## **INSTALLATION AND OPERATION MANUAL**

# DA-1000 DA-1500 DA-2000 High Wattage PA Power Amplifier





Caution: Please read this manual carefully before operating Damage caused by misuse is not covered by the warranty



### **SAFTY WARNINGS!**

- 1. Read and keep these instructions.
- 2. Heed all warnings and follow all instructions.
- 3. Do not use this apparatus near water.
- 4. Do not block any ventilation openings. Install in accordance with the manufacturer's instructions.
- 5. Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus that produce heat.
- 6. 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 is provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.
- 7. Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.
- 8. Only use attachments/accessories specified by the manufacturer.
- 9. 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.
- 10. Unplug this apparatus during lightning storms or when unused for long periods of time.
- 11. 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.
- 12. This appliance shall not be exposed to dripping or splashing water and that no object filled with liquid such as vases shall be placed on the apparatus.
- 13. Plug this apparatus to the proper wall outlet and make the plug to be disconnected readily operable.
- 14. Main plug is used as disconnected device and it should remain readily operable during intended use. In order to disconnect the apparatus from the mains completely, the mains plug should be disconnected from the mains socket outlet completely.
- 15. WARNING: To reduce the risk of fire or electric shock, do not expose this apparatus to rain or moisture.
- 16. An appliance with a protective earth terminal should be connected to a mains outlet with a protective earth connection.

### **WARNING!**

TO PREVENT FIRE OR SHOCK HAZARD, DO NOT USE THE PLUG WITH AN EXTENSION CORD, RECEPTACLE OR OTHER OUTLET UNLESS THE BLADES CAN BE FULLY INSERTED TO PREVENT BLADE EXPOSURE.

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

TO PREVENT ELECTRICAL SHOC

K, MATCH WIDE BLADE PLUG TO WIDE SLOT, FULLY INSERT.



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.

# CAUTION RISK OF ELECTRIC SHOCK DO NOT OPEN

WARNING: 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 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.

### **INTRODUCTIONS**

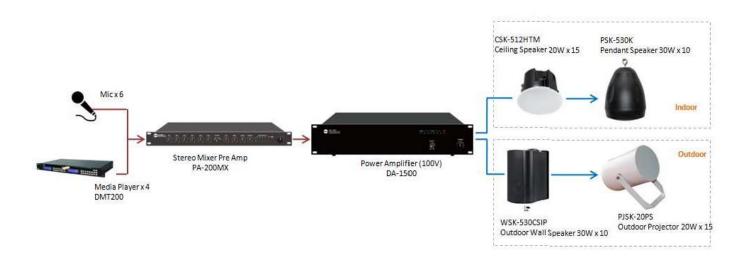
#### Description

The DA-1000 & DA-1500 & DA-2000 High Wattage PA Power Amplifier are of switching power supply Class-D technology, which features of minimum power consumption and much higher efficiency up to 85%, moreover it helps to save installation rack space, generate lessheat so as to extend its performance life span. The DA-1000 & DA-1500 & DA-2000 power amplifiers are of rated power output at 1000W & 1500W & 2000W, so it could be used as digital public address system at minimum cost. The versatile loudspeaker outputs of both high impedance 100V/70V & low impedance 4-8 Ohms enable it meet both PA fixed installation and Hifi stereo sound installation jobs. There are one balanced inputs by XLR connector with volume control on front panel. Visual working status indicators include power, signal & protection for easy amplifier working status monitoring. With complete protection includes short circuit, overload & high tempetc.

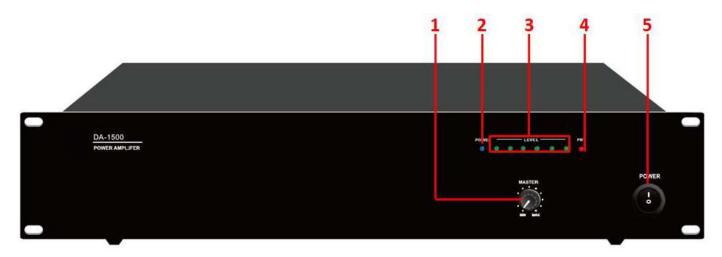
#### Feature:

- Premier sound performance and extreme reliable Class-H power amplifier
- Switch power supply of green star technology
- Efficiency up to 85% or higher ensure minimum power consumption
- With output transformer for high voltage protection and premier sound quality
- 2U height for less rack space & less heat generation
- Single channel power amplifier into 19" rack size
- Rated power output at 1000W & 1500W & 2000W
- Speaker outputs 4Ω-8Ω & 100V/70V
- Balanced line input by XLR & Link out
- With volume control on front panel
- Separate indicators for power, signal & protection
- Complete protection includes short circuit, overload, high temp etc
- Suitable for giant quantity PA loudspeakers connection like playground, stadium, park & airport

#### **Connection Diagram:**



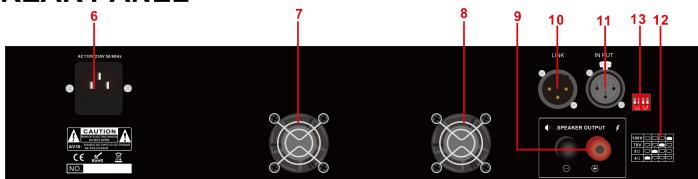
### **FRONT PANEL**



- 1. Volume attenuator
- 2. Power indicator
- 3. Output signal level Meter

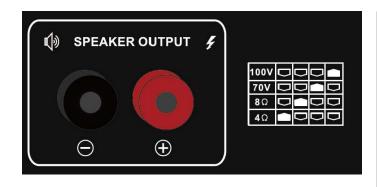
- 4. Protection indicator
- 5. Power on/off switch





- 6. AC Power socket.
- 7. Cooling fan
- 8. Cooling fan
- 9. Speaker output terminal (- & +)

- 10. Link XLR to another amplifier
- 11. XLR input from mixer or pre-amplifier
- 12. Output mode selector (default as of 100V output)
- 13. DIP switch



Speaker Output Mode Selector:

There are four speaker output modes: 100V/70V/8 Ohm/4 Ohm, the default setting is 100V.

**WARNINGS:** If you switch into low impedance speaker connection, this output ode must been switched to the matched low impedance modes, otherwise damage of loudspeaker or amplifier is out of warranty service.

### **AMPLIFIER OPERATION GUIDANCE**

#### **Power & Input Signal Setup**

Before operating the DA-1500 amplifier, check the mains supply voltage and connect the IEC inlet to the mains power supply using the power lead supplied (or equivalent) to see the power indicator on front panel light on. Ensure that the cooling vents at rear are not covered or obstructed in any way with adequate space for air-flow through the unit.

Minimum the output attenuator (1) on front panel, connection the mixer or pre-amplifier to the input (11), to see the front panel output level meters have dynamic signals, otherwise check the microphone or media player to the mixer or pre-amplifier and the line input whether has been good connection.

#### **Amplifier Loading & Protection**

Slowly increase the output attenuator (1) to Max 80%, do connection Max 80% loading of each amplifier (800W for DA-1000 and 1200W for DA-1500 and 1600W for DA-2000 to ensure the dynamic signal change will not damage the amplifier).

Once the amplifier protection indicator light on, please decrease the output volume to less than 80%-50%, then check the speaker cable whether over loading, short circuit, output mode connection wrong etc to protect the amplifier.

Connection to another power amplifier once you need to double the power loading by LINK to one more amplifiers to share the same sources.

Long time amplifier of protection mode will cause damage of amplifier or loudspeakers, which is out of warranty service.

Before powering on/off, always turn down the volume controls to avoid loud pops or noises through the speaker.

#### **Cooling Fan System**

The power amplifier will start cooling fan system immediately the amplifier power on/off, it will slow down after a while, these high power loading amplifiers must always keep the fan clean and running smoothly, so please keep in mind.

### **SPECIFICATION**

Model	DA-1000	DA-1500	DA-2000
Description	High Wattage PA Power Amplifier		
Rated Power Output	1000W	1500W	2000W
Speaker Output	4-8Ω & 100V/70V		
Frequency Response	40Hz-16KHz		
Input	1V, 1.2KΩ(Bal)/600Ω(balanced)		
Input Impedance	10ΚΩ		
THD	<0.3%		
S/N Ratio	>90dB		
Power Consumption	1300W	2000W	2500W
Power Supply	AC 220V-240V, 50-60Hz		
Dimension	484x375x88mm		
Weight	9.5kg	10.0kg	10.5kg

### **TROUBLESHOOTING**

No power light on front	Ensure IEC inlet is connected to mains and lead is in good condition		
panel switch	Ensure mains outlet is switched on		
Power light is on but no	Check input signal and connection leads		
other LEDs and no output	Ensure pre-amplifier or mixer have mic or sources input		
Power light and Signal LEDs are lit but no output	Check speaker leads are in good condition and connected properly		
	Check the speaker output modes are well matched.		
	Check speakers are in good working order and not shorted (use a multi-tester)		
Case getting hot	Ensure cooling vents are clear and fan is working (refer to technician if not)		
Output is very distorted and Protection LEDs are lighting	Check the speaker impedance is not below the rated Ohms		
	Turn down the input level from audio source		
	Check the speaker output modes whether matched		
	Check the speaker loading whether less than 80%, otherwise it is overloading		
Output is working but at very low level	Ensure input source is at line level		
	Increase input level from mixer or pre-amplifier audio source		
	Turn up volume attenuator max to 80%.		

### **SERVICE**

#### **Procedures**

Ensure the problem is not related to operator error, or system devices that are external to this unit. Information provided in the troubleshooting portion of this manual may help with this process. Once it is certain that the problem is related to the product contact your warranty provider as described in the warranty section of this manual.

#### Warranty

Warranty terms of global three years. While the term and warranty may vary by country and may not be the same for all products. Terms and conditions of warranty for a given product may be determined first by locating the appropriate country which the product was purchased in, then by locating the product type.

Specifications may change without pre-notice.