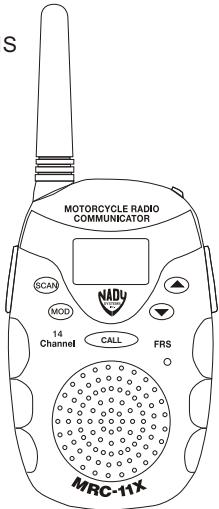


# COMMUNICATOR

MODEL MRC-11X  
OWNER' S MANUAL  
INSTALLATION AND  
OPERATING INSTRUCTIONS

PLEASE READ THIS  
OWNER' S MANUAL  
CAREFULLY BEFORE  
USE. KEEP FOR  
YOUR REFERENCE.



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## **1. General Description and Feature Summary.**

The MRC-11X provides low-cost, basic FRS.

**This solution also includes VOX (hands-free), auto dual channel transmit and receive, Stopwatch.** This solution applies

Die-Bonding EMC Micro-controller with built-in LCD driver. The hardware circuit provides excellent communication range and voice quality, and the software program has advanced and user-friendly features.

## **2. Advanced Feature**

- Multi-spec selectable FRS ( 14 channels ) ( 462-467 MHz )
- There are Six distinct Call tones to choose
- VOX (hand free) and Four - level voice activation adjusts for "VOX" use even with background noise.
- 
- Soft key Power on/off
- Auto dual channel receive and dual channel transmit
- Comander

## **3. Feature Summary**

- Battery power low indication on LCD.
- Six - level digital volume for speaker volume.
- Auto squelch.
- Auto Monitor and Manual Monitor.
- Power on beep tone.
- Beep tone for confirmation of key.

- Beep tone for confirmation of Transmit.
- Key lock on/off selectable.
- Backlight LCD.
- Dual Channel or Basic Channel selectable.
- Max 1.3 Minute per time for Transmit. (for Protect)
- Page / Calling button
- EEPROM for save data.
- Save data (last select before it is shut off)
- All Channel can to storing different CTCSS code.

#### 4. Keypad Assignment

**Set key** For Soft Key PowerON / OFF  
Press and hold key over 3s to turning on/off Radio  
To selecting data and exit setting mode , when setting mode.

**Mode key** Press into next function setting mode, set data  
Press and hold over 2s into setting mode

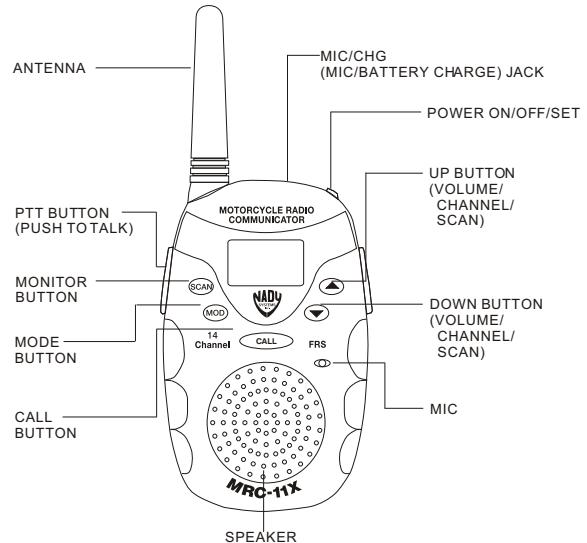
**Down key** Press and hold over 2s to setting VOX on/off  
Press to setting volume level  
Press to setting function data, when setting function mode

**Up key** Press to setting volume level  
Press to setting function data, when setting function mode  
Press and hold 2s to setting Key Lock on/off

**Call key** Press to calling

**Talk key** Press and hold to Transmit (talk mode)

**Scan key** Press to Manual Monitor.  
Press and hold key over 2s to scan channel



#### 5. Operation Manual

##### (1). Power on with soft key ON/OFF.

While the unit is on, press and hold **SET** key for over 2s to turning off and the unit will enter into off mode at the lowest power consumption.

While the unit is off, press and hold **SET** key for over 2s to turning on the unit.

##### (2). Talking to Another Party.

Send call and talk to other FRS radios set to the same channel.

Press and hold **TALK** key, Speak in a normal voice. After speaking, release **TALK** key, listen to another party's response.

### **(3). Receive incoming call (Standby Mode)**

When finished talking or in standby mode. (First set same channel)  
If have other FRS call, you can listen speak of other FRS.

### **(4). VOX (hand-free) feature.**

In standby mode, Press and hold **Down key** for over 2s to turn ON or OFF VOX hand-free.

The unit has four - level for choosing, adjusting for “VOX Hands-free” use even with background noise voice.

### **(5). Auto Monitor feature.**

When the signal you want to hear is consistently weak, you may place the radio in monitor mode. Then press the **SCAN** key to enter auto monitor mode.

To return normal operation, press mod ptt or call key.

### **(6). Auto squelch.**

This unit is equipped with auto squelch that can automatically shut off weak transmission and unwanted noise due to terrain conditions or if you reach range limit.

### **(7). Key lock feature.**

The purpose of the Lock function is to lock most keys to avoid accidental operation. In standby mode, press and hold **UP** key for over 2s to turn on Key Lock or Unlock.

### **(8). Call Another Party.**

To alert another party you wish to communicate with you.  
Press and release **CALL** key to call other FRS units with calling alert tone.

### **(9). Scan feature.**

Press and hold **SCAN** key for over 2s to start scan channel action in up direction.

While scanning, press **TALK** or **CALL** key to exit the scan mode and save channel number to basic channel.

### **(10). Digital volume control.**

Press **UP** key to increase the volume of the speaker output with 6-level LCD indication.

### **(11). Stopwatch feature**

To enter stopwatch mode, press and hold **CALL** key for over 2s.

In this mode, only **CALL** and **TALK** key will have response. In stopwatch mode, press **TALK** key to start count, press **TALK** key again to stop. While stop count, press **CALL** key to reset counter, press **TALK** key continue start count. While run count, press **CALL** key to LCD display on hold, press **CALL** key again continue LCD display.

Press other keys to exit stopwatch mode and go to each other mode.

### **(12). Change basic channel.**

Press and hold **MODE** key for over 2s to enter function setting. First to set channel number. Press **UP** key to change to next Channel.

Press **DOWN** key to change to lower channel. Press **MODE** key to set selected data and enter next function set mode. Press **SET** key to set selected data and exit set mode.

Press other key to exit set mode.

### **(13). Function setting.**

For all function set mode:

Press **MODE** key to save set number and enter next set mode.

Press **SET** key to save set number and exit set mode. Press **UP** key or **DOWN** key to change set number or status.

Press other key to exit set mode.

While the unit is in standby mode, press and hold **MODE** key for over 2s to enter set mode, allows choose between five different modes to set:

Basic channel, VOX level, Dual channel scan ON or OFF, second channel, radio ON/OFF.

Press and hold **MODE** key for over 3s to set Basic channel, press **UP** key to increase number, press **DOWN** key to decrement/decrease number. Press **MODE** key to save Basic channel. Press **MODE** key again to set VOX level. Press **MODE** key again to save VOX level and to set Dual channel scan ON or OFF.

While the unit is set to Dual channel scan ON, press **MODE** key again to save Dual channel scan ON status and to set second channel. While the unit is set to Dual channel scan Off, Press **MODE** key again to save Dual channel scan OFF status

While the unit is setting second channel, press **MODE** key again to save second channel. Press **DOWN** key to choose the radio **ON/OFF**, press **SET** key to save the setting.

## 6. Setting Transmit output power, calling tone type and market spec

Press and hold “S” set key & “Scan” key for over 2 s, the unit is LCD on and enter user setting mode, when the unit is power off.

### (1). Setting Transmit output power.

Press “Talk” key enter set transmit output power: L=0.5Watts, H=2.2W, when this is user setting mode. Press “▲” Up key and “▼” Down key to choose level of transmit output power. Press “S” set key to save set data and into user setting mode, press “S” set key again, exit user setting mode and the unit enter power off.

### (2) Setting calling tone type.

Press “Calling” key into choose calling tone type, when this is

User setting mode. Press “▲” Up key and “▼” Down key, choose calling tone type : 1 … 6 .Press “S” set key to save set data and into user setting mode, press “S” set key again, exit user setting mode and the unit enter power off.

**Warning:** Changes or modifications to this unit not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

**Note:** This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications.

However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

***Safety Information:***

Your wireless hand-held portable transceiver contains a low power transmitter. When the Push-to-Talk (PTT) button is pushed it sends out radio frequency (RF) signals. In August 1996, the Federal Communications Commissions (FCC) adopted RF exposure guidelines with safety levels for hand-held wireless devices. **Important:** To maintain compliance with the FCC's RF exposure guidelines, hold the transmitter and ANTENNA at least 2 inches (5 centimeters) from your face and speak in a normal voice, with the ANTENNA pointed up and away from the face. Use only the supplied ANTENNA. Unauthorized antennas, modifications, or attachments could damage the transmitter and may violate FCC regulations.