

MatchMaker™ Bi-Directional Analog Stereo Balanced-to-Unbalanced Interface

MM100

The MatchMaker Model **MM100** matches all levels and impedances between unbalanced phono jacks and balanced XLR 600/150 ohm systems. It provides complete output ground isolation from consumer line operated equipment to avoid creating RF and hum inducing ground loops back through the power system. Only a true transformer-coupled output can provide the required isolation for this purpose and only ATI's unique drive circuitry does the job with none of a transformer's usual limitations.

Use the **MM100** for record-playback and send-receive applications interfacing audio or video recorders, sound cards and digital workstations, and also for input-output matching of equalizers, noise reduction units, reverbs and mixers. The RCA IHF jacks can be paralleled to make a dual line amp, a two-output Distribution Amplifier or a two-input summing amplifier and stereo combiner.

MM100 Features and Benefits

- Rugged shielded enclosure eliminates noise and interference
- Dynamic range better than 18 bit digital
- Rugged gold plated connectors
- Adjustable 6dB reserve gain on all channels
- Excellent RF immunity
- Distortion 80dB below +22 dBm peaks (20-20kHz), under noise at +4dBm
- Shelf Mount Brackets supplied
- Accessory 1RU rack panel mounts one or two units
- Internal 115/230 VAC power supply (specify when ordering or change in the field)
- UL and CE markings



Technical Specifications

MM100

	Channels L & R Balanced to Unbalanced	Channels LL and RR Unbalanced to Balanced
GAIN	-14dB nominal, -8dB maximum; user adjustable for -10dBu (.25V) output with 0, +4 or +8dBm inputs	+14dB nominal, +22dB maximum; user adjustable to 0, +4 or +8dBm output with -10dBu (.25V) input
NOMINAL LEVELS	+4dBm input, -10dBu (.25V) out	-10dBu (.25V) in, +4dBm out
PEAK LEVELS	+22dBm in, +8dBu (2.0V) out	+8dBu (2.0V) in, +22dBm out
MAXIMUM LEVELS	+28dBm in, +20.5dBu out	+24dBu in, +23dBm out
NOISE (20-20kHz)	-90dBu maximum	-80dBm maximum
HUM OUTPUT	-96dBu max @60, 120 & 180 Hz	-90dBm max @60, 120 & 180 Hz
DYNAMIC RANGE	98dB minimum	102dB minimum
HARMONIC DISTORTION (20-20kHz)	0.02% max. at Peak Level; 0.005% max. at Nominal Level	0.01% max. at Peak Level; 0.005% max. at Nominal Level
INTERMOD DISTORTION SMPTE, 7k/60Hz, 4:1	0.005% maximum at Peak and Nominal Levels	
FREQUENCY RESPONSE	+0, -0.25dB, 20 to 20,000 Hz; -3dB at 0.5 Hz and 150kHz	+0, -0.25dB, 20 to 20,000 Hz; -3dB at 1.0 Hz and 65kHz
CROSSTALK	70dB minimum at 10kHz, all modes	
INPUT HUM REJECTION Common Mode Signals	60dB minimum, internal trimmer	N/A
INPUT IMPEDANCE	Balanced, 20kΩ bridging Split and RF Bypassed	Unbalanced, 10kΩ Split and RF Bypassed
OUTPUT IMPEDANCE	Unbalanced, 1500Ω maximum Outputs may be paralleled for mono	Transformer Balanced, 40Ω maximum source impedance, 600/150Ω load impedance
SLEW RATE	13V/μSec	
RISE TIME	2 μSec, peak level square wave	8 μSec, peak level square wave
OVERSHOOT	None	2% maximum
PHASE SHIFT (20-20kHz)	Less than 1 degree, input to output and between channels	10 degrees max., input to output; less than 2 degrees between channels
POWER	115 / 230 VAC ±10%, 47 to 63 Hz, 4VA	
DIMENSIONS	1.5" (3.8cm) H x 8.5" (21.2 cm) W x 4.65" (11.8 cm) D	
WEIGHT	3 lbs. (1.4 kg) net, 5 lbs. (2.3 kg) shipping weight	
MOUNTING	Brackets provided for easy mounting to mating equipment, desk or shelf Accessory Rack Panel P/N 20273-501 mounts 1 or 2 units in 1RU	
CONNECTORS	Unbalanced IHF lines: RCA type Phono Jacks 600Ω Inputs: XLR type, three terminal female 600Ω Outputs: XLR type, three terminal male	
ENCLOSURE	Steel Wrap-around with reverse printed graphics overlay	
WARRANTY	Limited, One Year Warranty	

Distortion, Noise, Dynamic Range, Crosstalk and Response measurements are all made at nominal gain settings. Reference Levels: 0Bm=0.775V/600Ω, 0dBu=0.775Vrms. Technical specifications are subject to change as we continually improve our products.

©2010 Audio Technologies Inc.