

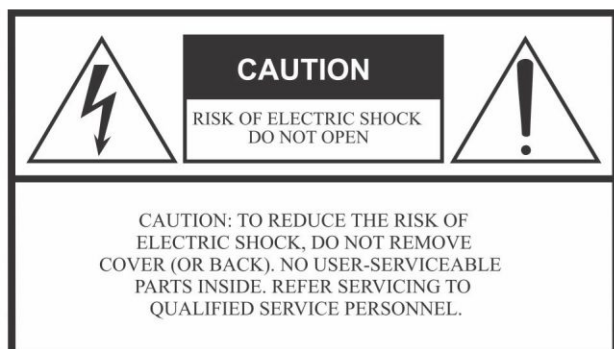


# DUAL CHANNEL POWER AMPLIFIERS PA SERIES

## Owner's Manual



Models :- PA 1.5, PA 2.0, PA 3.0, PA 4.5, PA 6.0, PA 7.5



## Explanation of Graphical Symbols



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



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

# IMPORTANT SAFETY INSTRUCTIONS

## WARNING

TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS APPARATUS TO RAIN OR MOISTURE.

## IMPORTANT NOTICE

### Connecting the Plug and Cord


**WARNING: THIS APPARATUS MUST BE EARTHED IMPORTANT.** The wires in this mains lead are coloured in accordance with the following code:

GREEN-AND-YELLOW: EARTH

BLUE: NEUTRAL

BROWN: LIVE

As the colours of the wires in the mains lead of this apparatus may not correspond with the coloured markings identifying the terminals in your plug proceed as follows:

The wire which is coloured GREEN-and-YELLOW must be connected to the terminal in the plug which is marked by the letter E or by the safety earth symbol  or colored GREEN or GREEN-and-YELLOW.

The wire which is coloured BLUE must be connected to the terminal which is marked with the letter N or coloured BLACK.

The wire which is coloured BROWN must be connected to the terminal which is marked with the letter L or coloured RED.

- 1 Read these instructions.
- 2 Keep these instructions.
- 3 Heed all warnings.
- 4 Follow all instructions.
- 5 Do not use this apparatus near water.
- 6 Clean only with dry cloth.
- 7 Do not block any ventilation openings. Install in accordance with the manufacturer's instructions.
- 8 Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
- 9 Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.
- 10 Only use attachments/accessories specified by the manufacturer.
- 11 Use only with the cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the apparatus. When a cart is used, use caution when moving the cart/apparatus combination to avoid injury from tip-over.



- 12 Unplug this apparatus during lightning storms or when unused for long periods of time.
- 13 Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.

## Tips for Safe Operation

The 3 core AC mains cable should be terminated with this AC mains plug by connecting brown/red wire on live pin (L), black/blue wire on neutral pin (N) and yellow/green wire on earth pin (E).

The amplifier must be connected to an AC earthed mains outlet that can delivered the maximum power required. The use of extension cables or adaptors should be avoided as this can jeopardize correct delivery to the amplifier.

All connections must only be carried out or changed with the amplifier switched OFF. Ensure proper impedance matching while in use for BRIDGE mode applications. For continuous safe operation, resultant impedance of the speakers 8 ohm/4 ohm is recommended.

For 2 ohm/4 ohm applications, it is recommended to use speakon connectors only. Use of cable 40/36 or thicker is recommended to prevent power losses.

The level of input signal should not exceed the specified input sensitivities. Excessive input signal levels result in over driving of input circuit which leads to saturated / distorted output at speaker terminals.

Do not operate the amplifier with continuously blinking CLIP LED. The respective volume control of the channels must be adjusted so that the output level does not clip and distort. Do not obstruct the front or back of the amplifier for necessary intake of air.

# Precautions

## — For safe operation —

### WARNING

#### Installation

- Connect this unit's power cord only to an AC outlet of the type stated in this Owner's Manual or as marked on the unit. Failure to do so is a fire and electrical shock hazard.
- Do not allow water to enter this unit or allow the unit to become wet. Fire or electrical shock may result.
- Do not place a container with liquid or small metal objects on top of this unit. Liquid or metal objects inside this unit are a fire and electrical shock hazard.
- Do not place heavy objects, including this unit, on top of the power cord. A damaged power cord is a fire and electrical shock hazard. In particular, be careful not to place heavy objects on a power cord covered by a carpet.

#### Operation

- Do not scratch, bend, twist, pull, or heat the power cord. A damaged power cord is a fire and electrical shock hazard.
- Do not remove the unit's cover. You could receive an electrical shock. If you think internal inspection, maintenance, or repair is necessary, contact your dealer.

- Do not modify the unit. Doing so is a fire and electrical shock hazard.
- If lightning begins to occur, turn off the power switch of the unit as soon as possible, and unplug the power cable from the electrical outlet.
- If there is a possibility of lightning, do not touch the power cable plug if it is still connected. Doing so may be an electrical shock hazard.

#### In case an abnormality occurs during operation

- If the power cord is damaged (i.e., cut or a bare wire is exposed), ask your dealer for a replacement. Using the unit with a damaged power cord is a fire and electrical shock hazard.
- Should this unit be dropped or the cabinet be damaged, turn the power switch off, remove the power plug from the AC outlet, and contact your dealer. If you continue using the unit without heeding this instruction, fire or electrical shock may result.
- If you notice any abnormality, such as smoke, odor, or noise, or if a foreign object or liquid gets inside the unit, turn it off immediately. Remove the power cord from the AC outlet. Consult your dealer for repair. Using the unit in this condition is a fire and electrical shock hazard.

### CAUTION

#### Installation

- Keep this unit away from the following locations:
  - Locations exposed to oil splashes or steam, such as near cooking stoves, humidifiers, etc.
  - Unstable surfaces, such as a wobbly table or slope.
  - Locations exposed to excessive heat, such as inside a car with all the windows closed, or places that receive direct sunlight.
  - Locations subject to excessive humidity or dust accumulation.
- Do not place the power cord close to a heater. It may melt, causing fire or electrical shock.
- Hold the power cord plug when disconnecting it from an AC outlet. Never pull the cord. A damaged power cord is a potential fire and electrical shock hazard.
- Do not touch the power plug with wet hands. Doing so is a potential electrical shock hazard.
- This unit has ventilation holes at the front, rear & top to prevent the internal temperature rising too high. Do not block them. Blocked ventilation holes are a fire hazard. In particular, do not
  - place the unit on its side or upside down,
  - place the unit in any poorly-ventilated location such as a bookcase or closet (other than on the dedicated rack),
  - cover the unit with a table cloth or place it on a carpet or bed.
- Allow enough free space around the unit for normal ventilation. This should be: 5 cm at the sides, 10 cm behind, and 10 cm above.
- If the airflow is not adequate, the unit will heat up inside and may cause a fire.

- To mount several of these units in a standard EIA rack, refer to the rack mounting instructions on page 16.
- To relocate the unit, turn the power switch off, remove the power plug from the AC outlet, and remove all connecting cables. Damaged cables may cause fire or electrical shock.

#### Operation

- Use only thick speaker cables when connecting speakers to amplifier outputs. Use of cables type 40/36 or thicker is recommended for connecting low impedance speakers to avoid power loss in the cables, as heavy current flows through the cables. Using other types of cables is a fire hazard.
- Turn off all musical instruments, audio equipment, and speakers when connecting to this unit. Use the correct connecting cables and connect as specified.
- Always lower the volume control to minimum before turning on the power to this unit. A sudden blast of sound may damage your hearing.
- Do not use this amplifier for any purpose other than driving loudspeakers.
- If you know you will not use this unit for a long period of time, such as when going on vacation, remove the power plug from the AC outlet. Leaving it connected is a potential fire hazard. When operating amplifier on a generator, make sure it is switched "OFF" till generator voltages has stabilized & then only switch "ON" amplifier.
- Be sure of proper impedance of 2/4/8 ohm when used for STEREO/PARALLEL configuration & 4/8 ohm recommended when used in BRIDGE mode.



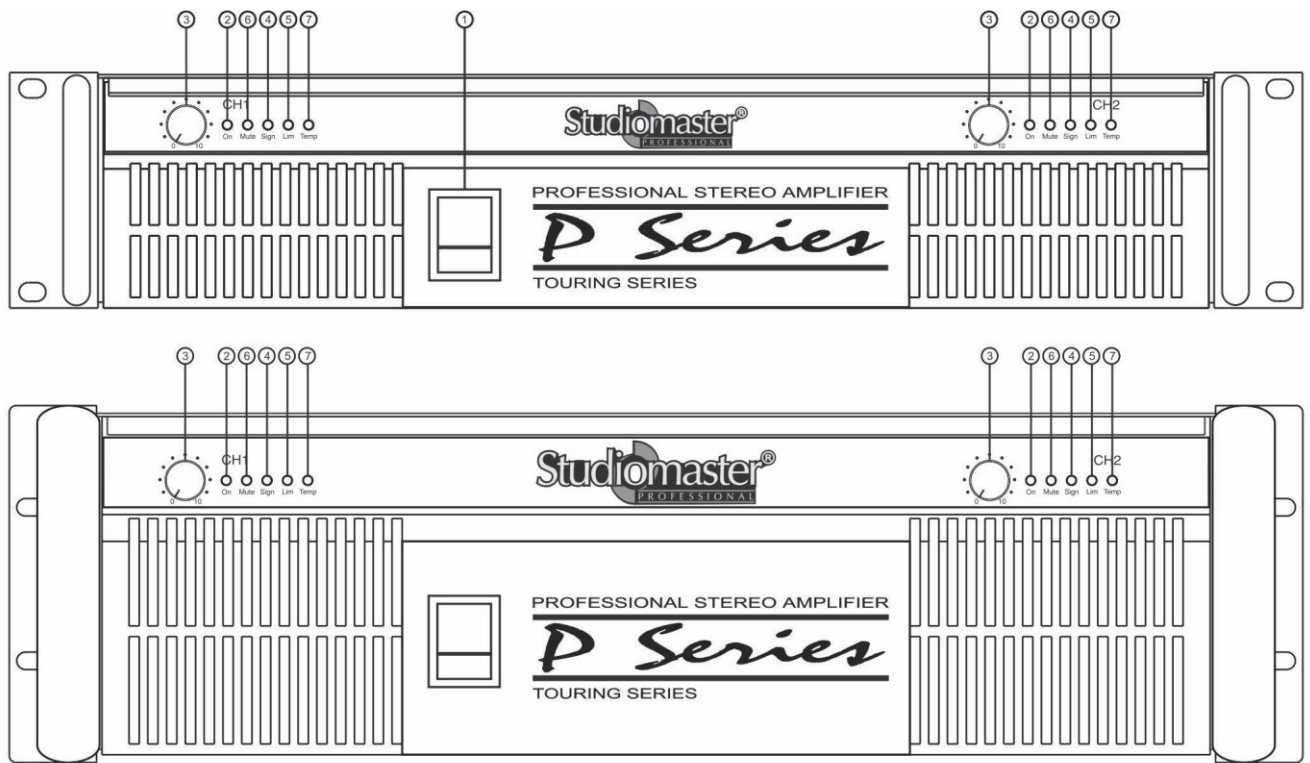
● Features / General Description of Product.....	5
● Front Panel Controls & Features.....	6
● Rear Panel Controls & Features.....	7
● Input-Output Connections.....	8
● Setup & Operations.....	9
● Typical Applications.....	12
● Protections & Installations.....	16
● Trouble Shooting.....	17
● Block Diagram.....	19
● Specifications.....	22
● Note.....	23

Thank you for your purchase of the STUDIOMASTER PA Series power amplifiers. These amplifiers fully incorporate STUDIOMASTER's renowned technology and offers high reliability, rock solid stability and superb acoustic characteristics.

## Features / General Description of Product

- Rugged 19" rack mountable design of chassis.
- High current torroidal transformer which provides excellent regulation and minimized hum & noise.
- Low THD and high damping factor for excellent sound quality.
- Extensive protection circuitry for Temperature ( transistor and transformer ), Overload, Over voltage, DC, RFI & Output short circuit. The amplifier is fully protected for variations in AC supply due to Genset Mains fluctuation.
- Indicator LEDs for Signal, Clip, Temperature (output devices and transformer), Fault & Overload conditions.
- Output termination on 4 way speakon connectors for each channels.
- Limiter circuit protects the amplifier and speaker from being over driven because of high input level signal.
- Balanced / Unbalanced input signal through parallel XLR and 6.3mm (1/4") stereo phone jack in both channels.
- Slide switch selection of Mono / Stereo / Bridge Mode provided at rear panel.

This owners Manual covers 6 models PA 1.5, PA 2.0, PA 3.0, PA 4.5, PA 6.0 & PA 7.5 power amplifiers. Please read through this manual carefully before beginning use, so that you will be able to take full advantage of amplifier's superlative features & enjoy trouble free operation for years to come. After reading through the manual, please store it in a safe place.



## Front Panel Controls & Features

### 1 Master switch

Switches the unit on and off, interrupting both phases.

### 2 Power ON indicator light

When lit, this green LED indicates correct operation of the channel.

### 3 Volume control

Used for adjusting the volume of the channel.

### 4 Signal indicator

Green LED that indicates the presence of the signal in the final stge. It lights up with signals higher than - 20dB.

### 5 Limiter-peak indicator

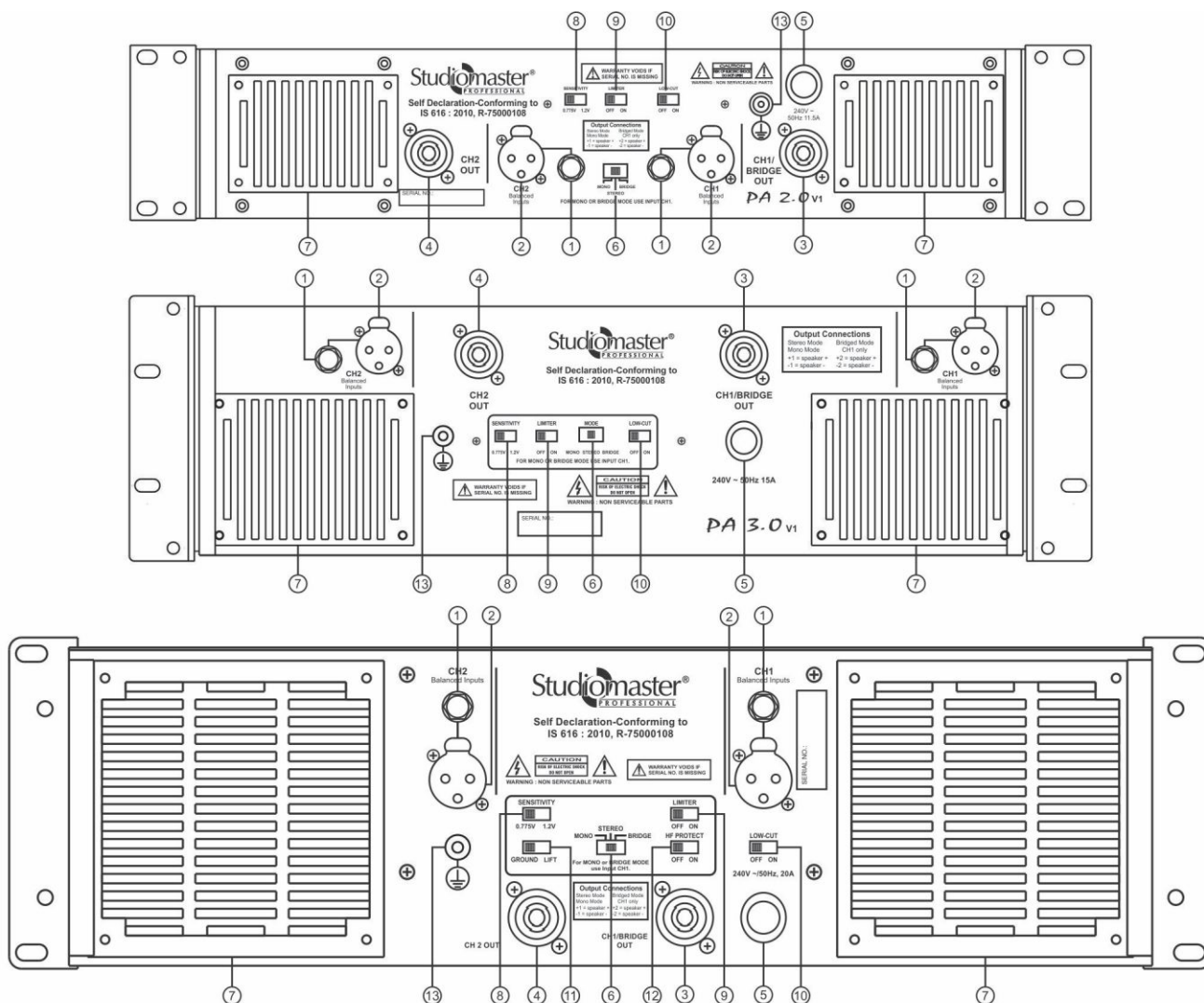
This red LED lights up to indicates that the internal limiter has been activated to eliminate clip. When the limiter is activated it indicates that the maximum amplification has been reached. When it lights up continuously, this means there is an excessive signal input.

### 6 Mute indicator

Yellow LED that indicates the mute status of the channel and is lit for the following reasons: switch on delay (3 seconds), presence of continuous voltage on the channel output, short circuit, thermal protection of the channel, thermal protection of the transformer.

### 7 Thermal protection indicator

Red LED that lights up to indicate an excessive temperature. When this protection is tripped, the amplifier remains in mute status until a normal operating temperature has been restored. It indicates overheating of both the channels and the transformer, in which case the indicators of both channels will be lit.



## Rear Panel Controls & Features

### 1 Balanced 6.3 mm jack input

This stereo jack connector takes the signal (balanced/unbalanced) for driving the channel. If the signal is unbalanced, a mono connector may be used.

### 2 Balanced XLR input

This XLR connector takes the signal (balanced/unbalanced) for driving the channel. If the signal is unbalanced, pin 2 can be used for the signal and pin 3 connected to the earth.

### 3 CH 1 output speakon connector

Use this connector for picking up the amplified signal of CH 1 and signal for bridged configuration.

### 4 CH 2 output speakon connector

Use this connector for picking up the amplified signal of CH 2.

### 5 Power cable

Use this cable for supplying power to unit.

### 6 Configuration switch

This three way switch configures the amplifier for the three working modes: mono, stereo and bridge.

### 7 Air intake grill

The are for cooling the amplifier is taken in from this grill. Do not obstruct the grill, and clean the air filter whenever necessary.

### 8 Sensitivity

This switch is used to select sensitivity to either 0.775V or 1.2V depending on the source.

### 9 Limiter

This switch activates limiter when in ON position. The limiter prevents distortion of the output level when its gets overloaded. When the output level exceeds its maximum, an internal adjustment will be made to prevent overloading. The limiter is specially designed to safeguard connected full-range speakers. The high tone piezo drivers of these speakers are now protected against distortion and harmonic signals which are the result of over steering the amplifier. **When the amplifier is used as a subwoofer amplifier then the limiter has to be switched off to set the extra "punch".**



## 10 Low-cut

Low-cut switch filters the low frequencies from the input signal. Cut off frequency is 20 Hz when it is selected. The filter protects the cone of the speakers against unwanted and inaudible low frequencies.

## 11 Ground/Lift switch

Allows input connector & chassis/circuit ground to be separated to address problem with earth loop.

## 12 HF Protection switch

It is a protection for the amplifier against HF. In case there is high amplitude HF signal at the output, it drops the power of the amplifier thus protecting the internal circuitry.

Presence of prolonged, large amplitude, high frequency output can damage the speakers as well as the internal circuit of the amplifier. The HF Protection circuit continuously monitors the output and drops the amplifier power, if the high frequency persists for more than 10-15 seconds. The HF Protection has no effect on normal music.

## 13 External earth terminal

For a possible ground connection (e.g. in case of hum problems).

# Input-Output Connections

FIG. 1

BALANCED INPUT CONNECTIONS

**STEREO JACK  
6.3mm 1/4"**

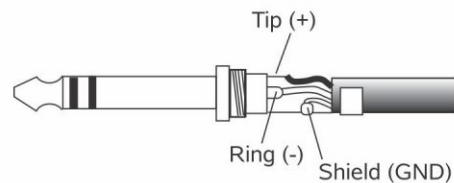
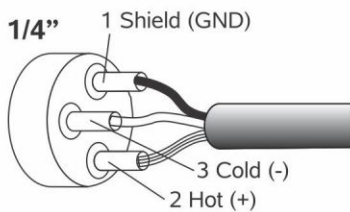


FIG. 2

UNBALANCED INPUT CONNECTIONS

**MONO JACK  
6.3mm 1/4"**

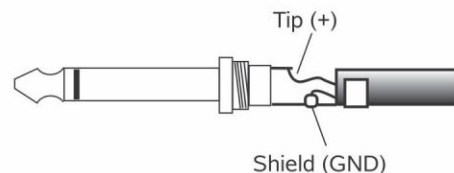
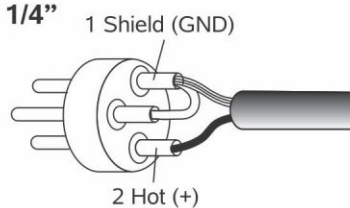


FIG. 3

MONO / STEREO OUTPUT CONNECTIONS

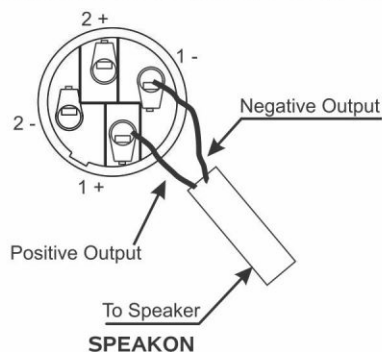
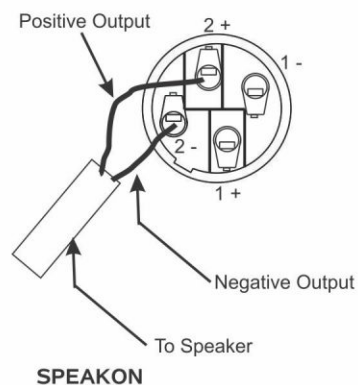


FIG. 4

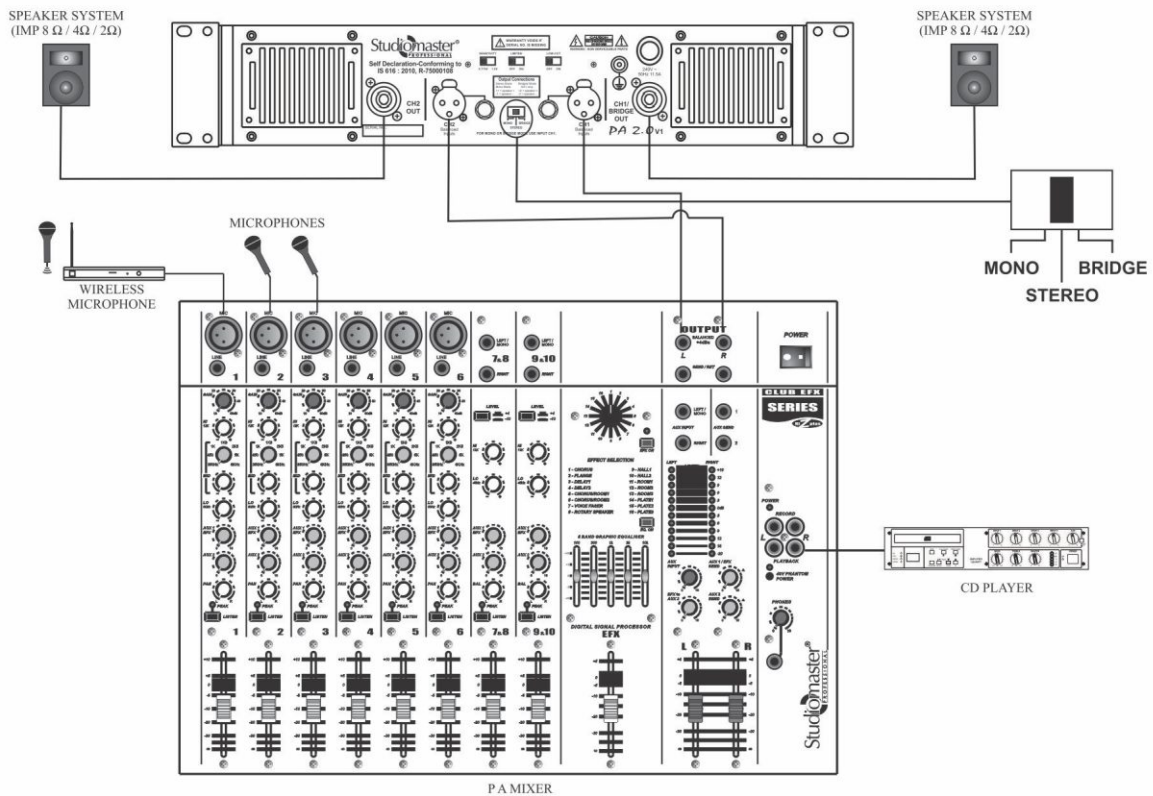
BRIDGE OUTPUT CONNECTIONS  
(CH 1 OUTPUT CONNECTOR)





# Setup & Operation

## Stereo Mode Configuration



In STEREO mode, both channels 1 & 2 are fully independent of each other. The balanced / unbalanced inputs can be connected either to a stereo signal source or two independent mono signal sources. Each channel can separately drive loudspeaker loads of 8 ohm or 4 ohm or 2 ohm.

Connect the Left & Right outputs of a mixer to channel 1 and 2 inputs of the amplifier respectively. Inputs can be wired as per fig.1 & 2 (Input Connections for Balanced and Unbalanced Mode)

Connect a speaker system (8 ohm / 4 ohm / 2 ohm) on the output terminal of each channel. It is recommended to use the speakon connectors and wire these as per fig.3 (Output Connections for Stereo / Mono Mode)

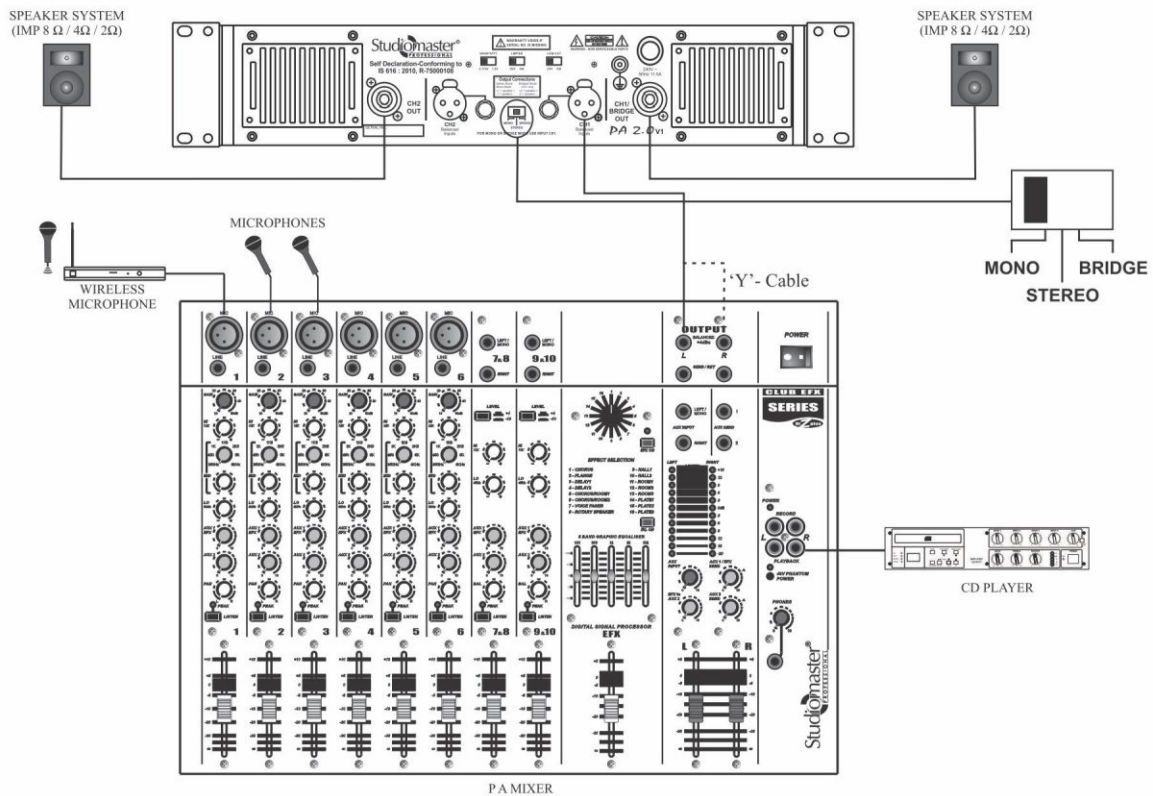
To select STEREO mode, keep the slide switch, provided at rear panel, in STEREO position.

Adjust the individual volume controls of each channel on the front panel to obtain the desired output level.

The level indicator LEDs glow to indicate the presence of signal at the output terminals.

# Setup & Operation

## Mono Mode Configuration



Note:- 'Y' cable to be used to make mono cable or use mono output of mixer.

When operating in MONO mode, the signal source should be connected to the balanced / unbalanced inputs of channel 1 only. Both channels provide similar outputs to their respective loudspeakers. Each channel can separately drive loudspeaker loads of 8 ohm or 4 ohm or 2 ohm.

Connect the line output of a mixer to a channel input of the amplifier. Inputs can be wired as per fig.1 & 2 (Input Connections for Balanced and Unbalanced Mode)

Connect a speaker system (8 ohm / 4 ohm / 2 ohm) on the output terminal of each channel. It is recommended to use the speakon connectors and wire these as per fig.3 (Output Connections for Stereo / Mono Mode)

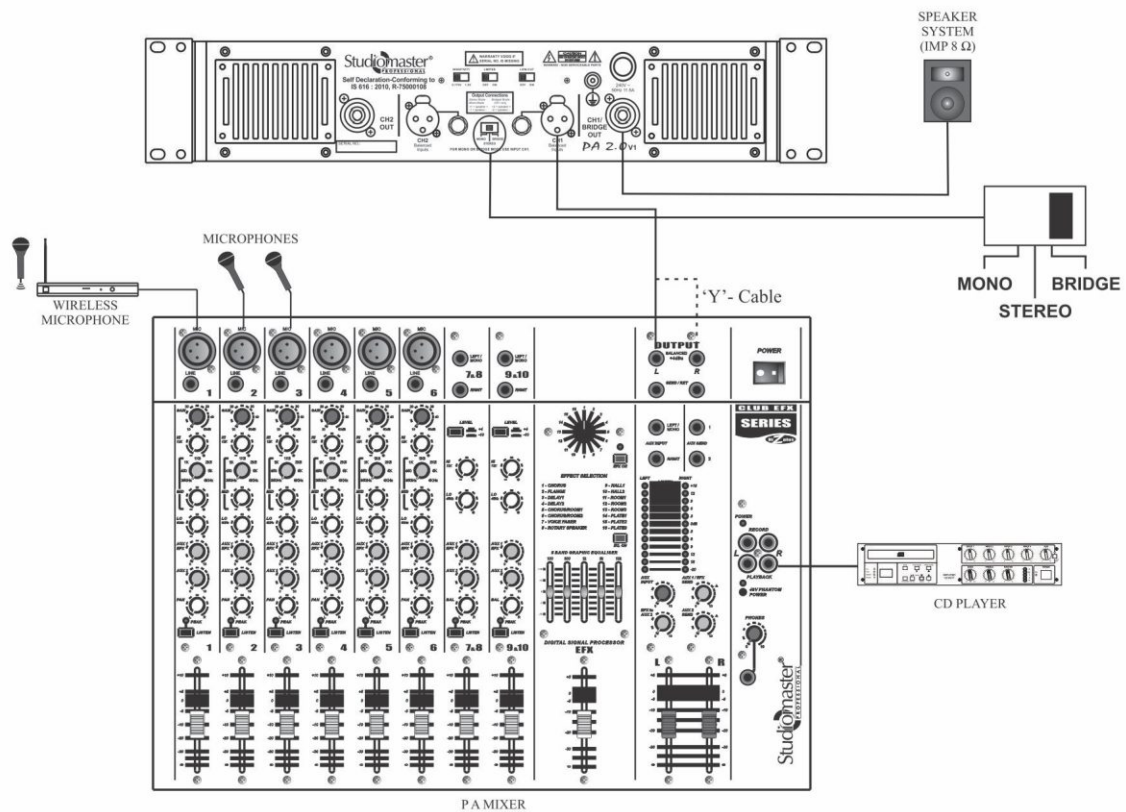
To select MONO mode, keep the slide switch, provided at rear panel, in mono position.

The desired output levels of both the channels are adjustable by volume control of each channel individually.

The level indicator LEDs glow to indicate the presence of signal at the output terminals.

# Setup & Operation

## Bridge Mode Configuration



Note:- 'Y' cable to be used to make mono cable or use mono output of mixer.

For BRIDGE mode operation, the signal source should be connected to the balanced / unbalanced inputs of channel 1 only. This mode the combined power output of both channels for connecting a single loudspeaker load. The combined loudspeaker load should not go below 4 ohm.

Connect the line output of a mixer to a channel 1 input of the amplifier. Input can be wired as per fig.1 & 2 (Input Connections for Balanced and Unbalanced Mode)

Connect a speaker system (8 ohm/4 ohm) on the speakon output of channel 1 only. It is recommended to use the speakon connectors and wire these as per fig.4 (Output Connections for Bridge Mode)

To select BRIDGE mode, keep the slide switch, provided at rear panel, in Bridge position.

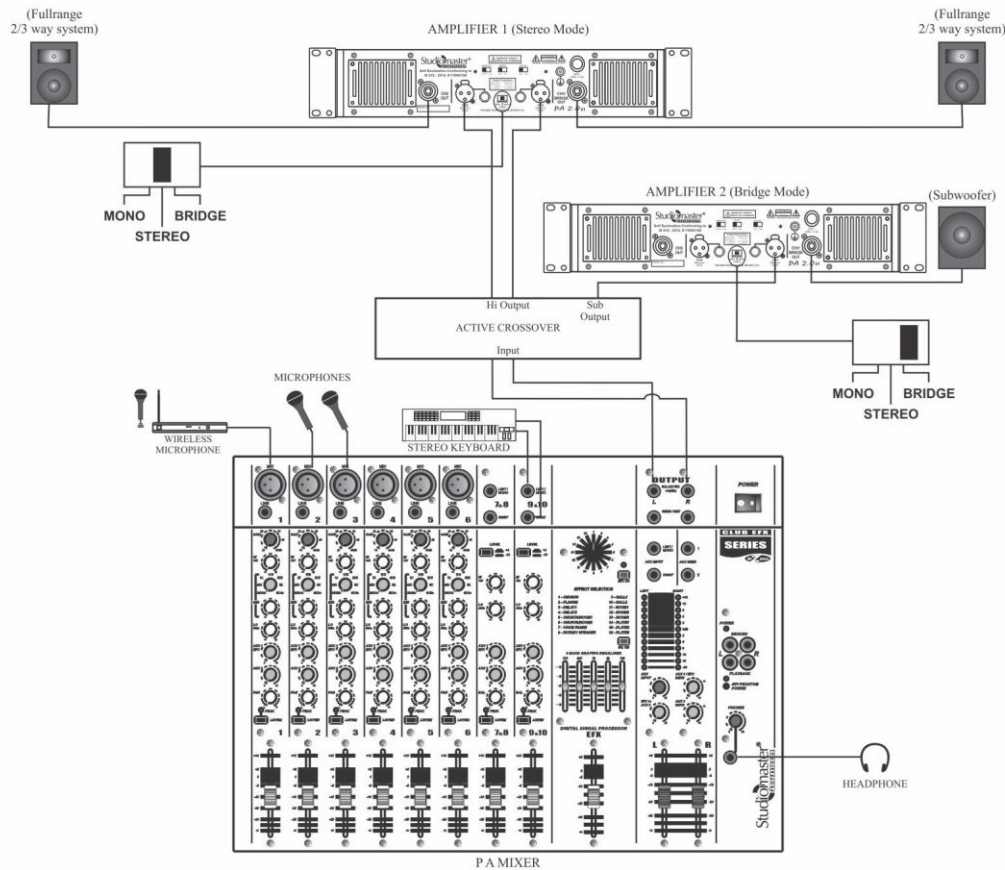
The desired output levels of both the channels are adjustable by volume control of channel 1 only.

The level indicator LEDs glow to indicate the presence of signal at the output terminals.



# Typical Applications

## Stereo Mix Plus Subwoofer



Connect the left and Right outputs of the Audio mixing console to the respective inputs of the Active Crossover. Connect the Left and Right High frequency output of the active crossover to the respective input channels 1 & 2 of amplifier 1. Inputs can be wired as per fig. 1 & 2 (Input Connections for Balanced and Unbalanced Mode) One no. of full range loudspeaker system can be connected to each of the channels of amplifier 1. The output speakon connectors should be wired as per fig. 3 (Output Connections for Stereo / Mono Mode) Amplifier 1 will be used in stereo mode. Keep the slides switch of amplifier 1 in stereo position.

Feed the Sub output signal of the crossover to channel 1 input of amplifier 2. Inputs can be wired as per fig. 1 & 2 (Input Connections for Balanced and Unbalanced Mode)

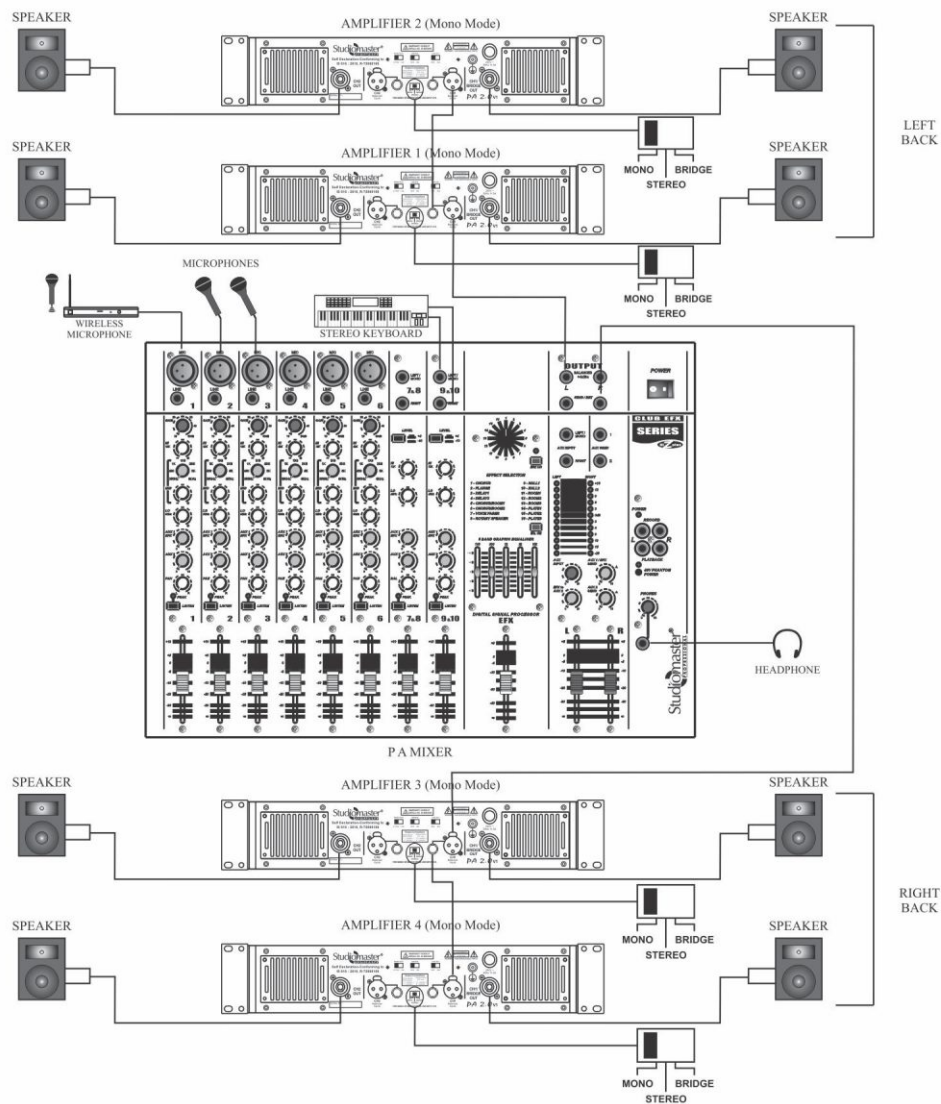
One no. of high powered subwoofer system can be connected to the channel 1 output of amplifiers 2. Output speakon connectors can be wired as per fig. 4 (Output Connections for Bridge Mode).

Amplifiers 2 will be used in bridge mode. Keep the slide switch of amplifiers 2 to BRIDGE position to activate bridge mode.

Finally adjust the volume control of channel 1 & 2 in amplifier 1 to control the level of their respective position to get desired power. Also, adjust the volume control of channel 1 in amplifiers 2 to control the levels of Sub out.

# Typical Applications

## Mono Mode - High Power Dual Channel Configuration



Connect the left line output of the Audio mixing console to the channel 1 input (XLR/jack) of amplifier 1. The XLR and jack inputs of the amplifier are in parallel and either ones can be used.

Connect the unused channel 1 input (jack/XLR) of amplifier 1 to the channel 1 input (XLR/jack) of amplifier 2. The jack and XLR inputs can be wired as per fig. 1 & 2 (Input Connections for Balanced and Unbalanced Mode)

The Left speaker stack comprises of four nos. speaker systems. Each speaker is individually connected to the four speaker outputs available from amplifier 1(channel 1 & 2) and amplifier 2 (channel 1 & 2).

Output speakon connectors to be wired as per fig. 3 (Output Connections for Stereo/Mono Mode).

Amplifier 1 & 2 will be used in mono mode.

Keep the slide switch of amplifier 1 and 2 in mono position.

Similarly, connect the Right line output of the Audio mixing console to the channel 1 input (XLR/jack) of amplifier 3. Also connect the unused channel 1 input (jack/XLR) of amplifier 3 to the channel 1 input (XLR/jack) of amplifier 4.

The Right speaker stack's connections are done in a similar way as for left speaker stack's connections. Amplifier 3 and 4 will also be used in mono mode.

Adjust the volume controls individual channel of four amplifier to control the levels of their respective speakers. Finally any adjustments in the total quality of the sound, if required, can be made from the audio mixing console.

# Protections & Installations

## Thermal Protection

### • Output Devices

Due to excessive heating of output devices, the thermal protection circuit brings the audio signal to mute status. Onset of thermal protection circuit is indicated by glowing of TEMP LEDs (yellow) in each channel. To restore normal operation conditions, it is recommended to switch off the amplifier and rectify the cause.

### • Transformer

Due to excessive heating of output devices, the thermal protection circuit brings the audio signal to mute status. To restore normal operation conditions, it is recommended to switch off the amplifier and rectify the cause.

## DC, RFI Protection

Inbuilt circuitry is provided to protect the loudspeaker from any offset DC voltages. Also sufficient suppression filters at primary and secondary power supplies have been inbuilt, to overcome RF interferences.

## Overload / Short Circuit Protection

Protection circuit is provided in both channels for the safety of output devices in case of overloading or mismatching of impedances at outputs. This circuit brings the input signals to respective channels are pressed.

## DC Fuses

### PA 1.5, PA 2.0

2 x 12A fuses for +ve and -ve DC supply.

### PA 3.0

2 x 20A fuses for +ve and -ve DC supply.

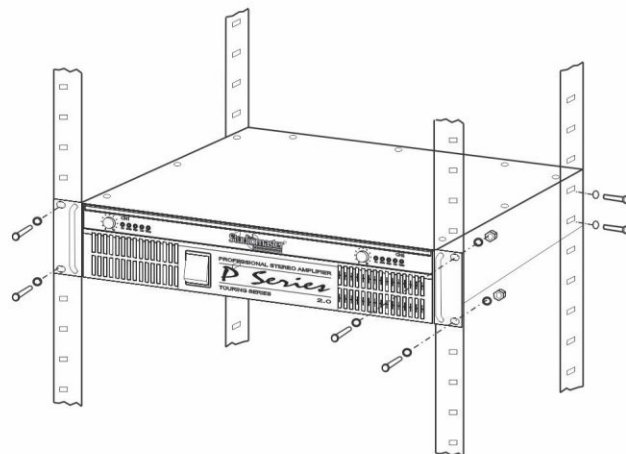
### PA 4.5, PA 6.0 & PA 7.5

2 x 25A fuses on Power Amp PCB.

## 19" Rack Installation

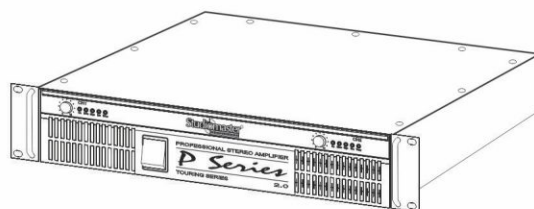
The amplifier is designed for use in a standard 19" rack with height of 2U units (PA 1.5 & PA 2.0) and 3U units (PA 3.0, PA 4.5, PA 6.0 & PA 7.5).

In order to provide sufficient support base to the heavy amplifier, it is essential to use the 19" rack system with side support mounting also in addition to front screw mounting as shown in the figure below.

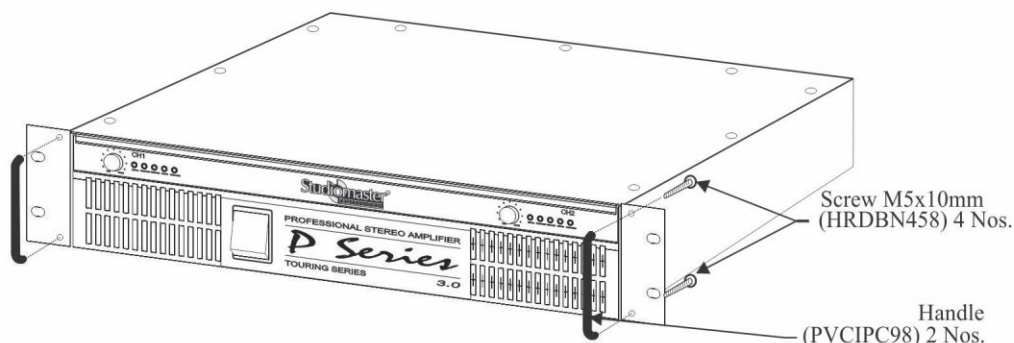


## Table Top Usage

The 'U' handles are helpful in easy portability of the amplifier for table top usage.



## PA 3.0/PA 4.5/PA 6.0/PA 7.5 Handle Fitting Instruction



**Note:-** 1) Handles to be fitted on both sides as shown in diagram above.

2) Handle (PVCIPC98) 2 nos. & Screw M5x10 (HRDBN458) 4 nos. are included in packing.



# Trouble Shooting

## Key to LED symbols:



- 1) Indication:                                
ON      MUTE      SIGN      LIM      TEMP

Condition: Normal operation

Possible Reason:

The amplifier is in normal operation

- 2) Indication:                                
ON      MUTE      SIGN      LIM      TEMP

Condition: No power to the amplifier

Possible Reason:

The amplifier power switch may be off. The amplifier may not be plugged into the power receptacle. Conform that the AC outlet works by plugging in another device. If too many amplifier are used on one outlet, the building's circuit breaker may trip and shut off power. An overload in bridge mode may cause tripping of main switch on front panel. An amplifier which keeps shutting off may have a serious internal fault. Turn it off, remove AC power cord and get the amplifier serviced by a qualified technician.

- 3) Indication:                                
ON      MUTE      SIGN      LIM      TEMP

Condition: Low output

Possible Reason:

Check if the level of the input signal is too low. Check the signal source is operating and the input cable is intact. The channel volume control setting is not at desired level. Similarly conditions may occur in MONO and BRIDGE mode.

- 4) Indication:                                
ON      MUTE      SIGN      LIM      TEMP

Condition: No Sound

Possible Reason:

The amplifier goes in mute mode due to excessive input signal, speaker impedance mismatch or output short circuit. Check the speaker impedance and speaker wiring for stray strands or breaks in the insulation. Reduce the volume control, for desired output. Similarly conditions are possible in MONO and BRIDGE mode also.

- 5) Indication:                                
ON      MUTE      SIGN      LIM      TEMP

Condition: No Sound

Possible Reason:

The amplifier goes in mute mode to output short circuit, overloading or poor ventilation resulting into the rise in temperature either of output devices or power transformer. Switch off the amplifier to cool down. Check if the fan is working, proper ventilation is provided and output connections are as recommended. To restore normal operation, turn down the volume control, press the reset button once and increase the volume control for desired output. Similarly conditions may occur in MONO and BRIDGE mode.

- 6) Indication:                                
ON      MUTE      SIGN      LIM      TEMP

Condition: Distorted Sound

Possible Reason:

The input signal level may be too high. So turn down the amplifier level controls. Check the level of source from input source. If it is high then reduce the input signal level. The amplifier should never be operated at a level which causes the LIM LEDs to illuminate constantly. Similar conditions may occur in MONO and BRIDGE mode.

- 7) Indication:                                
ON      MUTE      SIGN      LIM      TEMP

Condition: Either low or no sound

Possible Reason:

This could be due to wrong speakon connections or faulty speaker. Check the output speakon connections as per fig. 4 on page no. 7 (Output Connections for Bridge Mode)

8) Condition: Hum

Possible Reason:

Move cabling and signal sources to identify the problems areas in the system. Cables with faulty shielding are a frequent entry point from him. In the situation where the hum is present in the installations due to close looping of ground, cut the jumper on the input PCB to isolate input ground to mains earth.

9) Condition: Hiss

Possible Reason:

Unplug the amplifier input to confirm whether the hiss is coming from the source or a device upstream. The erratic or popping noises indicate an electronic fault in the offending unit.

# Specifications

Specmcautions

	PA 1.5	PA 2.0	PA 3.0	PA 4.5	PA 6.0	PA 7.5
RMS POWER @ THD 1% Stereo	2Ω ( 2 x 800W RMS ) 4Ω ( 2 x 650W RMS ) 8Ω ( 2 x 350W RMS )	2Ω ( 2 x 1000W RMS ) 4Ω ( 2 x 800W RMS ) 8Ω ( 2 x 500W RMS )	2Ω ( 2 x 1500W RMS ) 4Ω ( 2 x 1100W RMS ) 8Ω ( 2 x 700W RMS )	2Ω ( 2 x 2250W RMS ) 4Ω ( 2 x 1600W RMS ) 8Ω ( 2 x 950W RMS )	2Ω ( 2 x 3000W RMS ) 4Ω ( 2 x 2000W RMS ) 8Ω ( 2 x 1300W RMS )	2Ω ( 2 x 3750W RMS ) 4Ω ( 2 x 2600W RMS ) 8Ω ( 2 x 1550W RMS )
Bridged	4Ω ( 1600W RMS ) 8Ω ( 1300W RMS )	4Ω ( 2000W RMS ) 8Ω ( 1600W RMS )	4Ω ( 3000W RMS ) 8Ω ( 2200W RMS )	4Ω ( 4500W RMS ) 8Ω ( 3200W RMS )	4Ω ( 6000W RMS ) 8Ω ( 4000W RMS )	4Ω ( 7500W RMS ) 8Ω ( 5200W RMS )
Single channel driven	2Ω ( 900W RMS ) 4Ω ( 750W RMS ) 8Ω ( 380W RMS )	2Ω ( 1200W RMS ) 4Ω ( 1050W RMS ) 8Ω ( 670W RMS )	2Ω ( 1920W RMS ) 4Ω ( 1230W RMS ) 8Ω ( 750W RMS )	2Ω ( 2500W RMS ) 4Ω ( 1700W RMS ) 8Ω ( 1000W RMS )	2Ω ( 3500W RMS ) 4Ω ( 2400W RMS ) 8Ω ( 1400W RMS )	2Ω ( 4300W RMS ) 4Ω ( 2750W RMS ) 8Ω ( 1650W RMS )
EIA Power @ THD 1% Stereo	2Ω ( 2 x 1225WRMS ) 4Ω ( 2 x 1012W RMS ) 8Ω ( 2 x 595W RMS )	2Ω ( 2 x 2250WRMS ) 4Ω ( 2 x 1380W RMS ) 8Ω ( 2 x 755W RMS )	2Ω ( 2 x 2750WRMS ) 4Ω ( 2 x 1580W RMS ) 8Ω ( 2 x 830W RMS )	2Ω ( 2 x 3900WRMS ) 4Ω ( 2 x 2450W RMS ) 8Ω ( 2 x 1225W RMS )	2Ω ( 2 x 5625W RMS ) 4Ω ( 2 x 3100W RMS ) 8Ω ( 2 x 1700W RMS )	2Ω ( 2 x 6400W RMS ) 4Ω ( 2 x 3600W RMS ) 8Ω ( 2 x 1800W RMS )
Bridge	4Ω ( 2450W RMS ) 8Ω ( 2025W RMS )	4Ω ( 4500W RMS ) 8Ω ( 2760W RMS )	4Ω ( 5500W RMS ) 8Ω ( 3160W RMS )	4Ω ( 7800W RMS ) 8Ω ( 4550W RMS )	4Ω ( 11250W RMS ) 8Ω ( 6200W RMS )	4Ω ( 12800W RMS ) 8Ω ( 7225W RMS )
Sensitivity	0.775V/1.2V switchable					
Frequency Response	20Hz-20KHz ( ±0.5dB )					
Low Cut (-3dB)	20Hz		30Hz			
THD+N @ rated power, 4Ω load, single channel	< 0.02% @ 1KHz, < 0.1% @ 20KHz					
Signal to noise ratio	> 103dB “A” Weighted	> 102dB “A” Weighted	< -95dB “A” Weighted			
Cross-talk @ 1KHz	> 70dB @ 1KHz	> 65dB @ 1KHz				
Input Impedance	20K□ Balanced, 10K□ Unbalanced					
Damping factor @ 8	>200 : 1		>400 : 1 ( 8 )			
Slew Rate	50V/uS		33V/uS			
Protections	Temperature, DC, RFI, Short circuit, Soft-Start, Overload					
Rear Switches	Sensitivity, Low-cut, Mode selection, Limiter		Sensitivity, HF protection, Mode selection, Low-cut, Limiter, Ground/Lift			
Input Connector ( per channel )	XLR, Jack Stereo 6.3mm					
Output connector ( per channel )	4 WAY SPEAKON Connector					
Cooling	2 X Variable Speed high CFM fans					
Indicators ( per channel )	On, Mute, Signal, Limiter, Temperature					
Mains Supply	240V ~/50Hz, 7.5A	240V ~/50Hz, 10A	240V ~/50Hz, 16A	240V ~/50Hz, 18A	240V ~/50Hz, 20A	240V ~/50Hz, 25A
Minimum AC Mains	150V					
On/Off Switch	8A Magnetic		10A Magnetic		20A Magnetic	
Dimensions (W x D x H )	482 x 455 x 88mm (2U)		482 x 455 x 130mm (3U)		482 x 570 x 130mm (3U)	
Net Weight	17Kg	18Kg	28Kg	32Kg	36Kg	40Kg



Do not attempt to make any repairs yourself. This would void your warranty.  
Do not make any changes to the unit. This would also void your warranty.  
The warranty is not applicable in case of accidents or damages caused by inappropriate use or disrespect of the warnings contained in this manual. **Studiomaster Professional** cannot be held responsible for personal injuries caused by a disrespect of the safety recommendations and warnings. This is also applicable to all damages in whatever form.

## **PRODUCT OF AUDIOPLUS**

A1/A2, Giriraj Industrial Estate,  
Mahakali Caves Road, Andheri (East),  
Mumbai-400 093. India  
Tel.: +91-22-42869043 / 4286 9076 / Fax +91-22-26871453  
E [info@audioplus-india.com](mailto:info@audioplus-india.com)  
W [www.studiomasterprofessional.com/www.audioplus-india.com](http://www.studiomasterprofessional.com/www.audioplus-india.com)

**Studiomaster Professional reserves the right to make modifications to its products without notice**