

SA202-RDT & SA202

Mini Amplifier

Preliminary Technical Information for System Engineers



SOUNDTUBE
ENTERTAINMENT



SA202-RDT (15 VOLT, 5 AMP POWER SUPPLY INCLUDED)

SA202 (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 (100 Hz, 12 dB/oct, 4 ohm, A-Weighted)
Input impedance	6 k ohms
High-pass filter (F ₃)	120 Hz; 12 dB per octave
Height	31.2 mm (1.23 in.)
Width	101.1 mm (3.98 in.)
Depth	123.6 mm (4.86 in.) including connectors
Weight - amp and power supply (SA202-RDT)	0.59 kg (1.30 lbs.)
Weight - amp only	0.25 kg (0.55 lbs.)
Shipping weight - amp and power supply (SA202-RDT)	0.70 kg (1.55 lbs.)
Shipping weight - amp only	0.34 kg (0.75 lbs.)
Packaging	One per box
Included accessories	15-volt, 5-amp power supply (SA202-RDT only), high-power input wire and Euroblock power connectors, pole- and surface-mount adaptor
Optional accessory (SA202)	15-volt, 5-amp power supply (AC-PS-1550)
Regulatory - CE	Approved

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- 35 dB maximum gain with 2 x 20 watt output.
- Dual RCA, stereo mini jack and high-level inputs.
- High pass filter at 120 Hz (12 dB per octave) to reduce bass distortion in smaller speakers.
- Aluminum housing with integrated heat sink.
- Power inputs include either three-pin Euroblock or barrel connector.
- 12-volt trigger for automatic on/off functions when source power is detected.
- Included accessory: universal pole- and surface-mount adaptor.
- Included SA202-RDT accessories: universal pole- and surface-mount adaptor, 15-volt power supply.
- Optional accessory for SA202: 15-volt, 5-amp power supply (AC-PS-1550).

Description

The SA202 and SA202-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 SA202-RDT. Mounting hardware is included and adapts to pole, surface or security attachment installations.

Applications

Small and cost-effective, the SA202 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 SA202-RDT and SA202 are 20-watt per channel (4 ohm) Class AB amplifiers (the SA202-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 SA202 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 120 Hz and a slope 12 dB per octave.

The external wiring output connector shall be a Euroblock connector that accepts from 10 – 22-gauge wire. The power input shall either be by three-pin Euroblock that accepts from 10 - 22-gauge wire or barrel connection. The system shall be for indoor applications.

The enclosure shall be constructed of extruded aluminum with integrated heat-sink fins. Overall cabinet dimensions shall be no more than 31.2 mm (1.23 in.) in height by 101.1 mm (3.98 in.) in width and 123.6 mm (4.86 in.) in depth.

The SA202-RDT shall include the amplifier, mounting hardware, power supply, high-power input wire and Euroblock power connectors. The SA202 shall include only the amplifier and mounting hardware. An optional 15-volt, 5-amp power supply is available (AC-PS-1550).

The AC-PS-1550 power supply (included with the SA202-RDT, optional with the SA202) accepts input voltage from 100-240 volts and complies with UL, CE and RoHS standards.

The system shall be the SA202-RDT or the SA202 for amplification.

SoundTube Entertainment

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

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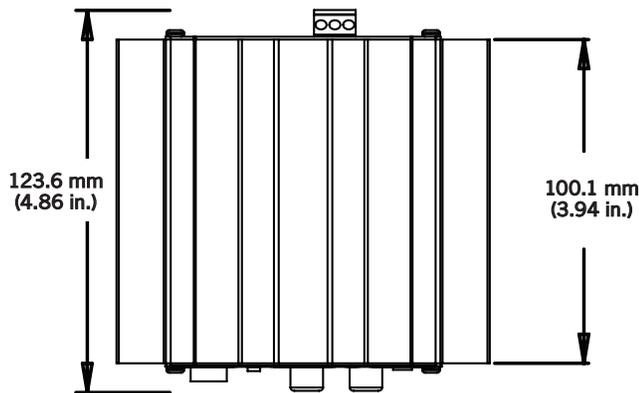
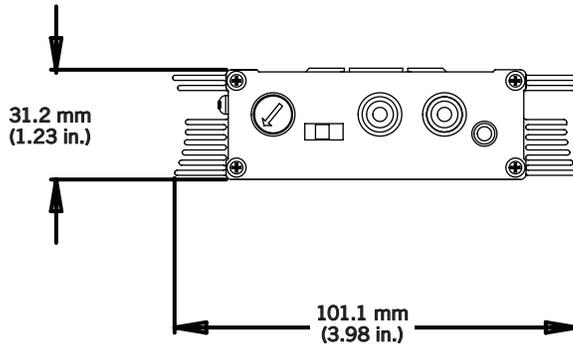
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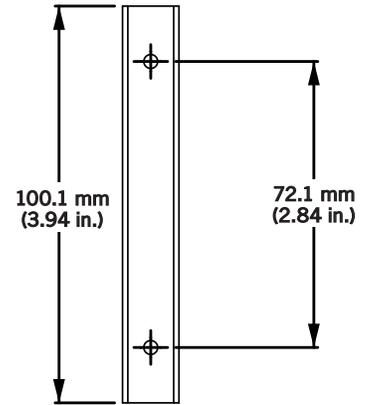
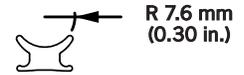
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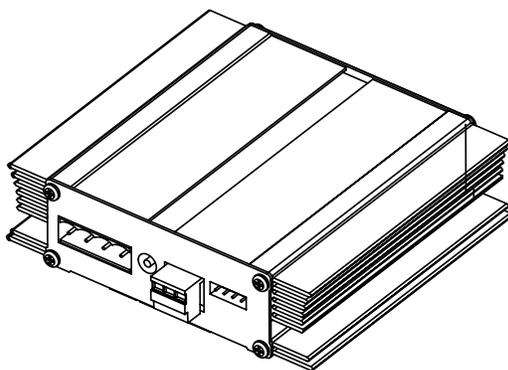
Mechanical Drawings



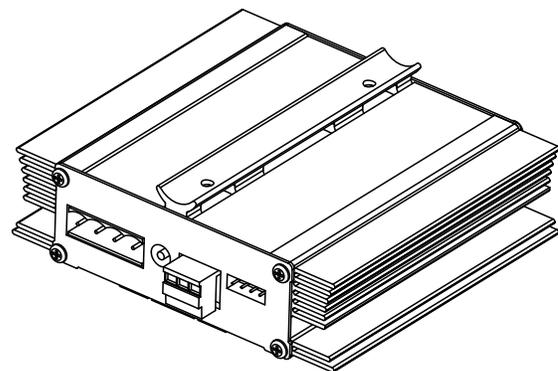
Included Accessories



Pole/surface mount adaptor



SA202 without pole/surface mount



SA202 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 USA.

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