



# CROWN

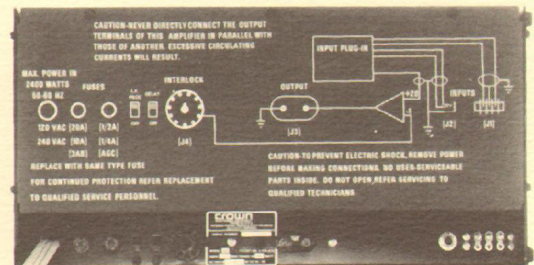
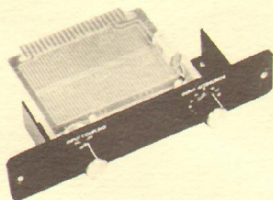
## M600 POWER AMPLIFIER



The Crown M600 power amplifier provides high power levels and an adaptable format intended for the varied needs and operating environments of industrial and commercial audio users. While maintaining the exacting laboratory performance standards of the DC300A, the M600 produces 600 watts (monaural) into an 8 ohm load, and 1000 watts into a 4 ohm load. Built for durability and trouble-free operation, the M600 includes built-in cooling which permits continuous full power operation. Also included is a plug-in input board which provides space and foil layout for standard integrated circuits which can be used as the basic elements for a preamplifier, bandpass filter, or other signal shaping circuit which become a built-in part of the amplifier.

The output stages of the M600 employ features similar to other Crown amplifiers, such as the protection circuitry of the DC300A, which allows the amplifier to drive highly reactive and low impedance loads without adverse effects. In addition the M600 employs a newly-patented output bridge circuit, which permits extremely high power levels to be safely sustained. The standard output of the M600 is 70 volts unbalanced.

Coupling two M600's together through a socket provided at the back of each amplifier produces a 140 volt balanced output. This configuration is called an M2000, and produces 2 kilowatts into an 8 ohm load. A peak-catching meter, and threshold lights provide convenient front panel output monitoring.



## M600 SPECIFICATIONS

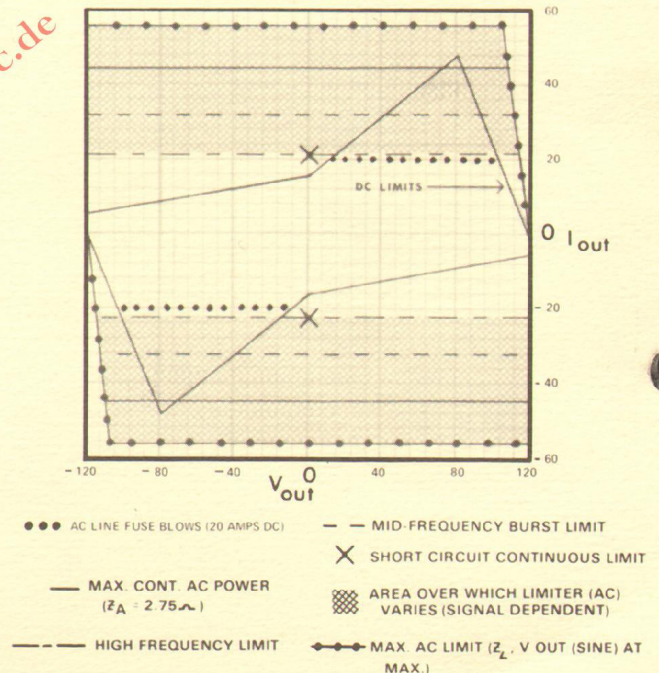
R.M.S. Power Response:	+1, -0dB DC-20KHz at 600 W into 8Ω
	+1, -0dB DC-15KHz at 1 KW into 4Ω
R.M.S. Power at Clip Point:	Typically 750 W into 8Ω , 1350 W into 4Ω .
R.M.S. Burst Power (IHF):	Typically 840 W into 8Ω , 1600 W into 4Ω
DC Output:	Typ. 20A max. (Supply fuse limited) at 100V or 2KVA.
Frequency Response:	± .1dB DC-20KHz at 1 w into 8Ω ± 1 dB DC-100 KHz at 1 W into 8Ω ± 1dB 10Hz-100 KHz at 1 W in AC coupled input mode of std. input plug in.
Phase Response:	+0, -15 degrees DC-20KHz at 1W into 8Ω
Slew Rate:	16 V/μ Sec
I.M. Distortion: (60-7KHz 4:1)	<.05% from .01 W to 600 W (peak equivalent to a single sinusoid, RMS) into 8Ω . <.01% at 600 W into 8Ω or 1200 W into 4Ω .
Harmonic Distortion:	<.05% from DC-20KHz at 600 W into 8Ω . (True RMS measure)
Damping Factor: (8Ω )	Greater than 400 from DC to 1KHz at 1A rms, typ. 1500 DC to 100Hz.
Input Gain:	20 ± 1% (26 dB) at std. input with gain control fully CW; -1 ± 1% at interlock connector input.
Std. Input Sensitivity:	3.46 V rms ± 1% for 600 W rms into 8Ω .
Input Impedance:	25K ± 30% with std. input. 44.76K ± .5% at interlock connector input.
Hum and Noise: (20Hz-20KHz)	120 dB below 600 W into 8Ω . Typ. 128 dB unweighted.
DC Drift at Output:	Typ. < 100μV/°C with all inputs grounded.
Turn-On:	May be switch selected for instantaneous or 4-5 seconds of delay after applying power. No dangerous transients.
General Protection:	High line voltage on over temperature results in shutdown of the high power supplies, each of which is fused. Controlled-slewing-rate voltage amplifier protect the amplifier against RF burnouts. Input overload protection is furnished by a resistor at the input of the amplifier to limit current.
Power Requirements:	50-60Hz AC with adjustable taps for 120, 220, and 240V ± 10% operation, draws 80 W or less on idle, 1KW at 600 W output into 8Ω .
Controls:	On the meter display are two knobs for adjusting the indicator lamp thresholds. Push-push power switch. On the standard input plug-in are an AC-DC input coupling switch and a gain control pot. Low frequency load protection and turn on delay switches are located on the rear panel.
Input Plug-ins:	The standard plug-in contains an AC-DC input coupling capacitor and switch, a gain control potentiometer, and a universal PC layout which may be adapted for input peripherals such as: differential inputs, filters, oscillators, servo amplifiers, remote DC gain controls, compressors, digital controllers, etc. Regulated ±15 VDC supplies are provided with the maximum total available current of the supplies limited to 25ma. The delay mode of amplifier operation may be programmed from the plug-in.
Dimensions:	19" std. rack mount (W.E. hole spacing), 8 3/4" height, 16 1/2" behind mounting surface, handles extend 2" in front of mounting surface. Center of gravity is nearly centered at 5" behind the mounting surface.
Weight:	92 pounds (41.7Kg) net weight.

## M2000 SPECIFICATIONS

R.M.S. Power Response:	+1, -0dB DC-15KHz at 2KW into 8Ω . +1, -0dB DC-20KHz at 1.2KW into 16Ω . Typ. 2.7KW into 8Ω , 1.5KW into 16Ω .
R.M.S. Power at Clip Point: (.01% THD at 1 KHz)	Typ. 3.2KW into 8Ω , 1680W into 16Ω .
R.M.S. Burst Power (IHF):	Typ. 20A max. (supply fuse limited) at 200V or 4KVA.
DC output:	± .2 dB DC-20KHz at 1W into 8Ω . ± 1 dB DC-50KHz at 1W into 8Ω .
Frequency Response:	+0, -20 degree DC-20KHz at 1W into 8Ω . 32V/μSec
Phase Response:	<.1% from 10mW to 2KW (peak equivalent to a single sinusoid, RMS) into 8Ω . .01% at 2KW into 8Ω or 1.2KW into 16Ω .
Slew Rate:	<.05% from DC-10KHz at 2KW into 8Ω .
I.M. Distortion: (60-7KHz 4:1)	Greater than 140 from DC to 1KHz at 1A rms; typ. (400, DC to 100 Hz.)
Harmonic Distortion: (True RMS measure)	40 ± 1% (32 dB) at std. input with gain control fully CW.
Damping Factor: (8Ω )	3.16 rms ± 1% for 2KW rms into 8Ω .
Input Gain:	25K ± 30% with std. input.
Std. Input Sensitivity:	115 dB below 2KW into 8Ω . Typ. 125 dB unweighted.
Input Impedance:	Typ. 200μV/°C with inputs grounded.
Hum and noise:	50-60Hz AC with adjustable taps for 120, 220, and 240V ± 10% operation. Draws 160W or less on idle, 3.8KW at 2KW output into 8Ω .
DC Drift at Output:	
Power Requirements:	

## M600

TYPICAL LIMITS OF VI OUTPUT  
(FOR M2000 VI OPERATING AREA DOUBLE VALUES OF VOLTAGE AXIS)



**CROWN**  
INTERNATIONAL

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