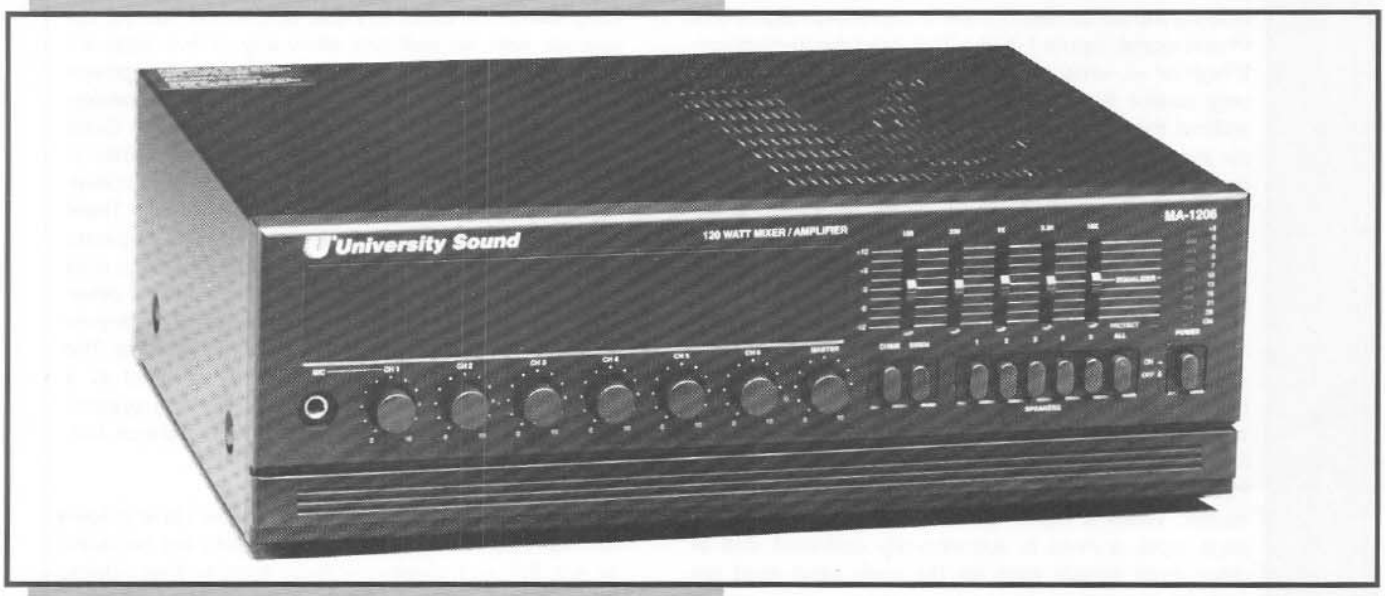
University Sound
A Mark IV Company

MA-1206
Mixer/Amplifier



Product Data

- **120 Watts RMS power output**
- **Seven input channels**
- **4Ω, 8Ω, 25V, 70.7V power outputs**
- **Channels 1-6 adjustable from Mic to Line Level**
- **Channel 6 can match mic-to-line signal or phono signal**
- **Channel 7 is a 600Ω phone page input**
- **XLR connectors on inputs 1-5**
- **Channel 6 has mono-combining dual RCA jack connectors**
- **5-band graphic equalizer**
- **Voice over music paging with mute**
- **Siren and Chime functions**
- **Link In / Link Out for interconnection with mixers and amplifiers**
- **Pre-Amp Out / Amp In allows use of signal processing equipment**
- **Rack mountable with optional RM-4/10 rack mount kit**

Summary Specifications:

Power Output	120 Watts RMS
THD at rated output	<0.5% at 1 kHz
Frequency Response	60 Hz - 20 kHz, ± 2 dB
Input Sensitivity/Impedance	
Channels 1-6	0.25-80 mV/600Ω (bal)
Phono	2 mV/22KΩ (unbal)
Link In	100 mV/15KΩ (unbal)
Telephone In	0.775 V/600Ω (unbal)
Power Amp In	1 V/47KΩ (unbal)
Output Level/Impedance	
Pre-Amp Out	1V/600Ω (unbal)
Link Out	500 mV/600Ω (unbal)
Speaker Outputs	4Ω, 8Ω, 25V, 70.7V
Dimensions	
Height	5.25" (13.5 cm)
Width	16.5" (42.0 cm)
Depth	13.5" (34.3 cm)
Net Weight	26.5 lbs. (12.0 kg)
Shipping Weight	28.0 lbs. (12.7 kg)

Description

The Model MA-1206 is a six-input, 120 Watt mixer/amplifier incorporating many features that enable it to serve well in a variety of paging and other commercial sound reinforcement applications.

Each of the six inputs has its own rear-panel gain control that matches any signal level from Lo-Z microphone to Auxiliary. In addition, Input 6 can be field-converted to match either a Mic-to-Aux signal or a Phono signal. Inputs 1-5 use XLR input connectors (pin 2 high or +), while Input 6 uses a dual RCA jack plate very useful for resistively combining stereo signals without the use of an external adaptor. Each of these six inputs has a corresponding front-panel level control, and a MASTER control adjusts the level of the overall mix. An additional input is available for connection to telephone-driven paging systems. This input appears on two screw terminals and provides the standard 600Ω impedance used by such paging systems.

Internal muting circuitry is provided to accommodate voice-over-music paging. A mute is activated by contact closure across two rear-panel screw terminals. When activated, the muting circuitry causes the signals from Inputs 3-6 to be muted, while the signals from Inputs 1 and 2, LINK IN, CHIME, and SIREN are not muted. When a signal is detected on the telephone page input, a mute is automatically activated, and all other input signals save for the page input itself are muted.

Four connections to the internal mixing buss are provided: a LINK IN / LINK OUT pair and a PREAMP OUT / AMP IN pair. All four connections are line-level inputs and outputs, and all appear on standard 1/4" phone jacks. The LINK pair of connections allows other mixer/amplifiers to be interconnected with the MA-1206 to provide additional input channels, additional output power, or both. The PREAMP/AMP pair is very convenient for applying signal processing to the final mix of the MA-1206. When a phone plug is inserted into the AMP IN connection, the internal link between the two is automatically disconnected. This prevents the unprocessed pre-amp mix from interfering with the signal sent to the AMP IN jack.

A number of the unit's features are conveniently located on the front panel. A 1/4" phone jack to the left of the first level control feeds directly into Input 1, particularly useful for temporary use of a sound source. Six speaker selector switches allow any of five separate speaker groups to be selected, or all of the five groups to be selected simultaneoously. Five separate speaker screw-terminals on the rear-panel correspond to these five speaker groups. A five-band graphic equalizer is incorporated into the MA-1206 for rapid and convenient tonal adjustment of the final pre-amp mix. There is also an internal tone generator with two separate functions. The chime function is available for page alert or other applications; the chime can be triggered either by pushing a front-panel button or by contact closure across the EXT CHIME rear-panel screw terminals. The siren function allows the MA-1206 to be used as a central music, page, and emergency warning system. The front-panel SIREN button is a push-and-lock button, and is the sole trigger for this function.

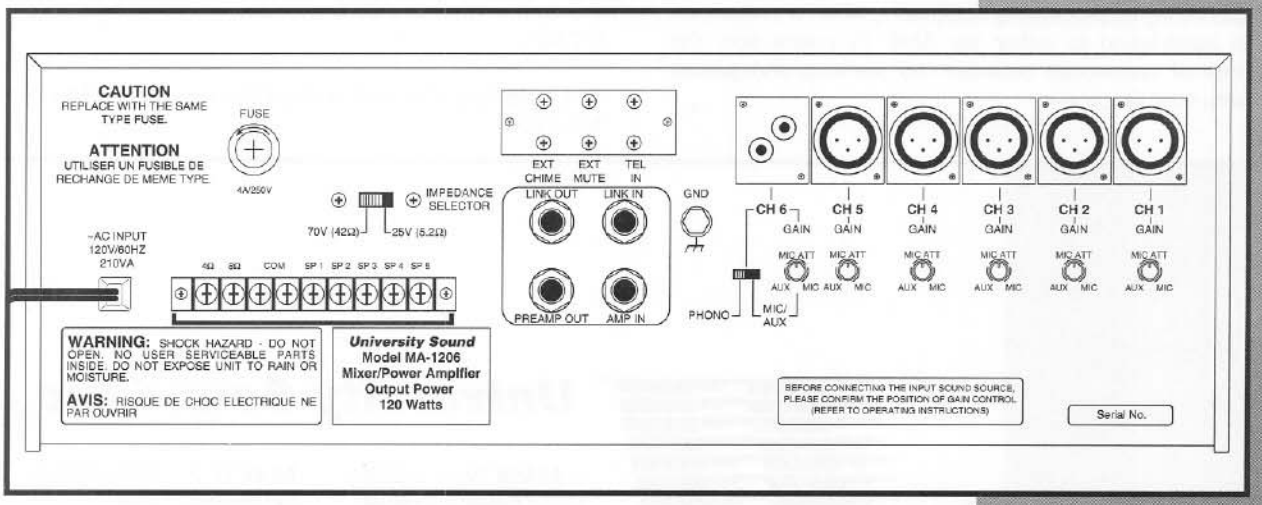
All power amplifier outputs are available via a screw-terminal strip on the rear-panel. Outputs are provided for 4Ω, 8Ω, and constant-voltage speaker lines. Using the switch directly above the output strip, the constant-voltage output can be configured to use 25 Volt or 70 Volt lines. The single-channel power amplifier is rated at 120 Watts RMS. A front-panel LED meter monitors the power output of the MA-1206.

The MA-1206 operates from a standard 120 VAC 60 Hz power source, and is protected by a 4 Amp, 250 Volt fuse. The front panel of the unit is fabricated from black, high-impact polycarbonate, while the rest of the enclosure is steel finished in black.

Specifications

Power Output	120 Watts RMS
THD at rated output	<0.5% at 1 kHz
Frequency Response	60 Hz-20 kHz ± 2 dB
Graphic Equalizer	
Center Frequencies	100,330,1k,3.3k,10kHz
Cut/Boost	±12 dB
Input Sensitivity/Impedance	
Channels 1-6	0.25-80 mV/600Ω (bal)
Phono	2 mV/22KΩ (unbal)
Link In	100 mV/15KΩ (unbal)
Telephone In	0.775 V/600Ω (unbal)
Power Amp In	1 V/47KΩ (unbal)
Signal-to-Noise Ratio	
Channels 1-6	72 dB
Phono	63 dB
Link In	73 dB
Telephone In	73 dB
Power Amp In	100 dB
Output Level/Impedance	
Pre-Amp Out	1V/600Ω (unbal)
Link Out	500 mV/600Ω (unbal)
Speaker Outputs	4Ω, 8Ω, 25V, 70.7V
Dimensions	
Height	5.25" (13.5 cm)
Width	16.5" (42.0 cm)
Depth	13.5" (34.3 cm)
Net Weight	26.5 lbs. (12.0 kg)
Shipping Weight	28 lbs. (12.7 kg)
Power Requirements	120 VAC, 50/60 Hz
Power Consumption	24 Watts idle 350 Watts @ rated output
Protection	4 Amp / 250V fuse
Optional Accessory	
RM-4/10 Rack Mount Kit	

Rear-panel View



Architect's and Engineer's Specifications

The mixer/amplifier shall have seven total input channels, six of which shall have individual level and gain controls. The seventh input shall be configured to match the paging output of a telephone PABX or switchboard. There shall be a MASTER level control for adjusting the level of the overall mix. The first six inputs shall be able to match any input signal level from Lo-Z microphone to auxiliary (line level). The sixth input channel shall be field-convertible to match either a Mic-to-Aux signal or a phono signal, as determined by the position of a rear-panel switch. The first five channel inputs shall appear on standard female XLR connectors, while the sixth channel input shall have a pair of stereo-combining RCA phono jacks. The XLR connectors shall use the pin two high (+) standard. The telephone paging (seventh) input shall appear on a pair of screw terminals and provide the standard 600Ω line impedance required by telephone paging systems. All input connections shall be made to the rear panel, with the exception of the first channel's input, which shall have, in addition to the rear-panel XLR connector, a front-panel 1/4-inch phone jack.

An internal muting circuit shall, when activated by contact closure across rear-panel screw terminals, mute input channels 3-6, while leaving all other inputs unaffected. When a signal is detected on the telephone paging input, the muting circuit shall be automatically triggered, and all inputs except for the telephone paging input shall be muted.

Four connections to the mixing buss shall be provided: a LINK IN / LINK OUT pair and a PREAMP OUT / AMP IN pair. All four connections shall appear on standard 1/4-inch phone jacks, and all four connections shall be line level inputs and outputs. The LINK pair shall facilitate the interconnection of additional mixers and power amplifiers. The PREAMP/AMP pair shall facilitate the use of signal processing equipment; when a connection is established to either the AMP IN connection, the internal connection between the pre-amp and power-amp shall be broken.

A five-band graphic equalizer shall be provided with all controls on the front panel. The equalizer shall have center frequencies at 100 Hz, 330 Hz, 1 kHz, 3.3 kHz, and 10 kHz, and shall have a maximum boost or cut of 12 dB.

There shall be six front panel switches allowing five different speaker networks to be selected, or all of the five to be selected at once. Corresponding to these selector switches, there shall be five different constant-voltage power amplifier output screw terminals.

There shall also be an internal tone generator with two distinct functions: CHIME and SIREN. The front panel switch for the siren function shall be a push-and-lock button. The front panel switch for the chime function shall be a push-and-release button, triggering a three-tone chime sequence. This chime function shall also be triggerable from contact closure across two rear panel screw terminals. When either of these functions are triggered, all inputs to the MA-1206 shall be muted.

Three power amplifier outputs shall be provided: 4Ω and 8Ω connections for direct speaker voice coil connections, and the series of five constant-voltage outputs for use with the front panel speaker selector switches. A rear panel slide switch shall determine whether the signal output on the constant-voltage terminals matches a 25 Volt or 70.7 Volt transformer line. A front panel LED meter shall be provided to monitor the output of the power amplifier.

The unit shall operate from a standard 120 VAC 50/60 Hz power source, and be protected by a 4 Amp, 250 Volt fuse. The front panel shall be fabricated of black, high-impact polycarbonate, while the rest of the enclosure shall be of a sturdy steel construction, finished in black. The unit shall measure 5.25" x 16.5" x 13.5" (13.5cm x 42.0cm x 34.3 cm), and weigh 26.5 pounds (12 kg).

The mixer/amplifier shall be the University Sound Model MA-1206.

University Sound Inc.

a MARK IV company
13278 Ralston Avenue
Sylmar, CA 91342-7607
FAX (818) 362-3463
PHONE (818) 362-9516

Mark IV Audio Canada
345 Herbert Street
Gananoque, Ontario K7G 2V1
FAX (613) 382-7466
PHONE (613) 382-2141

Part #207-0053-00