

## 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.

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### 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<br>-1dB                                                                                                                                                                                          |
| Frequency Response       | 20Hz - 30KHz 0.5dB -1dB                                                                                                                                                                                                           |
| Distortion THD @ 1KHz    | O/P 20dBu <.015%<br>(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 connections    | 6 Way screw terminal connector                                                                                                                                                                                                    |
| Control input            | Pins 1 & 2 18V - 24V DC ( Voltage mode) Isolated switch contacts (Switch mode)                                                                                                                                                    |
| Remote indicator outputs | Pin 3 - Limit<br><br>Pin 4 - Peak<br>Pin 5 - Priority<br>Pin 6 - OVE common<br>Outputs will drive L.E.D.s. directly without series resistors. They will also drive suitable solid state relays 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)                                                                          |
| Priority input    | Internally selectable Mic - Line                                                                                                         |
| Connector type    | XLR in and out                                                                                                                           |
| Set to Mic        | Low impedance. Balanced. Max gain 70dB                                                                                                   |
| Set to Line       | 10K Balanced. Max I/P level 30dBu                                                                                                        |
| Visual indicators | Power - 2 x Green L.E.D.s.<br>Limit - Red L.E.D.<br>Peak - Amber L.E.D.<br>Priority override - Red L.E.D.                                |
| Dimensions        | 19" rack mounting - 1RU - Width 482 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. |
| Power             | IEC Connector<br>200 - 240V AC. Mains Fuse 250mA Anti Surge (slow blow)<br>110 - 115V AC. Mains Fuse 500mA Anti Surge (slow blow)        |

#### Head Office

NoiseMeters Ltd  
7 Jayes Park  
Ockley  
Surrey  
RH5 5RR

Telephone **+44 130 677 0855**  
Fax **+44 845 680 0316**

Email: **info@noisemeters.com**  
Support: **support@noisemeters.com**

#### Web Sites

Main site:  
<https://eu.noisemeters.com>

Product shortcut:  
<https://eu.noisemeters.com/p/g-cx4/>

Tech Support:  
<https://support.noisemeters.com>