



CEILING

SYSTEMS

[Between us, ideas become reality.™]

iceilings

SOUND SYSTEMS

i-ceilings Powered Panels (AMP Versions)



User Instructions for models

- CS4000ME/AMP
- PROME/AMP

i-ceilings Powered Panels



CS4000ME/AMP and PROME/AMP models are powered versions of the unique i-ceilings Sound Panel and feature the IAPA (Integrated Armstrong Panel Amplifier) - a 20W fully featured power amplifier pre-installed into the i-ceilings panel.

i-ceilings Sound Panels can be supplied with a wide range of tile finishes allowing the unit to be installed invisibly in any

Armstrong suspended ceiling. i-ceilings are primarily designed for use in sound reinforcement systems.

The 'IAPA' amplifier has two inputs; One is at line level allowing the use of AV equipment (eg. CD/MP3/Laptop, etc) or remote Outreach input plates such as the APA and APL. The other input is at a level suitable for connection to a wireless microphone receiver such as the Chiayo IWR220 Infrared. An 18v DC supply is available from the amplifier to drive the Outreach plates and a 15v DC supply to power the IR receiver. Both inputs have their own level controls.

A separate line level output, 18v DC supply and external low impedance speaker output are available should they be required.

The unit is fitted with High and Low tone controls to allow adjustment of the frequency response of the panel to suit the installation requirements.

All the connections to the unit are externally accessible and are of the removable screw terminal type allowing for quick and easy connection.

The amplifier requires a 230v 50Hz mains power supply.

Specifications

Rated Output:	20W RMS into 8 ohms
Frequency Response:	100Hz ~ 18kHz \pm 3dB
THD (At 1kHz):	Better than 0.1% at rated output
Tone Controls:	Low 1kHz \pm 12db High 10kHz \pm 12db
Line Input:	500mv, 600 Ohm balanced
Mic Input:	200mv, 10k Ohm unbalanced
18v Outputs:	18v DC, fused at 100mA max
15v Output:	15v DC, fused at 500mA max
Line Output:	750mv, 600 Ohm Balanced
Power Consumption:	35 Watts max
Power Input:	230V AC 50Hz via IEC socket
Case:	White painted steel
Weight:	CS4000ME/AMP: 4.6kg PRO-ME/AMP: 7.1kg
Dimensions:	600 x 600 x 120mm

Please note:

In line with our policy of continual product improvement, the manufacturer reserves the right to change the above specifications without prior notice.

Accessories

Your i-ceilings Amplified Sound Panel is supplied with an IEC mains lead.



Integrated Amplifier Features

- **Line Level:**

Volume control for adjusting the level of the Line Level Input.

- **Microphone Level:**

Volume control for adjusting the level of the Microphone Receiver Input.

- **Tone Controls:**

Two controls (Low and High) for adjusting the tonal content of the sound output from the amplifier.

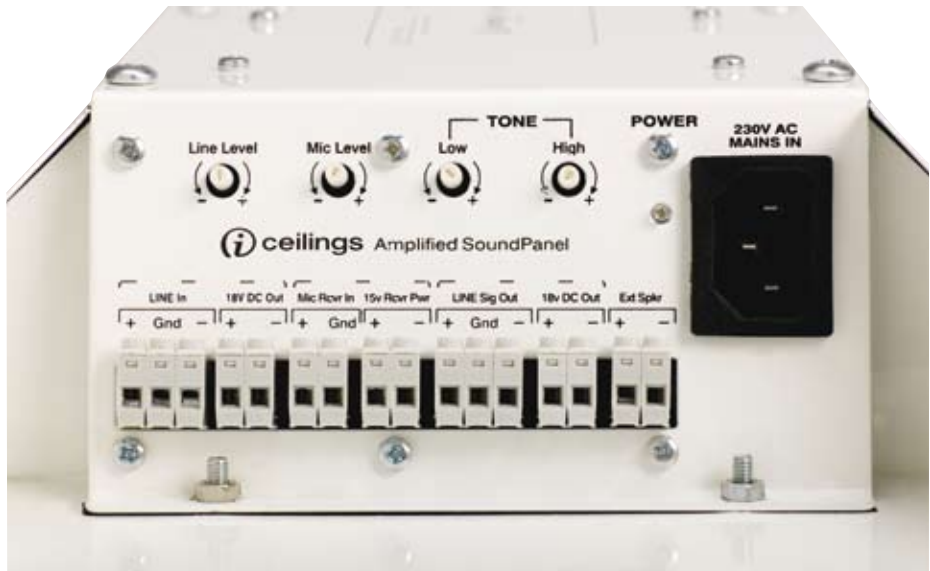
Note: the 'Low' control operates over the lower middle frequencies only, as the bass response is preset to suit the panel characteristics.

- **Power:**

The red LED situated on the unit indicates, when illuminated, that power is present.

- **230v Mains Input:**

230V 50Hz Mains input (IEC Type Connector).



Connection Details

(please refer to diagram on page 6)

- **Line In:**

Balanced line level input terminals for connection of AV equipment (eg. CD, MP3, Laptop, etc) or up to five remote Outreach input plates (APA / APL etc.)

- **Microphone Receiver In:**

Unbalanced microphone level input terminals for connection of an infrared or radio microphone receiver.

- **18v DC Out: (Line Level / Line Sig Out)**

18v DC supply terminals providing power to the Outreach plates. These terminals will provide a combined maximum output current of 100mA.

- **15v DC Out: (Microphone Receiver)**

15v DC supply terminals providing power to a wireless microphone receiver. These terminals will provide a combined maximum output current of 500mA.

- **Line Sig Out:**

Balanced line level output terminals available within the IAPA for connection to the line level input of other equipment such as the APA-LLO. Can be used for connecting multiple Armstrong panels together in larger rooms where one speaker would not give sufficient sound coverage.

- **Ext Speaker:**

External 8 ohm speaker terminals for powering extra low impedance speakers if required. Damage to the amplifier can occur if speakers with a total impedance of less than 8 Ohms is connected to these terminals.

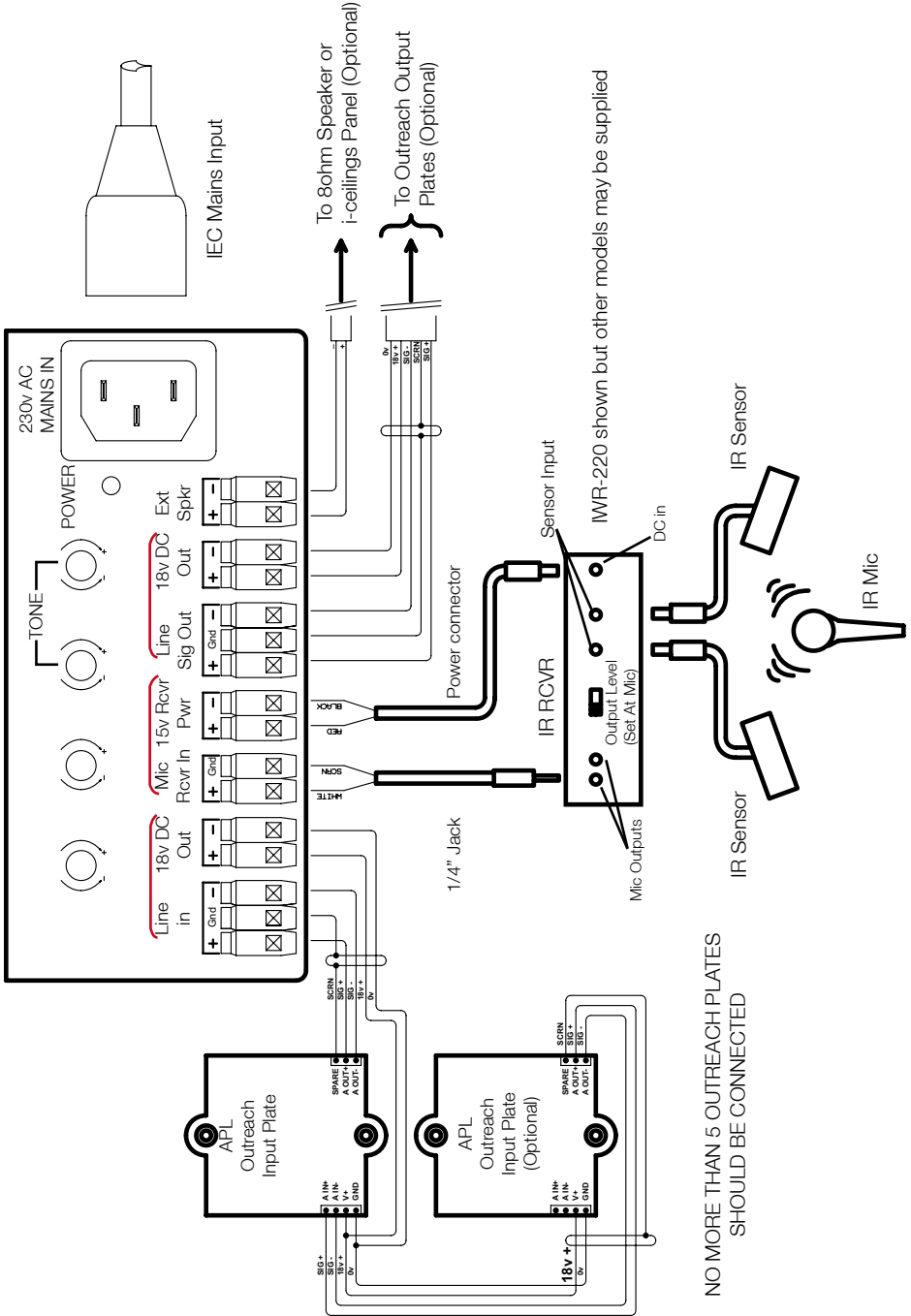
- **Mains In:**

The mains input should be connected here using an IEC type connector. The supply input should be 230v AC (+/-10%) 50Hz.



**Warning -
No connections should be made to the unit
whilst the mains power is connected**

IAPA Connection Details



Further Information

Optional extras

Armstrong Soundfield installation kits (Please contact your dealer for details).

Technical assistance

For technical assistance regarding this product please contact your local dealer, or you can email direct to: service@cie-ltd.co.uk

Comments

If you have any suggestions or comments on how we can improve this product or these operating instructions please contact us using the details on the back cover or by emailing us at the following address:

engineering@cie-ltd.co.uk

All customer feedback is appreciated.

Important please read:

This product should only be installed by a competent installer. The manufacturer accepts no responsibility for any resulting damage or consequential loss due to incorrect installation.

- **Remember – if in doubt about any aspect of the installation, please ask!**
- **We strongly recommend the installation of safety cables when installing this product in a ceiling.**
- **The amplifier will get warm during use, so please allow adequate ventilation around the unit.**

For further information on i-ceilings Sound Panels, go on-line to

www.iceilings.uk.com

Product compliance:

These products comply with the following European directives:

- EMC directive 89/336/EC (plus amendments)
- Low voltage directive 72/23/EC (plus amendments)
- WEEE Directive 2002/95/IEC
- RoHS Directive

Disposal:

When this product has reached the end of its useful life it must be disposed of in accordance with the European Parliament and Council Directive on Waste Electrical and Electronic Equipment (2002/96/EC) ('the WEEE Directive')

For disposal details, please go on-line to www.iceilings.uk.com/weee.htm

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The Armstrong logo consists of the word 'Armstrong' in a bold, sans-serif font, with a circular graphic element behind the letter 'A'.