

**SATLINK**

USER'S MANUAL

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**WS-6909**

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## 1.GUIDE

### 1.1 Important Safety Instructions

Thank you for choosing our product. Before installation, we would like to remind you some notes, which is very important for operating safely and properly, as follows:

- Be sure to read this user manual before starting your operation.
- You must install the dish with correct direction and angle. If the dish is not working properly, contact your local dealer.
- When the unit is suddenly moved to a hot area from a cold area, it may cause some problems. In that case, turn off the power, and turn on again after 1-2 hours.
- Keep meter placed in clean space with sufficient ventilation.
- Do not cover the meter with or place it on a unit that emits heat.
- Clean the case by a soft cloth with a little washing liquid.
- Do not remove the cover.
- Do not let the unit exposed to extreme heat, cold or humid conditions.
- No liquids or any other materials to come inside of the unit.

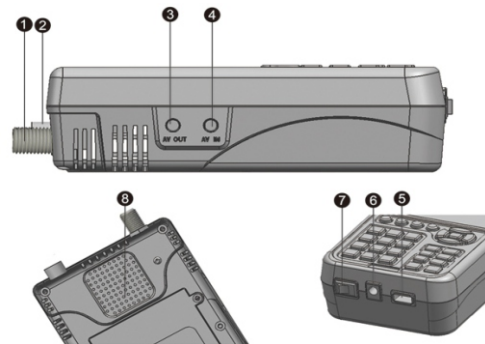
**Warning:** All instructions are subject to the latest version of software without prior notice if any new functions are added to the equipment.

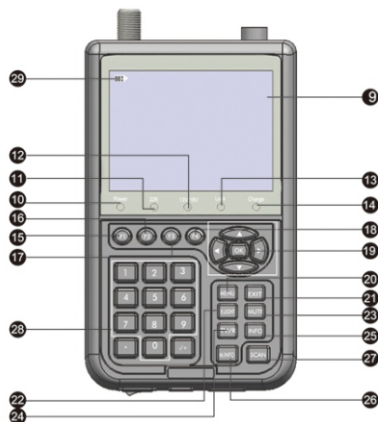
## 1.2 Unpacking Equipment

Open the package and make sure it includes all below items, if any is missing, please contact the reseller for replacement.


- 1.Digital Satellite Meter
- 2.User's manual
- 3.AV cable
- 4.Car charger cable
- 5.Adaptor
- 6.Carrying case

## 1.3 Product Overview & Illustration





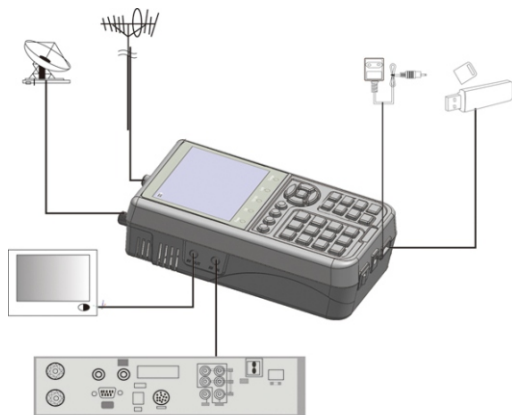
NO	Description	FUNCTION
1	LNB IN	Connect to satellite antenna cable
2	Antenna IN	Connecting to the antenna for DVB-T
3	AV OUT	Connect to AV port for TV
4	AV IN	Connect to AV port for meter
5	USB Port	Connect to USB memory
6	DC Slot	Connect to Adaptor Input
7	Power witch	Turn on/off meter
8	Speaker	Speaker Integrated
9	LCD Screen	Video display
10	Power	Power indicator light

11	22KHZ	22Khz indicator light
12	13V/18V	Vertical /Horizontal polarization voltage output light
13	LOCK	Signal lock indicator light
14	Charger (Note1)	Charger indicator light
15	F1	1)Shows the Subtitle menu ; 2)TV/Radio switch
16	F2	1)Shows the EPG menu; 2)Audio select
17	F3	1)Shows the Favorite Manager menu; 2)lock beep alarm
18	F4	1)Shows Manager Channel menu; 2)TV system switch
19	NEVIGATION KEY	Volume Control or move cursor, channel or change, confirm etc
20	MENU	Show the main menu on the screen or jump back to previous menu in sub-menu setting conditions
21	EXIT	Escape from present menu and save the settings
22	B.LIGHT	LCD Screen Switch
23	MUTE	Enable or disable the audio output
24	TV/RADIO	Switch between TV and Radio mode
25	INFO	To display channel status or various program information of current channel
26	M.INFO	Show 5 channels signal information for DVB-T
27	SCAN	'Quick Search' menu shortcut key
28	0-9	Select channels or enter programming
29	 (Note 2)	When power on the meter , displays the battery level

**Note1:**When the adapter insert dc slot,Charging indicator scintillation three times, then the indicator is often bright, when the batteries charged sufficient, the charge indicator is going out.

**Note2:**When the battery is on power failure, a voice alarm, please a timely charge, do not continue to be used to avoid the internal battery runs out and shorten the usage time.

## 1.4 INSTALLATION OF METER



## 2. OUTLINE

- 3.5 Inch High Definition TFT LCD Screen
- Fully DVB-S/DVB-T
- Supports scan of Auto ,Blind, Manual
- Sound and Light Alarm for Locking Signal
- Auto Calculate Angle of AZ ,EL
- Supports DISEQC 1.0/1.1/1.2 ,0/22khz Tone
- Support both AV out and AV in
- LNB short protect
- 8.4V/3000mAh Lion Battery Included
- Software upgrade via USB port
- Easy to carry

## 3. THE MENU OSD INSTRUCTION

If you have installed and connected the cables to the meter, pressing MENU key to display the Main Menu.

- DVB-S
- DVB-T
- Multimedia
- System



Press the keys of ▲▼◀▶ to move the cursor up or down in the menu interface, then use OK key to confirm a selection.

### 3.1 DVB-S

Select DVB-S and press OK key to enter the DVB-S system



#### 3.1.1 Quick Search

Select Quick Search and press OK key to enter the Quick Search interface.



**3.1.1.1 Satellite:** Press ◀▶ key enter the satellite list. Use ▲▼ key to move the cursor, then press OK key to select the satellite that you want.



**3.1.1.2 LNB type:** Press ◀▶ key, you can select Universal/ Normal C/Normal Ku, according to your physical LNB type.

**3.1.1.3 LOW FREQ / HIGH FREQ:** Enter the proper LNB frequency referring to your LNB using the numeric keys or pressing ◀▶ key.

**3.1.1.4 TP Num:** Press ◀▶ key into the TP list. Use ▲▼ key to move the cursor then press OK key to select the satellite that you want.



**3.1.1.5 Frequency :** Frequency of the current transport, Input the value by using the numeric keys

**3.1.1.6 Symbol rate:** Symbol rate of the current transponder, Input the value by using the numeric keys.

**3.1.1.7 Polarity:** Press ◀▶ key to change Vertical or horizontal of polarization.

**3.1.1.8 LNB Power:** Press ◀▶ key to select the desired option. If your meter is connected to another receiver through LOOP THROUGH support, in case the other receiver is directly connected to the LNB, then select OFF.

**3.1.1.9 22K Tone:** 22 KHz control is automatically set for each LNB alternative. If “Universal” is selected, 22 KHz control should be “off state”.

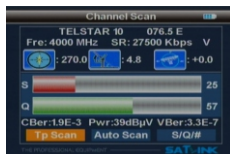
**3.1.1.10 Sat Longitude:** Input the value of satellite longitude by using the numeric keys.

### 3.1.0.1 Quick Search

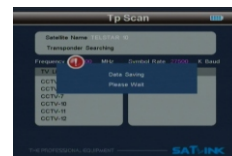
In the satellite search interface, pressing OK key will enter the quick search.

If you set the My Longitude and My Latitude Under the “3.4 system setup”, the angle of LNB, the orientation and elevation of antenna, all will be displayed on the screen.

Press ◀▶ key to select TP Scan, Auto Scan, S/Q#, then press OK key into function.



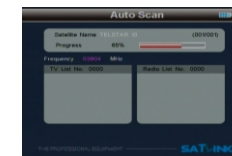
■ **TP Scan** : According to the current TP, search channel,



■ **S/Q/#**: Enlarge showing of the strength and quality



■ **Auto** : According to the user db of satellite, search channel



**3.1.2 Sat Manager:** Press “OK” key to enter the Sub-menu, and then set the state of the dish

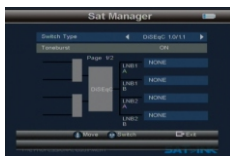
### 3.1.2.1 Switch type

According to your switch type, the meter provides NONE, DiSEqC1.0/1.1, DiSEqC1.2/USALS, let you have exact information to direct your antenna toward a satellite.

Press ◀▶ key to select switch type.

#### 1.DiSEqC 1.0/1.1

Press ▲▼ keys to select LNB1/LNB2/LNB3/LNB4



Press “OK” key to enter the Sub-Menu



Press “F1” key to select the desired satellite.



Press ▲▼ key to select the desired satellite, and press “OK” key, then you can see the information of the satellite you select.



#### 2.DiSEqC 1.2/USALS

Press ▲▼ keys to select Position 01/ Position 02/... .. Position 31/ Position 32





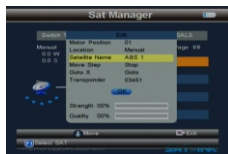
Press “OK” key to enter the Sub-Menu



Press “F1”key to select the desired satellite.



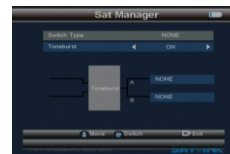
Press ▲▼ key to select the desired satellite, and press “OK” key, then you can see the information of the satellite you select.



### 3.1.2.2 Toneburst

Press ◀▶ button to choose Toneburst mode OFF/ON

1. Select Switch Type on NONE, Toneburst mode ON



2. Select Switch Type on DiSeqC 1.0/1.1, Toneburst mode ON



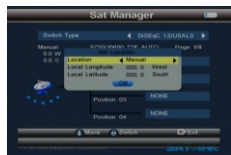
3. Select Switch Type on DiSeqC 1.2/USALS



- Press F1 key to Set Limit.



- Press F2key to Set Location.



- Press F3key to Set LNB



### 3.1.3 TP Manager

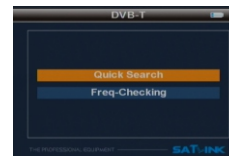


Press ◀▶ key to change satellite .Pressing OK/▲▼ key, switch to TP select

- Press F1key to add TP
- Press F2/OK key to delete the current TP
- Press F3 key to delete the ALL TP
- Press F4 key to scan the current TP

### 3.2 DVB-T

Select DVB-T and press OK key to enter the DVB-T system.



### 3.2.1 Quick Search

Select Quick Search and press OK key to enter the Quick Search interface.



**3.2.1.1 Country:** Press ◀▶ key to select the default channels of the country.

**3.2.1.2 Channel:** Press ◀▶ key to select the channel.

**3.2.1.3 Frequency:** Frequency of the current channel, Input the value by using the numeric keys.

**3.2.1.4 Bandwidth:** Press ◀▶ key to select the bandwidth. The type of bandwidth has 6M/7M/8M.

**3.2.1.5 Antenna Power:** Press ◀▶ key to choice Ant voltage output, it has ON/OFF options

**3.2.1.6 Antenna Power:** Press ◀▶ key to choice Ant voltage output, it has 5 v / 12 v / 24 v options

#### 3.2.0.1 Quick Search

In the satellite search interface, pressing OK key will enter the quick search.

Press BEEP key to open locking sound.

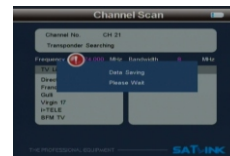
Press ▲▼ key to change the channel

Press ◀▶ key to select Scan, Auto Scan, S/Q/#

press OK key to enter the functions



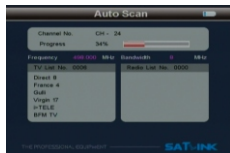
■ **Scan** : According to the current channel, search program



■ **S/Q/#**: Enlarge showing of the signal strength and quality.



■ **Auto** : According to the channels of country, search program.



### 3.2.2 Freq-Checking

In the Freq-checking, we can make signal test for Multi-Channel

Press ◀▶ key to select the current channel.

Press ▲▼ key to change channel.

Press OK key to enter next menu for signal testing.



#### 3.2.2.1 Signal Test

Check signals of five channel, in turn.

Press ◀▶ key to switch next/Previous channels

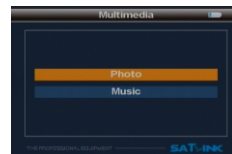
Press OK key stop/start check



### 3.3 Multimedia

The meter integrates USB port, which support the following device:

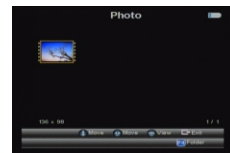
- USB portable harddisk
- USB memory



It will appear “storage device is inserted” when USB device is inserted to the USB port that means the USB device has been recognized and can be used. Otherwise will appear “Device was removed”

#### 3.3.1 Photo

Press ▲▼◀▶ key to select picture, then press OK key to play.





Input the value by using the numeric; the value must be not higher than 180;

If the location longitude A is higher than 180, the value will be (360-A), then press ◀▶ key to change location/Hemisphere

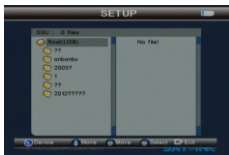
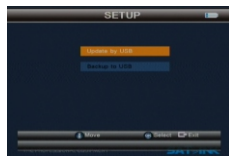
### Exp:

Local longitude is East 200.

You should input west (360-200)=160

**3.4.5 Time Zone :** Press ◀▶ key to set Time Zone.

### 3.4.6 SW Update



To upgrade Software or Data through USB port.

To store the upgrading file in the external memory, and insert it into USB port, and then enter upgrade menu.

To select the file, it will automatically return back to the previous menu after upgrade.

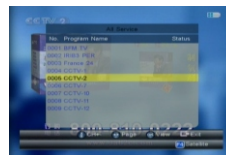
### 3.4.7 Set Default

The set default allows user to restore the factory reset values, when you press OK key, the Warning window will appear, if you select yes, the system setup will be restored to the default values.

**3. 4. 8 Software Ver:** The software version of the satellite is T+S-V2.83

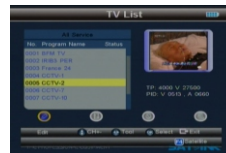
### 3.5 Shortcut Buttons

**3.5.1 All Service:** Press “OK” key to enter the All Satellite interface when it's playing programs



Press ▲▼ key to select the desired satellite, and press “OK” key.

**3.5.2 TV List:** Press F1 key to enter the TV List interface when it's playing programs, you can operate according to the screen prompts



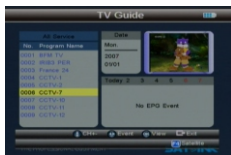
**3.5.3 SUBTITLE:** Press F2 key to enter the SUBTITLE interface when it's playing programs, you can select the Subtitle Language.



**3.5.4 Audio channel:** Press F3 key to enter the audio channel interface when it's playing programs, you can operate according to the screen prompts



**3.5.5 TV Guide:** Press F4 key to enter the TV Guide interface when it's playing programs



## 4 Technical Specification

TRANSMISSION STANDARDS	
DVB-T/S	
SATELLITE INPUT/DEMODULATION	
Connector Type	IEC Female 9.5mm/F Type
Input Frequency	47 to 860MHz/950 to 2150 MHz
Signal Input Level	-65 to -25dBm
Band Switch Control	22KHz
LNB Supply	13V/18V, I <sub>max</sub> 400mA
Demodulation Type	QPSK, 16QAM, 64QAM
Symbol Rate	2<R <sub>s</sub> <45 Mband(SCPC/MCPC)
LCD FEATURES	
LCD Type	TFT TRANSMISSIVE
Number of Dots	480(RGB) x272
Active area (WxH)	95.04x53.86 mm <sup>2</sup>
AV output interface	
Connector Type	3.5 mm Jack
Video Output	CVBS,
Audio output	Stereo Audio L/R output
AV input interface	
Connector Type	3.5 mm Jack
Video input	CVBS,
Audio input	Stereo Audio L/R input
AUDIO/VIDEO PROCESSING	
Resolving rate	PAL-25 frame@720*576, NTSC-30 frame@720*480,
Signal compatibility	Support conversion for different video formats

Video Format	4:3,16:9 By Pan & Scan and Letter Box conversion
Audio output mode	Stereo, Mono,R/L
<b>DATA SERVICE PORT</b>	
Connector	USB
Data protocol	USB2.0 interface
file format	mp3.jpg
<b>MICROPROCESSOR</b>	
Microprocessor	CT216S-T
Clock Frequency	133MHz
SDRAM Memory	4*16Mbit
<b>Power SUPPLY</b>	
Li_Ion Battery	8.4V/3000mAh
Adapter	OUTPUT :DC12V/1.5A, INTUPT :100-240VAC 50/60Hz
Power consumption	Max. 10W
<b>PHYSICAL CHARACTERISTICS</b>	
Size (W x D x H)	95x155x45(mm <sup>3</sup> )
Net Weight	0.5KG

## 5 Troubleshooting

Problem	Possible Causes	What To Do
No display light up	Power switch is not on Run out of batteries Black led is off	Check to make sure power on. Even on adapter. Press B.light key
No sound or picture, but the front panel power light is ON.	AV IN jack insert, but no video input	Pull out AV IN cable
No sound or picture	The satellite dish is not pointing at the satellite.	Adjust the dish. Check the Signal Level in the Antenna Setup Menu
Bad picture /Blocking Error	No signal or weak signal	Check the cable connections of antenna and meter Adjustment direction of antenna.
	The satellite dish is not pointing at the satellite	Adjust the dish.
	Signal is too strong	Connect a signal attenuator to the LNB input
	Satellite dish is too small	Change to a larger dish
	LNB noise factor too high.	Change to an LNB with lower noise factor
AV out No picture (Video)	The LNB is faulty.	Change the LNB
	The system is connected by SCART cable and TV is not in AV mode.	Check the UHF channel, fixed in your system and turn the UHF properly.
	Out of battery	Even on adapter
The key is not working	Key blocks	make sure no blocks between the front panel

**Note:** If you still cannot resolve the problem with the above references. Please contact the local dealer or their aftersales service center.