



This manual does not include all details relating to the design, manufacture or modification of the equipment. It does not cover every circumstance that may arise during installation, operation or maintenance. The information contained herein is accurate at the time of sale, however, specifications and content may be subject to change without notice.

Safety Instructions

1. All the safety and operating instructions must be read before using the CM82s.
2. These safety and operating instructions should be retained for future reference.
3. All warnings on the appliance and in the user manual must be adhered to at all times.
4. The CM82s must always be maintained and clean.
5. Connect the equipment only to the power outlet specified in this manual. Using an incorrect outlet may result in fire or electric shock.
6. Do not place containers of liquid or small metal objects on the equipment. Spillage or foreign objects may cause fire or electric shock.
7. Do not cut, bend, twist, stretch, apply heat or place equipment or any other object on the power cord. Damage to the power cord may result in fire or electric shock.
8. Keep the power cord away from heaters and other heat sources. Excessive heat may cause the power cord to melt, creating a fire hazard. If the power cord is damaged cut or has exposed wires obtain a replacement from an authorised agent. Continued use may cause fire or electric shock.
9. When unplugging, grasp the insulated plug. Do not pull on the power cord, as this may damage both the power cord and socket, leading to fire or electric shock.
10. Do not handle the power plug with wet hands. This may result in electric shock.
11. Prevent water, moisture or dampness from entering the equipment. Exposure may cause fire or electric shock.
12. Do not use the equipment in the following conditions - on an unstable or sloped surface - in areas of high humidity or excessive dust - in direct sunlight or overheated environments - near sources of steam or heat such as stoves, boilers or humidifiers.
13. Do not block the ventilation openings at the front or rear of the unit. Restricted airflow may cause overheating.
14. Allow adequate clearance for cooling - minimum 5 cm on each side and 10 cm at the rear.
15. Before moving the equipment, disconnect the power cord and all other connected cables. Failure to do so may result in damage or electric shock.
16. Dispose of packaging safely and keep it out of the reach of children.
17. Do not break the warranty seal or open the mixer. Internal components carry high voltage and may cause electric shock. For servicing contact Sound Choice Pro Audio directly.
18. Do not make unauthorised modifications to the equipment. Doing so may cause malfunction, fire or electric shock.
19. In the event of a lightning storm, switch off the power immediately and unplug the unit.
20. Ensure all audio equipment and speakers are switched off before any connections are made.
21. Before switching on the equipment, set the volume control to minimum. Sudden loud output may damage hearing.
22. If the equipment will not be used for an extended period, disconnect the power cord from the mains outlet.
23. If the casing of the equipment is damaged, switch off the power immediately, unplug the unit and contact an authorised agent.
24. If the unit emits smoke, odour or other abnormal signs, switch off the power immediately, unplug the unit and contact an authorised agent. Failure to do so may result in fire or electric shock.
25. Do not touch conductive parts of output terminals. Any external wiring connections to the terminals must be completed by an audiovisual integrator.
26. This equipment is for commercial and professional use only.
27. This product complies with EU WEEE regulations. End-of-life product should be disposed of in line with local regulations.





Protective earthing terminal. The apparatus should be connected to a mains outlet with a protective earthing connection.



This lightning flash is intended to alert the user to the presence of non-insulated "dangerous voltage" on the output terminals that may be of sufficient magnitude to constitute a risk of electric shock. The external wiring connected to the terminals requires installation by an competent person or the use of ready-made leads or chords.



CAUTION
RISK OF ELECTRIC SHOCK
DO NOT OPEN



CAUTION: To reduce the risk of electric shock, do not expose any internal components. There are no user-serviceable parts inside. Please refer servicing to qualified service personnel only.



The lightning flash with the arrowhead symbol within the equilateral triangle is intended to alert the user to the presence of uninsulated "dangerous voltage" within the products enclosure that may be of sufficient magnitude to constitute a risk of electric shock.



The exclamation point within the equilateral triangle is intended to alert the user to the presence of important operation and maintenance (servicing) instructions in the literature accompanying this appliance.

CAUTION: To prevent electric shock, do not use this polarised plug with an extension cord, receptacle or other outlet unless the blades can be fully inserted to prevent blade exposure.

Introduction

The CM82s is a simple but versatile preamplifier offering a flexible solution for installations where multiple voice and music sources need to be mixed to one or two output zones or stereo. The two zones provide a great solution for retail spaces, small offices and foyer areas. Channels 1 and 2 are Mic level inputs. They feature 3-band tone control, phantom power and talk over for priority announcements. The CM82s has six balanced stereo inputs, to connect line level audio. In addition, the CM82s has two balanced stereo outputs or two mono zone outputs. A master volume control for each of the outputs provides 2-band tone control and LED VU meters are located on the front panel. On the back of the CM82s is a priority mute contact that mutes all (non-priority) music sources when contact is closed to allow linking to alarm systems.

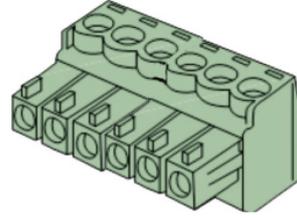
Unpacking and Installation

Although the CM82s is not complicated to install or difficult to operate, we would recommend a few minutes of your time to read this manual as it provides information for a correct installation and helps you become familiar with its features and operation. Please take care when moving the CM82s and never place the unit near heat, in front of heating vents, direct sunlight or in excessive humid or dusty locations to avoid damage and to guarantee long term reliability. Connect your CM82s with system components as per the description on the following pages.

Connections

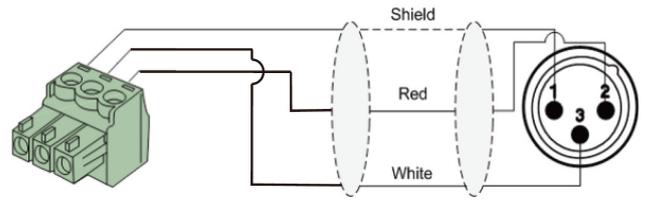
The input and output connections are to international wiring standards for professional audio equipment.

For balanced stereo input and link output connections

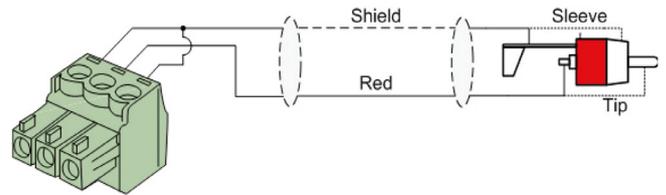


L { Left: Ground
Center: Signal-
Right: Signal+
R { Left: Ground
Center: Signal-
Right: Signal+

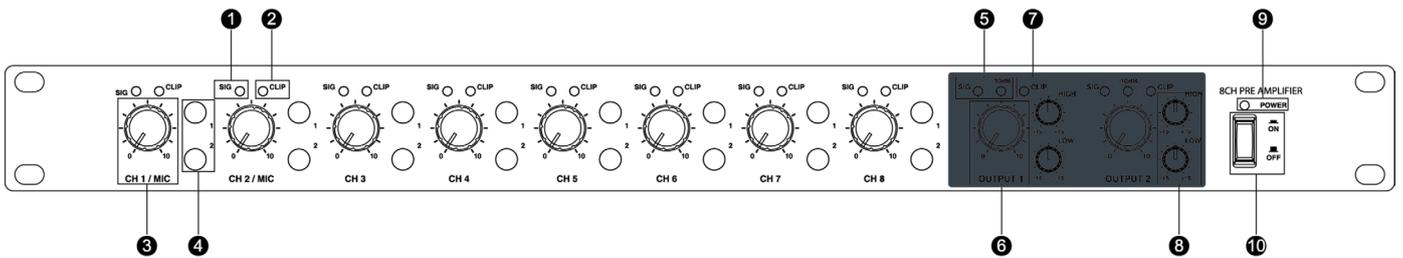
For balanced line output connections



For balanced stereo input and link output connections

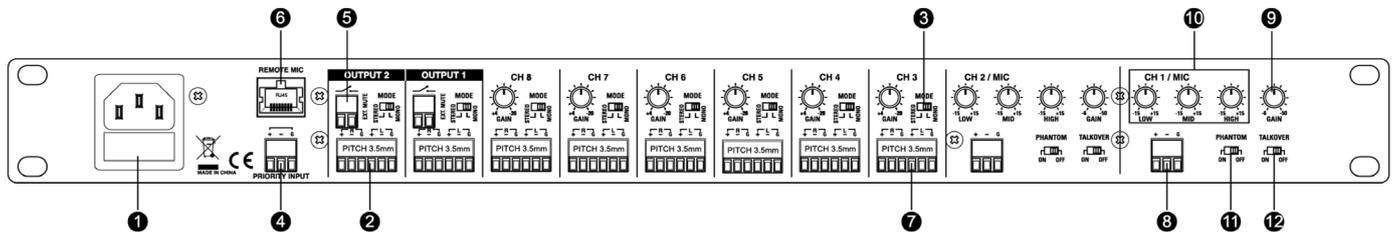


Front Panel



1. SIGNAL INDICATORS - Indicators show current input signal on each input channel.
2. CLIP INDICATORS - Indicators warn against signal overload on each input channel. We recommend users adjust GAIN control on the rear panel when PEAK indicators are flickering to protect the audio system.
3. INPUT CHANNEL VOLUME - Input volume control allows adjustment for each individual input.
4. OUTPUT CHANNEL SELECTORS - Push button selectors allow routing for each input channel.
5. OUTPUT LEVEL METER - Indicators show current output level.
6. OUTPUT VOLUME - Volume controls allow adjustment of the level for each output channel.
7. CLIP INDICATORS - Indicators warn against signal overload on each output channel. We recommend users adjust the output VOLUME control when CLIP indicators are flickering to protect the audio system.
8. OUTPUT CHANNEL EQ CONTROLS - Two band equalisers per output channel adjustable over a wide range - HIGH : $\pm 15\text{dB}$ at 10KHz / LOW : $\pm 15\text{dB}$ at 100Hz
9. POWER INDICATOR - Indicator lights when power switch is turned on.
10. POWER SWITCH - On/Off switch.

Rear Panel



1. AC POWER INLET WITH FUSE - Mains power supply (100-240V AC - 50/60 Hz) has to be connected to AC power inlet. The connection is made by an IEC C14 power connector and is fitted with a fuse. If replacing the fuse, make sure the value of the replacement fuse matches the value of the original fuse (T500mAL/250V).
2. BALANCED STEREO LINE OUTPUT - Balanced stereo line has one 6-pin terminal block connector. The audio signal from these connectors can be fed to any amplifier.
3. MODE - Switches the input between mono and stereo modes. When switched to mono, this mixes both channels making them identically available on both output channels. When switched to stereo, the output channels are stereo.
4. PRIORITY INPUT ALL - Mutes all input signals.
5. PRIORITY MUTE CONTACT - Completely mutes the output channel when the contact closure terminals are shorted. This is convenient for situations where a separate emergency system is installed and complete background music muting is required for a fire alarm as the emergency system contact outputs can be connected to this input.
6. OPTIONAL REMOTE MIC INPUT - Connects a RM2 (desktop remote microphone) via a RJ45 jack (a UTP CAT5/6 cable is required) for individual zone announcements. You can connect up to 4 stations through the link port. It is recommended that the maximum distance from the main unit to the RM2 does not exceed 200 meters.



Note: This port is not a network terminal. Do not connect a network device.

7. BALANCED STEREO LINE INPUTS - Balanced line level audio sources can be connected to channels 3-8 via a 6-pin terminal block connector.
8. BALANCED MICROPHONE INPUTS - Balanced mono sources such as a microphone, can be connected to inputs mic 1 and mic 2 via 3-pin terminal block connectors.
9. GAIN CONTROLS - Controls vary the input level with a 44dB adjustable range of -50dB to -6dB for microphone input channels and -30dB to +14dB for line input channels.
10. INPUT CHANNEL EQ CONTROLS - Control the input signal equalisation with a range from -15dB to +15dB at 80Hz(LOW), 2.5kHz(MID) and 12kHz(HIGH) for CH1~CH2.
11. PHANTOM POWER SWITCH - Switch to on to provide phantom power when using condenser microphones.
12. TALKOVER SWITCH - All input signals are muted by the input signal of channel 1 automatically when this switch is on.

Specifications CM82s

Rated Output Level/Impedance	0dB / 600 Ω Balanced
Input Sensitivity/Impedance Mic Input	(CH1-2)- 60dB~- 16dB / 20KΩ Balanced
Input Sensitivity/Impedance Line Input	(CH1-6)- 20dB~ + 4dB / 20KΩ Balanced
Frequency Response (-1dB)	20Hz- 20kHz
THD	< 0.1%
Crosstalk	> 70 dB
Equalization Mic Input	High : 12 kHz ± 15 dB / Mid : 2.5 kHz ± 15 dB / Low : 80 Hz ± 15 dB
Equalization Output	High : 10 kHz ± 15 dB / Low : 100 Hz ± 15 dB
Hum and Noise	> 90 dB
Power Source	AC 100~240 Volt, 50~60Hz
Net Weight	3.33kg
Dimensions (W x H x D)	482 x 44 x 320mm

Specifications RM2

Rated Output Level/Impedance	0dB / 600 Ω Balanced
Input Sensitivity/Impedance	-36dB / 20kΩ Balanced
Frequency Response (-1dB)	80Hz - 15kHz
THD	< 0.1%
Hum and Noise	> 90 dB
Number of Zones	2 Zones
Net Weight	700g
Dimensions (W x H x D)	120 x 60 x 200mm (base only)

Warranty

We offer a conditional warranty for the following periods for parts and labour against faulty manufacture and original materials only:

Amplifiers	5 years
Mixers	5 years
Processors	5 years
Replay	1 year
Speakers	5 years
Commercial	5 years

The terms of the product warranty only apply if the product:

- Has been purchased directly or indirectly from Sound Choice Pro Audio Pty Ltd in Australia and New Zealand
- Has been installed and operated in strict accordance with the instructions and specifications supplied
- Has not been:
 - Repaired
 - Altered in any way
 - Tampered with
 - Opened (Chassis not to be opened)
 - Damaged by accident, misuse, abuse, improper installation or operation or an act of God

This warranty excludes any parts, labour, packing, transport and other associated costs including personal injury with:

- Damage caused due to operation or installation under incorrect conditions or contrary to the instructions or specifications of the product
- Faults due to not performing proper routine maintenance as specified in the operation manual
- Accessories from other suppliers or damage caused to or by this item to accessories or other equipment to which it may be connected
- The failure of any loudspeaker components due to misuse or abuse, incorrect operation, overpowering, clipping or any fault or failure in any amplifier or other signal processor or device directly or indirectly connected to the failed speakers regardless of the cause of the fault
- Faults or failures due to adverse environmental or operational conditions. Such conditions include the effects of poor ventilation, water, chlorine, salt water, dust, temperature, wind, vibration, perspiration and or other corrosive and abrasive agents
- Faults arising from outside interference such as radio frequency and electro magnetic interference or other electronic/ electrical interference
- The failure of any original software supplied with any product due to the improper use or application of the software either to the device itself or to any other devices or systems or software applications associated with it
- The use of unauthorised copies of any software in any product totally voids warranty associated with that product and software.

Nothing in this warranty shall be construed as affecting any rights you may have under the Trades Practices Act or any other Commonwealth or State legislation which gives you rights which cannot be modified or excluded by the agreement.