# CX4 - Fire Alarm Priority & Sound Level Limiter



#### **Features**

- Interfaces audio system and fire alarm
- Cuts music level in case of fire alarm.
- Priority override channel for safety announcements
- Control maximum music sound level

### **Applications**

- Fire Safety
- Noise Control
- Entertainment Venues
- Sports Venues

#### Overview

The CX4 interfaces with your fire alarm system. It cuts the music sound level and provides a priority override.

#### **Cut the Music Level**

The CX4 connects between the mixer (or preamp) and the amplifiers of the audio system. It is a four channel device, usually connected as two stereo pairs.

In normal mode (not triggered by the fire alarm) the signals pass through the four channels without attenuation. When the unit is triggered - usually by a fire alarm - the music level is attenuated. In order to avoid panic, it has been found that the music should be attenuated rather than cut altogether, so this is exactly what the CX4 does. The level of attenuation can be adjusted using the controls hidden under the front panel.

When the unit is reset, the programme will fade back to the original volume. Reset can be either manual or automatic.

#### **Priority Override**

The priority input may be a microphone or a line level source. In normal operation, the priority input signal is available at the priority output socket for normal use.

When the CX4 is triggered, the priority signal is mixed into the four channels of attenuated music.

#### **Noise Limiter**

This is a secondary function that is included with the CX4. It allows you to set a maximum permitted sound level in an entertainment venue. The unit monitors the level in channels 1 and 2 (the main programme channels) and if it goes above the threshold then the LIMIT indicator lights up and the level is attenuated back to the threshold.

Two limiters are fitted, one acting on the average level and one based on the peak level. This allows the average and peak limits to be set without undue music compression.

# **NoiseMeters**

### CX4 - Fire Alarm Priority & Sound Level Limiter

### **Specifications**

**Technical Specifications** 

Detailed specifications for the Fire Alarm Priority and Sound Level Limited, which cuts the music volume in

the even of an alarm activation.

Gain Normal operation, unity gain 0dB

-1dB

Frequency 20Hz - 30KHz 0.5dB -1dB

Response

Distortion THD @ O/P 20dBU <.015% 1KHz (Typically .007%) Noise

< -90dBU EIN

Inputs Balanced Connector type XLR Input impedance > 30k Ohms Max input level 22dBU

Outputs Electronically balanced

Connector type XLR

Max O/P level 22dBU into 600R load

Auxiliary 6 Way screw terminal connector connections

Control input Pins 1 & 2 18V - 24V DC (Voltage

mode) Isolated switch contacts

(Switch mode) Pin 3 - Limit

Remote indicator

outputs

Pin 4 - Peak Pin 5 - Priority Pin 6 - OVE common

Outputs will drive L.E.D.s. directly without series resistors. They will also drive suitable solid state relavs to drive mains voltage indicators.

Controls Situated behind removable security

panel

1 - Priority input level all channels 2 - Priority input level channels 3&4 (allows chans 3&4 to be lower than

chans1&2)

3 - Limit threshold.(average) adjustable range -20dBU to 22dBU 4 - Peak threshold allows the peak limiter to be set above the average

limit threshold

5 - Attenuation channels 1&2. Range 0dB to -60dB (factory setting

-20dB)

6 - Attenuation channels 3&4. Range 0dB to -60dB (factory setting

-20dB)

7 - Reset momentary action push button(can be set to automatic) 8 - Test momentary action push button. (For set-up and testing) Internally selectable Mic - Line

Priority input Connector type XLR in and out

Set to Mic Low impedance. Balanced. Max gain

Set to Line 10K Balanced. Max I/P level 30dBU

Visual indicators Power - 2 x Green L.E.D.s.

> Limit - Red L.E.D. Peak - Amber L.E.D.

Priority override - Red L.E.D.

19" rack mounting - 1RU - Width 482 **Dimensions** 

mm (19") Depth 206 mm (8.1")

Height 44 mm (1.75")

Finish Front - and Rear panels- Black

> anodised aluminium with silver notation which will not rub off in use. Case - black plastic coated steel.

IEC Connector Power

200 - 240V AC. Mains Fuse 250mA

Anti Surge (slow blow)

110 - 115V AC. Mains Fuse 500mA

Anti Surge (slow blow)

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#### Web Sites

Main site:

https://www.noisemeters.asia

Product shortcut:

https://www.noisemeters.asia/p/q-cx4/

Tech Support:

https://support.noisemeters.com