

MCW-D 531

Delegate Microphone Unit

Order # 486.426

MCW-D



FEATURES

- Fully digital audio and control
- Revolutio Microphone Array Technology
- Corridor characteristic
- Direct Sequence Spread Spectrum (DSSS) provides high immunity from interference and unauthorised listening
- Wireless transmission with integrated transmitting/ receiving antenna (antenna diversity) in the 2.4 GHz frequency band which is approved world-wide
- Digitally encoded audio signals prevent unauthorised listening (128 bit encryption)
- Integrated two-way speakers
- Microphone button for switching the microphone on and off and requesting to speak
- LED next to the microphone button and LED strips on both sides of the housing indicate that the participant is requesting to speak or the microphone unit is in ready-to-talk mode
- Charging contacts
- Power on LED on the rear
- Mini stereo jack (3.5 mm) as documentation output for the connection of recorders, PCs with the steno-s recording software etc.
- High-quality aluminium housing with non-glare, and scratch-resistant Nextel® finish (on the rear) and touch button (on the front)
- The following parameters can be programmed: loudspeaker level, auto-off behaviour, voice-controlled activation
- The loudspeaker is turned off when the microphone is activated
- Auto-Off function when nobody speaks into the microphone
- Microphone unit can be programmed by using the configuration software with the control unit
- APO function for Automatic Power OFF when the control unit is in the stand-by mode or switched off
- Processor-controlled charging electronics to prevent the "memory effect" of the battery
- Reliable charging electronics ensure immediate use of the microphone units
- Maximum charging time of 3.5 hours when the battery (NiMH) is completely empty
- Operating time approx. 30 hours

DESCRIPTION

The MCW-D 531 delegate microphone unit provides a microphone button in the housing with which the participant can switch the microphone on or off.

The Revoluto microphone array technology with integrated microphone capsules provides a so-called corridor characteristic which ensures a wide range of good voice quality. The speaker can move freely, i.e. can stand up or sit down, can move his/her head and move towards or away from the microphone unit.

With the **A**utomatic **C**hannel **A**llocation function (ACA) the transmitting channels of the microphone units are allocated automatically. When the microphone button is pressed in the manual operating mode, the request-to-talk is received by the control unit (a possible external dual colour LED will illuminate red). Then the control unit checks which one of the available receiving channels is free. Then the control unit informs the microphone unit which channel it should use for transmitting. When the channel of the microphone unit is set and checked by the control unit, the microphone is switched on. The ready-to-talk status of the microphone is indicated by the red LED strips at both sides of the housing. In the request-to-talk mode of the discussion system the request-to-talk is received, but the microphone is not yet released. The red flashing LED indicates that the request-to-talk has been received. The microphone is released by the operator at the PC by using the "MCW-D 50 Conference" software or a media control system. When the microphone button is pressed once again, the delegate clears his/her request-to-talk.

Depending on the configuration with the "MCW-D 50 Conference" software the following operating modes are available:

Override: the first microphone is switched off, when the maximum number of switched on microphones is exceeded.

Voice activation: the microphone is switched on, when someone speaks into it.

Push-To-Talk: the microphone button is held down, while the participant is speaking.

The integrated loudspeaker reproduces the audio signal of the whole conference system. Depending on the audio signal routing in the control unit the loudspeaker can reproduce other audio signals such as a wireless microphone in the auditorium.

The parameters of the microphone unit are adjusted via PC by using the "MCW-D 50 Conference" software. The parameters are set for all microphone units.

If a participant forgets to switch off his/her microphone and if nobody speaks into the microphone, the "Auto-Off" function switches the microphone off. The time when the "Auto-Off" function will be activated and the sensitivity can be configured.

The volume of the loudspeaker is adjusted and can be controlled with the MCW-D 50 control unit or a media control system.

Each microphone unit has its own address. An existing system can be complemented at any time.

The DSSS-transmission provides high immunity against unauthorised listening. In addition to this, a conference system including the appropriate microphone units can be protected with a code. A microphone unit that does not have the correct code will be identified by the control unit and switched off immediately.

The integrated rechargeable battery allows an operation of the microphone unit for up to 30 hours depending on the amount of participation in the discussion. As soon as the remaining battery time is below a selectable threshold of 1 hour, the power on LED on the rear of the microphone unit will flash or if the system is controlled by PC or a media control system, the low battery capacity can also be displayed. The charging time of a completely empty battery is max. 3.5 hours with the integrated processor-controlled charging electronics. Depending on the use of the microphone unit the charging time can be less.

As an option the microphone unit can be powered and charged by a DC power supply adapter.

The microphone unit is switched on by briefly pressing the microphone button once. There are various ways to switch off the microphone unit:

1. Press the microphone button for 3 seconds.
2. Press the standby button of the MCW-D 50 control unit for 3 seconds to switch off all activated microphone units.
3. Switch off all microphone units via an RS 232 or TCP/IP command from the PC or media control system.
4. Switch off the control unit; after approx. 3 minutes the microphone unit will be switched off.

ARCHITECT'S SPECIFICATIONS

Digital wireless delegate microphone unit with Revolutio Microphone Array technology. One button to switch the microphone on/off or to enter a request-to-speak. Red LED indicates switched-on status; LED flashing red displays a request-to-talk. 17 microphone capsules in a line array set-up with corridor characteristic, red LED strips at both sides of the housing indicate the ready-to-talk status. DSSS modulation (Direct Sequence Spread Spectrum) ensures high immunity from interference. World-wide approval for the 2.4 GHz frequency band. Integrated loudspeaker with voice equalisation for decentralised sound reinforcement. ACA - **A**utomatic **C**hannel **A**llocation via integrated, digital transceiver. Microphone unit addressing via network and storage on unit. Using the configuration software with a PC, it is possible to adjust and

configure the volume of the loudspeaker, threshold for voice activation and auto-off-switching. Integrated rechargeable NiMH battery ensures an operating time of up to 30 hours. Processor-controlled charging technology for a charging time of max. 3.5 hours without memory effect. The battery is monitored by the control unit and an LED indicates when the capacity is too low. 2 charging contacts. Mini jack socket (3.5 mm) as documentation output. Design aluminium housing. Rear with charcoal-grey, non-glare and scratch-resistant Nextel® finish. Front with touch button. Dimensions (LxHxD) 300x82x96mm. Weight approx. 1100 g.

Manufacturer: beyerdynamic
Type: MCW-D 531

TECHNICAL SPECIFICATIONS

General

Frequency range 2400 – 2483.5 MHz
(ISM-band)
Modulation Direct Sequence Spread
Spectrum DSSS, digital
signal processing
acc. to own standard
Max. number of audio streams 9 usable channels
per system
(Standard: 3)
Signal-to-noise ratio 80 dB typ.,
(unweighted
signal-to-noise ratio)
Range between microphone units
and control unit. > 100 m
Power supply 110 – 240 V AC 50/60 Hz
Approval world-wide

Microphone Units

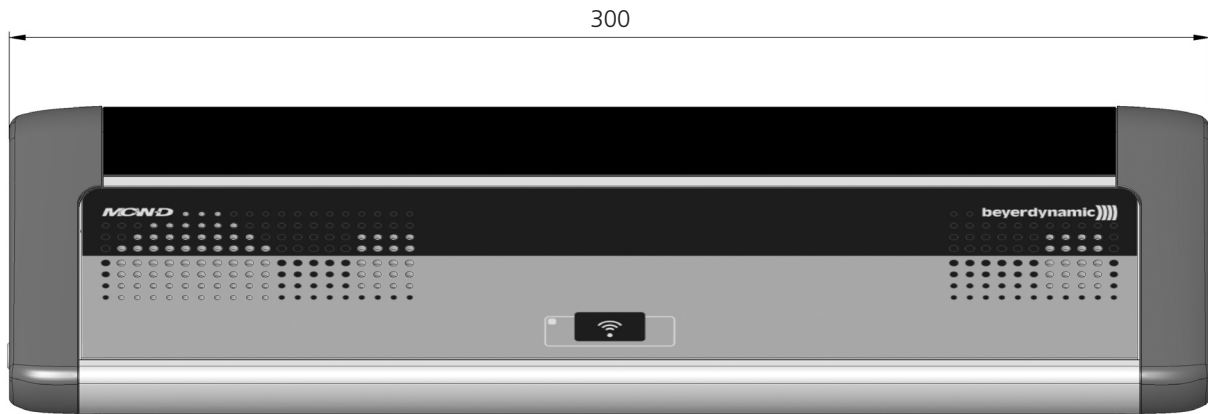
Microphone Microphone Array
Pick up pattern Corridor
Power consumption. 67 mA (mic on)
T.H.D. < 0.1%
Transmitter power max. 15 dBm per
channel (average,
duty cycle ≤ 30%)*
Battery voltage 8 NiMH cells, 2.5 Ah
Charging time
with CD 13 max. 3.5 hours when the
battery is completely
empty
with CA 2457 max. 7 hours when the
battery is completely
empty

Loudspeaker Integrated, two-way
loudspeaker
Loudspeaker switch off at "Mic On" yes
AF output Documentation output,
not separately adjustable,
unbalanced jack socket
(3.5 mm, stereo)
Connection Tip = AF+, Ring = AF-,
Shield = ground
Output level max. 2.4 V rms on open
circuit, T.H.D. < 1%,
2.3 V rms at 80 Ω load,
T.H.D. < 1%
Min. impedance 600 Ω
Integrated limiter against clipping cannot be switched off
Limiter activity at 126 dB SPL
Power supply. 9.6 V with integrated
NiMH battery (8 cells)
Operating time depending on the type
of the microphone unit approx. 30 hours in
discussion mode;
operating time depends
on the volume
Temperature range
(at < 90% humidity) +10 °C – +40 °C
Storage temperature
(at < 90% humidity) -20 °C – +55 °C
Minimum impedance. 8 Ω
Dimensions (L x H x D) 300 x 82 x 96 mm
Weight approx. 1100 g

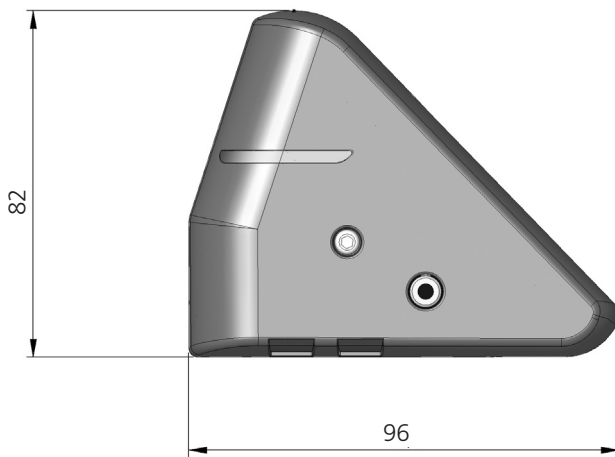
*The transmitter power can differ from this value due to specific regulations in various countries.

DIMENSIONS

Front View



Lateral View, left



Lateral view, right

