Ballroom Combining System Direct Microphone Input





Audio combining and microphone control for 2 to 4 rooms has never been more cost effective and efficient!

Designed for the smaller meeting spaces, the ML-400 is perfect for those areas that require background music and one microphone per room. This system features direct microphone inputs (with or without phantom power), eliminating the need for individual microphone mixers.

Along with hotels and conference centers, the ML-400 is perfect for churches, country clubs, gymnasiums, funeral homes, banquet halls, and general divisible meeting spaces.

Provisions are made for the control of up to four separate rooms. Rooms may be used independently or mixed to either of two separate mix busses for full flexibility. Local control plates in each room provide control over microphone and music functions, room volume and mix bus assignment. The heavy gauge steel security cover locks to prevent unauthorized tampering of the room settings while adding to the durability of the system. Since mixing is accomplished at the local wallplates, access to the rack area is not required for setup. The ML-400 may be used with any brand of amplifier, allowing the system to be tailored to specific user requirements or easily retrofitted into existing areas.

FEATURES:

- Combines audio from two to four rooms in any combination.
- Direct microphone input (no mixers required).
- All operating features are controllable from local room areas.
- Only 7 wires (control only) connect the wallplates to the main unit.
- Rooms may be independent or mixed to either of two busses.
- May be used with any amplifier.
- Eliminates patch panels and "homemade" systems.
- All audio equipment can be located in one place.
- Robust design and construction insures years of trouble-free operation.







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SYSTEM COMPONENTS:

ML-400 Control Unit: 19 inches wide by 1¾ inches high by 10½ inches deep. The rack-mountable control unit contains all active circuitry. Front panel status indicators monitor power supply voltages. An adjustable music bus control is provided. The unit is equipped with six-foot cable to connect to the power supply.

Power Supply: 5 inches wide by 2¾ inches high by 4½ inches deep. PM-2 power supply provides all necessary voltages required by the ML-400 Control Unit. The PM-2 is rear-rack mountable and connects to standard 120 VAC power. To prevent overload, no other devices should be powered from the PM-2 when used with the ML-400.

Local Control Plates: Wall-mount local control plate mounts in any 3-gang wall box with a minimum 2½ inch depth. It provides control of microphone on/off, music on/off, room volume, and Mix Bus A / Mix Bus B / local. An eight-conductor 22 AWG cable (e.g. West Penn #271) connects the wallplate to the control unit. No audio signals are carried by this cable.

SPECIFICATIONS:

Microphone Input Connectors: four 3-pin screw terminals.

Phantom Power: +24 VDC (+ on "H & L" pins, ground on shield).

Input Impedance: 1.6 Kohm nominal electronically balanced. Mic gain adjust -30dB to +66dB.

Background Music Input: 3 pin screw terminals, 10K ohm impedance, music level pot (rear panel) allows practical adjustment range of -20dB to +6dB.

Audio Output Connectors: four 3-pin screw terminals.

Output Impedance: 600 ohm transformer-coupled.

Output Level: +18dBv maximum.

Microphone Volume Control Range: -20dB to +4dB.

Music Volume Control Range: -18dB to +3dB relative to input signal level.

Residual Noise: better than -75dBv — input floating, outputs 600 ohm load, microphone and music switches on.

Crosstalk: better than -80dB at 1KHz (relative to +10 dBv input signal.

Frequency Response: -1+0dB, 30Hz - 20KHz.

Power Consumption: 120 VAC, 50/60 Hz at 25 watts maximum.

LOCAL CONTROL PANELS:

Local control panels in each room area allow selection of all system functions. A locking cover plate on each panel regulates access to the controls. Each panel has the following features:

Mix Bus Selector: The leftmost rocker switch allows the room's mixer to be assigned to either of two mix busses (Line A or Line B) or its own independent bus (local).

Microphone On/Off: This rocker switch enables/disables the room's microphone.

Music On/Off: The third rocker switch allows audio from the background music bus to be turned on and off.

Music Volume/Mic Volume: These volume control pots set the audio level to each room area.





ORDERING INFORMATION:

- The ML-400 comes complete as a fourroom system, including the audio control unit, four local control plates, and a PM-2 power supply.
- 2) ML-400-RK. The system as listed above with a rack mount panel to mount the local control plates in the rack instead of the rooms.





Specifications are subject to change without notice



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