

Satellite locator WS-6906





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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

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

- 1. Digital SatelliteMeter
- 2. User's manual
- 3. Adaptor
- 4. Carrying case
- 5. Strap of carrying case

Notice: Packing list is indicative only. If there is inconsistency between the Packing list and the actual product, the actual product shall govern.

1.3 PRODUCT OVERVIEW& ILLUSTRATION



NO	Description	FUNCTION
1	LNB In	Connect to satellite antenna cable
2	Power Switch	Turn on/off meter
3	AV 3.5 Jack	AV out
4	AV 3.5 Jack	AV in
5	RS232	Software upgrade
6	DC Slot	Connect to adaptor input
7	Speaker	Speaker integrated
8	LCD Screen	Video display
9	Power	Power indicator light
10	H/V Light	Polarization voltage output light
11	LOCK	Signal lock indicator light
12	Charger (Note1)	Charger indicator light
13	0-9/A-Z/*.#	Numbers or letters buttons
14		Show the main menu on the screen or jump back to
14	MENU	previous menu in sub-menu setting conditions
15	EXIT	Escape from present menu and save the settings
16	F1	Enable LCD black light
17	F2	No function
18	F3	Enable lock beep
19	F4	No function
20	NEVIGATION KEY	Volume Control or move cursor, channel or change, confirm etc

NO	Description	FUNCTION
21	MUTE	Disable the audio output
22	SCAN	The short key of the Auto Scan menu
23	SAT	display the satellite list of searched channels
24	TV/R	Switch between TV Channel and Radio Channel
75		To display channel status or various program informa-
25		tion of current channel
26	BACK	Recall function
27	PAUSE	Pause function

Note1: When the battery charged sufficient, the charge indicator is going out. When the battery is insufficient, indicator flashing.

1.4 INSTALLATION OF METER



2. OUTLINE

- 3.5 inch High definition TFT LCD Display
- Fully DVB-S/MPEG-2 compliant
- SCPC&MCPC receivable from C/KU band satellites
- PAL-NTSC auto-conversion
- Support Auto ,NIT and PID search
- Measure Parameters: intensity, quality and bit error rate
- Supports DiSEqC 1.0/1.2, 0/22Khz Tone
- Support both AV out and AV in
- Both light and beep for the indicator of signal locked
- RS232 port for software upgrades
- Built-in speaker
- LNB short protect and alarm
- Easy Graphic Menu Interface
- 7.4V/3000mAh Li-ion battery included
- Max operating time: 4 hours

3. THE MENU OPERATION

Notice: If the Parent Lock is opened, when prompted for a password, please enter "0000", or you modified

If you have installed and connected the cables to the receiver, pressing to display the Main **MENU**.

This menu consists of 4 menu options shown as below.

- Channel
- Satellite
- System
- Tools



Press the keys of $\blacktriangle = b$ to move the cursor up or down in the menu interface, then use on to confirm a selection. To escape the menu system at anytime, press

3.1 CHANNEL

If there are some programs stored in the receiver, user can press or to enter the menu.

3.1.1 TV CHANNEL & RADIO CHANNEL

You can manage the stored channels no matter in TV Channel or Radio Channel, and delete, short, lock, skip them very easily. 3. Select TV Channel ro Radio Channel to

through the main menu:

manage the TV or radio channels; Press ok you can see the edition channels screen.

Access to the editing channels screen,

Press MENU to enter the main menu.
 The option Channel will be highlighted.

• Delete channel:

1.In the edition channels screen, press 1. 2.Locate the channel you want to delete, and press **ok** The channel will be marked with the symbol "X".

3. Repeat step 2 with those channels you want to delete.

4. To confirm the deletion, press **EXIT** to

exit the edition channels menu. You will see a confirmation message.

5.Press the arrow keys to select option "OK" and press **OK** to confirm the deletion, or select "Cancel" and press **OK** to cancel.

• Move Channel:

 In the edition channels screen, press 2.
 Press the arrow keys to select the channel you want to move and press or You can see the channel will be marked with the symbol.

3. Press the arrow keys to locate the point you want to put the selected channel and press **OK**

4. Repeat steps 1, 2 and 3 for those channels you want to move.

Add channels to the favorite lists:
1. In the edition channels screen, locate your favorite channel and press 3.
2. You will notice the sub-menu with favorite order in screen. Select one of the six favorite orders you desire, and press ok

0021 A10 Hetbird 6/8/9 12300/V/30000	Holb 0013 \$ A2 0014 \$ A3 0015 \$ A4 0016 \$ A5 0017 \$ A6 0018 \$ A7 0019 \$ A8 0020 \$ A9	And 8/8/9 Favorite Commerce Sports Movies News Kid Music	No 5	Signat
V/A/PCR PID 0053/0054/005.	0021 A10		Hotbird 6/8/9	12300/V/30000 0053/0054/0053







3. The channel will be marked with the symbol.

4. Repeat steps 1 and 2 for those channels you want to add into the favorite lists.

• Edit the channel:

1. In the edition channels screen, locate the channel you want to edit and press 4.

2. You will notice the sub-menu in screen.

3. You can press the arrow keys to select and use the numeric keys to input the value of parameter.

4. Select "Save" to confirm them otherwise select "Exit" to go back.

• Delete all channels:

1. In the edition channels screen, press 5.

2. All channels will be marked with the symbol "X".

3. To confirm the deletion, press **EXT** to exit the edition channels menu. You will see a confirmation message.

4. Press the arrow keys to select option "OK"

and press **ok** to confirm the deletion, or select "Cancel" and press **ok** to cancel.

• Change satellite:

In the edition channels screen, press SAT.
 The cursor will jump to the title at the top of window.

3. Press ◀► to select the desired one from the stored satellites. The channel list will show all programs under the current satellite.
4. Press or to go back the channel list.

O TV Channel	- 27	
Hotbird	6/8/9	
0013 \$ A2	3	
0014 \$ A3		
0016 \$ A5		No Signal
0017 S A6		
0010 \$ AR		
0020 € 40		
0021 440		A Hotbird 6/8/9 12300/V/30000





• Sort channel:

1. In the edition channels screen, Press 6.

2. You will notice the sub-menu with sort orders in screen.

3. Select one of the three sort orders you desire in screen and press **OK**.

4. The channel will be rearranged.

• Lock channel:

1. In the edition channels screen, press 8.

2. The channel will be marked with the symbol.

3. To confirm the locking, press **EXIT** to exit the edition channels menu. You will see a confirmation message.

4. Press the arrow keys to select option "OK" and press of to confirm the locking, or select "Cancel" and press of to cancel.

5. Then the channel will be locked. You must input password if you want to watch the locked channel in condition that the Channels Lock is set to lock.

3.1.2 ADD CHANNEL

In the Channel menu, select the option Add Channel and press OK

- Satellite: Press ok to deploy the satellite list, and use ▲▼ to select the satellite you want , and press ok to confirm the selection. You can also use ◀► to select the satellite directly.
- TP: Transponder, select the desired one from the pre-program options.
- TP Frequency: Input the value by using the numeric keys.
- Symbol Rate: Symbol rate of the current transponder.
- Polarity: Vertical or Horizontal polarization.
- Search: Select the desired mode for searching.

Hotbird 6/8/9 0001 CCTV 4 0002 CCTV 7 0003 CCTV 6 0004 BEJING 0005 SHANG 0005 SHANG 0005 UJANGS 0005 UJANGS 0005 UJANGS	No	Signal
0009 XIAMEN	Hetbird 6/8/9	12300/V/30000 0053/0054/0053





3.2 SATELLITE

3.2.1 ADD SATELLITE

- Satellite: Press or to enter the submenu, and rename the name of the new satellite.
 Press MENU to exit this menu.
- Sat Longitude: Enter the proper longitude using the numeric keys. Example:76.5E, please input "00765".
- LNB Type: Select proper LNB type by using the arrow keys according to your physical LNB type.

•	LNB Freq(1, 2):Enter the proper LNB frequency referring to your LNB by	using
	the numeric keys.	

- LNB Power: Select the desired option. If your STB is connected to another receiver through LOOP THROUGH support, you should check which receiver is connected directly to the LNB. In case the other receiver is directly connected to the LNB, then select OFF.
- 22K: 22KHz control is automatically set for each LNB alternative. If "universal" is selected, 22 KHz control should be "off state".
- DiSEqC: Select the port number to get the RF signal from the LNB, which is connected to DiSEqC switching box.

3.2.2 EDIT SATELLITE

- Satellite: Press ok to deploy the satellite list, and use ▲▼ to select the satellite you want, and press ok to confirm the selection. You can also use ◀► to select the satellite directly.
- Sat Longitude: Enter the proper longitude using the numeric keys. Example:76.5E, please input "00765".

Satellite		» 🔜
LNB Type	Universal	
Positioner	Off	

- LNB Type: Select proper LNB type using the arrow keys according to your physical LNB type.
- LNB Freq(1,2): Enter the proper LNB frequency referring to your LNB by using the numeric keys.
- LNB Power: Select the desired option, if your STB is connected to another receiver through LOOP THROUGH support, you should check which receiver is connected directly to the LNB. In case the other receiver is directly connected to the LNB, then select OFF.

Satellite	New Sat3	
	00000	
LNB Type	Standard	
LNB Power	13/18V	
		_
Select Blen	ame	

- 22K: 22KHz control is automatically set for each LNB alternative. If "universal" is selected, 22 KHz control should be "off state".
- DiSEqC: Select the port number to get the RF signal from the LNB, which is connected to DiSEqC switching box.
- Positioner: To set satellite Position.

3.2.3 DELETE SATELLITE

 Press of to enter the Delete Satellite menu.
 Locate the satellite you want to delete, and press of The satellite will be marked with the symbol "X".

3. Repeat step 2 with those satellites you want to delete.

4. To confirm the deletion, press EXIT to exit

the edition satellite menu. You will see a confirmation message.

5. Press the arrow keys to select option "OK" and press **OK** to confirm the deletion, or select "Cancel" and press **OK** to cancel.

3.2.4 AUTO SCAN

Press of to enter the Auto Scan menu.
 Press of to deploy the satellite list, and use
 T to select the satellite you want , and press
 to confirm the selection. You can also use
 T to select the satellite directly.
 Select the desired mode for searching and

press **OK** to start search channel automatically.

4. You can also enter the Edit Satellite to reset the current satellite.

3.2.5 NIT SEARCH

Press of to enter the Satellite Search.
 Press of to deploy the satellite list, and use
 To select the satellite you want , and press
 to confirm the selection. You can also use
 to select the satellite directly.
 Select TP by pressing <>, or modify TP

3. Select IP by pressing **◄**▶, or modify IP Frequency, Symbol Rate and Polarity you want.

4. Select the desired mode for searching and then press **ok** to start searching automatically.

	Badr 4/5/8	
TP Frequency	12100	
Polarity	A H A	
	All	
Signal Intensity	180	3%
Signal Quality	92 BER 0/4000000	2%

Satellite	Astra 4A	

	11
	51
	1
Arabsat 28	
Atlantic Bird 2	
	٦.

5. You can also enter the Edit Satellite to reset current satellite and enter Add TP to add new TP or enter Delete TP from the satellite to Delete TP.

3.2.6 SATELLITE SEARCH

Press OK to enter the Satellite Search.
 Press OK to deploy the satellite list, and use
 ▲▼ to select the satellite you want , and press
 OK to confirm the selection. You can also use
 ▲► to select the satellite directly.
 Select the desired mode for searching and

then press or to start searching the default TP automatically.



4. You can also enter the Edit Satellite to reset the current satellite.

3.2.7 PID SEARCH

1. Press **OK** to enter the Satellite Search.

2. Press of to deploy the satellite list, and use
▲▼ to select the satellite you want , and press
of to confirm the selection. You can also use
♦► to select the satellite directly.

 Select the desired TP and input Video PID, Audio PID, PCR PID for searching and then press
 OK to start Search automatically.

Satellite	(12)	Badr 4/5/	8 12	×
TP		1/82	_	
	12100			
	22425		0000	
		PCR PID	0000	
Edit Satellite				
ignal Intensity			=	80%
ional Status Lo	cked	BER 0/1000	000	191%

4. You can also enter the Edit Satellite to reset the current satellite.

3.3 SYSTEM

3.3.1 LANGUAGE

Select the desired language for menu.



3.3.2 TV SYSTEM

You can set the TV type by pressing the arrow keys. If the source program is PAL, TV set PAL, source program is NTSC, and TV set NTSC.



To set the time for stopping work automatically.

3.3.4 OSD SETTING

- Menu Color: Allows you to select the desired color for menu.
- Transparence: You can adjust the transparency level by using the arrow keys from 0% to 80%.

3.3.5 DEFAULT VALUE

This option allows you to restore the parameters to the original state. Be careful when you use this option, because you can lose data.









3.3.6 PARENT LOCK

- Menu Lock: If the Menu Lock item is set to OFF, the keys of the front panel is invalidation. The default password is 0000. When the correct password is entered; the selected menu opens automatically.
- Channel Lock: This function allows you to come come come come lock the channel with a password in order to prevent children from accessing the channel. You can also protect your



- New Password: You can change password by using this function.
- Confirm Password: Input new password again to make it effective.

3.4 TOOLS

3.4.1 INFORMATION

You can get the information of the current channel from here.

3.4.2 SATELLITE GUIDE

1. Local Longitude: Enter the correct value of local longitude.

2. Local Latitude: Enter the correct value of local latitude.

3. Satellite Longitude: Enter the longitude of the current sat<u>el</u>lite.

4. Start: Press **OK** The orientation and elevation **a** of the antenna will be display on the screen.

Local Longitude	
	00.00
Orlentation 000.00	Elevation





3.4.3 SOFTWARE UPGRADE

By this function you can upgrade software via RS232.

- Upgrade Mode: Select the desired upgrade mode from code, logo, program list and all.
- Start upgrade: After you press **ok**key, machine will reboot for upgrade.

Upgrade Type Upgrade Mode	(R	P2P All	80

4. TECHNICAL SPECIFICATION

TRANSMISSION STANDARDS	
DVB-S	
TUNER	
Input Frequency	950 to 2150 MHz
Signal Input Level	- 65 to -25 dBm
LNB Supply	13V/18V/0FF, max 400mA
Demodulation Type	QPSK
Symbol Rate	4~ 45 MS/s
LCD FEATURES	
LCD Type	TFT TRANSMISSIVE
Number of Dots	320(RGB) x240
Active area (W x H)	70.08x52.56 mm ²
AV in/output interface	
Connector Type	3.5 mm jack
Video in/output	CVBS
Audio in/output	Stereo Audio L/R
AUDIO/VIDEO PROCESSING	
Audio Standard	ISO/IEC 13818-3
Audio Channel	Mute, Left, Right and Stereo
Audio Decoding	MPEG-1 & MPEG-2 layer I and II
Video Standard	SO/IEC 13818-2, MPEG-2 MP@ML
Video Resolution	720 x 576 (PAL), 720 x 480 (NTSC)
PROCESSOR/DATA PORT	
Microprocessor	Ali
Data port	RS232
Power SUPPLY	
Li-ion Battery	7.4V/3000mAh
Adapter	OUTPUT :DC12V/1.5A, INTUPT :100-
	240VAC 50/60Hz
Power consumption	Max. 10W
PHYSICAL CHARACERSTICS	
Size (W x D x H)	15.5x12.2X3.5 (cm)
Net Weight	0.5kg

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5. TROUBLE SHOOTING

Problem	Possible Causes	What To Do
No display light up	Power switch is not on	Check to make sure pow-
	Run out of batteries	er on. Even on adapter
No sound or picture, but	1, connect AV out to TV	1,if TV have picture; go to
the front panel power	2, Insert AV signal to AV	2 step,
light is ON.	IN port.	2,if LCD have picture,
		please press AV key
No sound or picture	The satellite dish is not	Adjust the dish. Check
	pointing at the satellite.	the
		Signal Level in the An-
		tenna Setup Menu
Bad picture/Blocking Er-	No signal or weak signal	Check the cable connec-
ror		tions of antenna and
		meter Adjustment direc-
		tion of antenna.
	The satellite dish in not	Adjust the dish.
	pointing at the satellite	
	Signal is too strong	Connect a signal atten-
		uator to the antenna, or
		don't use antenna
	Antenna impedance mis-	Change a mismatch an-
	match	tenna
AV out No picture(Video)	The system is connected	Check the UHF channel,
	by SCART cable and TV is	fixed in your system and
	not in AV mode.	turn the UHF properly.
The key is not working.	Out of battery	Even on adapter
	Key blocks	make sure no blocks be-
		tween the front panel

Note: If you still cannot resolve the problem with above reference. Please contact the local dealer or their after-sales service center.





AV Cable



Power Adaptor

Car charger cable



carrying bag



USB