

639589 Revision C, May 2016

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.

CommScope requires pretesting actuators on the ground prior to installation, using the CommScope portable controller and the latest version of the controller software (available online at www.commscope.com/Resources/Software). 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 CommScope will void warranty.

SAFETY NOTICE

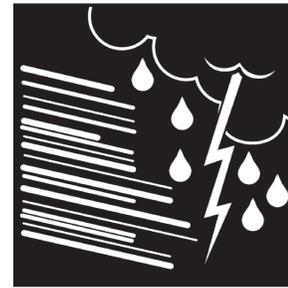
The installation, maintenance, or removal of an antenna requires qualified, experienced personnel. CommScope installation instructions are written for such installation personnel. Antenna systems should be inspected once a year by qualified personnel to verify proper installation, maintenance, and condition of equipment.

CommScope 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.



Do not install near power lines. Power lines, telephone lines, and guy wires look the same. Assume any wire or line can electrocute you.



Do not install on a wet or windy day or when lightning or thunder is in the area. Do not use metal ladder.



Wear shoes with rubber soles and heels. Wear protective clothing including a long-sleeved shirt and rubber gloves.

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.**
- Please contact the CommScope Customer Support Center (see bottom of cover page) for any questions.

Pre-Testing and Configuring of the RET Antenna System

1.0 Introduction

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

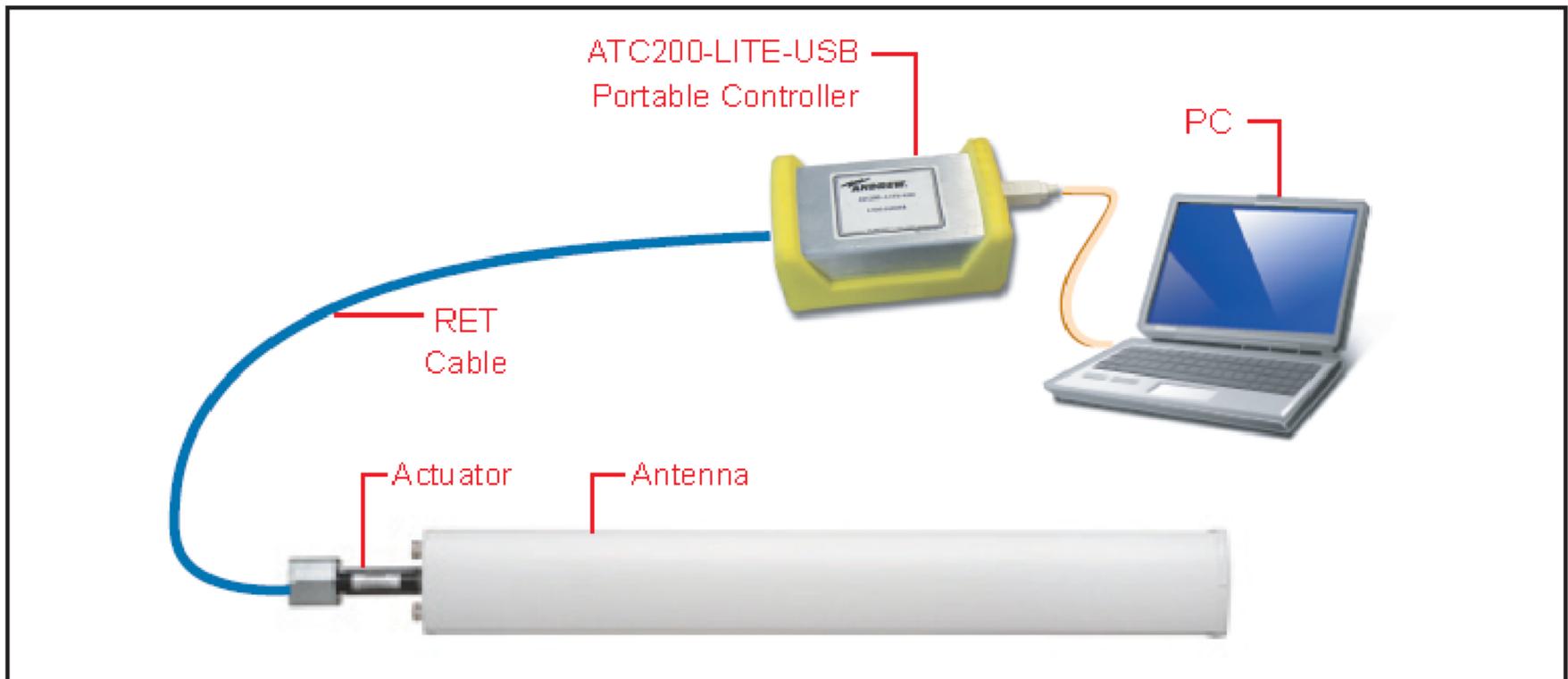


Figure 1-1. Pre-Testing Setup For CommScope RET Antenna System.

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.

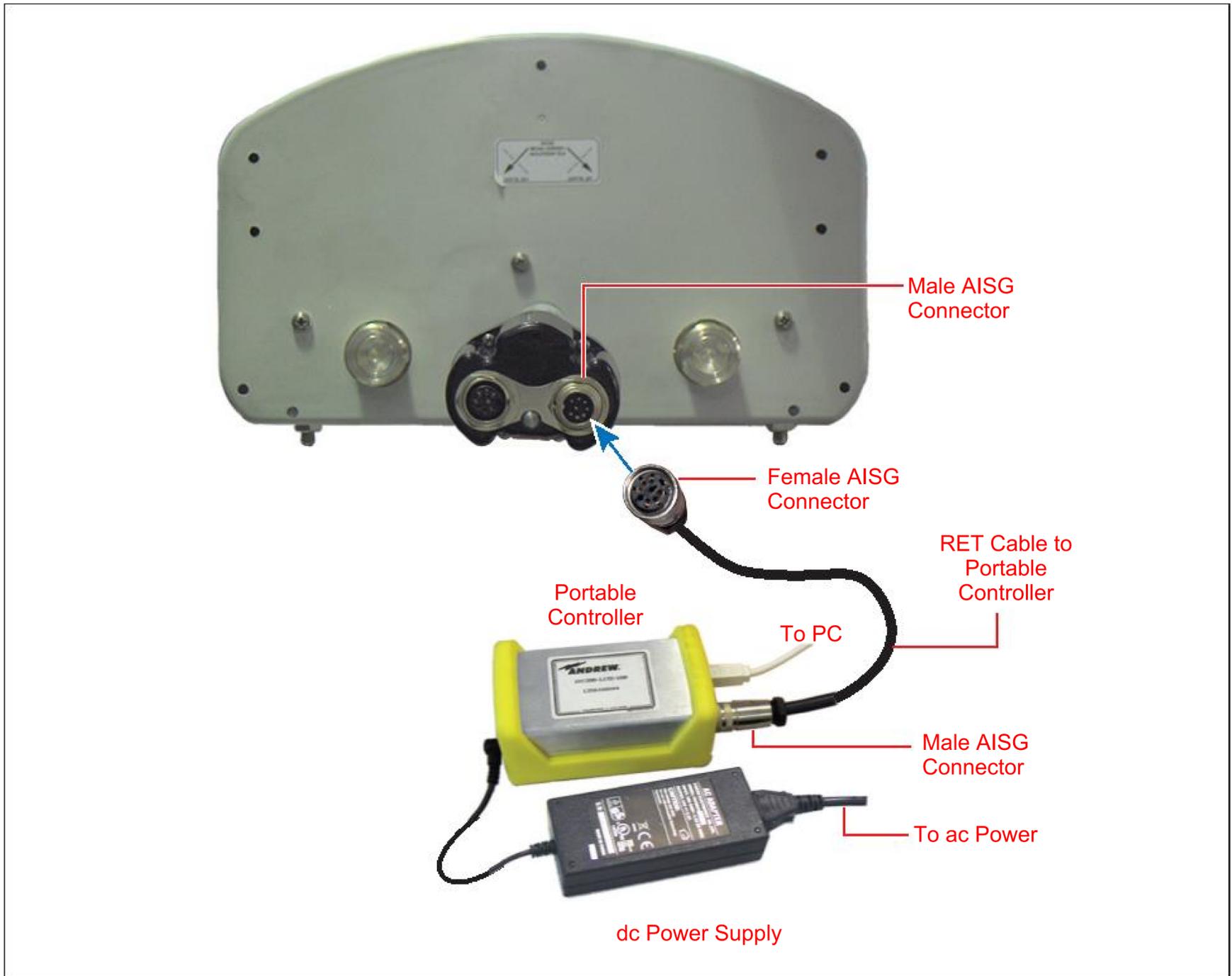


Figure 2-1. Pre-Testing Setup For CommScope's RET Antenna System.

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.commscope.com/Resources/Software.

Refer to Bulletin 639559, ATC200-LITE-USB 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.

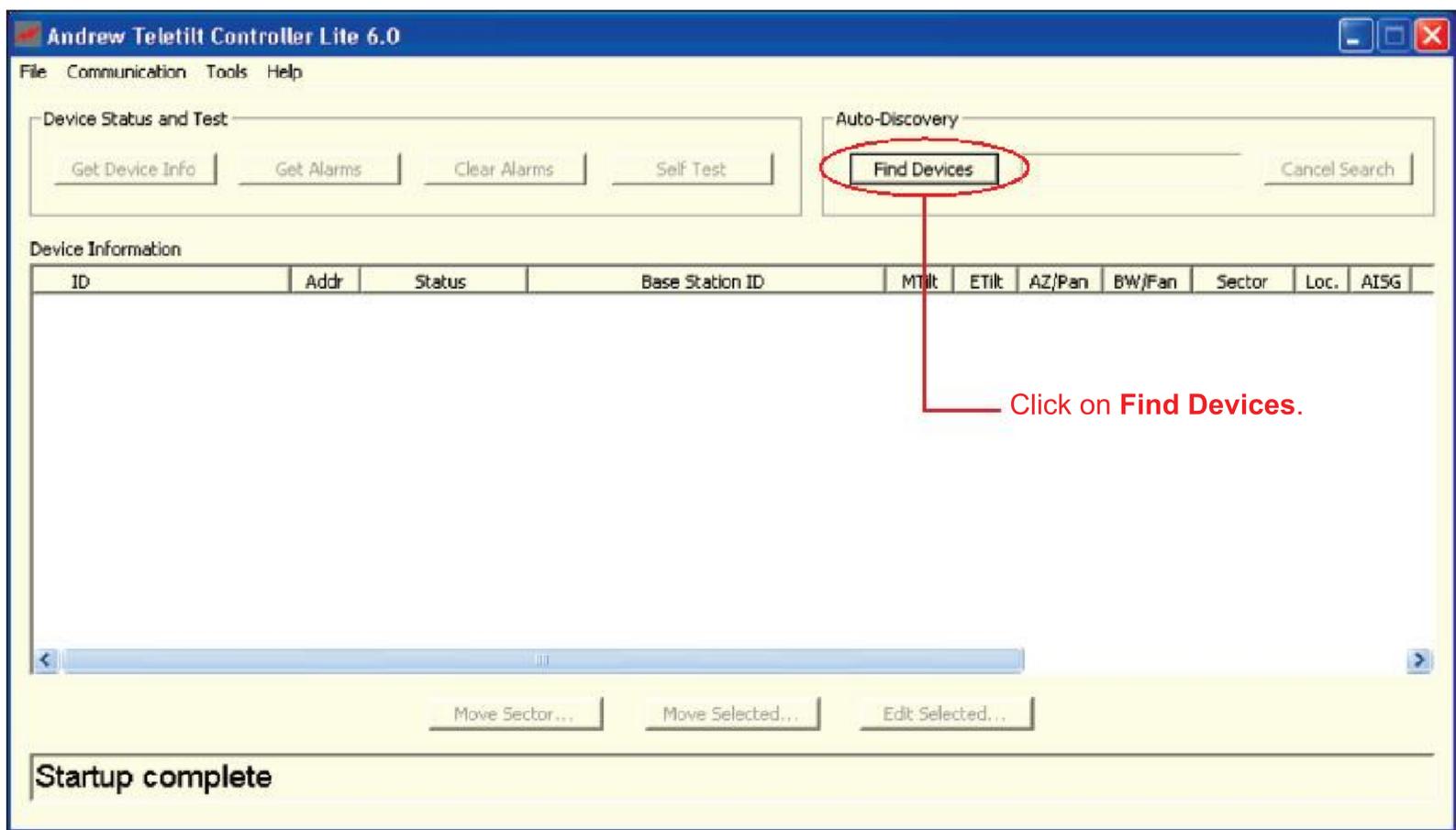


Figure 3-2. Main Startup Screen Ready For Device Search.

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).

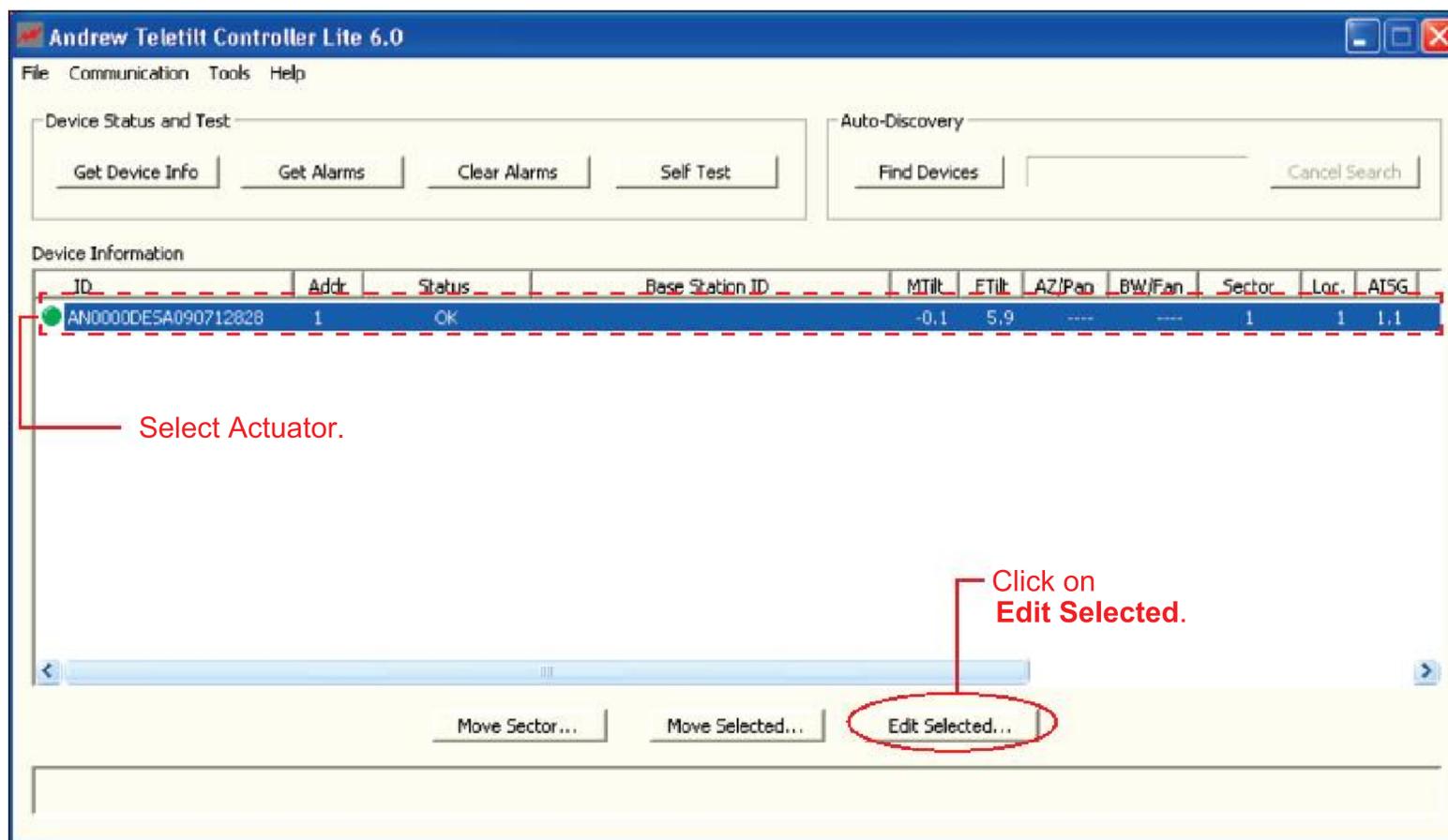


Figure 3-3. Selecting Actuator In A RET Antenna System.

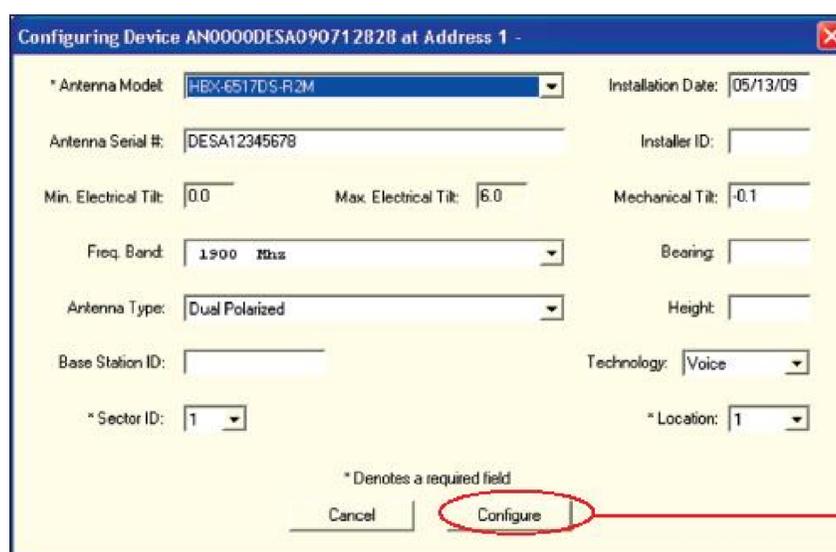


Figure 3-4. Configuring A Selected Device Prior To Operations.

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.

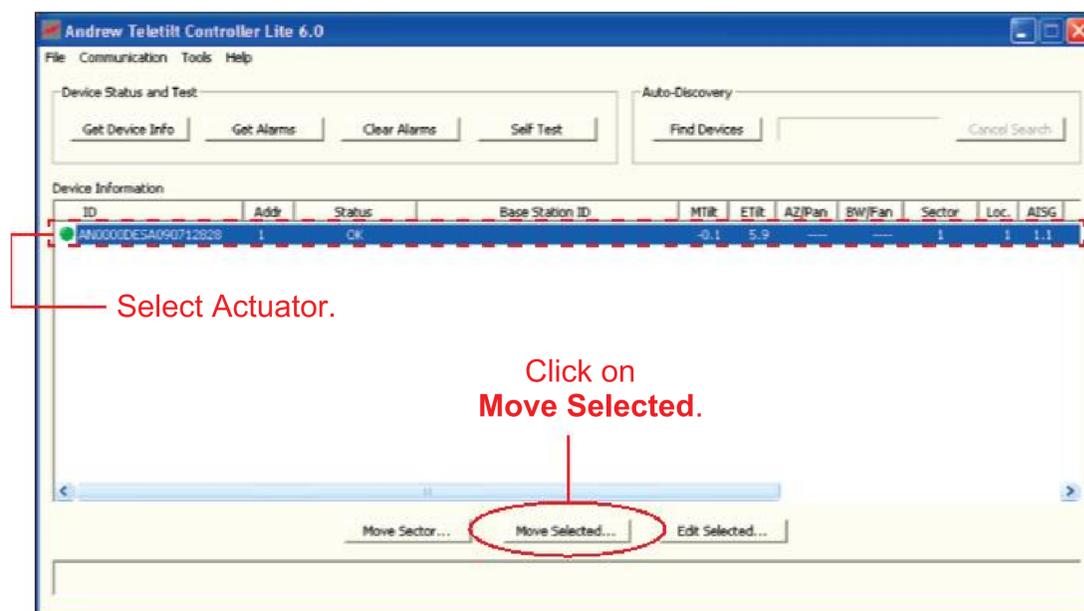


Figure 3-5. Selecting The Actuator To Be Tested.

- 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.

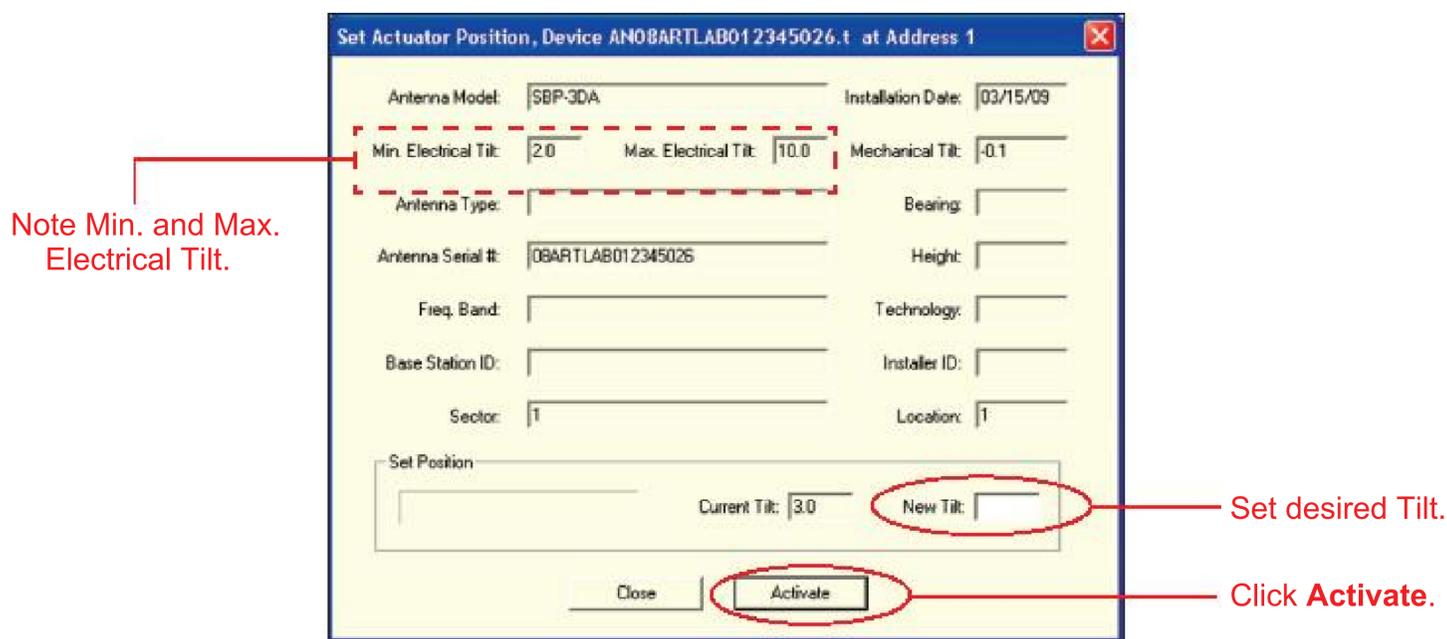


Figure 3-6. Adjusting Tilt To Minimum And Maximum Settings.

3.5. Summary:

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