

639581 Revision E, May 2016

**CommScope RET Control Cables Guide**

ATCB-B01 Series

**ATTACHING CONTROL CABLES**

1. The connectors on RET control cables are keyed to provide a matching fit. Ensure that the dielectric grease has been added to connector pins before the connection is made.
2. The control cable connector at the base station end of a home run cable should always be male. See Figures 1 and 2.
3. Secure jumper cables without pulling actuators to either side.
4. Connections should be hand tightened only. Over-tightening can shear pins off of internal components of equipment.

RET cables can damage these pins if twisted with too much force on removal.

**SECURING AND GROUNDING CONTROL CABLES**

1. The main RET control cable, feeding to the tower structure, should be secured at 2 m intervals and 1 m from either end using cable ties (CommScope 40417), hangers (CommScope 68MCLICK), or similar fasteners.
  - Feeder cables between junction boxes and actuators should be secured every 0.5 m to avoid excessive wind vibration.
2. CommScope recommends grounding RET systems on the top and bottom of the site.
  - At the top: By grounding a top Smart Bias Tee (SBT), AISG TMA, junction box, lightning protection unit, or using a ATGK-COMP grounding kit.
  - At the bottom: By grounding a lightning protection unit, junction box, bottom SBT, dc 2.1 bias tee, or using a ATGK-COMP grounding kit.
  - CommScope recommends using an ATGK-CABLE grounding kit (Bulletin 639596) for runs over 60 m and at

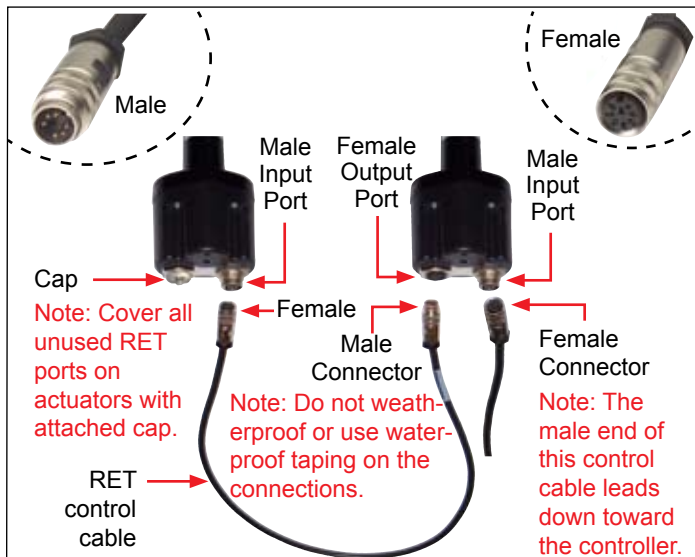


Figure 1. Attaching Control Cables to CommScope Actuators.

60 m intervals. This grounding kit clamps onto the RET connectors, where 2 cables are joined together, without cutting into cables (Figure 2).

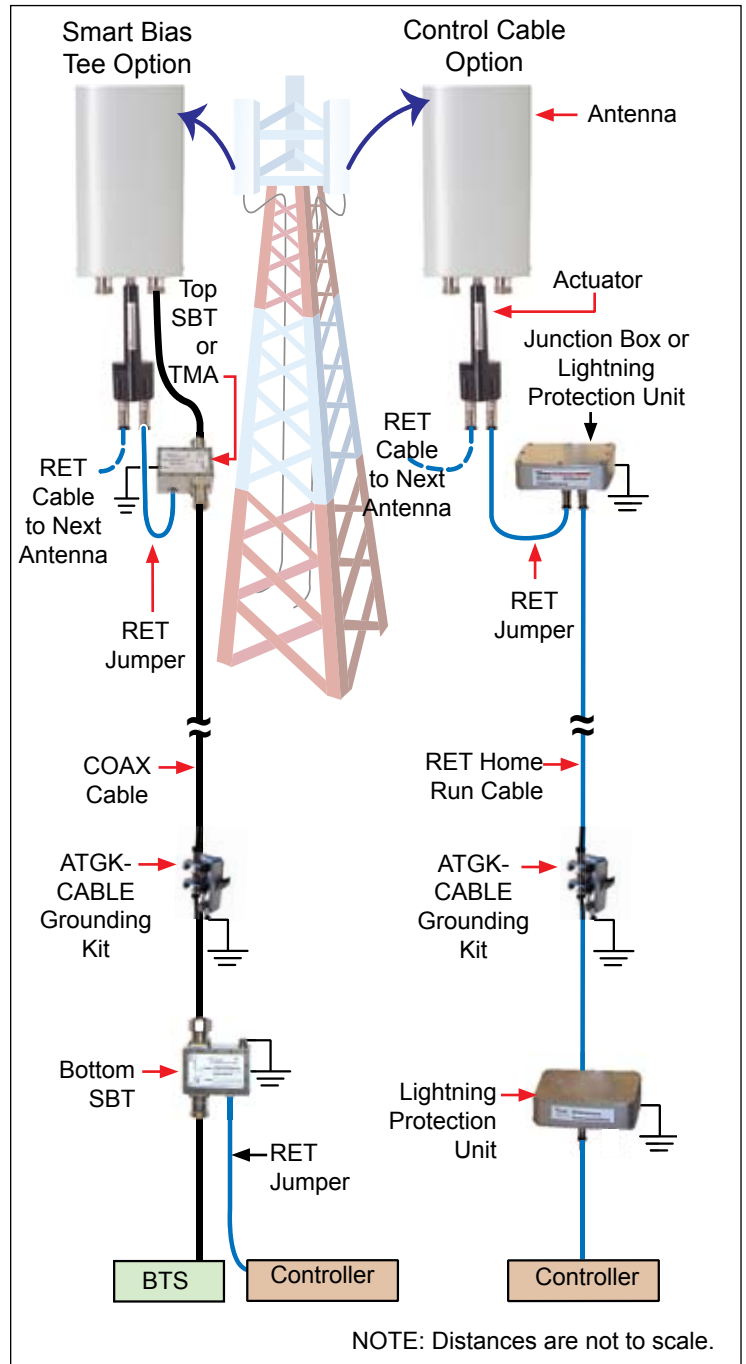


Figure 2. CommScope RET Control Cables Feed Data and Power From Controller to RET System.

(continued on page 2)

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See detailed instructions about the ATCB-B01 Series Control Cables online. Go to [www.commscope.com/Product Catalog/Wireless/Product/Antenna-Systems/Base-Station/Remote-Electrical-Tilt-\(RET\)-Products](http://www.commscope.com/Product Catalog/Wireless/Product/Antenna-Systems/Base-Station/Remote-Electrical-Tilt-(RET)-Products), then select a part number and click the Documents/Tools tab.

### **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](http://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.

**Unauthorized removal of a protective shroud to replace actuators voids the CommScope 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.