



## Z8 & Z4 VENUE MIXER



The audio requirements of today's multi-zone, multi-functional venues are many and varied. So too are the potential sources of music and other programmes. The new Cloud Z-8 has been developed specifically to meet these needs, and can act as a user-friendly master control for the entire sound system. Accordingly, the Z-8 offers direct connection of up to six sources, two microphones and a paging mic, all of which can be selected to operate in up to eight different output zones, in any combination.

Simple, remote or in-zone control of music level and source selection is a standard feature, using the RSL-6 option. The dedicated paging microphone input features a pre-settable level control for each zone, plus a signal routing facility that can interface with most commercially available paging mics, or the dedicated 8-zone paging mic with pre-announcement chime which will be available shortly. The two microphone inputs can be set to operate in any of the eight zones via front panel mounted level controls. The Z-8 also has two zones with jumper selectable music priority on the Line 6 input, to satisfy the requirements of a jukebox, spot announce or other priority/override function. These same two zones also have a direct "facility" input, which can interface with an aerobics or dedicated conference module. Recognising that each zone may have different loudspeakers, separate equalisation is provided on each zone for music signals, and each of the three mic inputs has its own bass and treble controls. All inputs have gain trimmers located adjacent to the respective input socket, for perfect level matching.

Although the Z-8 operates in mono, all the music inputs are via stereo RCA phono connectors with internal mono mixing. All the zone outputs are balanced, with a nominal 0dBu level, and use 3-pin XLR connectors. Offering similar features, a four-zone variant, the Z-4 is also available. Both units are 19" rack mountable, requiring only 3U of rack space. Effective and simple control of sound for leisure venues, hotels, sports centres, retail complexes and larger licensed premises has never been easier. Thanks to legendary reliability and superb audio quality, it has never been better.



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### Applications

Key applications for this versatile venue mixer include:

- Leisure venues, retail shops and licensed premises where the whole system requirements can be controlled by a single 'Venue Mixer'.
- Large hotel sound system with special requirements for fitness suites, swimming pool, conference rooms and bars in addition to general requirements.
- Sports centre where the sound system is required to provide selective paging and a choice of music in several zones, with the option to have a remotely located active module with direct input facilities to suit aerobic instruction.

### Line Input

The Z4 and Z8 have six line level inputs; for installer convenience, stereo inputs are provided and the left and right signals are summed internally to form a mono signal. The line inputs are suitable for a wide variety of music signal sources such as CD players, receivers, tape players etc.

Connection is by way of RCA phono sockets on the rear panel and the gain of each input can be optimised by the rear panel pre-set controls.

### Microphone Input

Two mic inputs are provided on both the Z4 and Z8; these have electronically balanced, low noise circuitry and connection is by the way of a 3 pin latching XLR type connectors. Each input is suitable for microphones with a rated impedance in the range of 200 to 600 ohms. A pre-set gain control is provided adjacent to the respective input connector. Each zone has two front panel mounted mic level controls; this allows the two microphone channels to be routed to any zone at the optimum level or not at all. The microphone signals are autonomous and are not controlled by the remote facilities. All microphones have priority over the music signals; when a mic signal is detected, the music signal will be reduced by 30dB, smoothly restoring to its previous level when the announcement ceases. Phantom power can be provided by setting internal jumpers.

### Paging Microphone Input

A dedicated paging microphone input is provided. The electronically balanced input has low noise circuitry and is suitable for 200 to 600 ohm microphones; connection is via a 3 pin latching XLR type connector. A pre-set input gain control is provided on the rear panel adjacent to the input connector and each zone also has a pre-set paging mic level control. The paging mic signal can be electronically switched to operate in any zone by grounding the respective zone access contact on the rear panel; this convention not only suits the CPM-4 and CPM-8 but is also compatible with industry standard paging mics. The paging mic has full VOX priority over both Mic 1 and Mic 2 and when operating, also reduces the music signal by 30dB.

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### CPM-4 And CPM-8 Paging Microphones

The CPM-4 four zone paging microphone is available as accessory and features a pre-announcement chime, which can be enabled or disabled as, required. The logic controlled zone switching routes the paging to any combination of the four zones and a concealed switch allows the zone selection to be retained or automatically reset; a 'call all' facility is also provided for instant announcements in all four zones. A small internal chime sounder can be switched on for installations where the CPM-4 is located in a position where the pre-announcement chime cannot be heard through the PA system.

### Microphone Equalisation

Pre-set treble and bass controls are provided for each of the three microphone inputs and these are located on the rear panel adjacent to the input socket and gain control. The equalisation is optimised for speech together with high pass filter operating at 100Hz; this reduces handling noises and breath blasts to a minimum and therefore improves intelligibility.

### Zone Controls

Each zone has the following front panel user controls:

- Music source  
The rotary 6-position switch is used to select the desired music source. On Zone 1 & Zone 8, the line 6 input can be configured to have priority over any other selected source. (The Cloud Z4 has this facility on Zone 4 only)
- Music level  
This control adjusts the level of the selected music source.
- Mic level controls  
Each zone has two front panel mounted level controls; these controls provide independent level control of Mic 1 & Mic 2; the paging microphone level can be separately adjusted for each zone by a small pre-set level control mounted on the rear panel. The microphone signals are not controlled by the remote control facilities. The paging microphone has full priority over both Mic 1 and Mic 2 and all microphones have priority over any music signal present on the same zone.

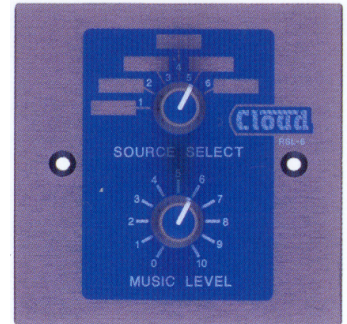
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### Remote Music Source/Level Control

The music programme selection and music level of each zone can be controlled remotely if required by connecting the optional RSL-6 six channel remote source/level control plates. A rear panel mounted switch allows any zone to operate with local control or remote control and if appropriate with local control or remote control and if appropriate, internal jumpers allow the use of a remote level control (RL-1) with front panel source select. When using the remote control function, the operation of the respective front panel control is defeated. The RSL-6 is connected to the mixer using two-core cable with screen.



### Music Equalisation

The pre-set music treble and bass controls for each zone are located on the rear panel adjacent to the zone output socket. The equalisation characteristics are optimised for music signals.

### Line 6 Priority

A facility on both Zone 1 and Zone 8 (Zone 4 only on the Z4) allows the signal on line 6 to have full priority over the selected music signal.

### Facility Input

Two facility inputs are provided on the Z8 (zones 1 & 8) and the Z4 has a single facility input (zone 4). Two modules will be available from September 1999:

The AE-1 has inputs for a microphone plus a line input for a stereo music source with facilities to mute the music source derived from the venue mixer. The facilities provided by the AE-1 will be optimised for aerobic instruction.

The MM-1 will feature four balanced microphone inputs, each with a gain control and common tone controls. This unit will be optimised for conference use.

### Remote Music Mute

A facility to remotely mute the music signals is provided and this can be used to satisfy the requirements of the Local Fire Service. A rear panel mounted 2 pole connector can interface with a fire alarm control panel; when an alarm condition exists, the music signals will mute, but the microphone circuits will operate normally for evacuation purposes.



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### Outputs

All zones have a single, mono, balanced output via a 3 pin, male XLR type connector. The nominal output level is 0dBu (775mV) although, with a headroom of 20dB, the unit can provide a maximum signal of +20dBu (7.75V). The output can be terminated into an unbalanced load without signal loss.

### External Voltage Control Of Music Source & Level

The Z8 and Z4 can be used as part of an automated sound system by controlling the music level and music source by an external 0-10V DC voltage. The microphone signals cannot be voltage controlled and will remain fixed at the levels set by the rotary controls.

### Multi-Zone Applications

Where the specification calls for more than 8 zones, the venue mixers can be used in multiples. The signal sources can be connected to the inputs of additional mixers; this can satisfy the requirements of complex systems by the use of selected or common audio sources to specific zones as required. A venue can therefore benefit from flexible program options yet retain a simple operator interface.