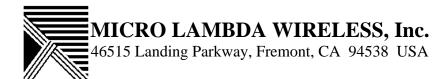
REV	DESCRIPTION OF CHANGE	APPROVAL	DATE
-	Initial release		08-12-08

# **INSTALLATION INSTRUCTIONS**

## **FOR**

Oscillators, Filters and Multipliers with Drivers



### INSTALLATION INSTRUCTIONS

#### **FOR**

#### STANDARD OSCILLATORS, FILTERS AND MULTIPLIERS WITH DRIVERS

Note: Please read thoroughly before turning on and attempting to operate this precision microwave product.



Description: These instructions will give the user basic power supply hook-up details and test equipment requirements to make basic electrical and microwave measurements.

The need for these instructions shall be determined by the user depending upon the level of expertise, driver manufacturer, system installation requirements, heat sink requirements, cooling fans, wire sizes and length of wires used by the user in any wire harness that will be connected to the input DC connector of the YIG device in question.

The recommended wire sizes to be used in any wire harness that will mate with the input DC connector for all Micro Lambda Wireless drivers are:

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1) DC supply wires : 20-22 gauge 2) Ground wires : 20-22 gauge 3) All other wires : 24-26 gauge

Power supplies that are to be connected to the main driver should be well regulated and possess no more than 10 mV ripple peak-peak from 2 kHz to 3 MHz on the power supply lines. Power supplies used for the heater need not be that clean. The heater input can be either power supply and ground or floating with plus and minus voltages. Polarity is not important.

## **Integrated Drivers:**

Digital (12, 14 and 16 bit TTL) : Options CD, CG, PD, PG, MD, MG

Serial Digital (16 bit) : Options SD, SG, MS, MF

Analog (0 to +10 Volts) : Options CA, CF, PA, PF

## **Remote Drivers:**

Digital Remote (12, 14 and 16 bit TTL) : Option RD,

Serial Remote (16 bit) : Option RS

Analog Remote (0 to +10 Volts) : Option RA

Make sure you have reviewed the type of product you have purchased. Make power supply hook-ups either using figure 1 for oscillator/driver or figure 2 for filter-multiplier/driver.

Verify that the current levels are the same as indicated on the test data sheets shipped with the product. Given the values measured are correct, proceed with test equipment hook-ups either using figure 3 for oscillator/driver or figure 4 for filter/driver.

You can now make microwave measurements as required to verify performance.

If the values measured do not coincide with the test data sheets provided, notify your Micro Lambda representative immediately or call the factory for assistance.

Heat Sink Oscillator  $\pm$  FM Coil  $\pm 10 \mathrm{V} \, \mathrm{dc} \, @$ DC Power 250 mASupply If Required FM + FM -To -15V Driver OR Ground +28V @ 500mA +15V Heater Tune Return Power Supply (4) Optional +15VGround -15V12, 14 or 16 Bits -Power Supply (1) Power Supply (2) Power Supply (3) Frequency Control +15V @ 2500 MA -15V @ 2500 MA 0 to +10V @ 10mA OR TTL or Serial Controller

Figure 1

Figure 1 - Power Supply Hook-up Diagram Oscillators with Drivers

Heat Sink Filter Or Multiplier To -15V OR -15V Driver +28V @ Ground 1000mA To +15V Data Tune +15V Heater Tune Return Power Supply (4) Optional -15V +15V Ground 12, 14 or 16 Bits -Power Supply (1) Power Supply (3) Power Supply (2) Ξ Frequency Control +15V @ 2500 MA -15V @ 2500 MA 0 to +10V @ 10mA ORTTL or Serial Controller

Figure 2 - Power Supply Hook-up Diagram Filters and Multipliers with Drivers

Figure 2

Figure 3 - Standard Test Equipment Block Diagram for Oscillator with Driver

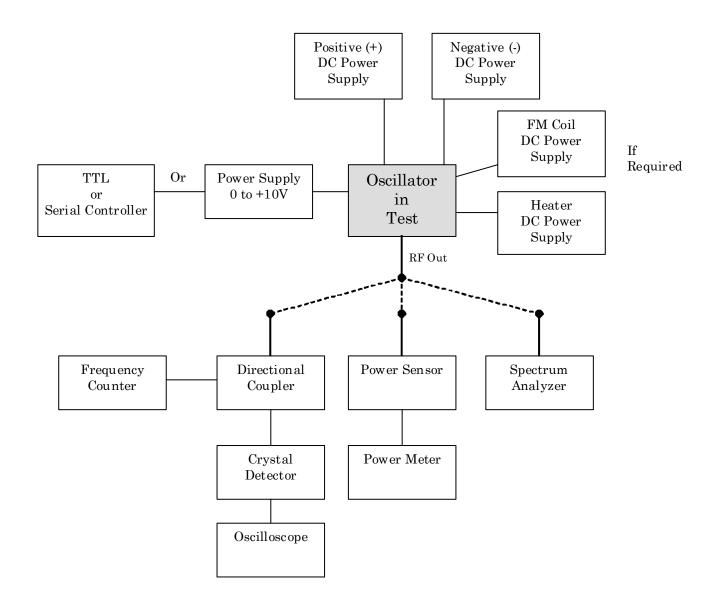


Figure 3

Figure 4 - Standard Test Equipment Block Diagram for Filters and Multipliers with Drivers

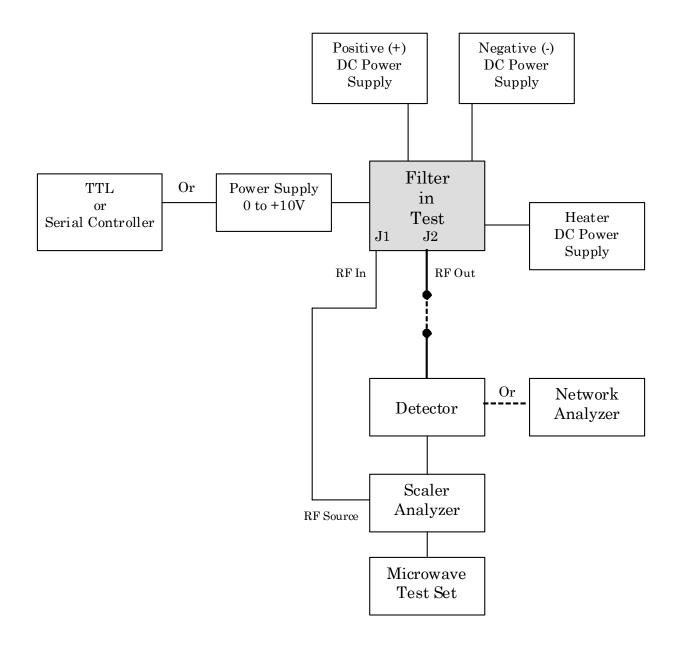


Figure 4