

MCW-D 533

Chairman Microphone Unit

Order # 486.434

MCW-D



FEATURES

- Fully-digital audio and control
- Revoluto 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
- 3 buttons: priority, microphone, clear
- Microphone button to switch the microphone on / off
- Clear button to switch off all activated delegate units
- Programmable function button for different priorities or external controls
- LED next to the microphone button and LED strips on both sides of the housing indicate that 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 buttons (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 533 chairman microphone unit provides a clear, priority and 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.

The chairman microphone unit does not depend on the maximum number of simultaneous open microphones. Unlike the delegate microphone units the chairman microphone unit is not controlled by ACA (Automatic Channel Allocation), but has an extra transmitting channel exclusively for the chairman. The ready-to-talk status of the microphone is indicated by the red LED in the housing and the red LED strips on both sides of the housing.

Using the clear button all switched-on microphones of the delegate microphone stations are switched off.

With the priority button there are various configurations available:

Priority "Normal"

When the chairman switches his microphone on with the function button and the priority programming "Normal" the switched on delegate microphone units are switched off. Afterwards the delegates can switch on their microphone and take part into the discussion again, while the chairman's microphone is still switched on.

Priority "Mute"

When the chairman switches his microphone on with the priority button the switched on delegate microphone units are muted as long as the chairman is speaking. If the chairman switches his microphone off, all delegate microphone units that had been switched on before, are switched on again.

Priority "Clear"

When the chairman switches his microphone on with the priority button the switched on delegate microphone units are switched off. The delegates can switch on their microphone again, when the chairman has switched off his.

COM Message

A command is sent via the RS 232 serial interface from the MCW-D 50 control unit and a programmed function is carried out via a media control system for instance (e.g. light control). For the other functions there is also a command sent via the RS 232 serial interface from the MCW-D 50 control unit.

Custom

Two different commands according to the duration of the push:

< 1 second = command "Short press string" is transmitted

> 1 second = command "Long press string" is transmitted

These commands can be set individually with the "MCW-D 50 Conference" software.

Audio Mute

An audio signal, e.g. from a wireless microphone, can be switched off. This function can be combined with a "Clear" command to switch off activated delegate microphones.

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

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

Push-To-Talk: the microphone button must be 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.

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 chairman microphone unit with Revolutio Microphone Array technology. Three buttons to switch the microphone on/off, clear all activated delegate microphone units and one special button that can be programmed e.g. as priority button or for special functions in conjunction with a serial interface / Ethernet interface at the control unit. Specific DSSS modulation (Direct Sequence Spread Spectrum) ensures a high safety against noise and unauthorised listening. World-wide approved in the 2.4 GHz frequency band. Integrated loudspeaker with voice equalisation for decentralised sound equalisation. 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. Using the configuration software with a PC, it is possible to adjust and

configure the volume of the loudspeaker and 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 buttons. Dimensions (LxHxD) 300x82x96mm. Weight approx. 1100 g.

Manufacturer: beyerdynamic
Type: MCW-D 533

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

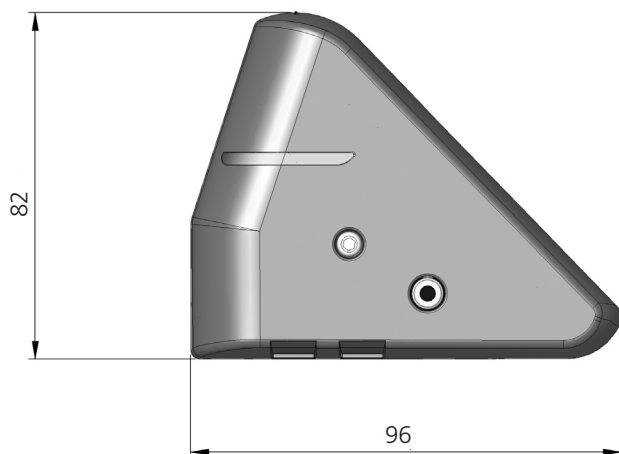
*The transmitter power can differ from this value due to specific regulations in various countries.

DIMENSIONS

Front View



Lateral View, left



Lateral view, right

