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-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.

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.
- 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