

Central Unit

The CU-110-12 Central Unit is a controller unit for *Close Talk Conference System*.

Acting as the system hub it controls all aspects of the system using microprocessor technology.

Intelligent functionality includes automatic speaker list, chairman priority, audio level control, remote controlling and more.

All functions are easily reached using the 16x2 character, LED backlit, LC display together with a two button and one rotary knob control panel.

Unit settings can be PIN code protected.

Supports up to eight High Frequency signal connections including the TU-100-02, TU-100-03 and TU-100-03 Transceiver Units directly connected to the CU-110-12.

Supports four received channels, three audio and one data, and two transmitted channels, one audio and one data.

Supports any number of Delegate Units, Infra-Red signal coverage is the limiting factor.

Up to three simultaneously active microphones.

Powered by a safety grounded 12VDC switch mode power supply provides superior reliability and safety. World-power input range ensures easy installation.

Sturdy steel case for table-top placement.

Low power consumption.

Unit firmware can be easily be updated via the RS-232 serial port.



Balanced (XLR) and unbalanced (1/4" Tele) Line & Tele



RS-232 serial port for remote control applications such as *Close Talk Control* PC software for conference control and *Close Talk Install* PC software for system testing.

All connections are easily accessible on the rear panel.

Rear panel contains 8 HF signal connectors, RS-232 serial port, system fuse, microphone signal insert, power input, four balanced XLR Line- and Tele in and outputs, four unbalanced 1/4" Tele Line- and Tele in and outputs.

The number of Transceiver Units can be expanded above eight using the Split Box SB-110-01 or equivalent.



Technical Data

Audio:

- 200Hz 6000Hz frequency range
- -S/N ratio > 80dB
- $\hbox{-}\, Equalizer for \, Delegate \, Unit\, microphone\, signal$
- Insert connector for Delegate Unit microphone signal
- Balanced and unbalanced Line- and Tele audio connectors

Power:

- -12VDC operation
- World-power range 100-240VAC input power supply
- Power consumption 11W (no transceivers connected)
- Power supply supports up to eight directly connected Transceiver Units (type dependent)
- Front panel system power switch

Transmission:

- -6 channels, four received and two transmitted
- Frequency range 2.4 5.6MHz
- Analog FM modulation
- Audio channel S/N ratio 60dB, companded to greater than 80dB
- Data channel bit phase modulated, 1.67kb/s

Physical:

- -Size 253x289x93mm (wxdxh)
- -Weight approx. 4.6kg
- Black steel case
- Table-top placement

Environment:

- Indoor home or office use only
- Temperature +10-35 deg. celsius
- Recycle case and contents according to local laws and regulations
- -Clean using soap-water damped cloth only

Approvals:

-CE approval

Tender Specification

The Central Unit is to comply with all relevant CE regulations.

The configuration of the unit shall be facilitated by an easily readable LC display and status lamps . The display shall be backlit. An easy-to-use two-button and rotary switch panel provides access to the unit.

The unit configuration shall be able to protect using a PIN code.

With proper installation configuration, the unit shall be able to provide intended functionality without end-user assistance.

The unit shall provide the connection of up to eight High Frequency Infra-Red transmission units.

The wire-less transmission of audio shall be in full duplex, using analog FM modulation with carrier frequencies in the 2 to 6MHz range.

Line-level audio in- and outputs shall be provided for the transmission of audio to external equipment and the reception of audio from external equipment. Balanced audio in- and outputs are to be facilitated using industry standard XLR connectors. Unbalanced audio in- and outputs are to be facilitated using industry standard 1/4" Tele connectors.

An Insert connector shall be provided for external audio processing of the delegate microphone signal.

The unit is to be powered by a safe, low level, direct current voltage using an external power converter with world-power input range (100-240VAC). System power shall be operated using a single switch on the unit front panel.

Unit functionality should be easily field upgradeable via firmware updates.

The unit shall provide an activation time of microphones to be less than 1 second (Delegate Unit dependent), support up to three simultaneously active microphones, provide an automatic first-in-first-out speaker list in the situation of no available speaking channels, and provide chairman override functionality.

By means of a built-in RS-232 serial port, the system shall be able to be remote controlled in all aspects of the system functionality.

Audio feedback reduction functionality shall be built-in.

The unit case shall be of steel, black colour and be suitable for table-top placement.

Central Unit model Close Talk, type CU-110-12 or equiva-