

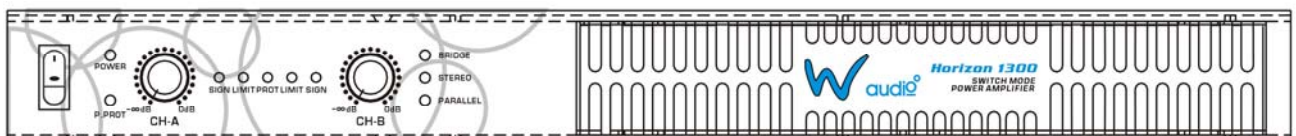
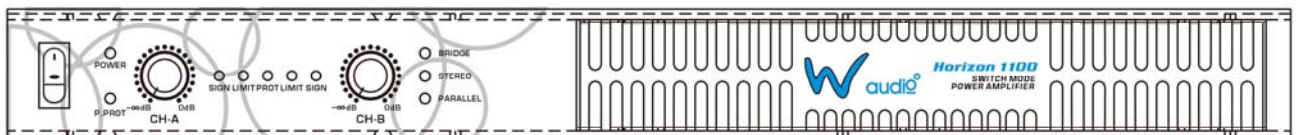
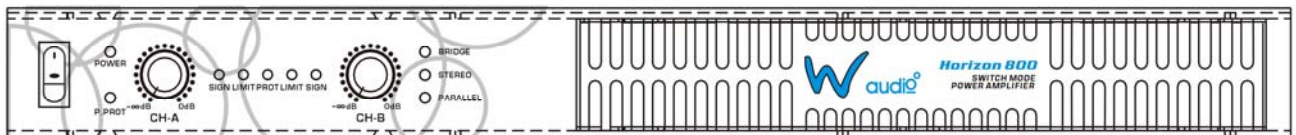
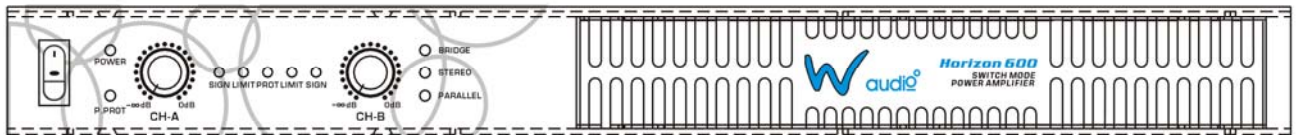
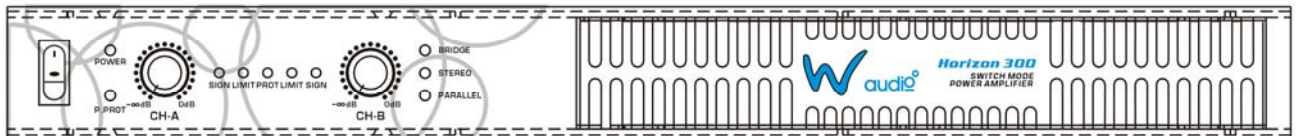


Professional Power Amplifier

HORIZON SERIES

USER MANUAL

Thank you for buying this W Audio product. To take full advantage of this product, please keep this manual and read the operating instructions carefully.



Content

● Safety instruction.....1	● Connections (Signal output).....6
● Main features.....2	● General operation.7
● Precaution.....2	● Maintenance.....7
● Front Panel3	● Trouble shooting.8
● Rear Panels.....4	● Specification.....9
● Connections (Signal input).....5	● Correct disposal of this product.....10

1. Safety Instructions



The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert the user to the presence of un-insulated “dangerous voltage “within the product’s enclosure that may be of sufficient magnitude to constitute a risk 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 appliance.

- 1.) Caution: Avoid the risk of electric shock, do not remove the cover. No user serviceable parts inside.
- 2.) To prevent fire or shock hazard, do not expose the unit to rain or moisture. Do not place metal objects or spill liquid inside the unit as electric shock or malfunction may result.
- 3.) Do not cover any ventilation slots as this may result in overheating. Always install the unit in a well ventilated place. Avoid the presence of heat sources and dusty or humid environments.
- 4.) Do not attempt to repair the unit yourself. Refer any servicing or repair work to qualified personnel only.

2 · Main features

The Horizon Series are professional power amplifiers with advanced switch mode power supply technology for a greater performance. Ideal for mobile performers, DJ, Bar, Meeting Rooms, hotels and restaurants etc.

The amplifier features:

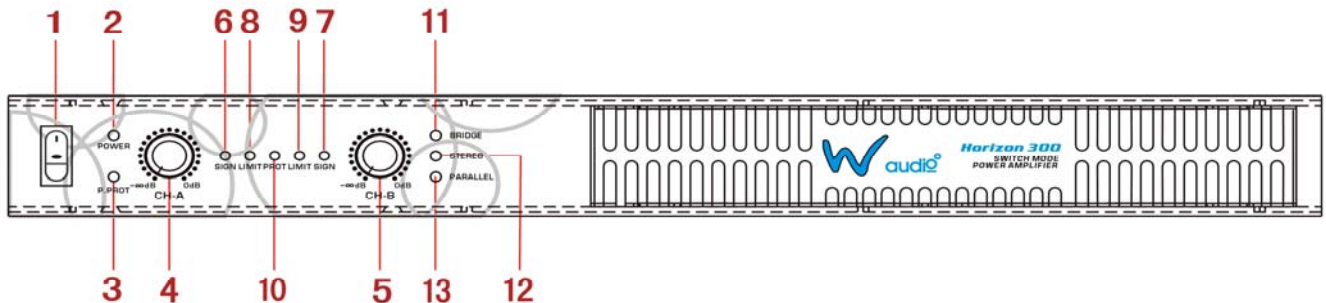
- Soft start up
- Short circuit protection
- DC fault protection
- High temperature protection
- Overloaded protection
- Connection mode : Stereo, bridge, parallel
- Input connectors : XLR, 6.3mm Jack
- Output connectors : Speakon
- Indicators: Power, Limit, Protect, Stereo, BTL (Bridge), & PAR (parallel)

3 · Precautions

- 1) Make sure the mains power of the unit is turned off before installation.
- 2) Make sure the mains supply matches to the unit's rated voltage.
- 3) Use an adequate power source; do not turn on several amplifiers at the same time.
- 4) Make sure all the connectors are well located in their indicated position.
- 5) Before turning on the power, please check carefully if the mode switch is in its correct position – stereo, bridge, or parallel.
- 6) Set the input level controls to the left (0) before you turn on the power.
- 7) If the amplifier does not power-up, turn it off immediately. Do not attempt to repair it yourself, contact your dealer for service information.

4 · Front panel

- Horizon 300
- Horizon 600
- Horizon 800
- Horizon 1100
- Horizon 1300



For the front panels of the Horizon series amplifier, all the models have the same functions knobs and LED indicators.

1) POWER SWITCH

Press this switch to power up the amplifier.

2) POWER LED (GREEN)

This LED illuminates when power is connected and the amplifier is turned on.

3) POWER PROTECTS LED (YELLOW)

This LED illuminates for a short period when you turn on the power, it takes about 3~ 4 seconds to complete the function of soft start-up. Soon after that you will hear a “click” to indicate the amplifier is ready for operation.

4/5) GAIN CONTROL (LEFT CHANNEL & RIGHT CHANNEL)

Adjust the desired volume here.

6/7) SIGNAL LED (GREEN)

When the signal is present, the LED will illuminate.

8/9) LIMIT LED (RED)

When the input signal voltage is too high, the LED will illuminate.

10) PROTECT LED (YELLOW)

The LED will be illuminated / flashing under the following 3 conditions:

- During first few seconds after switching on/swithing off the amplifier.
- When the temperature of the power stage becomes too high.
- In the case of a technical defect: DC protection, overload protection, short circuit protection, input limit protection, VHF protection, over heat protection.

11) Bridge LED (BLUE)

This illuminates in bridged mode.

12) STR/Stereo LED (BLUE)

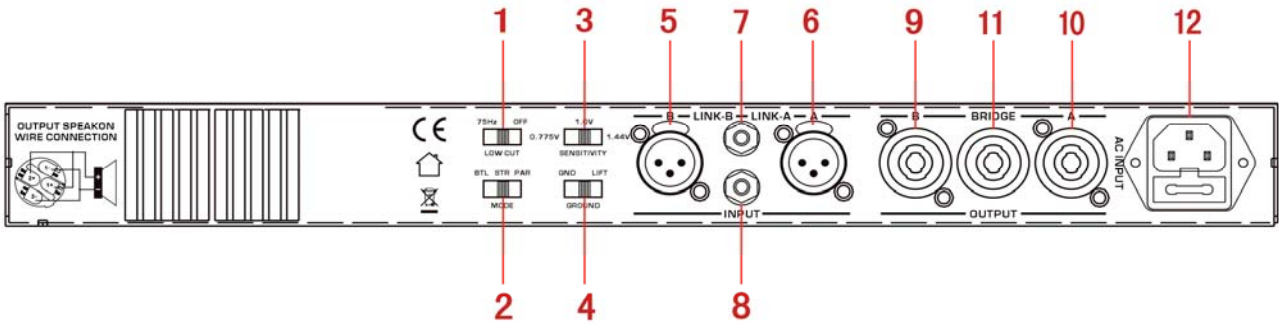
This illuminates in stereo mode.

13) PAR/Parallel LED (BLUE)

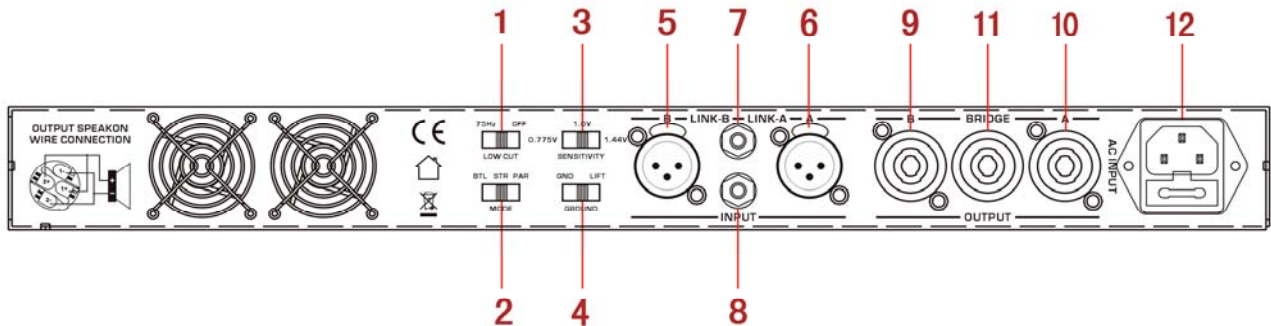
This illuminates in parallel mode.

5 · Rear Panels:

- **Horizon 300**



- **Horizon 600**
- **Horizon 800**
- **Horizon 1100**
- **Horizon 1300**



1) LOW CUT FUNCTION

75Hz-24Db/Oct Low cut function (optional)

2) Mode Switch

The amplifier is shipped in “Stereo “mode. You can select between Stereo, Bridge, or Parallel mode.

3) INPUT SENSITIVITY SELECTOR

For selecting the desired (0.775V, 1.0V or 1.44V) input sensitivity.

4) GROUND OR LIFT SELECTOR

In some cases hum noises can occur due to ground loops in your sound setup. Setting the Ground/ Lift switch to the position “Lift” breaks the ground loop between the amplifier and the chassis ground of the other components in your setup. As a result, the hum noises should disappear.

5/6) INPUT XLR (CHA &CHB) SOCKETS

Connection of the XLR input feed.

7/8) INPUT (CHA &CHB) SOCKETS

Connection of the JACK input feed.

9/10) OUTPUT (CHA &CHB) SOCKET

Use a 4 pole SPEAKON connector.

11) SPEAKON OUTPUT FOR BRIDGE MODE

12) POWER IEC CONNECTION

6 · Connections (Signal Input)

1) Unbalanced wiring:

Fig. 1- Signal input using a 1/4" mono Jack
CHA & CHB signal input:
Use a mono jack- Tip = signal
Sleeve= ground

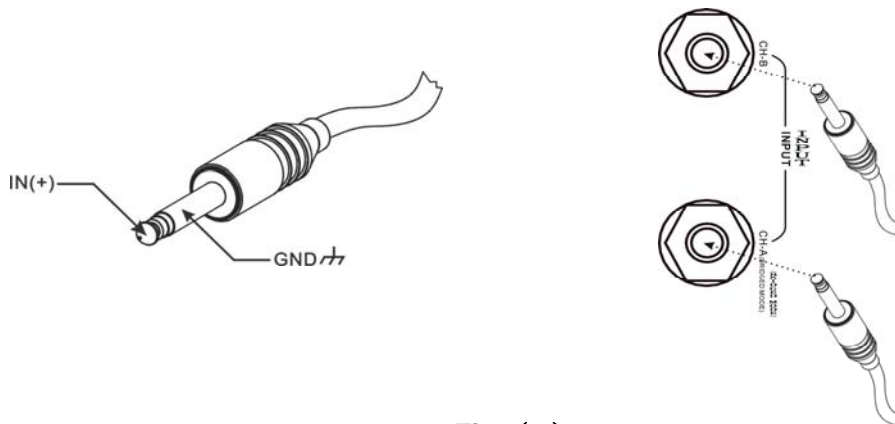


Fig. (1)

For balanced wiring, you can also use a 1/4" Stereo 6.3 Jack.

2) CHA & CHB Input/link XLR(female)

Using a standard XLR (female) (Fig. 2) or for connecting another amplifier in a daisy chain.

Pin1: Ground / Pin2: Signal + / Pin3: Signal -



Fig. (2)

Note : Incorrect connection will result in malfunction. Make sure the connection is correct before operation.

7 · Connection (Signal output)

1) Stereo Mode

Fig. 3 - Signal output using Speakon connector

CHA & CHB signal output :

1+ \ 2+ Signal output (+) connect to speaker (+)

1- \ 2- Signal output (-) connect to speaker (-)

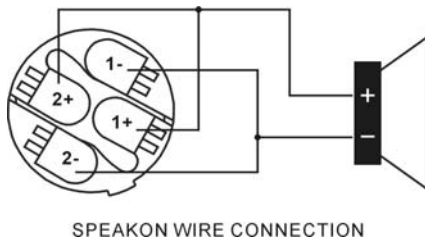
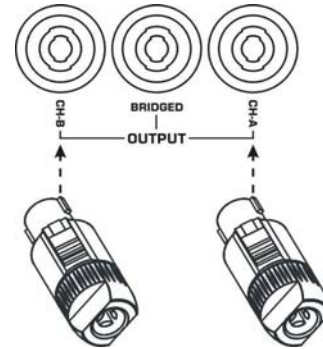


Fig. (3)



2) Bridge mode

Fig. 4- Signal output using Speakon connector

Be sure to set the mode switch on the rear panel to "bridge "(BTL).

1+ \ 2+ Signal output (+) connect to speaker (+)

1- \ 2- Signal output (-) connect to speaker (-)

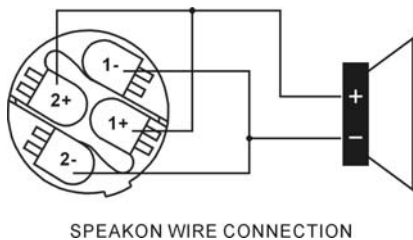
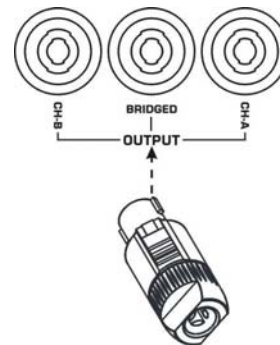


Fig. (4)



3) Parallel Mode

Fig. 5- Signal output using Speakon connector

1+ \ 2+ Signal output (+) connect to speaker (+)

1- \ 2- Signal output (-) connect to speaker (-)

Signal input from CHA, signal output from CHA & CHB.

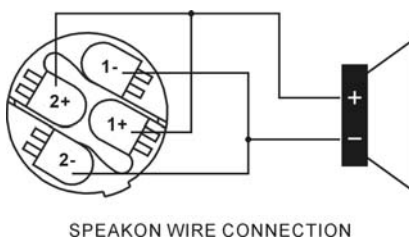
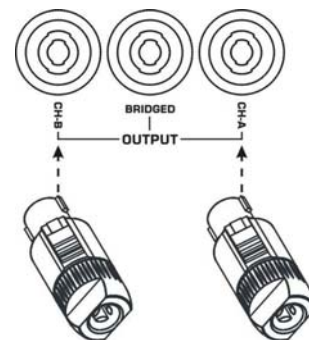


Fig. (5)



Note : Incorrect connection will result in malfunction. Make sure the connection & operation mode is correct before turning on the power.

8 · General Operation

1 · Operation procedures:

- 1) Connect to the matching speakers (dependent on operating mode required)
- 2) Make sure all the input & output connections are correct and well located.
- 3) Make sure the mains power supply matches to the power indicated on the amplifier.
- 4) Connect the signal source equipment, i.e. Mixer, to the amplifier's signal input
- 5) Set amplifier's input level to the minimum
- 6) Set the mode switch to the correct operating mode (stereo, bridge, or parallel).
- 7) Turn on the power of signal source equipment first
- 8) Turn on the power of the amplifier
- 9) Adjust the input level to required level.

2 · Operation procedure of Bridge, Parallel & Stereo mode:

A.) Stereo Mode:

- A) Turn off the power of amplifier
- B) Connect speakers to CHA and CHB outputs
- C) Set mode switch to "stereo "
- D) Input a signal to CHA and CHB
- E) Turn on the power of amplifier
- F) Adjust CHA and CHB input level

Caution: The amplifier will protect itself if used continuously under 4 Ohm stereo at maximum level for long durations.

B.) Bridge mode:

- A) Turn off the power
- B) Connect speakers to "bridge "output.
- C) Set mode switch to BTL (bridge).
- D) Input a signal to CHA
- E) Turn on the power of amplifier
- F) Adjust CHA input level.

Caution: The amplifier will protect itself if it is used continuously under 4 Ohm bridge for long durations.

C.) Parallel mode:

- A) Turn off the power
- B) Set mode switch to PAR (Parallel)
- C) Connect speakers to CHA and CHB outputs
- D) Input a signal to CHA
- E) Turn on the power of amplifier
- F) Adjust CHA & CHB gain controls respectively for each channel's output volume.

Caution: The amplifier will protect itself if it is used continuously under 4 Ohm parallel for long durations.

9 · Maintenance

1. Clean the unit by wiping with a slightly damp cloth. Avoid getting water inside the unit. Do not use alcohol or any volatile liquid that will damage the unit.
2. Clean the ventilation slots regularly with a vacuum cleaner. This increases the cooling capacity of the amplifiers fans and helps prevent temperature overheating.

10 · Troubleshooting

You can check some operation problems as detailed below first before calling your dealer.

Problem	Problem cause(s)	Suggested remedy
No response when power on	1.Power did not turn on	1.Turn on the power.
	2.Loose connection of the power cord	2.Make sure the power cord is connected firmly to the mains supply before turning on the power of amplifier.
	3.Blown fuse	3.Turn off the power, then check the fuse on the rear panel .Replace the fuse with same type only.
No sound	1.No signal input	1.Connect the signal source equipment to the amplifier, and then turn on the power.
	2.Loose connection of the speaker or damaged speaker	2.Make sure the speaker is well connected. Check if the speaker is in good condition.
	3.Wrong connection	3.Make sure the connection between amplifier and speaker is correct. Please refer to the point 8 Connection (signal output) for more information.
	4.Thermal protection	4. Avoid overloading the amplifier for a long time, or working in an area with bad ventilation. Check if the fans work properly and the ventilation slots are clear of dust.
Inadequate output volume	1.The signal input level (intensity) is set at minimum	1. Adjust the signal input level to the appropriate level.
	2.Low input voltage of the signal source equipment	2. a. Increase the input voltage of the signal source equipment b. Adjust the input sensitivity of the amplifier.

11 · Specification

Model No.		HORIZON-300	HORIZON-600	HORIZON-800	HORIZON-1100	HORIZON-1300
THD+N≤0.1% Output Power 1KHZ	Stereo 8Ω	100 W×2	200 W×2	250 W×2	340 W×2	400 W×2
	Stereo 4Ω	150 W×2	300 W×2	400 W×2	550 W×2	650 W×2
	Bridge 8Ω	300 W	600 W	800 W	1100 W	1300 W
THD+N		≤0.1%				
IMD		<0.1% (Stereo 8Ω)				
Frequency Response		20Hz~20KHz +0dB, -1.0dB				
Input Sensitivity		0.775V/1.0V/1.44V (Stereo 8Ω)				
S/N ratio (A Weighted RMS)		>100dB (Stereo 8Ω)				
Crosstalk at rated power output (8Ω1KHz)		>65dB (Stereo 8Ω)				
Phase Response		+15°, -15°(Stereo 8Ω)				
Damping Factor		>80 (@8Ω)	>150 (@8Ω)	>150 (@8Ω)		
Protection		Soft start up, Short Circuit, Overloaded, Overheat DC fault, AC line fuse Limit				
Indicators		power ,signal ,limit ,protection				
Connectors		IN: 1/4(6.3)Phone-Jack / XLR female OUT: 3× Speakon				
Slew rate		>20V/ms				
Power supply		AC240V / 60Hz				
Dimension(W×D×H)		483×235×44mm	483×323×44mm		483×403×44mm	
Weight		4.5Kgs	6.5Kgs		8.4Kgs	

HORIZON SERIES Professional Power Amplifier

English



***Correct Disposal of This Product
(Waste Electrical & Electronic Equipment)***

(Applicable in the European Union and other European countries with separate collection systems)

This marking shown on the product or its literature, indicates that it should not be disposed with other household wastes at the end of its working life. To prevent possible harm to the environment or human health from uncontrolled waste disposal, please separate this from other types of wastes and recycle it responsibly to promote the sustainable reuse of material resources.

Household users should contact either the retailer where they purchased this product, or their local government office, for details of where and how they can take this item for environmentally safe recycling.

Business users should contact their supplier and check the terms and conditions of the purchase contract. This product should not be mixed with other commercial wastes for disposal.