

SHURE**MICROPHONES AND ELECTRONIC COMPONENTS**

AREA CODE 312/328-9000 CABLE SHUREMICRO



MODEL M62 AUDIO LEVEL CONTROLLER



General: The Shure Model M62 is a transistorized variable input level controlling device especially designed to keep its electrical output constant although the input signal from the microphone may vary considerably.

The Audio Level Controller:

Permits the speaker or entertainer to use the microphone at varying distances and positions without a change in output volume-eliminates blasting and fade-outs.

Upgrades tape-recording systems by controlling the volume being fed to the recorder. This prevents distortion and overloading of the tape recorder which is caused by excess volume from the microphone.

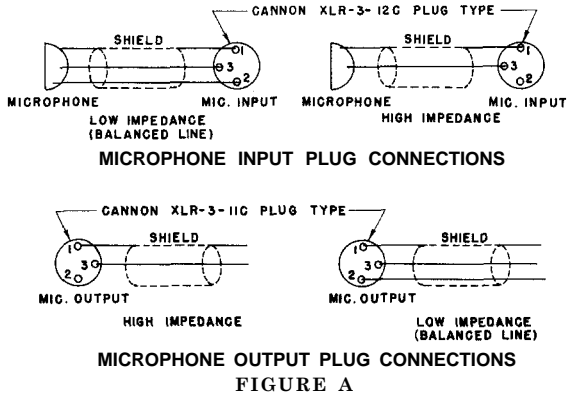
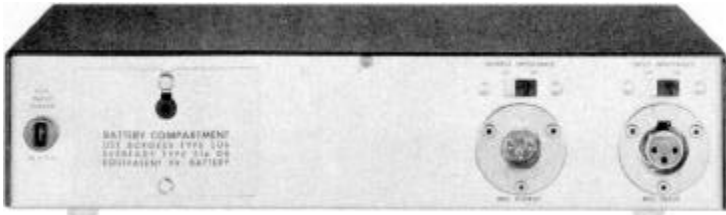
Permits more than one paging system operator to use the public address system without a change in output volume of that system.

Prevents feedback from becoming ear-splitting and excessively loud.

Theory of Operation: The "Level-Loc" is basically a low noise, constant-output device. Under very low signal conditions, the output is nearly 1 to 1 (that is, the output level equals the input level). With a great amount of signal applied, a reduction in output may be obtained without introducing significant distortion or transients to that signal. The degree of reduction is determined by the signal, i.e., the greater the signal, the greater the reduction. The Distance Selector switch determines the input level at which gain reduction begins. It has been calibrated to show the distance from the microphone at which the gain reduction becomes effective, using an average speaking voice and an average dynamic microphone. (See Distance Selector)

HOW TO USE YOUR M62 LEVEL CONTROLLER

Input Connection: The Cannon type receptacle marked MIC. INPUT is designed for either low (25 to 600 ohms) or high impedance dynamic or ribbon microphones. The impedance is selected by a slide switch above the input receptacle. The unit is not recommended for use with crystal or ceramic microphones. The input receptacle is a female Cannon XLR-3-13 (uses XL-3-12 mate, Shure Part No. 95A55, or XLR-3-12C mate, Shure Part No. 95A227). See Figure A for low and high impedance connections to receptacle.



Output Connection: The receptacle marked MIC. OUTPUT is a dual impedance output selected by the switch above the receptacle. This output is designed to work into a 25 to 600 ohm microphone line or input, or into a high impedance amplifier or tape recorder microphone input. The receptacle is a male three-pin Cannon XLR-14 type connector (uses XL-3-11 mate, Shure Part No. 95A38, or XLR-3-11C mate, Shure Part No. 95A176). See Figure A for output receptacle connections.

Battery and Auxiliary Power Connections

The battery to power the M62 is shipped with the unit but must be installed. Install as follows:

1. Remove Battery Compartment Cover by removing the two slotted screws holding cover.
2. Snap battery into clips provided.
3. Replace Battery Compartment Cover and tighten screws securely.

Battery Replacement Use Burgess type 2U6, Eveready type 216, or equivalent 9 V. D.C. battery.

Aux. Input Power: This jack is used as a power input when using the 28 V. D.C. power source from the Shure M68 Mixer. In this case, the battery should be disconnected. A special connecting cable is provided to connect from the M68 Mixer jack marked ACCESSORY 28 V. D.C. to the M62 jack marked AUX. INPUT POWER.

In order to utilize A.C. current, the use of a 9 volt D.C. Battery Eliminator is suggested.

There is a provision in the battery compartment cover that will allow using a 9 V. D.C. Battery Eliminator to power the M62. Battery Eliminator cable is to be slipped into the split rubber grommet on the cover of the battery compartment. To secure cable, rotate grommet 1/2 turn. Connection is to be made using the same battery clips that normally connect to the 9 volt battery.

(Note: If the Battery Eliminator is to be used, first remove the battery.)

OPERATION

Master Control

When the switch is in the BYPASS position, the input to the M62 is switched directly to the output receptacle and the automatic action of the M62 Level Controller is not operative. This, also, turns OFF the battery voltage.

When the Master Control switch is in the LEVEL-LOG position, the battery voltage is ON and the controlling action of the M62 is operative.

DISTANCE SELECTOR

Best results are usually obtained when the Distance Selector is set for the normal working distance of the performer from the microphone. The Distance Selector can be set 6, 12, or 18 inches.

When recording in quiet surroundings, the 18 setting of the Distance Selector may be used to obtain maximum control of the recorded level. This is especially advantageous in recording sound sources where the volume is not predictable.

Loud programs or high sensitivity microphones may result in blasting. This may be alleviated by setting the Distance Selector to a setting of 12 or 6 inches.

To use the Level-Loc in a public-address system, increase the volume control on the public-address amplifier to that point where the system is at the threshold of feedback with no signal being transmitted through the microphone. In this manner, the total volume is reduced as signal is applied, and the system is more stable during loud parts of the performance. Should accidental feedback occur, the Level-Loc will prevent it from becoming ear-splitting or damaging the loudspeakers.

Note: For best results, it is recommended that some time be spent in experimentation with the Level-Lot to enable the user to become accustomed to the advantages which this unit presents.

The Level-Lot action may be demonstrated by switching from the Level-Lot to the Bypass.

To Use With M68 Microphone Mixer: The two ways of using the M62 with the M68 Mixer are to:

1. Connect the microphone directly into the M62 and connect the M62 to the M68 Microphone Input. This method gives audio Level-Loc control on the one microphone input of the M68 which is fed from the M62.
2. Connect the M62 to control channels of the M68 by connecting the microphone Hi impedance output of the M68 to the input of the M62 (switched to high impedance). The input for the main amplifier will be connected to the M62 (Mic Output). When used in this manner, the Master Control and the M68 Mixer should not be advanced past 5 and the individual controls should not be advanced past 7. If more overall volume is required, the volume control on the main amplifier should be advanced.

Guarantee: The Shure Model M62 Audio Level Controller 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. Our guarantee is voided if the basic assembly has been opened or subjected to unreasonably rough handling.

OPTIONAL ACCESSORIES

Output Cable Kit	Model A68C
Locking Panel	Model A68L
Rack Panel Kit	Model A68R
Stacking Kit	Model A68S
Attaché Carrying Case.....	Model AC68

SPECIFICATIONS

Input Impedance

High Impedance: 100K ohms
 Low Impedance: 500 ohms

Output Impedance

High Impedance: Less than 500 ohms
 Minimum recommended load: 2,000 ohms
 Low Impedance: Less than 10 ohms
 Minimum recommended load: 25 ohms

Gain: before compression (db) :

Input	Output	
	Low Impedance	Hi Impedance
Low Impedance	0	+22
High Impedance	-22	0

Frequency Response: flat 20 to 20KHz \pm 2 db

Signal to Noise Ratio: with respect to 10 microbar input 60 db

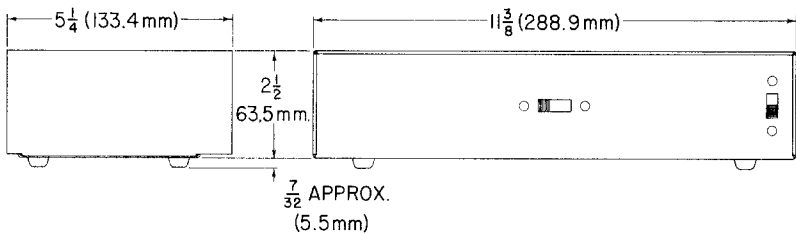
Distortion: Any input and distance selector position: 3% maximum

Battery Life: 250 hours

Compression Action: 40 db change in input gives approximately 6 db change in output level.

Dimensions: See Figure B.

Net Weight: 2.2 lbs.



OVERALL DIMENSIONS

FIGURE B