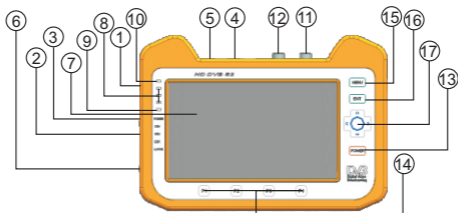


USER'S MANUAL

Digital Multi-function Tester

We operate a policy of technically change without prior notice, the picture of outlook and color is for a reference only, the actual item is the standard.

FRONT PANEL



No.	Item	Description
1	USB-Port	USB port for PC connection and power supply connection
2	AV In	Input audio and video signals
3	AV Out	Output audio and video signals
4	USB-Port	Connect to USB or USB-HDD device
5	HDMI-Port	Connect to TV through HDMI cable
6	DC12V-Out	Output DC12V 2A
7	LCD-Display	Display the TV program, the operation menu and the detailed parameters.
8	22K/13V/18V-LEDs	LED lights when 22K/13V/18V switch on
9	LOCK-LED	LED lights when satellite signal is locked
10	POWER-LED	<i>Operation:</i> Red: the finder is on. Off: the finder is off. <i>Charging:</i> Green:The battery is being charged. Orange:The battery is full.
11	LNB-IN	Satellite signal input
12	CCTV-IN	CCTV camera signal input(Optional)
13	POWER-button	Switch meter on/off
14	Function -button	F1: Switch LCD on/off. F2: Mute F3: Switch the display. F4: To switch between TV program and Radio program
15	Menu-button	Display the main menu
16	Exit-button	Leave the current menu, cancel operation
17	Navigation-button	Navigation through menus, switching programs ▲, ▼ volume control ◀, ▶
	OK button	OK button: confirmation for selection

➤ Charging

- If the finder is being used for the first time, it may be necessary to charge for no longer than 8 hours. If the battery runs low during use, you should recharge it for 4 to 5 hours, it will be full when the power light turns to orange from green.

Fully rechargeable Li-ion battery can last approximately 2.5 hours.

- It may be necessary to turn off the finder while charging. A 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.

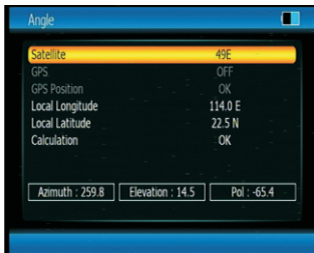
➤ Language setting

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

➤ Restore factory setting

- From the system setting menu, you can find the factory reset item. You can choose "restore to factory". Press OK button to confirm. MENU button to cancel.
- After factory resetting, all modified and saved contents will be lost.

➤ Angle Calculate



INSTRUCTION

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

Satellite | **Local Longitude** | **Local Latitude** | **Recalculation**

Satellite: Select the desired satellite.
Local Longitude: Input your local longitude.
Local Latitude: Input your local latitude.
Recalculation: After the completion of all values, press the [OK] button to calculate the angle.

Azimuth: show the azimuth angle of the chosen satellite
Elevation: 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 the cursor to Satellite, 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 menu, move the cursor to LNB Type, Use [◀][▶] buttons to choose LNB Type between Single, Universal or MDU, then move cursor to the next bar, Use [◀][▶] buttons to select the default LNB frequency. The LNB frequency must be the same as the LNB on the antenna.

Select parameter

- From the finding menu, move the cursor to Frequency, Use [◀][▶] buttons to select the parameter that you want.
- If no default parameters, press OK button to edit, you can key in the frequency, symbol rate and switch the polarization by using direction buttons and press OK button.

Detect satellite signal

- After signal detected, the finder will show the signal bar and beeps. View the PWR,C/N,MER,a.BER and NIT on the screen. The value of POWER is higher, the strength of signal is better and stronger. You can also search the satellite channel list by pressing OK button.

Value

0.00E : show the longitude of the chosen satellite

DiSEqC : show the DiSEqC port of the chosen satellite

Az : show the azimuth angle of the chosen satellite

EI : show the elevation angle of the chosen satellite

Pol : show the polarity angle of the chosen satellite

LAT : show the local latitude of the chosen satellite

LONG : show local longitude of the chosen satellite

NIT : show the longitude of the locked satellite

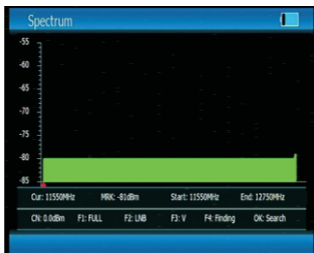
C/N : show the C/N value of the locked satellite

MER : show the MER value of the locked satellite

a.BER : show the a.BER value of the locked satellite

➤ Spectrum Analyzer

- The spectrum analyzer mode allows the user to discover the signals present in the frequency band in quickly and easily and to make measurements at the same time.



- From the main menu, you can find the Spectrum options. Press OK button, the spectrum menu will appear.

Press [▲/▼] to move vertical coordinate's position, and browse the level of Hi-Lo lines.

Press [◀/▶] to move Red cursor to select frequency, when a frequency with signal detected, the LOCK LED will light up and sound alarm.

F1: Press [F1] to switch SPAN of spectral abscissa, This function enables selecting the displayed screen frequency in spectrum analyzer mode between Full, 200 MHz, 100 MHz, 50 MHz, FULL as Default.

F2: Press [F2] can enter the LNB interface to setting the system parameter. After setting complete, press [MENU] to return to Spectrum menu

F3: Press [F3] to switch between Horizontal and Vertical polarity

F4: Press [F4] to switch between Spectrum analyzer menu and Finding menu.

OK: Press [OK] when a frequency of Abscissa is selected, system will enter Frequency searching menu, press [OK] when Search selected to start frequency searching.

➤ **CCTV Camera Test(Optional)**

CCTV camera testing can help users to test, install the surveillance camera quickly and accurately. Individual output DC12V 2A, can power supply for camera in real-time.

- From the main menu, you can find the CCTV options. Press OK button, the CCTV Camera Test menu will appear.

When a signal was input, the meter will automatically recognizes Analog, AHD, TVI camera. Press EXIT button to exit CCTV Camera test menu.

- Before using the Camera test, make sure that the CCTV cable and DV12V is Properly connected.

➤ **Delete Channels**

- From the main menu, select "Channel", press [OK] to enter the channel edit menu. Use [▲/▼] buttons to choose from the options below.

Delete ALL TV Channels

Delete ALL Radio Channels

Delete ALL FTA Channels

Delete ALL Scramble Channels

Press OK button to confirm

Press Menu to cancel

➤ **Software & Parameters upgrade**

- Copy the software or parameters to the USB stick root, insert the USB stick, the system will display" USB Device connected", enter the USB menu, select " Upgrade by USB" item. Press [OK] to enter the software upgrade menu.
- Use [◀][▶] buttons to select the mode that you want, to upgrade software select Software, to upgrade parameters select CSV.
- Then move the cursor, press [OK] to enter "Upgrade from file..." menu to select upgrade files. Press start to upgrade the files, and select "YES"
- During upgrading, Do not power off the meter.

Download the latest software, parameters from our website---www.sat-hero.com.

➤ Notice

- Before using the meter, make sure that the cable is properly connected first.

While installing the antenna, make sure that the LNB in port of the finder is well 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 signal bar stronger and beep quicker. View the PWR value on the screen, continue to turn the antenna until the finder shows the maximum value of PWR, Set the antenna in the best position.

- Through this function, users 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 or charger into water or fire.
- Do not shock or vibrate the device and charger.
- Make sure that the battery is fully charged while upgrading. Do not switch off the device or pull out the cable while upgrading. The device will restart automatically after upgrading.

➤ Battery & charger:

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

Service

Product Certificate

Product Serial Number: _____

Registration Code: _____

After purchased, please read out the product serial number and register code form the back of battery cover, fill in the relevant form on the top, and register code on the official site to verify

Official Sit: _____

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, 8PSK, 16APSK, 32APSK
Symbol rate	2Mbps~45 Mbps
Measurement Unit	dBm, dBuV

Connectors

Serial data interface	USB 2.0 Port
Video/audio interface	HDMI 1.4 and 3.5mm

Power supply

Supply voltage	DC14.5V 1.5A
Li-on battery	11.1V 3200mA
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
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Weight

Weight	0.8Kg
Gross weight	1.3Kg