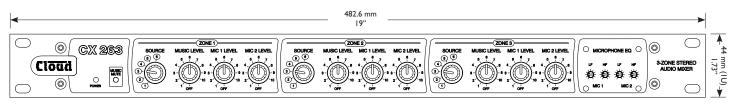
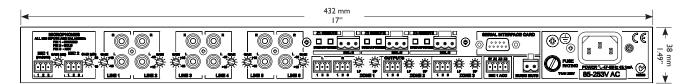
# CLOUD CX263 ZONE MIXER





Cloud CX263 Zone Mixer - front panel view



Cloud CX263 Zone Mixer - rear panel view

#### **General Description**

The Cloud CX263 is an easy-to-use, three-zone, rack-mounting (1U) audio mixer. It combines simple control of background music with versatile microphone paging for up to three separate areas. It is suitable for use in many types of premises, including pubs, bars, clubs, shops, offices, hotels, etc.

The CX263 has six stereo line inputs and two microphone inputs. It has three separate zone outputs, in each of which one of the line inputs and the microphone inputs may be mixed together. Separate user controls for music source selection, and music and individual mic levels are provided for each zone. One of the zone outputs is stereo, making it suitable for driving a main public area where music fidelity is more important. Optional plug-in EQ cards for use with various installed-audio loudspeakers may be fitted to any or all of the three outputs. The CX263 is directly compatible with Cloud PM Series paging microphones. Alternatively, Mic I input may be configured to suit most OEM paging systems: paging may be activated by voice (VOX) or short-to-ground access connections, and Mic I may be configured to have priority over the Mic 2 to prevent announcement clashes. Additionally, one line input may be set to have priority over any other selected to facilitate connection of a digital sound store or similar device.

Music level only, or music level and source selection may be controlled remotely in each zone if wished, using standard Cloud RL and RSL Series remote control plates. The CX263 may also be fitted with an optional RS-232 serial control interface\*; as well as allowing remote music control, the interface's command set permits remote control of other unit functions.

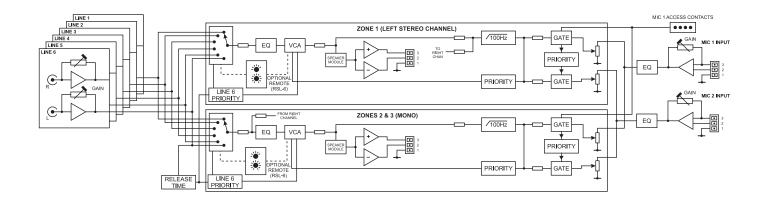
\* A separate datasheet is available for the CDI-S200 serial interface.

- Provides music and paging in three zones
- Front panel controls for music source, music level and Mic I/Mic 2 level in each zone
- Six (unbalanced) stereo line inputs with individual gain controls
- Two balanced mic inputs  $12\,V$  phantom power available on either or both
- 100 Hz hi-pass filter on both mic inputs
- Sensitivity (rear panel) and HF/LF EQ adjustment (front panel) for each mic input
- Anti-tamper panel for mic EQ controls
- Three electronically-balanced zone outputs, one stereo, two mono
- HF/LF music EQ adjustment on each zone output
- Paging priority control on Mic I input via short-to-ground access connection or VOX triggering
- Mic I may be selected to have priority over Mic 2

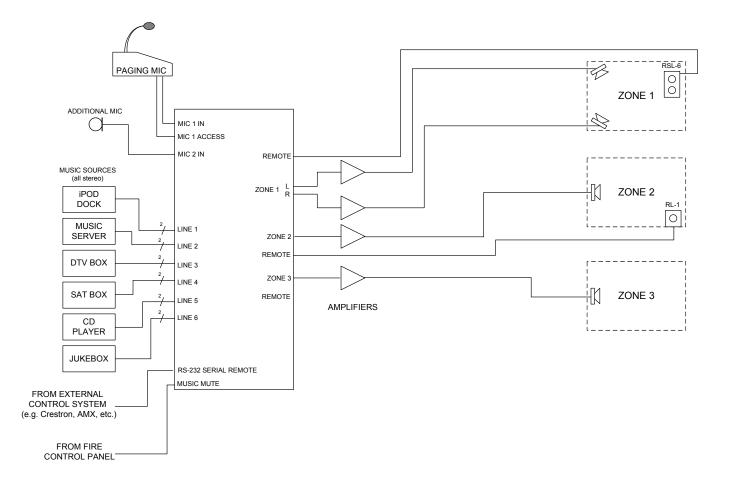
- Zone I has selectable LINE 6 priority with choice of release times
- Music Mute control input (N/O or N/C) for interface to emergency system
- Compatible with standard Cloud remote control panels: RL-I Series (music level) and RSL-6 Series (music level and source selection)
- Optional CDI-S200 serial interface card, providing RS-232 remote control of:
  - Music level
  - Music source
  - Mic I zone access
  - Mic I muting per-zone or globally
  - Mic 2 global muting
  - Music Mute control
- Optional loudspeaker EQ cards available
- IU 19" rack mounting unit



### **Block Diagram**



## System Example



The example shows a CX263 used to provide music, announcements and paging in three separate areas (zones) of a premises such as a retail outlet. Area 1 is wired for stereo music, and can set its own music source and volume by means of the local RSL-6 remote control panels (optional). Areas 2 and 3 are mono only; Area 2 is fitted with an RL-1 remote control panel which allows local control of music level in that zone. Music sources and levels could be set from the front panel of the mixer itself if preferred. Paging to any zone is achieved using a paging mic (such as the Cloud PM4) connected to Mic I input; this would typically be located somewhere other than either of the two zones. Additional announcements to any zone can be made from the separate microphone connected at Mic 2 input.

Note that the jukebox is shown connected to Line input 6; if Line 6 Priority is enabled in the mixer, then whenever the jukebox is in use it will always be heard in Zone I, regardless of the music source setting.

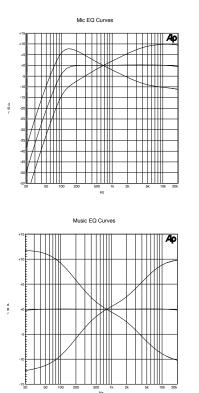


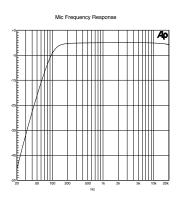
# Technical Specifications

Line inputs	
Frequency Response	20 Hz - 20 kHz, +0, -0.3 dB
Distortion	<0.05% typical, 20 Hz to 20 kHz
Sensitivity	100 mV (-17.8 dBu) to 1.5 V (+6 dBu)
Input Gain Control	24 dB
Input Impedance	48 kohms
Headroom	>20 dB
Noise	<-84 dB. 20 Hz to 22 kHz @ 0 dB gain
Equalisation	LF: +/-10 dB @ 50 Hz, HF: +/-10 dB @ 10kHz
Microphone input	
Frequency Response	-3 dB @ 100 Hz (filter) to 20 kHz, +/-0.5 dB
Distortion	<0.05%, 20 Hz to 22 kHz
Gain Range	10 dB to 50 dB
Input Impedance	>2 kohms
Common Mode Rejection	>70 dB @ 1 kHz
Headroom	>20 dB
Noise	-128 dB EIN, 20 Hz to 22 kHz @ 0 dB gain
Equalisation	LF: +/-10 dB @ 150 Hz, HF: +/-10 dB @ 5 kHz
Outputs	
Output level (nominal)	0 dBu
Maximum output level	+20 dBu
Minimum load impedance	1.2 kohms
General	
Power input	85 V to 253 V AC, 50/60 Hz
Current consumption	43.1 mA at 240V
Fuse Rating	IA
Fuse Type	TIA, 20 x 5 mm
Dimensions (w x h x d)	482.6 mm x 44 mm (IU) x 152.5 mm
	19" x 1.73" (1U) x 6"
Shipping Dimensions (w x h x d)	560 mm x 60 mm x 290 mm
	22" x 2.4" x 11.4"
Weight	2.15 kg
	4.66 lb
Shipping Weight	3.15 kg
	7.1 lb



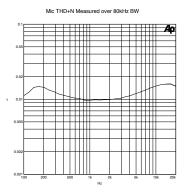
## Graphs

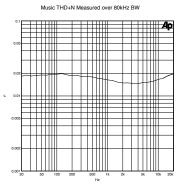




Music Frequency Response

d B Ao





## Architect's and Engineer's Specification

The mixer shall be equipped with six unbalanced stereo music inputs on rear panel phono sockets (RCA jacks), and two electronically balanced microphone inputs, one electronically balanced stereo (L & R) output and two electronically balanced mono outputs, all on rear panel multipin connectors.

The mixer shall have three channels designated Zone I, Zone 2 and Zone 3. The channels shall be identical in design and features. The microphone inputs shall be mixed and summed with the music input selected in each channel separately. Each channel shall have its own front panel microphone level controls, one per microphone input. The music input to each channel shall be selected by 6-position front panel rotary switches. It shall be possible to control the level of the music source independently of the microphone levels in each channel.

Each music and microphone input shall also have a rear panel input sensitivity control. Independent two-band equalisation adjustment shall be provided on the rear panel for the music signal in each mixer channel. Independent two-band equalisation adjustment shall be provided on the front panel for each microphone input; the controls shall be covered by a removable plate fixed with screws. Phantom power shall be available at either or both microphone inputs when selected by internal jumpers.

A control input shall be provided to activate microphone input I by external contact closure, with separate routing to each mixer channel. It shall be possible to configure the mixer such that this function is overridden and microphone input I is always active. It shall also be possible to configure the mixer to perform the following functions: i) detection of a signal on microphone input I will automatically reduce the music level by 30 dB, ii) detection of a signal on microphone input 2, iii) one line input will automatically override all others in all channels, even if unselected.

Two types of optional remote control panels shall be available to permit control of i) music level in any mixer channel; ii) music source selection and music level in any mixer channel; it shall be possible to retrofit these to the mixer at any time. The remote control panels shall connect via a rear panel multipin connector. It shall be possible to disable either the front panel music level or the music level and music source selection controls. An external control input shall be provided to allow muting of the music source by a fire alarm or other external emergency system via isolated, 'volt-free' contacts, and this input shall be configurable to respond to either a short or open external circuit. An optional RS-232 serial control interface module shall be available; this shall be retrofittable internally and present a 9-pin Dsub connector on the rear panel. The RS-232 command set as a minimum shall include commands to select music source and music level in each mixer channel, to mute either microphone input, to activate the routing of microphone I input to any mixer channel and to activate the external music muting function.

The mixer shall accept a range of plug-in equaliser cards to permit use with compatible loudspeakers. It shall be possible to fit these in any or all of the outputs.

The mixer shall be built in a IU steel chassis for mounting in a standard 19" rack. A front-panel LED shall indicate when mains power is applied to the unit. The mixer shall operate on mains supply voltages from 85 to 253 V. Mains supply shall be connected via a detachable IEC cable.

The mixer shall be the Cloud CX263; the optional remote control panels shall be the Cloud RL-I Series (music level only) and the Cloud RSL-6 Series (music level and source selection). The optional RS-232 serial remote control interface shall be the Cloud CDI-S200.



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