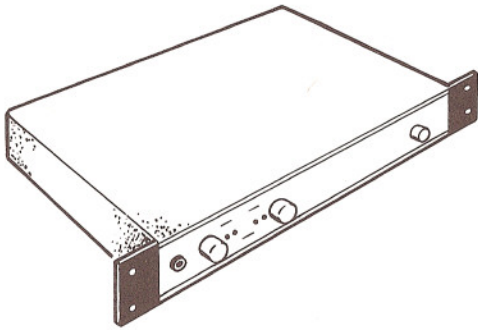


TECHRON[®]



MODEL 5507

POWER SUPPLY / AMPLIFIER

SPECIFICATIONS

TECHRON's 5507 Power Supply/Amplifier delivers accurate high power levels with complete self-protection for dependable operation. At frequencies from 20Hz to 20KHz, 95 watts continuous average output into 8 ohms is typical, with extremely low distortion and noise.

The SPACE Controller (Signal Programmed Automatic Current Executor) circuit acts as a signal-variable current limiter at most frequencies, and as a Voltage/Current limiter at low frequencies, offering comprehensive protection against amplifier damage, no matter what the input or output demands may be.

The Input-Output Comparator (IOC), through constant monitoring of both input and output waveforms, assures precision accuracy. Should any distortion be present at the output, the IOC lights inform the operator while the protection circuitry guards against harm to the amplifier.

Switchable DUAL/MONO Operation allows independent control of two separate channels, or bridges both channels together to produce a balanced output of even higher power. In either mode, the amplifier fully protects itself while meeting the most stringent demands.

TECHRON engineering supports the 5507 with constant attention to user needs, design assistance for special installations, and a wealth of technical know-how to handle new or unusual applications for the 5507.

The TECHRON 5507 Power Supply / Amplifier is a proven, yet innovative system that's tough enough for industrial environments, dependable enough for medical uses, and accurate to laboratory standards

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PERFORMANCE SPECIFICATIONS

	DUAL CHANNEL	SINGLE CHANNEL (Bridged)*
POWER RESPONSE	<p>8 ohm load: 20Hz-20KHz at 35W per channel continuous average output power with no more than .05% THD (Total Harmonic Distortion).</p> <p>4 ohm load: 20Hz-20KHz at 45W per channel continuous average output power with no more than .05% THD (Total Harmonic Distortion).</p>	<p>8 ohm load: 20Hz-20KHz at 95W continuous average output power with no more than .05% THD (Total Harmonic Distortion).</p> <p>16 ohm load: 20Hz-20KHz at 70W continuous average output power with no more than .05% THD (Total Harmonic Distortion).</p>
FREQUENCY RESPONSE	20Hz-20KHz: ± 1 dB at 1W into 8 ohms. 5Hz-100KHz: ± 1.2 dB at 1W into 8 ohms.	20Hz-20KHz: ± 2 dB at 1W into 16 ohms. 6Hz-50KHz: ± 1 dB at 1W into 16 ohms.
PHASE RESPONSE	+10°, -15° 20Hz-20KHz at 1W into 8 ohms.	+10°, -15°, 20Hz-20KHz at 1W.
SLEW RATE	6V/usec.	12V/usec.
I.M. DISTORTION (60Hz-7KHz 4:1)	Less than .01% from .25W to 35W (peak equivalent to a single sinusoid, rms) into 8 ohms.	Less than .01% from .25W to 70W (peak equivalent to a single sinusoid, rms) into 16 ohms.
HARMONIC DISTORTION (True RMS Measure)	Less than .001% from 20Hz-400Hz and increasing linearly to .05% at 20KHz at 35W into 8 ohms.	Less than .001% from 20Hz-400Hz and increasing linearly to .05% at 20KHz, 70W into 16 ohms.
OUTPUT IMPEDANCE	15 mohms in series with 3uH.	30 mohms in series with 6uH.
LOAD IMPEDANCE	Rated for 8 and 4 ohm usage; safe with all loads. Normally, 4 ohms or greater; maximum continuous sinusoidal output power at 2.5 ohms. Lower impedance affects only maximum power.	Rated for 8 and 16 ohm usage; safe with all loads. Primarily used at 8 ohms or greater; maximum continuous sinusoidal output power at 5 ohms. Lower impedance affects only maximum power.
INPUT GAIN	20.6 ± 2 % (26.3dB ± 2 dB), input gain control fully CW.	41.2 ± 2 % (32.3dB ± 2 dB) with input gain control fully CW.
INPUT SENSITIVITY	.812V ± 2 % for 35W into 8 ohms.	.812V ± 2 % for 70W into 16 ohms.
INPUT IMPEDANCE	25K ± 30 %	25K ± 30 %
HUM AND NOISE (20Hz-20KHz)	106dB below 35W into 8 ohms (84uV). Typically 109dB (59uV).	106dB below 70W into 16 ohms (168uV). Typically 109dB (119uV).
POWER REQUIREMENTS	50-400Hz AC, single phase, with adjustable taps for 100, 120, 200, 220 and 240V ± 10 % operation.	50-400Hz AC with adjustable taps for 100, 120, 200, 220 and 240V ± 10 % operation.
POWER DRAW	15W or less on idle; 120W at 70W total output.	15W or less on idle; 120W at 70W total output.
TURN-ON DELAY		None
OUTPUT TRANSISTOR PROTECTION	Short, mismatch, and open-circuit protection; electronic protection operates without thumps or shutdown.	
MAXIMUM AC CURRENT DRAW	2 Amps.	
OPERATING ENVIRONMENT	0-25°C, non-condensing at 90% or less humidity.	

*These specifications are for Model 5507 when the DUAL/MONO switch is in the MONO position. In this mode, the two channels of Model 5507 are internally bridged, forming a single-channel balanced output.