-pole XLR balanced audio line inputs with galvanic separation
- Two three-pole XLR balanced audio line inputs without galvanic separation
- Four stereo Cinch unbalanced audio line inputs
- Two three-pole XLR balanced audio line outputs with galvanic separation
- Two three-pole XLR balanced audio line outputs without galvanic separation
- Four stereo Cinch unbalanced audio line outputs
- One stereo headphone output 3.5 mm (0.14 in)
- Eight control inputs
- Five control outputs
- One RS-232 serial data connectors for controlling cameras and diagnostics
- One Ethernet connection for PC control

Parts Included

Quantity	Component
1	DCN-NCO Multi CCU Network Controller
1	Set of mounting brackets for 19" rack
1	Set of feet
1	Set of connectors
1	System installation and user instruction on CD ROM
1	Power cord

Ordering Information

DCN-NCO Multi CCU Network Controller
for controlling delegate microphones, distributing simultaneous interpretation and conducting voting sessions

DCN-NCO

DCN-NCO-US Multi CCU Network Controller (US)
US version

DCN-NCO-US

Technical Specifications

Electrical

Supply voltage	115/230 V +/- 10 %
Power consumption	170 W
Optical network supply	40 VDC, max 65 W
Total supply power	130 W
RS-232 connection	1 x nine-pole Sub-D female socket
Ethernet connection	1 x RJ45 socket
Frequency response	30 Hz - 20 kHz (-3 dB at nominal level)
THD at nominal level	< 0.5 %
Cross talk attenuation	> 85 dB at 1 kHz
Dynamic range	> 90 dB
Signal-to-noise ratio	> 87 dBA

Audio inputs

XLR nominal input	-12 dBV (+/- 6 dB)
XLR maximum input	+12 dBV
Cinch nominal input	-24 dBV (+/- 6 dB)
Cinch maximum input	+0 dBV

Audio outputs

XLR nominal output	-12 dBV (+6 / -24 dB)
XLR maximum output	+12 dBV
Cinch nominal output	-24 dBV (+6 / -24 dB)
Cinch maximum output	+0 dBV

Mechanical

Mounting	Tabletop or mounted in a 19" rack
Dimensions (H x W x D)	
for tabletop use, with feet	92 x 440 x 400 mm (3.6 x 17.3 x 15.7 in)
for 19" rack use, with brackets	88 x 483 x 400 mm (3.5 x 19 x 15.7 in)
in front of brackets	40 mm (1.6 in)
behind brackets	360 mm (14.2 in)
Weight	7 kg (15.4 lbs)
Color	Charcoal (PH 10736) with silver

LBB 4190/00 Startup

Features

▸ **Setting master volume levels**

▸ **Opening, closing and deleting Installation File**

▸ **Configuring the Startup program to automatically load selected DCN Next Generation modules**

▸ **Accessing, acknowledging and printing error messages**

▸ **On-screen help facility**

The Startup screen is active whenever DCN Next Generation software modules are used for controlling and monitoring. This module is different from other DCN Next Generation software modules as it is primarily used as a platform from which the other modules are selected. However, this is only one aspect of the different functions of Startup.

Functions

When Startup is loaded, it presents the user with a desktop window that is the DCN Next Generation opening screen. The other DCN Next Generation modules are represented by icons in this opening screen, and activated simply by clicking on them. Startup also has a facility, which allows other DCN Next Generation modules to be loaded automatically. This saves having to manually select modules that are used virtually every time the DCN Next Generation system is in operation. The user can specify any combination of modules for automatic Startup.

Installation/Configuration Notes

This classic software module is intended for wired DCN Next Generation systems using the DCN-CCU and optional DCN-NCO. Please note that the classic software is not compatible (will not work) with the new DCN-CCU2 and DCN-CCUB2 and also it will not work with DCN Wireless.

Active whenever DCN Next Generation software modules are used.

Ordering Information

LBB 4190/00 Startup	**LBB4190/00**
I.e. used as a platform from which the other software modules are selected	

Software Options

LBB 4190/00-E Startup E-code	**LBB4190/00-E**
Electronic authorization code. Only valid for the EMEA region.	

LBB 4185/00 System Installation
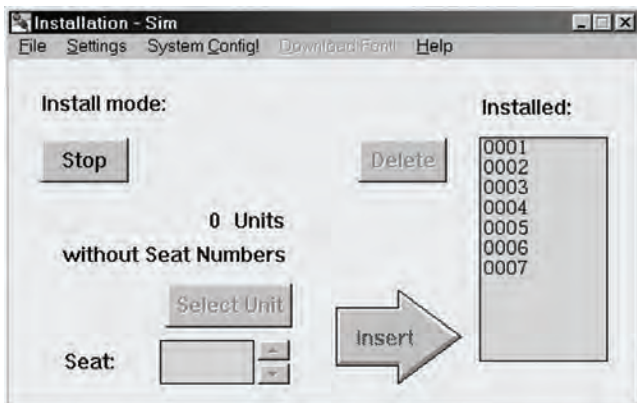
Features

▸ **Single-point control of system installation**

▸ **Facilities for assigning functions to audio channels**

▸ **In-conference warning message when installation configuration changes**

▸ **On-screen help facility**

The System Installation software is an effective tool for installers and system operators when installing and setting up the DCN Next Generation system. System installation, set-up and functions are brought entirely under PC control through its easy-to-use, Windows-based software.

Functions

The DCN Next Generation System Installation software provides – in an easy yet methodical way – to specify the number of audio channels dedicated to interpretation and intercom facilities.

Assigning seat numbers

The initial task in any installation is to assign seat numbers to delegate contribution units. The System Installation software offers a choice of two assignment methods:

1. From the hall, by physically pressing delegate microphone buttons in sequence. This is registered by the PC, which in turn automatically allocates the unit a number.
2. From the PC, where the operator selects a random microphone and allocates a number. The next assigned number will follow on sequentially. The software instantly recognizes when a new unit is installed by offering a seat number for the newly installed unit.

A dialogue box displaying the system configuration is available at any time, with the total number of installed delegate and chairman units, interpreter desks etc.

Downloading font sets

It is possible to download special font sets that allow certain DCN Next Generation contribution units to display characters in complex European languages, or icon-based scripts such as Chinese.

Audio channel assignment

The DCN Next Generation system offers 32 audio output channels, with a default configuration of 26 distribution, 4 contribution and 1 intercom link (requires 2 channels) channels. Ten distribution channels can be assigned to combinations of interpretations, floor language and intercom, with two channels reserved for line output and one for delegate loudspeakers as default. If required, all 31 channels can also be used for interpretations. All channel assignments are interdependent. The number of channels assigned to floor and intercom is dependent on the number required for simultaneous interpretation. In large international conferences using 31 interpretation channels plus one floor channel, no channels are available for intercom use. In such a case, the system performs totally as an interpretation system. The task of assigning audio channels is made easy with the aid of on-screen channel selection, using a display with three scroll bars that gives an instant overview of channel allocation and the effect of altering any of these. System Installation is primarily a preparation program. Once all microphones and delegate units have been assigned seat numbers and the audio channels configured and tested, there is no need to use System Installation for day-to-day monitoring and controlling of a conference. However, if the physical layout changes in the conference hall (delegate units are added, for example), the data in System Installation must be updated, and a message appears in the installation window.

The conference-related information generated is stored in an installation file. The user can open, create, save, delete and save these files under a new name.
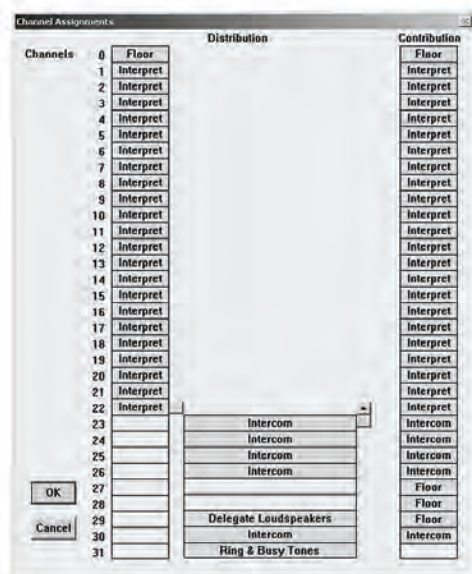
Installation/Configuration Notes

This classic software module is intended for wired DCN Next Generation systems using the DCN-CCU and optional DCN-NCO. Please note that the classic software is not compatible (will not work) with the new DCN-CCU2 and DCN-CCUB2 and also it will not work with DCN Wireless.

System installation, set-up and functions are entirely under PC control.

Ordering Information

LBB 4185/00 System Installation   **LBB4185/00**
effective tool for installers and system opera-
tors when installing and setting up the DCN
Next Generation system

Software Options

LBB 4185/00-E System Installation E-code   **LBB4185/00-E**
Electronic authorization code. Only valid for
the EMEA region.

LBB 4170/00 Microphone Management
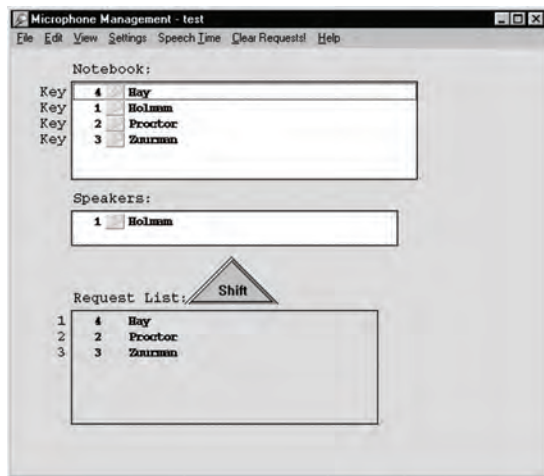
Features

▸ **Single-point control of all microphone units**

▸ **Various microphone control options**

▸ **Extensive range of options for microphone related parameters**

▸ **Output to printer and/or external equipment such as cameras**

▸ **On-screen help facility**

The efficient management of delegate microphone status is a vital element in successful conference control. The Microphone Management software module provides the user with a powerful and easy-to-use tool that brings all aspects of microphone management to a single point of control.

Functions

Microphones are controlled using the name (or desk number) of the delegate. The user can select microphones for the speakers list (active microphones) or prepare a request list. The order of delegates within the request list and speakers list can be altered at any time before or during a conference. A search facility is available that allows the operator to locate specific delegates. It is also possible to give notebook status to delegates, which means they do not have to join the request list and can enjoy certain other privileges not granted to other delegates. The microphone type must be specified for the notebook. The possibilities are:

• 'Chair' for chairman microphones

• 'Key' where delegates activate their microphones by pressing their microphone buttons. (in this mode the 'VIP'LED of the contribution units is illuminated)

• 'Operator' where the microphones of more active delegates are activated by the operator

The DCN Next Generation system automatically recognizes an assigned chairman unit and will automatically add it to the notebook. Microphone Management offers a number of microphone control options. This has a bearing on both how the Microphone Management module operates and how the conference itself proceeds. These options are:

• Control by operator with request-to-speak list (manual)

• Control by operator with request-to-speak list and response list

• Control by delegate with request-to-speak list (open)

• Control by delegate with override of other delegate microphones (first-in-first-out)

• Control by delegate with voice activation
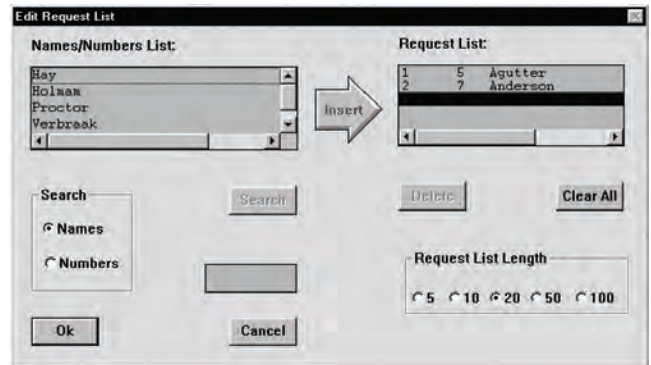
Each mode allows a different level of both operator and delegate control, so almost all situations can be covered. For example, smaller, informal discussions require very little operator control, so a mode such as control by delegate would be ideal. For a full-scale international conference with hundreds of participants, control by operator with request-to-speak list would be more appropriate. The operator can specify whether one, two, three or four normal delegate microphones can be active simultaneously. It is also possible to specify whether delegates are allowed to cancel requests to speak or switch their microphones off. The amount of time delegates are allowed to speak can also be specified.

Single-point control. Can be used in combination with the Text/ Status Display module, LBB 4183/00.

Ordering Information

LBB 4170/00 Microphone Management brings all aspects of microphone manage- ment to a single point of control	**LBB4170/00**

Software Options

LBB 4170/00-E Microphone Management E-code Electronic authorization code. Only valid for the EMEA region.	**LBB4170/00-E**

A number of options are available as to how the conference information is presented. The contents of the main window can be altered, and how each delegate is represented in any of the lists is also user-definable. There is a facility to automatically test and scan all installed microphones individually, with or without a sound generator. The microphone under test is indicated on-screen and the results of the test are made known to the system operator. This program can also be used in combination with the Text/ Status Display module, LBB 4183/00, to show delegate names or seat numbers on a hall display as soon as they are present on the speakers list or request-to-speak list. Delegates' microphone activity can be recorded on file or sent to a printer. Microphone activity data is also made available for controlling external equipment such as an automatic camera system.

During a conference, the main window is used for monitoring and controlling delegate microphone status. Depending on the operating mode, delegate microphones can be switched on or off by simply clicking on the screen microphone icon, or double-clicking on a delegates name. A single click on a delegate name allows the operator to either insert, delete or replace the delegate from the request-to speak list.

Installation/Configuration Notes

This classic software module is intended for wired DCN Next Generation systems using the DCN-CCU and optional DCN-NCO. Please note that the classic software is not compatible (will not work) with the new DCN-CCU2 and DCN-CCUB2 and also it will not work with DCN Wireless.

LBB 4171/00 Synoptic Microphone Control

Features

- ▸ **Easily-created synoptic layout used for microphone control**
- ▸ **Single-point control of all microphone units**
- ▸ **Various microphone control options**
- ▸ **Output to printer and/or external equipment such as cameras**
- ▸ **On-screen help facility**

This software module takes microphone control away from the traditional method of control panels and keys and replaces it with an extremely user-friendly, on-screen means of managing microphone status. A graphical representation of the contribution units in a conference venue is created and then used to control the microphone status of delegates. Through the use of different icons and colors, the user has an at-a-glance overview of the status of all conference participants. The result is a highly visual 'push-button' conference control facility. There are two modes of operation within Synoptic Microphone Control; layout mode and control mode.

Functions

Layout mode

In layout mode, the user creates a graphical representation of the contribution units present in the conference venue. This synoptic layout is a plan view of the conference venue. Layout mode contains dedicated tools for this purpose. Icons representing the contribution equipment are used to build up the layout. Each item of contribution equipment (delegate unit, chairman unit, podium or lavaliere microphone, etc.) has its own icon.

Viewing options that reduce the size of the icons make it easier to work with larger layouts. An optional on-screen grid helps with alignment and a snap facility lines up icons with the grid lines. Seat numbers can be automatically assigned to each layout element. The synoptic layout can be changed simply and quickly. Contribution units can be moved by dragging them using the cursor. Standard Windows functions such as cutting and pasting can be used to move, remove or add elements to the layout.

Control mode

While layout mode is used to create a synoptic floor plan of the conference venue (for preparation purposes), control mode is used to monitor and control a conference. The synoptic layout generated in layout mode becomes a control panel in control mode. The icons in the layout become functional, and are used as status indicators or buttons to initiate actions for the contribution unit the icon represents. The color of a particular icon is related to the state (request-to-speak, active, etc.) of the actual microphone it represents. Icons cannot be moved in control mode, but a layout can be edited by returning to layout mode. The state of a delegate microphone can be altered by clicking on the appropriate icon. Synoptic Microphone Control offers the following microphone control mode options:

- Control by operator with request-to-speak list (manual)
- Control by delegate with request-to-speak list (open)
- Control by delegate with override of other delegate microphones (first-in-first-out)
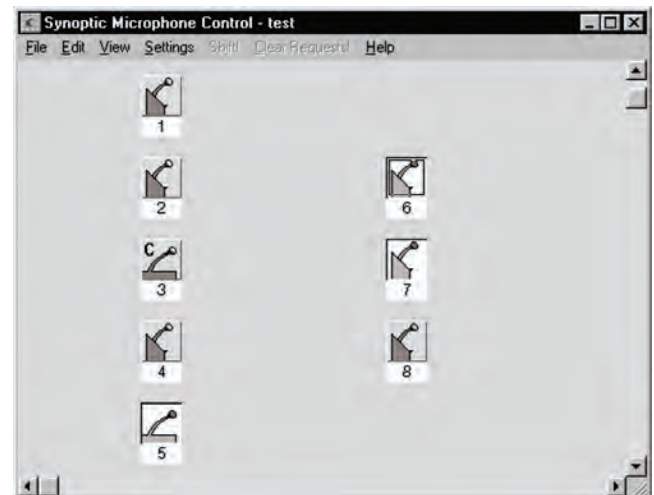
The synoptic layout is stored in a layout file. There are a number of options available to the user for working with these files, all of which are standard DCN Next Generation file options. These consist of opening, creating and saving files under a new name. Delegate microphone activity can be recorded on file or sent to a printer. Microphone activity data is also made available for controlling external equipment such as an automatic camera system. Synoptic Microphone Control has a facility to automatically test and scan all installed microphones individually, with or

without a sound generator. The microphone under test is indicated on-screen and the results of the test are made known to the system operator.

Installation/Configuration Notes

This classic software module is intended for wired DCN Next Generation systems using the DCN-CCU and optional DCN-NCO. Please note that the classic software is not compatible (will not work) with the new DCN-CCU2 and DCN-CCUB2 and also it will not work with DCN Wireless.

Single point of control. Standard Windows functions.

Ordering Information

LBB 4171/00 Synoptic Microphone Control two modes of operation within Synoptic Microphone Control; layout mode and control mode	LBB4171/00
Software Options	
LBB 4171/00-E Synoptic Microphone Control E-code Electronic authorization code. Only valid for the EMEA region.	LBB4171/00-E

LBB 4172/00 Simulta-neous Interpretation
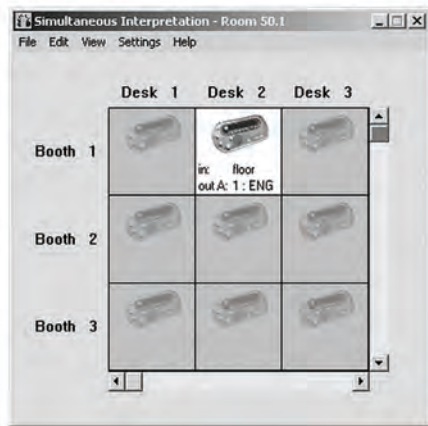
Features

▸ **Can accommodate 186 interpreter desks**

▸ **Online monitoring of interpretation activities**

▸ **Facilitates normal and relay interpretations**

▸ **Microphone mode options**

▸ **Specifying a language for each of the system interpretation channels**

▸ **Determining the microphone interlock mode**

▸ **On-screen help facility**

Simultaneous interpretation is essential for international conference venues. The Simultaneous Interpretation program supports the preparation of simultaneous interpretation facilities and the monitoring of interpreter activities during a conference. It accommodates 31 interpreter booths, each with up to 6 interpreter desks.

Functions

The main window has two display modes, both with graphics for easy management of information. One gives a channel-oriented overview of system status, such as which language is present on that channel, the mnemonic for that language, on which language the interpretation is based, and the number of the desk and booth generating that language. The other display mode gives the same information in a different form, providing an overview of the status of each desk in each booth. This includes booth and desk status (active or non-active), and the language in and out of each active desk. In addition, the software enables the operator to establish microphone interlocks, between booths and within booths, with or without using

an override facility. In interlock mode, the active microphone must first be turned off before any other microphones can become active. In override mode, any microphone can automatically override the current active microphone and become active. The interpreter system settings are stored in an interpreter configuration file. There are a number of options available to the user for working with these files, all of which are standard DCN NG file options. These consist of opening, creating and saving files under a new name. A print function enables a hard copy printout of desk and channel language assignment– ideal for use as a reference to current system settings.

Installation/Configuration Notes

This classic software module is intended for wired DCN Next Generation systems using the DCN-CCU and optional DCN-NCO. Please note that the classic software is not compatible (will not work) with the new DCN-CCU2 and DCN-CCUB2 and also it will not work with DCN Wireless.

Interpreter system settings are stored in an interpreter configuration file.

Ordering Information

LBB 4172/00 Simultaneous Interpretation supports the preparation of simultaneous interpretation facilities and the monitoring of interpreter activities during a conference
`LBB4172/00`

Software Options

LBB 4172/00-E Simultaneous Interpretation E-code Electronic authorization code. Only valid for the EMEA region.
`LBB4172/00-E`

LBB 4173/00 Intercom

Features

▸ **Enables private, two-way conversations between delegates, chairmen, interpreters and other PC users**

▸ **Search facility to locate delegates**

▸ **Allows up to 5 simultaneous conversations**

▸ **Simple menus for ease of control**

▸ **On-screen help facility**

The Intercom software module forms the basis of a communication system that allows conference participants to hold two-way private conversations. It provides a means of setting up and controlling intercom calls between delegates, chairmen, interpreters and other PC-users during a conference.

It allows several types of calls to be made:

• Participant to / from operator
• Between participants
• Interpreter to/from operator
• Between interpreters
• Participant to/from interpreter
• Between PC operators in a multi-PC system

Functions

The Intercom software is used in combination with the Intercom Handset and Cradle. It provides assistance in both the pre-conference creation of an intercom network, and the routing and controlling of intercom calls once the conference is underway. Preparation work includes assigning special intercom links between participants, interpreters or both. Once the conference is taking place, the operator can establish and re-route intercom calls via simple on-screen windows. Each intercom link uses a

system channel. The maximum number of intercom links is 5. If no intercom links are assigned, the intercom module will not start.

Note   The number of DCN Next Generation audio channels available for intercom purposes is set using the System Installation software LBB 4185/00.

Note   Delegate Database LBB 4180/00 is required if delegate names are used.

Note   Simultaneous interpretation LBB 4172/00 is required if interpreter names are used.
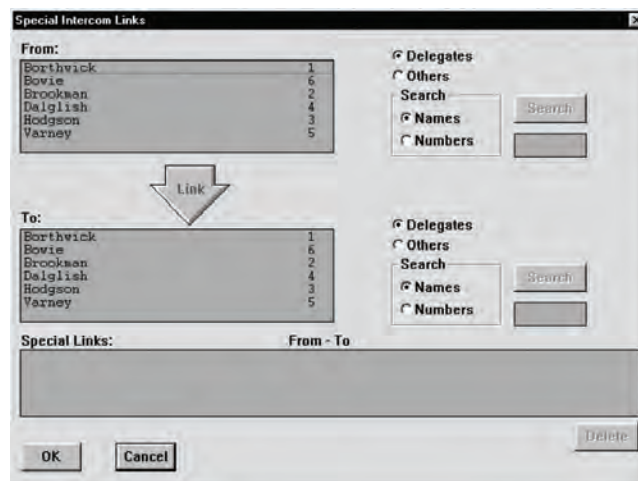
Installation/Configuration Notes

This classic software module is intended for wired DCN Next Generation systems using the DCN-CCU and optional DCN-NCO. Please note that the classic software is not compatible (will not work) with the new DCN-CCU2 and DCN-CCUB2 and also it will not work with DCN Wireless.

Software is used in combination with the Intercom Handset and Cradle.

Ordering Information

LBB 4173/00 Intercom allows conference participants to hold two-way private conversations	LBB4173/00
Software Options	
LBB 4173/00-E Intercom E-code Electronic authorization code. Only valid for the EMEA region.	LBB4173/00-E

LBB 4175/00 Parliamentary Voting
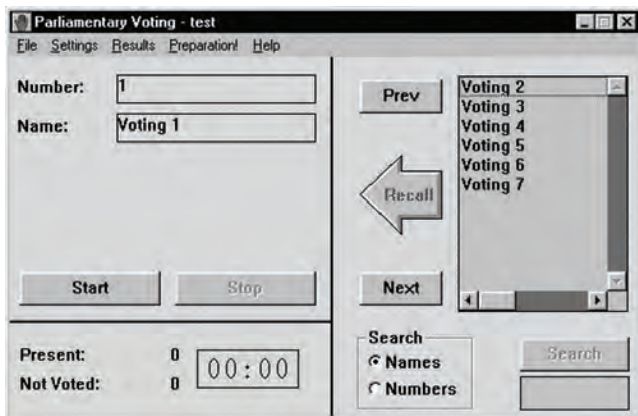
Features

▸ **Allows complete operator control of parliamentary voting sessions**

▸ **Extensive motion preparation facilities**

▸ **Can output voting results to disk, hall displays or printers**

▸ **Wide range of vote-related parameter options**

▸ **On-screen help facility**

The Parliamentary Voting module is a DCN Next Generation software module designed for controlling and monitoring conferences and discussions using the DCN Next Generation contribution equipment. The module allows an operator to implement and manage voting at a conference.

Functions

The program covers a number of functions including vote preparation, specifying vote-related parameters, and starting and controlling voting. The module has two main windows; the Preparation window and the Control window. The preparatory and parameter definition work is mainly carried out from the Preparation window, and the starting and controlling of voting is carried out from the Control window.

The files created using this module are called script files as they act as the script for voting procedures. The file menu allows script files to be opened, created, deleted, saved, saved under a different name, imported and printed out.

A script file consists of a number of proposals or motions (between 1 and 999), each of which will be voted on. New ones can be created and existing ones edited within script files. Items to be edited are selected from a list in the currently open script file and displayed on-screen. All parameters related to this can be altered, although certain parameters have to satisfy system-specified criteria. Once a n item has been edited it is inserted back into the list. Every item must have a unique number, which is used by the DCN Next Generation system as a reference. The name and description of each defines it for both users and delegates. It is also possible to enable a quorum function. This specifies how many authorized delegates must be present before voting can legitimately take place. A majority function determines what percentage of votes constitutes a majority voting. Once a vote is ready to be taken, it is recalled in the Control window and the voting process is started. When the program enters the active voting state, delegates can use their delegate units to register votes. The user has full control over the voting procedure, and can stop or suspend a vote at any time. Motions that have already been voted on cannot be edited, but voting again on the same motion is possible. It is also possible to vote without opening a script file.

The program offers the possibility of displaying incoming votes or the final result of a vote on hall displays connected to the DCN Next Generation system, on delegate units with a display facility, and on-screen. It is possible to print out a hard copy of a vote with its results. There is also a facility that automatically prints out the results of a vote once voting is completed.

Note   Delegate Database LBB 4180/00 is required if delegate names are used.
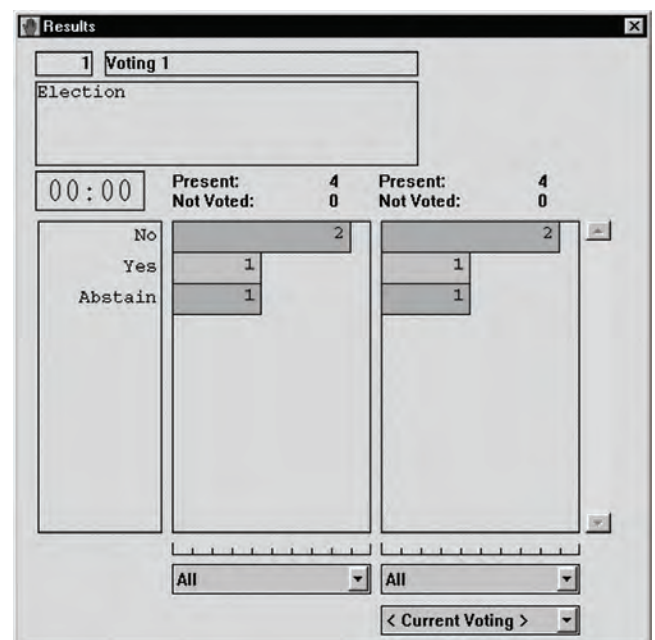
Installation/Configuration Notes

This classic software module is intended for wired DCN Next Generation systems using the DCN-CCU and optional DCN-NCO. Please note that the classic software is not compatible (will not work) with the new DCN-CCU2 and DCN-CCUB2 and also it will not work with DCN Wireless.

Delegate Database LBB 4180/00 is required if delegate names are used.

Ordering Information

LBB 4175/00 Parliamentary Voting   **LBB4175/00**
allows an operator to implement and manage voting at a conference

Software Options

LBB 4175/00-E Parliamentary Voting E-code   **LBB4175/00-E**
Electronic authorization code. Only valid for the EMEA region.

LBB 4176/00 Multi Voting
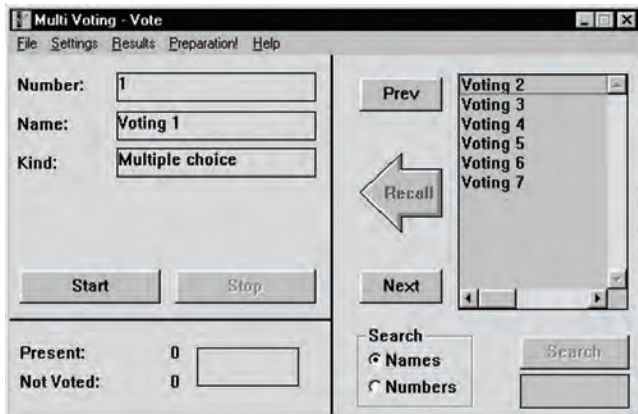
Features

▸ **Allows selection between six different kinds of voting**

▸ **Extensive voting preparation facilities**

▸ **Wide range of vote-related parameter options**

▸ **Choice of three voting results display types**

▸ **On-screen help facility**

This software module provides the means to select and control six different kinds of conference voting, including Parliamentary Voting. The voting types that can be implemented or selected are:

- Parliamentary
- Opinion Poll
- Audience Response
- Rating
- Multiple Choice
- For/Against

In each case, the program allows the user to prepare for voting, specify vote-related parameters, display and print voting results and start and control voting.

Functions

There are two main windows: the Preparation window and the Control window. The Preparation window is where voting motions are created and parameters are defined or changed. The Control window is used for starting and controlling voting. There is also a Results window for displaying voting results. These can be displayed in bar-, pie- or thermometer charts. It is also possible to see voting results while the voting is still taking place. These 'interim results' can be specified in the Preparation window. It is also possible to enable a quorum function. This specifies how many authorized delegates must be present before a voting can legitimately take place. A majority function determines what percentage of votes constitutes a majority voting. The files created are called

script files as they act as the script for voting procedures. A file menu allows script files to be opened, created, saved, deleted and printed. There is also a facility for importing script files that have been created and saved in another application. Each script file can consist of a number of voting motions (up to 9,999), each of which can be selected from a 'voting motions list' in the Preparation window. Once selected, a voting can be edited and then inserted back into the voting list. All parameters related to the voting can be altered although certain parameters have to satisfy system specific criteria. A search facility is provided to help locate specific voting motions. Vote-related parameters can be specified for each individual voting.

These are:

- Vote type (open or closed, majority or non-majority, timed or non-timed)
- Time related options
- Results display style
- Interim results display
- Screen and print legends
- Hall display, vote weighting, roll call, voting LEDs and abstain options

Once a motion is ready to be voted on, delegates can register votes on their delegate units. Multi Voting incorporates a roll call function which, when activated, means that delegates must vote in a predetermined order that is specified in the Delegate Database Module (LBB 4180/00). Otherwise, delegates can vote in any order at the same time. Voting without a script is also possible, and the same functions are available as with a script. Voting can be stopped or suspended at any time, and incoming votes or the final result of a vote can be displayed on hall displays connected to the DCN Next Generation system, on delegate units with a display facility and on-screen. The user can print the final result of a vote, and it can also be automatically exported to a file.

Note Delegate Database LBB 4180/00 is required if delegate names are used.
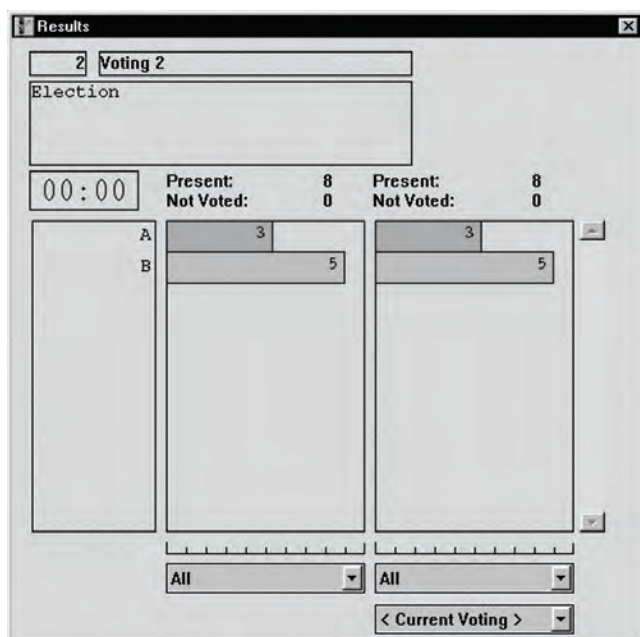
Installation/Configuration Notes

This classic software module is intended for wired DCN Next Generation systems using the DCN-CCU and optional DCN-NCO. Please note that the classic software is not compatible (will not work) with the new DCN-CCU2 and DCN-CCUB2 and also it will not work with DCN Wireless.

Delegate Database LBB 4180/00 is required if delegate names are used.

Ordering Information

LBB 4176/00 Multi Voting   LBB4176/00
select and control six different kinds of conference voting, including Parliamentary Voting

Software Options

LBB 4176/00-E Multi Voting E-code   LBB 4176/00-E
Electronic authorization code. Only valid for the EMEA region.

LBB 4178/00 Attendance Registration
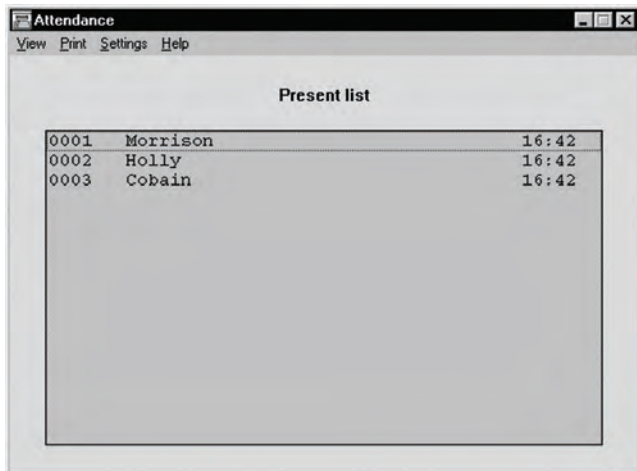
Features

▸ **Registration using chip card with or without PIN-code, or present key**

▸ **Access control facilities**

▸ **All data instantly available to operator**

▸ **Print facility to reproduce data in several formats**

▸ **On-screen help facility**

This software module is used when registering for a conference room, and for accessing facilities in the conference room.

Functions

The functionality of Attendance Registration falls into two categories:

Registration:

It is possible to specify entrance requirements that conference participants have to meet before entering the conference room. This normally means participants have to insert a chip card in a chip card reader, either at the entrance to the conference venue or at the contribution unit. Registration at a contribution unit can also be by means of pressing the 'Present' key. It is possible to display lists on-screen of all 'present' and 'absent' participants, and print hard copies of these lists. There is also a window that can be permanently displayed on-screen that gives an overview of all participants who have registered their presence or absence.

Access:

The settings specified for registration can also be used for access. This means that although participants can enter the conference venue, they cannot use any of the contribution unit facilities (such as microphone, voting, intercom) without first satisfying access requirements. Access is also controlled by means of chip cards, with or without PIN code. There is also an option whereby participants register their presence at the entrance using a chip card reader, and a specific contribution unit is then made available for them. You can also control where participants sit by specifying whether they can occupy any seat or a particular, pre-defined one.

Installation/Configuration Notes

This classic software module is intended for wired DCN Next Generation systems using the DCN-CCU and optional DCN-NCO. Please note that the classic software is not compatible (will not work) with the new DCN-CCU2 and DCN-CCUB2 and also it will not work with DCN Wireless.

Registration using chip card or present key.

Ordering Information

LBB 4178/00 Attendance Registration	**LBB4178/00**
Used for registering and accessing facilities in the conference room	
Software Options	
LBB 4178/00-E Attendance Registration E-code	**LBB4178/00-E**
Electronic authorization code. Only valid for the EMEA region.	

LBB 4180/00 Delegate Database

Features

▸ **Comprehensive database creation for all delegates**

▸ **Facility for configuring 'screen line' and 'card label'**

▸ **Facility for printing labels and chip card production**

▸ **Dedicated fields for ease-of-use**

▸ **On-screen help facility**

The Delegate Database software allows users to compile a comprehensive database of information relating to participants at a conference or meeting. The delegate information is classed as either 'conference-related' or 'personal'.

- Conference-related deals with parameters like interpretation language, vote weight and authorization. This data is used by the DCN Next Generation for conference controlling
- Personal information deals with data such as home address and telephone number, date of birth and fax number. This data is for reference only

Functions

The data for each delegate is stored in a 'screen card', which contains delegate data in dedicated fields. Screen cards are stored collectively in a names file. There are a number of options available to the user for working with these files, all of which are standard DCN Next Generation file options. These consist of opening, creating, deleting and saving files under a new name. All information is entered via a PC, before or during conference proceedings. A considerable amount of data can be

specified for each conference participant. Many parameters are not general but delegate specific, including:

- PIN Code
- Card Code for chip card
- Delegate group
- Delegate country
- Delegate name
- Delegate vote weight
- Delegate seat number
- Language of delegate screen display (French, German, Italian, Dutch, English, Portuguese, Japanese or Spanish)
- Simultaneous interpretation language

If the Chip Card Encoder (LBB 4157/00) and printer are connected to the DCN Next Generation system, chip cards can be encoded by using the ID Card Encoder module (LBB 4181/00) and the labels for the chip cards printed. It is also possible to grant or deny authorization to individual delegates for the following:

- Microphone
- Voting
- Intercom

This is possible when they use an ID card to register, and is carried out using the Attendance Registration and Access Control module (LBB 4178/00). All delegate data is input via the main window. For some entries (first name, last name) the only restriction is the number of characters entered. For other entries (country, group, etc.), the input can easily be selected from a list of options that is presented by the system when the user activates that particular field. This options list can be edited and expanded by the user. In the personal data section, the user can input such delegate data as date-of-birth, address, telephone number, fax and E-mail number. Certain fields within the screen card can be identified in order to print on an ID card label, or associated (as a screen line) with other software packages such as Microphone Management and Attendance Registration and Access Control.

Installation/Configuration Notes

This classic software module is intended for wired DCN Next Generation systems using the DCN-CCU and optional DCN-NCO. Please note that the classic software is not compatible (will not work) with the new DCN-CCU2 and DCN-CCUB2 and also it will not work with DCN Wireless.

Information is entered via a PC to compile a database.

Ordering Information

LBB 4180/00 Delegate Database used to compile a comprehensive database of information relating to participants at a conference or meeting	**LBB4180/00**

Software Options

LBB 4180/00-E Delegate Database E-code Electronic authorization code. Only valid for the EMEA region.	**LBB4180/00-E**

Bosch Security Systems

DCN-IDENC ID Card Encoder (USB)

Features

▸ **USB (2.0) supported**

▸ **ID card supported (DCN-IDCRD)**

▸ **Supported by DCN-SW and LBB 4190/00**

The ID Card Encoder (USB) is used to encode ID cards (DCN-IDCRD). It is used in combination with the following Conference software modules: ID Card Encoder (DCN-SWID), Delegate Database (DCN-SWDB) and Conference Software Main module (DCN-SW).

The DCN-IDENC can also be used with the LBB 4181/00 from software version 2.80 onwards.

Certifications and Approvals

FCC part 15 Class B, UL, CE, VCCI
EMV 2000 Level 1

Technical Specifications

Electrical

Power supply	Through USB bus
Indication on top of unit	One dual state green LED
Operating System	XP, Server2003, Vista
ID card supported	DCN-IDCRD

Mechanical

Cable	1.5 m long with USB type A connector
Dimensions (H x W x D)	10 x 70 x 70 mm (0.39 x 2.8 x 2.8 in)
Weight	60 g (0.13 lb)

Environmental

Operating temperature	0 ° to +50 °C (+32 ºF to +122 ºF)
Storage temperature	-20 ° to +60 °C (-4 ºF to +140 ºF)
Relative humidity	15% to 90%

Ordering Information

DCN-IDENC ID Card Encoder (USB) used in combination with the ID Card Encoder (DCN-SWID), DCN-SW and DCN-SWDB software modules	**DCN-IDENC**
DCN-SWID Conference Software ID Card Encoding software module for producing ID cards. Can only be used in combination with DCN-IDENC, DCN-SW and DCN-SWDB. Can not be used with the DCN Wireless Discussion System (DCN-WCCU).	**DCN-SWID**
DCN-SW Conference Software Main Module a platform on which all other Conference software modules run	**DCN-SW**
DCN-SW-E Conference Software Main Module E-code Electronic authorization code. Only valid for the EMEA region.	**DCN-SW-E**
DCN-SWDB Conference Software Delegate Database can only be used in combination with DCN-SW	**DCN-SWDB**
DCN-SWDB-E Conference Software Delegate Database E-code Electronic authorization code. Only valid for the EMEA region.	**DCN-SWDB-E**
Accessories	
DCN-IDCRD ID Card (100 pcs) standard credit-card format, set of 100	**DCN-IDCRD**

DCN-IDCRD ID Card (100 pcs)

LBB 4181/00 ID Card Encoder

Encoder software is used in combination with the Delegate Database software (LBB 4180/00) as a software driver for producing ID cards. These ID Cards are used to identify delegates during a conference and contain information specified using Delegate Database. An encoding unit (DCN-IDENC) is also required to produce the ID cards.

Features

▸ **Attractive design**

▸ **Ample space for a name or other delegate personal information**

▸ **Clear instructions showing how to insert the card into a reader**

Installation/Configuration Notes

This classic software module is intended for wired DCN Next Generation systems using the DCN-CCU and optional DCN-NCO. Please note that the classic software is not compatible (will not work) with the new DCN-CCU2 and DCN-CCUB2 and also it will not work with DCN Wireless.

These standard credit-card format ID cards are used by delegates to identify them to the DCN Next Generation system. This can be a pre-requisite for access to contribution units and activities such as attendance registration and voting.

Ordering Information

LBB 4181/00 ID Card Encoder software driver for producing ID cards	**LBB4181/00**
Accessories	
DCN-IDENC ID Card Encoder (USB) used in combination with the ID Card Encoder (DCN-SWID), DCN-SW and DCN-SWDB software modules	**DCN-IDENC**
Software Options	
LBB 4181/00-E ID Card Encoder E-code Electronic authorization code. Only valid for the EMEA region.	**LBB 4181/00-E**

Technical Specifications

Mechanical

Dimensions (H x W)	85 x 54 mm (3.3 x 2.1 in)

Ordering Information

DCN-IDCRD ID Card (100 pcs) standard credit-card format, set of 100	**DCN-IDCRD**

LBB 4182/00 Message Distribution

Features

▸ **Message distribution to personal or hall displays**

▸ **Easy message generation procedure**

▸ **Archiving facility allows messages to be retrieved and re-used**

▸ **Automatic message removal option**

▸ **On-screen help facility**

The Message Distribution software allows the operator to originate messages that can be sent via the DCN Next Generation to individual delegates, groups of delegates and other participants to view on their units. Messages can also be sent to hall displays for general viewing by the public and delegates.

Note   Message text is only available on delegate units with display.

Functions

Message handling

Messages created can be stored in a library for later use. There is a facility that automatically removes messages after they have been displayed for a pre-specified period of time.

Installation/Configuration Notes

This classic software module is intended for wired DCN Next Generation systems using the DCN-CCU and optional DCN-NCO. Please note that the classic software is not compatible (will not work) with the new DCN-CCU2 and DCN-CCUB2 and also it will not work with DCN Wireless.

The Message Distribution software can be used in combination with the Video Display software (LBB 4184/00) and the Text/Status Display software (LBB 4183/00).

Ordering Information

LBB 4182/00 Message Distribution allows the operator to originate messages that can be sent via the DCN Next Generation to delegates	**LBB4182/00**
Software Options	
LBB 4182/00-E Message Distribution E-code Electronic authorization code. Only valid for the EMEA region.	**LBB4182/00-E**

LBB 4183/00 Text/Status Display

Features

▸ **Supports numeric, alphanumeric and geographic displays**

▸ **Displays voting, message and microphone information**

▸ **Automatic priority system for displays**

▸ **Accepts information from other DCN Next Generation software modules**

▸ **On-screen help facility**

The Text/Status Display module provides a means of displaying conference-related information on character displays in the conference venue. Almost all displayed information is generated by other DCN Next Generation modules. The text that appears on screen to accompany voting results can be generated using Text/ Status Display. It is also possible to specify the display length of the speakers list and the request-to-speak list.

Functions

Text/Status Display accepts the following types of display information:

- Voting Results display. This information is generated using the Parliamentary Voting module (LBB 4175/00) and consists of a voting motion (number, description, time) and the results of the vote on that motion
- Messages display. This information is generated using the Message Distribution (LBB 4182/00) and consists of a conference-related text message

- Microphone Information display. This information is generated either using the Microphone Management module (LBB 4170/00) or the Synoptic Microphone Control module (LBB 4171/00). It consists of a list of delegates whose microphones are active and those waiting to speak This software supports three different types of conference venue displays:
- Numeric display. This is typically a dot matrix display of only a few characters per line, and allows only purely numerical information to be displayed
- Alphanumeric display. Also typically a dot matrix display, but for up to 10 lines of 33 characters. Information can be displayed using both text and numbers
- Geographic or status display. This kind of display gives information on the voting status of each conference participant (if the vote is non-secret). A representation of the seating plan and different colored LEDs for vote status are used to achieve this.

Installation/Configuration Notes

This classic software module is intended for wired DCN Next Generation systems using the DCN-CCU and optional DCN-NCO. Please note that the classic software is not compatible (will not work) with the new DCN-CCU2 and DCN-CCUB2 and also it will not work with DCN Wireless.

Displayed information can be generated by modules LBB 4175/00, LBB 4182/00, LBB 4170/00, LBB 4171/00.

Ordering Information

LBB 4183/00 Text/Status Display used to display conference-related information on character displays in the conference venue	**LBB4183/00**
Software Options	
LBB 4183/00-E Text/Status Display E-code Electronic authorization code. Only valid for the EMEA region.	**LBB4183/00-E**

LBB 4184/00 Video Display

Features

▸ **Interface to monitors, video projectors and Vidiwalls**

Video Display is unlike all other DCN Next Generation modules in that there is no user action required to operate it. It automatically interfaces the DCN Next Generation software with video displays. It provides a means of displaying conference-related information on video displays located in the conference venue. The information can consist of text, numbers and graphical elements like bar charts. All information displayed is generated by other DCN Next Generation modules, and it is not possible to alter this information in Video Display.

Functions

To use Video Display, it is necessary to have a Video Display (VD) Client application. The VD Client application receives the information that is passed to it from the Video Display (server) module. The user can change settings related to how information is displayed on the video screens, such as text or background colors. This can be carried out either during or after installation of Video Display. This VD Client application accepts four different types of display information:

- Voting Results display. A voting motion and the results of the vote on that motion.
- Message display. A conference-related text message (e.g. when and where lunch will be, or when tomorrow's session will begin).
- Microphone Information display. A list of delegates whose microphones are active and those waiting to speak.
- Attendance registration display. Information about how many delegates are absent or present.

Installation/Configuration Notes

This classic software module is intended for wired DCN Next Generation systems using the DCN-CCU and optional DCN-NCO. Please note that the classic software is not compatible (will not work) with the new DCN-CCU2 and DCN-CCUB2 and also it will not work with DCN Wireless.

All information displayed is generated by other DCN Next Generation modules.

Ordering Information

LBB 4184/00 Video Display Used for displaying conference-related information	**LBB4184/00**
Software Options	
LBB 4184/00-E Video Display E-code Electronic authorization code. Only valid for the EMEA region.	**LBB4184/00-E**

LBB 4188/00 Automatic Camera Control
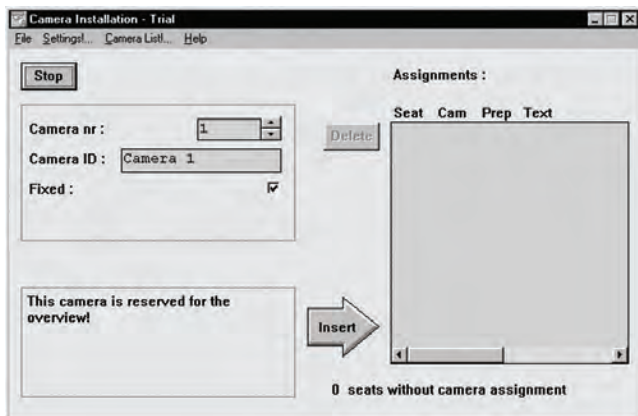
The DCN Next Generation Automatic Camera Control software interfaces DCN Next Generation conference systems with the Bosch Allegiant series of video control switchers. It selects fixed or pre-positioned cameras (such as the Bosch AutoDomes) to be activated to display the current active speaker at a conference.

Functions

When a chairman or delegate microphone is activated on the DCN Next Generation equipment, the camera assigned to that position is activated. When no microphones are active, an overview camera is automatically selected. The image can be displayed on hall displays or other monitors together with information about the current speaker if required (such as delegate identification). The system operator has a monitor, which also displays information about which camera is active. This system provides an extra dimension to conference proceedings.

Ordering Information

LBB 4188/00 Automatic Camera Control PC controlled	**LBB4188/00**
LBB 4188/00-E Automatic Camera Control E-code Electronic authorization code. Only valid for the EMEA region.	**LBB4188-E**

LBB 4189/00 Multi PC

Features

▸ **Master / Slave configuration**

▸ **On-screen help facility**

The Multi PC software module is needed when more than one PC is required to control the DCN Next Generation system. All Slave PCs in a multi-PC environment are connected via Ethernet to the Master PC, which is connected the CCU.

Functions

This module sets up the master/slave mode of all other modules in a multi PC environment. The Multi PC configuration is accessed from the menu in the Startup screen (LBB 4190/00).

Installation/Configuration Notes

This classic software module is intended for wired DCN Next Generation systems using the DCN-CCU and optional DCN-NCO. Please note that the classic software is not compatible (will not work) with the new DCN-CCU2 and DCN-CCUB2 and also it will not work with DCN Wireless.

Ordering Information

LBB 4189/00 Multi PC   LBB4189/00
Is needed when more than one PC is required to control the DCN Next Generation system

Software Options

LBB 4189/00-E Multi PC E-code   LBB4189/00-E
Electronic authorization code. Only valid for the EMEA region.

Technical Data

Conforms to international standard IEC 60914, the international standard for conference systems.

Microphones
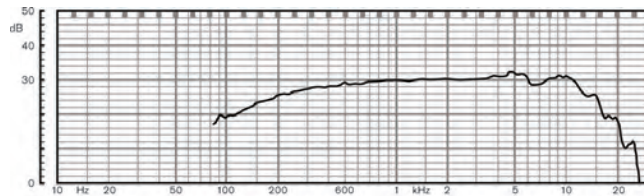
Microphone frequency response

Frequency response	100 Hz to 16 kHz
Transducer type	Condenser
Directional pattern	Cardioid
Sensitivity	9.3 mV at 85 dB SPL (Rl=3k3, U=5V)
Max. SPL for THD	< 3 % 110 dB
Equivalent input noise level	24 dB lin, 21 dBA
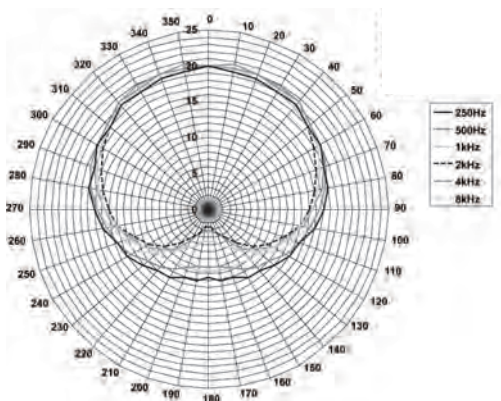
Microphone polar diagram of LBB 4149 measured with pink noise in octaves

	250	500	1k	2k	4k	8k	Hz
F-Rear Sensitivity Index	10.5	12	15.5	17.5	17	11.5	[dB]
F-Random Sensitivity Index	3.7	3.7	4.6	5.0	4.3	3.9	[dB]

Transmission links
- From delegate to interpreter
- From delegate to delegate
- From interpreter to delegate
- From interpreter to interpreter
- From auxiliary input to delegate
- From auxiliary input to interpreter
- From delegate to auxiliary output
- From interpreter to auxiliary output

General

Frequency response	125 Hz to 20 kHz*
Harmonic distortion	< 0.5 %
Harmonic distortion at overload	< 1 %
Crosstalk attenuation at 4 kHz	> 80 dB
Dynamic range	> 90 dB

* Intercom links: 125 Hz to 5 kHz

Combined units
- Delegate microphone with transmission link to interpreter headphone
- Delegate microphone with transmission link to delegate headphone
- Delegate microphone with transmission link to auxiliary output
- Interpreter microphone with transmission link to interpreter headphone
- Interpreter microphone with transmission link to delegate headphone
- Interpreter microphone with transmission link to auxiliary output

General

Typical frequency response	125 Hz (-8 dB) to 16 kHz (-8 dB)
Front-to-random sensitivity index	> 4.6 dB
Rated equivalent sound pressure level due to inherent noise	< 24 dB (A)
Total harmonic distortion at overload	< 1 %
Crosstalk attenuation	> 96 dB

System electrical and electro-acoustic characteristics
General

Normal input level	125 Hz (-8 dB) to 16 kHz (-8 dB)
Overload input level	> 4.6 dB
Automatic gain reduction at Overload input level	25 dB interpretation channels, 21 dB delegate loudspeaker channel (not for PA-floor output
Operator master gain control	24 x 1 dB and OFF (Mute)

System environmental conditions
General

Working conditions	125 Hz (-8 dB) to 16 kHz (-8 dB)
Temperature range - transport - operating	-20 ℃ to +55 ℃ (-4 ℉ to +131 ℉) +5 ℃ to +45 ℃ (+41 ℉ to +113 ℉)
Relative humidity	15 - 90 % max.
Safety	According to IEC 60065, and according to CAN/CSA-E65 (Canada and USA) and UL6500
EMC emission	According to harmonized standard EN 55103-1 and FCC Rules (Part 15) complying with the limits for a class A digital device
EMC immunity	According to harmonized standard EN 55103-2
EMC approvals	Affixed with the CE mark

ESD	According to harmonized standard EN 55103-2
Mains harmonics	According to harmonized standard EN 55103-1
Other legal requirements	No cadmium used other than in the nickel cadmium battery housed in the central unit
Shock resistance	According to IEC 60069-2 – 29 Eb
Vibration resistance	According to IEC 60069-2 – 6 Fc

Power consumption and nodes

The Power Consumption and the nodes of units connected to a CCU have a bearing on the total number of such units that can be connected.

The maximum power of all units connected to DCN-CCU2 must not exceed 255 Watts.

The maximum number of nodes must not exceed 63.

The power of all units that can be connected to DCN-CCU2 is given below:

Device	Watt	Nodes
DCN-DISS / DCN-DISL	2.75	-
DCN-DISD	2.8	-
DCN-DISCS	2.9	-
DCN-DISDCS	3.15	-
DCN-DISV	3.05	-
DCN- DISVCS	3.20	-
DCN-CON	3.4	-
DCN-CONCS	3.7	-
DCN-CONFF	4.2	-
DCN-CONCM	4.2	-
DCN-DDB	2	-
DCN-DDI	4.9	-
DCN-EPS	0.1	-
DCN-FCS	0.9	-
DCN-FVU	1.0	-
DCN-FVU-CN	1.0	-
DCN-IDESK	3.6	-
LBB 4114/00	1.3	-
LBB 4115/00	1.4	-
DCN-CCU2	n.a.	2
DCN-WAP	4	1
LBB 4402/00	7.6	1
PRS-4DEX4	6	1
LBB 4404/00	10.5	1
LBB 4414/10	4.6	1*
LBB 4410/00	3.9	1
INT-TX04	-	1
INT-TX08	-	2
INT-TX16	-	4
INT-TX32	-	8

* LBB 4414/00 does not count in the maximum of 63 nodes

DCN network limits

- Control capacity
  - The maximum number of active devices that a central control unit can control is 245.
  - The number of passive devices is without limit.
  - The maximum number of data distribution boards in the system is 15.
  - A multi-CCU system can contain maximum 30 CCU's and a total of 4000 active devices.
- Power capacity
  - The maximum power that one DCN socket of the central control unit can supply is 85 W.
- Loop-through
  - The maximum number of loop-throughs in succession for active devices is 25, where 4 m additional extension cable is the equivalent of 1 device. If there are more than 25 loop-throughs of active units, or an equivalent mix with passive devices and additional extension cable, the signal must be regenerated with a trunk splitter (LBB4114/00).
  - The maximum number of loop-throughs in succession for passive devices is 50, where 2 m additional extension cable is the equivalent of 1 passive device. If there are more than 50 loop-throughs of active units, or an equivalent mix with additional extension cable, the signal must be regenerated with a trunk splitter (LBB4114/00).
  - In case active and passive units are mixed in the trunk line, all units need to be seen as active units with their corresponding loop-through limit of 25.
- Tap-off connections
  - The maximum connections in succession between the central control unit and the last tap-off in a branch are four.
- Cable-lengths
  - With regenerative tap-offs, the maximum cable length is 250 m from the central control unit to the furthest device in any branch of the DCN. The maximum cable length of 250 m includes the device cables and extension cables.

Wireless network limits

- Control capacity
  - The maximum number of active devices in a DCN system, with one central control unit, is 245.
- Coverage area
  - For a good operation of the wireless part, all wireless discussion units need to be in range of the wireless access point. The wireless access point has a typical at least coverage area of 30 m by 30 m.
- Frequency
  - The wireless network must operate in a different frequency band than adjacent wireless (computer) networks.
- Number of language distribution channels
  - The wireless network has a maximum of 10 language distribution channels, excluding the channel for the floor. The total number of language distribution channels in the system, is set via the interpreter desk or the Conference control software.
  - If there are more than 10 Language Distribution Channels, only the first 10 channels will be available for the wireless network. All higher channels will only be available for the (wired) DCN network and/or the infrared Integrus network.

Optical network limits

- Number of nodes
  - The maximum number of nodes that you can connect to the optical network of the central control unit is 61.
- Number of WAPs
  - The maximum number of DCN-WAP Wireless Access Points in the optical network is 1.
- Cables
  - The maximum length of the standard network cable LBB4416/xx (Plastic Optical Fiber) cable is 50 m.
  - If longer cables are required, the PRS-FINNA can be used to convert from plastic to glass and vice versa. The maximum cable length of Glass Optical Fiber is dependent on the used Plastic Optical Fiber plus the equivalent cable length per used device.
  - The minimum bend radius of a 90 degree bend in a POF cable is 25 mm.
  - The minimum coiling radius of a POF cable is 100 mm.
- Power capacity
  - It is important that the devices in the optical network do not use more total power than you supply to the devices. Each device uses power and most devices do not have an independent power supply.

Note   Refer to the DCN installation and operation manual and use the DCN calculation tool for DCN network limits in general.

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applications around the world, from
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to businesses, schools and homes.

**Local authority
wireless approval**
Although DCN Wireless equipment
operates in a license-free band it is
subject to local certification
regulations. Please contact your
nearest Bosch representative to
check the situation in your country.