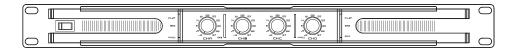
# SWITCHING POWER PROFESSIONAL AMPLIFIER

**User's Manual** 

# A150.4



# Important Safety Instructions





This symbol, wherever used, alerts you to the presence of un-insulated and dangerous voltages within the product enclosure. These are voltages that may be sufficient to constitute the risk of electric shock or death.



This symbol, wherever used, alerts you to important operating and maintenance instructions.

#### POWER SUPPLY

Ensure that the insource voltage (AC outlet) matches the voltage rating of the product. Failure to do so could result in damage to the product and possibly the user. Unplug the product before electrical storms occur and when unused for long periods of time to reduce the risk of electric shock or fire.

#### EXTERNAL CONNECTION

Always use proper ready-made insulated mains cabling (power cord). Failure to do so could result in shock/death or fire. If in doubt, seek advice from a registered electrician.

## DO NOT REMOVE ANY COVERS

Within the product are areas where high voltages may present. To reduce the risk of electric shock do not remove any covers unless the AC mains power cord is removed. Covers should be removed by qualified service personnel only. No user serviceable parts inside.

#### FUSE

To prevent fire and damage to the product, use only the recommended fuse type as indicated in this manual. Do not short-circuit the fuse holder. Before replacing the fuse, make sure that the product is OFF and disconnected from the AC outlet.

# PROTECTIVE GROUND

Before turning the unit on, make sure that it is connected to Ground. This is to prevent the risk of electric shock.

Never cut internal or external Ground wires. Like wise, never remove Ground wiring from the Protective Ground Terminal.

## **OPERATING SAFETY INSTRUCTIONS**

Read these instructions. Follow all instructions. Keep these instructions. Do not discard. Heed all warnings. Only use attachments/accessories specified by the manufacturer.

# POWER CORD AND PLUG

Do not tamper with the power cord or plug. These are designed for your safety. Do not remove Ground connections! If the plug does not fit your AC outlet seek advice from a qualified electrician. Protect the power cord and plug from any physical stress to avoid risk of electric shock. Do not place heavy objects on the power cord. This could cause electric shock of fire.

# SERVICING

Refer all servicing to qualified service personnel only. Do not perform any servicing then those instructions contained within this User's Manual.

2

# DISPOSAL



This symbol indicates that the disposal of this product is submitted to local regulations. Please contact your local dealer.



# Warranty

This device is warranted parts and labor against any manufacturing defects for a period of two years from the date of purchase by the first user.

#### Conditions

- The unit has been installed and implemented by observing the safety instructions in this
  operating manual.
- The device was not diverted from its destination, either voluntary or accidental, and suffered no deterioration or modification other than those described here or explicitly authorized by SHOW.
- 3. All modifications or repairs have been carried out by an authorized service station.

- The defective product must be returned with the dealer who made the sale or to an authorized service station with proof of purchase.
- 5. The device was properly packaged to avoid damage in transport.

CHA & CHB CHC & CHD		2 Ω (RMS) / (EIAJ)	4 x 230 W / 4 x 360 W	
		4 Ω (RMS) / (EIAJ)	4 x 150 W / 4 x 210 W	
		8 Ω (RMS) / (EIAJ) 4 x 90 W / 4 x 120 W		
BRIDGED		4 Ω (RMS)	400 W	
		8 Ω (RMS) 310 W		
THD		< 0,1%		
Frequency Response CHA-CHD		20 Hz - 20k Hz +0/-1 dB		
Frequency Response (SUB Mode)	CHA & CHB	(50 Hz – 250 Hz) – 20 kHz +0/-3 dB		
(COD IIICUC)	SUB	20 Hz – (50Hz – 250 Hz) +0/-3 dB		
S/N rate		> 96 dB		
Gain (V)		28 ± 0,5 dB		
Input Sensitivity		0,9-1,1 V (0+/-1 dBv)		
Input Impedance		$20~\text{k}\Omega$ balanced or $10~\text{k}\Omega$ unbalanced		
Controls		Front panel: On/Off Power Switch, volume channel A, B & SUB Rear panel: SUB, CHA + CHB selector; Cut off frequency selectors		
Indicators		POWER ON: Green Led SIGN: Green Led PROT: Red Led CLIP: Red Led		
Connectors		Inputs: Euroblock Outputs: Euroblock		
Load Protection		On/Off Mute, DC fault grounding relay, internal fault fuses		
Power Supply		110 - 120 V or 220 - 240 V 50 ~ 60 Hz		
Dimensions (L x D x H)		483 x 281 x 44 mm		
Net Weight		4.6 kg		

10

1.	Introduction	4
2.	Main Features	4
3.	Functions	5
4.	Applications	8
5.	Technical Specifications	10
6	Warranty	11



# Introduction

Thanks for the acquisition of the A150.4. This four channels power amplifier has been developed to drive two satellites and one subwoofer in fixed installations requiring limited space in the bays.

The A150.4 has a high efficiency thanks to his Class-D technology and can deliver  $4 \times 150 \text{ W RMS/4 Ohms}$  or  $2 \times 150 \text{ W RMS/4 Ohms} + 300 \text{ W RMS/8 Ohms}$  (Bridged).

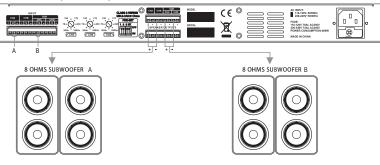
4



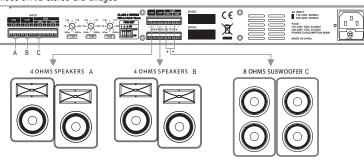
# **Main Features**

- Class-D,
- 4 x 150 W / 4 Ohms or 2 x 400 W / 4 Ohms Bridged
- Balanced inputs on Euroblock connectors,
- Speaker outputs on Euroblock connectors,
- 1U rack,
- 4.6 kg

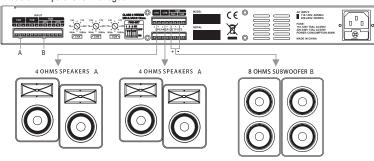
# Mode 3: A/B bridged C/D bridged



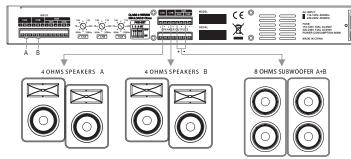
# Mode 5: A/B stereo C/D bridged



# Mode 6: A/B parallel C/D bridged



# Mode 8: A/B stereo C/D SUB





# **Applications**

#### Inputs connections

The inputs can be connected to the Euroblock socket using the female free part connectors supplied with the device.

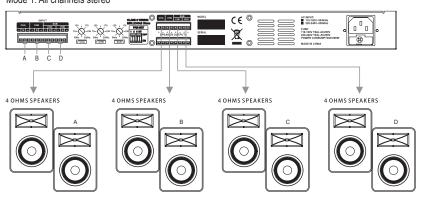
For balanced inputs use Hot pin (+), Cold pin (-) and Ground pin (G) terminals.

For unbalanced inputs use Hot pin (+) and Ground pin (G) only.

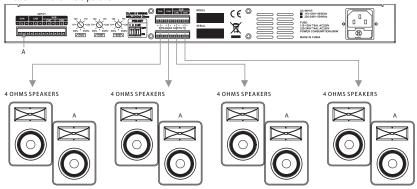
#### Speaker connections

Check that the polarity is well respected for every speaker. Two Euroblocks connected point to point are available for easy parallel set up. The impedance output must not be higher than 2 Ohms per channel.

Mode 1: All channels stereo

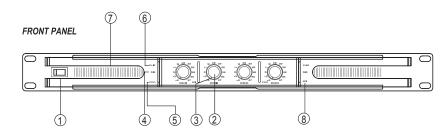


Mode 2: All channels parallel



8

# **Functions**



## Power Switch

It switches ON/OFF the unit main power.

## ② Level Control

These volume controls allow you to adjust the volume level.

# ③ Power/Prior LED

The Green LED light up when the amplifier is powered ON.The Red LED light up when the amplifier is input priority

# 4 Signal LED

These green LED light up when the respective channel's output signal pass through .

# ⑤ Protection LED

In normal operation, the LED will not illume; If the LED is red, it means the unit is in hea t protection, no sound is output. The speaker system is actually disconnected from the amplifier outputs when this LED is red, the temperature must be lowered by better ventilation and decrease the signal level etc. if the problem is corrected, the protection systems deactivate automatically, and normal amplifier operation is resumed.

This red LED lights up when the input signal is too strong, it is time to reduce input level until clip LED turns off.

# ② Air Intake Vents

A150.4 employ a variable speed internal cooling fan to intake the air through front grill to keep it running cool even under extreme operating conditions. Please keep these vents clear and free from obstruction at all times to insure proper cooling.

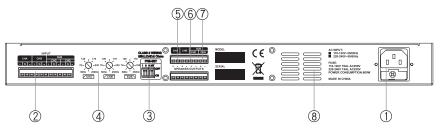
5

# ® Bridged LED

The Bridged LED light up when the amplifier is Bridged Mode.



Back Panel



# 1 - Mains and fuse

Power supply socket. Make sure that the cable plug is correctly inserted in the socket.

The compartment located below the socket contains the fuse. In the event of change, it is imperative to use a fuse with identical electrical characteristics under threat of damage to the unit.

# 2 - Input connectors

Euroblock balanced inputs

# 3 - MODE

Mode 1: All channels stereo

All input and output channels are independent.

Mode 2: All channels parallel

All outputs are the same with any channel input.

Mode 3: A/B bridged C/D bridged

Input the signal to channel A, connect the speaker's "+" to the output A+, connect speaker's '-' to the output B+. Then you get a  $300W(8\Omega)$  power. CH C and CH D are the same.

Mode 4: A/B parallel C/D parallel

CHA output and CHB output are the same whether input from CH A or CH B. The CH C and CH D are the same.

Mode 5: A/B stereo C/D bridged

CH A's input and outputs are independent from CH B. CH C and CH D are bridged.

6

Mode 6: A/B parallel C/D bridged

CH A and CH B are parallel. CHC and CH D are bridged.

Mode 7: A/B stereo C/D SUB

CH A and CH B are stereo. CH C and CH D are bridged. SUB output signal is low frequency from CHC input. X-OVER FREQ is available.

Mode 8: A/B stereo C/D SUB

CH A and CH B are stereo. CH C and CH D are bridged and the device filters and amplifies signal A+B to feed the Subwoofer with the low frequencies only. X-OVER FREQ is available.

Mode 9: Amplifier Mute

Amplifier is Mute.

\* X-OVER FREQ is available in Mode 7 and Mode 8 only.

Preset					Operation Made
	1	2	3	МТ	Operation Mode
1	OFF	OFF	OFF	OFF	CHA/CHB/CHC/CHD ALL STEREO
2	ON	OFF	OFF	OFF	CHA/CHB/CHC/CHD ALL PARALLEL
3	OFF	ON	OFF	OFF	CHA/CHB BRIDGED ,CHC/CHD/ BRIDGED
4	ON	ON	OFF	OFF	CHA/CHB PARALLEL,CHC/CHD/ PARALLEL
5	OFF	OFF	ON	OFF	CHA/CHB STEREO,CHC/CHD BRIDGED(FULL RANGE)
6	ON	OFF	ON	OFF	CHA/CHB PARALLEL, CHC/CHD BRIDGED(FULL RANGE)
7	OFF	ON	ON	OFF	CHA/CHB STEREO, SUB(CHC/CHD BRIDGED,INPUT=CHC)
8	ON	ON	ON	OFF	CHA/CHB STEREO, SUB(CHC/CHD BRIDGED,INPUT=CHA+CHB)
9				ON	AMPLIFIER MUTE

# 4 - X-OVER FREQ

## 5, 6 & 7 - Speakers connectors

Euroblock speakers output. The up and down outputs are connected together.

# 8 - Vent grille

This fan has three level speed. The fan will speed up when the temperature of the amplifie rise up. When you set the amplifie in mute mode, the fan run fastest. Check that the vent grille is not obstructed.