

# SA120

120W, 6 Channel Mixer Amplifier

## Description

The SA120 is a high quality system amplifier which can be powered by 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 microphone or unbalanced line and auxiliary inputs. The unit has industry standard XLR microphone sockets and dual RCA 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 sockets.

## Insert Point

A 6.35mm insert jack between the pre-amp and 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 24 volt 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.

## 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.

## Protection

Australian Monitor Installation Series amplifiers feature a protection network that provides greater stability and performance. Our amplifiers are recognised worldwide for their reliability and this is due to the extensive levels of current limiting which protect the amplifiers from both overload and overdrive conditions.



<b>Power Output</b>	120 Watts RMS
<b>Maximum Load</b>	80 Ohms @ 100 Volts
<b>Power Bandwidth</b>	60Hz - 15kHz <0.5% THD
<b>Frequency Response</b>	60Hz - 15kHz (± 3dB)
<b>Total Harmonic Distortion</b>	0.5% @ 1kHz rated power
<b>Signal To Noise Ratio</b>	-72dB with all controls at their centre position
<b>Tone Controls</b>	Bass @ 100Hz: Boost +12dB, Cut -12dB; Treble @ 10kHz: Boost +9dB, Cut -9dB
<b>Inputs</b>	Six mic/aux universal inputs with XLR female mic sockets and dual RCA sockets. TRS (6.35mm) Jack Insert point
<b>Input Sensitivity</b>	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)
<b>Insert Point</b>	600mV in/out
<b>Outputs</b>	Speaker: 100, 70 Volts, 8 Ohms; Line: Balanced 700mV @ 10K Ohms; Tape: 350mV @ 10K Ohms
<b>Phantom Power</b>	15V DC on all mic channels. Internal on/off switch
<b>Controls</b>	6 Input channel gain controls, 1 Bass control, 1 Treble control, 1 Master gain control, 1 Power on/off switch
<b>Indicators</b>	LED Level VU, Power "on" LED
<b>Power Source</b>	AC: 240V - 50Hz, 110V - 60Hz (special) 3 pin IEC Connector; DC: 24 Volts
<b>Power Consumption</b>	220 Watts
<b>Protection</b>	Soft limiter for overload and overdrive protection, plus AC and DC fuses
<b>Dimensions/Weight</b>	88mm H x 480mm W x 330mm D (Chassis Dimensions Only). 12kg
<b>Tone Generators</b>	Optional four tone module ATC5488
<b>Muting</b>	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 dual RCA line/auxiliary sockets. 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 blue "on" LED 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 24V DC, with less than 0.5% distortion at 1kHz and with system hum and noise of less than -72dB.

The amplifier shall be an Australian Monitor Installation Series model SA120.



Engineered and Distributed By **AUDIO TELEX COMMUNICATIONS PTY LTD** (ABN 78 001 345 482), 149 Beaconsfield Street, Silverwater, Sydney, NSW, 2128 Australia

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