Power Professional Amplifier

DAP1100 / DAP2100

USER MANUAL

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

Content

1. Safety Instructions

CAUTION
RISK OF ELECTRIC SHOCK
DO NOT OPEN

Caution: to reduce the risk of Electric shock,
do not remove cover(or back). No user-
serviceable parts inside. Refer servicing to
qualified service personnel.

The lighting flash with arrowhead symbol, with in 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 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: To 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; electric shock or malfunction may result.
3.) Don't cover any ventilation slots as this may result in overheating. Always install the unit in a well ventilated place. Avoid presence of heat sources, and avoid places   which are dusty and humid.
4.) Do not attempt to repair the unit by yourself. Service or repair should be by qualified personnel only.

2. Main features

Professional power amplifiers with advanced switch mode power supply technology for a higher performance. They are perfect for discotheques, clubs, theatres, mobile audio etc.

The amplifiers feature:
● Soft start up
● Automatic voltage/ current limiter
● Short circuit protection
● DC fault protection
● High temperature protection
● Overload protection
● Connection mode : Stereo, bridge, parallel
● NEUTRIK Combo Input connector and NEUTRIK Speakon output connector.
● Power, Protect, Limit, Signal, ST (Stereo), BR (Bridge), & PA (parallel) indicators.

3．Precaution

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 connected in their indicated positions firmly.
5) Before turning on the power, please check carefully if the mode switch is in the correct position – stereo, bridge, or parallel.
6) Set the input sensitivity controls to minimum before you turn on the power.
7) In case the amplifier does not work properly, stop and disconnect it immediately. Do not attempt to repair it by yourself, contact your dealer for service.

4．Front panel

DAP1100

DAP2100
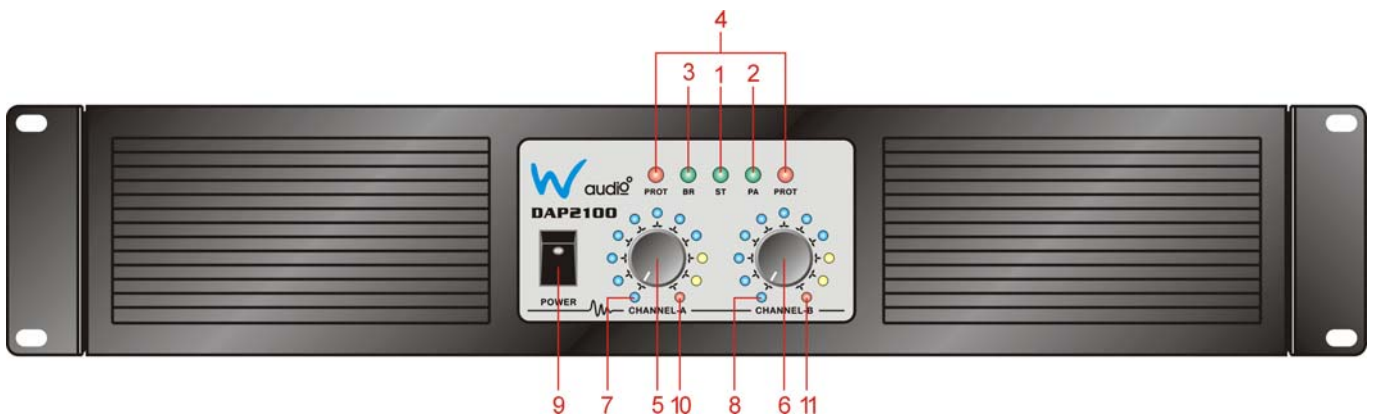
1）ST/Stereo LED (Green）

   Indicates that the amplifier is working on Stereo mode.

2）PA/Parallel LED (Green)

   Indicates that the amplifier is working in parallel mode. In parallel mode, you have to apply the signal only to the CHA (Channel A) input of the amplifier. The signal input is from CHA, but the signal outputs are same as in Stereo mode, i.e. from CHA & CHB (Channel B) outputs, connecting to two speakers.

3）BR/Bridge LED (Green）

   Indicates that the amplifier is working in bridge mode. This means that both channels are connected together in series to act as a mono amplifier. In bridge mode, you have to apply the signal only to CHA input of the amplifier.

4）PROT (Protect) / LIMIT LED (Red/ Blue colors for DAP1100; PROT Yellow LED for DAP2100)

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

    4-1) During the first seconds after switching on/ switching off the amplifier. The protection LED is on when the speakers are disconnected from the amplifier.

    4-2) When the temperature of the power stage becomes too high.

    4-3）In case of a technical defect : DC protection. For DAP1100, the Limit Blue LED will be on when the input signal voltage is too high. Please reduce the signal input.

5）/ 6.) CHA (Channel A) / CHB (Channel B) Input Level Control

These controls are used to control the input volume of the amplifier. In bridge or parallel mode, only CHA (Channel A) is active.

7）/ 8.) Power and CHA / CHB Signal indicators:

First LED around the control knob is the Power indicator. It lights up when the power is on. Other LEDs Indicates the signal input volume. The more LEDs light up, the stronger the signal is.

9）Power switch

When the power is turned on, it takes about 3~ 4 seconds to complete the function of soft start-up, then the amplifier is ready to work.

10) / 11) LIMIT LED: When the input signal voltage is too high, the limit LED will illuminate. The limiter reduces the average input level when the signal begins to distort; this process is designed to reduce distortion and protect the speakers. Please reduce the signal input level when the LIMIT LED is on.

5．Rear Panel

DAP1100
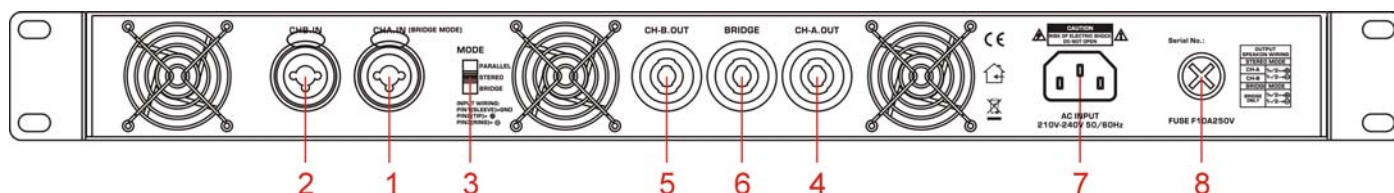
DAP2100
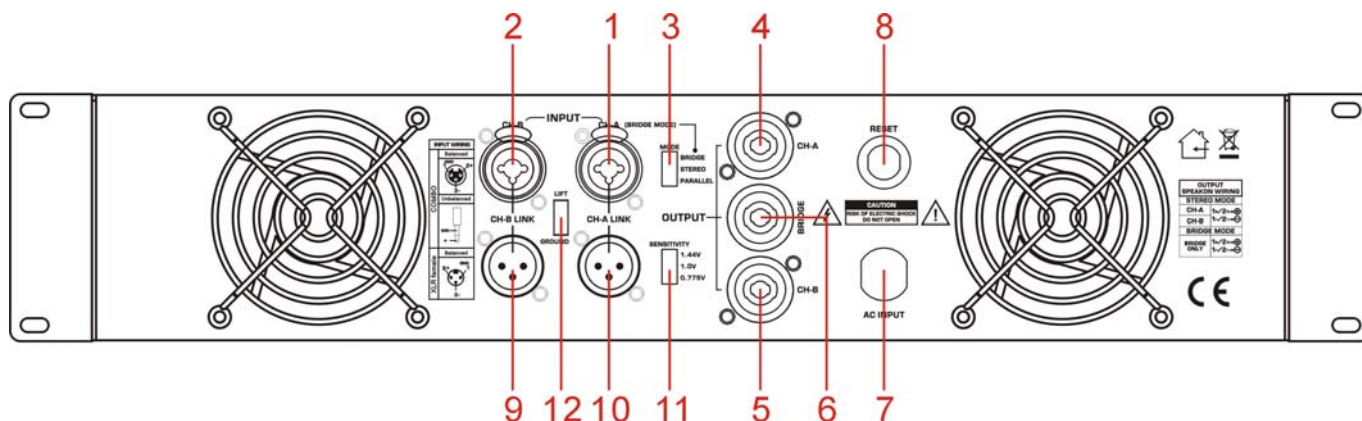
1.) / 2.) CHA/ CHB input Combo connectors :

Combination of 3-pin XLR & 6.35 (1/4") JACK connectors. Pin 1: Ground   / Pin 2: Signal + / Pin 3: Signal -

3)   Mode Switch: The amplifier is shipped in " Stereo " mode.

You can select between Stereo, Bridge, or Parallel mode.

ST/ Stereo Mode: You have to connect the input and output of both channels.

BR/ Bridge Mode: The input signal must be applied to CH A only.

PA/ Parallel Mode: The input signal must be applied to CH A only.

4)   CHA output

5)   CHB output

6)   Speakon Output for bridge mode

7)   DAP1100: IEC power connector: For mains power input.

DAP2100: AC power cord for mains power input.

8)   DAP1100   FUSE: F10A/250V

DAP2100   Circuit Breaker (Reset): T15A/250V

9)/ 10) CHA&CHB Input XLR(male)

Using a standard XLR for connecting another amplifier in daisy chain.

Pin1: ground   Pin2: positive   Pin3: negative

11) Input sensitivity switch: The amplifier is shipped at 0.775V. For 0.775V, 1.00V or 1.44V selection

12) Ground/ Lift Switch: In some cases nasty hum noises can occur due to ground loops in your setup.

Setting the Ground/ Lift switch to the position " Lift " breaks the ground loop between the amplifier and

the chassis ground of various other components in your setup. As a result, the hum noises disappear.
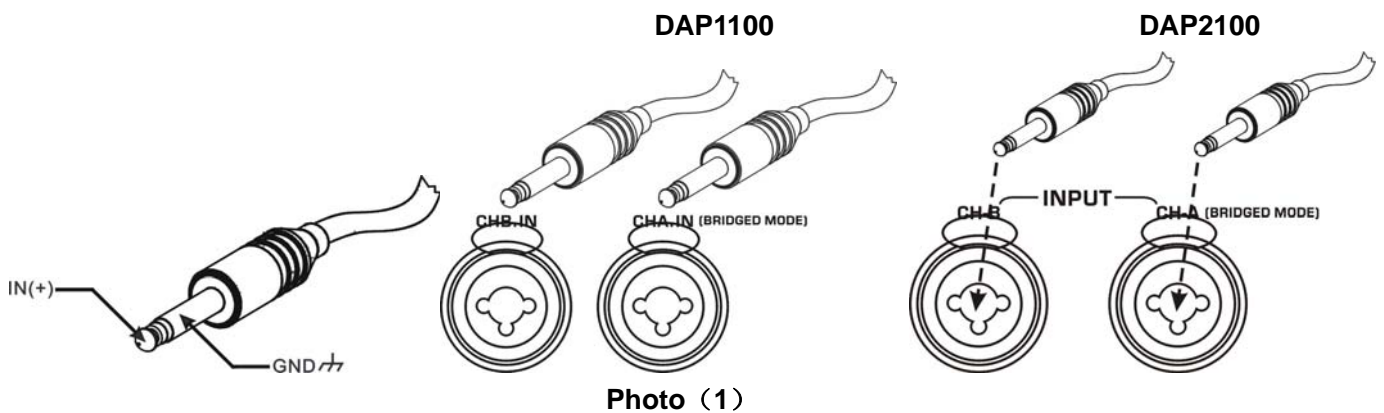

6．Connections (Signal Input）

1）**Unbalanced wiring:**

Photo 1- Signal input using a 1/4" mono Jack

CHA & CHB signal input:

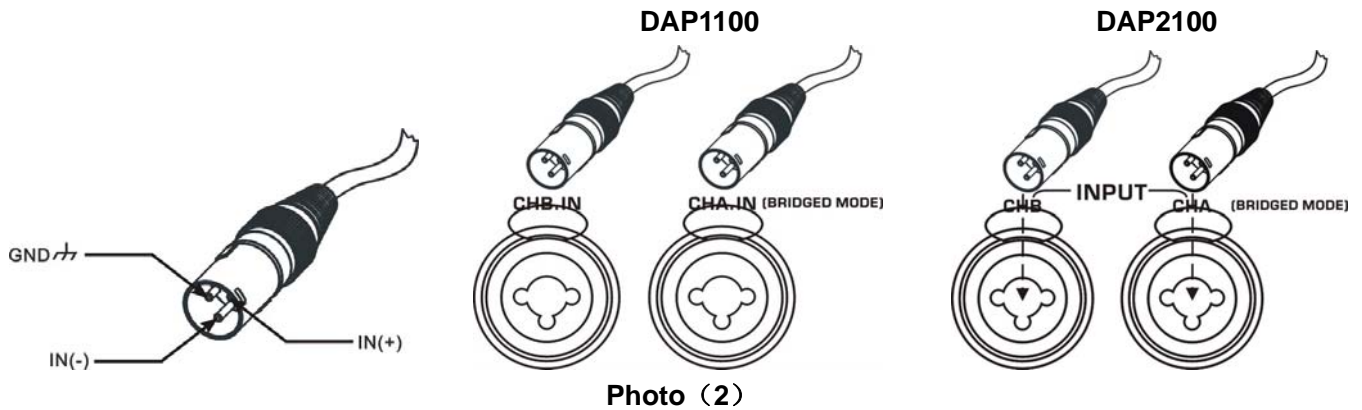Use a mono jack-   Tip = signal

Sleeve= ground

DAP1100   **DAP2100**

Photo（1）

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

2）**Balanced wiring:**

Photo 2 – Signal input using an XLR connector
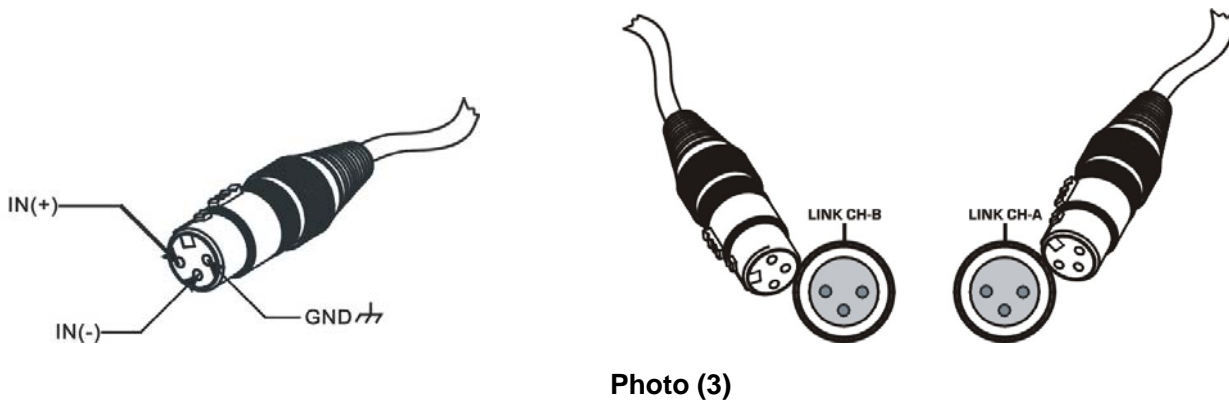
CHA & CHB Signal input：

Pin1= Ground

Pin 2= Signal +

Pin 3= Signal –

DAP1100   **DAP2100**

Photo（2）

3.) CHA & CHB Input XLR(male)

Using a standard XLR (Photo 3) for connecting another amplifier in a daisy chain.

Pin1: ground   Pin2: positive   Pin3: negative

Photo (3)

Note：Incorrect connection will result in malfunction. Make sure the connection is correct before operation.
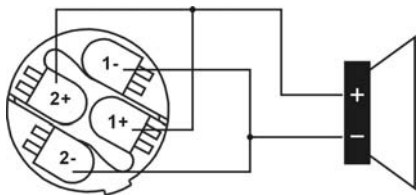
7．Connection（Signal output）

1）Stereo Mode

Photo 4- Signal output using Speakon connector

CHA & CHB signal output：

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

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

DAP1100   **DAP2100**
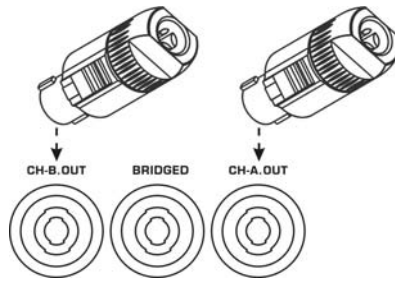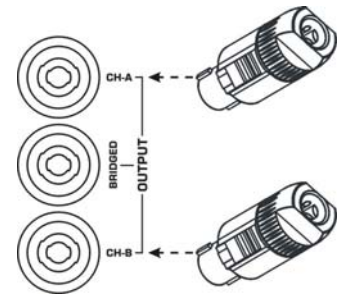
SPEAKON WIRE CONNECTION
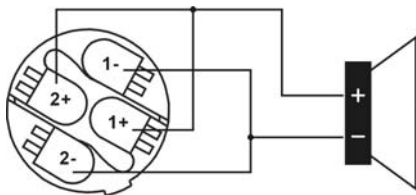
Photo（4）

2）**Bridge mode**

Photo 5- Signal output using Speakon connector

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

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

1-、2- Signal output　(-)　connect to speaker (-)
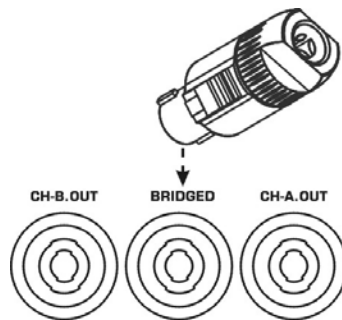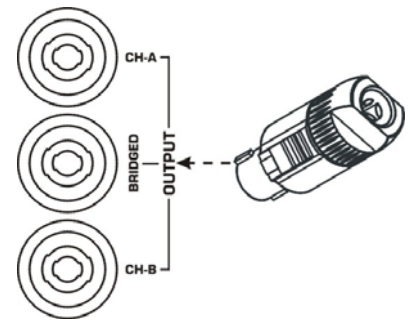
DAP1100　　　　　　　　DAP2100

SPEAKON WIRE CONNECTION

Photo（5）

3）**Parallel Mode**
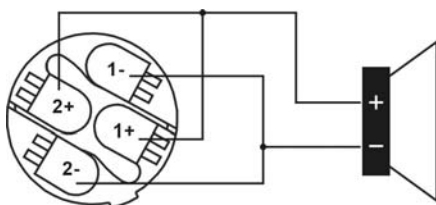
Photo 6- Signal output using Speakon connector

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

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

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

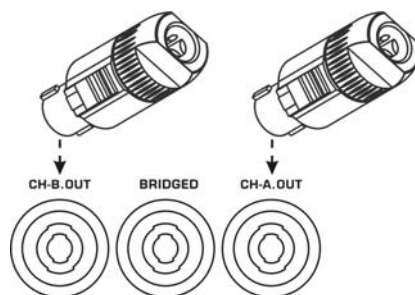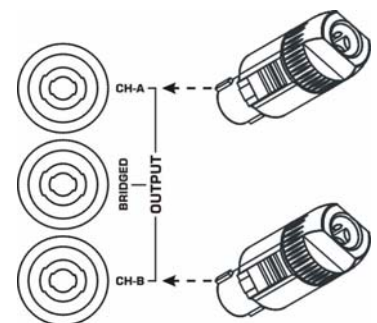DAP1100　　　　　　　　DAP2100

SPEAKON WIRE CONNECTION

Photo（6）

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

8．General Operation

1、Operation procedures:

1）Connect to the matching speakers
2）Make sure all the input & output connections are correct and well connected
3）Make sure the mains power supply matches to the power indicated on the amplifier.
4）Connect the signal source equipment Mixer to the amplifier's signal input
5）Set amplifier's input level to the minimum
6）Set the mode switch to the mode (stereo, bridge, or parallel) you want.
7）Turn on the power of signal source equipment, then the amplifier
8）Then adjust the input level to the intensity you want.

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

A.) Stereo Mode:

a.) Turn off the power of amplifier
b.) Speakers connect to CHA and CHB outputs
c.) Set mode switch to "stereo "
d.) Input signal from CHA and CHB
e.) Turn on the power of amplifier
f.) Adjust CHA and CHB signal volume

Caution: The amplifier will protect itself if it is used continuously under 2 Ohm stereo at its maximum for long durations.

B.) Bridge mode:

a.) Turn off the power
b.) Speaker connect to " bridge " speakon output.
c.) Set mode switch to BR (bridge).
d.) Input signal from CHA
e.) Turn on the power of amplifier
f.) Adjust CHA signal volume.

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 PA (Parallel)
c.) Input signal from CHA
   Output signal from CHA & CHB, like in Stereo mode.
d.) Turn on the power of amplifier
e.) DAP1100: Adjust CHA only for the output volume of CHA & CHB.
   DAP2100: Adjust CHA & CHB respectively for each channel's output volume.

Caution: The amplifier will protect itself if it is used continuously under 2 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 preventing temperature overheat.

10. Troubleshooting

You can check some operation problems as mentioned below first before asking for help.

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 turn on the power of amplifier.
	3、 blown fuse	3、 Turn off the power, then check the fuse on the rear panel or the fuses (DAP2100 only) on the power amplification PCB. Replace the fuse with same type only if the fuse is blown.
No sound	1、 No signal input	1、 Connect the signal source equipment to the amplifier, 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 7 Connection (signal output) for more information.
	4、 Thermal protection	4. Avoid overloading the amplifier for a long time, or working in a bad ventilation area. Check if the fans work properly or 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 intensity
	2. Low input voltage of the signal source equipment (CD player)	2. a. Increase the input voltage of the signal source equipment b. Adjust the input sensitivity of the amplifier.

11．Specification

Model No.		DAP1100	DAP2100
Output Power 1KHZ THD+N≤0.1%	Stereo 8Ω	270W x 2 Ch.	525W x 2 Ch.
	Stereo 4Ω	525W x 2	1050W x 2
	Stereo 2Ω	650W x 2	1260W x 2
	Bridge 8Ω	1050W	2000W
	Bridge 4Ω	1250W	2400W
	Parallel 4Ω	525W x 2	1050W x 2
	Parallel2Ω	650W x 2	1260W x 2
Frequency Response		20Hz~20KHz±0.5dB	
Input Sensitivity		0.775V	0.775V/ 1.0V/ 1.44V
S/N ratio (A Weighted RMS)		>92dB	>96dB
Crosstalk at rated power output (8Ω1KHz)		>70dB	>80dB
Protection		Soft start up, Thermal cut off, Short Circuit、Overloaded、DC fault、Voltage limiter, AC line fuse	
Indicators		Power、Signal、Protect、Clip、Stereo、Bridge、Parallel	
Connectors		INPUT: NEUTRIK COMBO (Combination of 3-pin XLR connector and 1/4" Phone Jack) x 2; XLR Link male x 2 OUTPUT: NEUTRIK Speakon x 3	
Cooling system		Low noise, variable speed fans	
Power supply		220-250V~50/60Hz	
Dimension（W×D×H）		483*499*44mm	483*484*88mm
Net weight		10.0 KGS	15.0 KGS

DAP Series   Professional Power Amplifier

Specification is subject to change without prior notice.