

**RF-1941/
RF-1940 SERIES
HF MANPACK,
PORTABLE DIPOLE
ANTENNA**



The RF-1941/RF-1940 Series are lightweight, portable dipole antennas designed for use in the 2 to 30 MHz range with a maximum power of 500 Watts. The antenna is stored on self-contained flat spools, which form an integral part of the antenna. During operation, unwind to frequency marker and deploy; the unused portion remains on the storage spool. Each spool also contains throwing line that can be connected to masts, trees, buildings, poles, etc.

The RF-1941/RF-1940 Antenna series can be connected directly to the AN/PRC-138, AN/PRC-150, or RF-5800H manpack, using the manpack's built-in antenna coupler for ALE operation. The antenna design can be configured as a dipole, sloping dipole, sloping V, or as a vertical rhombic antenna depending on support and terminations (none are supplied). It includes a 10-meter, 50Ω coaxial cable with BNC male connectors. A BNC-to-Type N adapter is also included. The RF-1941 is completely contained in a heavy duty 6" x 12" x 3" OD bag with strap and clip points to attach to a military ruckpack. The RF-1941 is more rugged than the low cost RF-1940.



Electrical

- **Frequency Range**
 - 2.0 to 30 MHz (RF-1941)
 - 3.0 to 30 MHz (RF-1940)
- **RF Power Capacity**
 - 500 Watts (2.0 MHz to 30 MHz)
- **Input Impedance**
 - 50 ohms (nominal)
- **Radiation Pattern**
 - See below
- **Polarization**
 - Horizontal (Dipole Configuration)
- **VSWR**
 - <1.5:1
- **Gain**
 - 6 to 6 dBi depending on mounting configuration and frequency

Environmental

- **Temperature**
 - Operating; -25° to +55°C
 - Storage; (-40° to 70°C)
- **Relative Humidity**
 - 0 to 100%

Mechanical

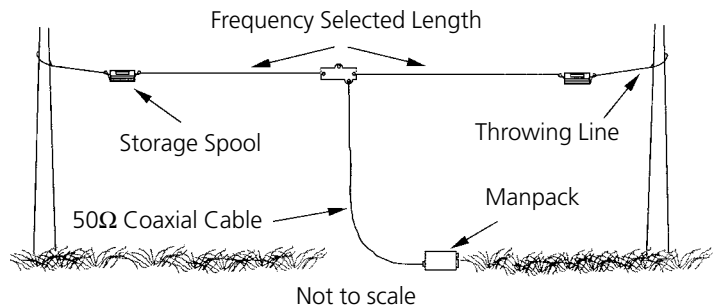
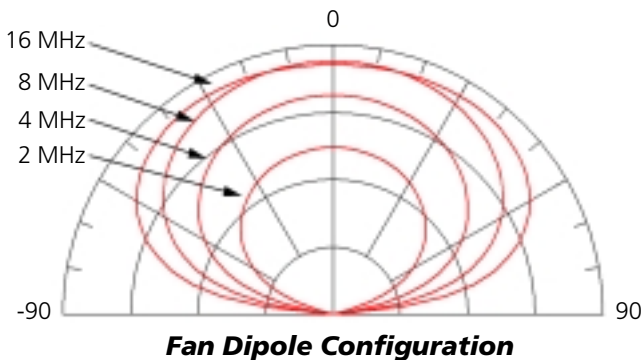
- **RF Connector**
 - BNC, male (BNC-to-Type N Adapter included)
- **RF Coaxial Cable**
 - RG-58 (10 meters)
- **Deployed Dimensions**
 - 74.6 m, fully extended (RF-1941)
 - 46.4 m, fully extended (RF-1940)
 - 34 cm x 17 cm x 7 cm, stored
- **Weight**
 - Approximately 2.3 kg (5.0 lbs)
- **Color**
 - Olive Drab Green

Features

- Reconfigurable
 - Dipole
 - Sloping dipole*
 - Sloping V*
 - Vertical Rhombic*
- Compact storage on custom bag (RF-1941)
- Light weight/Small package
- Low-cost (RF-1940)
- Compatible with ALE when radio has tuner

* Termination resistors not included

Radiation Patterns Over Average Ground



Specifications are subject to change without notice.

