

# ACM120XL

120W, 8 Channel Mixer Amplifier

## Description

The ACM120XL is an 8 channel, 120 watt mixer amplifier suitable for rack or desk mounting. The amplifier is a self contained compact unit of solid steel construction. This amplifier features a status LED.

## Inputs

The ACM120XL has eight universal input channels with separate level controls. Each channel will accept balanced or unbalanced microphone, line and auxiliary inputs. The unit has industry standard XLR microphone sockets and dual RCA auxiliary sockets for each channel. Rear panel dip switches per channel allow the adjustment of line input sensitivity. An insert point is also featured on the rear panel for those applications where an additional EQ or Feedback Exterminator may be required.

## Outputs

The ACM120XL features 100 volt, 70 volt, 4 & 8 ohm isolated transformer outputs, plus a tape recorder output by means of dual RCA sockets. A balanced 700mV XLR output is also provided to feed up to 6 power amplifiers. A vox triggered relay output is also available on the rear panel for activation of external devices from the vox muting circuit. In most cases this would be used as a muting bypass relay, which when used with the appropriate external attenuator, such as our ATC5143 or ATC5143FS, will maintain paging levels irrespective of the attenuator setting.

## VCA Control

The master volume level can be controlled remotely. External VCA control would normally be via a pot connected to a two wire rear panel barrier strip.

## Tone Generator

The ACM120XL comes standard with an in-built four tone generator module. Tones include Bell, Pre-announce Chime, Alert Tone (AS2220.1) and Evacuate Tone (AS2220.1). Any of these tones may be activated from a simple contact closure connected to the rear panel of the amplifier.

## Muting

Multiple levels of VOX muting is standard on the ACM120XL. A mic or line signal on channels 1 will mute channels 2 to 8, on channel 2 will mute 3-8 and channel 3, will mute 4-8. The muting function can be disabled via an internal link. A vox triggered relay output is also available on the rear panel for activation of external devices from the vox muting circuit. In most cases this would be used as a muting bypass relay, which when used with the appropriate external attenuator, such as our ATC5143FS, will maintain paging levels irrespective of the attenuator setting.

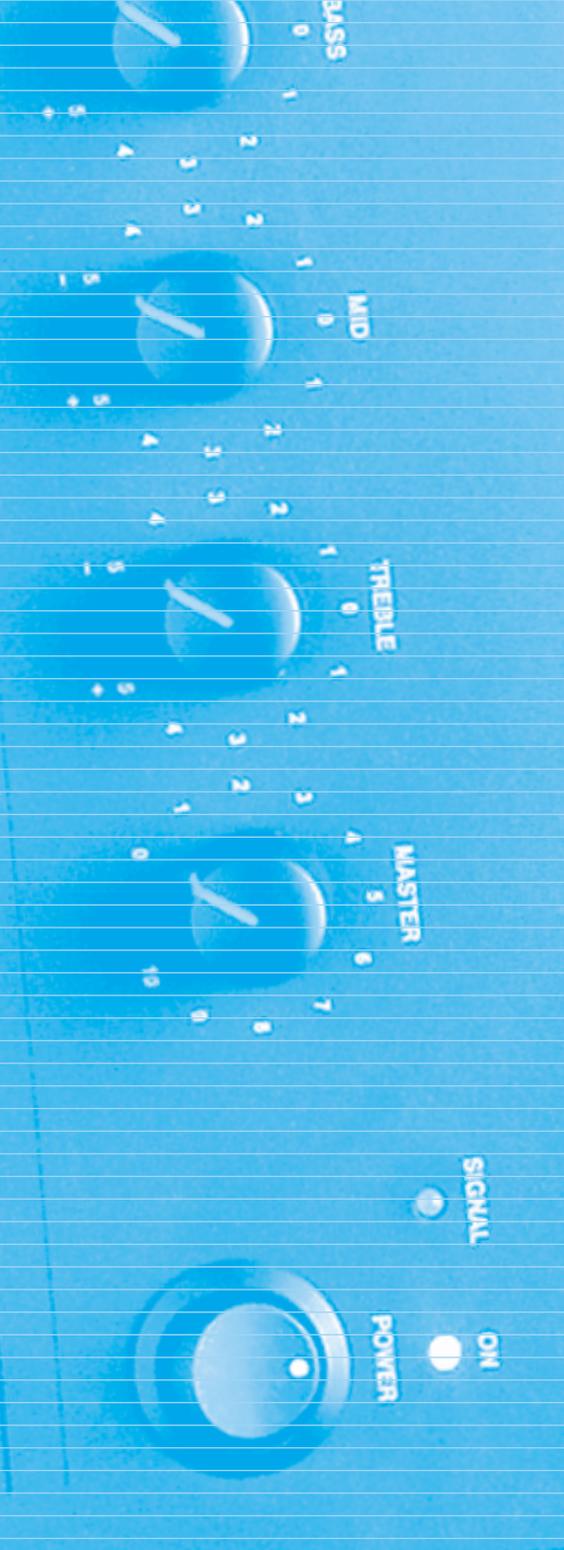
## Phantom Power

Phantom Power (18 volts DC) is available from all mic inputs. A rear panel phantom power on/off dip switch is also provided per channel.

## Protection

Internal current limiting protects the amplifier from both overload and overdrive conditions. 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>	-74dB with all controls at their centre position
<b>Tone Controls</b>	Bass @ 100Hz: Boost +12dB Cut -12dB; Mid @ 600Hz: Boost +12dB Cut -12dB; Treble @ 10kHz: Boost +9dB Cut -9dB
<b>Inputs</b>	Eight mic/aux universal inputs with XLR female mic sockets and dual RCA Phono aux sockets
<b>Input Sensitivity</b>	Mics: 1mV @ 200 Ohms; Aux: 90mV @ 47K Ohms with selectable 9, 12, 15dB Pads
<b>Outputs</b>	Speaker: 100, 70 Volts, 4 & 8 Ohms; Tape: 350mV @ 10K Ohms; Line: Balanced 700mV
<b>Phantom Power</b>	18 Volts DC on all Mic inputs (dip switch per channel)
<b>Controls</b>	8 Input channel gain controls, 1 Bass control, 1 Mid Control, 1 Treble control, 1 Master gain control, VCA rear panel strip, Dip Switch per Channel for line sensitivity and phantom power and a vox relay output on the rear panel.
<b>Indicators</b>	Power "on" LED, signal present LED
<b>Power Source</b>	AC 230/240V - 60Hz, 110V - 50Hz (special) 3 pin IEC connector
<b>Power Consumption</b>	250 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 280mm D (Chassis Dimensions only). 12kg
<b>Rack Mounting</b>	Standard
<b>Tone Generators</b>	Built-in four tone generator module. Includes Bell, Pre-Announce, Alert and Evac Tones
<b>Muting</b>	Built-in VOX muting. Channel 1 will mute channels 2 to 8, channel 2 mutes 3 - 8, channel 3 mutes 4 - 8. A vox triggered relay (for external devices) is also included.

#### ARCHITECTURAL AND ENGINEERING SPECIFICATIONS

The mixer amplifier shall have eight universal input channels, each comprising of a balanced microphone input with XLR female sockets and an auxiliary input using dual RCA sockets. A balanced XLR output to drive additional power amplifiers shall also be provided. The master output may be controlled remotely via a VCA control. An insert point is provided for the addition of signal processing. A vox triggered relay output (for external devices) shall also be included.

The amplifier master section shall include one master gain control, three EQ controls, one at 100Hz with 12dB of cut and boost, one at 600Hz with 12dB cut and boost and the other with 9dB of cut and boost at 10kHz. Speaker outputs shall be transformer isolated at 100 volt, 70 volt, 4 & 8 ohms. The amplifier must be capable of delivering 120 watts RMS into an 80 inductive ohm load, with less than 0.5% distortion measured at 1kHz and with system hum and noise equal to or better than -74dB.

The amplifier shall be an Australian Monitor Installation Series model ACM120XL.

