

Control Units

EN 54-16

EN 54-4

1438-CPR-0948

SMART-CU-11LCD / SMART-CU-11LT



SMART-CU-11LCD

SMART-CU-11LT Control Unit (CU) is a matrix mixer of input signals which it routes to 4 100V internal audio buses, a 45-channel digital system buses or directly to audio outputs in a unit. SMART-CU-11LT is designed to work for small PA & VE systems or as an extension unit in more complex systems. It means that the CU can function independently as the central unit of a small system or be part of a large complex system for which it represents another level of either territorial extension (operation in a remote structure) or functional extension (operation of further fire zones and loudspeaker lines in such a structure). The modular design of the CU and its flexibility enables optimisation of equipment and cost efficiency regardless of size / number of structures, their location and connectivity.

In the event of losing connectivity with a networked master unit, SMART-CU-11LT is able to perform fire alarm scenarios independently thanks to the configuration recorded locally. While attached to the main communication ring of the system, SMARTCU-11LT can control amplifiers and power supply managers as well as receive alarm and digital signals; and send them to other system devices. SMART-CU-11LT Control Unit distributes audio signals to indi-

vidual zones and ensures that individual zones function properly. It also controls the condition of loudspeaker lines and amplifiers. If a fault is detected, it sends the signal to the system and automatically switches to a backup amplifier.

The CU is equipped with an SMART-cAudio-4/12 card offering 4 symmetrical line audio inputs and 12 symmetrical outputs to lead audio signals out to external devices or amplifiers of the smartVES system. Further-

more, SMART-CU-11LT can be equipped with an LCD touch screen with a control module, which allows easy access to management functions and monitoring of the whole system – such extended configuration is included in SMART-CU-11LCD Control Unit.

CHARACTERISTICS

- » **Compliance with EN 54-16**
- » **Network-based system allowing configuration, diagnostics and management via Ethernet**
- » **Managing up to 254 devices on the network**
- » **11 slots available for any configuration of loudspeaker control cards and control input / output cards**
- » **Built-in audio card with 4 inputs and 12 audio outputs**
- » **Up to 12 messages played simultaneously in different zones**
- » **Up to 32 GB SD flash memory designated for playback and recording messages (48 kHz, 16 bit)**
- » **1 × POE port**
- » **Support of up to 12 secured amplifiers**
- » **Built-in 2 control inputs and outputs**
- » **2 × 1 GB ports available for system extension**
- » **Integrated DSP with implemented 3 band parametric EQ on all inputs on control units, 8 band parametric EQ, delay lines, audio limiter and feedback eliminator on each of the audio outputs**

	SMART-CU-11LT	SMART-CU-11LCD
Power supply	48 V DC (operating range 40-57 V DC) connector with screw terminals M2.5, the distance between the partitions of 5.08mm	
Power consumption	Up to 100 W (depends on configuration)	
Number of control slots	11	
Number of function slots	0	
Messages	Supported SD HC up to 32 GB / The set included 512 MB SLC SDHC cards provide more than 20 minutes of messages	
LCD display	None	4.5" Resistive LCD touchscreen
DSP	Implemented 3 band parametric EQ on all 4 inputs of the control units 8 band parametric EQ, audio limiter and delay line on all of the audio outputs	
Number of audio inputs	4	
Type of audio inputs	Differential	
Connector type	1x RJ45	
Frequency response	40 Hz... 20 kHz (@1dB) / 400 Hz... 8 kHz (@0,1dB)	
Input impedance	≥ 10 kΩ	
Maximum input voltage	≥ 3 Vrms	
Number of outputs	12	
Type of outputs	Balanced	
Connector type	3x RJ45	
Frequency response	40 Hz... 20 kHz (@1dB) / 400 Hz... 8 kHz (@0,1dB)	
Harmonic distortion (THD+IMD)	≤ 0,05%	
Headroom	10 dB	
SNR	≥ 90 dB	
Channel separation	≥ 80 dB	
Output impedance	600 Ω	
Nominal output level	1 Vrms	
Data communication	Communication between devices over large distances: › 1000BASE-X on the fiber › 2 ports provide a redundant connection Communication between devices installed side by side › 1000BASE-TX / RJ45 CAT5E cables – 2 ports available on the back panel. › 100BASE-TX / RJ45 CAT5 cables – 1 port available on the rear panel for connection to an external network (see notes) › 100BASE-TX / RJ45 CAT5 cables – 1 port available on the front panel (the main processor card) for connection to an external network	
Fiber module – connector type / kind of fiber	Modules type SFP / Connector SC/LC / Multimode or single-mode / E 30 or E 90, OM lub OM2	
Communication with PC	PC software: RJ45 connector twisted pair connection TIA / EIA 568A by the Ethernet protocol	
Operating temperature	-5°C / +40°C	
Operating humidity	15% to 80% (non-condensing)	
Storage temperature	-20°C / +70°C	
Storage humidity	15% to 80% (non-condensing)	
Finish case material	Finish Case Material: Steel / The front panel is made of metal plate painted black	
Dimensions	482 (W) × 85 (H) × 325 (D) mm	
Mounting	19" – rackmount	
Weight	Up to 8,4 kg (depends on configuration)	
Accessories	2 brackets and 4 screws for rack, 8 caps for free slots	