

Guarantee: The Shure Model PE70RM-2 Mixer is guaranteed to be free from electrical and mechanical defects for a period of one year from date of shipment from the factory, provided all instructions are complied with fully. In case of damage, it is essential that you carefully repack the unit and return it to the factory, or, if outside of the United States, to your dealer or authorized Shure Service Center for repair. Guarantee is voided if the basic assembly has been opened or subjected to unreasonably rough handling.

SPECIFICATIONS

Gain: At 1,000 Hz (cps).

Input	Outputs			
	Low Imp. Mic.	High Imp. Mic.	Guitar Amp.	Power Amp. Aux.
5.0 mv produces	.4 mv	6.7 mv	22.5 mv	85 mv

Frequency Response: The frequency response is flat ± 2 db from 30 Hz (cps) to 17,000 Hz. (cps).

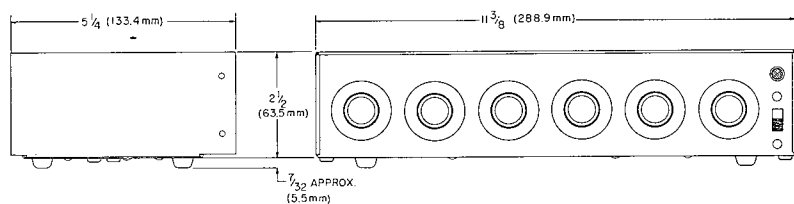
Hum-Noise: 60 db below rated output.

Input Impedance: Inputs suitable for high impedance dynamic and ribbon microphones and electrified instruments.

Case: Painted metal

Net Weight: 3 pounds.

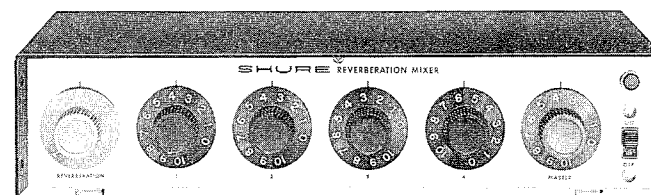
Dimensions: See Figure C



OVERALL DIMENSIONS
Figure C

MODEL PE70RM-2 REVERBERATION MICROPHONE/INSTRUMENT MIXER

12-18-67



General: The Shure Model PE70RM-2 is a four-channel, completely transistorized, portable microphone/instrument mixer with built-in REVERBERATION, for use with public address systems and musical instrument amplifiers.

The Model PE70RM-2 provides a practical, efficient and economical way to use up to four electric guitars, basses, console organs, or microphones, or any combination of four with your existing amplifier or system.

The Mixer features:

- Adjustable REVERBERATION to simulate the natural reverberation or echoes of a large concert hall.
- Connection provided for use with remote reverberation "ON-OFF" switch.
- No interaction between channels when volume controls are changed.
- Connection for battery power supply.
- Underwriter's Laboratories approved for use in commercial applications.

HOW TO USE THE PE70RM-2 MIXER

Input Connections

NOTE: Before using mixer, remove shipping screw (located on top of chassis) holding small tag and discard.

Up to 4 inputs per mixer—Electric guitars, basses, console organs, high impedance dynamic or ribbon microphones or any combination. If you desire to use even more instruments and microphones the mixer can be connected together with a Shure Model PE68M Mixer. (See paragraph on Connecting Two Units Together). The input connections are standard phone jacks marked 1, 2, 3, 4. Crystal or ceramic microphones are not recommended for use with the PE70RM-2 Mixer.

Volume Controls

Each input has a separate volume control for balancing sound between instruments or vocalist. A master volume control simultaneously adjusts volume of the entire sound system and is an indispensable feature where the regular amplifier controls are not readily accessible.

The individual gain controls should generally be set near maximum (8 or 9 on dial) and the master gain control adjusted to required output. Individual channel volume controls not being used should be kept at minimum gain (0 on dial).

Identifying Controls

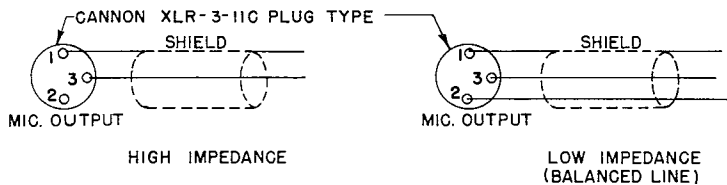
Pressure sensitive adhesive labels are supplied with the PE70RM-2 Mixer as a means of identifying the control and indicating the control position when optimum results have been obtained. The labels are easily removed or easily erased (when using pencil) when their use is no longer required.

Output Connections

Connect it to any amplifier—Has standard output connections to work into musical instrument amplifiers, microphone inputs, or the power amplifier of the existing sound system.

Output 2 (Guitar Amplifier Output): The jack marked OUTPUT 2 is a high impedance medium level output designed to feed a musical instrument amplifier. Any high quality shielded guitar cable may be used to connect the mixer to the amplifier.

Output 1 (Microphone Output): The receptacle marked OUTPUT 1 is a high or low impedance microphone output (selected by the switch above the receptacle). The output is the "mixed" output of all input sources and is designed to feed a 25 to 600 ohm microphone input, a high impedance amplifier, or tape recorder. The MIC. OUTPUT 1 receptacle on the mixer is a male three-pin Cannon XLR-3-14 type connector (see Figure A for the output plug XLR-3-11C connections). The Model A68C Output Cable Kit (Accessory) provides a simple and effective method of connecting the mixer to virtually any P.A. microphone input.



MICROPHONE OUTPUT PLUG CONNECTIONS

Figure A

Power Amplifier Output: The jack marked OUTPUT 3 is a high impedance high level output designed to feed a power amplifier in a P.A. system, into the auxiliary input of a tape recorder, or into the tuner input of a high-fidelity amplifier.

All outputs may be used simultaneously. Example: Guitar Output 2 can be used to feed guitar amplifier while using Microphone Output 1 to feed sound system in club.

When all connections have been made, turn on unit and advance volume controls for desired results.

Operating Voltage: 105-130 volts 50/60 Hz. (cps) or 210-240 volts 50/60 Hz. (cps).

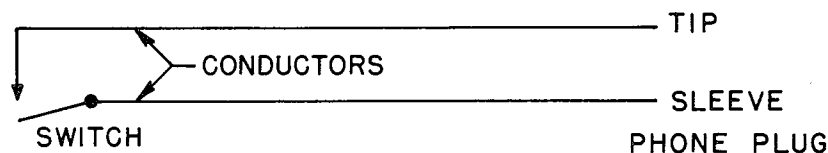
In the Model PE70RM-2, operating voltage is selected by a switch on the back panel. A switch lockplate is provided to prevent accidental switching to 105-130 volt position. The microphone mixers are shipped with the operating voltage selector switch locked in the 210-240 volt position. The lockplate can be removed from locking position by loosening (do not remove) the screw holding the lockplate, rotating the lockplate 90°, and retightening the screw. The power on-off switch is on the front panel.

Accessory 28-volt DC: To convert to DC operation, this jack is used as a power input when using the Model A68B Battery Power Supply (Accessory). When not using mixer—turn off switch to conserve battery life (pilot light does not operate when using A68B).

Reverberation

The red control knob (on front panel) marked REVERBERATION is used to adjust the amount of reverberation to the desired effect.

The standard phone jack (on back panel marked REVERBERATION REMOTE SWITCH) is used to connect an "ON-OFF" switch which can be operated through a cable at a remote location to turn REVERBERATION on and off. See Figure B for switch connections.



REMOTE REVERBERATION CIRCUITRY

Figure B

CAUTION: The PE70RM-2 Reverberation Mixer should not be set on or mounted against a loudspeaker, as vibrations from the speaker cabinet may cause improper operation of reverb. Avoid accidental jarring during operation.

Connecting Two Units Together

1. A PE70RM-2 Reverberation Mixer and a Shure PE68M five-channel Mixer may be combined to give a total of eight microphone/instrument channels. In this case, four channels could have reverberation and four channels would NOT have reverberation.

Unit 1—PE70RM-2

Unit 2—PE68M* (See note below)

- Connect the OUTPUT 2 on Unit 1 to the fifth MICROPHONE/INSTRUMENT INPUT on Unit 2.
 - Connect the microphones or instrument to mixers and set each input control to #0 position.
 - Take the output signal for desired application from appropriate output jack on Unit 2.
 - Set Master Control on Unit 1 to position #10.
 - Set fifth MICROPHONE/INSTRUMENT INPUT Control on Unit 2 to position #4.
 - The Master Control on Unit 2 is now Master for all inputs.
 - Advance Master Control (UNIT 2) to about #5 position and adjust individual microphone controls for proper level. If overall gain is too low or too high the Master Control (UNIT 2) may be adjusted.
2. A PE70RM-2 Reverberation Mixer and a Shure PE68M* five-channel Mixer may, also, be combined to permit reverberation in all eight microphone/instrument channels. In this case,
- Unit 1 is the PE68M,*
Unit 2 is the PE70RM-2.
- Connect the GUITAR AMP. OUTPUT 2 on Unit 1 to the fourth MICROPHONE/INSTRUMENT INPUT on Unit 2.
 - Connect the microphones or instrument to mixers and set each input control to #0 position.
 - Take the output signal for desired application from appropriate output jack on Unit 2.
 - Set Master Control on Unit 1 to position #10.
 - Set fourth MICROPHONE/INSTRUMENT INPUT Control on Unit 2 to position #4.
 - The Master Control on Unit 2 is now Master for all inputs.
 - Advance Master Control (UNIT 2) to about #5 position and adjust individual microphone controls for proper level. If overall gain is too low or too high the Master Control (UNIT 2) may be adjusted.

*Note: The PE68M operates on 110V. A.C. 50/60 Hz (cps). For use with 220 V. A.C. 50/60 Hz (cps), a step-down transformer (Model A68VT) is recommended as an accessory.