HARRIS®

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RF-1936 (AS-2259/GR)/ RF-1938

PORTABLE CROSSED DIPOLE ANTENNA

for NVIS (near vertical incidence skywave) communications



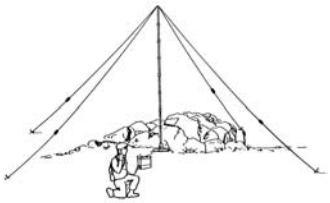
The RF-1936/38 Series of antennas are man-portable and rapid-deployable for NVIS communications.

The NVIS communication mode is for paths from 10 to 400 km. This communication mode is particularly useful in mountainous, heavily wooded terrain, or dry sandy soil where groundwave is limited. The RF-1936 is used for general purpose NVIS communication links out to 400 km; while the RF-1938 is designed for the hard to close 10 to 200 km links.

These lightweight antenna systems are easily carried and installed by two people in five minutes (RF-1936) or 15 minutes (RF-1938). The sectional mast is a low loss coaxial feed line to feed unequal length crossed dipole radiating elements. The radiating elements are attached to guy ropes that provide mast support. The entire antenna stows within a small canvas bag. The RF-1938 has a second set of coaxial masts and guy lines which stow within a second canvas bag.



Specifications for the RF-1936/RF-1938



Typical Installation of an RF-1936

Electrical

- **Frequency Range**
  2 to 30 MHz with antenna coupler
- **RF Power Capacity**
  400 Watts
- **Input Impedance**
  Compatible with RF-5800H internal coupler and RF-382 Antenna Couplers
- **Radiation Pattern**
  Azimuth: omnidirectional
  Elevation: see radiation patterns below
- **Polarization**
  Horizontal for the RF-1936 or a RF-1938
  Vertical if used with the monopole conversion kit option
- **VSWR**
  In accordance with RF-5800H internal coupler and RF-382 Antenna Couplers
- **Gain**
  See radiation patterns below

Environmental

- **Temperature**
  Operating –40˚ to +55˚ C
  (–40˚ to +131˚ F)
  Storage: –60˚ to +70˚ C
  (–76˚ to +158˚ F)
- **Wind**
  RF-1936: 60 mph (96 kph) with no ice

Mechanical

- **RF Connector**
  Side feed with wing nut
- **Dimensions**
  Stowed:
  RF-1936: 1 bag 26" long x 7" dia.
  RF-1938: 2 bags 26" long x 7" dia.
  Deployed: RF-1936 – 61 by 61 ft.
- **Finish**

RF-1936P-10	CARC 383 Green
RF-1936P-30	Semi Gloss Green
RF-1936V-10	CARC 383 Green
RF-1936V-30	Semi Gloss Green
RF-1938AT-10	CARC 383 Green
RF-1938AT-30	Semi Gloss Green

- **Weight**

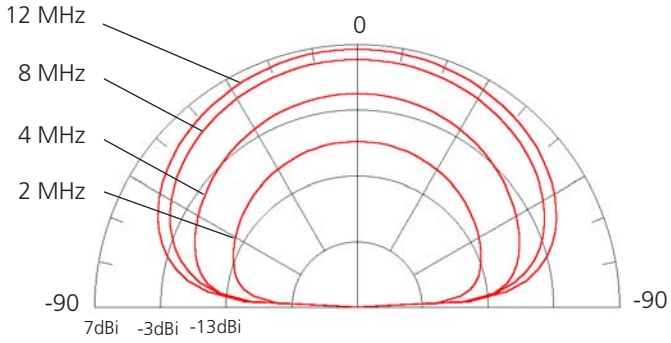
RF-1936:	15 lb.
RF-1938:	27 lb.

- **Height**
  RF-1936: 15 ft. (4.6 m)
  RF-1938: 27.9 ft. (8.6 m)
- **Installation Time**
  RF-1936: 5 min. with 2 people
  RF-1938: 15 min. with 2 people

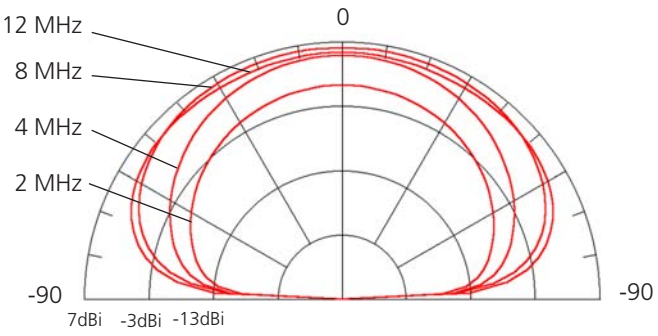
Options

- Monopole Conversion Kit:
  RF-1938-AT003 (convert RF-1936/38 to top loaded monopole)
- Vehicular Antenna Adapter: RF-1936-01 (included with the RF-1936V)
- Mounting Plate for flat surface:
  RF-1936-02 (included with the RF-1936P and RF-1938AT)

Radiation Patterns Over Average Ground



2, 4, 8, 12 MHz Patterns for the RF-1936 Antenna



2, 4, 8, 12 MHz Patterns for the RF-1938 Antenna

Specifications are subject to change without notice.

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RF Communications Division | 1680 University Avenue | Rochester, NY USA 14610
www.harris.com 1-585-244-5830

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