

GUARDIAN CX4 MK3 PRIORITY INTERFACE

Analogue signal processing Complete control

The CX4 MK3 provides a priority interface and sound level control over 2 stereo channels.

The priority input will appear at both outputs when the priority is triggered and the audio will be faded down by a preset amount (0 - 70dB).

The sound level control is separate for each stereo channel.

With the ability to help meet both fire safety and sound level (noise) limits the CX4 is a cost effective way of dealing with both issues.

The fire alarm connection can be set for voltage input or isolated contacts.

The priority input can be set for microphone or line level input, with phantom power (18V) available.

When attenuating the audio signal the distortion from the CX4 is less than 0.015% so the quality of the audio is not compromised.

The CX4 may be configured for manual or automatic reset. Manual reset is by a button recessed on the front panel.

There is a test facility which is operated by a button recessed on the front panel.



On each channel there are two controls to set average and peak level. The average is slow acting and the peak is fast acting which provides control while retaining the dynamics of the audio.

Other features include a dim facility which will reduce the set limit by a preset amount of 0 - 12dB (maximum), this can be useful if for example opening windows lets more audio out so magnetic relays can switch the dim facility.

The priority input has an output connection which is enabled when the unit is not triggered, this allows a microphone to be used for other purposes when the unit is not triggered.

When set for microphone input the gain adjustment has a range of 40dB and phantom power is switched if required internally.

When used purely as a priority interface the CX4 can run 4 mono channels.

Controls for settings are beneath the removeable front panel and connections are made to the back panel.

Priority level is adjustable separately for each stereo channel.

Front panel LED's indicate when priority is triggered, if the set limit is reached, if the peak limit is reached and if dim is switched on. LED's also indicate the power.



GUARDIAN CX4 MK III PRIORITY INTERFACE AND SOUND LEVEL CONTROL

The main features of the CX4 MK3 are as follows:

1. It will control the maximum sound level of two stereo audio systems and has a fire alarm interface that when triggered will fade down the two stereo systems giving priority to a Mic/Line channel for either live (Mic) or recorded messages or evacuation instructions.

2. The two stereo channels have separate sound level control circuits and may be set for different sound levels.

Controlling sound to an average level can remove some of the dynamic range which is why the CX4 MK3 monitors both average and peak level and has separate control settings for each.

The CX4 MK3 controls the average level on a slow averaging circuit allowing the peaks through, the peaks are controlled on a fast acting circuit set to a higher level.

This approach keeps the dynamics of the music so the sound will still be bright and punchy while controlling the level.

3. When doors or windows are opened more sound escapes. The CX4 MK3 has a dim facility that can be triggered by relays that will reduce the set maximum by a preset amount (0-12dBmax).

4. The priority line can be set for Mic or line input, for a recorded evacuation message line would be used.

If Mic is selected there is phantom power selectable, when not triggered the Mic is available at the priority output socket so that a Mic in normal use (eg Reception or DJ) may be used as the priority input.

The CX4 MK3 may be configured to work with most fire alarm trigger lines. This can be voltage or isolated contacts.

Voltage applied, voltage removed, contacts closing or contacts opening are the choices of trigger.

CX4 MK3

Frequency Response:

Distortion:THD+Noise @ 1Khz

Noise 20Hz - 20Khz:

Audio Inputs:

Audio Outputs:

Priority Input:

Set to Mic:
Set to Line:

Control Input:

Dim facility:

Visual Indicators:

Power:

Finish:

Dimensions:

Technical specification

20Hz - 20Khz +/- 0.5 dB

O/P Level 0dBu <0.01% (Typically 0.007%)

EIN < -90dBu

Electronically balanced, connect negative to screen for unbalanced use.

Input impedance: Balanced 20K Ohms
 Unbalanced 10K Ohms

Maximum input level: +22dBu

Electronically balanced, connect negative to screen for unbalanced use.

Source impedance: 100 Ohms
Minimum load impedance: 600 Ohms

Internally selectable Mic or Line

Low impedance: Balanced. Max gain 70dB. Phantom power internally selectable.
10K Balanced. Max I/P level +30dBu

Priority input socket is connected to priority output socket until the unit is triggered.

Pins 1 & 2. Voltage mode 15 - 24V DC. Switch mode a pair of isolated switch contacts.

Pins 3 & 4 when unlinked reduces sound level limit set on ch 1 by preset amount.
Pins 5 & 6 when unlinked reduces sound level limit set on ch 2 by preset amount.

Power - Green LED's. Limit - Red LED's. Peak - Amber LED's.

Dim - Red LED's. Priority - Red LED's.

Outputs for remote Peak,Limit, Dim and priority LED's available on back panel.

220V - 240V (Internally switchable to 110V).

IEC Mains connector; mains fuse 250mA slow blow.

Front and Rear panels - Black anodised aluminium with silver legend.

Case - Black plastic coated steel.

19" Rack mounting, 1RU

Width 482mm (19") Depth 200mm (7.9") Height 44mm (1.75")

Formula Sound reserve the right to alter the specification without notice.

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