



P101B

Mobile PA Amplifier



30W Amplifier
12V dc Power Supply
2 Balanced Microphone Inputs
1 Auxiliary Input
4-8 Ohm Load

IMPORTANT

Users please note:

These instructions should be read carefully and left with the user of the product for future reference.

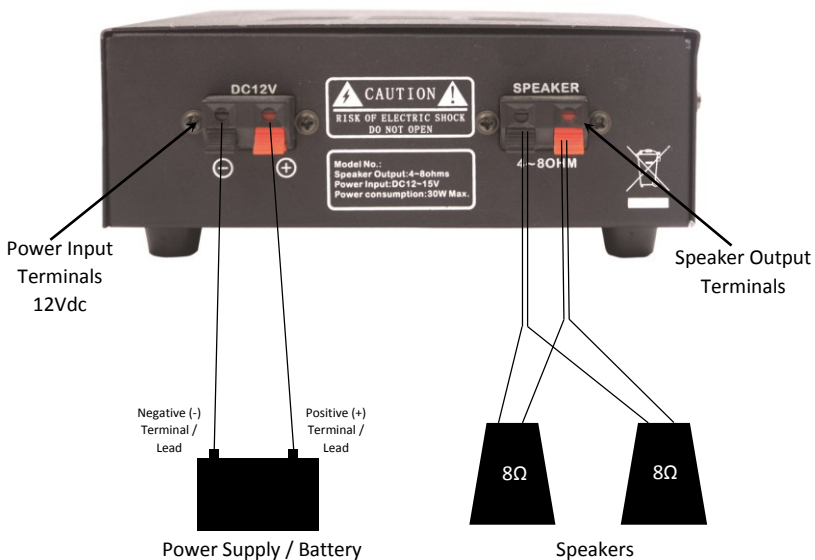
BEFORE USE

Inspect the product for signs of damage. If the product is damaged, DO NOT use it, and contact your supplier immediately.

PRODUCT SAFETY

- This product is not water/splash proof always keep dry.
- Use on a power supply rated at 3A or above

INSTALLATION



The P101B will only run from a suitable 12Vdc battery or Power Supply. Before connecting any power supply check the unit is switched off at the front panel and the wires are disconnected from the battery or the power supply is switched off. To connect to the power observe the correct polarity and connect the positive terminal/lead to the red(+) push connector and the negative terminal/lead to the black(-) push connector on the terminals marked as DC12V. The cable should be fully inserted into the connector with no bare wire or loose

strands showing.

The speakers may now be connected to the terminals marked SPEAKER. The PA amplifier is designed for a load of between 4 and 8 Ohms. If one speaker is used a 4 or 8 Ohm unit will be sufficient. If you wish to use more than one speaker the combined impedance of the speakers should not be any lower than 4 Ohms. On the diagram previously we have shown how 2 x 8 ohm speakers can be used in parallel to produce a 4 Ohm load at the amplifier. The equations for working the impedance at an amplifier from connecting speakers together are given below. If you are in any doubt as to the suitability of the speakers for the installation then you should seek guidance before using the product. Incorrect setup can cause serious damage to the unit and will invalidate any warranty. The wires should be fully inserted into the connector, observing the correct line polarity with no bare wire or loose strands showing.

For Speakers in parallel (as per the example on the image);

$$\frac{1}{r1} + \frac{1}{r2} + \frac{1}{r3} = \frac{1}{x}$$

Where r1, r2, r3 are the impedance of the speakers and x is the resultant impedance.

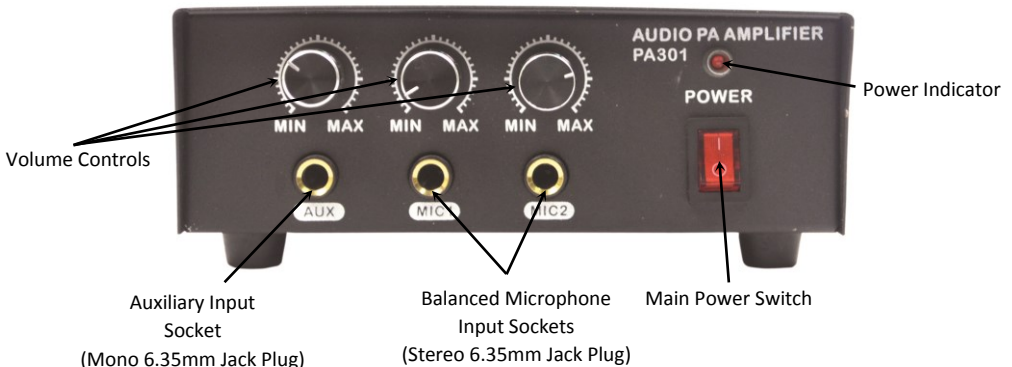
From the example from above we get; $\frac{1}{8} + \frac{1}{8} = \frac{1}{x}$, which makes x = 4 Ohm.

For speakers wired in series we have;

$$r1 + r2 + r3 = x$$

If we used the same 8 ohm speakers above wired in series we would have 8 + 8 = x, therefore x = 16 Ohms. This is too high so is not suitable for this situation and would need to be changed to two 4 Ohm units.

OPERATION



The unit has 2 balanced microphone and 1 auxiliary input. Before switching the unit on turn all volume controls to the minimum position (anti-clockwise) and insert the required microphone or auxiliary equipment. With the volume controls still at the minimum turn the unit on and the power indicator light should illuminate. Turn on the auxiliary equipment or gently speak into the microphone while turning up the required volume control till the desired output level is achieved.

IMPORTANT: to prevent damage to speakers or equipment the microphones or auxiliary equipment must not be unplugged whilst the unit is turned on and the volume is above minimum. To disconnect first turn all controls to minimum position then turn of the unit at the power switch. It is now safe to disconnect all cables and equipment. The battery/power cables must be disconnected from the battery, or the supply turned off before being removed from the power terminals.

DISPOSAL AND RECYCLING

You must not dispose of this unit with domestic household waste.

Most local authorities have specific collection system for electrical items and disposal is free of charge to the end-user.

TECHNICAL SPECIFICATION

Dimensions:.....	245×160×160 mm
Weight:	1.1 kg
Power Input:	12 Vdc
Power:	30W (3A Max)
Auxiliary Input.....	85mV (±1dB) @ 10k Ohms
Microphone Input	3.5mV (±1dB) @ 20-50k Ohms
Output impedance	4-8 Ohms
Output Power (4 Ohms)	30W

SERVICE WARRANTY

Electrovision guarantees the product free from defects in materials and workmanship for a period of twelve months.

Should this appliance be operated under conditions other than those recommended, at voltages other than the voltage indicated on the appliance, or any attempts made to service or modify the appliance, then the warranty will be rendered void.

The product you buy may sometimes differ slightly from illustrations. This warranty is in addition to, and does not affect, your statutory rights.

If you have any problems with this product, please call our Help Desk on (0845) 459 4816.

Electrovision Ltd.,
Lancots Lane, Sutton,
St. Helens, Merseyside.
WA9 3EX
www.electrovision.co.uk