



## General Description

The Cloud CX261 is a 1U rack-mounting audio mixer ideal for use in bars, restaurants, and other leisure sector premises, also offices, hotels and other multi-use areas where simple control of high-quality background music needs to be combined with a flexible range of paging options.

The CX261 mixes any one of six stereo line inputs with one or two microphone inputs. Separate control of music and mic levels are provided, and music source selection and level may be controlled remotely if wished. The main output is stereo; there is an additional transformer-isolated mono auxiliary output, which is suitable for providing a MOH (Music On Hold) output to a telephone system.

The mixer may be configured to suit most paging systems: either mic input may be activated by voice (VOX) or short-to-ground access connections, MIC 1 may have priority over MIC 2, one line input may have

priority over any other selected to facilitate connection of a digital sound store or similar device.

The CX261 is also provided with a 3.5 mm jack front-panel input to permit easy connection of a portable MP3 player, laptop or similar, with independent level control.

A switchable isolating transformer configures MIC 1 input for direct connection to a telephone system, enabling paging messages to originate from any extension.

Bose® EQ cards may be fitted to either or both channels.

- Six (unbalanced) stereo line inputs with individual gain control
- Two electronically-balanced mic input
- Front panel control of music source/level and mic level
- Front panel input (3.5 mm jack) for MP3 player; etc., with level control (disconnects rear panel LINE 1 input)
- HF & LF EQ adjustment for music and mic inputs
- MIC 1 input configurable as transformer-isolated line input (with separate gain control) for connection to phone system
- MIC 1 priority over MIC 2 (selectable)
- Short-to-ground access connector or VOX-triggered paging on both MIC 1 and MIC 2 inputs

- Selectable LINE 6 priority with choice of release times
- Music Mute control input (NO or NC) for interface to emergency system
- Compatible with standard Cloud remote control panels – RLI (music level) and RSL6 (music level and source selection)
- Electronically-balanced stereo main output
- Transformer-isolated mono auxiliary output for use with telephone MOH systems
- Aux output source selection (internal jumper) – follow main output or always LINE 2
- Optional Bose® EQ cards available
- 1U 19" rack mounting unit

## Technical Specifications

### Line Inputs

Frequency Response	20Hz - 20kHz +0.5dB
Distortion	1kHz <0.05%
Sensitivity	-12dBu to +12dBu
Input Gain Control	24dB range
Input Impedance	48kΩ
Headroom	>-20dB
Noise	A Weighted -85dB
Equalisation	±10dB/10kHz ±10dB/50Hz

### MP3 Inputs

Connection Type	3.5mm stereo jack socket
Frequency Response	20 - 20kHz ±5dB
Distortion	1kHz <0.05%
Gain Range	24dB
Sensitivity	-22dBu to +2dBu

### Microphone Inputs

Frequency Response	100Hz - 3dB 20kHz <-0.5dB
Gain Range	40dB
Sensitivity	-10dBu to -50dBu
Headroom	>20dB
Noise	A weighted 150Ω <-125dB EIN
CMPR	1kHz >70dB
Equalisation	±10dB/5kHz ±10dB/100Hz
Distortion	100-200kHz <0.05%
Limiter	1kHz 0dBu ±1dB

### Tel Input

Frequency Response	200kHz <-0.5dB 100Hz -3dB
Sensitivity	-20dBu to +4dBu
Gain Range	24dBu
Headroom	>20dB
Distortion	200-20kHz <0.05%

### Outputs

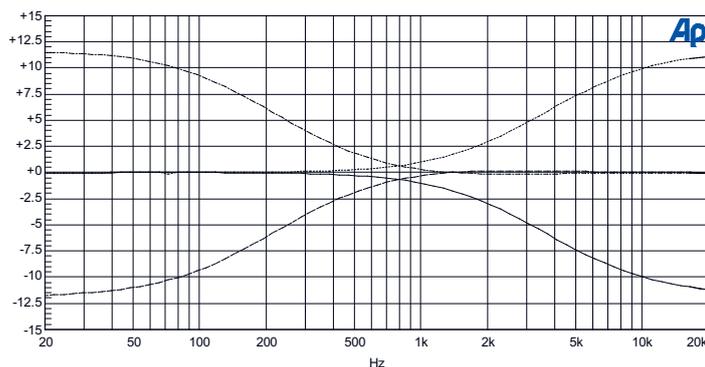
Nominal Output	0dBu
Minimum load impedance	General 1k2 MOH 600R
Maximum output level	General +20dBu MOH 0dBu
Music Limiter	1kHz, J15=0, +1dBu ±0.5dB J15=6, +6.5dBu ±0.5dB
MOH Freq response	200 600R, -8.5dBu ±1dB 100k, -3.5dBu ±1dB 20kHz 600R, -5.5dBu ±1dB 100k, -0.5dBu ±1dB

### General Specifications

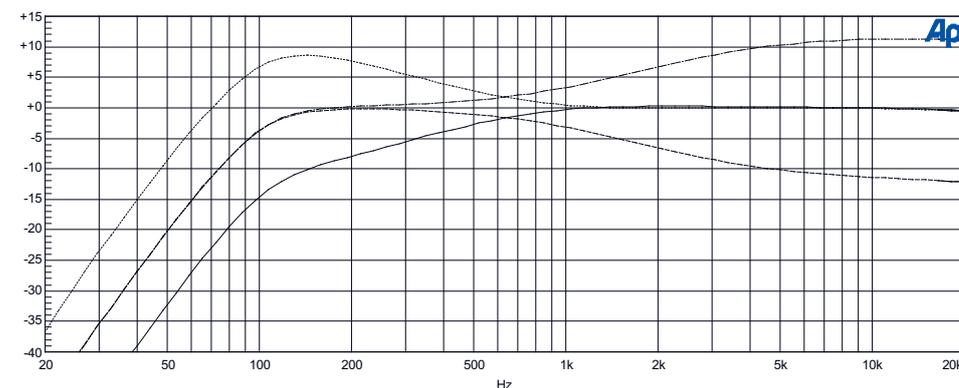
Power Input	230V ±10%
Fuse Rating	230V T100mA
Fuse Type	250V 20mm x 5mm
Dimensions	482.60 x 44.00mm x 152.5mm
Weight	2.15kg

## Graphs

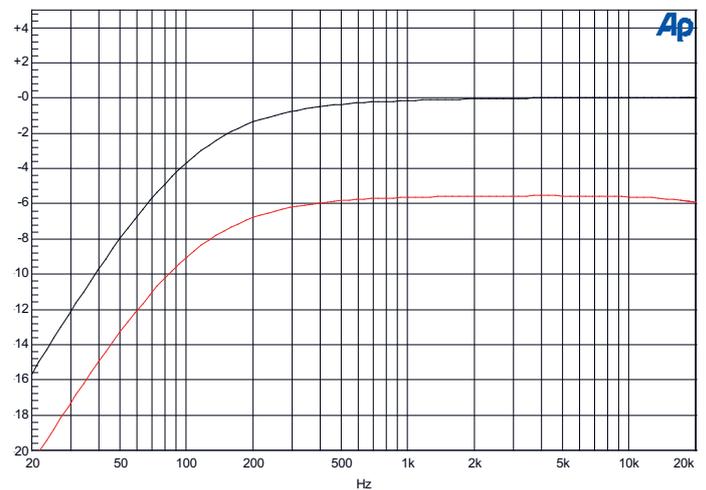
### CX261: Music EQ Curves



### CX261: Mic EQ Curves



### CX261: MOH Output Freq Response



### CX261: Music EQ Curves

Sweep	Trace	Color	Line Style	Thick	Data	Axis	Comment
1	1	Black	Solid	1	Anlr.Ampl	Left	HF Cut
2	1	Black	Dot	1	Anlr.Ampl	Left	HF Boost
3	1	Black	Dash	1	Anlr.Ampl	Left	LF Cut
4	1	Black	Dash Dot	1	Anlr.Ampl	Left	LF Boost

### CX261: Mic EQ Curves

Sweep	Trace	Color	Line Style	Thick	Data	Axis	Comment
1	1	Black	Solid	1	Anlr.Level A	Left	LF Cut
2	1	Black	Dot	1	Anlr.Level A	Left	LF Boost
3	1	Black	Dash	1	Anlr.Level A	Left	HF Cut
4	1	Black	Dash Dot	1	Anlr.Level A	Left	HF Boost

## 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 on rear panel Euroblock connectors. It shall be possible to select an alternative front panel 3.5 mm stereo jack socket as the input connector for one line input; selection of this input shall be made by a rear panel push-button switch, with front panel LED indication of its selection. The alternative input shall have a dedicated front panel level control and three LEDs indicating signal levels of -20 dBu (green), -4 dBu (yellow) and 0 dBu (red).

The music input to be used shall be selected by a 6-position front panel rotary switch. It shall be possible to control the level of the music source independently of the microphone levels.

The two microphone inputs shall be mixed and summed with the selected music input. Each microphone input shall have its own front panel level control. Each music input and each microphone input shall also have a rear panel gain control. Each microphone input shall also have a bi-colour LED (green/red) to aid gain adjustment. Independent 2-band equalisation adjustment shall be provided on the rear panel for i) the selected music source and ii) summed microphone inputs. Phantom power shall be available at either or both microphone inputs when selected by internal jumpers.

It shall be possible to configure one microphone input to accept a line-level input directly from a telephone system by a rear panel push-button switch. In this configuration, the input shall be galvanically isolated from the source by an internal transformer, and independent gain control shall be provided.

Control inputs shall be provided to activate either microphone input by external contact closure; it shall be possible to configure the mixer such that this function is overridden and either or both microphone inputs are always active. It shall be possible to configure the mixer to perform the following additional functions: i) when activated by its control input, MIC 1 will take priority over MIC 2; ii) detection of a signal on either microphone input will automatically reduce the music level by 30 dB, iii) one line input will automatically override all others when a signal is present, even if unselected.

Optional remote control panels shall be available to permit control of music level only or music level and input selection; it shall be possible to retrofit these to the mixer at any time. The remote control panels shall connect via a rear panel Euroblock connector. A push-button switch shall be provided to activate this connector; a front panel LED will confirm activation and the corresponding front panel controls will be disabled. When remote control of music level only is required, it shall be possible to retain front panel control of source selection by moving an internal jumper. 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, 'voltage-free' contacts, and this input shall be configurable to respond to either a short or open external circuit.

The mixer shall have three outputs: main L & R stereo and a mono auxiliary music output. It shall be possible to configure the mixer by internal jumper to combine the L and R signals for mono output operation. The main outputs shall be electronically balanced and the auxiliary output shall be transformer balanced and galvanically isolated so as to be suitable for connection to a telephone system as a Music On Hold source. All outputs shall be on rear panel Euroblock connectors. The auxiliary output shall be configurable internally to either follow the selected music source, or to be permanently fed with a mono sum of one line input; this line input will not be the same one that can be set to have priority over the other line inputs. The microphone inputs shall have no signal path to the auxiliary output. It shall be possible to set the level at the auxiliary output independently of the main outputs with a rear panel control.

The mixer shall accept internal Bose® Series IIS plug-in equaliser cards to permit use with compatible Bose® loudspeakers.

The mixer shall be built in a 1U steel chassis for mounting in a standard 19" rack. The mixer will be fitted with a front-panel power switch with LED indication. Two mains supply variants shall be available: 230V or 115V. Mains supply shall be connected via a detachable IEC cable.

The mixer shall be the Cloud CX261; the optional remote control panels shall be the Cloud RSL-6 (music level and source selection) and the Cloud RL-1 (music level only).