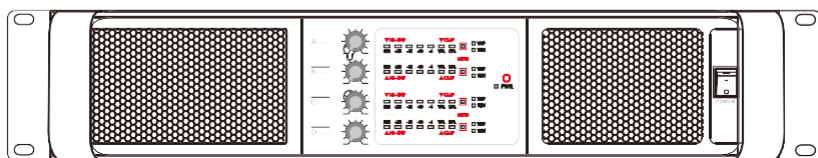


USER MANUAL



PROFESSIONAL POWER AMPLIFIER

Keep this manual for future reference

(This manual does not include all of the designs, production or variations of the equipment.)

PREFACE

SAFETY WARNINGS

CAUTION

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



RISK OF ELECTRICAL SHOCK
DO NOT REMOVE THE COVER



- 1.To reduce the risk of electric shock, do not attempt to open any part of the unit. no user-serviceable parts inside. refer servicing to qualified service personnel.
- 2.Do not use this amplifier if the electrical power cord is frayed or broken.
- 3.To avoid electrical shock, do not touch any exposed speaker wiring while the amplifier is operating.
- 3.Do not spill water or other liquids into or on the amplifier.
- 4.Disconnect the ac mains source before attempting to clean any part of the amplifier.
- 5.Output terminals are hazardous: wiring connection to these terminals requires installation by an instructed person.
- 6.Properly fit the ac mains plug to the amplifier inlet.
- 7.Before powering this amplifier, verify that the correct voltage rating is being used.
- 8.Take care to lock the output terminal before switching the device on.
- 9.Verify that your mains connection is capable of satisfying the power ratings of the device.
- 10.No naked flame sources such as lighted candles should be placed on the amplifier.
- 11.It is highly recommended to unplug the output connectors before proceeding with the self check procedure.
- 12.To prevent injury, this apparatus must be securely rack mounted in accordance with the installation instructions.
- 13.The manufacturer cannot be held responsible for damages caused to persons, things or data due to an improper or missing ground connection.
- 14.It is absolutely necessary to verify these fundamental requirements of safety and, in case of doubt, require an accurate check by qualified personnel.

IMPORTANT SAFETY INSTRUCTIONS

Common symbols and meanings



THE TRIANGLE WITH THE EXCLAMATION POINT IS USED TO ALERT THE USER TO IMPORTANT OPERATING OR MAINTENANCE INSTRUCTIONS.



THE TRIANGLE WITH THE LIGHTNING BOLT IS USED TO ALERT THE USER TO THE RISK OF ELECTRIC SHOCK.

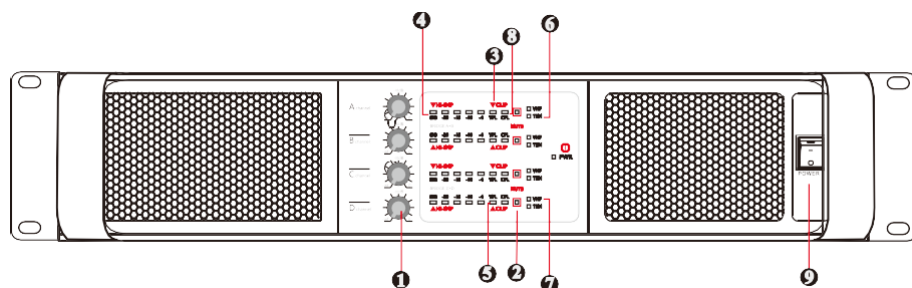
Please read and keep all safety and use instructions.

This product is intended for installation by professional installers only! This document is intended to provide professional installers with basic installation and safety guidelines for this product in typical fixed-installation systems. Please read this document and all safety warnings before attempting installation.

1. Read these instructions.
2. Keep these instructions.
3. Heed all warnings.
4. Follow all instructions.
5. Do not use this equipment near water.
6. Clean only with a 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 that produce heat.
9. Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades with one wider than the other. A grounding-type plug has two blades and a third grounding prong. The wide blade or the third prong are provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.
10. Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.
11. Unplug this apparatus during lightning storms or when unused for long periods of time.
12. 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.

FRONT PANEL FEATURES

The A/B Front panel LED area includes the following indicators per channel:



1. LEVEL CONTROL

Calibrated detente potentiometers to alter the total gain of the power amplifier. In order to avoid distortions in mixing consoles upstream, these controls should normally be positioned between 0 and 10. The calibrated markings show the additional attenuation directly.

2. MUTE LED

MUTE - Au protection under mute position.

3. Clip/limit indicator

This indicator signals if the amplifier output is clipping or limiting. It has two different indication states:
If the clip limiter is engaged, it has a short time constant, and it illuminates briefly.
If the clip limiter is not engaged, it has an increased time constant, and it illuminates for a longer period.

4. SIG / HI-IMP LED

Green SIG Indicates output signal levels in normal operating range
Hi-Imp - High-impedance/open load detected (Orange)

5. Limit power LED

When this LED lights up, the Limit power function is working.

6. TEMP

This LED lights up if the limiter has been activated and the power amplifier is being operated at the clip level. If the LED flashes briefly, this is not a cause for concern. If this LED is lit permanently, the volume should be reduced to avoid overload damages to the connected loudspeaker systems.

7. VHF

VHF - Very High Frequency protection active (output muted) (Yellow constant)

8. CPL LED

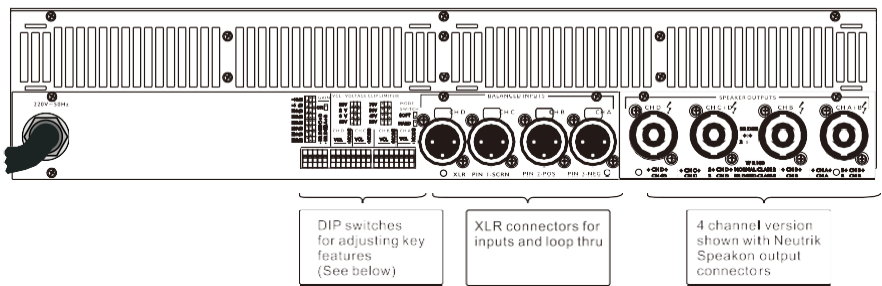
CPL - (Orange constant with output muted): Low impedance / short circuit detection fault

9. POWER Switch

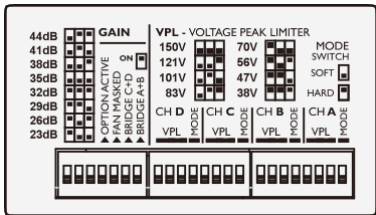
Turn the unit power on or off

REAR PANEL FEATURES

[A] Rear panel



Four-channel model shown. Two-channel versions have VCL and Bridge Mode switches for channels 1 and 2 only. All models have different VCL values. Functions are otherwise identical.

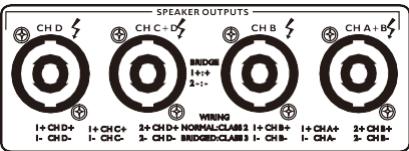


6.2.2 The DIP switch features

The following features may be adjusted using the DIP switches on the rear-panel of the amplifier. Gain - Globally set for all channels, from +23 dB to +44dB in 3 dB steps.

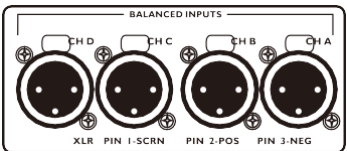
Bridge 1+2 and 3+4 - Switches the channel pairs into bridge mode operation. An automatic -6 dB gain compensation is applied.

Output connectors



Speakon outputs - 4-channel models

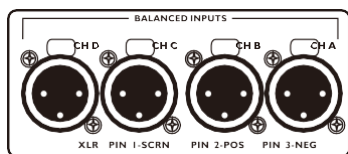
Input connectors



Audio inputs - 4-channel models

INPUT AND OUTPUT CONNECTION

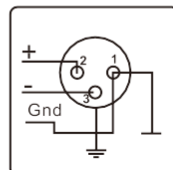
BALANCED INPUT CONNECTIONS



Audio inputs - 4-channel models

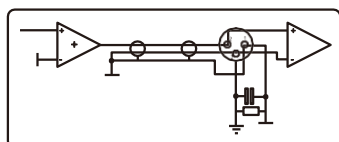
The XLR input connectors are electronically balanced, and wired according to the IEC 268 standard (pin 2 = hot). XLR input connectors should be wired as follows:

- Pin 1 Ground/shield
- Pin 2 Hot (+)
- Pin 3 Cold (-)



When linking the same source signal to several input channels, be aware that there is a limit to the number of channels an output source can "drive". A typical output source (e.g. a DSP crossover unit) can drive up to four amplifier channels before external line-drivers might be required to buffer the signal.

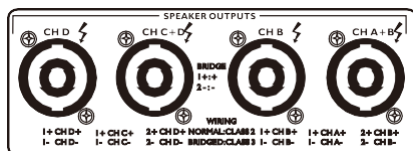
Unbalanced Input connections



To connect an input to an unbalanced source, it is possible to connect pins 1 and 3 in the XLR plug at the amplifier end of the cable. However, a better method is to connect pin 3 to the shield at the source end of the cable, as this usually results in better hum and noise rejection. Balanced input connections are recommended whenever possible.

Speakon Output connections

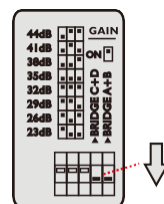
Refer to the instructions in this section if your amplifier is equipped with the Speakon output connectors.



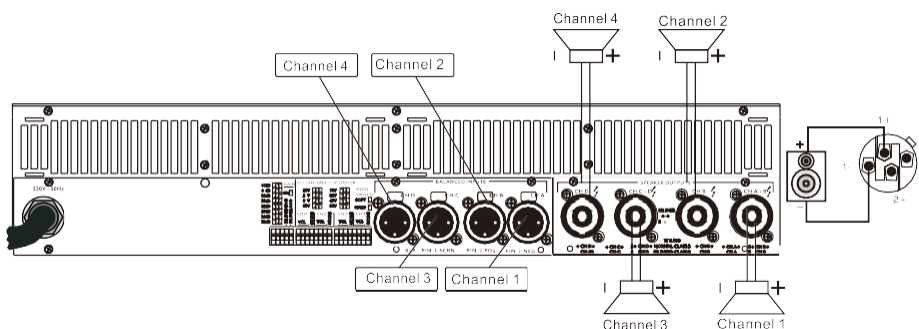
Speakon outputs - 4-channel models

STEREO/BRIDGE MODE

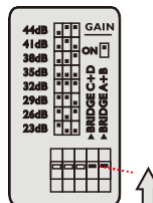
Before setting the mode , please turn off the amplifier and slide the mode select switch to below (Picture 1) .In this mode, Channel 1 an Channel 2 operate independently (just traditional stereo amplifier). The signal input into channel 1 can be output from channel 1 only, similarly, the signal input into channel 2 can be output from channel 2 only. The many channels , one by one in order type pushes.



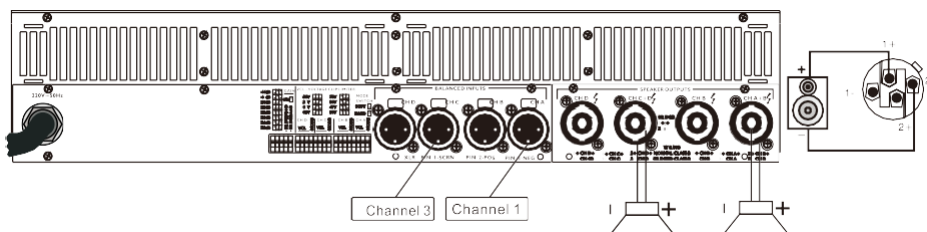
(Picture 1)



Before setting the mode , please turn off the amplifier and slide the mode select switch to above (Picture 2), channel 1 and channel 2 are bridged, channel 3 and channel 4 are bridged. At time , the signal input into channel 1 and channel 3 will be output from the bridge end. On other hand , the output level control of channel 2 and channel 4 should be turn down to smallest . Only the volume control of channel 1 and channel 3 are used to control the volume of whole system.

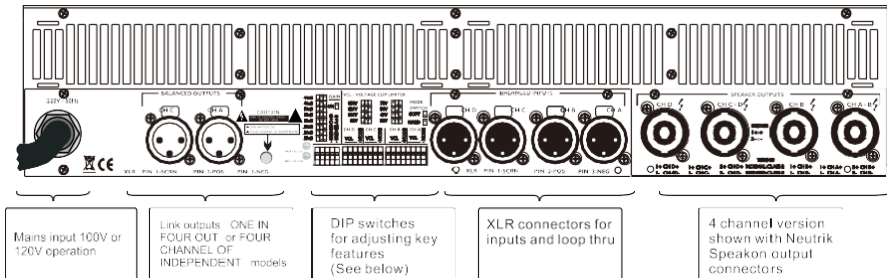


(Picture 2)

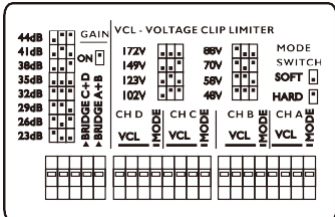


REAR PANEL FEATURES

[B] Rear panel



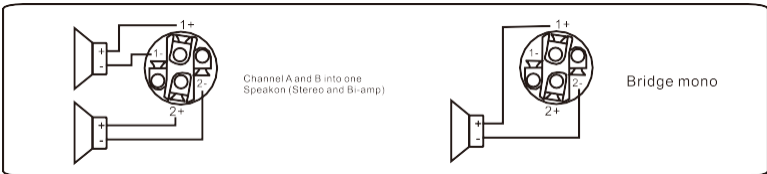
Four-channel model shown. Two-channel versions have VCL and Bridge Mode switches for channels 1 and 2 only. All models have different VCL values. Functions are otherwise identical.



6.2.2 The DIP switch features

The following features may be adjusted using the DIP switches on the rear-panel of the amplifier. Gain - Globally set for all channels, from +23 dB to +44dB in 3 dB steps.

Bridge 1+2 and 3+4 - Switches the channel pairs into bridge mode operation An automatic -6 dB gain compensation is applied.



Four-channel amplifiers Additional connectors are provided for Channel 3 and Channel 4. Channel 3 functions as Channel 1 above, and Channel 4 as Channel 2 above.

INPUT AND OUTPUT CONNECTION

		8Ω	4Ω
172V	☐	1800W	3000W
149V	☐	1710W	2900W
123V	☐	1176W	2000W
102V	☐	800W	1360W
88V	☐	612W	1050W
70V	☐	390W	663W
58V	☐	226W	384W
48V	☐	180W	300W

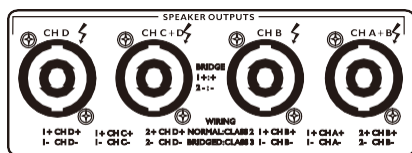
VCL - Voltage Clip Limiter adjustment is provided for eight discrete levels for each channel for each channel. Select the setting most appropriate for connected speakers.

VCL - in Bridge Mode

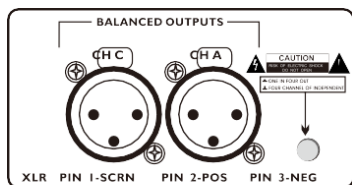
344V
298V
246V
204V
176V
140V
116V
96V

Mode - Select **VCL mode** to either Hard or Soft operation. For channels driving sub-woofers and low-frequency drivers, it is recommended to use the Hard setting for optimal operation. For mid- and high- frequency drivers, always select Soft.

Output connectors

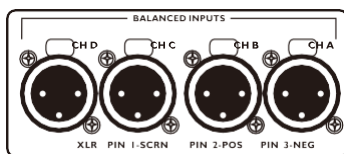


Speakon outputs - 4-channel models



Link outputs ONE IN FOUR OUT or FOUR CHANNEL OF INDEPENDENT models

Input connectors



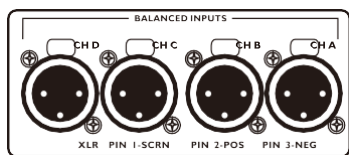
Audio inputs - 4-channel models

Link outputs ONE IN FOUR OUT or FOUR CHANNEL OF INDEPENDENT models:

In four channel independent models, the signal input into channel 1 can be output from channel 1 only, similarly, the signal channel 3 is the same. In one in four out models, the signal input into channel 1 or channel 3 can be output from channel 1 and channel 3.

INPUT AND OUTPUT CONNECTION

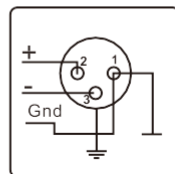
BALANCED INPUT CONNECTIONS



Audio inputs - 4-channel models

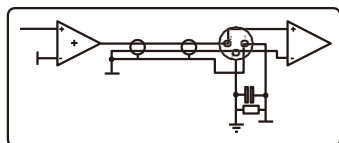
The XLR input connectors are electronically balanced, and wired according to the IEC 268 standard (pin 2 = hot). XLR input connectors should be wired as follows:

- Pin 1 Ground/shield
- Pin 2 Hot (+)
- Pin 3 Cold (-)



When linking the same source signal to several input channels, be aware that there is a limit to the number of channels an output source can "drive". A typical output source (e.g. a DSP crossover unit) can drive up to four amplifier channels before external line-drivers might be required to buffer the signal.

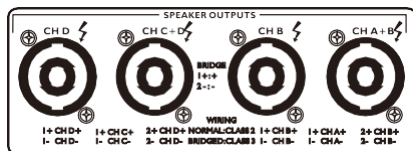
Unbalanced Input connections



To connect an input to an unbalanced source, it is possible to connect pins 1 and 3 in the XLR plug at the amplifier end of the cable. However, a better method is to connect pin 3 to the shield at the source end of the cable, as this usually results in better hum and noise rejection. Balanced input connections are recommended whenever possible.

Speakon Output connections

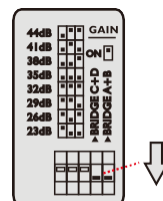
Refer to the instructions in this section if your amplifier is equipped with the Speakon output connectors.



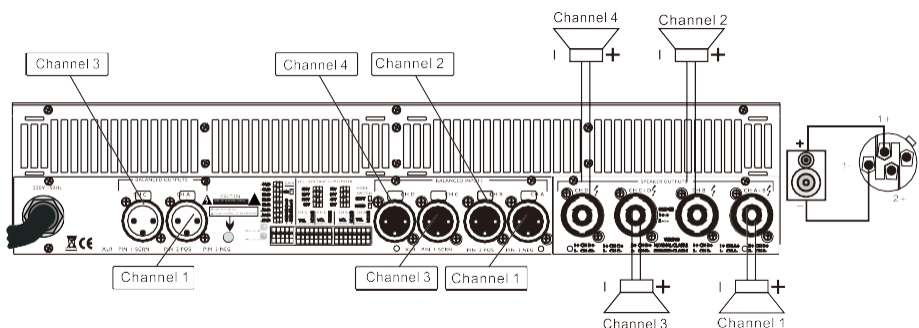
Speakon outputs - 4-channel models

STEREO/BRIDGE MODE

Before setting the mode , please turn off the amplifier and slide the mode select switch to below (Picture 1) .In this mode, Channel 1 an Channel 2 operate independently (just traditional stereo amplifier). The signal input into channel 1 can be output from channel 1 only, similarly, the signal input into channel 2 can be output from channel 2 only. The many channels , one by one in order type pushes.

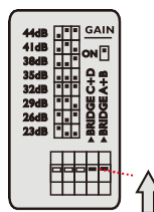


(Picture 1)

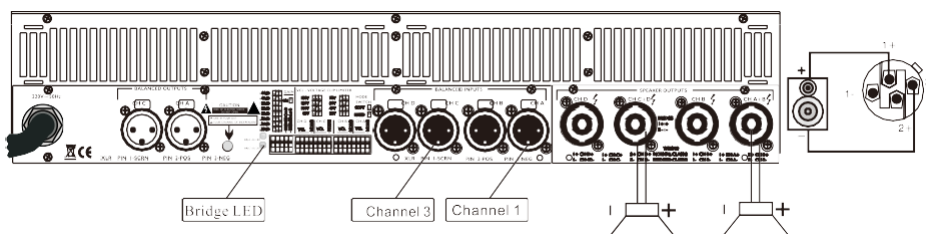


Bridge Mode

Before setting the mode , please turn off the amplifier and slide the mode select switch to above (Picture 2), channel 1 and channel 2 are bridged, channel 3 and channel 4 are bridged. At time , the signal input into channel 1 and channel 3 will be output from the bridge end. On other hand , the output level control of channel 2 and channel 4 should be turn down to smallest . Only the volume control of channel 1 and channel 3 are used to control the volume of whole system.



(Picture 2)



PERFORMANCE PARAMETERS

MODEL NO.		
8Ω Stereo Output Power	1350W	2350W
4Ω Stereo Output Power	2200W	3900W
8Ω Bridge watts	4100W	7100W
Output Circuit	TD	
Height	2U	
Power Requirement	220V~50Hz	
Frequency response	6.8Hz-34KHz	
THD 20 Hz - 20 kHz for 1W	<0.1%	
THD at 1 kHz	<0.05%	
S/N Ration	>112dBA	
Damping factor	2000	
Crosstalk	>70 dB	
Input sensitivity	23, 26,29,32,35,38,41,44dB	
Input impedance	20KΩ(Balance)/10KΩ(Unbalance)	
Input connector	3-pin XLR, electronically balanced	
Output connector	Speakon Connectors (NEUTRIK)	
Cooling	Variable Speed Fans,Front-To-Rear Airflow	
Dimension	483mm X 410mm X 91mm	483mm X 520mm X 91mm
Net weight	12.85 KG	18.5 KG
Gross weight	16.5 KG	21.5 KG
Packaging Dimension	575mm X 500mm X 150mm	615mm X 565mm X 150mm

WARRANTY CONDITIONS

Thank you for choosing our products. If you have any questions during use, please call our after-sales service center or contact your local dealer, we will serve you wholeheartedly.

In order to ensure your legal rights and enjoy better after-sales service, please pay attention to the following matters

Warranty:

1. This product must be purchased from our authorized dealer to enjoy this warranty service.
2. On the day of purchase, please fill in the relevant information correctly and stamp it with the dealer's seal.
3. If a quality problem occurs during the warranty period, the customer must present a warranty card and valid documents,
4. Warranty coverage is for failures that occur under normal use within one year. Consumables and consumable parts are not covered by the warranty.
5. The following are not covered by the warranty
 - * Out of warranty period,
 - * The product has been dismantled and repaired without permission.
 - * Invoices, body codes, or vouchers are unclear, altered, or inconsistent with the real thing,
 - * Failure to use the product according to the instructions of the product, which is caused by improper use.
 - * Appearance damage (such as rust, scratch, etc.),
 - * Damage due to force majeure (such as fire, flood, lightning, earthquake, etc.),
 - * Damage caused by exceeding the rated use conditions of the product (such as power overload, unstable voltage, overheated environment, moisture, etc.)

The company is not responsible for any direct or indirect losses caused by product failure. The final interpretation and modification rights of this warranty conditions are owned by the company



Thank you!

Reliability and quality for your audio needs.

