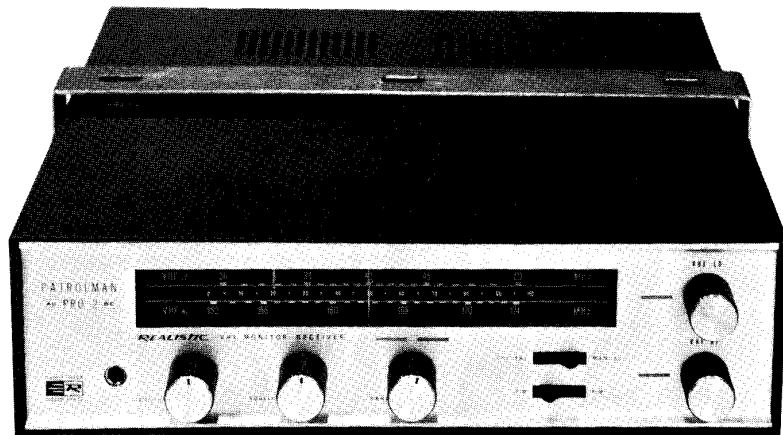


**REALISTIC<sup>®</sup>**  
**Patrolman<sup>™</sup>**  
**pro-2**

**LOW-HIGH VHF SOLID STATE MONITOR COMMUNICATION RECEIVER**



**No. 20-160**

**REALISTIC<sup>®</sup> PATROLMAN PRO-2 LOW-HIGH VHF  
 SOLID STATE MONITOR COMMUNICATION RECEIVER**

The Realistic Patrolman<sup>™</sup> Pro-2 VHF Solid State Monitor Communication Receiver is both tunable and crystal controlled through the range of 30-50 and 152-175 Mhz. It is a completely self-contained unit, that operates from either 117VAC 50/60 cycles or 12VDC negative ground power supply. Features: built-in monitor speaker; 30 semiconductors; separate front end tuners for each band; automatic noise limiter; OTL output; zener stabilized power supply; automatic frequency control; plus many others.

**TRANSISTOR**

**& DIODE COMPLEMENT:**

18 Silicon Transistors, 8 Diodes, and 2 Thermistors

Transistors

6 Front End Transistors  
 2 Crystal Oscillator Transistors  
 3 I.F. Amplifier Transistors  
 1 Limiter Transistor  
 1 Squelch Transistor  
 4 AF Amplifier Transistors  
 1 AGC Amplifier Transistor

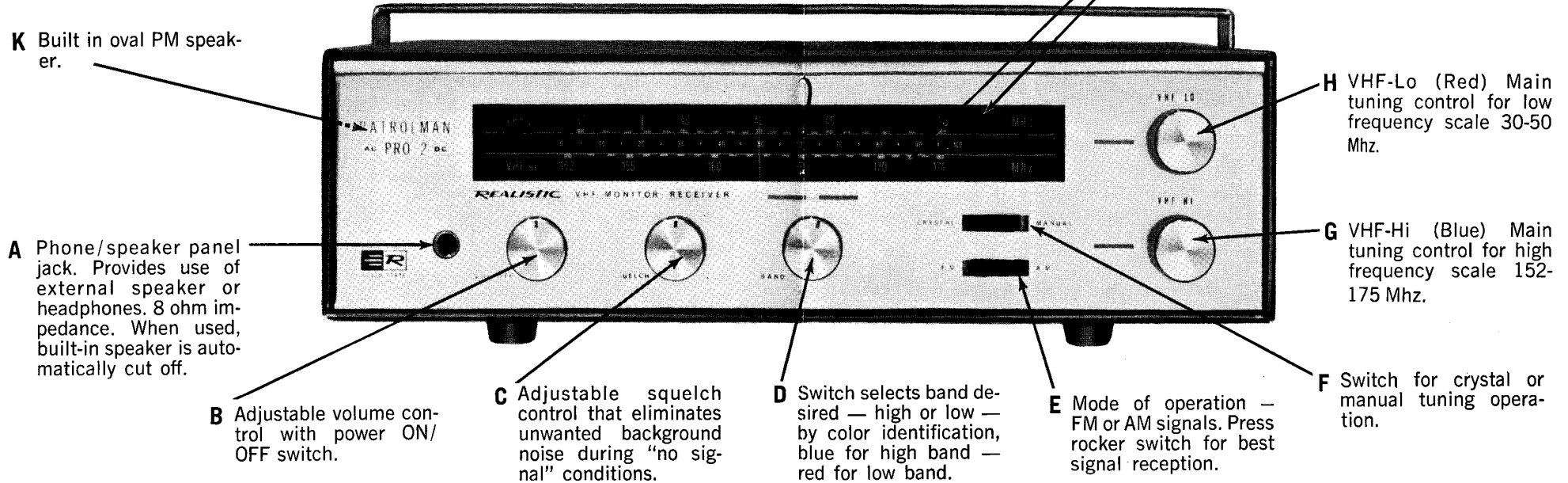
Diodes

1 ANL Diode  
 2 AM Diodes  
 2 FM Diodes  
 1 Zener Diode  
 2 Rectifier Diodes

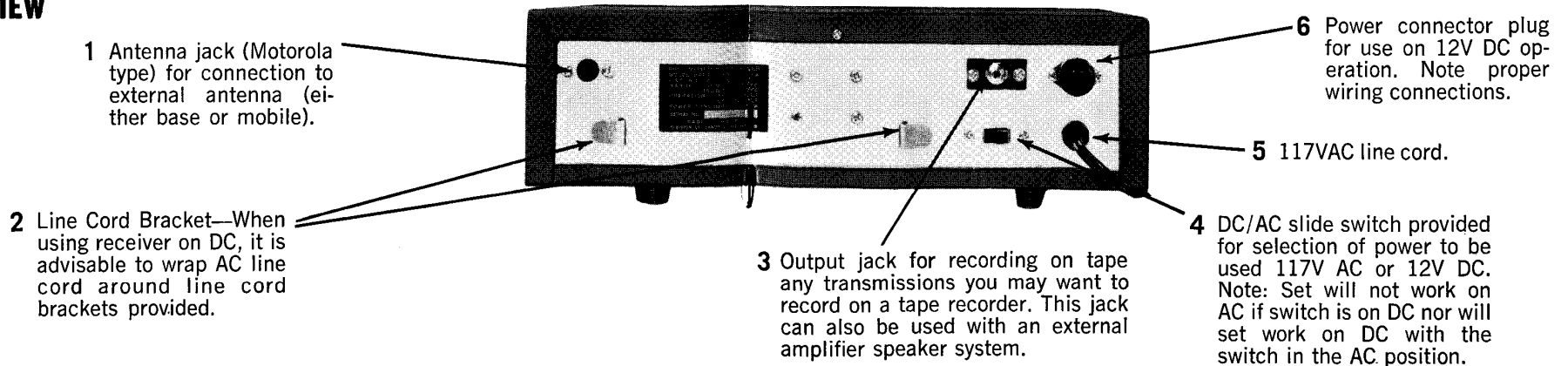
**PRODUCT OF RADIO SHACK<sup>®</sup>**  
 DIVISION OF TANDY CORPORATION

# Patrolman pro-2™

## DUAL-BAND SOLID STATE VHF MONITOR COMMUNICATION RECEIVER Operational Characteristics of Each Control



## REAR VIEW



## DESCRIPTION:

The Patrolman™ Pro-2 receiver can receive both AM and FM signals. This is done by depressing a "rocker" switch to either the AM or FM mode on the front panel. If in doubt as to the mode, place this switch in the position which results in best reception at the center of carrier.

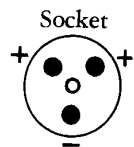
An output jack (rear panel) can be used for either tape recording transmissions or for feeding the input of an external amplifier.

A phone/speaker jack mounted in the front panel allows the use of an external phone/speaker. When using this jack, the built-in speaker is automatically shut-off. An ideal external speaker is the Realistic Model SP-150, Cat. No. 20-1500.

This unit has an adjustable squelch control that eliminates background noise in the absence of a signal. When adjusting the control, rotate it clockwise until background noise is barely audible. The squelch circuit is completely electronic and does not use relays.

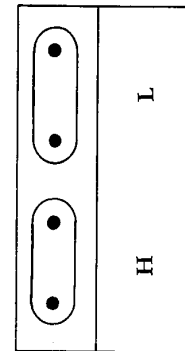
For satisfactory performance an antenna of no less than 8 ft. can be used. However, for best results, the antenna should be specifically designed for the desired frequency. A matching dual band antenna is available from Radio Shack, Cat. No. 20-015.

## DC OPERATION



An AC/DC slide switch is located on the rear panel. When in the DC position, the switch disables the AC power supply and connects the DC power to the socket on the back panel. A plug is included for connection to a 12VDC supply or to the Realistic portable 12 volt battery pack, Cat. No. 20-1501.

## CRYSTAL OPERATION\*

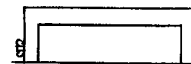


There are provisions for crystal control operation on both the 30-50 and 152 to 175 Mhz band. Crystal control operation is desirable whenever the receiver is set to a single frequency for a long period of time as it eliminates the necessity of critical tuning and also compensates for any slight frequency drift that may occur.

Crystal sockets are provided inside the unit. Unscrew plate on bottom of the cabinet to insert crystals. To receive high or low band signal on crystal control, insert crystal into the proper socket (H = high band, L = low band), depress crystal/manual switch in crystal position, place band switch into either red (low band) or blue (high band) position, and tune the signal present for maximum volume. If there is no signal present, there will be an increase in background noise or sensitivity as the receiving frequency as determined by the crystal is reached when dial is tuned to this frequency.

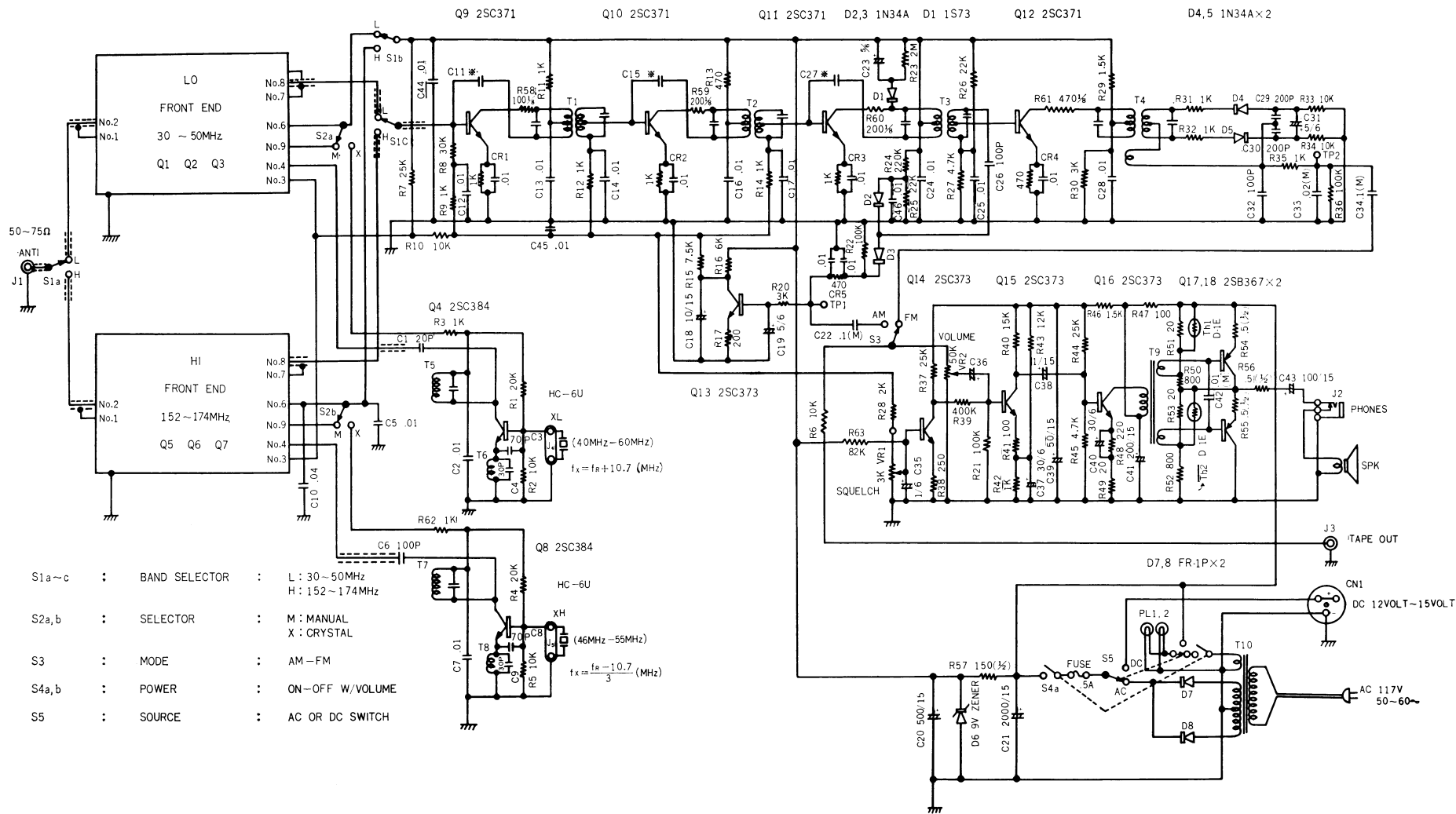
Both crystal sockets are marked with identification for low or high band operation.

## MOBILE INSTALLATION



A bracket is provided for mobile mounting. The most practical location would be under the dashboard of an auto or truck. A series of holes are provided in the bracket so that advantage can be taken of various combinations of matching holes on the vehicle dashboard.

\* When ordering crystals, specify model number of set and the frequency you wish to receive. Send order to our Radio Shack Warehouse, 2615 West 7th Street, Fort Worth, Texas. Allow 3 to 4 weeks delivery, order crystals under catalog No. 20-001.



- S1a~c : BAND SELECTOR : L : 30~50MHz  
H : 152~174MHz
- S2a,b : SELECTOR : M : MANUAL  
X : CRYSTAL
- S3 : MODE : AM-FM
- S4a,b : POWER : ON-OFF W/VOLUME
- S5 : SOURCE : AC OR DC SWITCH

# SCHEMATIC DIAGRAM