MLBS Quick Start Guide

1. Verify you have the following items:

Item	Quantity
MLBS Series Bench Test Synthesizer	1
AC Power Cord	1
Ethernet CAT5 cable	1
USB A to USB Mini-B cable	1
CD Rom (Contains manual, quick start guide and PC software)	1
MLBS Quick Start Guide (This Document)	1

- 2. Connect the AC power cable to the unit.
- 3. Connect the AC power cable to an appropriate 3 prong AC receptacle. The power switch will glow RED.
- 4. Connect the unit RF Out connector to the peripheral equipment using SMA compatible connectors.
- 5. Apply a frequency reference signal (i.e. 10.0 MHz) to the unit Ref. In connector if required.
- 6. If required, connect the USB or Ethernet connectors to the Host PC or equivalent.
- 7. Turn ON the unit using the front panel power switch. The power switch will now glow GREEN after a short warm-up. An unlock condition will be shown by the power switch LED flashing RED, if the reference is incorrect.
- 8. A 15 minute warm up is recommended before use.
- 9. Verify the front panel display is illuminated and displaying the current frequency setting in MHz, and the fan is producing air flow at the rear panel.
- 10. The unit is now ready for use via the front panel control or the peripheral interfaces.

Note: When the AC power cable is removed from the unit, the unit will remember its current power state and frequency setting and store them in nonvolatile memory for recall when the AC voltage is reapplied.

11. Install the CD:

The CD Rom supplied with the package contains a **SetupMLBS.msi** file, that when executed, will create a folder named "MLBS Support Files" on the desktop containing short cuts to the manual, documentation and programs for interfacing the product with a personal computer. This **SetupMLBS.msi** file is compatible with Windows XP, Windows Vista and Windows 7. The most current versions of these files, new offerings and filter specifications can be downloaded at our web site: http://www.microlambdawireless.com.

For interfacing with Apple or Linux PC's; The HTTP and UDP protocols can be used when connected to an Ethernet network.

12. Front panel operation:

Press the ▶ key on the front panel to move cursor right or when in the settings menu, go to the next menu selection.

Press the ◀ key on the front panel to move cursor left, to backspace data entry, or when in the settings menu, go to the previous menu selection.

Press the + key on the front panel to increment cursor position or enable a menu option.

Press the - key on the front panel to decrement cursor position or disable a menu option.

Enter numbers and decimal point via the keyboard as needed.

The MHz key is also used as the data entry key.

13. Quick Remote Control using Ethernet and a Web Browser (PC, and Network w/ DHCP router required):

Connect the unit to a DHCP network using the supplied CAT5 cable, wait 10 seconds for the router to issue an address. Press the decimal point key on the keypad, the display will show R_ (for recall). Enter "107" and press the MHz key. The unit's network name (Host Name) will be displayed on the lower line of the display (e.g. MLBS0005). Note this Host Name. Using a PC connected to the same network, open an Internet Browser window. In the browser's address bar, type the units host name (e.g. http://mlbs0005) and press enter. Alternately, you can input the units IP address in the browser address bar. The MLBS Home Page should now be displayed in the browser window. Commands may be sent and information received from this browser window.

14. Quick Remote Control using the USB interface:

Connect the unit to the PC's USB port using the supplied USB cable. Wait for Windows to verify that the device was successfully installed. From the folder on the PC desktop, run the program named "MLBS PC Interface". A control interface should now be visible with information about the product. Commands may be sent to the unit and information received from the unit, using this program. See the Help menu for more information.