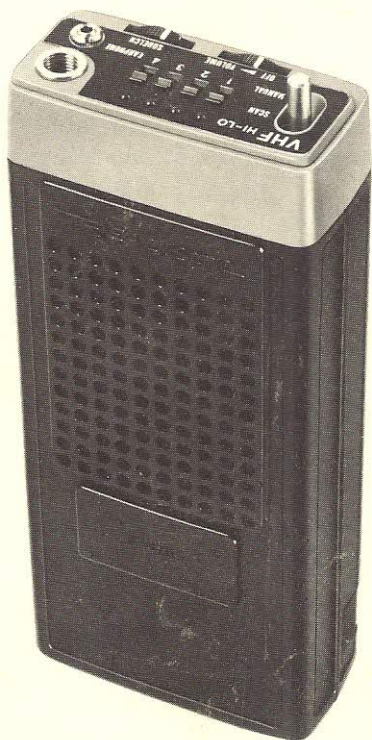


POCKET-SCAN FM Monitor Receiver

Dual Band : 30—50 & 144—174 MHz



PRO-20

**OWNER'S
MANUAL**

PLEASE READ BEFORE
USING THIS EQUIPMENT

REALISTIC[®]

**CAT. NO.
20-101**

CUSTOM MANUFACTURED FOR RADIO SHACK



A DIVISION OF TANDY CORPORATION

Your Realistic Pocket Scan FM Monitor Receiver will let you follow the "action bands" wherever you go. The compact unit is capable of scanning any four frequencies in the VHF Hi and Lo bands. That means you can receive police, fire, civil defense, radio telephone, National Weather Service and many other public service channels. Just obtain the correct crystals for the channel(s) you wish to monitor and plug them in. (Your Radio Shack salesperson can help you determine which crystals to buy for your needs and interests.)

The PRO-20 has many special internal features you can't see from the outside—but they sure make a difference in the performance!

- Sensitive, dual-conversion superheterodyne circuit
- One crystal filter and one ceramic filter for superior selectivity
- Built-in scan delay to prevent missed callbacks
- Stable and dependable solid-state circuitry, including 2 ICs, 14 Silicon Transistors, 16 Diodes and 4 LEDs

And there are plenty of convenience features, too:

- Selectable automatic or manual scanning
- Individual channel lockout switches so you can skip over any channel(s) you're not interested in monitoring
- LED channel indicators
- Two screw-in antennas, one short for convenient use anywhere, the other longer for optimal reception
- Earphone and earphone jack for private listening
- Recharger jack for use with Nickel-Cadmium batteries
- External power jack so you can operate the Pocket Scan from an external source of 6-volt DC negative ground power

For your own protection, we urge you to record the Serial Number of this unit in the space provided. You'll find the Serial Number on the back of this unit.

Serial No.

839496

RADIO SHACK LIMITED WARRANTY

This equipment is warranted against defects for 1 year from date of purchase. Within this period, we will repair it without charge for parts and labor. Simply **bring your sales slip** as proof of purchase date to any Radio Shack store. Warranty does not cover transportation costs. Nor does it cover equipment subjected to misuse or accidental damage.

This Warranty gives you specific legal rights and you may also have other rights which vary from state to state.

We Service What We Sell

WARNING

The PRO-20 is designed to operate from four penlight (AA) batteries (connected in series), or an external source of +6 volts DC (**negative ground**). If it fails to operate, and there is no clear reason for the failure, first check the batteries. Before you try connecting the PRO-20 to an external 6-volt DC power supply, check the voltage polarity. **Attempting to operate the negative ground PRO-20 from a positive ground electrical system, may damage it.** The Radio Shack warranty does not apply to any damage caused by improper power connections or other damage caused by misuse, or neglect.

SPECIFICATIONS

CHANNELS OF OPERATION:	Four—as determined by any one of 4 crystals operating in the frequency range
FREQUENCY RANGE:	30 to 50 MHz and 144 to 174 MHz
FREQUENCY COVERAGE:	VHF Lo 6 MHz for maximum sensitivity (40 MHz \pm 3 MHz) VHF Hi 8 MHz for maximum sensitivity (153MHz \pm 4 MHz)
SENSITIVITY:	Better than $1\mu\text{V}$ for $(S+N)/N=20\text{dB}$
SELECTIVITY:	± 9 kHz, -6 dB ± 17 kHz, -50 dB
MODULATION ACCEPTANCE:	± 7 kHz
I.F.:	10.7 MHz and 455 kHz
FILTERS:	10.7 MHz Crystal Filter and 455 kHz Ceramic Filter
SQUELCH SENSITIVITY:	Variable from less than $1\mu\text{V}$
SCANNING SPEED:	6 channels/second
DELAY TIME:	1 to 3 seconds
AUDIO POWER:	150 mW
POWER REQUIREMENTS:	+6V DC (negative ground only) Current drain: 40 mA (Squelched) 100 mA (full volume, unsquelched)
SEMICONDUCTOR COMPLEMENT:	2 Integrated Circuits 14 Silicon Transistors 16 Diodes 4 Light Emitting Diodes (LED's)
SPEAKER:	2" (5cm), 16 ohm, Permanent Magnet, dynamic type
ANTENNAS:	Telescopic and flexible types 24-3/4" (63cm) 7-3/4" (19.5cm)
CRYSTAL REQUIREMENTS:	Standard HC-25/u 3rd overtone

PREPARATION FOR USE

To use your POCKET-SCAN, you must do three things:

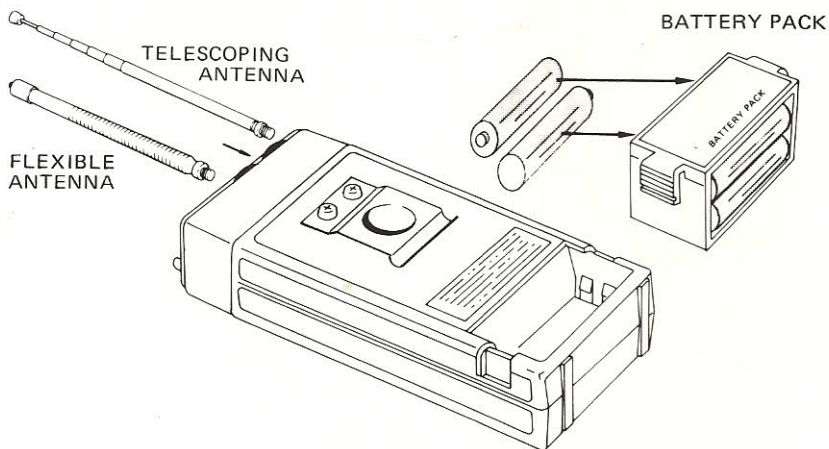
- Install the batteries
- Connect one of the antennas supplied
- Install 1, 2, 3 or 4 crystals

To install the batteries, turn the receiver face down, press in firmly on both sides of the section marked BATTERY PACK, and lift the compartment up and away.

Remove the battery pack. Insert four AA batteries, one at a time, making sure the polarity markings inside the battery pack match up (+ to + and - to -) with markings on the batteries.

We recommend that you use rechargeable Nickel Cadmium AA batteries, Radio Shack Catalog Number 23-125, or AA Alkaline ENERCELLS, Catalog Number 23-552.

Press the Battery Pack into place (press sides of Battery Pack inward to snap it back into the case).



Two antennas are provided with the PRO-20: a flexible "rubber duck" antenna and a telescoping one. The flexible antenna is for use in cramped areas or wherever a longer antenna would get in the way. The telescoping antenna is for obtaining the very best possible reception from your receiver. The telescoping antenna must be extended fully for proper operation.

