



MRM-70 FREQUENCY AGILE, DIVERSITY RECEIVER MODULE

Instruction Manual



The MRM-70 is a single channel, frequency agile, wireless microphone receiver module.

DIVERSITY RECEIVER MODULE

INTRODUCTION

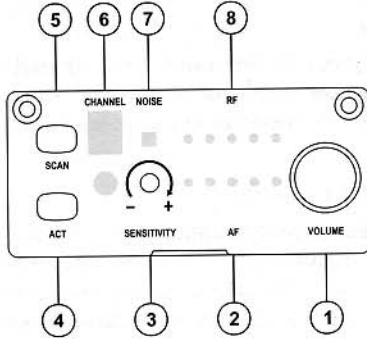
The MRM-70 is a wireless microphone receiver module suitable for installation in MIPRO's MA-705, 707 & 909 portable PA amplifiers. It can also be fitted to other PA amplifiers, mixers, signal processors and karaoke players to provide these devices with frequency agile, wireless reception.

The UHF band and PLL technology are utilized to avoid the often congested VHF band. True diversity and advanced circuitry combine to eliminate signal dropouts and random noise interference. The main features and benefits of the MRM70 are:

1. Press the 'SCAN' button and the receiver will auto-scan and lock on to one of the 16 pre programmed frequencies.
2. Press the 'ACT' button to automatically upload the receiver frequency to your transmitter.
3. Once the frequency pairing has been set, the data is stored in memory, meaning that the frequency is locked until it is changed by performing the 'ACT' function again, even after powering off.
4. Bright and easy-to-read LED displays indicate the numeric channel number and RF & AF signal strengths.
5. The receivers sensitivity level can be adjusted to avoid interference.
6. Reliable, true diversity reception with dual " Pilotone & NoiseLock" circuitry prevents interferences.
7. The receivers output level and dynamic range have been accurately factory calibrated to match the microphone capsule's sensitivity, ensuring optimal performance from the system. (1.5dB tolerance).
8. The modular design allows for easy installation, maintenance and DIY.

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1. GLOSSARY



- (1) **Receiver Power Switch/Volume Control:** Turns the receiver module on and off. After powering on, the AF LED will flash. Turn the knob clockwise to increase volume.
- (2) **Audio Signal Level Indicator:** Indicates the audio signal level.
- (3) **Sensitivity Adjustment:** Enables you to adjust the receivers sensitivity to ensures that no spurious noise is heard when there is no transmitter signal present.
- (4) **ACT Button:** Press to setup the transmitter frequency to match the receiver frequency.
- (5) **Scan Button:** Press to select the receivers frequency and to auto scan to ensure an interference free channel.
- (6) **Channel Indicator:** Display the channel selected for the receiver.
- (7) **Noise Indicator:** Indicates if there is interference present .
- (8) **RF Signal Level Indicator:** Indicates the RF signal strength at the receiver.

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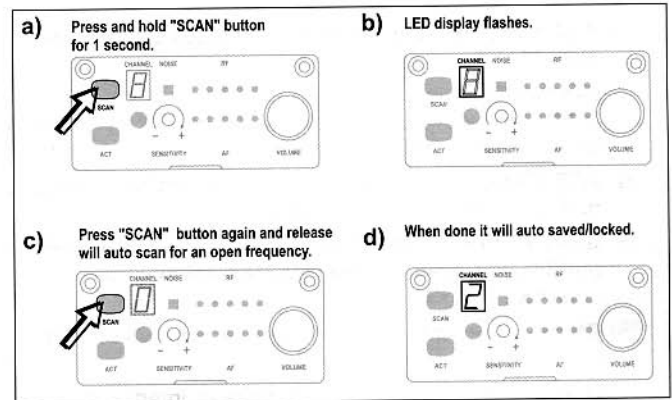
2. FREQUENCY AGILE OPERATION

(1) Overview:

- (a) This system incorporates an advanced PLL synthesized oscillator design and is reprogrammed with 16 user selectable frequencies.

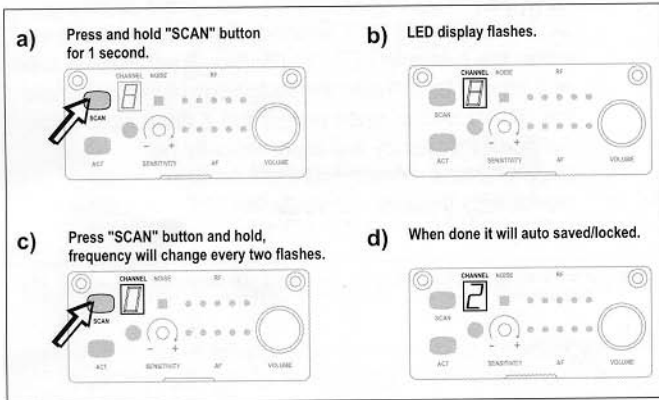
(2) Selecting a Frequency:

- (a) **Auto Scanning Frequency Set-up:** Hold down the SCAN button (5) for 1 second. Release the button when the numeric LED (6) flashes. It will flash a total of 6 times. To activate the AutoScan function, press the SCAN button once during the 6 flash sequence. An open frequency will automatically be saved/locked. *Note that the AutoScan function works only if accessed while the LED is flashing.



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(b) Manual Frequency Set-up: Hold down the SCAN button (5) for 1 second. Release the button when the numeric LED (6) flashes. It will flash a total of 6 times. To manually select any of the 16 preprogrammed frequencies, press the SCAN button and hold it down until the required frequency is selected. This frequency will then automatically be saved/locked.



(3) Change the channel when:

- (a) The existing channel is encountering interference.
- (b) You wish to select different channels for multiple system applications.

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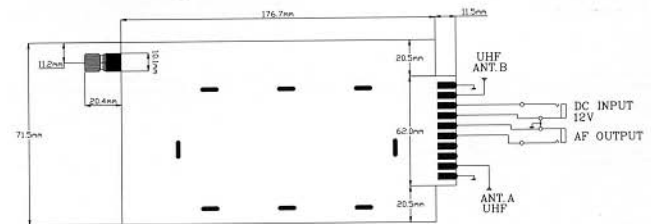
3. ACT BUTTON OPERATION

1. While holding the transmitter about 30 CM away from the receiver, point the "ACT" marking on the transmitter at the "ACT" button (4) on the receiver, as illustrated in diagram below.
2. Press "ACT" button (4) on the front panel of receiver once, and the system will then complete the "ACT" function.
3. Once the frequencies are synchronized and locked, the "ACT" function will disengage.



4. RECEIVER MODULE WIRING DIAGRAM

To install the receiver, simply follow the wiring diagram. Carefully align the edge connector and push the receiver module in to place. Then fasten the two locking screws.



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