MFJ-4117 Bias-Tee with DC Switch 1-60 MHz

INTRODUCTION

The **MFJ-4117 Bias-Tee** is ideal for running coax to distant devices allowing them to be placed anywhere regardless of power availability. Several MFJ products have a built in Bias-Tee, so the DC / RF coaxial cable can be directly connected to them as well.

The **MFJ-4117 Bias Tee** operates on frequencies ranging from 1-60 MHz. The Bias-Tee is used to inject DC voltage onto coaxial lines. The DC voltage is separated from the RF signal by another **MFJ-4116** or **MFJ-4117** on the terminating end (See Figure 1). Any standard 2.1 mm 1-50 VDC, 1 Amp maximum adapter will work. The **MFJ-4117** is equipped with a DC switch to turn the remote equipment on and off. When off the center conductor of the coaxial cable is DC grounded to insure no static electricity will build up on the center conductor.

INSTALLATION INSTRUCTIONS

- 1. Connect the transmitter to the "**RF IN/OUT**" coaxial connector on **Bias-Tee 1** using a 50-ohm coaxial cable. (See Figure 1) This is the RF signal input connector.
- 2. Connect a DC adapter to the "**DC IN\OUT**" jack. This is your DC voltage input connector.
- 3. If the device you are using <u>does have</u> a built in Bias-Tee, connect the device to the "RF/DC OUT/IN" coaxial connector on **Bias-Tee 1** using 50-ohm coaxial cable. The device will recover the RF and DC signals.
- 4. If the device you are using <u>does not have</u> a built in Bias-Tee, connect the "**RF/DC OUT/IN**" coaxial connector from **Bias-Tee 1** to the "**RF/DC OUT/IN**" coaxial connector on **Bias-Tee 2** using a 50-ohm coaxial cable. This is your RF/DC out of Bias-Tee 1 into Bias-Tee 2 to be recovered.
- 5. Connect the device to the "RF IN/OUT" coaxial connector of Bias-Tee 2 using a 50-ohm coaxial cable. This is your recovered RF signal output connector.
- 6. Connect the device to the "DC IN\OUT" of Bias-Tee 2 using a DC adapter. This is your recovered DC voltage output connector.

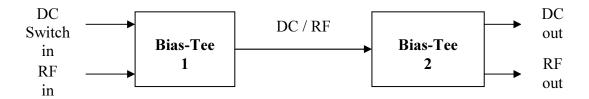


Figure 1: MFJ-4117 Bias-Tee Operation Diagram