Digital VHF/UHF 125-525MHz Power & S.W.R. Meter

USER'S MANUAL

CE

Key Specifications/Special Features:
Detect S.W.R.
Measurement RF Power
Measurement Frequency counter

Specifications:

Max Power:	120W
VSWR:	1.00-19.99
Frequency Range:	Cover:125MHz-525MHz
Power in:	5V (micro usb)
Frequency counter:	+/- 0.1KHz (+/-5%)
Li-ion Battery :	3.7V Li-ion Battery
In /Out Impedance :	50 Ω
Size without Socket :	70*75*35 mm
(in and out) Interface:	N(SL16) / SO239
Net Weight :	220g

Package

1x	VHF/UHF S.W.R Meter
1x	English Instructions
1x	USB charger Cable
1x	USB power Supply

How to Connect Radio :
   TX : Connect to RADIO RF Output
ANT : Connect to ANTENNA or 50 OHM Dummy Load

How to charger :
Connect external USB 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 to check the S.W.R. of your Antenna :
Connect to "TX" on Radio output and Antenna to "ANT". Proper adaptor/cable
is required if your device has different type of connectors.
1) Measurement V.S.W.R. :
2) METER TX connect Radio RF out
3) Radio TX METER with display S.W.R. measure data.
*Do not affect the test in the following cases, there are objects nearby and placed horizontally.

How to check the output Watt of your transceiver :
Connect to "TX" on Radio output and dummy Load to "ANT". Proper adaptor/cable is required if
your device has different type of connectors.
1)Measurement Power:
2)METER TX connect Radio RF out
3)METER ANT connect 50 ohm Dummy Load
4)Push TX botton 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 key to rotate display in 180 degree

Push [Blue botton] for MENU

1	LCD DIM (Back Light Time)	0-9	1	"0" is OFF, 1 min to 9 mins
2	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，-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%

* Supplier, the product will add functionality without having to give notice

SET & SAVE:
1. Press MENU [Blue botton]
2. Press F1 [Red botton)(Select 1-7 Function)
3. Press [Blue botton] (-), [Yellow botton] (+)
4. Press the [Red botton]for 2 seconds
5. Press the [Red botton] 2 second and relest ,show the save and exit page
6. [Blue botton] for save , [Yellow botton] not save and exit

Trouble shooting

 1. No Operation?
-PLease charge with USB cable +5V , or come with PSU .
-Push and hold on the "RED" botton .
-Replacement battery when battery dead.
-There are still problems with steps 1. and 2.and 3., please contact service center.

2.Watt /SWR read data is not hold on ?
-Some Radio problem when end of TX
.Radio 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 below 0.5W

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, Not for DMR system
-Input below 0.5W
-Please use menu mode 3 and fine tune the frequency offset.

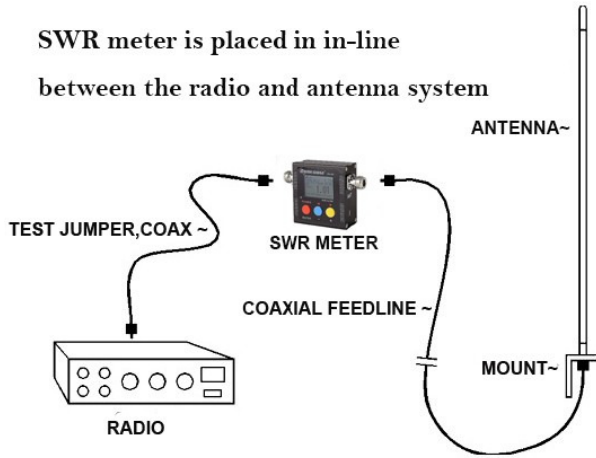**6.Display have problem ? e.g.BLack or Garbled or no Display**
-Restart , From METER remove the inside battery.
-There are still problems with steps 1. and 2., please contact surecom service center.
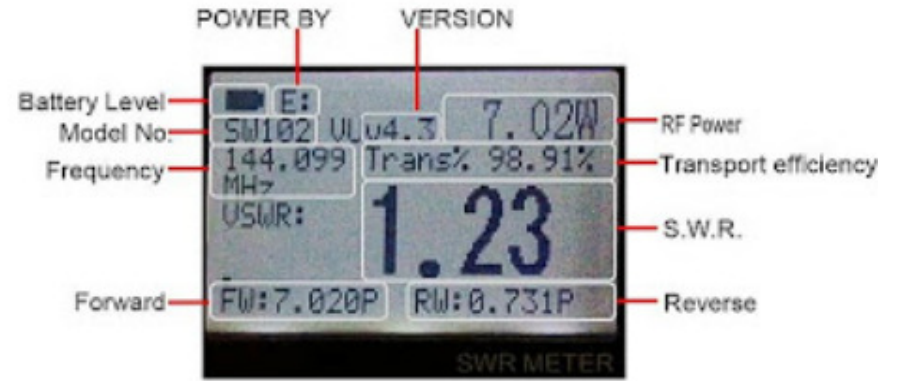
7. How to RESET the mirco chip
-Off mode ,Hold the Red button and the display show "restore to default "
-There are still problems with steps 1. and 2., please remove the battery.
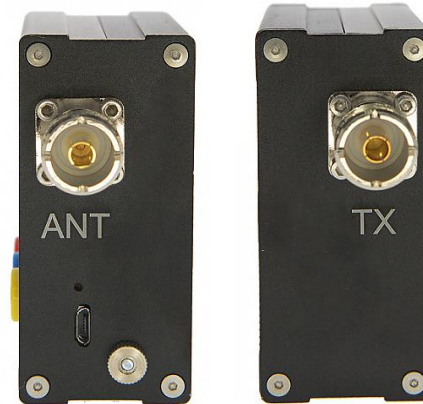 ****All Specifications are subject to change without notice**

ANT   TX

SWR meter is placed in in-line
between the radio and antenna system

ANTENNA~

TEST JUMPER,COAX ~

SWR METER

COAXIAL FEEDLINE ~

MOUNT~

RADIO

PIC.1

SW-102 NORMAL DISPLAY

POWER BY   VERSION

Battery Level ——   E:
Model No. —— SW102 VLu4.3   7.02W —— RF Power
Frequency —— 144.099 Trans% 98.91% —— Transport efficiency
MHz
VSWR: 1.23 —— S.W.R.

Forward —— FW:7.020P   RW:0.731P —— Reverse

SWR METER

TYPE : SO239

ANT   TX

TYPE: N (SL16)

ANT   TX

Correctly use the radio to measure S.W.R.

If you want the best SWR effect, please use metal sheet.

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

PIC.2