

Multiplex 900 power amplifier



description

The Crest Audio Multiplex 900 integrates cost-effective design with exceptional sonic accuracy, long-term reliability, and the basic features required for cinema sound applications. The Multiplex 900's remarkable price/performance ratio is the result of innovative engineering and highly efficient manufacturing in Crest's modern USA facility along with nearly two decades of leadership in professional amplifier design. The Multiplex 900 offers a welcome balance of exceptional audio performance and overall value. However, no compromises in component selection or quality control were permitted as a shortcut to cost reductions.

In every respect, the Multiplex 900 embodies the Crest Audio tradition of roadworthy ruggedness and reliability. For example, the Multiplex 900 includes the same TourClass protection features as found in Crest's CA and CK Family amplifiers. The Multiplex 900 will endure virtually any type of mishap or system stress - whether from uncontrolled upstream oscillation, extreme ambient heat, or accidental shorting - without damage to internal circuitry or connected speakers.

power specifications: other Multiplex Series power amplifiers

4Ω stereo	Multiplex 1100	Multiplex 1500
1kHz, 0.01% THD+N	550w	750w

features

- robust "over-built" power supply - massive filter capacitors and a high-output custom transformer provide ample current for solid bass performance, even when driving low impedance loads.
- more output transistors - by using more output devices than comparable models, the Multiplex 900 puts less stress on each device yielding a wider safe operating area (SOA) and long-term reliability.
- wide-band design - frequency response extends from 10Hz to 20kHz (-3dB @ 165kHz), ensuring powerful sub-bass performance as well as detailed, transparent high-frequency response.
- more effective cooling - large, extruded aluminum heatsink and front-mounted, two-speed 4-inch fan prolonging amplifier life by minimizing internal temperatures.
- front panel magnetic circuit-breaker/power switch
- rear panel knobs attenuators (with cover)
- differentially-balanced 1/4-inch TRS and Barrier Strip Input Connectors
- five-way binding post or Speakon output connectors (market dependent)
- LED indicators - SIGNAL PRESENT, CLIP, ACTIVE, and PROTECT
- stereo/bridged-mono mode select switch
- five-year warranty*

TourClass® protection circuits

ACL ACTIVE CLIP LIMITING prevents speaker damage by providing gentle gain reduction at the clipping threshold.

IGM INSTANTANEOUS GAIN MODULATION monitors speaker loads to detect conditions that may overstress output devices, allowing safe operation into difficult impedances.

AUTORAMP gradually increases gain to the attenuator level-settings when the amplifier is turned on.

Protection features include: THERMAL RUNAWAY, INPUT OVERLOAD, DC, SHORT CIRCUIT, IN-RUSH CURRENT, AND TURN-ON/TURN-OFF TRANSIENTS.



power specifications

900

1kHz, 0.01% THD+N

8Ω stereo

230w

4Ω stereo

400w

8Ω bridged

800w

Power figures are watts per channel, both channels driven.



specifications

Multiplex 900 power amplifier

architect's specifications

The power amplifier shall have two channels. Each channel shall deliver a minimum of 230W at 8Ω and 400W at 4Ω, both channels driven, 20Hz–20kHz, <0.1% THD+N. In bridged-mono mode, it shall deliver 800W at 8Ω, <0.1% THD+N.

The amplifier shall have circuitry to protect itself and the speaker load from output short circuits, DC voltage on outputs, and thermal overload. The amplifier shall include circuitry to gradually increase gain to attenuator setting levels when the amplifier is turned on, and circuitry for impedance sensing and clip limiting.

The amplifier shall have a voltage gain of x40 with an input sensitivity of 1.0V, for rated power at 8Ω. The hum and noise level shall be greater than 105dB below rated output, A-weighted. SMPTE IMD shall be less than 0.1%, rated power at 8Ω. The amplifier shall have a class AB output. The frequency response shall be greater than 20Hz–20kHz, +0/-0.3dB (1W/8Ω).

The amplifier shall operate at 100–240VAC, 50–60Hz (configured at factory). Maximum current draw shall not exceed 15A at 120VAC, (circuit breaker limited), with both channels driving continuously into a 4Ω resistor.

The amplifier front-panel shall include ACL, SIGNAL, PROTECT LED indicators for each channel and a combination power switch/magnetic circuit breaker.

Rear panel input connectors shall be TRS output. A rear-panel AC mains cord having an appropriate AC plug for the intended operating voltage shall be provided (market dependent).

The packaging of the amplifier shall allow for standard rack mounting without requiring space between similar units. Dimensions shall be 19" (483mm) wide, 5.25" (133mm) high and 12" (483mm) deep. It shall weigh 44lbs. (20kg) net. The amplifier shall be designated the Crest Audio Model Multiplex 900.

	1kHz, 0.1% THD+N	20Hz–20kHz, 0.1% THD+N
stereo power 8Ω	230W	225 W
4Ω	400W	400 W
bridged mono power 8Ω	800W	800 W
maximum output voltage	52.3V rms, 74V peak each channel	

frequency response 1W @ 8Ω	10Hz–20kHz, +0 / -0.3dB, -3dB@165kHz
power bandwidth rated power @ 4Ω, 1% THD+N	20Hz–20kHz, +0 / -0.23dB

THD+N	<1.0% rated power @ 4Ω, 1kHz
SMPTE IMD	<0.1% rated power @ 8Ω, 60Hz and 7kHz
damping factor	1000:1 10–400Hz @ 8Ω

input CMRR	>-64dB @ 1kHz
input sensitivity	1.0V
input impedance	>20kΩ balanced, >10kΩ unbalanced
hum and noise	-105dB, A-weighted below rated power
crosstalk gain	> -60dB @ 1kHz below rated power

class	AB
power supply	100–240 vac @ 50–60Hz factory configured
circuit breaker rating	15A @ 120v
current draw 1/8 power, 4Ω	<7.2A @120v
1/3 power, 4Ω	<10.4A @120v
at power-up	<15A @120v
at idle	<2.0A @120v

thermal emissions 1/8 Power, 4Ω	
1/3 Power, 4Ω	2000 BTU/Hr
cooling	2900 BTU/Hr
	front-to-side, one 110 CFM, two-speed fan

input connectors	
output connectors	TRS (tip +) and Barrier Strip
controls	speakon connectors or five-way output binding posts
	front panel: magnetic circuit breaker power switch
LED indicators	rear panel: two attenuators, mode select
TourClass® protection	ACL, SIGNAL, PROTECT

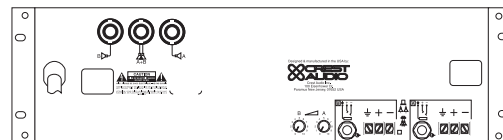
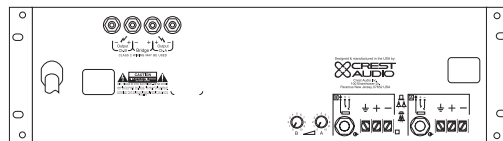
ACL, IGM, AUTORAMP, SHORT CIRCUIT, DC VOLTAGE, TURN-ON/-OFF TRANSIENT, CURRENT IN-RUSH, SUB/ULTRASONIC INPUT

construction	
dimensions	steel chassis 14 gauge
weight	5.25" x 19" x 12" 133 x 483 x 305mm height x width x depth
	gross: 46lbs 20.9kg
warranty	net: 44lbs 20.0kg
	five years* USA, Canada, United Kingdom, and many other countries

rear view 900

Power figures are watts per channel, both channels driven.

*Three-year Warranty with two additional years, if Registration Card is sent to Crest Audio.



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Crest Audio reserves the right to make improvements in manufacturing or design which may affect specification.



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