



EA35 In-wall amplifier

Manual and installation instructions

General Description

The EA35 is a versatile in-wall amplifier for use in classrooms, hotel rooms, meeting rooms and also for use in the home. The ideal choice where space or access is limited.

The amplifier is designed primarily for use with a PC and other devices such as DVD, MP3 or auxiliary line inputs and can also be used with sound reinforcement microphone systems.

The amplifier is ideal for use in a school classroom with either wall mounted or ceiling mounted speakers. Two inputs with separate volume controls located on the front of the amplifier, give you the ability to easily add sources such as a PC to the left hand input and a DVD player, MP3, iPod or other portable music source to the right hand input which also has a switch to match the source to the amplifier.

The EA35 amplifier is a Class D Stereo amplifier providing 15 Watts per channel continuous power and up to 26 Watts short term power.

The amplifier has a modular design that fits into wall mounted faceplates and backboxes or even other equipment with either an external laptop type DC power supply or a faceplate mounted power supply module.

To obtain the best performance from your amplifier please follow the guidance provided in this manual.

Standards

The amplifier complies with CE standards for Electro Magnetic Compatibility (EMC) and the Low Voltage Directive (LVD) and with the Restriction of Hazardous Substances Directive (RoHS) (EU directive 2002/95/EC)

The amplifier should be returned to the place of purchase at the end of its useful life for recycling.

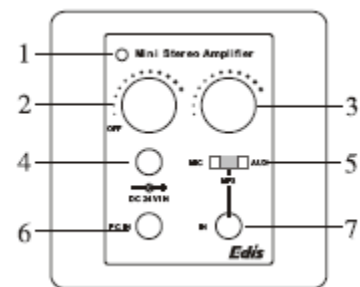
Warnings

The 24 volt DC power supply is designed for use with either 110 Volt or 240 Volt mains supply, please check that you have purchased the correct power supply with your amplifier before connecting to the mains.

Amplifier controls and connections

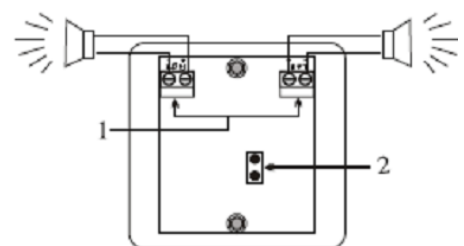
Amplifier front panel

1. LED Power on/off indicator
2. Volume control PC in and power on/off switch.
3. Volume control Mic/MP3/Aux
4. DC Power input socket (24 volt)
5. Selector switch
6. PC Input
7. Mic/MP3/ Aux input



Amplifier rear connections

1. Left and Right speaker connections
2. Link for power supply module



Power supply (module)

Mains input connections L=Live, N=neutral, GND= ground/earth
DC power link to amplifier socket

Power supply (External)

Power lead
Power supply
DC power cord

Specification

Rated Power Output	15Watts x 2
Output impedance	4Ω or 8Ω speakers
Frequency Response	50Hz~50kHz ± 3dB
Signal-to-Noise Ratio	≥ 60dB (MIC) ≥ 70dB (AUX) ≥ 65dB (MP3)
Input Sensitivity	5mV (MIC) 50mV (MP3) 600mV (AUX)
Input Impedance	10K (MIC) 47K (MP3) 47K (AUX) 47K (PC)
Supply Voltage	DC 24V
Power Consumption	34W
Dimension	85mm(W) x 72mm(D) x 85mm(H)
Weight	229g

Installation

The amplifier is designed for use inside buildings and is best installed near to the location of its input devices such as PC or DVD player etc. In a classroom this would normally be close or next to the interactive whiteboard at a height that is easily accessible by the teacher to control the volume and connect and disconnect devices

The following locations should be avoided if possible

- Areas with excessive moisture or damp
- Places that expose the faceplate to direct sunlight
- Locations over radiators or other heating equipment

Back Box

The backbox design with sliding cable entry makes installation very easy, simply fix the back box to the wall and place the cables in position, no need to thread cables or connectors through holes, though knock-outs are provided if needed.

The lower half of the back box sliding plate can be “snapped off” or left whole if cables are fed from the rear of the backbox

Mounting the amplifier

Siting the back box is simplified by fixing an adhesive template to the wall, ensuring that it is horizontal ideally using a spirit level. Drill the fixing holes and place suitable wall plugs in the holes to suit the wall surface ie masonry or plasterboard etc.

Ensure that the cable entry is facing the direction that you want before fixing to the wall.

If additional cable entries are to be used decide where the cable shall enter the box and use pliers to break out the plastic knockouts. Pass the cable through the hole and align the box up to the fixing hole you have drilled. Use countersunk screws to fix the box to the wall. Before they have been fully tightened, use the spirit level to check that the box is level.

Mounting the amplifier in Dado Trunking

The dual gang faceplate fits standard UK dual gang Dado accessory mounts and backboxes, but be sure that the Dado backbox depth is sufficient for the cables and connectors. The amplifier requires a minimum of 35mm and if used with the internal DC power module 45mm.

Speaker installation

The amplifier is suitable for use with 4Ω or 8Ω speakers

Before connecting speakers to the amplifier. make sure that the amplifier and all associated equipment is turned off.

Use a loudspeaker cable no lighter than 14 gauge AWG and no longer than 30 ft (10 metres) to avoid noticeable signal loss from the cable.

Connect the cable leads from the output of the amplifier to the input terminal (binding) posts on the rear of the loudspeaker cabinets.

Make sure that the speaker wires connect the amplifier to the speakers correctly ie the Left + on the amplifier to +(or Red) on the speaker installed on the left side and Left – on the amplifier to – (or Black) on the same speaker to maintain line polarity and to avoid phase distortion and simarlary with the Right speaker connections.

- Do not place the loudspeakers in a location where they will be exposed to direct sunlight, high temperature, or high humidity.
- Turn the volume control of your amplifier to it's lowest volume when first turning it on to avoid damaging the speakers.
- Do not exceed the maximum power rating of the speakers, as sound quality will be impaired and the loudspeaker drivers may be damaged.

Operating instructions

Check that the volume control on/off switch is in the off position before connecting the DC power supply to the amplifier or mains power to the power supply.

Ensure that all connections have been made including the speakers before switching on.

To obtain the best output quality, please select the correct input type corresponding to the input source as follow:

For MIC input, slide the switch to the 'MIC' position.

For MP3 input, slide the switch to the 'MP3' position.

For CD/VCD/DVD input, slide the switch to the 'AUX' position.

Trouble shooting

If your system is not operating properly, please refer to the following information. If the problem persists, disconnect from power and contact your AV reseller immediately.

Problem	Correction
No sound	Turn unit off and check connections Check output level from source e.g laptop or mp3 player output volume The amplifier has temperature and overload protection. This means if the operating temperature is extreme (< -40°C >+50°C) or the amplifier is overloaded it will temporarily mute itself. When normal conditions return, it will resume working. Check power connections
No RED power indicator light	Volume is too high
Distortion	Turn off and check connections
Sound from only one speaker	Turn off the amplifier immediately and unplug the power cord. Contact your dealer or nearest service centre.
Smell of burning or smoke	

Packing list

- EA35 Amplifier module, or module fitted into single gang faceplate or module fitted into dual gang faceplate
- Power supply either External or a power supply module (if not already fitted to faceplate)
- Dual gang or single gang faceplate, 2x 18mm screws and 2x screw covers
- Dual or single gang Back box including sliding plate
- Template label for fitting backbox
- Manual and Installation Instructions

Because we are committed to ongoing quality improvement the specification of this product may change without warning E&OE