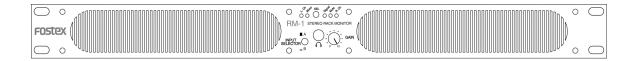


RM-1 Rack Mount Monitor

Operations Manual



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CAUTION

RISK OF ELECTRIC SHOCK DO NOT OPEN



CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK, $\label{eq:cover} \text{DO NOT REMOVE COVER (OR BACK)}.$

NO USER - SERVICEABLE PARTS INSIDE.

REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.

"WARNING"

"TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE."

SAFETY INSTRUCTIONS

- Read Instructions All the safety and operating instructions should be read before the appliance is operated.
- 2. Retain Instructions The safety and operating instructions should be retained for future reference.
- Heed Warnings All warnings on the appliance and in the operating instructions should be adhered to.
- 4. Follow Instructions All operating and use instructions should be followed.
- Water and Moisture The appliance should not be used near water - for example, near a bathtub, washbowl, kitchen sink, laundry tub, in a wet basement, or near a swimming pool, and the like.
- Carts and Stands The appliance should be used only with a cart or stand that is recommended by the manufacturer.



An appliance and cart combination should be moved with care. Quick stops, excessive force, and uneven surfaces may cause the appliance and cart combination to overturn.

- 7. Wall or Ceiling Mounting The appliance should be mounted to a wall or ceiling only as recommended by the manufacturer.
- 8. Ventilation The appliance should be situated so that its location or position dose not interfere with its proper ventilation. For example, the appliance should not be situated on a bed, sofa, rug, or similar surface that may block the ventilation openings; or, placed in a built-in installation, such as a bookcase or cabinet that may impede the flow of air through the ventilation openings.

CAUTION:

TO PREVENT ELECTRIC SHOCK, MATCH WIDE BLADE OF PLUG TO WIDE SLOT, FULLY INSERT.

ATTENTION:

POUR ÉVITER LES CHOCS ÉLECTRIQUES, INTRODUIRE LA LAME LA PLUS LARGE DE LA FICHE DANS LA BORNE CORRESPONDANTE DE LA PRISE ET POUSSER JUSQU' AU FOND.



The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.



The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

- Heat The appliance should be situated away from heat sources such as radiators, heat registers, stoves, or other appliances (including amplifiers) that produce heat.
- 10. Power Sources The appliance should be connected to a power supply only of the type described in the operating instructions or as marked on the appliance.
- Grounding or Polarization The precautions that should be taken so that the grounding or polarization means of an appliance is not defeated.
- 12. Power Cord Protection Power supply cords should be routed so that they are not likely to be walked on or pinched by items placed upon or against them, paying particular attention to cords at plugs, convenience receptacles, and the point where they exit from the appliance.
- 13. Cleaning The appliance should be cleaned only as recommended by the manufacturer.
- 14. Nonuse Periods The power cord of the appliance should be unplugged from the outlet when left unused for a long period of time.
- 15. Object and Liquid Entry Care should be taken so that objects do not fall and liquids are not spilled into the enclosure through openings.
- 16. Damage Requiring Service The appliance should be serviced by qualified service personnel when:
 - A. The power supply cord or the plug has been damaged; or
 - B. Objects have fallen, or liquid has been spilled into the appliance; or
 - C. The appliance has been exposed to rain; or
 - The appliance does not appear to operate normally or exhibits a marked change in performance; or
 - E. The appliance has been dropped, or the enclosure damaged.
- 17. Servicing The user should not attempt to service the appliance beyond that described in the operating instructions. All other servicing should be referred to qualified service personnel.

The new RM 1 is the ideal solution for monitoring needs in tight industrial environments. The RM 1, is the perfect speaker for machine rooms, VTR monitoring, surveillance, mobile and stationary control rooms, theme park applications or any other situation where monitoring is needed and space is tight.

The unit is a 1 rack space high industrial design, utilizing robust construction for around the clock operation. The aluminum front panel has a multitude of user options so that the audio output may be configured for the application at hand.

The RM 1 employs a unique new driver technology that makes this unit's frequency response outstanding, considering the limited spaced enclosure.

RM 1 Features...

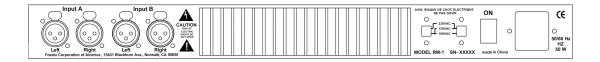
- * Two stereo balanced +4 inputs with (4) XLR/ 1/4" Neutrik combo connectors.
- *High intensity multi colored LEDs for mode tallies.
- *On board electronic matrix switching for: L Channel only, R Channel only, Mono, Stereo and Mute.
- *Front panel stereo Gain control.
- *Front panel Headphone jack with gain control; mutes speakers when used.
- *A/B input select switch.
- *Signal Presence Indicator that changes with intensity of audio input.
- *Multi line frequency conversion possible with on-board 3 voltage transformer.
- *2x 15-watt into 8 ohms amplifiers.
- *Special designed drivers providing 100hz-15K frequency bandwidth.
- *Rear panel power switch.
- *Robust construction with ease of servicing access.
- *Rated for 24-hour operation.
- *IEC power connector.
- *Fuse protected.

Fostex would like to thank you for purchasing the RM-1 rack mount monitor. The RM-1 was designed for industrial 24 hour use. The RM-1 utilizes the latest technology in both speaker drivers and electronic circuitry. Please be sure to read through this manual to get familiar with the operation of the various controls and connections.

- *Please read the safety instructions included within this manual
- * Make sure the voltage selector on the rear panel is selected for the line frequency of the country where it will be used.

The RM-1 should be rack mounted with 4 screws to fully support the chassis when installed in a equipment rack. The unit may get warm to the touch when in operation. The RM-1 was designed for 24 operation with thermal factors taken into consideration.

Rear panel description and connections.



Remove the safety strip from the AC power cord receptacle, only after checking the voltage selector on the rear panel, is set to your proper line frequency.

The **Power** switch is located next to the AC receptacle.

The RM-1 has 2 stereo left and right inputs designated as **Input A** and **Input B**. This configuration allows the user to monitor two different stereo sources within one RM -1 unit.

The input combo connectors can take either balanced XLR connectors or .25 TRS phone connectors. When using an unbalanced TRS type connector, the RM-1 will auto sense this connection and change the input sensitivity accordingly.

Pin 2 is hot, Pin 1 is shield and Pin 3 is neutral on the XLR jack.

Tip is hot, Ring in neutral, Sleeve is shield when using the .25 phone jack.

The RM-1 is fully shielded to prevent interference with video monitors or VTR machines.

FRONT PANEL



The front panel of the RM-1 monitor is basically self explanatory.

The A/B Input Selector selects the A stereo group or B stereo group to output to the drivers or headphone jack. The up position selects the A input, the down position selects the B input.

The .25 stereo Headphone jack can be used with all available types of headphones with ample sensitivity giving the user the necessary volume in loud machine room environments. When using headphones, the drivers are muted.

The Dual Concentric Volume control can be used to adjust the left or right inputs independently. The front portion of the control adjusts the left channel and the rear portion of the control adjusts the right channel input volume.

The Mode Selector is of the momentary variety and selects the various output modes, high intensity multi colored LED's tally the function selected:

Mute The audio is muted for both the drivers and the headphone

output.

L Ch. The left channel is output through both drivers.

Mono The left and right channels are output monaurally.

Signal Indicates signal presence at the input jacks. The LED flashes with

the input amplitude.

Mute Indicates that the inputs are muted.

R Ch. The right channel is output to both drivers.

Note: when the unit is configured for stereo, both the left and right

channel LED's will be lit.

Note: There are no user serviceable parts inside.

RM-1 Product specification

| Input impedance: | Combo XLR input 78K balanced |
|-------------------------------------|--|
| Input Impedance: | Combo Phone input 20K balanced |
| Max input level: | Combo XLR +24 dBu balanced |
| Max input level: | Combo phone jack + 13.8 dBV (+15.8 dBu balanced) |
| Common mode rejection ratio: | 40 dB typical @ 60 HZ |
| Nominal input level: | Combo XLR + 4 dBu |
| Nominal input level: | Combo phone jack -10 dBV (-8.2 dBu) |
| Power output each power amplifier: | .15 watts into 8 ohms @ 1 kHz @ 0.03% THD Both channels driven. |
| Power output each headphone output: | .10mW into 50 ohms @ 1 kHz @ 0.06% THD Both channels driven. |
| Sensitivity Combo XLR input: | . 82 dB SPL @ 1m @-10dBu (Volume Max) Stereo Mode 500 to 2kHz band limited pink noise input. |
| Sensitivity Combo Phone Input: | . 82 dB SPL @ 1m @-24dBV (Volume Max) Stereo Mode 500 to 2kHz band limited pink noise input. |
| Frequency Response: | 100 Hz to 20 kHz |
| Input Signal Led Threshold: | -20 dBu |
| Signal to Noise ratio: | . 90 dB |
| Physical Dimensions: | 19"W x 1.75"H x 10"D |
| Weight: | 10 lbs. |

Declaration of EC Directive

This equipment is compatible with the EMC Directive (89/336/EEC) - Directive on approximation of member nation's ordinance concerning the electromagnetic compatibility and with the Low Voltage Directive (73/23/EEC) - Directive on approximation of member nation's ordinance concerning electric equipment designed to be used within the specified voltage range.

The Affect of Immunity on This Equipment

The affect of the European Specification EN50082-1 (coexistence of electromagnetic waves - common immunity specification) on this equipment are as shown below.

* In the electrical fast transient/burst requirements, radiate electromagnetic field requirements and static electricity discharging environment, this could be affected by generation of noise in some cases.

FOSTEX DISTRIBUTORS LIST IN EUROPE

- * Including non-EU countries.
- * underlined: contracted distributors (as of August, 2000)

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