User's
Guide

Signal Meter
Model #460118

Contents:

Appearance of device and accessories may vary.

Note: This manual contains important safety and operating information. Please read and follow the instructions in this manual. Failure to do so could be hazardous and result in damage to your Signal Detector.

Wilson Electronics

Purpose

The purpose of the Signal Meter is to assist the installation of a Wilson Electronics Signal Booster, specifically for:

- **Mapping The Outside Frequency Environment**
- **Mounting Your Outside Directional Antenna**
- **Maximizing Wilson Electronics Signal Booster Coverage**

Recommended Outside Antenna

Directional antennas will help the installer determine the location of a signal-of-interest or interferer. For general frequency mapping, the 314411 is recommended because it is both directional and has wide bandwidth. This will allow the installer to use the Signal Meter without ever having to change antennas.

Inside this Package

Antenna for indoor frequency mapping **(311159)**

DC Plug-In 5.5V/2A Power Supply & USB Cable **(2D9910 / 859977)**

AC Power Supply **(859969)**

Signal Meter **(460118)**

Optional Accessory Kit:
(308410)

A. Wide-Band Panel Antenna 700-2700MHz **(314411)**
B. Pole Mount Assembly **(901117)**
C. 2' Extension Cable RG58, SMA Male to N-Male **(955802)**

A.

B.

C.

Appearance of device and accessories may vary.
To purchase, contact Wilson Electronics Sales Department at: 800-204-4104

Contact Wilson Electronics Technical Support Team with any questions at 866-294-1660 or email: tech@wilsonelectronics.com.   Mon.-Fri. Hours: 7 am to 6 pm MST.
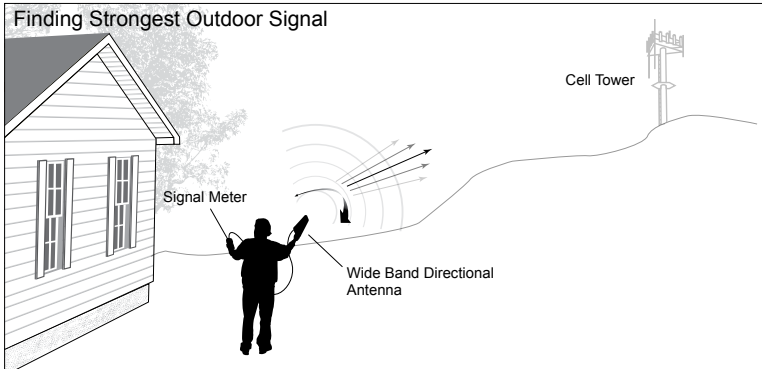
Frequency Mapping

1. Mapping The Outside Frequency Environment

Using the Wilson Signal Meter and a Directional Antenna, the available frequency bands, as well as the location of the associated cell tower, can be determined by the strength of the Detected Cellular Downlink Signal.
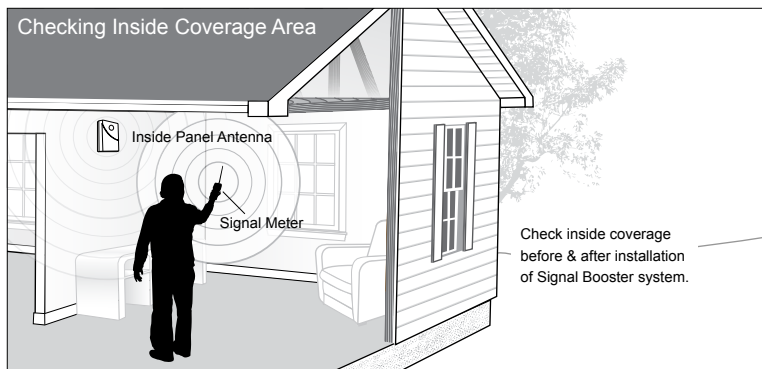
2. Mounting Your Outside Directional Antenna

When determining the best direction to mount your Outside Directional Antenna, the Wilson Signal Meter should be connected directly to a Directional Antenna.

Finding Strongest Outdoor Signal

Cell Tower

Signal Meter

Wide Band Directional Antenna

3. Maximizing Wilson Electronics Signal Booster Coverage

In order to maximize your Wilson Electronics Signal Booster coverage, the Signal Meter can be used inside the building to verify desired coverage area. If it is determined that coverage is not sufficient, follow directions for antenna separation and ensure the Outside Antenna is pointing at the strongest desirable cell tower.

Checking Inside Coverage Area

Inside Panel Antenna

Signal Meter

Check inside coverage before & after installation of Signal Booster system.
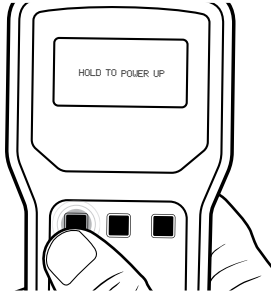
Contact Wilson Electronics Technical Support Team with any questions at 866-294-1660 or email: tech@wilsonelectronics.com.   Mon.-Fri. Hours: 7 am to 6 pm MST.
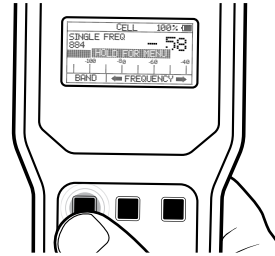
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Signal Meter Operation

To Turn the Device On

Hold the LEFT button for 3 seconds. The device will begin with the operational mode that was last used.

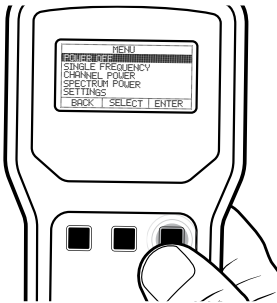## To Turn the Device Off

1. The device will automatically turn off after a set time if the sleep timer is enabled.

2. The device will automatically turn off if the battery reaches 0%.

3. The device can manually be turned off from the main menu by highlighting the OFF selection and pressing the RIGHT button.

Operational Mode

Operational modes can be selected from the main menu. To bring up the main menu:

1. Hold the LEFT button for 2 seconds.

There are three operational modes:

1. Single Frequency – A single frequency can be selected where bandwidth is approximately 1.5 MHz

   a. Frequencies can be changed by pressing either the MIDDLE button or the RIGHT button.

   b. Bands can be changed by pressing the LEFT button.

2. Channel Power – The entire channel can be selected where bandwidth is displayed on the screen.

   a. Channels can be changed by pressing either the MIDDLE button or the RIGHT button.
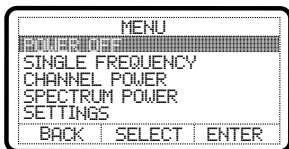
   b. Bands can be changed by pressing the LEFT button.

3. Spectrum Power – The entire bands spectrum is displayed on the screen.

   a. Frequencies can be changed by pressing either the MIDDLE button or the RIGHT button.

   b. Bands can be changed by pressing the LEFT button.

The bands are:

• BAND 12/13/17 – LTE (728-756 MHz

• BAND 5 – CELL (869-894 MHz)

• BAND 25 – PCS (1930-1995 MHz)

• Band 4 – AWS (2110-2155 MHz

Main Menu

1. While in the main menu, there are five selections:

```
MENU
POWER OFF
SINGLE FREQUENCY
CHANNEL POWER
SPECTRUM POWER
SETTINGS
BACK   SELECT   ENTER
```

   a. Power Off

   b. Single Frequency

   c. Channel Power

   d. Spectrum Power

   e. Settings

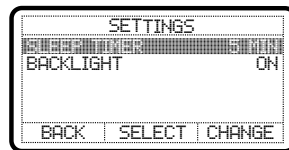2. To cycle through the main menu, press the MIDDLE button.

3. To enter a selection, highlight the selection and press the RIGHT button.

4. To cancel and return to the previous operational mode, press the LEFT button.
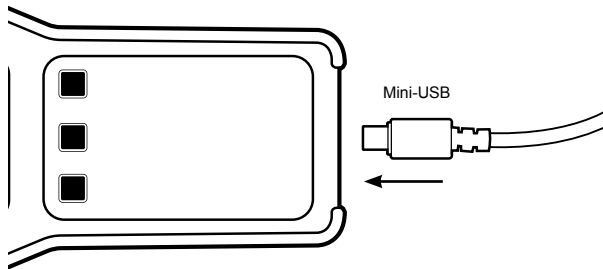
Settings Menu

1. In the settings menu, there are two selections:

   a. Sleep Timer

   b. Backlight

```
SETTINGS
SLEEP TIMER          5 MIN
BACKLIGHT              ON

BACK   SELECT   CHANGE
```

2. The sleep timer can be changed from the following selections:

   a. 1 minute

   b. 5 minutes (default)

   c. 10 minutes

   d. 15 minutes

   e. 20 minutes

   f. OFF (device will not automatically turn off)

3. The backlight can be turned on or off.

4. If you do not wish to change the settings, press the LEFT button to cancel any changes. This returns you to the main menu.

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Charging the Device

1. The device can be charged while off or in-use. Simply plug in the included Mini-USB power supply to the Mini-USB port located at the base of the device. If the device is on, the battery icon in the upper-right corner will display a lightning bolt.

2. Leaving the device plugged in will not harm the battery or the device. Internal circuitry protects the battery and the device.

3. The battery will last approximately 45 days while in sleep mode or 6 hours of continous use.

Mini-USB

30-Day Money-Back Guarantee

All Wilson Electronics products are protected by Wilson Electronics 30-day money-back guarantee. If for any reason the performance of any product is not acceptable, simply return the product directly to the reseller with a dated proof of purchase.

2-Year Warranty

Wilson Electronics Signal Boosters are warranted for two (2) years against defects in workmanship and/or materials. Warranty cases may be resolved by returning the product directly to the reseller with a dated proof of purchase.

Signal Boosters may also be returned directly to the manufacturer at the consumer's expense, with a dated proof of purchase and a Returned Material Authorization (RMA) number supplied by Wilson Electronics. Wilson Electronics shall, at its option, either repair or replace the product. Wilson Electronics will pay for delivery of the repaired or replaced product back to the original consumer if located within the continental U.S.

This warranty does not apply to any Signal Booster determined by Wilson Electronics to have been subjected to misuse, abuse, neglect, or mishandling that alters or damages physical or electronic properties.

Failure to use a surge protected AC Power Strip with at least a 1000 Joule rating will void your warranty.

RMA numbers may be obtained by contacting Technical Support at 866-294-1660.

Disclaimer : The information provided by Wilson Electronics, LLC is believed to be complete and accurate. However, no responsibility is assumed by Wilson Electronics, LLC for any business or personal losses arising from its use, or for any infringements of patents or other rights of third parties that may result from its use.

U.S. Patent Nos. – 7,729,669; 7,486,929

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Specifications

Signal Meter

Model Number	460018
Antenna connector	SMA
Antenna impedance	50 ohms
Dimensions	1.25" x 3.25" x 7"
Weight	9.7 oz
Maximum detectable in-band signal (dBm)	-38
Minimum detectable in-band signal with 1.5MHz BW (dBm)	-110
Minimum detectable in-band signal with 10MHz BW (dBm)	-105
Maximum recommended RF input (dBm)	-38
Power Requirements	5V / 1.5A

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