

Bosch DCN Wireless Discussion System

Data brochure



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Digital Congress Network - Next Generation	1
DCN Wireless Discussion System	1
DCN Wireless Discussion System	1
Introduction	3
Introduction	3
Examples	7
Example 1 - Discussion	7
Example 2 - Electronic Voting	8
Example 3 - Camera Control	9
Example 4 - Strong Combinations	10
Example 5 - Operator Control	11
Example 6 - Interpretation	12
Wireless Discussion Units	13
DCN-WD-D Wireless Discussion Unit	13
DCN-WDCS-D Wireless Discussion Unit with Channel Selector	15
DCN-WDD-D Wireless Dual Discussion Unit	17
DCN-WDDCS-D Wireless Discussion Unit with Dual Channel Selector	19
DCN-WDV-D Wireless Discussion Unit with Voting	21
DCN-WDVCS-D Wireless Discussion Unit with Voting and Channel Selector	23
DCN-MICS/L Pluggable Microphone Short/Long Stem	25
DCN-DISR Rims for Discussion Units	26
DCN-DISBCM Buttons Chairman (10 sets)	26
DCN-DISBDD Buttons Dual Use (10 sets)	27
DCN-WPS Power Supply for Wireless Discussion Units	27
Central Control Equipment	29
DCN-WAP Wireless Access Point	29
DCN-WCCU Wireless Central Control Unit	30
Battery Packs	33
DCN-WLIION-D Battery Pack for Wireless Discussion Units	33
DCN-WCH05 Charger for 5 Battery Packs	34
Accessories	35
DCN-WFCCCU Flight Case for CCU and WAP	35
DCN-RCWD10 Roller Case for 10 Wireless Discussion Units	36
DCN-FCWD10 Flight Case for 10 Wireless Discussion Units	37
DCN-UPTK Upgrade Toolkit	38
LBB 4416 Series Optical Network Cables	39
LBC 1259/00 Universal Floorstand	40
LBB 3441/10 Under the Chin Headphones	42
LBB 3442/00 Single Earphone	43
LBB 3443 Lightweight Headphones	44
Software	45
DCN-SWSMV Synoptic Microphone and Voting Software	45
LBB 4162/00 Automatic Camera Control	47
LBB 4187/00 Open Interface	47

DCN Wireless Discussion System



Features

- ▶ **Digital wireless discussion system**
- ▶ **Leading edge, future proof solution**
- ▶ **Set up quickly with no impact on location**
- ▶ **Award winning design**
- ▶ **Stable and secure digital communication**
- ▶ **Easily connect to other Bosch Congress products**

The Bosch DCN Wireless Discussion System offers organizations exceptional functionality and freedom.

Conferences and seminars in both small and large venues can now be set-up with the ultimate ease and flexibility.

Ordering Information

DCN-WCCU Wireless Central Control Unit

for all regions except North-America

DCN-WFCCU Flight Case for CCU and WAP

light grey, holds wireless central control unit(s), access point & cable

DCN-WCCU-UL Wireless Central Control Unit UL/CSA

for the North-America region

Introduction



Wireless Discussion System

Innovation

Bosch brings innovation to the congress world, with its new state-of-the-art and user-friendly Wireless Discussion System. Suitable for both small and large venues, the Bosch DCN Wireless Discussion System offers organizations unparalleled functionality and flexibility. Featuring an award-winning Wireless Access Point (WAP) that is easy to position, as well as separate battery packs for simple charging and changing, the DCN Wireless Discussion System is designed with the user in mind, whether that user is a system administrator, chairman or participant.

Maximum flexibility

Conferences and seminars can be set up with a great degree of freedom due to the Bosch DCN Wireless 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 System gives great support to conferences and seminars anywhere people meet.

Range of equipment

The Bosch DCN Wireless Discussion product line includes:

- Wireless Discussion Units
- Wireless Access Point (WAP)
- a central control unit
- congress control software
- information displays and installation equipment
- simultaneous interpretation and optional language distribution equipment

The system can be further complemented by external equipment such as PCs, monitors, power amplifiers, loudspeakers and printers, all of which are easily integrated into the DCN Wireless Discussion System.



Wireless Discussion System

Contribution equipment

Contribution equipment refers to the units that participants use to take part in a conference. Depending on the type of contribution unit used, participants can listen, speak, and take part in electronic voting. The wireless discussion units are designed for all kinds of gatherings and meetings and offer a high level of functionality, digital convenience, and distinctive styling. The basic discussion unit has a microphone with an on/off button and status indicators; more advanced units have dual discussion possibilities (for two participants) and voting functionality. All discussion units can be configured as a chairman unit.

Superb Sound and Speech Quality

The sound quality of the DCN Wireless System is first rate – up to 20 kHz. Each robust unit produces crystal-clear sound due to a very high signal-to-noise ratio. Units are also protected against interference from other mobile equipment using WiFi, Bluetooth or microwave signals. Being a mobile phone-proof system, participants can leave their mobile phones switched on during meetings without disrupting the discussion system signal.

Easy maintenance

Simple battery maintenance is essential for a wireless system. The Bosch DCN Wireless System ensures that battery power is available when needed. 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 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 Congress Control Software, an administrator can view the power consumption status of all active discussion units.

Secure and stable communication

All signals within the DCN Wireless System are digitally protected against tapping or eavesdropping. 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 WCCU 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.

Secure wireless communication between the WAP and the discussion units is in the 2.4 GHz band, which is license-free worldwide.

Central control equipment

The Bosch Wireless Central Control Unit (CCU) is the heart of the congress management system. The CCU can operate stand-alone to provide automatic conference control, or be administered by an operator via a PC if more extensive management is required. The CCU can control up to 150 discussion units (such as delegate, dual delegate and chairman units) and up to 95 DCN Next Generation wired units*. This gives the possibility to install a fixed wired installation, which is easy expandable by adding extra wireless units.

* DCN Discussion Units, DCN Concentus, DCN Interpreters, Desks or DCN Flush Mounts.

Fully automatic conference proceedings

In basic mode, the CCU automatically manages conference proceedings and does not require operator control. It provides basic microphone management, simultaneous interpretation with up to 32 high-quality audio channels including floor and voting facilities. This effectively allows unsupervised control of even large, international conferences.

Operator control via a PC

Although the CCU offers basic functionality automatically, there is extended functionality with operator control via a PC. Specially developed Bosch Congress Control Software is easy to install and gives precise control over the Bosch DCN Wireless Discussion System. Highly user-friendly, the discussion unit icons of the synoptic control interface are easily assigned to various operating functions. Operators can view on/off status of each unit, the identity of its user,

and many other key properties. The software has a Windows™ look and feel and allows on-the-spot coverage testing of whether all the units are correctly receiving the signal. If voting units are used, results can be shown on a large display screen and logged if desired. The software is optimized for touch screens, and features a multi-lingual graphical user interface (GUI). If the PC fails, the CCU will revert to a default operation enabling conference proceedings to continue.

Advanced audio coupling

It is possible to extract and insert both digital (AES/EBU or SPDIF) and analog audio. Other advanced audio coupling techniques include CobraNet™, a system which allows distribution of many real-time, high-quality digital audio channels over an Ethernet network using CAT5 cables. Made up of software, hardware and a network protocol, CobraNet™ makes it easy to distribute audio in buildings and connect the Bosch DCN Wireless Discussion System to other audio CobraNet™ compatible devices such as Audio Recorders and Audio Mixers.

Simultaneous interpretation and language distribution equipment

Simultaneous interpretation is supported via the Bosch Interpreter desks. The DCN Wireless Discussion System supports simultaneous interpretation via 10 language distribution channels. The Bosch Wireless Discussion Units with built-in channel selectors enable the participants to receive the language channel of their choice.

In case more than 10 language distribution channels are in use (maximum 32), the channels above ten, are distributed throughout the rest of the system, so they can be heard via wired units, or via the Integrus infrared receivers.

Integrus, a digital and wireless infrared language distribution system, is connected to the optical network and enables sound to be distributed reliably via the Integrus infrared digital transmitter. Equipped with individual Integrus receivers, participants can receive their language channel while moving around freely, without any loss of contact or quality.

Interpreter Desk for multi-lingual sessions

The Bosch DCN Next Generation Interpreter Desk accommodates up to 32* high-quality audio channels, all with an audio-bandwidth of 20 kHz. Up to six desks can be installed per interpreter booth. Each desk can be used stand-alone or as part of a system. When used stand-alone, the desks built-in microprocessor is manually programmed to allocate language channels, channel routing and interlocks.

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



Delegate with Wireless Discussion Unit

Integrus IR digital technology

Integrus incorporates 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.

Information screens

Information screens are ideal for quick and effective information distribution to many conference participants. A display shows the image of the current speaker, who has the floor, and who has a request to speak. Displays also show results when voting is used.

Automatic camera control

The system can automatically show an image of the current speaker on monitors or 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 Auto-Dome cameras are ideal for this application and especially useful when video conferencing between sites.

Camera control ensures that participants always have appropriate details on the current speaker.

Storage and transport

In many situations easy storage or transport is required for a DCN Wireless system. Flight cases with a robust construction with reinforced corners are designed, the shaped foam interior simplifies packing. Some flight cases are designed to store the system as compact as possible, while others offer the most comfortable way of storage to the user. Have a look through this data book to see the varieties.

Example 1 - Discussion



Shopping List

1. Wireless Discussion Unit
2. Wireless Dual Discussion Unit
4. Wireless Central Control Unit
5. Wireless Access Point
6. Removable Battery Pack / Battery Pack Charger
8. DCN Control Software

The DCN Wireless Discussion System is easy installed, rearranged and operated with virtually no impact on the integrity of the location. A basic discussion unit allows a delegate to talk and listen, while a dual discussion unit is a cost-effective solution to simultaneously serve two delegates. The chairman can overrule other delegates with a single touch of a button.

Example 2 - Electronic Voting

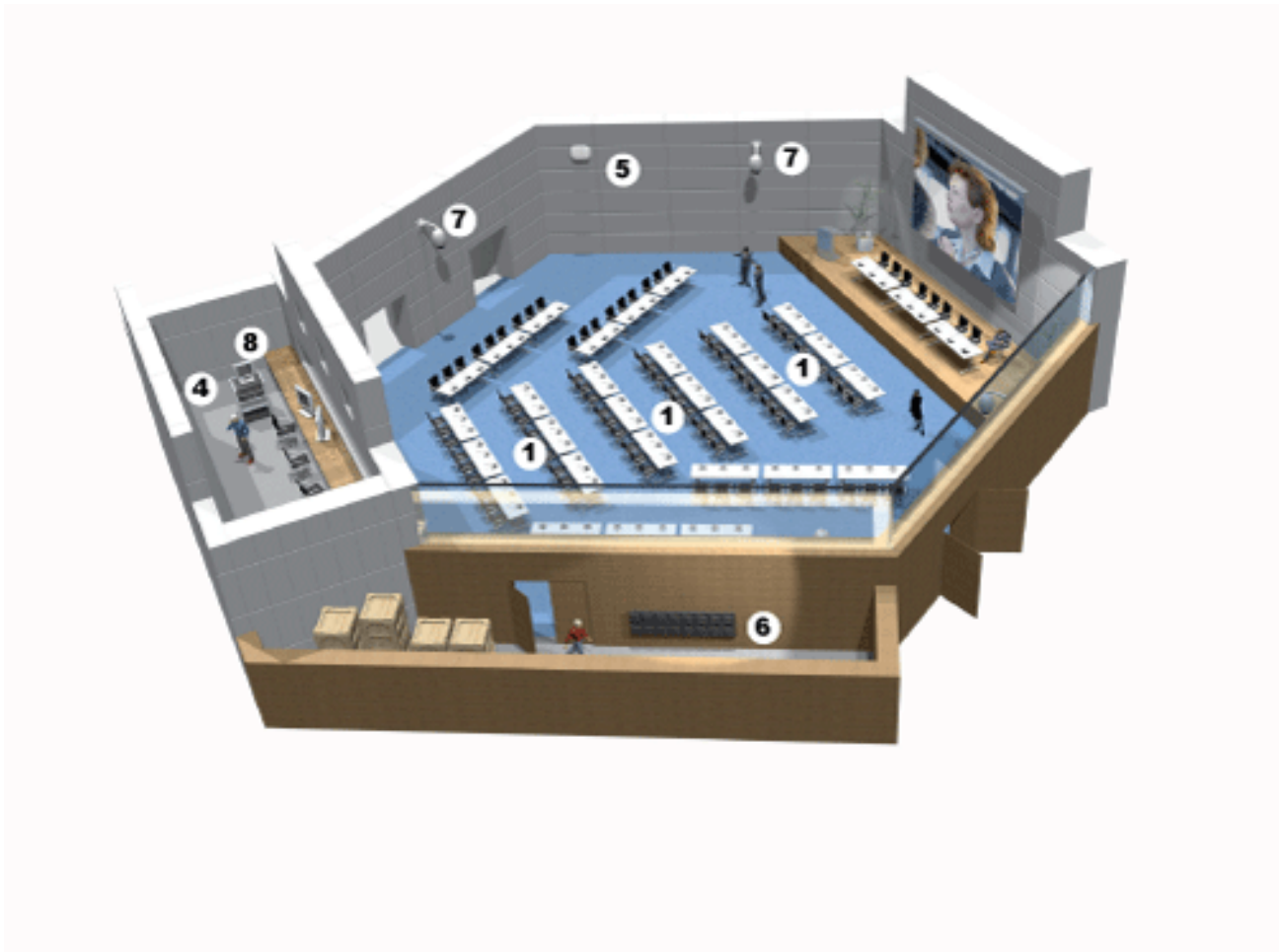


Shopping List

3. Wireless Discussion Unit with Voting
4. Wireless Central Control Unit
5. Wireless Access Point
6. Removable Battery Pack / Battery Pack Charger
8. DCN Control Software

Discussion units with voting functionality can be used in the DCN Wireless Discussion System for interactive situations such as polling and voting.

Example 3 - Camera Control

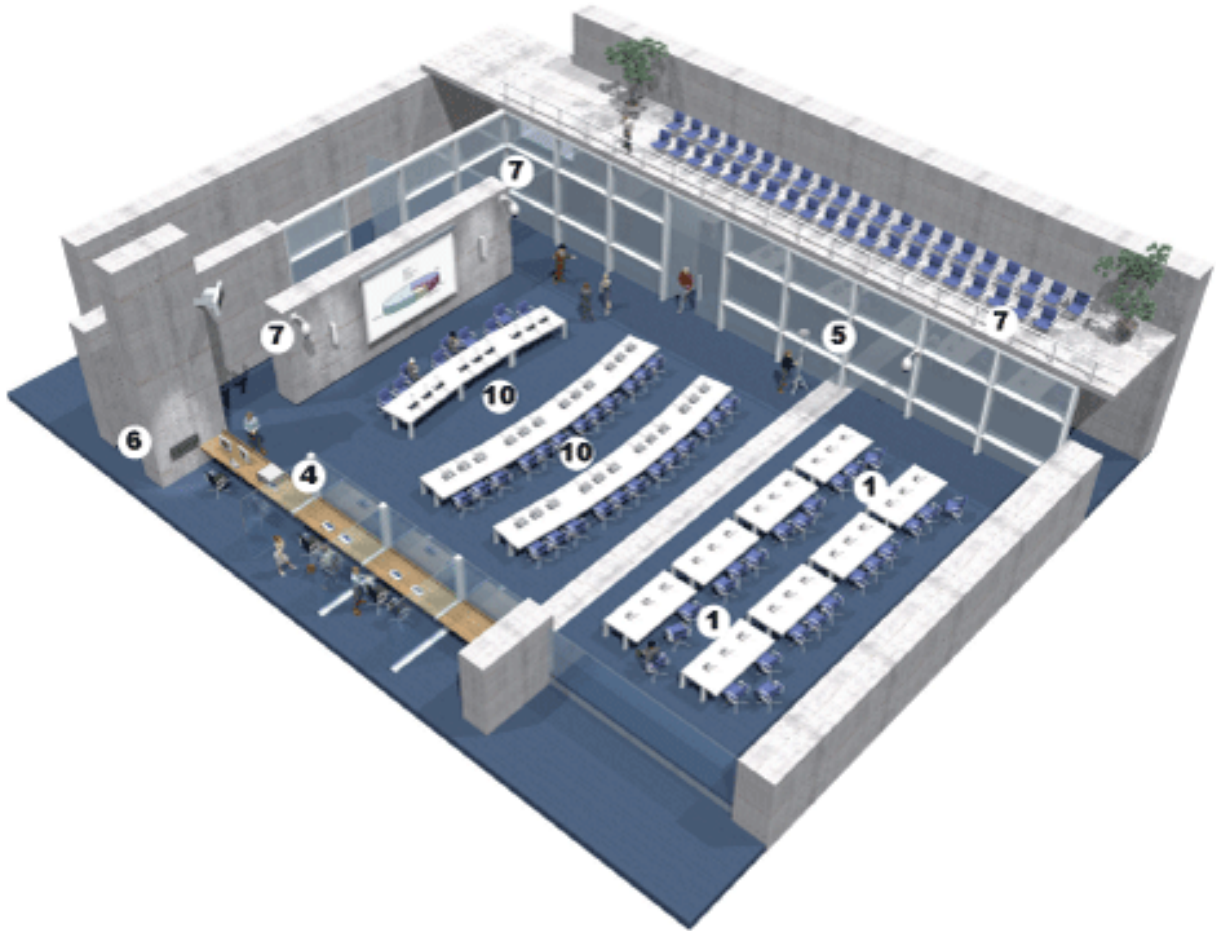


Shopping List

1. Wireless Discussion Unit
4. Wireless Central Control Unit
5. Wireless Access Point
6. Removable Battery Pack / Battery Pack Charger
7. Modular Autodome Camera
8. DCN Control Software

The system can automatically show an image of the current speaker on monitors or projection screens. Delegate information appears together with the image. For an 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.

Example 4 - Strong Combinations



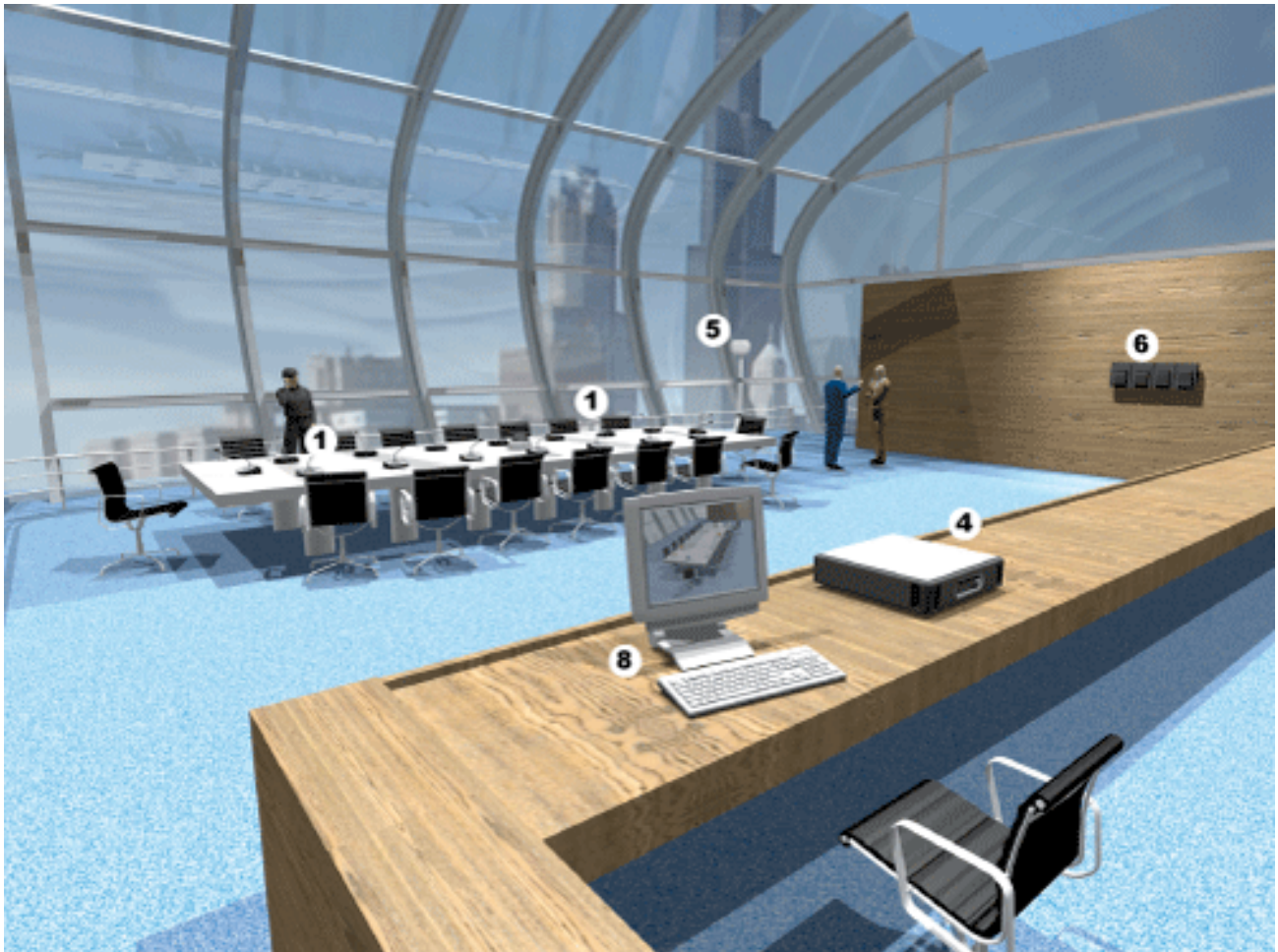
Shopping List

1. Wireless Discussion Unit
4. Wireless Central Control Unit
5. Wireless Access Point
6. Removable Battery Pack / Battery Pack Charger
7. Modular Autodome Camera
10. DCN Next Generation Wired Discussion System

A highly mobile and versatile solution, the DCN Wireless Discussion System is a fast and efficient way to add extra capacity to practically any wired conference facility.

The DCN Wireless Discussion System can be combined with up to 95 DCN Next Generation wired units, including discussion units, Concentus units, interpreter desks and flush-mounted units.

Example 5 - Operator Control



Shopping List

1. Wireless Discussion Unit
4. Wireless Central Control Unit
5. Wireless Access Point
6. Removable Battery Pack / Battery Pack Charger
8. DCN Control Software

Intuitive and user-friendly Conference Control software allows an operator a great degree of system control. The operator can control the microphones during a meeting, and start or stop voting sessions.

The operator can also monitor the battery status of every individual wireless discussion unit, and confirm that a unit correctly receives a signal.

Example 6 - Interpretation



Shopping List

1. Wireless Discussion Unit
5. Wireless Access Point
7. Modular Autodome Camera
- 9a. DCN Interpreter Desk
10. DCN Next Generation Wired Discussion System

Interpreters, who do simultaneous interpretation, are located in soundproof booths equipped with Bosch interpreter desks.

The DCN wireless discussion system, which has a 10-language capacity, allows delegates to follow a meeting in their preferred language.

If more than 10-languages are in use, the extra languages are distributed through the wired part of the DCN system and, if applicable, via the Integrus digital infrared language distribution system.

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.

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 other wireless equipment such as mobile phones, Bluetooth devices and WiFi networks.

Wireless communication means extra security considerations. The DCN Wireless system and discussion units therefore feature multiple-layer protection to prevent eavesdropping and unauthorized access. Digital protection ensures the information within the system remains confidential.

The DCN-WD-D Wireless 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 which are available in short and long stem versions (DCN-MICS and DCN-MICL, to be ordered separately).

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 are available in a range of colors to match the interior (DCN-DISR, to be ordered separately).

The unit can be used as a delegate unit or as a chairman unit (DCN-DISBCM chairman buttons to be ordered separately).

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.

Functions

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)

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

Accessories**DCN-MICS Pluggable Short Microphone**

length 310 mm (12.2 inch)

DCN-MICL Pluggable Long Microphone

length 480 mm (18.9 inch)

DCN-DISR-SR Rim High Gloss Silver (10 pcs)

silver, high gloss, set of 10

DCN-DISR-SR Rim Silver (10 pcs)

silver, set of 10

DCN-DISR-D Rim Dark (10 pcs)

dark, set of 10

DCN-DISRMH Rim Metal High Gloss (10 pcs)

metal, high gloss, set of 10

DCN-DISRMS Rim Metal Semi Gloss (10 pcs)

metal, semi gloss, set of 10

DCN-DISBCM Buttons Chairman (10 sets)

set of 10

DCN-WLIION-D Battery Pack for Wireless Discussion Units

charcoal color, lithium-ion, 7.2 VDC, 4800 mAh

DCN-WPS Power Supply for Wireless Discussion Units

not approved for all countries

DCN-FCWD10 Flight Case for 10 Wireless Discussion Units

light grey, holds 10 wireless discussion units and 2 charging units

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 other wireless equipment such as mobile phones, Bluetooth devices and WiFi networks.

Security

Wireless communication means extra security considerations. The DCN Wireless system and discussion units therefore feature multiple-layer protection to prevent eavesdropping and unauthorized access. Digital protection 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

Rims (DCN-DISR, to be ordered separately) are available in a range of colors to match the interior.

The unit can be used as a delegate unit or as a chairman unit (DCN-DISBCM chairman buttons to be ordered separately).

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)

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

Accessories

DCN-MICS Pluggable Short Microphone

length 310 mm (12.2 inch)

DCN-MICL Pluggable Long Microphone

length 480 mm (18.9 inch)

DCN-DISR-SR Rim High Gloss Silver (10 pcs)

silver, high gloss, set of 10

DCN-DISR-SR Rim Silver (10 pcs)

silver, set of 10

DCN-DISR-D Rim Dark (10 pcs)

dark, set of 10

DCN-DISRMH Rim Metal High Gloss (10 pcs)

metal, high gloss, set of 10

DCN-DISRMS Rim Metal Semi Gloss (10 pcs)

metal, semi gloss, set of 10

Ordering Information

DCN-DISBCM Buttons Chairman (10 sets)

set of 10

DCN-WLIION-D Battery Pack for Wireless Discussion Units

charcoal color, lithium-ion, 7.2 VDC, 4800 mAh

DCN-WPS Power Supply for Wireless Discussion Units

not approved for all countries

DCN-FCWD10 Flight Case for 10 Wireless Discussion Units

light grey, holds 10 wireless discussion units and 2 charging units

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.

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 other wireless equipment such as mobile phones, Bluetooth devices and WiFi networks.

Wireless communication means extra security considerations. The DCN Wireless system and discussion units therefore feature multiple-layer protection to prevent eavesdropping and unauthorized access. Digital protection ensures the information within the system remains confidential.

The DCN-WDD-D Wireless Dual 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 which are available in short and long stem versions (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 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.

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).

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.

Functions

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.

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

Accessories

DCN-DISBDD Buttons Dual Use (10 sets)

set of 10

DCN-MICS Pluggable Short Microphone

length 310 mm (12.2 inch)

DCN-MICL Pluggable Long Microphone

length 480 mm (18.9 inch)

DCN-DISRH-SR Rim High Gloss Silver (10 pcs)

silver, high gloss, set of 10

DCN-DISR-SR Rim Silver (10 pcs)

silver, set of 10

DCN-DISR-D Rim Dark (10 pcs)

dark, set of 10

DCN-DISRMH Rim Metal High Gloss (10 pcs)

metal, high gloss, set of 10

DCN-DISRMS Rim Metal Semi Gloss (10 pcs)

metal, semi gloss, set of 10

DCN-DISBCM Buttons Chairman (10 sets)

set of 10

DCN-WLIION-D Battery Pack for Wireless Discussion Units

charcoal color, lithium-ion, 7.2 VDC, 4800 mAh

DCN-WPS Power Supply for Wireless Discussion Units

not approved for all countries

DCN-FCWD10 Flight Case for 10 Wireless Discussion Units

light grey, holds 10 wireless discussion units and 2 charging units

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 other wireless equipment such as mobile phones, Bluetooth devices and WiFi networks.

Security

Wireless communication means extra security considerations. The DCN Wireless system and discussion units therefore feature multiple-layer protection to prevent eavesdropping and unauthorized access. Digital protection 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

Rims (DCN-DISR, to be ordered separately) are available in a range of colors to match the interior.

The unit can be used as a delegate unit or as a chairman unit (DCN-DISBCM chairman buttons to be ordered separately).

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.

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

Accessories

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

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

DCN-DISR-SR Rim High Gloss Silver (10 pcs)
silver, high gloss, set of 10

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

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

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

Ordering Information

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

DCN-DISBCM Buttons Chairman (10 sets)
set of 10

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

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

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

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.

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 other wireless equipment such as mobile phones, Bluetooth devices and WiFi networks.

Wireless communication means extra security considerations. The DCN Wireless system and discussion units therefore feature multiple-layer protection to prevent eavesdropping and unauthorized access. Digital protection ensures the information within the system remains confidential.

The DCN-WDV-D Wireless 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. The yellow indicator rings around the voting buttons confirm vote selections.

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.

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).

The unit can be used as:

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

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.

Functions

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)

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

Accessories

DCN-DISBDD Buttons Dual Use (10 sets)

set of 10

DCN-MICS Pluggable Short Microphone

length 310 mm (12.2 inch)

DCN-MICL Pluggable Long Microphone

length 480 mm (18.9 inch)

DCN-DISRH-SR Rim High Gloss Silver (10 pcs)

silver, high gloss, set of 10

DCN-DISR-SR Rim Silver (10 pcs)

silver, set of 10

DCN-DISR-D Rim Dark (10 pcs)

dark, set of 10

DCN-DISRMH Rim Metal High Gloss (10 pcs)

metal, high gloss, set of 10

DCN-DISRMS Rim Metal Semi Gloss (10 pcs)

metal, semi gloss, set of 10

DCN-DISBCM Buttons Chairman (10 sets)

set of 10

DCN-WLIION-D Battery Pack for Wireless Discussion Units

charcoal color, lithium-ion, 7.2 VDC, 4800 mAh

DCN-WPS Power Supply for Wireless Discussion Units

not approved for all countries

DCN-FCWD10 Flight Case for 10 Wireless Discussion Units

light grey, holds 10 wireless discussion units and 2 charging units

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 other wireless equipment such as mobile phones, Bluetooth devices and WiFi networks.

Security

Wireless communication means extra security considerations. The DCN Wireless system and discussion units therefore feature multiple-layer protection to prevent eavesdropping and unauthorized access. Digital protection 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

Rims (DCN-DISR, to be ordered separately) are available in a range of colors to match the interior.

The unit can be used as a delegate unit or as a chairman unit (DCN-DISBCM chairman buttons to be ordered separately).

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)

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-WDVCSD Wireless Discussion Unit with Voting and Channel Selector

Voting, pluggable microphone, dark base; microphone, rims and batteries to be ordered separately

Accessories

DCN-MICS Pluggable Short Microphone

length 310 mm (12.2 inch)

DCN-MICL Pluggable Long Microphone

length 480 mm (18.9 inch)

DCN-DISR-SR Rim High Gloss Silver (10 pcs)

silver, high gloss, set of 10

DCN-DISR-SR Rim Silver (10 pcs)

silver, set of 10

Ordering Information

DCN-DISR-D Rim Dark (10 pcs)

dark, set of 10

DCN-DISRMH Rim Metal High Gloss (10 pcs)

metal, high gloss, set of 10

DCN-DISRMS Rim Metal Semi Gloss (10 pcs)

metal, semi gloss, set of 10

DCN-DISBCM Buttons Chairman (10 sets)

set of 10

DCN-WLIION-D Battery Pack for Wireless Discussion Units

charcoal color, lithium-ion, 7.2 VDC, 4800 mAh

DCN-WPS Power Supply for Wireless Discussion Units

not approved for all countries

DCN-FCWD10 Flight Case for 10 Wireless Discussion Units

light grey, holds 10 wireless discussion units and 2 charging units

DCN-MICS/L Pluggable Microphone Short/Long Stem



Ordering Information

DCN-MICS Pluggable Short Microphone

length 310 mm (12.2 inch)

DCN-MICL Pluggable Long Microphone

length 480 mm (18.9 inch)

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 panes 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 310 mm (12.2 in)

DCN-MICL 480 mm (18.9 in)

Weight

DCN-MICS 100 g (0.22 lb)

DCN-MICL 115 g (0.25 lb)

Color top Silver (RAL 9022)

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, set of 10

DCN-DISR-SR Rim Silver (10 pcs)

silver, set of 10

DCN-DISR-D Rim Dark (10 pcs)

dark, set of 10

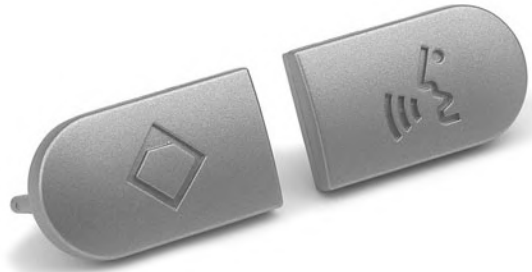
DCN-DISRMH Rim Metal High Gloss (10 pcs)

metal, high gloss, set of 10

DCN-DISRMS Rim Metal Semi Gloss (10 pcs)

metal, semi gloss, set of 10

DCN-DISBCM Buttons Chairman (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.

Technical Specifications

Mechanical

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

Ordering Information

DCN-DISBCM Buttons Chairman (10 sets)

set of 10

DCN-DISBDD Buttons Dual Use (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.

Technical Specifications

Mechanical

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

Ordering Information

DCN-DISBDD Buttons Dual Use (10 sets)
set of 10

DCN-WPS Power Supply for Wireless Discussion Units



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).

Technical Specifications

Electrical

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

Mechanical

Dimensions (H x W x D)	65 x 57 x 28 mm (25.6 x 22.4 x 11 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 all countries

DCN-WAP Wireless Access Point



Features

- ▶ **Compact and elegant (iF design award winner 2006)**
- ▶ **Single cable for power and communication**
- ▶ **Mountable on ceiling, wall, or floor stand for best reception**
- ▶ **Secure, digitally protected, wireless communication**
- ▶ **Typical range 30 m (100 ft)**

The DCN Wireless Access Point (WAP) links the central control unit (WCCU) and the wireless discussion units. To ensure security, data exchange between the WAPs and the wireless discussion units is digitally protected.

The WAP is linked to the WCCU 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.

Secure wireless communication between the WAP and the discussion units is in the 2.4 GHz band, which is license-free worldwide.

The WAP unit's 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)

Installation/Configuration Notes



DCN-WAP mounted on a LBC 1259/00 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 907 g (2 lb)
without bracket 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

Accessories

LBC 1259/00 Universal Floorstand

Lightweight aluminum construction, foldable, M10 x 12 reducer flange.

DCN-WFCCU Flight Case for CCU and WAP

light grey, holds wireless central control unit(s), access point & cable

DCN-WCCU Wireless Central Control Unit



Features

- ▶ **Optical network interface for easy connection**
- ▶ **Single branch or redundant loop networks**
- ▶ **Control for up to 150 wireless discussion units**
- ▶ **Additional control for up to 95 DCN Next Generation wired units**
- ▶ **Serial ports for PC and camera control**

The DCN-WCCU is the brain of the DCN Wireless system. It provides control for up to 150 wireless discussion units and 95 DCN Next Generation wired units.

The WCCU uses Bosch's proprietary optical network for easy connection to the wireless access point and other Bosch congress equipment. Networks can be set-up in single branch or redundant loop configurations, depending on the installed equipment.

For connection to DCN-IDEK interpreter desks, the WCCU has two outlet sockets for DCN trunk-cables.

In combination with a PC and the Conference Control Software (DCN-SWSMV), the WCCU brings greater sophistication to conference control.

Functions

- Optical network to:
 - couple the WCCU to the WAP
 - allow a variety of audio contribution and distribution facilities (can connect to other Bosch congress equipment, such as: Integrus transmitter for infra-red language distribution; Audio Expanders, and CobraNet™ interfaces)
- DCN trunk to connect to DCN Next Generation units, such as; DCN Discussion Units, DCN Concentus, DCN interpreter desks or DCN Flush Mounting Units
- Basic microphone management facilities
- Three operational microphone modes:
 - Open: microphone button control with request-to-speak (Auto)

- Override: microphone button with override of activated microphones (FIFO)
- PTT: Push To Talk (push and hold button to speak)
- Up to 4 open microphones (3 for delegates and 1 for the chairman)
- Simultaneous interpretation function with up to 10 language channels, plus one floor channel via the DCN Wireless Discussion System. In case more than 10 language distribution channels are in use (maximum 32), the channels above ten, are distributed throughout the rest of the system, so they can be heard via wired units, or via Integrus infrared receivers
- Voting control for parliamentary voting procedure when using PC and DCN-SWSMV software
- Each connected wireless discussion unit (DCN-WDCS-D, DCN-WDDCS-D and DCN-WDVCS-D) has an integrated simultaneous interpretation function with up to 10 language selection channels
- Basic intercom function
- Automatic camera control
- Extended conference facilities when using PC and DCN-SWSMV software
- Adjustable sensitivity for audio inputs and outputs
- Audio insertion facility to connect external audio processing devices or telephone couplers
- Configuration of WCCU and system via a display and a single rotary push button
- Each WCCU can be assigned a unique name by the installer for easy identification
- VU meter readings of audio inputs and outputs (monitored using a headphone)
- 19" (2U) housing for table top or rack mounting
- Handgrips for easy transport

Controls and Indicators

At the front

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

At the rear

- Four red LED overload indicators (2 for the DCN network outputs, 2 for the optical connections)

Interconnections

- Euro mains socket with built-in fuse
- Two DCN outlet sockets to connect DCN-IDEK interpreter desks, plus extension power supplies. Each socket is protected against short-circuit (2 x six-pole circular sockets)
- Two optical network connectors for a Wireless Access Point, Audio Expanders or Integrus TX
- Two three-pole XLR balanced audio line inputs with optional 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 headphone output 3.5 mm (0.14") stereo
- Two RS-232 serial data connectors for controlling PC and diagnostics

Parts Included

Quantity Component

1	DCN-WCCU Wireless Central Control Unit
1	System installation and user instruction CD-ROM
1	Mains cable, 1.7 m (5.5 ft)
plus:	19" rack mounting brackets, detachable feet and mounting accessories

Technical Specifications

Electrical

Supply voltage	100 - 240 VAC +/- 10 % 50 – 60 Hz
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

Ordering Information

DCN-WCCU Wireless Central Control Unit

for all regions except North-America

DCN-WFCCU Flight Case for CCU and WAP

light grey, holds wireless central control unit(s), access point & cable

DCN-WCCU-UL Wireless Central Control Unit UL/CSA

for the North-America region

Accessories

LTC 0455/51 Color Camera

1/3-inch, 540 TVL, PAL, DSP, 230 VAC, 50 Hz

LTC 8200/50 Allegiant Video Switcher

rated voltage 220 to 240 VAC (50/60 Hz)

LTC 0455/61 Color Camera

1/3-inch, 540 TVL, NTSC, DSP, 120 VAC, 60 Hz

LTC 8200/60 Allegiant Video Switcher

rated voltage 120 VAC (50/60 Hz)

LTC 0455/11 Color Camera

1/3-inch, 540 TVL, PAL, DSP, 12 VDC/24 VAC, 50 Hz

LTC 0455/21 Color Camera

1/3-inch, 540 TVL, NTSC, DSP, 12 VDC/24 VAC, 60 Hz

LTC 8555/00 Compact Full-function Keyboard

variable speed joystick

G3ACPW2CW Color AutoDome Kit

18x color, indoor pendant, wall mount, clear dome, white, 230 VAC, 50 Hz

LTC 5136/51 Autodome Controller

with 16 outputs for AutoDomes or for Allegiant Receiver/Drivers units, 230 VAC, 50/60 Hz

G3AC55C Color AutoDome Kit

18x color, indoor drop ceiling, clear dome, 24 VAC, 50 Hz

LTC 5136/61 Autodome Controller

with 16 outputs for AutoDomes or for Allegiant Receiver/Drivers units, 110 VAC, 50/60 Hz

DCN-WLIION-D Battery Pack for Wireless Discussion Units



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

Accessories

DCN-WCH05 Charger for 5 Battery Packs

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

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-WFCCU 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
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Ordering Information

DCN-WFCCU Flight Case for CCU and WAP

light grey, holds wireless central control unit(s), access point & cable

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, holds 10 wireless discussion units and 2 charging units

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, holds 10 wireless discussion units and 2 charging units

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 (CD-ROM with software is included).

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

Safety according	IEC 60950
EMC according	EN 55022 ITE
	EN 55024 ITE

Parts Included

Quantity	Components
1	USB connection cable
1	WDU connection cable
1	CD-ROM PC installation software

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

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).

Ordering Information

LBB 4416/00 Network Cable 100m

without the network connectors fitted

LBB 4418/00 Cable Connector Tool Kit**LBB 4417/00 Set Network Connectors (20 pcs)**

20 connectors that can be used with the network cable.

LBB 4416/01 Network Cable Assembly 0.5m

with the network connectors fitted

LBB 4416/02 Network Cable Assembly 2m

with the network connectors fitted

LBB 4416/05 Network Cable Assembly 5m

with the network connectors fitted

LBB 4416/10 Network Cable Assembly 10m

with the network connectors fitted

LBB 4416/20 Network Cable Assembly 20m

with the network connectors fitted

LBB 4416/50 Network Cable Assembly 50m

with the network connectors fitted

LBC 1259/00 Universal Floorstand



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 1259/00 is suited to a wide range of applications where a secure yet transportable mounting solution is required.

Functions

Adjustable and safe

The LBC 1259/00 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.

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 1259/00). 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)

Installation/Configuration Notes



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

Parts Included

Quantity	Component
1	LBC 1259/00 Universal Floorstand
1	36 mm (1.42 in) reducer flange with (M10 x 12) threaded pin
1	M10 securing knob for WAP mounting bracket

Technical Specifications

Mechanical

Length

standing	1.375 to 2.185 m (54 to 86 in)
folded	1.20 m (47 in)

Width

legs extended	980 mm (38.6 in)
legs folded	130 mm (5.1 in)

Weight	3.5 kg (7.7 lb)
--------	-----------------

Max. load	50 kg (110.2 lb)
-----------	------------------

Material	Aluminum
----------	----------

Tube diameter	36 mm (1.42 in)
---------------	-----------------

Thread	1/2" Whitworth
--------	----------------

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
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Ordering Information

LBC 1259/00 Universal Floorstand

Lightweight aluminum construction, foldable, M10 x 12 reducer flange.

LBB 3441/10 Under the Chin Headphones



Ordering Information

LBB 3441/10 Under the Chin Headphones

Lightweight stereo headphones.

Accessories

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

Features

- ▶ Lightweight stereo headphones
- ▶ Ergonomic design for use under the chin
- ▶ Replaceable ear tips
- ▶ Right-angled, gold-plated jack plug

Functions

Interconnections

- 1.2 m (4 ft) cable terminated with 3.5 mm (0.14 in) right-angled 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

LBB 3442/00 Single Earphone

Ordering Information

LBB 3442/00 Single Earphone
Lightweight single earphone.



Features

- ▶ **Lightweight single earphone**
- ▶ **Left or right ear use**

Functions

Interconnections

- 1.2 m (4 ft) cable terminated with 3.5 mm (0.14 in) jack plug

Certifications and Approvals

Region	Certification
Europe	CE

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

LBB 3443 Lightweight Headphones



Mechanical

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

Ordering Information

LBB 3443/00 Lightweight Headphones

LBB 3443/10 Lightweight Headphones Durable Cable

Accessories

LBB 3443/50 Foam Ear Pads for LBB 3443 (50 pairs)
replacement foam ear pads

HDP-LWSP Solid Ear Pads for LBB 3443 (50 pairs)
washable replacement ear pads

Features

- ▶ Lightweight with high quality sound reproduction
- ▶ Replaceable ear pads
- ▶ Available with normal or durable cable
- ▶ Separate available solid washable ear pads

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

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

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:

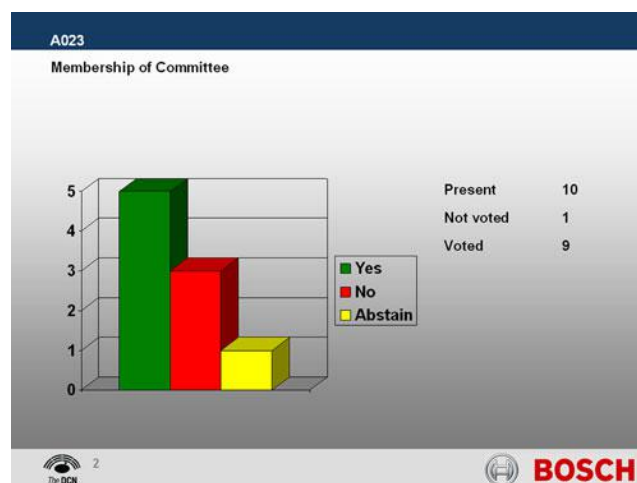
- Assignment mode allows you to assign names to microphone icons. The positions of the icons on the room layout can also be changed using the standard windows 'drag & drop'.
- Microphone control mode allows you to observe and control the state of each individual microphone. Microphones can be switched 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®

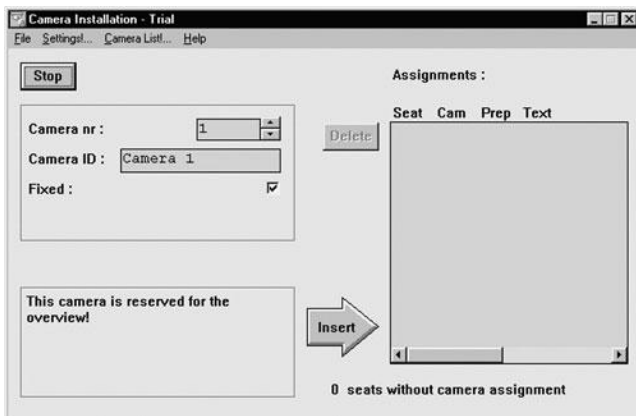
Installation/Configuration Notes

Used in combination with a DCN Wireless or DCN Next Generation system.

Ordering Information

DCN-SWSMV Synoptic Microphone and Voting Software

LBB 4162/00 Automatic Camera Control



The DCN Next Generation Automatic Camera Control software interfaces DCN Next Generation congress 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 congress and conference proceedings.

Ordering Information

LBB 4162/00 Stand-Alone Automatic Camera Control
for systems without PC control

LBB 4187/00 Open Interface

The DCN Next Generation Open Interface software allows remote control of selected DCN Next Generation functions via third party equipment and control software. Control data exchange between DCN Next Generation and the remote control device or system is carried out via an RS232 port on the CCU or via Ethernet on the NCO.

Ordering Information

LBB 4187/00 Open Interface

D

DCN Wireless Discussion System	1
DCN-DISBCM Buttons Chairman (10 sets)	26
DCN-DISBDD Buttons Dual Use (10 sets)	27
DCN-DISR Rims for Discussion Units	26
DCN-FCWD10 Flight Case for 10 Wireless Discussion Units	37
DCN-MICS/L Pluggable Microphone Short/Long Stem	25
DCN-RCWD10 Roller Case for 10 Wireless Discussion Units	36
DCN-SWSMV Synoptic Microphone and Voting Software	45
DCN-UPTK Upgrade Toolkit	38
DCN-WAP Wireless Access Point	29
DCN-WCCU Wireless Central Control Unit	30
DCN-WCH05 Charger for 5 Battery Packs	34
DCN-WDCS-D Wireless Discussion Unit with Channel Selector	15
DCN-WD-D Wireless Discussion Unit	13
DCN-WDDCS-D Wireless Discussion Unit with Dual Channel Selector	19
DCN-WDD-D Wireless Dual Discussion Unit	17
DCN-WDVCS-D Wireless Discussion Unit with Voting and Channel Selector	23
DCN-WDV-D Wireless Discussion Unit with Voting	21
DCN-WFCCCU Flight Case for CCU and WAP	35
DCN-WLIION-D Battery Pack for Wireless Discussion Units	33
DCN-WPS Power Supply for Wireless Discussion Units	27

E

Example 1 - Discussion	7
Example 2 - Electronic Voting	8
Example 3 - Camera Control	9
Example 4 - Strong Combinations	10
Example 5 - Operator Control	11
Example 6 - Interpretation	12

I

Introduction	3
--------------	---

L

LBB 3441/10 Under the Chin Headphones	42
LBB 3442/00 Single Earphone	43
LBB 3443 Lightweight Headphones	44
LBB 4162/00 Automatic Camera Control	47
LBB 4187/00 Open Interface	47
LBB 4416 Series Optical Network Cables	39
LBC 1259/00 Universal Floorstand	40

A Tradition of Quality and Innovation

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Bosch Security Systems proudly offers a wide range of security, safety, communications and sound solutions that are relied upon every day in applications around the world, from government facilities and public venues to businesses, schools and homes.



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