

# MA501t

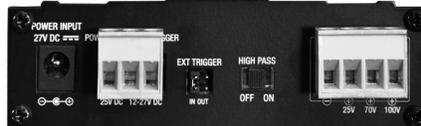
Compact 70V Power Amplifier  
Preliminary Technical Information for System Engineers



**SOUNDTUBE**  
ENTERTAINMENT



Front Panel



Rear Panel

## PRELIMINARY SPECIFICATIONS: MA501t

System Type	MA501T 50 W 70V amplifier
Amplifier Power	50 watts RMS <0.5% THD
Output	25V/70.7V/100V
High Pass Filter – Switchable	120 Hz @ 12 dB/octave
Overall Response	30 Hz – 20 kHz +/- 3 dB @ 1 watt <0.2% THD
Output Power	50Hz-20 kHz @<1% THD 50W @ 25/70/100V
Power Band Width Response	50Hz - 20 kHz +/- 3 dB
Inputs	RCA Unbalanced/Single Euro Block Balanced
Maximum Input Sensitivity	500 mV for full output
THD+ Noise	<.1% below rated output power
S/N	>84 dB un-weighted
Input Impedance	20K unbalanced, 15K balanced
Protection Features	Amplifier-Overload, Short Circuit, DC and Heat Protection Power Supply- Thermal protection, Over current protection, Short circuit protection
Front Panel Indicators	Power/Standby, Clipping LEDs
Power Supply	Input: 100-240VAC 50/60 Hz Output: 32 VDC @ 1.6 A
Current consumption 120V	0.6 A/AC
Operating Voltage	100-240 VAC with approved power supply
Height	32.0 mm (1.25 in.)
Width	100.0 mm (3.9 in.)
Depth	200.0 mm (7.9 in.)
Weight - amp only	.73 kg (1.6lbs)
Packaging	One per box
Regulatory - UL	UL 60065 Listed
CCC	Approved
Regulatory - CE	Approved
RoHS	Approved

## Preliminary Technical Information

- Compact high-output, constant voltage 50 W amplifier
- Audio grade toroidal output transformer
- Rugged extruded aluminum housing
- Taps for 25V, 70V, 100V
- Balanced inputs (Euroblock) and unbalanced inputs (RCA)
- Euroblock outputs
- Signal sensing Auto-on or 12v trigger
- 30 Hz – 20 kHz +/- 0.5 dB frequency response
- Peak output detector and indicator (clipping), power LED
- Recessed screw adjust input gain
- 120 Hz high pass switch
- Overload, Short Circuit, DC and Heat Protection
- Versatile mounting options: pole, rack or chassis
- Small size – 1.2" x 3.9" x 8"

## Description

The MA501t is a low-voltage mono power amplifier engineered for use in distributed sound applications. Designed for use with SoundTube and other high-fidelity speakers, the MA501t provides 50 watts of output power at 25V, 70V or 100V. A 12V trigger is provided for auto-on/off functions. Recessed gain control is available via the front panel; this deters unauthorized tampering with levels or other settings.

## Applications

The MA501t is ideal for distribution of mono audio to speakers throughout a facility. Applications include hospitality, corporate, retail, education, government, themed entertainment and other commercial applications.



### Patented Technologies

SoundTube Entertainment and the MSE Audio Group constantly develop new technologies which enhance audio product performance. SoundTube Entertainment innovations are protected by multiple U.S. and international patents, which explicitly cover SoundTube dome, enclosure and dispersion technologies. The MSE Audio Group actively defends its patents in order to protect SoundTube resellers and end-users.

### Architectural Specifications

The amplifier shall be a compact 50 watt, monaural, constant-voltage amplifier.

The amplifier shall provide balanced input via Euroblock and an unbalanced RCA line level input, with an input selection switch. It shall incorporate an audio grade toroidal output transformer. Outputs shall be presented on Euroblock and shall provide connections for ground plus 25V, 70V and 100V applications. Input adjustment shall be made via recessed screw gain control. The amplifier shall provide power and peak output / clipping indication via LEDs. A selectable high pass filter shall be included.

Performance specifications of a typical production unit shall be as follows: 50 watts RMS (30 Hz – 20 kHz) at <1% THD. The high pass filter shall have a sub-in crossover frequency of 120 Hz and a slope of 12 dB per octave.

An external power supply shall provide 32V DC input to the amplifier. The amplifier shall also provide a 32V DC power input via Euroblock. The amplifier shall activate either on signal sensing (auto-on) or via an external trigger ranging from 12 to 32 V DC. Triggering shall be enabled via a jumper on the exterior of the chassis.

Construction of the chassis shall be extruded aluminum. Mounting options shall include pole mount, rack mount or chassis mount. Overall cabinet dimensions shall not exceed 30.5 mm (1.2 in) height by 99.1 mm (3.9 in) width by 203.2 mm (8.0 in) depth.

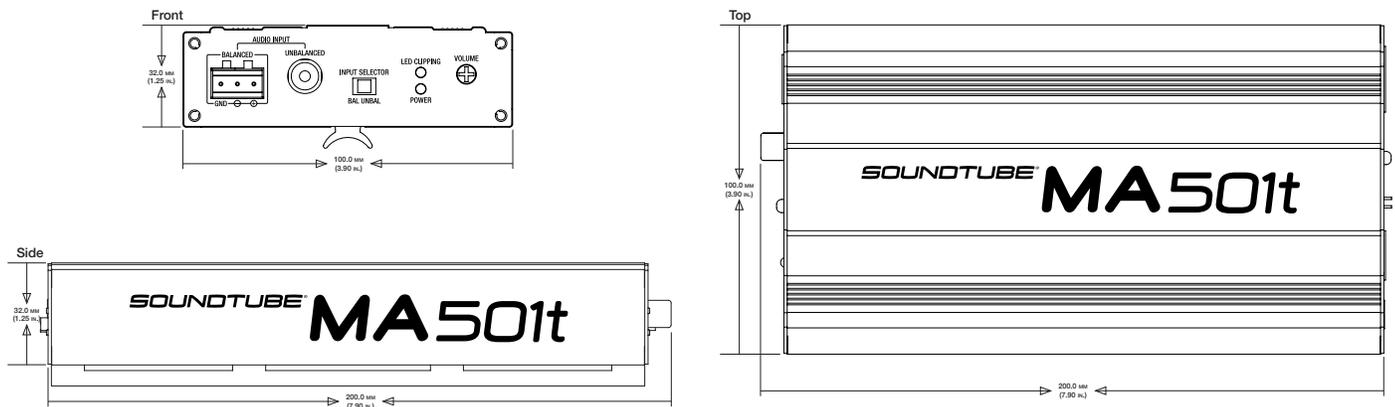
The system shall be the SoundTube MA501t.

### SoundTube Entertainment

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All SoundTube products come with a 5-year limited warranty.

### Mechanical Drawings



SoundTube Entertainment manufactures a complete line of speakers for:  
**Open-Ceiling • In-Ceiling • Surface-Mount • Outdoor • Sound-Focusing**

All SoundTube products are designed and engineered in the USA.