SA201-RDT & SA201

Mini Amplifier
Technical Information for System Engineers

SOUNDTUBE ENTERTAINMENT

SA201-RDT (15-VOLT, 3-AMP POWER SUPPLY INCLUDED)
SA201 (AMP ONLY, DOES NOT INCLUDE POWER SUPPLY)

System Type	20-watt-per-channel (4 ohm) Class AB amplifier
Frequency Response	20 Hz - 20 kHz (+/- 0.1 dB)
Max gain	35 dB
Power per channel @ < 10% THD	20 watts (4 ohm stereo) 10 watts (8 ohm stereo)
Power per channel @ < 1% THD	15 watts (4 ohm stereo) 8 watts (8 ohm stereo)
Signal to noise ratio	92 dB (120 Hz, 12dB/oct, 4 ohm, A-Weighted)
Input impedance	6 k ohms
High-pass filter (F_3)	250 Hz; 6 dB per octave
Low-pass filter	310 Hz; 6 dB per octave
Height	27.7 mm (1.09 in.)
Width	71.7 mm (2.82 in.)
Depth	115.8 mm (4.56 in.) including connectors
Weight - amp and power supply (SA202-RDT)	0.53 kg (1.15 lbs.)
Weight - amp only	0.18 kg (0.40 lbs.)
Shipping weight - amp and power supply (SA202-RDT)	0.61 kg (1.35 lbs.)
Shipping weight - amp only	0.25 kg (0.55 lbs.)
Packaging	One per box
Included accessories	15-volt, 3-amp power supply (SA201-RDT only), high-power input wire and terminal block power connectors, pole- and surface-mount adaptor
Optional accessory	15-volt, 3-amp power supply (AC-PS-1550)
Regulatory - CE	Approved

Key Features

- 35 dB maximum gain with 2 x 10 watt output.

- Dual RCA, stereo mini jack and high-level inputs.

- High- and low-pass filters.

- 12-volt trigger for automatic on/off functions when source power is detected.

- Included SA201 accessory: universal pole- and surface-mount adaptor.

- Included SA201-RDT accessories: uni versal pole- and surface-mount adap tor, 15-volt power supply.

- Optional accessory for SA201-wo/PS: 15-volt, 3-amp power supply (AC-PS-1550).

Description

The SA201 and SA201-RDT are 20-watt-per-channel (4 ohm) Class AB amplifiers with maximum gain of 35 dB. Input options include dual RCA jacks and a stereo mini jack for line-level audio sources and a speaker-level (amplified) input for applications with low-wattage speaker outputs (e.g., AV projector to external speakers). A 15-volt power supply is included with the SA201-RDT. Mounting hardware is included and adapts to pole, surface or security attachment installations.

Applications

Small and cost-effective, the SA201 is engineered for external amplification with SoundTube FP sound-focusing and other high-fidelity speakers. Additional applications include digital signage, education, point of purchase, museums, surgical centers, AV carts or any application where a small amplifier is needed to boost a limited source output (e.g., computers, A/V projectors, etc.).

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.

Technical Data and Specification Tools

Technical Data

SoundTube Entertainment strives to provide complete and effective technical information and data to dealers, engineers and designers. All data are available from SoundTube Entertainment or at www.soundtube.com.

Technical data and downloads include:

EASE™ data – 3-D polar plots.

EASE™ Address – 2-D modeling for distributed systems

Autodesk® Revit® software

Tech Sheets – Technical information and architectural specs for system engineers

SoundTubeSPEC™ – Proprietary speaker placement software

Independant Data Acquisition and Verification

All data for SoundTube speakers are independently collected and verified by NWAA Labs (www.nwaalabs.com) using their proprietary MACH testing system. All data are collected and analyzed according to ASTM, ISO and AES standards using EASERA, TEF and MLSSA. Full balloon data including both phase and magnitude are compiled into a variety of formats including EASE 4.x, GLL and CLF.

Architectural Specifications

The SA201-RDT and SA201 are 20-watt per channel (4 ohm) Class AB amplifiers (the SA201-RDT includes a power supply).

The amplifier shall provide three inputs including a stereo miniature jack, dual RCA and a hard-wired high-level input (speaker level). The SA201 also includes a variable 35 dB maximum gain control.

Performance specifications of a typical production unit shall be as follows: 20 watts per channel (20 Hz – 20 kHz, 4 ohm, stereo) or 10 watts per channel (20 Hz – 20 kHz, 8 ohm stereo). The high-pass filter shall have an f_3 of 250 Hz and a slope of 6 dB per octave. The low-pass filter shall have an f_3 of 310 Hz and a slope of 6 dB per octave.

The external wiring output connector shall be 20-gauge hard-wire leads. Power input wiring shall be a terminal block that shall accept from 10 - 22-gauge wire. The system shall be for indoor applications.

The enclosure shall be constructed of extruded aluminum. Overall cabinet dimensions shall be no more than 27.7 mm (1.09 in.) in height by 71.7 mm (2.82 in.) in width and 115.8 mm (4.56 in.) in depth.

The SA201-RDT shall include the amplifier, mounting hardware, power supply, high-power input wire and terminal block power connectors. The SA201 shall include only the amplifier and mounting hardware. An optional 15-volt, 3-amp power supply is available (AC-PS-1550).

The AC-PS-1550 power supply (included with the SA201-RDT, optional with the SA201) accepts input voltage from 100-240 volts and complies with UL, CE and RoHS standards.

The system shall be the SA201-RDT or the SA201 for amplification.

SoundTube Entertainment

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

Mechanical Drawings
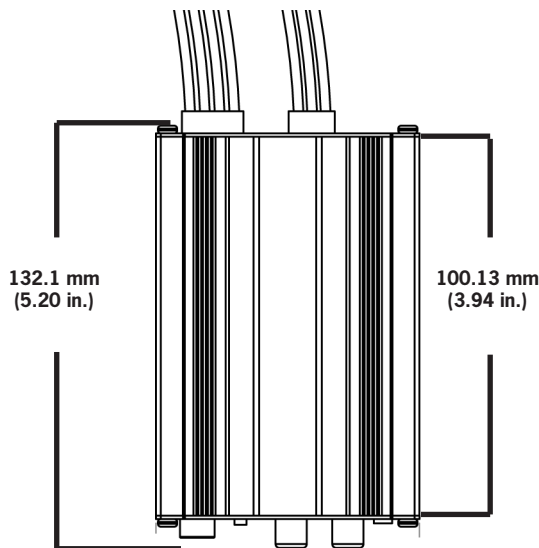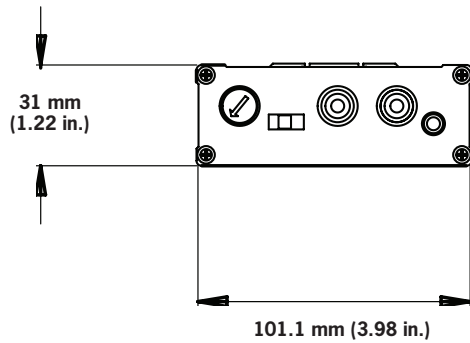

31 mm
(1.22 in.)

101.1 mm (3.98 in.)

132.1 mm
(5.20 in.)

100.13 mm
(3.94 in.)

Included Accessories

R 7.6 mm
(0.30 in.)

100.13 mm
(3.94 in.)

72.1 mm
(2.84 in.)
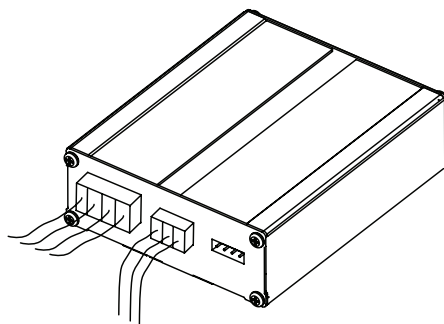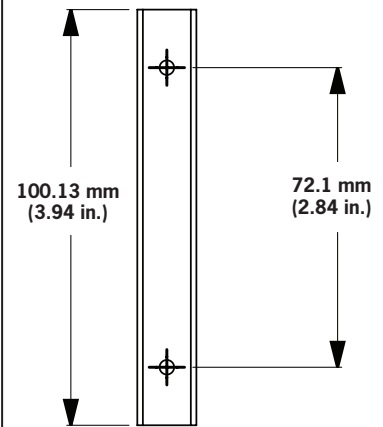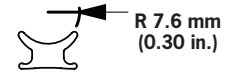
SA-201 Without Pole/Surface Mount

SA-201 With Pole/Surface Mount

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 U.S.A.

SA201-RDT &
SA201

Mini Amplifier
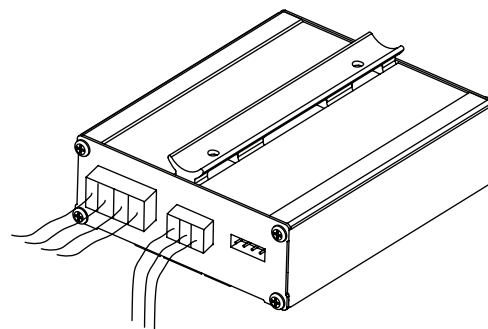Technical Information for System Engineers

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