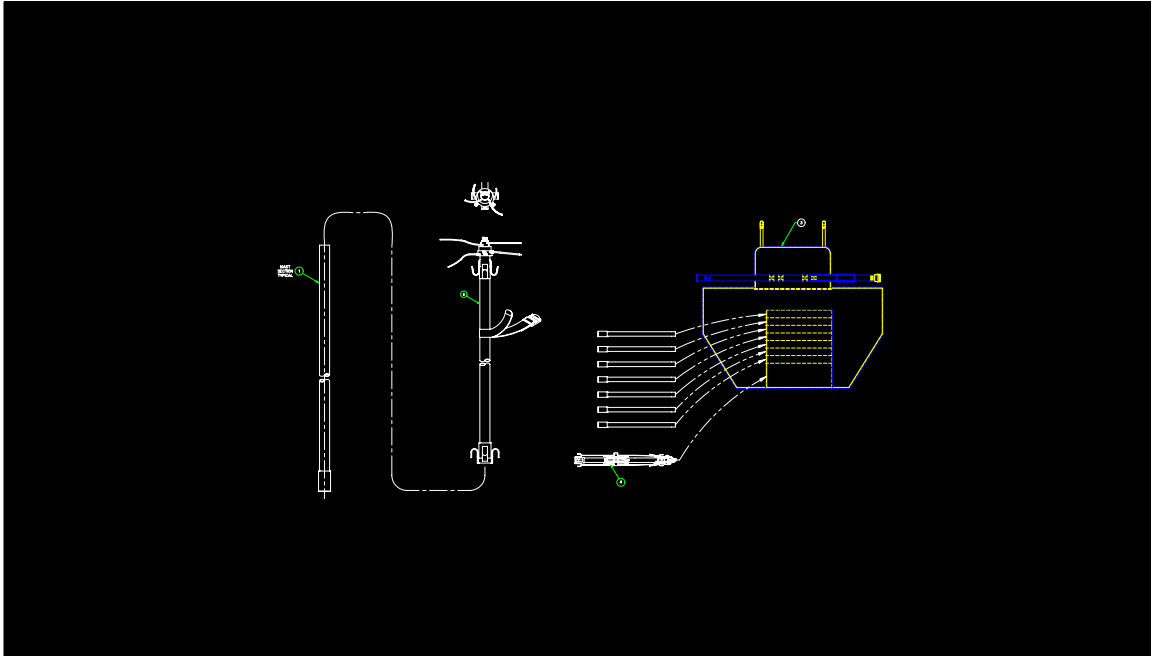


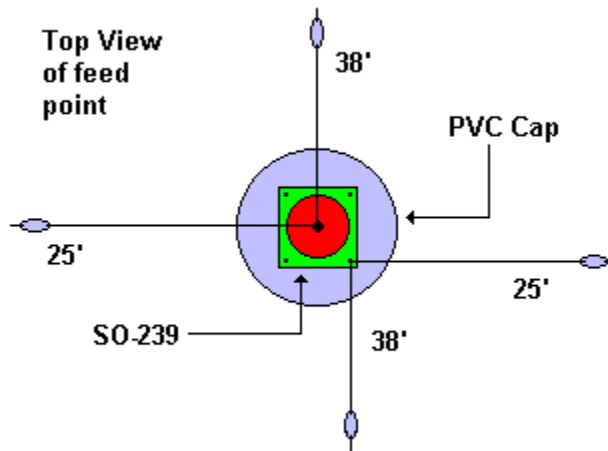
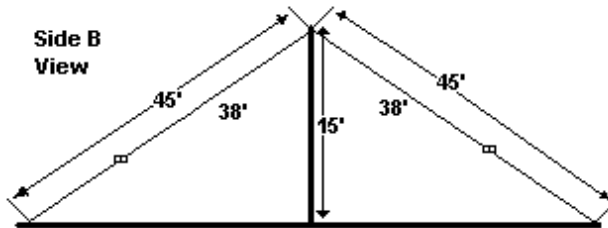
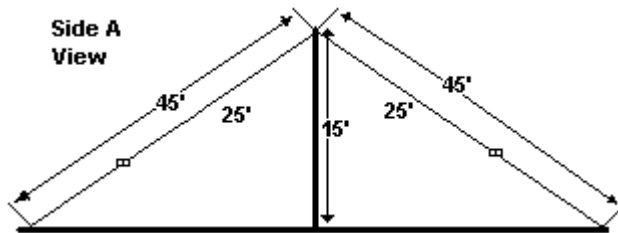
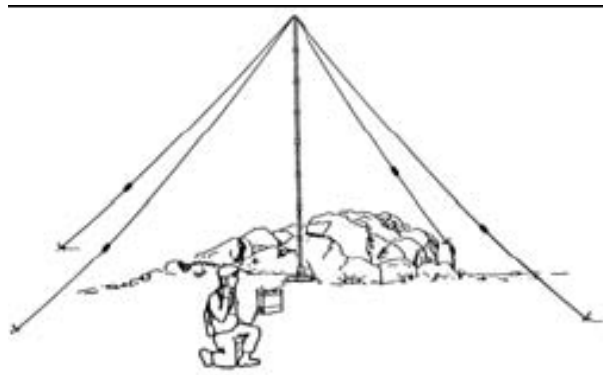
SB-400 HF Antennas



SB-400

The SB-400 Series of antennas are man-portable and rapid-deployable for HF communications. The HF ANTENNA 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 ground wave is limited. The SB-400 is used for general purpose HF communication links out to 400 km; while the SB-400 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 (SB-400) or 15 minutes (SB-400). 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 SB-400 has a second set of coaxial masts and guy

SB-400 ANTENNA



**PORTABLE CROSSED
DIPOLE ANTENNA
Electrical**

Frequency Range : 2 to 30 MHz with antenna coupler

RF Power Capacity : 400 Watts

Input Impedance	: 50 OHM with Compatible Antenna Couplers
Radiation Pattern	: Azimuth: omnidirectional Elevation: see radiation patterns below
Polarization	: Horizontal for the SB-400 or a Vertical if used with the monopole conversion kit option
VSWR	: In accordance with Antenna Couplers
Gain	: See radiation patterns below

Mechanical

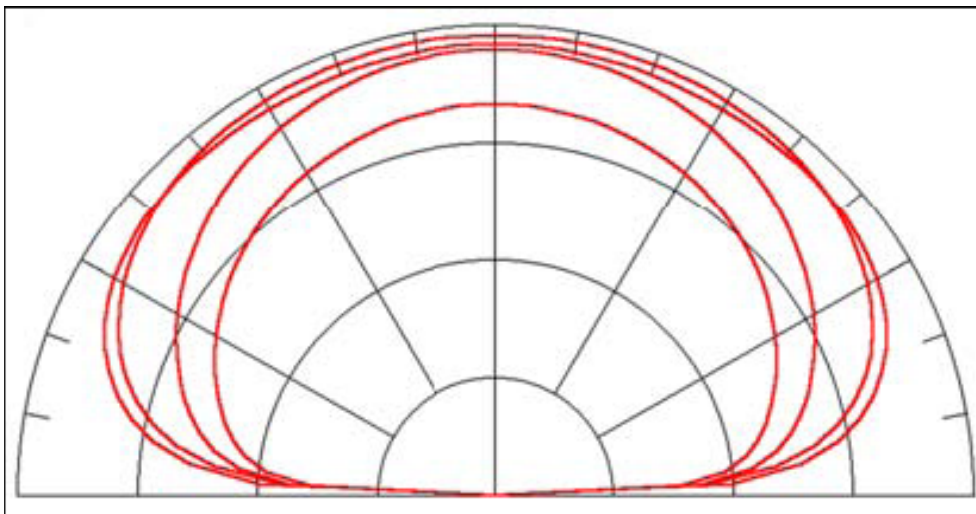
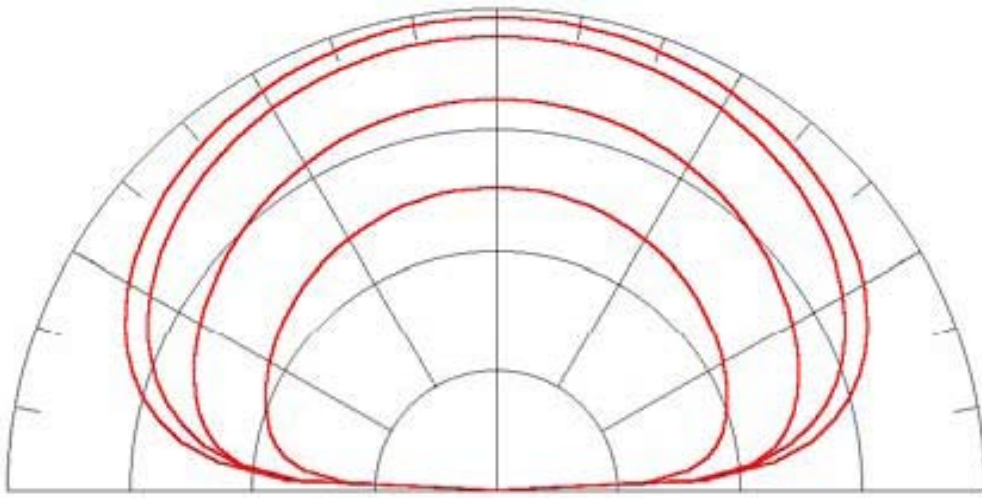
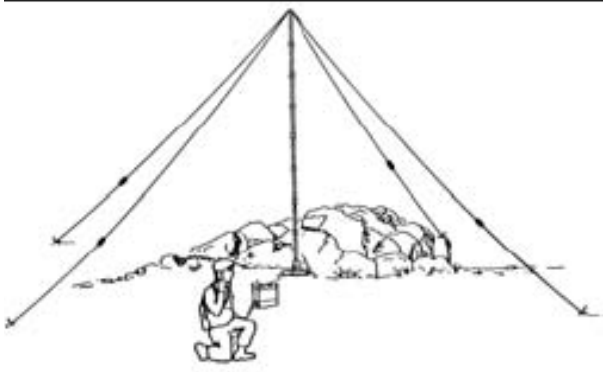
RF Connector	: Side feed with wing nut
Dimensions	: Stowed: RF-1936: 1 bag 26" long x 7" dia. RF-1938: 2 bags 26" long x 7" dia. Deployed: RF-1936 – 61 by 61 ft.
Finish	: SB - 400-1 CARC 383 Green SB - 400-2 Semi Gloss Green SB - 400-3 CARC 383 Green SB - 400-4 Semi Gloss Green SB – 400-5CARC 383 Green SB – 400-6 Semi Gloss Green
Weight	: SB –400 : 27 lb.
Height	: SB-400: 27.9 ft. (8.6 m)
Installation Time	: SB-400 : 15 min. with 2 people

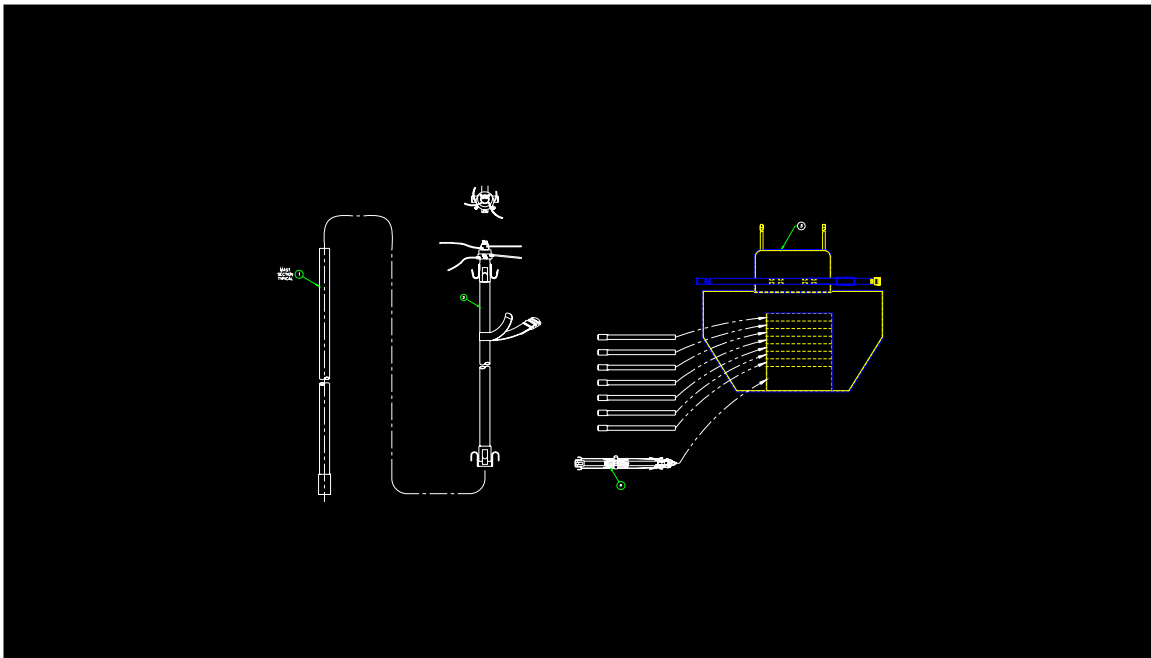
Radiation Patterns Over Average Ground

12 MHz
2, 4, 8, 12 MHz Patterns for the SB-400 Antenna
Typical Installation of an SB-400
8 MHz, 4 MHz, 2 MHz
-90 -90
7dBi -3dBi -13dBi
0 12 MHz
2, 4, 8, 12 MHz Patterns for the SB-400 Antenna
8 MHz, 4 MHz, 2 MHz
-90 -90
7dBi -3dBi -13dBi
0

Environmental

Temperature	: Operating –40° to +55° C (–40° to +131° F)
Storage	: –60° to +70° C (–76° to +158° F)
Wind	: SB-400: 60 mph (96 kph) with no ice





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.

®
assured

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

**PORTABLE CROSSED
DIPOLE ANTENNA
for NVIS (near vertical
incidence skywave)
communications**

Electrical

n Frequency Range

2 to 30 MHz with antenna coupler

n RF Power Capacity

400 Watts

n Input Impedance

Compatible with RF-5800H internal coupler and RF-382 Antenna Couplers

n Radiation Pattern

Azimuth: omnidirectional

Elevation: see radiation patterns below

n Polarization

Horizontal for the RF-1936 or a RF-1938
Vertical if used with the monopole conversion kit option

n VSWR

In accordance with RF-5800H internal coupler and RF-382 Antenna Couplers

n Gain

See radiation patterns below

Environmental

n Temperature

Operating -40° to +55° C
(-40° to +131° F)

Storage: -60° to +70° C
(-76° to +158° F)

n Wind

RF-1936: 60 mph (96 kph) with no ice

Mechanical

n RF Connector

Side feed with wing nut

n 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.

n 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

n Weight

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

n Height

RF-1936: 15 ft. (4.6 m)
RF-1938: 27.9 ft. (8.6 m)

n Installation Time

RF-1936: 5 min. with 2 people
RF-1938: 15 min. with 2 people

Options

n Monopole Conversion Kit:

RF-1938-AT003 (convert RF-1936/38
to top loaded monopole)

n Vehicular Antenna Adapter: RF-1936-01
(included with the RF-1936V)

n Mounting Plate for flat surface:

RF-1936-02 (included with the RF-1936Pand RF-1938AT)

Radiation Patterns Over Average Ground

12 MHz

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

Typical Installation of an RF-1936

8 MHz

4 MHz

2 MHz

-90 -90

7dBi -3dBi -13dBi

0 12 MHz

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

8 MHz

4 MHz

2 MHz

-90 -90

7dBi -3dBi -13dBi

0