# DIGITAL VHF/UHF 125-525MHz POWER & S.W.R. METER



#### Key Specifications/Special Features: Detect S.W.R. Measurement RF Power (FF / REV) Measurement Frequency counter

### Specifications:

120W					
1.00:1~19.99 :1					
Cover:125MHz-525MHz					
5V (micro usb)					
+/- 0.1KHz (+/-5%)					
3.7V Li-ion Battery					
50 Ω					
70*75*35 mm					
N / SO239 (SL16)					
220g					
Package					
S.W.R Meter					
English Instructions					
USB charger Cable					
USB power Supply					

### How to charge your meter :

Connect external USB DC+5V source (e.g. USB charger) to micro USB input When display is showing 'E', it means the unit is powered by USB. When display is showing 'B', it means the unit is powered by internal battery.

### How touse meter connect your Radio :

TX : Connect to Radio antenna RF Output

ANT : Connect to ANTENNA or 50 OHM Dummy Load

( Proper adaptor/cable is required if .your device has different type of connectors.)

### How to use a swr meter to test antenna (SWR) : (pic 1)

Measurement V.S.W.R. : 1)Radio antenna RF output connect to meter "TX" socket . 2)Antenna connect to meter "ANT" socket . 3)Push PTT from Radio, METER display is SWR measure data. \*TX Power must be 3 watt or more

## How to use a meter to test the output Watt of your transceiver :

Measurement Power: 1)Radio antenna RF output connect to meter "TX" socket . 2)50 Ohm Dummy connect to meter "ANT" socket . 3)Push PTT from Radio, METER display is Power measure data . ( Check freq.standard VHF 145MHz UHF 430MHz) \*(METER is not for DMR system)

### How to rotate the display:

Press Yellow button and hold to rotate display in 180 degree

### Push [Blue button] for MENU

1	LCD DIM (Back Light Time)	0-9	1	"0" is OFF, 1 min to 9 mins	
2	Auto Power Off Time	0-9	3	"0" is ON, 1 min to 9 mins	
3	Adjustment frequency counter	-99 to +99	0	1=0.1KHz <sup>,</sup> -1=-0.1KHz	
4	Adjust VHF power offset	-99 to +99	0	"1" is up to 1%,"-1" is down to 1%	
5	Adjust UHF power offset	-99 to +99	0	"1" is up to 1%,"-1" is down to 1%	
6	Adjust VHF low Power offset	-99 to +99	0	"1" is up to 1%,"-1" is down to 1%	
7	Adjust UHF low Power offset	-99 to +99	0	"1" is up to 1%,"-1" is down to 1%	
8	AutoZero (Second)	0 to 30	5	0= Hold data, 1-30 Data auto reset	
* C	* Supplier, the product will add functionality without having to give notice				

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### SET & SAVE:

1. Press MENU [Blue button]

- 2. Press F1 [Red button)(Select 1-8 Function)
- 3. Press [Blue button] ( ), [Yellow button] (+)

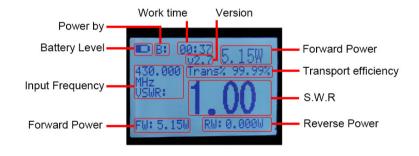
4. Press the [Red button ]for 2 seconds

5. Press the [Red button] 2 second and relest

,show the save and exit page

6. [Blue button] for save , [Yellow button] not save and exit

### LCD DISPLAY



### TYPE : SO239 (SL16)





TYPE: N



## Correctly use the SWR meter to measure mobile radio of antenna



SWR 1.0 - 1.5: The ideal range!

**SWR 1.5 - 1.9:** There's room for improvement, but SWR in this range should still provide adequate performance.

**SWR 2.0 - 2.9:** While not good, this likely won't damage your radio with casual use. **SWR 3.0+:** Performance will be severely affected, and you're likely to damage your radio with extended transmission use.

IMPORTANT NOTE: Radio damage will only occur when you're TRANSMITTING from an antenna with high SWR readings. Leaving the radio on to receive signals poses no risk to your radio.

# Correctly use the SWR meter to measure handheld radio short antenna



If you want the Best effect. Please use metal sheet(optional)

### Trouble shooting

1. The Meter does not start.

- -PLease charged battery with USB cable  $\ +5V$  , or come with PSU .
- -Push and hold on the "RED" button .
- -Replacement battery when battery dead.

-There are still problems with steps 1. and 2.and 3., please contact service center.

### 2.Watt /S.W.R. read data is not hold on ? -Some Radio problem when end of TX . -Radio RF output TX is not stabilizing.

## 3.Read the watt data is not accurate ? -Not for DMR system

-Don't not use the antenna get the watt data. -Please use the correct power dummy load to measure (must be 50 OHM) -The data read error when not read the frequency from radio -The TX input is weak, Input Watt must be higher than 0.5Watt

## 4.Read the S.W.R. data is not accurate? -Not for DMR system

-Do not affect the test in the following cases, there are objects nearby -Do not affect the test in the following cases, placed horizontally.

## 5. Read the Frequency counter is not display or read frequency not accurate?

e.g. Radio is 145.000 , read 145.003 -e,g, input below 0.5Watt ,higher than 0.5W is best. -Please use menu mode 3 and fine tune the frequency offset.

## 6.Display have problem ? e.g.BLack or Garbled or no Display

-Restart, From METER remove the inside battery. -There are still problems with steps 1. and 2., please contact Retail shop service center.

## 7. How to RESET the microchip

-Off mode ,Hold the Red button and the display show "restore to default "

-There are still problems with steps 1. and 2., please remove the battery.

# \*\*All Specifications are subject to change without notice

cases, there are objects nearby and placed horizontally.