# ROBYN HI-LOW BANDER MODEL 8+8/16

## INSTRUCTION BOOK SCANNING MONITOR RECEIVER



#### GENERAL DESCRIPTION

Robyn's new Hi-Low/FM scanning monitor receives sixteen (16) fixed crystal frequencies, in two (2) bands, eight (8) are in the 144–174 MHz. band and eight (8) are in the 75 – 88MHz. band. Exclusive front panel switches allow the user to use both bands simultaneously, or individually, whichever the case might be.

- 1. Robyn's exclusive 16 crystal load capacity gives various combinations between Hi and Low band frequencies.
- 2. Scanning is performed automatically or manually.
- 3. Our new dimmer switch will increase or decrease the brightness of the scanning lamps. A must for mobile operation.
- 4. The Robyn Hi-Low Bander will operate from 12 volts DC or 220 volts AC. Both cords are included.
- 5. Our built-in swivel antenna will allow you to position your antenna in any direction for best results. A 32 inch antenna which is retractable is another feature not found in any other set. The external antenna jack will allow you to use your standard mobile antenna while mobiling.
- The Robyn Hi-Low Bander has its own built-in speaker but if needed, you can install your own external speaker.
   An external speaker jack is provided at the rear of the set.
- Switches located above your channel lights will enable you to pick either Hi band frequencies or Low band frequencies or combination of both.
- 8. The four extra pilot lamp caps blue, yellow, white and green can be installed in place of the red caps which are standard at the factory. This will make a "on the spot" color identification from a distance.
- 9. To get LOW TONE, just pull the Squelch Control Knob towards you. TONE CONTROL SWITCH will give you HIGH TONE when kept in the original position.
- 10. Six (6) intergrated circuits, Thirty two (32) silicon Transistors Thirty six (36) diodes assure extreme sensitivity and reliability.
- 11. This Monitor is designed for negative grounding only.

### **CRYSTAL INSTALLATION**

Suitable crystals must be installed before operation.

To install crystals:

- 1. Remove two lock screws. Each side bottom cabinet.
- 2. Install crystals in the sockets according to the channel numbers. Be careful not to bend crystal pins.

IMPORTANT: CRYSTALS HAVE TO BE SELECTED CAREFULLY IN ACCORDANCE WITH THE BASIC RECEIVING FREQUENCY:

Low Band
Crystal frequency = 
$$\frac{\text{channel frequency} + 10.7 \text{ MHz}}{2}$$
High Band
Crystal frequency = 
$$\frac{\text{channel frequency} - 10.7 \text{ MHz}}{3}$$

\*\* It is recommended that you will have your dealer install or replace crystals.

Your Robyn Hi-Low Bander is shipped without crystals. Your dealer should have stock covering the standard frequencies for your area. If there is no dealer in your area and you wish to purchase crystals covering any channel in the 144 MHz-174 MHz band or 75 MHz-88 MHz band, please write us direct. Your cost will be US\$5.00 pre-paid direct from the factory. Approximately 10 days delivery.

## INSTALLATION

A) Mobile station:

B) Fixed base station:

To install The Robyn Hi-Low Bander in your automobile, follow these directions:

- 1. Select the best place to mount the set.
- 2. Fix the mounting bracket to the selected points.
- 3. Hold the set on the bracket tightening the two screws at the both ends of the bracket.
- To use the car antenna, insert the Motorola type plug into the External Antenna Jack on the back of the set.

Note: Make sure to extend the car antenna about 32 inches to be equivalent to a built-in antenna. \*\*See your dealer when you wish to use any other type antenna.

5. Plug in DC cord to the set.

Connect Red (Plus) cord with Plus (+) Pole of the car battery (12V) and Black (Minus) cord with Minus (-) Pole.

6. Be sure to observe the polarity, otherwise your set may be damaged.

To use Hi-Low Bander as a fixed base station, follow the instruction below.

- 1. Pull out the built-in swivel antenna to its full length.
  - 2. Set the antenna in the best direction after the trial operation
  - 3. Connect the AC power cord to your set first, then plug it into the power outlet.

Built-in swivel antenna is good enough to get satisfactory efficiency in the area of high signal strength.

When the set is used in areas of low signal strength, use a Ground Plane Antenna or ask your dealer what type of antenna to use.

## **OPERATION**

A. Preparation	<ol> <li>Be sure AC or DC cord is properly plugged in.</li> <li>Turn your set on with the volume control.</li> </ol>	
B. Automatic scanning	<ol> <li>Set the Slide Switch (left side on the front panel) to the position "8+8" or "16" according to the type of scanning desired.</li> <li>Turn the "SQUELCH" control counter clock-wise until scanning stops.</li> <li>Turn the VOLUME knob further until you get adequate sound volume.</li> <li>Turn the "SQUELCH" knob clock-wise gradually until the sound fades out.</li> </ol>	
C. Manual scanning	<ol> <li>Set the Slide Switch on the position of "MANUAL".</li> <li>Push "CH. SELECT" Switch for desired channel to monitor.</li> </ol>	
D. Skipping	To skip unnecessary channels, push down the individual switches under the channels which are not desired.	
E. Tone switch	Pull the "SQUELCH" knob towards you when you prefer Lower Tone. Leave the "SQUELCH" knob in the original position when higher tone is preferred.	
F. Band Indicator	Exclusive front panel band indicator lights permit instant visual identification of which band is being received.	
G. Delay switch	A 1.5 Second Delay Switch is mounted on the back side of your scanner. This switch will allow you to hear both sides of the conversation when both stations are on the same frequency.	
H. 8+8/16 scanning	This Robyn Scanner will automatically scan 16 channels when the front panel slide switch is moved from 8+8 to 16. (First one band will scan, followed by the other.) At this point the band programming switches are not in the circuit, and therefore it is not necessary to	
	position these switches. It must be noted when scanning 16 channels that each lock-out switch will control two frequencies, locking out one high band crystal and one low band	

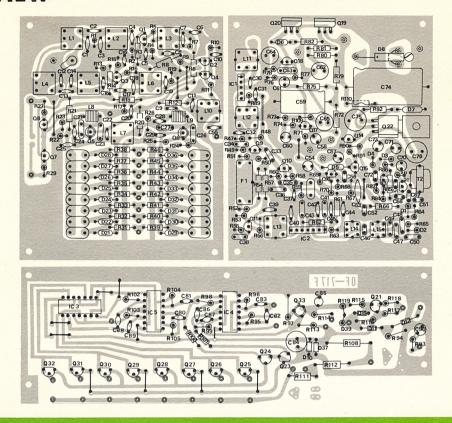
# **SPECIFICATION**

I.F. Frequency  $\,\cdots\,$  1st 10.7 MHz 2nd 455 KHz

crystal.

Frequency Range	AF Out Put Power (10% dist.) 2.5 Watts
Low Band · · · · · · · 75–88 MHz	(maximum) 5 Watts
High Band 144–174 MHz	Antenna Built-in Swivel Antenna
Frequency Separation	50 ohm external Antenna
Low Band	Semiconductor
Sensitivity	Power Supply DC 13.8V, AC 220V  Power Consumption DC 10 Watts maximum
Low Band $\cdots \cdots (20 \text{dB NQ}) \ 0.5 \mu\text{V}$ High Band $\cdots \cdots (20 \text{dB NQ}) \ 0.7 \mu\text{V}$	AC 15 Watts maximum Dimension W 200mm (8") H 95mm (3-4/5")
Squelch Sensitivity (Threshold)	D 210mm (8-2/5'')
$\begin{array}{cccc} \text{Low Band} & & & 0.3 \mu\text{V} \\ \text{High Band} & & & 0.5 \mu\text{V} \\ \text{Selectivity} & & 6 \text{dB} \pm 7 \text{ KHz} \\ & & & 50 \text{dB} \pm 20 \text{ KHz} \end{array}$	Weight
Frequency Deviation ±5 KHz	

## **TOP VIEW**



## SCHEMATIC DIAGRAM

