

9. Physical Data

Dimension: 19" * 6.5" * 1.8" (1U Space)
New Weight: 8 Lbs



PROFESSIONAL POWER AMPLIFIER



Sound Town Inc. accepts no liability for any loss which may be suffered by any person who relies either wholly or in part upon any description, photograph, or statement contained herein. Technical specifications, appearances and other information are subject to change without notice.

For the applicable warranty terms and conditions, including additional information regarding Sound Town's limited warranty, please see details online at:

<https://www.soundtown.com/pages/return-warranty>

1. Important Safety Instructions

Warning: To reduce the risk of electric shock, do not disassemble this amplifier. No user serviceable parts inside. Please contact authorized service personnel when need maintenance.

This unit has been engineered and manufactured to assure your personal safety. Improper use can result in potential electrical shock or fire hazards. In order not to defeat the safeguards, observe the following instructions for its installation, use and servicing.

- Read these instructions.
- Keep these instructions.
- Heed all warnings.
- Follow all instructions.
- Do not expose this apparatus to rain or moisture.
- Clean only with dry cloth.
- Do not block any ventilation openings. Install in accordance with the manufacturer's instructions.
- Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus that produce heat.
- The equipment should be connected to power outlet with grounded protective power grid.
- Protect the power cord from being walked or pinched. Unplug the power cord during lightning storms or when unused for long periods of time.

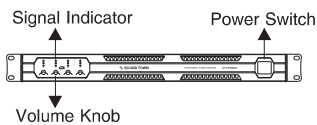
2. Certification Notice

We declare our devices are compliant with the following directives and/or standards 2004/108/EC (Electromagnetic Compatibility) directives.

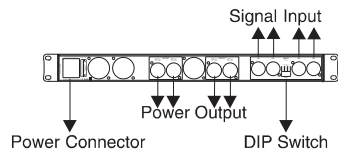
- EN55103-1, EN55103-2, EN61000-3-2, EN61000-3-3 AND E4, E5 ELECTROMAGNETIC
- 2006/95/EC LOW VOLTAGE DIRECTIVES EN60065 ENVIRONMENT DIRECTIVE
- 2004/108/EC ELECTROMAGNETIC COMPATIBILITY DIRECTIVE
- FCC ELECTROMAGNETIC RADIATION DIRECTIVE 15.109
- IEC CISPR Pub.22 ed 6.0 (2008-09) CHAPTER 7.1.1, PART 15.107
- IEC CISPR Pub.22 ed 6.0 (2008-09) CLASS B

3. Front/Rear Panel Function Diagram

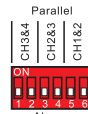
Front Panel:



Rear Panel:

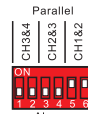


DIP Switch Instructions:



All Inputs Independent
(Default setting)

All channels remain independent in this setting, may be used for 4 different signals.



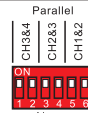
**Two Channel Inputs
Signal Linked**
(2 Channels in Parallel)

Adjust the 2 dip switches can connects both Ch1 & Ch2 inputs together. One signal can feeds both channels. Each channel's gain control and loudspeaker connection remain independent. The rest 2 channels remain independent inputs.



**Three Channel Inputs
Signal Linked**
(3 Channels in Parallel)

Adjust the 4 dip switches can connects Ch1, Ch2 & Ch3 inputs together. One signal can feeds 3 channels. Each channel's gain control and loudspeaker connection remain independent. The rest 1 channel remain independent input.



All inputs linked
(4 Channels in Parallel)

Adjust the 6 dip switches can connects all 4 channel inputs together. One signal can feeds 4 channels. Each channel's gain control and loudspeaker connection remain independent.

Caution: Do not connect different inputs to each side of a channel when these channels are in parallel. Only 1 connected input will feed all parallel channels. One of the rest parallel channels can be used as signal link out to another apparatus. (A male to male XLR cable will be required for the linking out.)

4. Product Briefing

UPDM (Unipolar Pulse Density Modulation) amplifier is the latest generation power amplifier with an ultra-low power consumption. Durable 1 RU chassis rack mountable. Intelligent Cooling System.

5. Product Highlights

- 90V~264V AC global power supply
- Redundancy PSU system
- Ground and signal source noise reduction
- Direct energy amplifying
- Constant zero distortion power control
- Dual reactor phase shift control
- Dynamic energy recycling
- Soft protection of overheat and clip

6. Specifications

8 Ohm Stereo Power	800W * 4
4 Ohm Stereo Power	1400W * 4
2 Ohm Stereo Power	850W * 4
Total Harmonic Distortion	<0.03%
Freq. Response	20 Hz ~20 kHz
S/N Ratio	108dB (A-weighting)
Damping Factor	>1000
Controlled Slew Ratio	>100V/us

DC Residual	<5mV
Operation Range (AC)	90V~250V (±10%, 50/60Hz)
Operation Range (DC)	120V - 240V
Power Factor	>0.85@>500W
Power	Switched PSU with PFC

7. Protection Functions

■ Overload Protection

This amplifier has output current protection. Output current will be limited when exceeds the allowed maximum value. When a channel of the amplifier output current exceeds allowed maximum value (for example short circuit), the amplifier will be disabled (muted) for 1000ms. The amplifier will restart after the short circuit comes back to normal.

■ Input Voltage Protection

When the input voltage is higher than the upper limit or lower than the lowest limit, PSU will enter protect mode and cut off the power supply.

■ New Generation Redundancy Power Supply System

This amplifier uses 2 identical PSU in one chassis. Controlled by specifical power management chips for load balance and redundancy. Backup PSU will work alone when main PSU fails. So dual PSU will supply more power and stability.

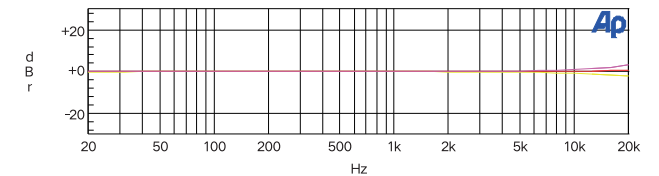
■ Temperature Protection

The amplifier comes with complete temperature detection, and monitors both PSU and amplifier simultaneously. Output power will be limited when the temperature of the heatsink higher than the maximum limit and power output will be cut off. The amplifier will restart when temperature return to normal.

8. Typical Test Curve

Audio Precision

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Sweep	Trace	Color	Line Style	Thick	Data	Axis	Comment
1	1	Yellow	Solid	1	Ank.Level A	Left	
2	1	Red	Solid	1	Ank.Level A	Left	
3	1	Magenta	Solid	1	Ank.Level A	Left	

Frequency response: 4 Ohm (Yellow) , 8 Ohm (Red) and open load (Magenta).