

GUARANTEE

YOUR EQUIPMENT IS GUARANTEED FOR A PERIOD OF TWELVE MONTHS TAKEN FROM THE DATE OF PURCHASE OF THE PRODUCT AGAINST ANY DEFECTS DUE TO FAULTY MATERIALS OR FAULTY MANUFACTURING. DURING THIS PERIOD, REPAIRS TO THE EQUIPMENT WILL BE CARRIED OUT WITHOUT CHARGE FOR LABOUR OR MATERIALS BY ANY AUTHORISED DEALER OR THE FACTORY SUBJECT TO THE FOLLOWING CONDITIONS.

1. The fault must be entirely due to faulty materials or faulty manufacture.
2. The defect must not have been caused by bad installation, accidental damage, misuse or failure to comply with the instructions given in this users manual.
3. The equipment must be used solely for audio applications and is subject to fair wear and tear, for commercial usage.
4. If at any time during the guarantee period part or parts of the equipment are replaced with a part or parts not supplied or approved by us or if the equipment has been dismantled or repaired by any person not authorised by the us, then guarantee shall immediately cease and become void.
5. Evidence of the date of purchase (invoice, receipt or finance agreement) must be produced at the service department to obtain the benefit of this guarantee. Any carriage charges relating to the guarantee will be the responsibility of the purchaser.
6. This guarantee applies to the original purchaser only and the equipment must have been purchased or financed from new, the guarantee cannot be assigned or transferred.
7. Any defective part that has been replaced shall become the property of the company and the right is reserved by the company to replace the equipment or repair it at the option of the company.
8. This guarantee applies to equipment purchased and used within the E.E.C. The importers of equipment in non E.E.C. countries are responsible for the guarantee of this equipment. Parts required under guarantee are free. Shipping charges for components will be charged at cost.
9. Knobs, potentiometers, switches and chassis mount connectors are not covered under the terms of this guarantee.
10. The guarantee does not cover equipment that is in industrial use or which are the subject of rental or hire agreement.
11. The guarantee shall become void if the equipment is at anytime used on any supply circuit or voltage range other than that specified on the equipment.
12. THIS GUARANTEE DOES NOT IN ANY WAY AFFECT YOUR STATUTORY RIGHTS AS A CONSUMER WITHIN THE E.E.C.

**DO NOT
SWITCH or LINK + & - TERMINALS
IF IN DOUBT CALL HELP LINE
PLEASE REMEMBER YOUR SYSTEM IS
ONLY AS GOOD AS ITS WEAKEST POINT
THIS IS GENERALLY
THE HOOK UP WIRES
NEARLY ALL SOUND SYSTEM
FAULTS CAN BE TRACED BACK
TO POOR WIRING CHECK
ALL YOUR CABLES REGULARLY
AND CLEAN THE FAN GUARDS
TO REMOVE ANY CAKING.
HELP LINE (UK) 44 1749840102**

PB400

ACTIVE POWERED SB600
with CONTOUR CONTROL
& SUB BASS LIMITER

OWNERS MANUAL

*For EUROPEAN
220V -230V
OPERATION*



Hz INTERNATIONAL LTD COMBE HOUSE - STOKE ST MICHAEL -BATH - SOMERSET - ENGLAND

UNPACKING

Although these units are a rugged piece of professional audio equipment, they are not indestructible and contain some high specification modern electronic assemblies; they should be handled with some care - like any other type of instrument. Throwing the unit around or into a vehicle or dropping down onto hard ground is the kind of abuse that could eventually cause reliability problems.

The packaging of the unit is specifically designed to safely transport this product. In the unlikely event of the product requiring servicing, this packaging is the safest way to transport it.

All units are factory set for 220/230v operation, but can be internally adjusted to suit 110/120v. Units factory made for 110/120V supply are clearly marked on the back and should not be connected to any higher voltage power source.

SITING THE SPEAKERS

Care must be taken when siting these speakers - not only from the audibility point of view, but for other technical reasons.

DO NOT STAND RIGHT NEXT TO HEATING APPLIANCES OR RADIATORS

DO NOT COVER WITH CLOTH OR SMOTHER BACK POWER MODULE AGAINST CURTAINS ETC.,

◆IN HOT CLIMATES AVOID STANDING THE UNITS IN DIRECT SUNLIGHT IF POSSIBLE◆

FITTING A POWER LEAD & PLUG

The wires in the IEC/CEE mains lead are coloured: Earth: Green/Yellow Neutral: Blue Live: Brown

As these colours may not correspond with the colour markings identifying the terminal in your plug proceed as follows: Green/Yellow wire must be connected to the terminal which is marked with the letter E or coloured Green. - Brown wire must be connected to the terminal which is marked with the letter L or coloured red. - Blue wire must be connected to the terminal which is marked with the letter N or coloured black.

CONNECTIONS

On the back of the PB400 power module you will find the following connection sockets:-

- A. IEC Inlet/ Outlet sockets : To connect the unit to the mains A/C power supply.
- B. XLR male & female: Signal input and link into the amplifier module.

INPUT CONNECTIONS

Connecting the input signal:- The input signal may be connected to the female XLR socket on the module. The signal may come from any suitable line level output,(0dB / 0.775V) e.g., mixer or another PE module. All input connections must use shielded/screened cables.

DO NOT CONNECT WITH SPEAKER CABLES.

The inputs are electronically balanced for those who require this facility, connections on the XLR's are pin 1 = Ground / Screen, pin 2 = Hot / signal & pin 3 = Cold / balanced signal. They can be used unbalanced, make sure the XLR is grounded on pins 1 & 3 with pin 2 as 'Hot' for this configuration.

OUTPUT SIGNAL CONNECTION

Connecting a link signal:- Link outputs can be obtained by using the Male XLR output connector.

PLEASE NOTE THIS OUTPUT IS NOT A SPEAKER CONNECTION - IT IS A LINE LEVEL SIGNAL ONLY 0dB / 0.775mV

POWER CONNECTIONS

Connecting a mains lead:- Fit the female plug of a mains lead into the connection socket on the amplifier and the male plug into a suitable mains supply socket. AC power link can be taken from the Female IEC socket on to another adjacent PE module, However daisy-chain style hook-ups of more than 4 units per power source are not recommended.

PEC Combined Power & Audio hook up cables are available in terminated 2M, 5M & 10M lengths. (This type of cable alleviates the need or separate hook-up wires.)

PECD 4 way - 1U Rack mount Signal & AC distribution panel is available for multiple hook-ups of PEC cables.

OPERATION

Your PB400 unit is now ready to use. Before switching on, it is advisable to familiarise yourself with the functions of the controls and the significance of the indicators.

1. Power switch: Isolates unit from the line supply.
2. Green Flash: When showing indicates power is applied to unit.
3. Volume: Sets the gain of the amplifier stage
4. Green LED : on front of speaker Indicates the power module is running.

POWERING UP

You can turn the module on or off either at the mains supply, or by using the rocker switch on the panel.

Please note: it is good practice to turn down the thumbwheel volume control on the enclosure before switch on as precaution against speaker damage. Which can be caused by instant high level feedback from an open channel mixer & mic, or system instability etc.

SPECIFICATIONS

REAR PANEL FEATURES

- 2 x XLR Connectors In/Out Link - Line level 0dB 0.775V -Balanced
- 2 x IEC AC In/Out Link 220/230v AC - 50Hz
- 1 x Green indicator Rocker type on/off switch
- 1 x Fuse Holder 6A AC Supply
- 1 x Rotary on/off Ground lift switch
- 1 x Thumb Wheel Volume Control

ENCLOSURE FEATURES

- 1 x Green Power Indicator LED on front centre panel

DRIVE STAGE

OUTPUT : Bi -Polar - 400W RMS
FREQUENCY RESPONSE = 20Hz - 250Hz

GENERAL SPECIFICATION

AVERAGE S.P.L. = 124dB programme
PEAK S.P.L. = 128dB
WEIGHT = 30kgs

MODULE MAINTENANCE

To ensure long term reliability

REGULARLY CLEAN THE FAN GUARD MESH WITH A DRY BRUSH TO REMOVE ANY CAKING.

The amplifier module contains no user serviceable parts inside. Due attention should also be paid to the condition of all signal and mains interconnection leads and connectors. If required the outside of the unit can be cleaned using household polish with a lint free cloth. Do not clean using solvents, detergents or abrasives.

TROUBLE SHOOTING GUIDE

Although the greatest care has been taken in the manufacture of this system the possibility remains that problems might occur during use or difficulties could be experienced during its initial usage.

The cause, however, is rarely found to be the amplifier module. Below is a list of symptoms and possible causes. Some of the suggested causes may appear obvious but they can be easily overlooked.

Under no circumstances should you open the equipment; this is dangerous, will expose high voltages, and will invalidate all rights under the guarantee..

1. After turning on the 'power' switch the 'power' indicator does not light-

The mains plug is not pushed far enough into the module or there is no supply at the mains socket. Check supply by using another appliance.

The mains fuse is broken, located on the rear of the module, replace using 6A 20mm fuse.

2. When volume control is turned up no sound is heard - No input signal connected to input socket.

3. Even when the output is low, the output sounds distorted-

Check for a faulty connection of plug or damaged cables or the Input Signal level may be too high and overloading the input stage

4. Output distorted at medium volume setting-

Overloaded input signal - reduce source volume level and turn up module volume or the module is running too hot, ensure free flow of air, around the unit. (see section a. of Siting the Speaker)