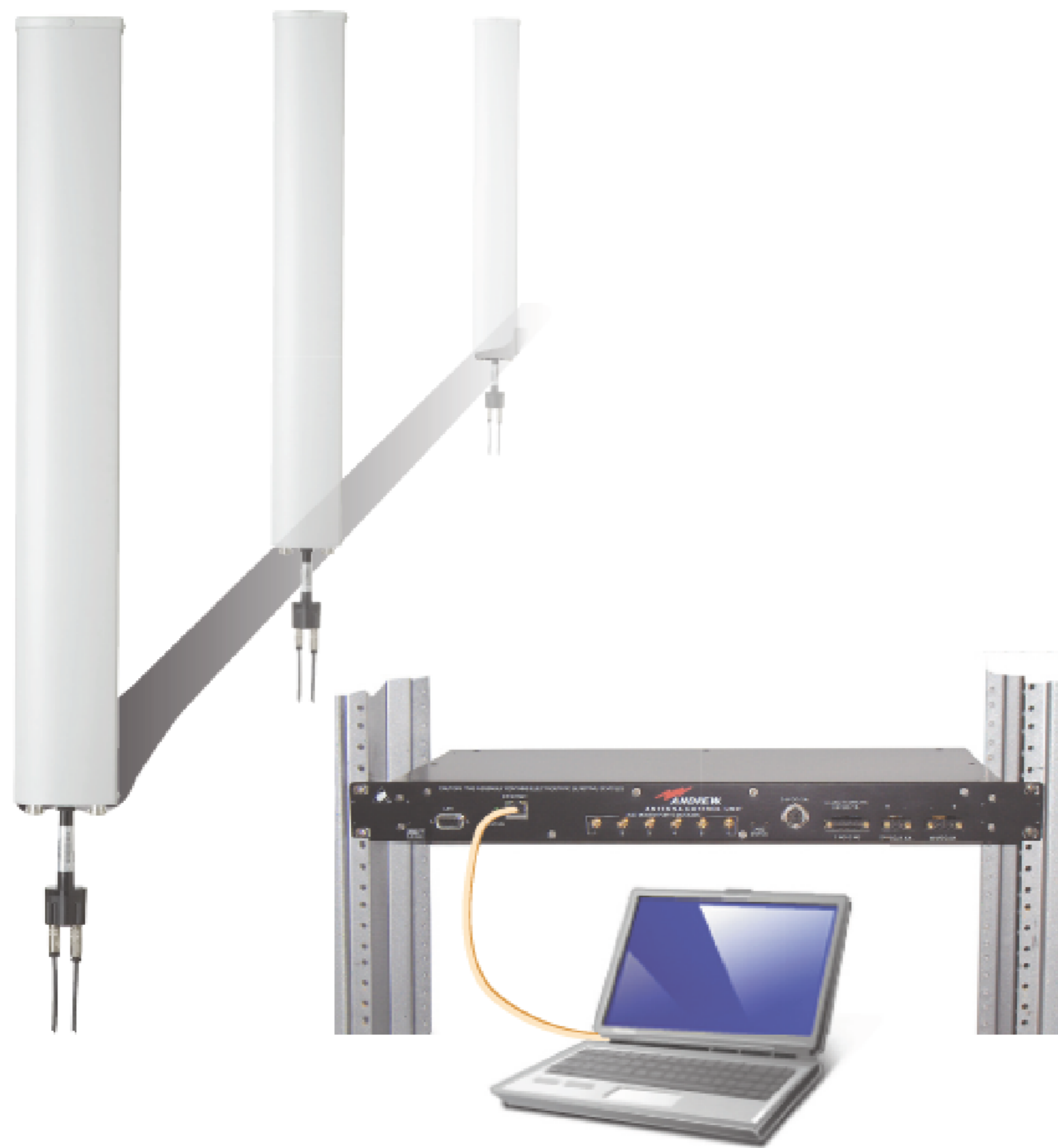


639572 Revision G, May 2016

ATC300-1000/2000 Control System

Equipment Installation Overview



Statement of Purpose:

Starting with firmware version **2.27** and later, the ATC300-1000/2000 controller can be connected to the network out of the box and will establish a DHCP connection.

The ATC300-1000/2000 default hostname is its serial number.

ATC300-1000/2000 controllers running firmware version **2.26** or earlier should see Bulletin 639571 for network communications setup.

An upgrade to the latest firmware is recommended and may be performed once network communication is established. See Bulletin 639544, ATC300-1000/2000 Installation and Operation User Guide, Section 9.

Firmware can be downloaded from the CommScope website:

- From the Products tab on www.commscope.com, click on **ATC300-1000/2000 Rack Mount Controller** link.

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

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.

1. Equipment Installation Options

Note: Test system components on the ground before installation on tower.

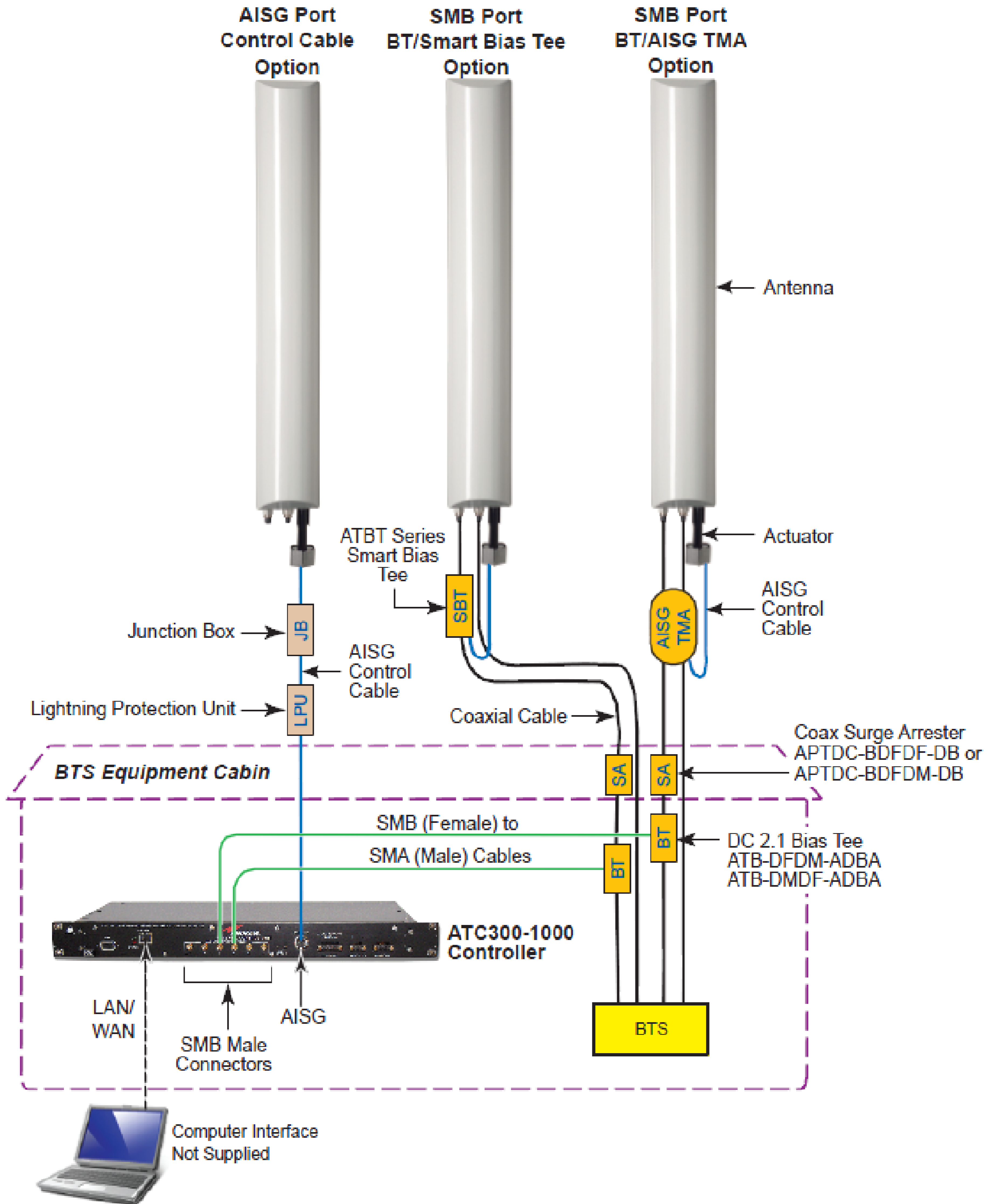


Figure 1. ATC300-1000/2000 Control System Connection Options

2.0 Controller Program Startup and Device Scan

1. Pre-Installation Notes:

- **CommScope strongly recommends that each component be tested before installation on the tower.**
- Both +24 and -48 Vdc connections for the power supply module are available. For proper operation, ensure wires are connected with correct polarity.
- CommScope recommends that you register online to receive notifications for updates made to the software file. It is also recommended that the CommScope web site be checked every 30 days for updated software/documentation.
- Refer to Bulletin 639571 for instructions about using the IP Config Tool to reconfigure the local PC/laptop's IP address for access to the ATC300-1000/2000's main operating interface.
- Refer to Bulletin 639577, Updating Firmware of CommScope Devices, if an update is required.

2. Controller Access:

- Type the controller's IP address or hostname into Internet browser URL window. The factory default IP address is 192.168.255.141. See Figure 2-1.
- Click on **Go** (or press **Enter** on the keyboard).

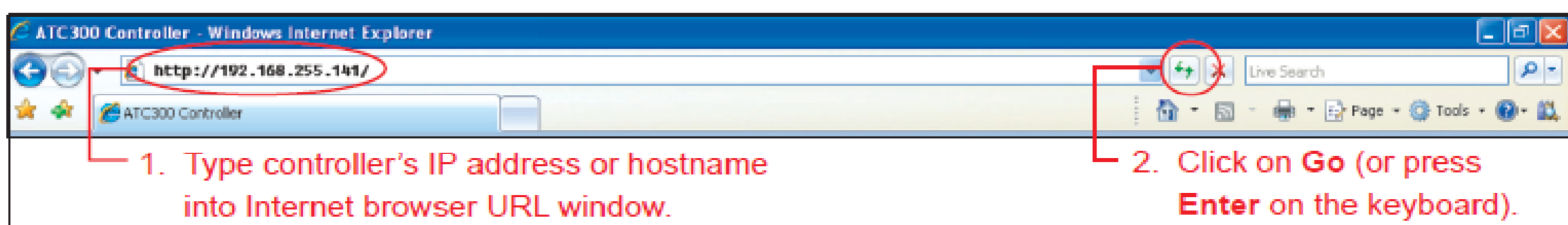


Figure 2-1. Entering Controller's IP Address Into Internet Browser.

- The ATC300-1000/2000 Controller main interface screen is shown below.

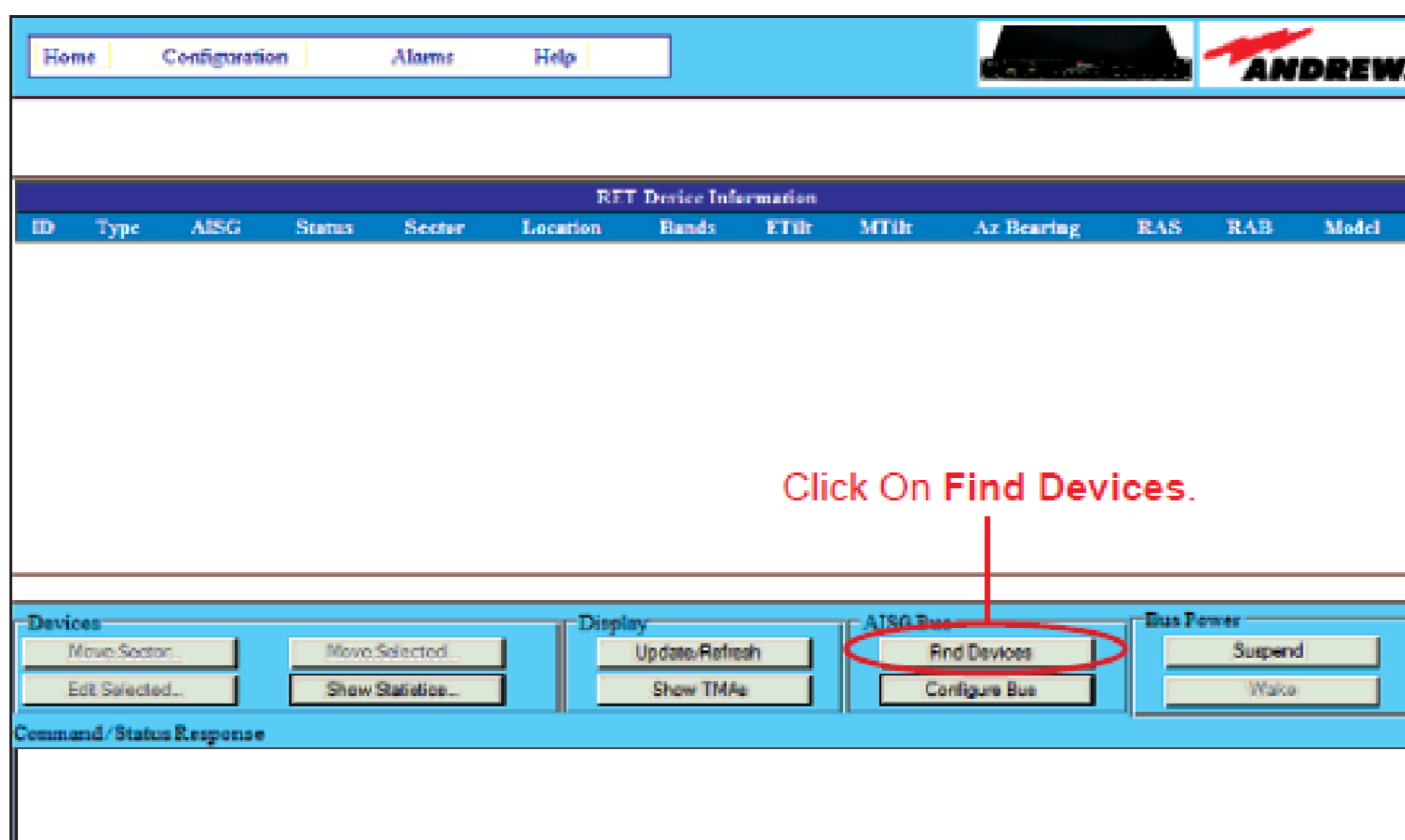


Figure 2-2. ATC300-1000/2000 Controller Main Interface Screen.

3. Device search:

Click on **Find Devices** (Figure 2-2).

- Click on **Start Scan** on the **Device Scan Progress** screen (Figure 2-3).
- If an antenna/actuator has been removed or added to the site, a new scan is required.
- Firmware upgrades for CommScope devices may be recommended.
- Click on **Close** to return to the main screen.

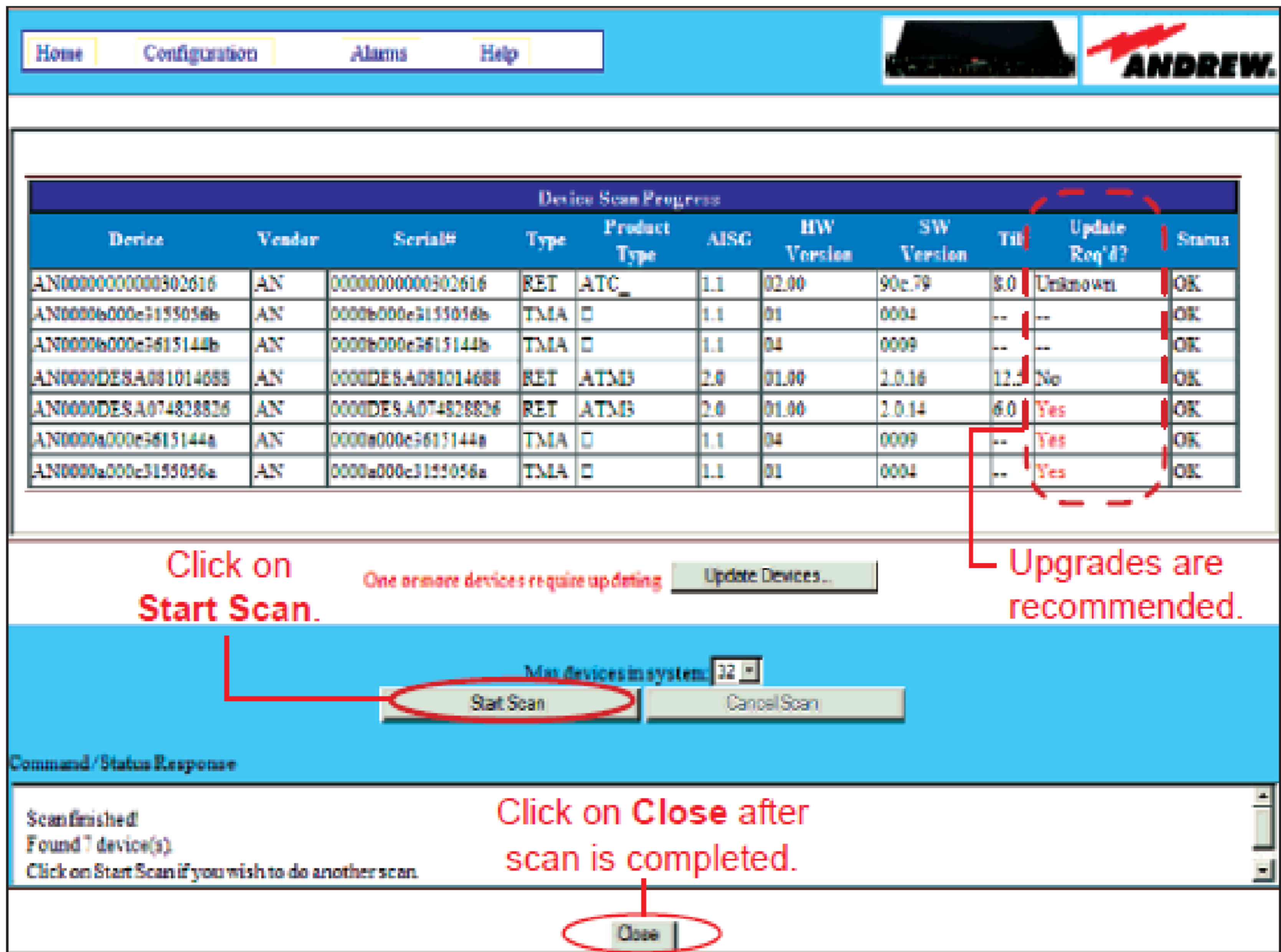


Figure 2-3. Searching for Devices.

3.0 Device Configuration

1. Select appropriate device to be configured and click on **Edit Selected** (Figure 3-1).

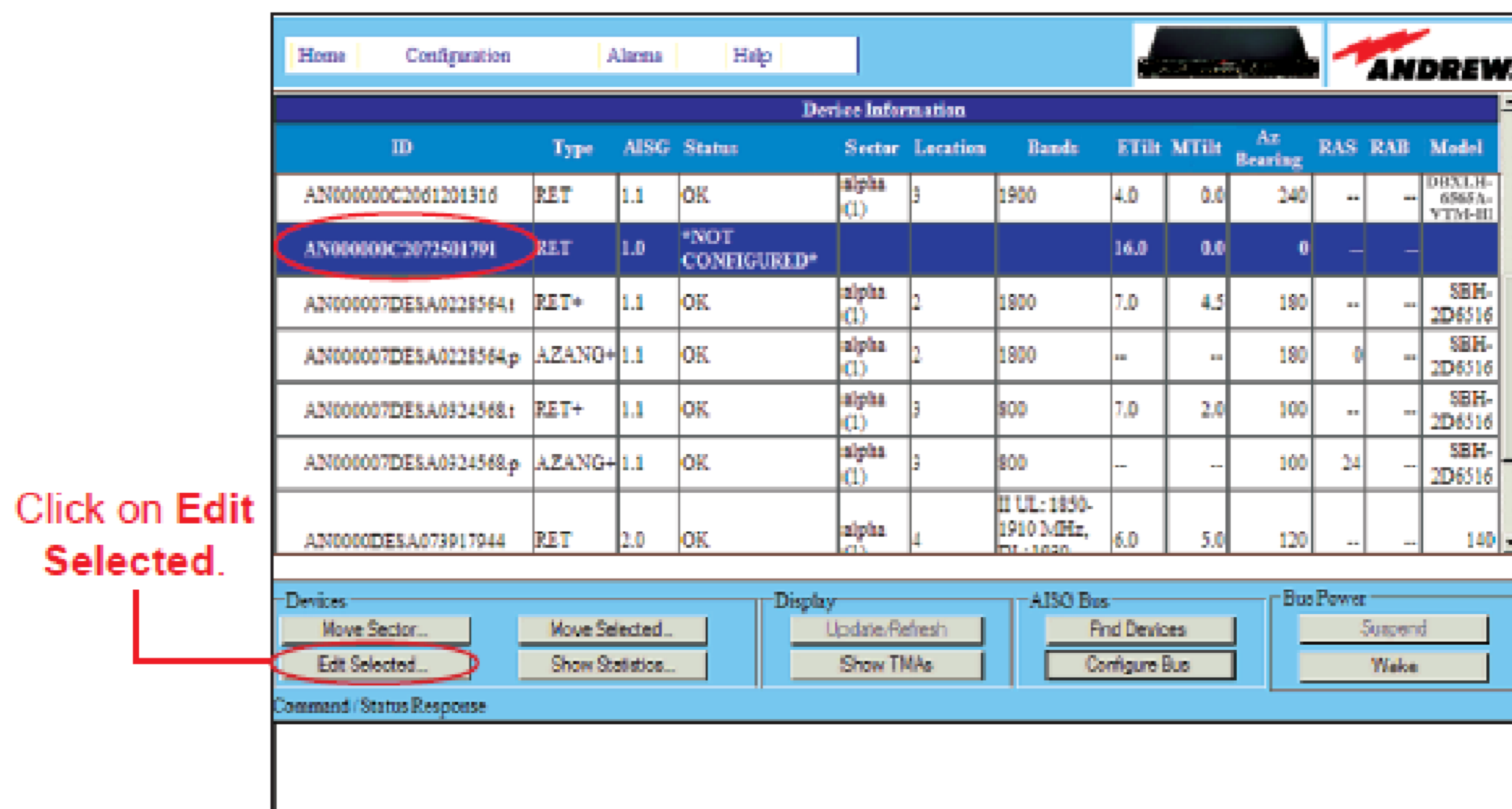


Figure 3-1. Starting the Device Configuration.

2. Make appropriate selections and text entries on screen below.

- To receive commands from the controller, a device must be configured to provide specific information about the antenna and its location on site.
- Factory installed actuators are pre-configured to include the antenna model number, antenna type, and antenna serial number.
- The remaining fields (Installation Date, Base Station ID, Mechanical Tilt, Technology, Freq. Band, Sector, Location, Bearing, Height, and Installer ID) will need to be configured.
- After entering data, click on **Set Device Data** (Figure 3-2).

Note: Click on **Close** to return to the controller's main screen when device configuration is complete.

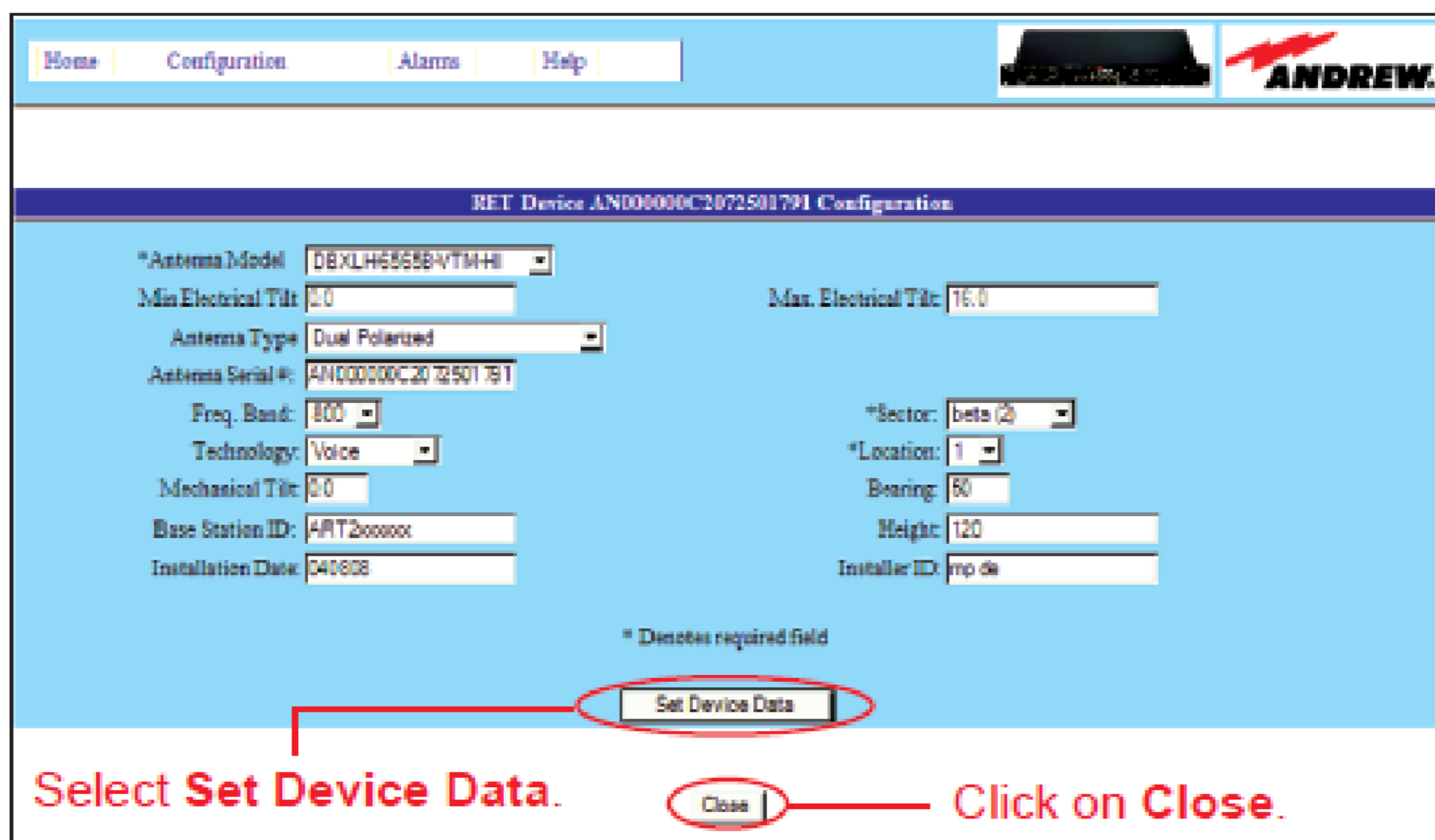


Figure 3-2. Device Configuration.

4.0 Adjusting Electrical Tilt

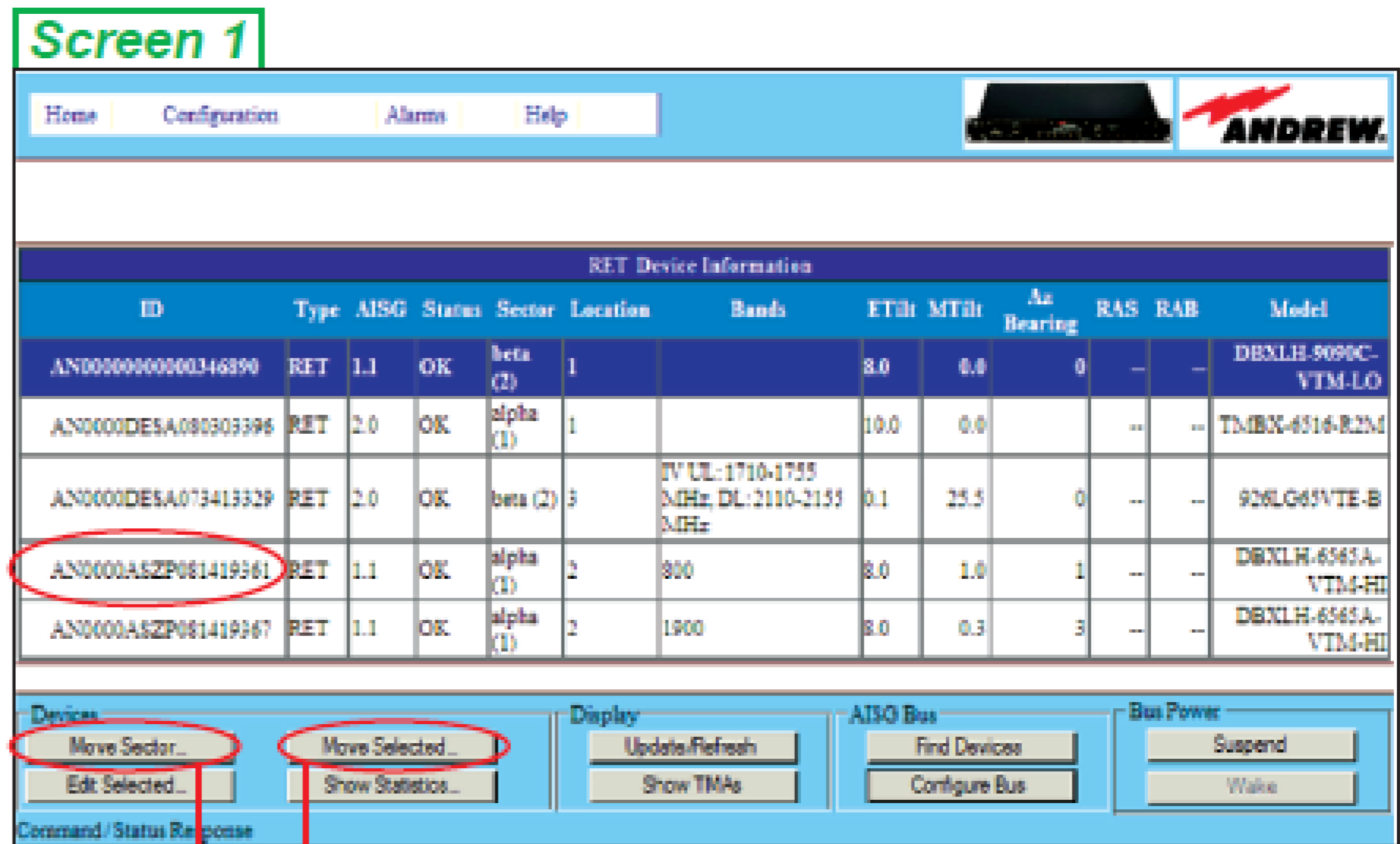
1. Device adjustments for a single antenna:

- Start at the controller's main inter-face screen. To change electrical downtilt on a single antenna, select the antenna actuator to be tilted, and click **Move Selected**. See Figure 4-1, Screen 1.

- Enter the new electrical tilt angle and click on **Set Tilt**. See Figure 4-1, Screen 2.

2. Device adjustments for a group of antennas:

Click on a device that is to be included in the sector move, and click **Move Sector** (Screen 1). The dialog box to **Set Electrical Tilt for Sector x** appears (Figure 4-2).



Move Sector or Move Selected.

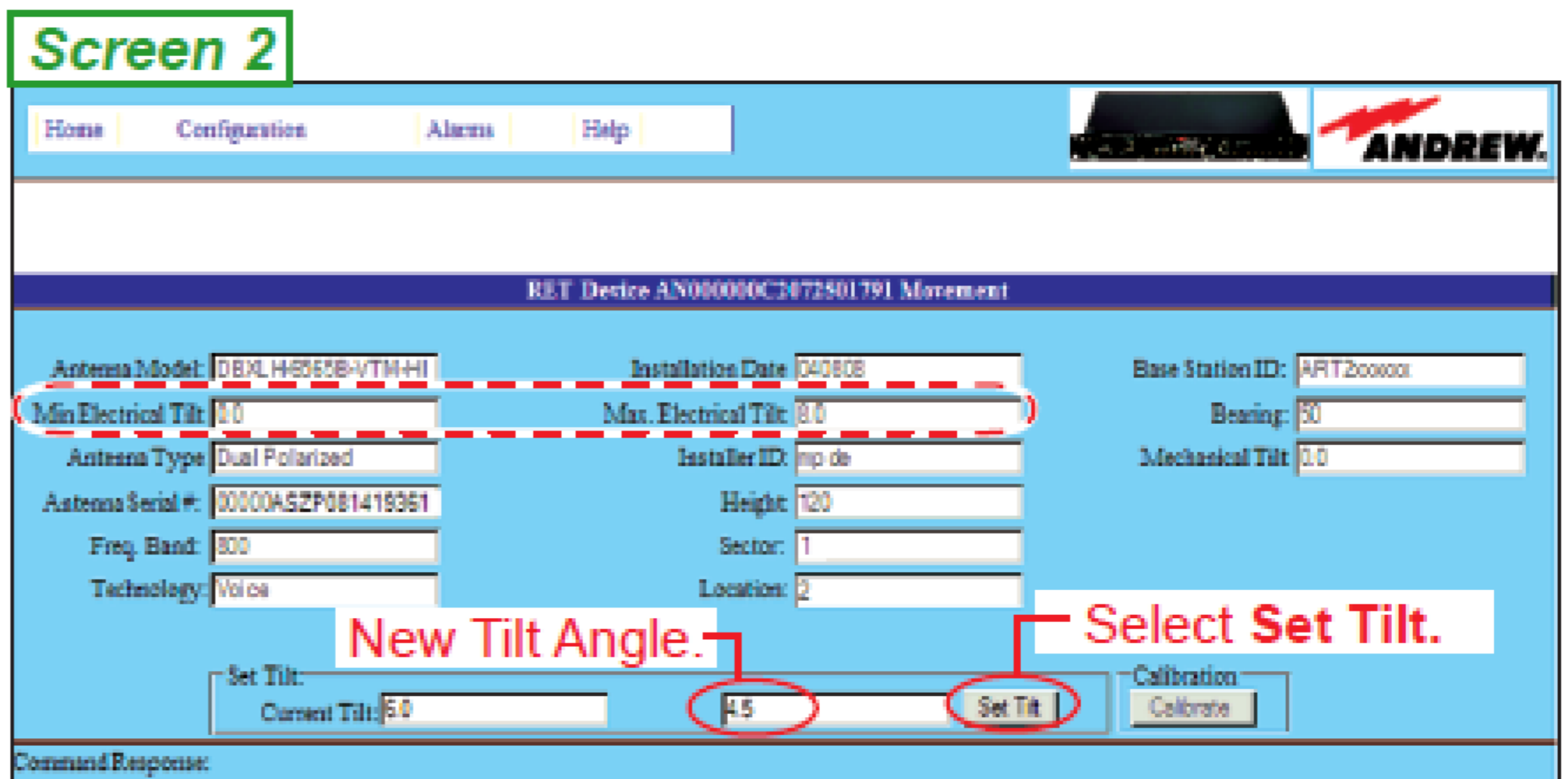


Figure 4-1. Adjusting Tilt For One Antenna.

3. Adjusting the downtilt angle on a group of antennas:

- Click on the **Additional** models, one at a time, to be included in the sector move (Figure 4-2). Antennas are listed in the Additional box only if they have the same sector and tilt range as the selected antenna.
- Click on **Add** to move the selection to **Included**. Double-clicking on the model will also add it to the group for the sector move.
- Enter the new electrical tilt angle. Review the electrical tilt range to verify that the new tilt angle entered is valid for the antenna model. Any downtilt angle within this range may be entered. Angles may be entered with the precision of 0.1 degree (Example: 5.0 or 5.5).
- Click on **Set Tilt**.

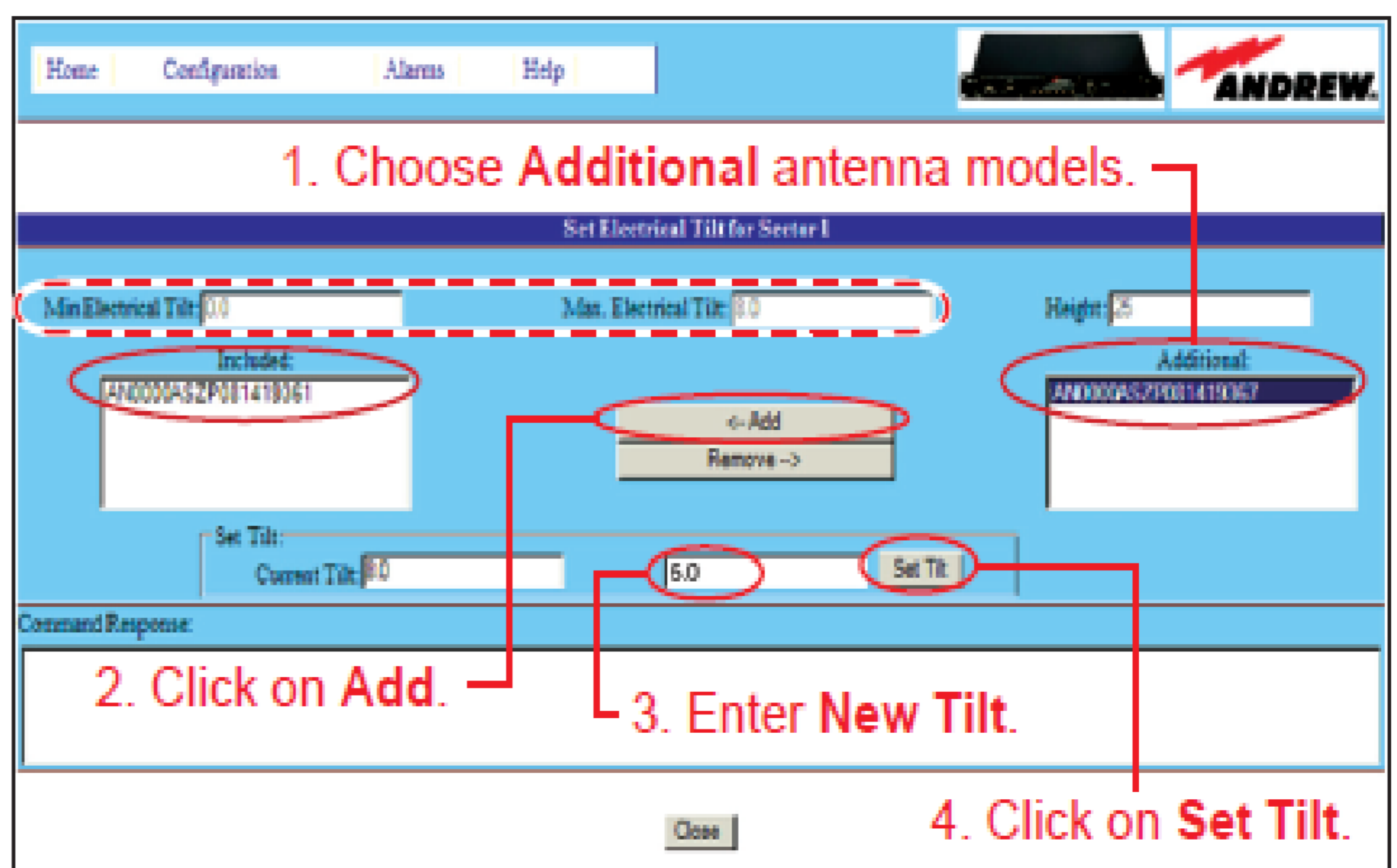


Figure 4-2. Adjusting tilt for antennas in the same sector.