**Using a TT-40 Thru Tee**

**Using an Orbital Thru Tee to provide a separate DC power supply to the BUC, while passing the 10 MHz signal through from the modem.**

Remember this: if you have external reference (ie a 10 MHz source), you need a special kind of Bias Tee if you want to insert DC power - a standard high quality Bias Tee does NOT pass 10 MHz and a low quality one impairs and greatly attenuates the 10 MHz signal. The special kind of Bias Tee that you need, is a TT-40 Thru Tee - that allows both the L Band and 10 MHz reference to pass through with less than 0.5 dB of insertion loss, AND permits the insertion of DC power (up to 4.0 Amps and up to 48 VDC).

Often, when upgrading a BUC, the systems engineer discovers that the existing modem does not provide sufficient DC power. What to do? Using a conventional Mux Tee the 10 MHz signal from the modem is blocked. The Orbital TT-40 Thru Tee allows both the 10 MHz and L band signals to pass while inserting the high power DC.

All this can be done using existing cabling.