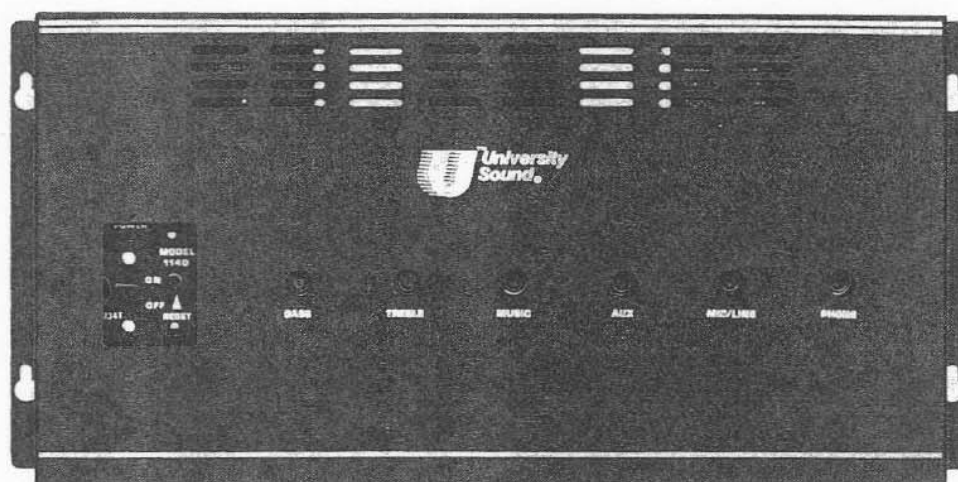




Model 1120/1140

Wall-Mount Paging Amplifiers



Product Data

- 20 Watts RMS power rating (1120)
- 40 watts RMS power rating (1140)
- Three paging inputs and one music input
- Transformer isolated phone page input
- Power outputs for 4 ohm, 8 ohm, 25V, or 70.7V speaker systems, all on screw terminals
- Separate bass and treble tone controls
- Voice activated page-over-music mute
- Wall or surface mount
- Internal thermal circuit protection with automatic reset
- Tamper deterrent screwdriver control adjustment
- UL listed

Summary Specifications:

Power Output:

1120: 20 watts RMS @ 1kHz

1140: 40 watts RMS @ 1kHz

Frequency Response: 50 Hz – 20 kHz $\pm$ 2 dB

Distortion: <1.5% THD @ 1 kHz,
rated output

Outputs: 4 Ω , 8 Ω , 25V, and 70.7V

Output Regulation: <2 dB No load to full
load

Tone Control:

Bass: $\pm$ 12dB @ 50kHz

Treble: $\pm$ 13dB @ 15kHz

Circuit Protection: Internal thermal breaker

Dimensions: 16.0" W x 7.75" H x
3.625" D (40.6 cm x
19.7 cm x 9.2 cm)

Shipping Weight:

1120: 10 lbs. (4.6 kg)

1140: 12 lbs. (5.5 kg)

Description

The Models 1120 and 1140 are monaural solid state 20 and 40 watt RMS paging amplifiers. The four input channels consist of three paging channels and one music channel. The three paging channels are: 1) The PHONE channel which has a 500/600 ohm balanced transformer input to provide proper termination for the paging access output port of registered telephone equipment such as a PABX or switchboard, 2) The MIC/LINE channel has balanced inputs which may be wired for either low impedance microphone or balanced line, 3) The AUX channel which has an unbalanced input with an input sensitivity of 250mV for use as the paging source from other audio equipment such as a preamplifier or intercom system. The MUSIC channel may receive its source from an external signal such as a tape deck, CD player or tuner. Paging priority is automatically performed by a voice activated circuit which mutes the music channel when any of the paging inputs are used.

Separate BASS and TREBLE controls are provided for basic equalization functions. In addition, a TRUMPET PROTECT switch is provided on the front panel. This protects the drivers from damage and avoids excessive amplifier loading at low frequencies.

Output terminals are included to drive 4 ohm or 8 ohm speaker lines, and 25 and 70 Volt speaker distribution outputs are provided. In addition, a BOOSTER AMP output jack is provided as a line out source to send the signal to additional amplifiers.

A push-to-reset circuit breaker feature is included which protects the entire unit from conditions beyond the safe operating limits.

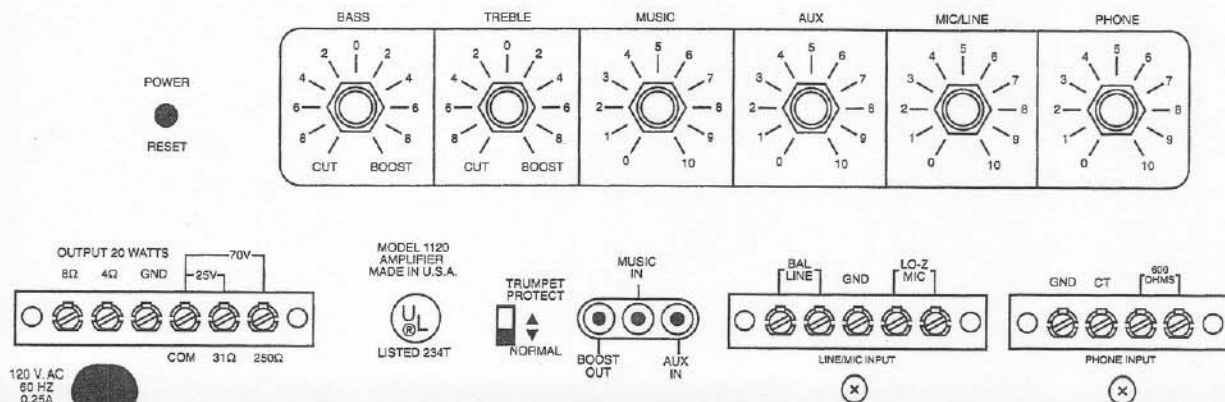
The entire unit is housed in a sturdy steel chassis with two metal flanges which permit wall mounting.

Front Panel Detail

WARNING-TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE. DO NOT REMOVE COVER NO USER SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED PERSONNEL.

RAYMER MODEL 1120

PHONE INPUT-THIS UNIT IS NOT TERMINAL EQUIPMENT AND MAY NOT BE DIRECTLY CONNECTED TO THE NATIONAL TELECOMMUNICATIONS NETWORK. THE RINGER EQUIVALENT OF THE 500 OHM INPUT IS 2. THIS MEANS THAT RINGING VOLTAGE SHOULD NOT BE APPLIED TO THIS INPUT.



Specifications

Input Specifications

Impedance

Aux Input:	250K Ω unbal
Phone Input:	600 Ω bal
Mic Input:	150 Ω bal
Music Input:	200K Ω unbal
Line Input:	10K Ω bal

Sensitivity

Aux Input:	220mv
Phone Input:	50mv
Mic Input:	0.5mv
Music Input:	220mv
Line Input:	50mv

Frequency Response (+/-2dB)

Aux Input:	50Hz-20kHz
Phone Input:	400Hz-6kHz
Mic Input:	70Hz-20kHz
Music Input:	20Hz-20kHz (-2,+6dB)
Line Input:	70Hz-20kHz

Signal to Noise Ratio

Aux Input:	70dB
Phone Input:	71dB
Mic Input:	58dB
Music Input:	71dB
Line Input:	58dB

Controls

Phone, Mic/Line, Aux, Music, Bass,
Treble & Power On/Off

Connectors

RCA type phono jacks for Booster Out,
Music In, Aux In
Screwtype Terminals for Power Output,
Phone In, Mic In & Line In

Protection

Push-to-Reset Circuit Breaker

Power Consumption

1120:	0.25A 120 VAC 60 Hz
1140:	0.4A 120 VAC 60 Hz

Power Output:

1120:	20 watts RMS @ 1kHz
1140:	40 watts RMS @ 1kHz

Frequency Response:

50 Hz – 20 kHz $\pm$ 2 dB

Distortion:

<1.5% THD @ 1 kHz, rated output

Outputs:

4 Ω , 8 Ω , 25V, and 70.7V

Output Regulation:

<2 dB No load to full load

Tone Control:

Bass: $\pm$ 12dB @ 50kHz
Treble: $\pm$ 13dB @ 15kHz

Circuit Protection:

Internal thermal breaker

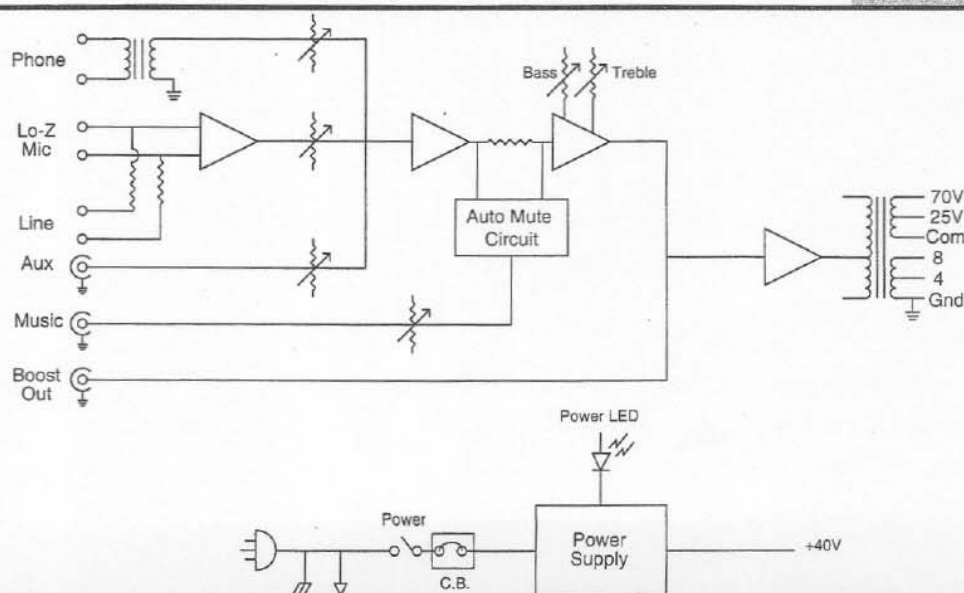
Dimensions:

16.0" W x 7.75" H x
3.625" D (40.6 cm x
19.7 cm x 9.2 cm)

Shipping Weight:

1120:	10 lbs. (4.6 kg)
1140:	12 lbs. (5.5 kg)

Block Diagram



Architect's and Engineer's Specifications

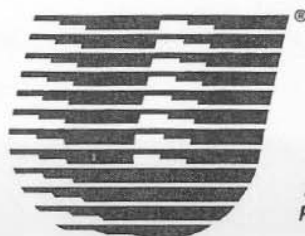
The paging amplifiers shall have three paging inputs and one music input. The paging inputs shall have the following characteristics: one input shall have a 500/600 ohm balanced isolation transformer, another shall be a balanced Lo-Z mic / line level input with an impedance of 150/10K ohms, while the remaining input shall be a high-impedance input with a sensitivity of 250 mV. The music input shall be a high-impedance input with a sensitivity of 250 mV. A voice-activated circuit will provide paging mute of the music input whenever a signal is detected on any of the three paging inputs.

There shall be a treble tone control with ± 13 dB boost/cut at 15 kHz, and a bass tone control with ± 12 dB boost/cut at 50 Hz. The amplifier output shall be able to drive 4 ohm, 8 ohm, 25V, or 70.7V speaker systems. There shall be a

BOOST OUT output with a RCA-type connector jack. There shall be a power switch on the face of unit, a push-to-reset circuit breaker button, and POWER ON and OVERLOAD LED indicators. The enclosure shall measure 16.0" x 7.75" x 3.625" (40.6 cm x 19.7 cm x 9.2 cm) including wall-mount flanges on either side. The units shall operate from a 120V AC 60 Hz line.

[Paragraph below applies only to the Model 1120]
The unit shall provide a power output rated at 20 watts RMS. The unit shall be the University Sound Model 1120.

[Paragraph below applies only to the Model 1140]
The unit shall provide a power output rated at 40 watts RMS. The unit shall be the University Sound Model 1140.



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