Pre-Testing and Configuring of RET Antenna Systems Prior to Installation

Overview
Notices and Precautions

**WARRANTY NOTICE**
Proper installation procedures must be followed when installing and operating RET equipment. Failure to assure installations are done properly by trained installation personnel and to follow procedures discussed in this bulletin may cause warranty for such products to be void.

Andrew requires pre-testing actuators on the ground prior to installation using the Andrew portable controller and the latest version of the controller software (available online at www.commscope.com/andrew under Products→Antennas→Teletilt® RET System). This will verify proper actuator functionality and also ensure that the latest available actuator firmware release is installed on the actuator. Failure to conduct pre-test and pre-installation procedures defined by Andrew will void warranty.

**SAFETY NOTICE**
The installation, maintenance, or removal of an antenna requires qualified, experienced personnel. Andrew installation instructions are written for such installation personnel. Antenna systems should be inspected once a year by qualified personnel to verify proper installation, maintenance, and condition of equipment. Andrew disclaims any liability or responsibility for the results of improper or unsafe installation practices.

It is recommended that transmit power be turned off when the field installation is performed. Follow all applicable safety precautions as shown on this page.

**GENERAL INSTRUCTIONS**
• It is recommended to turn off the transmit power when working around an installed antenna.
• RET connections are weather resistant and must not be weatherproofed.
• It is required to connect the RET antenna system to the controller and to test it ON THE GROUND before installing the antenna.
• Register online at www.andrew.com to receive e-mail announcements for software updates.
• Please contact the Andrew Customer Support Center (see bottom of cover page) for any questions.

*Andrew Institute offers installation training.*
Pre-Testing and Configuring of the RET Antenna System

1.0 Introduction
This bulletin covers pre-testing procedures for the Andrew RET antenna system. It also shows how the antenna system can be configured and set to the desired tilt positions.

Figure 1-1. Pre-Testing Setup For Andrew’s RET Antenna System.

Required Material:
1 ea ATC200-LITE-USB
1 ea Short RET cable, e.g. ATCB-B01-001
1 ea Laptop with the latest version of ATC Lite running on Windows 2000, XP, or Vista operating system
2.0 Procedure

Follow the steps as illustrated below to pre-test the RET antenna system for full functionality and movement, and to ensure that the latest actuator firmware is applied.

Note: For antennas with more than one actuator, please ensure that all daisy-chain cables between actuators are attached before testing to verify proper cable installation.
3.0 Controller Program Startup And Operation

Please download the latest version of the ATC Lite software from www.andrew.com.

Refer to Bulletin 639559, ATC200-LITE-USB Teletilt Control System Computer Interface Setup, for installation of the ATC Lite software.

3.1. Program Startup:

• Double-click on the ATC Lite program icon on the computer’s desk-top. See Figure 3-1.

3.2. Device Search:

• Click on Find Devices. See Figure 3-2.

Figure 3-1. ATC Lite Program Icon.

Figure 3-2. Main Startup Screen Ready For Device Search.
3.3. Configuring The Actuator:

- With the actuator selected, click on **Edit Selected** (Figure 3-3).
- To configure the selected device, make the appropriate selections and text entries in the **Configuring Device** dialog (Figure 3-4).
- After the configuration data is entered, click on **Configure** (Figure 3-4).

![Figure 3-3. Selecting Actuator In A RET Antenna System.](image)

![Figure 3-4. Configuring A Selected Device Prior To Operations.](image)
3.4. Electrical Tilt Settings:

- Selecting the actuator enables adjustments to the desired electrical downtilt to occur.
- The actuator of the RET antenna is selected in Figure 3-5.

![Select Actuator](image)

**Figure 3-5. Selecting The Actuator To Be Tested.**

- With the tilt actuator selected, click on Move Selected (Figure 3-5) and move to the minimum and maximum tilt settings (Figure 3-6):
  1. Enter max position and click on Activate.
  2. Then enter min position and click on Activate.
  3. Verify the movement throughout the actuator’s full range. See Figure 3-6.
  4. Then set to the desired tilt.
- If more than one actuator is attached to the antenna, repeat test for each additional actuator following the steps described in 3.3 and 3.4.

![Set desired Tilt](image)

**Figure 3-6. Adjusting Tilt To Minimum And Maximum Settings.**

3.5. Summary:

This concludes the pre-testing and initial setup of the RET antenna system.