INVISIBLE WAVES RF-id SOLO™

Operating Instructions

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USA

678-714-2000

The portable RF-*id* SOLO is a compact frequency measuring unit that is easy to operate and reliable.

Features include:

Large LCD
9-digit display
Low power consumption
Display holding
Display saving
Menu setting
Low battery indicator
Signal strength indicator
Equipped with a rubber antennas and power adapter

Accuracy

The RF-*id* SOLO has a 10Hz resolution. A wireless microphone may be set to 550.125MHz, but because of the high accuracy of the RF-*id* SOLO, the display may indicate a true center frequency transmission at 550.127MHz (off by 2KHz). Please round up or down as necessary. Note: Most wireless microphones frequencies will end in either 0 or 5. See "Calibration" on how to adjust for an off-set.

Transmission Types

The RF-*id* SOLO works with both digital and analog single carrier transmissions in the 50MHz to 2.5GHz range provided that the transmissions are not very wideband, spread-spectrum or frequency hopping transmissions. When measuring these types of devices the frequency reading will fluctuate.

Using the RF-*id* SOLO

To turn on the unit: Press the power button. Hold the button to turn off the power.
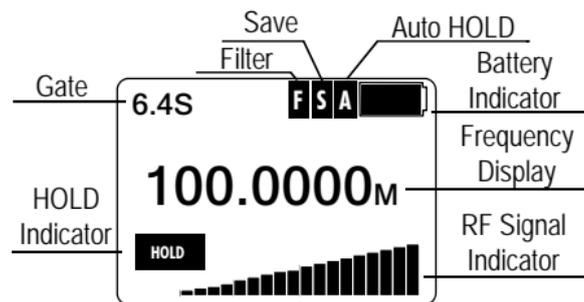
Re-set the unit: Turn off the unit. Hold "MENU" down. Press the "LIGHT". Release the "Menu".

LCD back light:
While the unit is turned on press "LIGHT" to turn on the LCD back light. Press "LIGHT" again to turn off the light.

Holding the reading: Press "HOLD". Press "HOLD" again to restart measuring.

Display symbols:

Entering the menu:
Hold "MENU" for 2 seconds.
Note: The solid arrow indicates an item to be selected. The solid square stands for "selected", a hollow square referring to "not selected". In the menu "LIGHT" is used as the UP key. "HOLD" as the DOWN key. Press "MENU" to select and enter the next title.

Exiting the menu:
Hold "MENU" to exit. If no key is pressed within 30s, menu setting is cancelled.

Setting the range:
Use "MENU" to set the desired range, and press "MENU" to return.

Setting the gate:
Use "OPTIONS MENU" to select "GATE".
Hold "LIGHT" or "HOLD" to select the gate and press "MENU" to confirm.
Recommended settings: 0.64S or 0.064S

Saving the display:
Use "USER" to select "SAVE".
When "AUTO" is selected, and at the same time "AUTO" is selected in "HOLD", the reading is held and saved automatically, when a signal is measured.
When "MANUAL" selected use "HOLD" to hold the reading, and press "MENU" to save the reading.
As many as 99 data selections can be saved in the memory. When the data exceeds 99 selections, new data overwrites the previous data automatically.

Setting the hold mode:
Use "USER" to select "HOLD".
When auto hold is selected the reading is held automatically if the signal strength indicating bars exceed 50% of the scale.
When manual holding is selected press "HOLD" to hold the reading. Press "HOLD" to quit holding (recommended method).

Checking the saved data:
Use "USER" to select "VIEW". Press "LIGHT" or "HOLD" to view the saved data. The position of the saved data appears at the right bottom corner, from M01 -M99.

Setting the filter:
Use ""USER" to select "FILTER".
When "ON" is selected the reading is 0.000 when there is no signal (recommended setting). When "OFF" is selected there might be a flashing figure.

Auto power off:
Use "USER" to select "AUTO -OFF".
When on is selected the power is turned off if the unit is not operated in 5 minutes. When "OFF" is selected, this function is disabled.

Measuring the RF signal:
The RF-id SOLO was designed for near -field measurements (within a few inches). This requires the use of the short, rubber -tipped stub antenna. Far-field measurements are possible by using the included rod antenna.

Maintenance

Storing the RF -id SOLO:
If the unit is not going to be used for an extended time, please removed the battery.

Charging the battery:
The battery is not charged when the unit is purchased. Please charge the battery for 4 hours before using. When the battery is used as the power supply, the battery symbol at the right top corner indicates the battery level. The following possible symbols may appear:

The last symbol indicates the low battery. Charge the battery as soon as possible.
Plug the adapter into the power input to charge the battery and supply the power when the unit is turned on. The battery symbol will be changed to:

When the battery is charged with the unit turned off, only the charging symbol appears on the LCD:

Extending the Battery operating hours:
When the battery is used (without the adaptor connected), the frequency counter can be turned off automatically to save power when auto-power-off is turned on. If no key is pressed in 5 minutes the unit is turned off automatically.
Note: If the adaptor is connected the unit will not be turned off automatically.

Note: When the built-in Li-ion battery is replaced, please use the adaptor to activate the battery protector. It is activated when the adaptor is plugged in.

Calibrating the Time Base:
Input a standard signal and adjust the CAL, until the reading is equal to the standard signal.

CAL
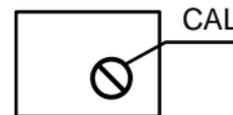
Warranty and Service

The warranty is one year from the date of purchase. The damage caused by any of the following is not covered under the warranty: damage caused by using a non-specified battery, damage caused by improper use, damage caused by accidents, abuse or input overload.

Range	10Hz – 40MHz	1MHz-2.6GHz
Amplifier	1Mg ohm	50 ohm
Impedance	1Mg ohm 30pF	50 ohm VSWR<2:1
Features	RF Signal strength (1MHz -2.6GHz) Freeze the screen Save View Battery Indicator	
Sensitivity	<30mV@ 10Hz – 30MHz <30mV@ 30MHz – 40MHz	<5mV@100MHz <5mV@400MHz <15mV@1GHz
Gate	1 Sec 0.1 Sec 0.01 Sec 10 Sec	0.64 Sec 0.064 Sec 0.64m Sec 6.4 Sec
Time Base	<+/-5ppm	
LSD	0.1Hz (10Sec, 10Hz – 40MHz) 10Hz (6.4Sec, 1MHz – 2.6 GHz)	
Battery	1X16340 Li-ion	
Power	5VDC1A	
Cabinet	PVC	
Size	85mm(H)49.5mm(D)21.5mm(W)	
ANT	(UHF)	