

# SPECIFICATIONS

AUDIO TELEX

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COMMUNICATIONS PTY LTD

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## SA120 6 CH MIXER AMPLIFIER

**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 % @ 1Khz 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 + 9  
Cut - 9dB

**INPUTS.**  
Six mic / aux universal inputs with XLR female mic sockets and RCA Phono aux sockets.  
TRS (6.5mm) Jack Insert point.

### INPUT SENSITIVITY

MIC: 0.6mV @ 200 Ohms all inputs.  
AUX: Inputs (1-5) 40 mV in 47k ohms  
Input (6) 200 mV in 47k ohms  
INSERT POINT 600mV in / out

### OUTPUTS

SPEAKER: 100,70v, 4 & 8 ohms  
LINE: Balanced 700mV in 10k ohm  
TAPE: 350mV in 10k ohms  
INSERT POINT 600mV in / out

### CONTROLS

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

### INDICATORS

Power neon  
LED display Vu

### POWER SOURCE.

AC 240 / 110 Volts 50Hz  
DC 24 Volts  
Power consumption 350 watts.

### PHANTOM POWER.

9-19 Volts DC with internal on / off switch

### PROTECTION

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

### DIMENSIONS / WEIGHT

H 88mm W 480mm D 330mm  
12kg

### EXTRA FEATURES:

- ⇒ TRS Insert point which enables Graphic EQ or similar device to be connected between pre-amp and power amp sections
- ⇒ Current limiting protection circuitry to prevent damage to output transistors even under high overload or overdrive conditions
- ⇒ Facility for internal connection of tone generators by means of a plug-in module
- ⇒ Voice operated muting with channel one priority.

The SA120 is a high quality system amplifier, powered by 240 /110 Vac mains or 24VDC stand-by power. Sturdily constructed with aluminium extruded, standard rack mounting front panel, generous heat sinking and a conservatively rated 300VA toroidal power transformer, ensure the amplifier comfortably meets specifications.

**INPUTS:** SA120 Has six universal channels with separate channel gain controls and ample headroom. Each channel will accept balanced or unbalanced, microphone, line and auxiliary inputs. The unit has industry standard XLR microphone sockets and RCA Phono auxiliary sockets for each channel.

**OUTPUTS:** Speaker outputs for the SA120s are 100 & 70 Volts, 4 & 8 ohm isolated transformer line outputs. A separate balance male XLR socket provides a max 700mV balanced transformer isolated output for connection to additional power amplifiers. A separate tape recorder output is supplied by means of an RCA Phono socket.

**MUTING:** SA120 Is equipped with a multi-pin receptacle on the circuit board, which accommodates an optional TX3014 two channel muting module. When channel 1 activates by voice or program input (VOX), all remaining inputs 2 to 6 are muted. When channel 2 activates by VOX, 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 3 to 6 when activated from channel one.

**INSERTION POINT:** A TRS (6.5mm) jack insert point between the pre-amp and power-amp stage is accessible at the rear. It is ideal for a Graphic EQ, FBX Feedback Exterminator or any other type of processor.

**PROTECTION:** Soft knee, internal current limiting, provides protection from overload and overdrive conditions,

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

**STONE GENERATOR:** A 4 tone module TX5488 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. They are: Electric 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 at the rear panel of the amplifier. Their activation automatically mutes inputs 2 to 6 of the amplifier.

## ARCHITECTURAL AND ENGINEERING SPECIFICATIONS

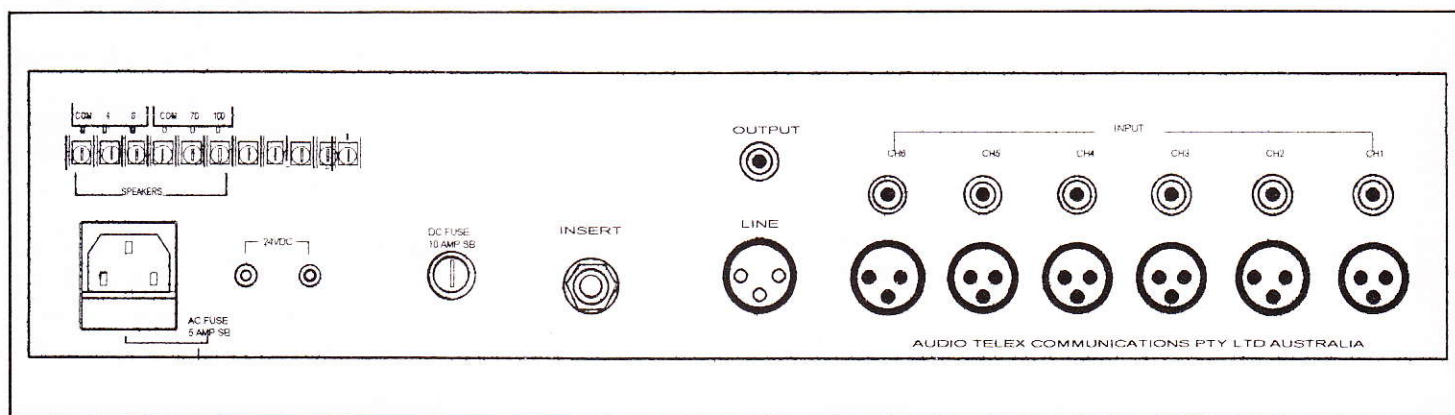
The mixer amplifier shall have six universal inputs, each comprising balanced microphone, with a sensitivity of 600 micro-volts and XLR female sockets. Auxiliary inputs must have a sensitivity of 40 mV for inputs one to five and 200mV for Input 6 to accommodate a CD or other high level input. Each Aux input will have RCA Phono sockets.

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 +21 to -3dB shall form part of this section.

The amplifier chassis shall be solidly constructed, suitable for rack mounting in a standard 482mm width rack without the need for additional rack mounting accessories.

Speaker outputs will be transformer isolated and comprise, 100 & 70 volts, 4 and 8 ohms. The amplifier must be capable of delivering 120 watts RMS at 100 volts into an 80 ohms inductive load from mains and 24VDC, with less than 0.5% distortion at 1kHz and with system hum and noise of less than -72dB.

The amplifier shall be Audio Telex, Australian made, model SA120.



REAR VIEW OF SA120 AMPLIFIER