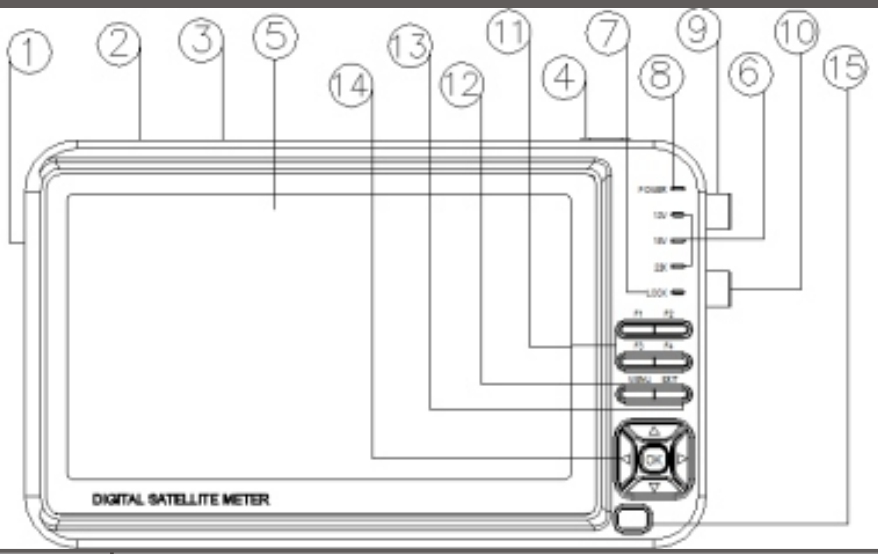
USER'S MANUAL

Digital satellite Meter

SH-500

We operate a policy of technically change without prior notice,

FRONT PANEL



No.	Item	Description
1	USB-Port	USB port for PC connection and power supply connection
2	AV In	Input audio and video signal
3	AV Out	Output audio and video signal
4	POWER-button	Switch meter on/off
5	LCD-Display	Display the TV program, the operation menu and the detailed parameters
6	L22K/13V/18V-LEDs	LED lights when 22K/13V/18V switch on
7	LOCK-LED	LED lights when satellite signal is locked
8	POWER-LED	Operation: Red: the finder is on Off: the finder is off Charging: Green: The battery is being charged Orange: The battery is full
9	LNB-IN	Satellite signal input
10	Test-Port	Tested cable input
11	Function -button	F1: Switch LCD on/off F2: Mute F3: Switch the display F4: Turn on GPS(SH-500G)
12	Menu-button	Display the main menu
13	Exit-button	Leave the current menu, cancel operation
14	Navigation-cross OK button	Navigation through menus, switching programs ▲, ▼ volume control ◄, ► OK button: confirmation of a selection
15	IR	Receive the infrared signals

➢ Charging

- If the finder is being used for the first time, it may be necessary to charge for about 12 hours. If the battery runs low during use, you should recharge it for 5 to 6 hours， it will be full when the power light turns to orange from green. Fully rechargeable Li-on battery can last approximately 3.5 hours.
- It may be necessary to turn off the finder while charging. Universal charger operating on 110vac/60Hz or 220vac/50Hz makes it usable anywhere.

➢ Turn on/off

- Press and hold the POWER button for 2 seconds, the meter will turn on.
- Press and hold the POWER button for 2 seconds again to turn off.

➢ Enter registration code

- It is necessary to enter the registration code when you first start_up or restart after updating the softwares and parameters. You can find the code item in the manual and enter it into the meter by pressing the direction buttons, [◄][►]:move the cursor to the alternate location, [▲][▼]: choose numbers or letters, press OK button to confirm.
- Registration code is the security and after-sale guarantee, please keep it safely.

➢ Language setting

- From the system setting menu, you can find the language setting item. select your favorable language and press OK button.

➢ Angle Calculate

Press the [▲][▼] button to select the following points:

Sat Name | GPS | Local Longitude | Local Latitude | Recalculation

Sat Name: Select the desired satellite

GPS: Select the GPS On or Off. (The meter will load the longitude and latitude of your position automatically if GPS on, or you input them by yourself)

Local Longitude: Input your local longitude

Local Latitude: Input your local latitude

Recalculation: After the completion of all values, press OK button to angle calculation

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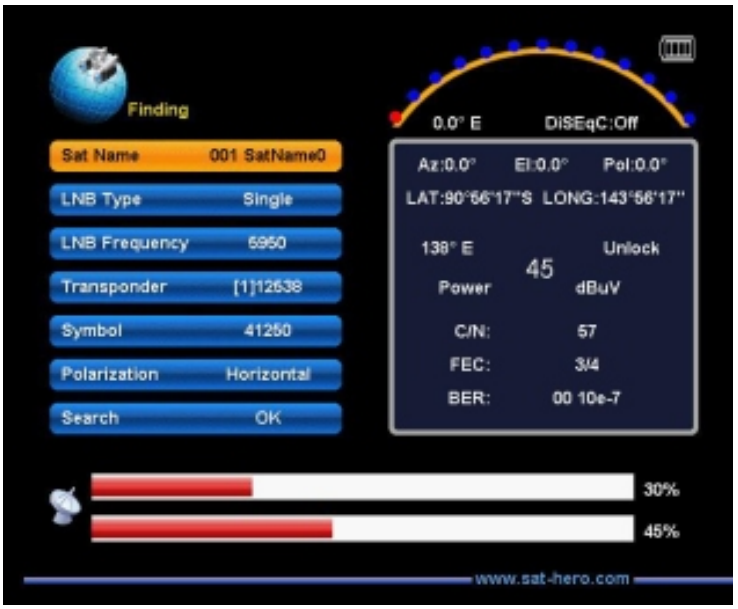
Az: show the azimuth angle of the chosen satellite

El: show the elevation angle of the chosen satellite

Pol: show the polarity angle of the chosen satellite

➢ Satellite Finding



Select Satellite

- From the finding menu, move cursor to Sat Name, you can browse the satellites list, use [◄][►] buttons to switch between different satellites, select the one you want, press OK button.

Select LNB

- From the finding main menu, move cursor to LNB Type, Use [◄][►] buttons to choose LNB Type between single and double local oscillator, then move cursor to next bar, Use [◄][►]buttons to select the default LNB frequency. The LNB frequency must be the same as on the antenna.
- If there is not default frequency, press the OK button to edit and key in the LNB frequency by using the direction buttons. Press the OK button to end.

Select parameter

- From the finding main menu, move the cursor to TP. Use the [◄][►] buttons to select the parameter.
- If the default parameters are not what you need, press OK to edit. You can key in the frequency, symbol rate and polarization by using the direction buttons. When finished, press OK to end.

Detect satellite signal

- When a signal is detected the signal bar will become active and a audio tone can be heard. You will now see usable readings of PWR, C/N, FEC, a.BER and NIT. You are now able to search the satellite channel list by pressing the OK button.

Value	
0.0ºE：	shows the longitude of the chosen satellite
DiSEqC：	shows the DiSEqC port of the chosen satellite
Az：	shows the azimuth of the chosen satellite
El：	shows the angle of elevation of the chosen satellite
Pol：	shows the polarity angle of the chosen satellite
LAT：	shows the local latitude of the chosen satellite
LONG：	shows local longitude of the chosen satellite
NIT：	shows the longitude of the locked satellite
C/N：	shows the C/N value of the locked satellite
FEC：	shows the FEC value of the locked satellite
a.BER：	shows the a.BER value of the locked satellite

➢ Restore factory setting

- From the system setting menu, you can find the reset setting item. Press OK button and input the password. You can choose factory type. You can choose “delete CA channels” “delete radios channels” “delete all channels” and “restore to factory”. Press OK button to confirm.
- After factory resetting, all modified and saved contents will be lost.

➢ Upgrade

- Download the latest software, parameters and update tool from our Website.

➢ Notice

- Before being ready to seek satellite signal, make sure that the cable is properly connected through the testing port of finder first. Take the LNB in port of finder or In port of digital satellite receiver as the output of tested cable. Turn on the finder and receiver (if used), the test light on the finder panel will be lit as soon as the cable is connected. While installing the antenna, make sure that the LNB in port of finder is connected to the tuner of the antenna with tested cable. Turn the antenna in the approximate direction, the finder will light the LED bar and beep when the antenna is close to the satellite. Continue to turn the antenna in the direction that makes the finder light more LED's and beep quicker. View the PWR value on the screen, continue to turn the antenna until the finder shows the maximum value of PWR, lock in the best position of antenna.
- Through this function, user can quickly and easily find the right satellite and accurately set the dish.

➢ **Warning**

- Only qualified personnel may dismantle device and charger.
- Do not drop device and charger into water or fire.
- Do not shock or vibrate the device and charger.
- Make sure that the battery is full charged while upgrading. Do not switch off the device or disconnect the cable while upgrading. The device will restart automatically after upgrading.

➢ **Battery & charger:**

- Only use original batteries and chargers. The use of any other type of battery or charger can be dangerous and could damage the device, and will void your warranty.
- Dispose of batteries according to local regulations.
- Do not crush or puncture the battery. Avoid extreme temperatures and high pressure.
- If left unused, a full charged battery will lose its charge over time, please recharge before using.
- Unplug the charger from the electrical plug when not in use.

Service

Product Certificate

Write your meters serial number and registration code here. You can find this information on the inside of the battery door.

Product Serial Number: _____

Registration Code: _____

Technical Specifications

LNB input

F-type connector	IEC 169-24
Frequency range	950 MHz ~ 2150 MHz
Input level	-65dBm -25dBm
Input Impedance	75Ω
LNB power supply	14/18V, max. 650mA
LNB switch control	22 kHz

Demodulator

Demodulator front end	QPSK
Symbol rate	2Mbps~45 Mbps
Measurement Unit	dBm, dBuV
Connectors	
Serial data interface	MINI USB
Video/audio interface	3.5mm

Power supply

Supply voltage	DC14.5V 1.5A
Li-on battery	2550mA
Working time	about 3 hours
Supply voltage (charger)	AC 110~250V 50/60 Hz

Temperature

Operating temperature	0°C to +40°C
Storage temperature	-10°C to +50°C

Dimensions

Length x width x height	21 x 12.5 x 3.5 cm

Weight

Weight	0.58Kg
Gross weight	0.98Kg