

## Aphex Model 1100 Discrete Class A Microphone Tube Preamplifier

1100 Specs	
Physical	
Chassis Size	19" wide x 9" deep x 1.75 " high
Front Panel Projections	0.75" max.
Net Weight	8.2 lbs.
Packed Weight	10 lbs

Environmental	
Operating temperature Range	32-122 deg. F (0-50 deg C)
Humidity	0 to 95% RH, non-condensing

Power	
Power Requirements	35 Watts
Line Voltage Input	100/120/220/240 VAC 50/60Hz
Power Receptacle	IEC Standard with line filter, fuse, and voltage selector

Analog Audio Specifications	
Mute Function	Optical soft switch, greater than 70dB attenuation
Low Cut Filter Frequencies	Off, 30, 36, 44, 53 ,63, 77, 92, 111, 134, 162, 195 Hertz
Low Cut Filter Type	Second order butterworth servo cancellation technique
Phantom Voltage	+48VDC
Phantom Build-Out Resistances	6.81K ohms to pins 2 and 3
Phantom Ramp-Up/Down	Slow ramp up and down, approximately 5 seconds
Preamp Gain	21dB to 65dB in 4dB steps
Output Match Trim	3-Turn precision potentiometer 0 to -12dB range
Maximum Output Level (MOL)	+27dBu unloaded, +25dBu into 600 ohms
Maximum Input Level (MIL)	+27dBu minus preamp gain value plus pad value
Equivalent Input Noise	Gain=65dB, input shorted, BW=100Hz to 22KHz, EIN=-135dBu
THD	Output level=+15dBu, 0.09%; output level=+4dBu, 0.05%
IMD	Output level=+15dBu, 0.12%; output level=+4dBu, 0.08%
DIM	Below noise floor at all possible measurement levels
Slew Rate	22V/uSec
Analog Dynamic Range	97dB to 101dB depending upon preamp gain setting
Analog Output Noise	-70dBu to -74dBu depending upon preamp gain setting
Analog Signal To Noise Ratio (SNR)	76dB typical, for ref level = +4dBu

Digital Audio Specifications	
Output Resolution	24-Bits
Output Sample Rate	44.1, 48, 96 KHz Selectable
Clock Source	Internal Low Jitter Crystal, external word clock or external AES/EBU clock
Digital SNR	98dB typical for ref level = 0dB(fs)
	80dB typical for ref level = -18dB(fs)

Front Panel Controls	
Preamp Gain (each channel)	21, 25, 29, 33, 37, 41, 45, 49, 53, 57, 61, 65 dB, switched
Low Cut Frequency/Off (each channel)	Off, 30, 36, 44, 53,63, 77, 92, 111, 134, 162, 195 Hertz switched
Line Output Calibration (each channel)	3-Turn precision potentiometer 0 to -12dB range
20dB Pad (each channel)	on/off
Polarity (each channel)	positive/negative
Tone (each channel)	on/off
Phantom (each channel)	on/off
Mute (each channel)	on/off
MicLim™ (each channel)	on/off
Clock Source	Internal/External
Internal Rate	44.1/48/96 KHz
Power	on/off

Rear Panel Controls	
Line Output Normal	+4dBu/-10dBV switch
	Specifications are subject to change.