SCOUT™

XF | XFORM READY

User Manual

RE[Z]™
| ANTENNA SYSTEMS |

RezAntenna.com | support@RezAntenna.com

IMPORTANT!

READ ALL WARNINGS BEFORE USING THIS PRODUCT.

WARNING: ELECTRICAL SHOCK HAZARD

DO NOT USE NEAR POWER LINES. CONTACT WITH POWER LINES CAN CAUSE AN ELECTRICAL SHOCK. SERIOUS INJURY OR DEATH MAY OCCUR.

WARNING: TIPPING HAZARD

KEEP A WIDE RADIUS AROUND THE ANTENNA CLEAR OF PEOPLE AND OBJECTS. IF THE ANTENNA IS IMPROPERLY DEPLOYED OR IS USED IN WINDY CONDITIONS IT CAN TIP OVER. THIS CAN CAUSE SEVERE INJURY, AND OR PROPERTY DAMAGE.

WARNING: FIRE HAZARD

DO NOT EXCEED THE POWER LIMITS LISTED IN THE SPECIFICATIONS TABLE ON PAGE 1 OF THIS MANUAL. EXCEEDING THE POWER LIMITS CAN RESULT IN A FIRE. EXCEEDING THE POWER LIMITS WILL VOID YOUR WARRANTY.

WARNING: RF EXPOSURE

NEVER OPERATE THIS ANTENNA IN A WAY THAT COULD EXPOSE INDIVIDUALS TO HIGH LEVELS OF RF EXPOSURE, ESPECIALLY ABOVE 10 WATTS OR ABOVE 14 MHZ. NEVER USE THIS ANTENNA NEAR RF SENSITIVE MEDICAL DEVICES, SUCH AS PACEMAKERS.

REZ Antenna Systems™ Scout XF™

Contents:

(1) Scout XF Feed Point Base

(2) 3/8-24 Coupling Nuts

(1) 3/8-24 Hoisting Ring

Thank you for purchasing your REZ Antenna Systems Scout XF! This manual will familiarize you with how to set up, tune, and perform basic maintenance on your antenna. We take great pride in the build quality of our products, but should you have any issues or questions, please email us at support@rezantenna.com.

Overview

The patent-pending Scout XF (XFORM Ready) Base is the foundation of the REZ Antenna Systems Scout XF platform. Serving as the central hub, it provides the attachment point for your coaxial cable and antenna accessories. Precision-machined from anodized 6061 aluminum, the Scout XF delivers rugged strength and weather resistance in the field.

On its own, the Scout XF excels as a resonant antenna system. Configurations include a 1/4-wave vertical, coil-loaded vertical, 1/2-wave wire or rigid dipole, hamstick dipole, and coil-loaded rigid dipole. This versatility makes the Scout XF a reliable tool for quick, efficient resonant deployments.

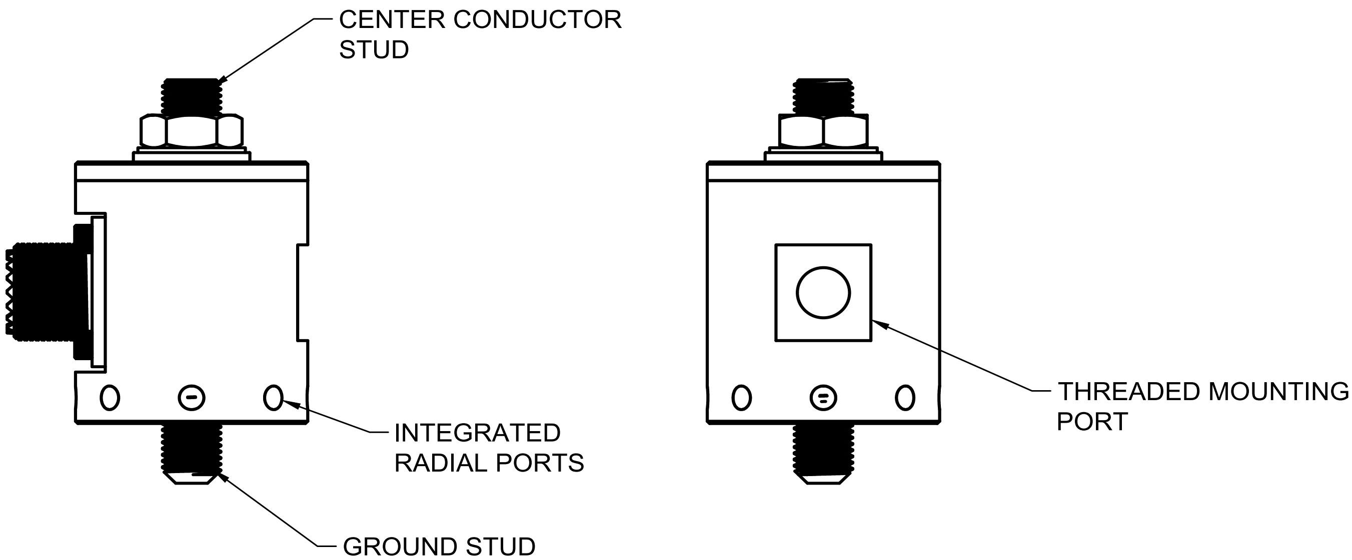
When paired with the REZ XFORM System, the Scout XF expands into a transformer-based, multi-band platform.

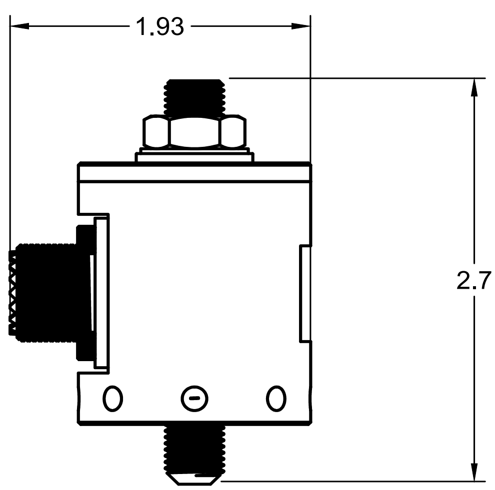
Swappable XFORM transformer modules unlock harmonic end-fed half-waves, random-wire verticals, loop antennas, and other non-resonant designs—all from the same compact base.

The Scout XF also incorporates REZ's rapid-deploy radial system. Integrated 4mm banana ports accept up to eight radials, making it fast and simple to connect the REZ 4-wire radial kit for optimized quarter-wave vertical operation.

SCOUT XF SPECIFICATIONS	
Length (Inc. Coupling Nuts)	4.3"
Max Dia.	2"
Material	Anodized 6061 Aluminum
Hardware	Stainless Steel
Coax Connector	SO-239
Power Limits	500 Watts SSB, 300 Watts CW, 200 Watts Digital (50% Duty Cycle)

Nomenclature & Physical Attributes





Accessories and Expanded Capability

The Scout XF is a flexible antenna system that can be deployed in many ways. Your operating style and desired configuration will dictate which accessories you'll need to complete your setup. The Scout XF is available in several kit configurations, or you may purchase the required accessories separately.

In addition to standard accessories such as whips, coils, and radial kits, the Scout XF is also compatible with the REZ XFORM Modular Impedance-Matching System — a series of interchangeable transformer modules that expand the capability of the Scout XF platform.

Each XFORM module threads directly onto the Scout XF base, forming a rugged, sealed connection that allows operators to adapt the antenna for a wide range of configurations and frequency ranges.

XFORM Module Options

- 49 : 1 XFORM – For efficient multi-band end-fed half-wave operation.
- 9 : 1 XFORM – For broadband or random-wire verticals and Rybakov configurations (used with a tuner).
- 4 : 1 XFORM – For delta loops, linked dipoles, and other balanced or low-impedance systems.

Field Advantages

- Quick reconfiguration – Swap matching networks in seconds.
- Durable and sealed – Precision-threaded, moisture-resistant connection.
- Operator-defined – Configure for any terrain, band, or mission profile.

The XFORM system and Scout XF together form a modular, scalable antenna platform — from resonant single-band setups to advanced multi-band field systems.

The table on the following page will help you determine which accessories you'll need to deploy the antenna in your desired configuration. Accessories can be purchased directly from rezantenna.com or through DX Engineering.

Some accessories may not yet be available. For availability and detailed module information, visit rezantenna.com/XFORM or contact support@rezantenna.com.

SCOUT™

CONFIGURATION QUICK REFERENCE GUIDE

PAIR THE SCOUT BASE WITH THE FOLLOWING TO ACHEIVE THE LISTED CONFIGURATION

CONFIGURATION	REQUIRED ACCESSORIES	
DELTA LOOP	▪ XFORM 4:1 ▪ REZ MULTI MOUNT ADAPTER ▪ (2) [Z]-17 TELESCOPING WHIPS ▪ G SPIKE, CAMERA TRIPOD, OR SURVEYOR ADAPTER	▪ CM7 COMMON MODE CHOKE ▪ REZ DELTA LOOP WIRE KIT ▪ INTERNAL OR EXTERNAL TUNER (BAND DEPENDENT)
RYBAKOV	▪ XFORM 4:1 ▪ [Z]-25 TELESCOPIC WHIP ▪ GROUND SPIKE, CAMERA TRIPOD, OR SURVEYOR ADAPTER	▪ [Z]QD RADIAL KIT ▪ CM7 COMMON MODE CHOKE ▪ INTERNAL OR EXTERNAL TUNER (BAND DEPEDENT)
RIGID DIPOLE	▪ (2) [Z]-17 TELESCOPING WHIPS ▪ UNIVERSAL MAST MOUNT ▪ SUPPORT MAST ▪ CM7 COMMON MODE CHOKE	
WIRE DIPOLE	▪ LINKED DIPOLE WIRE KIT OR ▪ SINGLE BAND WIRE ▪ INCLUDED HOIST RING OR ▪ UIVERSAL MAST MOUNT & SUPPORT MAST	▪ CM7 COMMON MODE CHOKE
1/4 WAVE VERTICAL	▪ [Z]-17 or [Z]-25 TELESCOPING WHIP ▪ G SPIKE OR [Z]-POD ▪ [Z]QD RADIAL KIT	
LOADED VERTICAL	▪ [Z]-17 or [Z]-25 TELESCOPING WHIP ▪ G SPIKE OR [Z]-POD ▪ [Z]QD RADIAL KIT ▪ SCOUT 4017 or 4025 COIL	
HAM STICK DIPOLE	▪ (2) HAM STICKS FOR DESIRED BAND ▪ UNIVERSAL MAST MOUNT ▪ SUPPORT MAST ▪ CM7 COMMON MODE CHOKE	

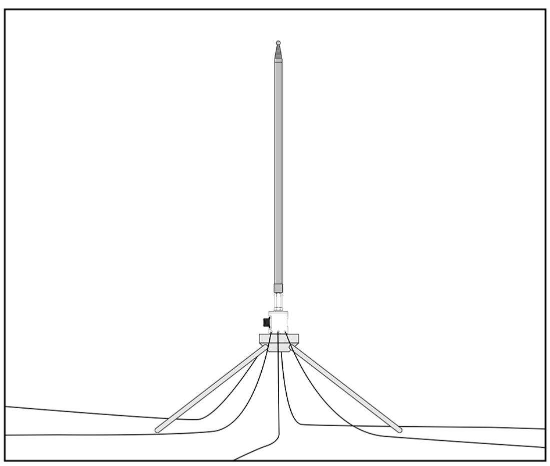
Deployment Configurations

Overview

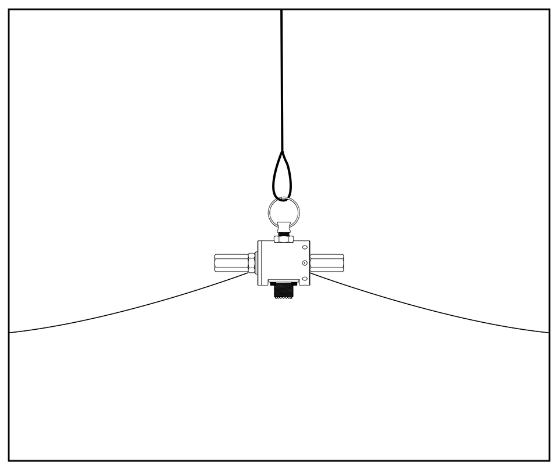
Although there are many different possible configurations with the Scout XF, this manual will outline the 3 most popular resonant configurations. For configurations using the XFORM matching transformers, refer to the corresponding XFORM manual.

The scope of this manual is to give you basic configuration knowledge. It will cover what accessories are needed to achieve the desired configuration.

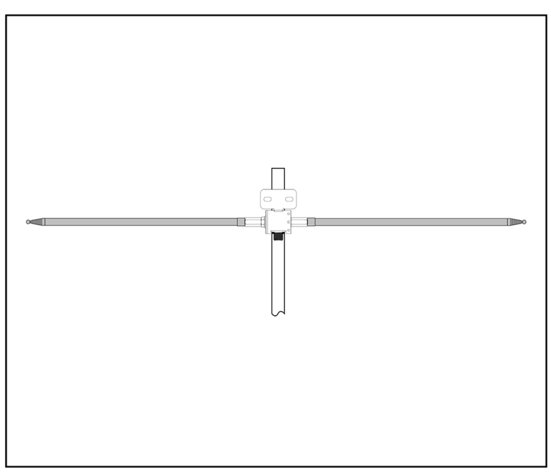
Over the next few pages you will learn how to deploy the Scout XF as a vertical antenna, a wire dipole antenna, and a rigid dipole antenna. Each style of deployment has it's advantage depending on the desired outcome of your operation. As the operator, you will decide which balance of speed, performance and ease of use best fits your needs.



1/4 WAVE VERTICAL



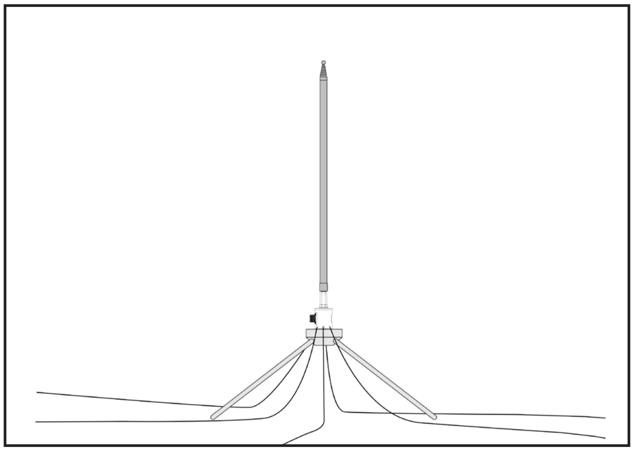
WIRE DIPOLE



RIGID TELESCOPING DIPOLE

Deployment Configurations

1/4 Wave/Loaded Vertical Antenna



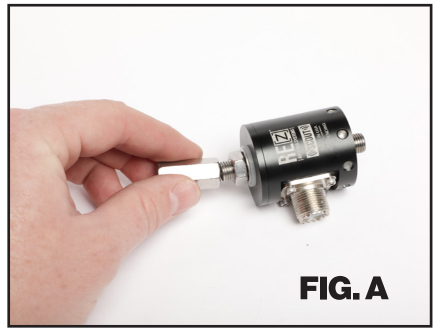
The Scout XF can be deployed as a 1/4 wave vertical covering the 10 through 20 meter bands. By adding the Scout coil, it can also be deployed as a base loaded vertical to cover the 40 meter band.

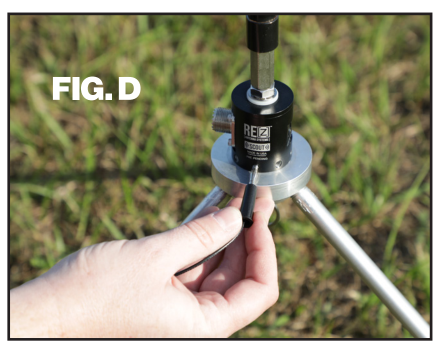
In order to deploy the Scout XF as a 1/4 wave or loaded vertical antenna you will need:

- [Z] Pod or Ground Spike (You can also mount the Scout XF on a camera tripod using the Multi Mount adapter.)
- [Z]-17 telescoping whip
- Scout coil (only needed for 40 meter operation)
- A minimum of (4) 33' radials

Deploying as a Vertical

1. Set up and properly secure the support (tripod, spike, etc.) for the base.
2. Thread a coupling nut onto the center conductor stud. The center conductor stud is the stud protruding through the white insulating washer. **(FIG. A)**
3. Thread the ground side stud into your support. The ground side stud is the stud closest to the integrated radial ports. **(FIG. B)**
4. To operate on 40 meters, thread the Scout coil onto the coupling nut. To operate on 20 meters and up skip this step and go directly to step 5.
5. Thread the [Z]-17 telescoping whip into the coupling nut or into the Scout coil. **(FIG. C)**
6. Deploy your radials and plug them into the integrated 4 mm radial ports. **(FIG. D)**
7. Connect your coax and begin tuning by extending or retracting the [Z]-17 until you reach your desired SWR.

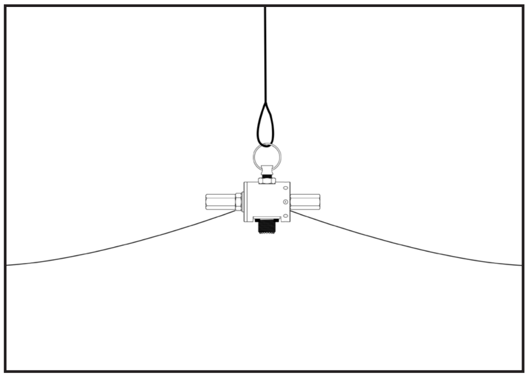




Deployment Configurations Continued

Dipole

Wire Dipole



The Scout XF can be deployed as a 1/2 wave wire dipole and hoisted via rope from a support point such as a tree or antenna mast.

To deploy the Scout XF as a wire dipole you will need:

- Hoist ring and screw (included)
- REZ CM7 common mode choke
- Appropriate length of rope
- Linked dipole kit or single band wire
- 2 coupling nuts (included)
- 9/16" open ended wrench

These instructions assume you have a pre-built and tuned set of wires for your dipole. For tuning information, please refer to the user guide included with your linked wire dipole kit.

Deploying as a Wire Dipole

1. Find a suitable tree or deploy an antenna mast.
2. Throw your rope over a sturdy branch or fix it to your antenna mast.
3. Thread the hoisting ring into the mounting port on the Scout XF until it bottoms out. **(FIG. A)**
4. IMPORTANT: Use a 9/16" wrench to tighten the jam nut down onto the Scout XF body. This ensures the hoisting ring will not loosen up and become detached. **(FIG. B)**
5. Tie the rope off to the hoisting ring.
6. Snap the carabiners on the dipole wires onto the hoisting ring. This provides strain relief for your wire connections. **(FIG. C)**
7. Slip the 3/8" ring terminals at each end of the dipole wires over the studs on the Scout XF and secure them with the coupling nuts. **(FIG. D)**
8. Attach the CM7 to the Scout XF and your coax to the CM7
9. Hoist the Scout XF to the desired operating height and secure the end of each dipole wire.

FIG. A

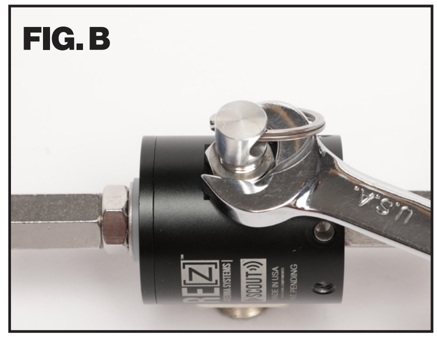
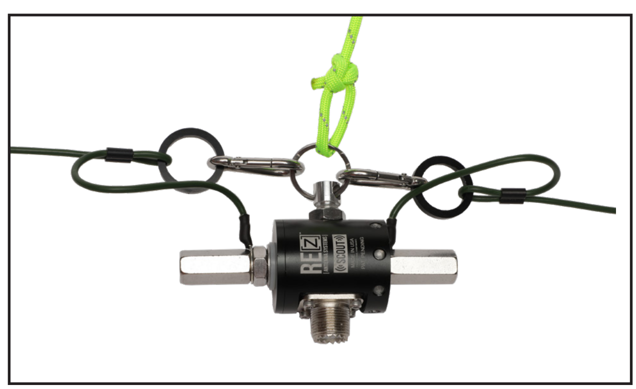


FIG. B

FIG. C

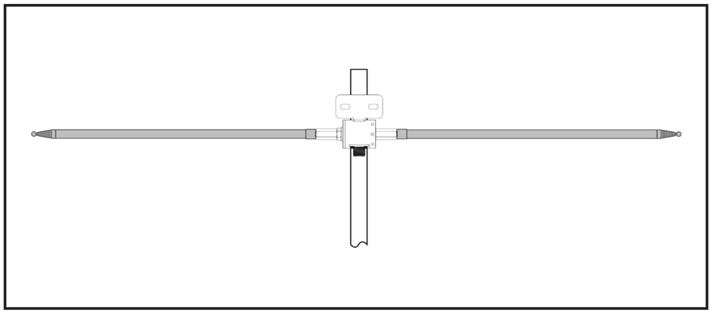
FIG. D



Deployment Configurations Continued

Dipole Continued

Rigid Dipole



The Scout XF can be deployed as a 1/2 wave rigid dipole using 2 [Z]-17 telescoping whips. This will cover the 20m through 6m bands.
To deploy the Scout XF as a rigid dipole you will need:

- A sturdy support mast (1" to 1.75" top section diameter)
- Universal mast mount
- 2 [Z]-17 telescoping whips
- Dipole extension kit
- CM7 common mode choke

These instructions assume you have pre-installed the universal mast mount on your mast. For installation instructions please refer to the manual included with the universal mast mount.

Always follow the instructions provided with your mast to ensure safe operation. Ensure your mast is rated to hold the weight and wind load produced by this configuration.

Deploying as a Rigid Dipole

1. Deploy your antenna mast according to the manufacturer instructions.
2. Install 2 coupling nuts onto the threaded studs. **(FIG. A)**
3. Secure the Scout XF to the universal mast mount according the instructions included with the mount. **(FIG. B)**
4. Thread 2 [Z]-17 whips into the coupling nuts. **(FIG. C)**
5. Attach the CM7 to the Scout XF and your coax to the CM7 **(FIG. D)**
6. Hoist the Scout XF to the desired operating height. We recommend 25 feet.
7. Sweep the antenna with an antenna analyzer.
8. If adjustment is needed, lower the antenna.
9. Based on your sweep, extend or retract the whips to resonate on your desired frequency.
10. Return the antenna to it's operating height and observe the change.
11. Repeat steps 7 through 11 as needed.
12. It's recommended that you spend time to pre-tune this antenna before heading to the field. Take note of how many sections produce resonance at the desired frequency for later use. Return the antenna to the same height for consistent tuning results.


FIG. A


FIG. B


FIG. C


FIG. D

General Maintenance

The Scout XF requires very little maintenance, but following a few basic procedures will keep your antenna operating at peak performance.

After Each Use:

1. When operating in harsh environments, wipe down the unit with a damp cloth followed by a dry microfiber cloth.
2. Clean any dirt/debris from the mounting threads and radial ports

Warranty Information

Each product is covered by a 1 year limited warranty.

REZ ANTENNA SYSTEMS LLC, warranties this product to be free from defects in material or workmanship for a period of one (1) year following the date of purchase, provided that the product is used for amateur radio purposes. This limited warranty does not cover failures due to abuse, accidental damage or when repairs have been made or attempted by anyone other than **REZ ANTENNA SYSTEMS LLC**. A defective product meeting the warranty conditions set forth herein will be replaced or repaired at no charge in the following manner:
Send the product (prepaid) to the **REZ ANTENNA SYSTEMS LLC** Service Center for repair or replacement at **REZ ANTENNA SYSTEMS LLC's** option. Proof of purchase may be required. Information about **REZ ANTENNA SYSTEMS LLC's** service center and warranty instructions can be found at www.rezantenna.com/warranty.

This warranty gives you specific legal rights and you may have other rights which vary from state to state. Should you have any questions, contact the **REZ ANTENNA SYSTEMS LLC** Service Center. This product is not intended for commercial use, and accordingly, such commercial use of this product will void this warranty. All other guarantees, express or implied, are hereby disclaimed.