

Amphenol Antenna Solutions Smart Bias-T, part number MODEMxxx (also known as SBT-6962690-xxx) is used in place of traditional AISG “Home Run” cables. The Smart Bias-T cable eliminates the need for the home run cable by integrating DC power and AISG control signals onto the coaxial feeder line. The “xxx” designation is used for defining the gender of the three connectors (two for the coaxial feeder and jumper lines and one for AISG control and power) on each Bias-T. If a TMA is not used, two Bias-T’s are typically required—one at the bottom of the tower and one at the top. Some BTS manufacturers integrate this Bias-T function into their NodeB, eliminating the need for the bottom Smart Bias-T cable. Please talk to your BTS representative to see if this feature is available.

Figure 1.1 shows a MODEM100, which contains two female coax connectors and a male AISG connector. Please see the MODEMxxx specification sheet and ordering guide for more information. The Modem100 series will always have a male AISG connector, which will always be used at the bottom of the tower. The Modem200 series will have a female AISG connector, and will be used at the top of the tower.



Figure 1.1. Modem 100 Smart Bias-T.

INSTALLING MODEMxxx Smart Bias-T Cables

Proper MODEMxxx Smart Bias-T installations usually entail a top and a bottom unit. See Figure 2.1 and the steps below for a detailed explanation.

Top Unit Instructions

1. Connect the coaxial jumper cable between the RET antenna and the Smart Bias-T Modem 200.
2. Connect the coaxial feeder cable to the Smart Bias-T Modem 200.
3. Connect the male AISG connector to the female port on the Smart Bias-T Modem 200.
4. Connect the female AISG connector to the male port on the RET antenna.
5. Attach one end of the ground cable (not supplied) to the Smart Bias-T grounding hardware, then attach other end to the tower ground.

Bottom Unit Instructions

1. Connect the coaxial feeder cable to the Smart Bias-T Modem 100.
2. Attach one end of the ground cable (not supplied) to the Smart Bias-T grounding hardware, then attach the other end to the tower ground.
3. Connect the coaxial jumper cable between the BTS and the Smart Bias-T Modem 100.
4. Connect the female AISG connector to the male AISG port on the Smart Bias-T Modem 100.
5. Connect the male AISG connector to the female port on the AISG controller.

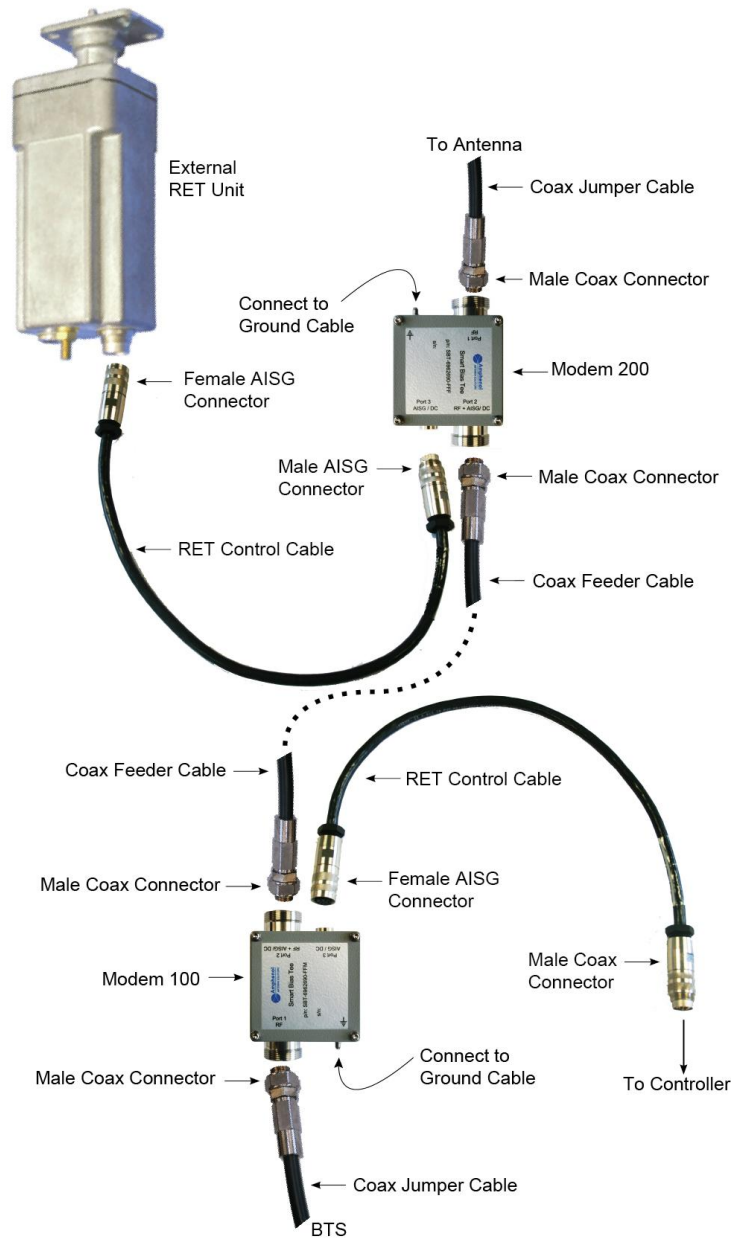


Figure 2.1. Smart Bias-T AISG Cable Installation.

After completing installation of the Smart Bias-T cables, verify successful operation. Please refer to the ALDC users guide for information on operating the AAS SmartTilt RET system.



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