

SA120



120w, 6 Channel Mixer Amplifier

Description

The SA120 is a high quality system amplifier which can be powered by 240 AC mains or 24 Volts DC. It is sturdily constructed with a solid steel chassis and standard rack mounting front panel. Generous heat sinking and a conservatively rated 300VA toroidal power transformer ensure that the amplifier comfortably meets specifications.

Inputs

The SA120 features six universal channels with separate channel gain controls. Each channel will accept balanced or microphone or unbalanced line and auxiliary inputs. The unit has industry standard XLR microphone sockets and dual RCA Phono auxiliary sockets for each channel.

Outputs

The SA120 features 100 volt, 70 volt, 4 & 8 ohm isolated transformer outputs. A separate male XLR socket provides a 700mV max balanced transformer isolated output for connection to additional power amplifiers. A separate tape recorder output is supplied by means of dual RCA Phono sockets.

Muting

The SA120 is equipped with a multi-pin receptacle on the circuit board which accommodates the optional TX3014 two channel muting module. With the TX3014 installed, signal present on channel 1 will mute all remaining inputs (2 to 6). When signal is present on channel 2, inputs 3 to 6 are muted. A single channel muting module TX3010 is also available. This unit plugs into the same socket in the amplifier and will provide muting of channels 2 to 6 when signal is present on channel 1.

Insert Point

A 6.35mm insert jack between the pre-amp power-amp stage is accessible on the rear panel. It is ideal for a Graphic EQ, FBX Feedback Exterminator or any other type of line in/line out processor.

DC Operation

A trickle charge circuit automatically provides a maximum of 300mV to a stand-by battery connected to the 24Volt DC input.

Tone Generator

A four tone module (ATC5488) is an optional accessory. The unit plugs-in to a receptacle inside the amplifier. A choice of any one of four tones may be selected including Bell, Pre- announce chime, Alert tone (AS2220.1) and Evacuate tone (AS2220.1). Any of the tones may be activated from a remote point by means of external connections which may be wired to the rear panel of the amplifier. Activation of any tone automatically mutes inputs 2 to 6 of the amplifier.



SA120 Specifications

Power Output

120 watts RMS

Maximum Load

80 Ohms @ 100 Volts

Power Bandwidth

60Hz-15kHz <0.5% THD

Frequency Response

60Hz-15kHz (+/-3dB)

Total Harmonic Distortion

0.5% @ 1 kHz rated power

Signal To Noise Ratio

-72dB with all controls at their centre position.

Tone Controls

Bass @ 100Hz: Boost +12dB, Cut -12dB

Treble @ 10kHz: Boost + 9dB, Cut -9dB

Inputs.

Six mic/aux universal inputs with XLR female mic sockets and dual RCA Phono sockets. TRS (6.35mm) Jack Insert point.

Input Sensitivity

Mic: 0.6mV @ 200 Ohms all inputs.

Aux Inputs 1-5: 40mV @ 47k ohms

Aux Input 6: 200mV @ 47k ohms (for CD player of similar high level input)

Insert Point

600mV in/out

Outputs

Speaker: 100, 70 volts, 8 ohms

Line: Balanced 700mV @ 10k ohm

Tape: 350mV @ 10k ohms

Phantom Power.

15V DC on all mic channels. Internal on/off switch

Controls

6 Input channel gain controls, 1 Bass control, 1 Treble control, 1 Master gain control, 1 Power on/off switch

Indicators

LED Level VU, Power "on" neon

Power Source

AC: 240V-50Hz, 110V-60Hz (special) 3 pin IEC Connector, DC: 24 Volts

Power consumption

220 watts

Protection

Soft limiter for overload and overdrive protection, plus AC and DC fuses

Dimensions/Weight

88mm H x 480mm W x 330mm D (Chassis Dimensions Only). 12kg

Tone Generators

Optional four tone module ATC5488.

Muting

Optional TX3010 or TX3014 muting modules

Architectural and Engineering Specifications

The mixer amplifier shall have six universal inputs, each with a balanced microphone with XLR female socket, and a dual RCA phone line/auxiliary socket. Auxiliary inputs 1-5 shall have a sensitivity of 40 while input 6 shall have a sensitivity of 200mV to accommodate a CD or other high level input.

The master section shall include one master volume control, two EQ controls, one with 12dB of boost and cut at 100Hz and the other with 9dB of boost and cut at 10kHz. A power on/off switch with red "on" neon and an LED display Vu graduated from +21dB to -3dB shall form part of this section. The amplifier chassis shall be solidly constructed, suitable for rack mounting in a standard 19" width rack without the need for additional rack mounting accessories.

Speaker outputs will be transformer isolated and comprise, 100 volts, 70 volt, & 8 ohms. The amplifier must be capable of delivering 120 watts RMS at 100 volts into an 80 ohm inductive load from mains or 24VDC, with less than 0.5% distortion at 1kHz and with system hum and noise of less than -72dB.

The amplifier shall be an Audio Telex model SA120 manufactured in Australia