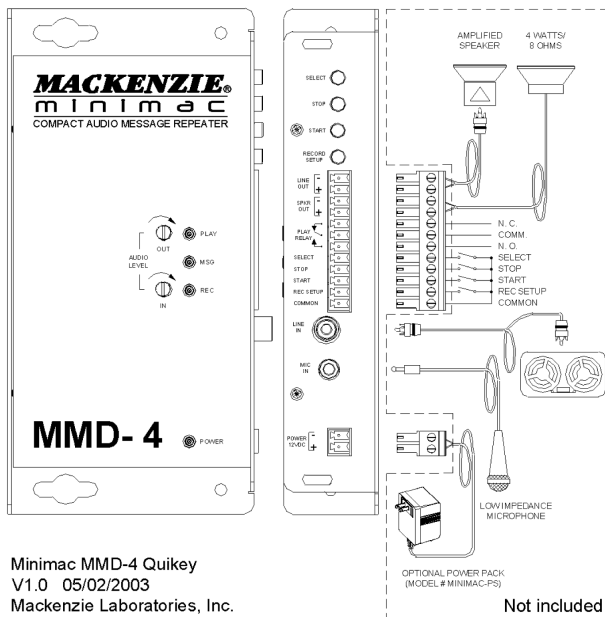


THE MINIMAC COMPACT SINGLE MESSAGE REPEATER



Minimac MMD-4 Quikey
V1.0 05/02/2003
Mackenzie Laboratories, Inc.

Audio Coding:

Method: 16 bit PCM, uncompressed
Sample Rate: 16kHz

Audio Quality:

Dynamic Range: 60dB, Typical
Signal to Noise: 60dB, Typical
Frequency Resp.: 100Hz to 8kHz

Audio Input:

Line: 10k ohm, RCA
Mic: 1.5k ohm, 1/8" mini jack
Level: +4dBm max., potentiometer

Audio Output:

Line: 600 ohm(+4dBm max.), transformer isolated, Pluggable terminal
Amplified: 4 watts into 8 ohm(STD), 10 watts into 8 ohm(optional), Pluggable terminal
Level: Potentiometer

Audio Memory:

Type: FLASH EPROM
Capacity: 8MB, 4 min local record

Power Requirement:

Input Voltage(STD): 12VDC, 1A(Spkr Out) or 250mA(Line Out)
Connection: Pluggable terminal

Manual Control & Status:

Pushbuttons: Record, Stop, Play, Select
Status Indicators: Play, MSG, Record LED's

Remote Control I/O:

Control Inputs: Record, Stop, Play, Select
Status Outputs: Playing
Output Type: Dry relay contact(Form C), 1A @24VDC non-inductive load
Connection: Pluggable terminal

Mechanical:

Package: Wall or table mount chassis
Material: 18 gauge cold rolled steel; red paint, white silkscreen

Regulatory Agency Approvals:

FCC, Part 15, Class A; UL/CSA approval on external power pack(sold separately)