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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:

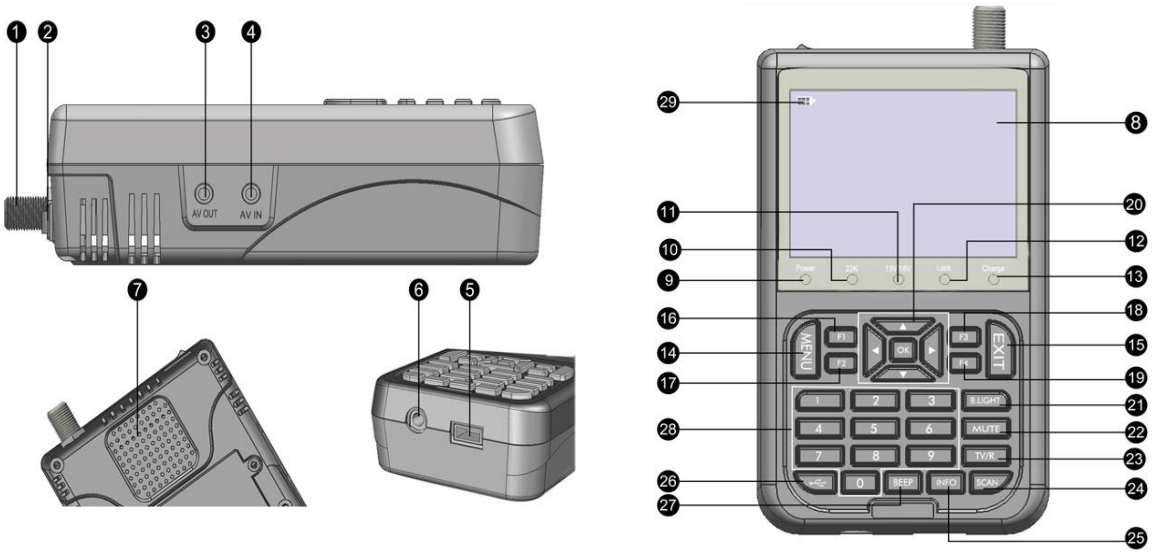
- Be sure to read this user manual before starting your operation.
- You must install the dish with correct direction and angle. If the dish is not working properly, contact your local dealer.
- When the unit is suddenly moved to a hot area from a cold area, it may cause some problems. In that case, 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.

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 Satellite Meter
2. User's manual
3. AV cable
4. Car charger cable
5. Adaptor
6. F connector
7. Carrying case
8. Strap of carrying case

1.3 PRODUCT OVERVIEW & ILLUSTRATION



ON	Description	FUNCTION
1	LNB IN	Connect to satellite antenna cable
2	Power witch	Turn on/off meter
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	Speaker	Speaker Integrated
8	LCD Screen	Video display
9	Power	Power indicator light
10	22KHZ	22Khz indicator light
11	13V/18v	Vertical /Horizontal polarization voltage output light
12	LOCK	Signal lock indicator light
13	Charger (Note1)	Charger indicator light
14	MENU	Show the main menu on the screen or jump back to previous menu in sub-menu setting conditions
15	EXIT	Escape from present menu and save the settings
16	F1 (Note 2)	Shows the Subtitle menu ;
17	F2	Shows the EPG menu
18	F3	Shows the Favorite Manager menu

ON	Description	FUNCTION
19	F4	Shows Manager Channel menu
20	NEVIGATION KEY	Volume Control or move cursor, channel or change, confirm etc
21	B.Light	Display of LCD ON/OFF
22	MUTE	Enable or disable the audio output
23	TV/RADIO	Switch between TV and Radio mode
24	SCAN	'Quick Search' menu shortcut key
25	INFO	To display channel status or various program information of current channel
26		USB menu shortcut key
27	BEEP(Note3)	Sound Alarm for Locking Signal on/off
28	0-9	Select channels or enter programming
29	(Note 4)	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 go out.

Note2: Is long according to the key over the 1 s, the key is switch audio function.

Note3: The Key only in menu of '3.1.0.1 Quick Search' is effective

Note 4: When the battery power is lacking, 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

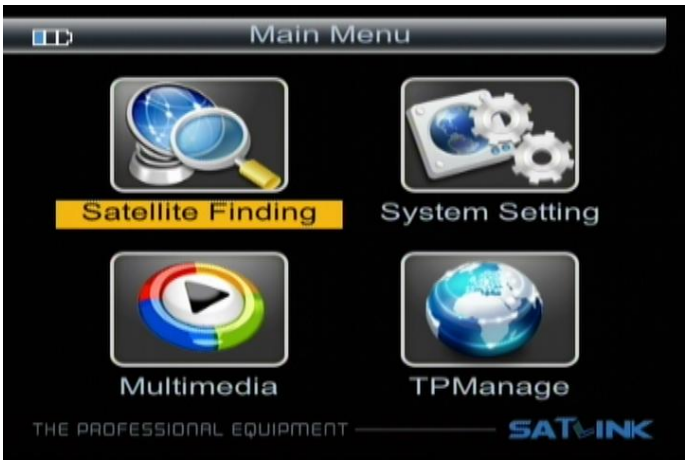
2 OUTLINE

- 3.5 Inch High Definition TFT LCD Screen
- Fully DVB-S/DVB-S2, MPEG-2/MPEG4 compliant
- MPEG-2 / H.264 Hardware decoding
- Digital meter for signal strength and quality
- 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
- Speaker Integrated
- 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

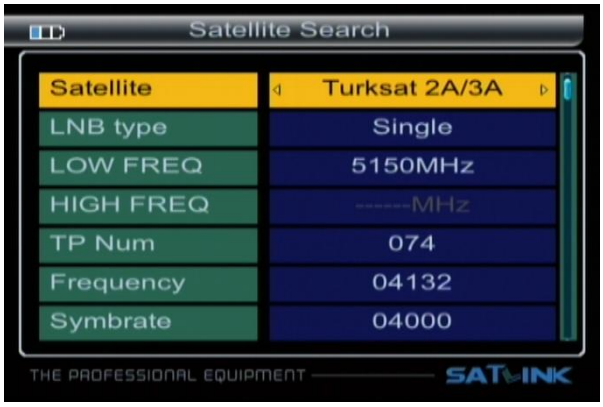
If you have installed and connected the cables of the meter, pressing MENU key to display the Main Menu.

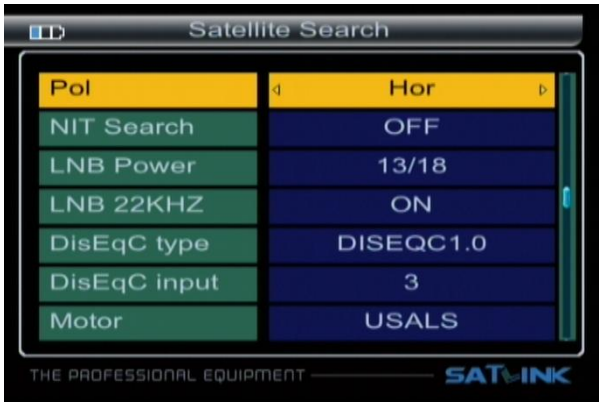
- Search
- System
- Multimedia
- TP Manage



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 Search





3.1.1 Satellite

Press ◄► key into the satellite list. Use ▲▼ key to move the cursor, then press OK key to select the satellite of you want.

3.1.2 LNB type

Press ◄► key, you can select single/Universal/ UnicableSCR etc, according to your physical LNB type.

3.1.3 LOW FREQ / HIGH FREQ

Enter the proper LNB frequency referring to your LNB using the numeric keys or pressing ◄► key.

3.1.4 TP Num

Press ◄► key into the TP list. Use ▲▼ key to move the cursor then press OK key to select the satellite of you want.

3.1.5 Frequency

Frequency of the current transport, Input the value by using the numeric keys.

3.1.6 Symbrate

Symbol rate of the current transport, Input the value by using the numeric keys.

3.1.7 Pol

Press ◄► key to change Vertical or horizontal of polarization.

3.1.8 NIT Search

Press ◄► key to on or off NIT Search.

3.1.9 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.

3.1.10 LNB 22KHZ

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

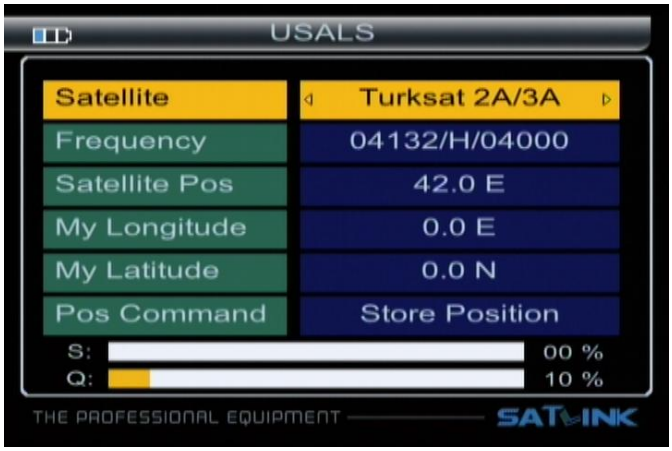
3.1.11 DisEqc type & Input

Press ◄► key to set the port type or number, which get the RF signal from the LNB, if the LNB is connected to DiSEqC switching box.

3.1.12 Motor

If you use the equipment of motor, According to your motor category, the meter provides DiSEqC1.2/USALS, let you have exact information to direct your antenna toward a satellite.

Press ◄► key to select Motor type, then press OK key into interface of motor sett

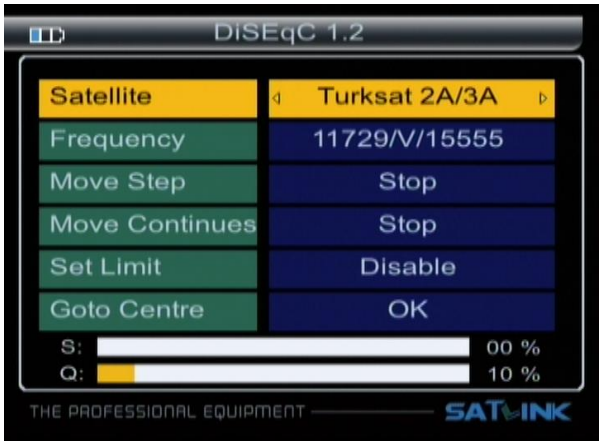


USALS SET

- Satellite: Press ◄► key to select the desired satellite.
- Frequency: Press ◄► key to select the TP.

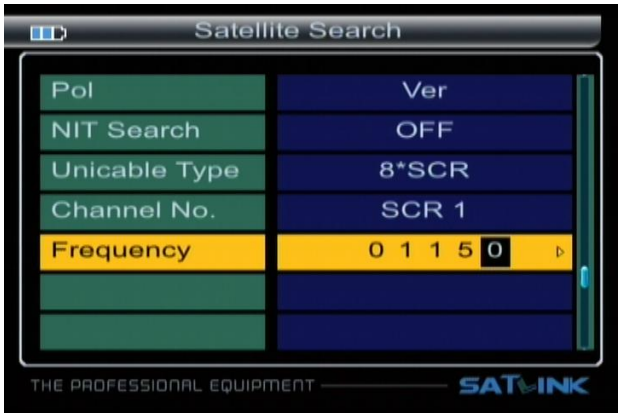
- Satellite Pos: Position of satellite, Input the value by using the numeric keys.
- My Longitude & My Latitude : Position of local, Input the value by using the numeric keys.
- Pos Command: Check the signal locked, the motor moves correct position, press OK key to store the present position.

DiSEqC1.2 SET



- Satellite: Press ◄► key to select the desired satellite.
- Frequency: Press ◄► key to select the TP.
- Move Step: The satellite can now be turned into the desired direction using the arrow buttons
- Continuous Move: The satellite can be continuous moved to the desired direction.
- Limit Setup: Set limits for the antenna.
- Go to Reference: A starting point for the satellite search function can be selected by pressing the OK key. If the signal is locked, the present position is automatic stored.

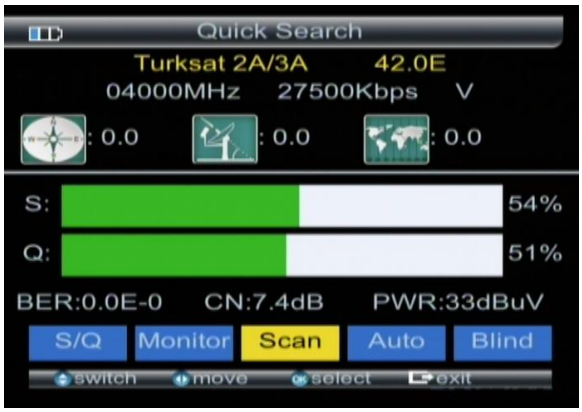
3.1.13 Unicable setting

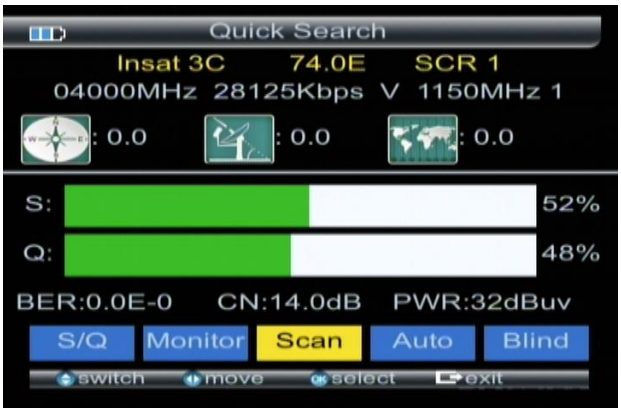


If in the '3.1.2 LNB type' select you can set SCR.

- Unicable type: You can select '8*SCR"or"4*SCR".
- Channel No. : You can select SCR channel.
- Press ◄► key select frequency of SCR channel or Input the value by using the numeric keys.

3.1.0.1 Quick Search





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

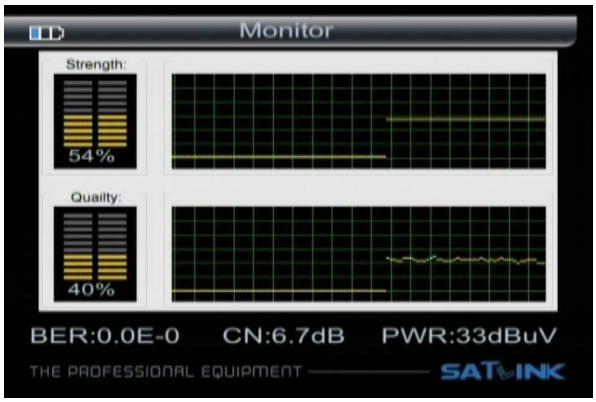
If you set the My Longitude and My Latitude Under the “3.6 system setting”, the angle of LNB, the orientation and elevation of antenna, all will be display on the screen.

Press ▲▼ key to select the TP frequency.

Press ◄► key to select S/Q, Monitor, Scan, Auto, Blind, then press OK key into function.

- S/Q: Enlarge showing the strength and quality

- Monitor: Level Showing the strength and quality



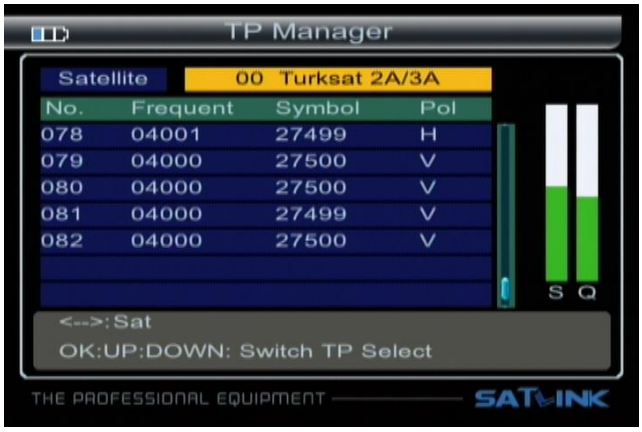
- Scan : According to the current TP, search channel,
- Auto : According to the user db of satellite, search channel.

- Blind search :Blind search all frequency. The first, scan all TP, According to these TPs, auto scan programs.

3.2TP Manager

Press ◄► key to change satellite .Pressing OK/▲▼ key, switch to TP select

Press ◄► key to change satellite .Pressing▲▼ key to select tp.



- Press F1 key to add TP
- Press F2 /OK key to edit TP
- Press F3 key to del the current TP
- Press F4 Key to search the current TP

3.3 Multimedia

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

- USB portable harddisc
- USB memory

It will appear “storage device is inserted ” when USB device is inserted to the USB port. the usb device had been recognized and can use.Otherwise will appear “USB Device Not Found”.

USB feautres:

Multi system format support: FAT16, FAT32 and NTFS format etc.

Mulit file format support:wma, mp3,mp4,avi,jpg,jpeg,bmp,img etc

3.3.1 MUSIC

Press ▲▼ key to select song, then press OK key to play.

Press F1/F2 key to control volume.

Press ◄► key to move the cursor, then press OK key to operate function.

These functions are Play/Pause, Previous song, Next song, Stop.

3.3.2 VIDEO

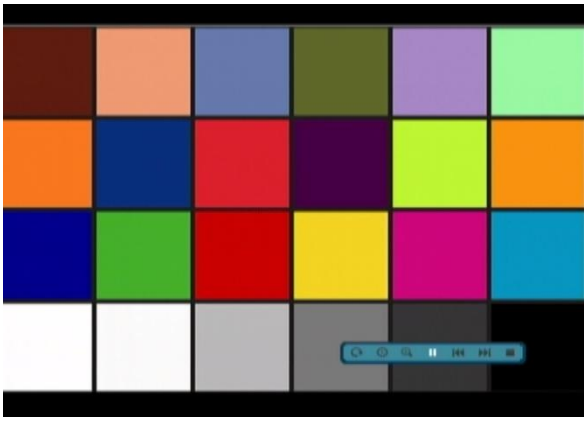
Press ▲▼ key to select the video file, then press OK key to play.

Press ◄► key to control volume. Press MENU key to appear playing bar.

Press ◄► key to move the cursor, that the help will appear on upper right of screen, then press OK key to operate function. These functions are Backward, Forward, Play/Pause, Previous file, Next file, Stop.

3.3.3 PICTURE

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



Press MENU key to appear playing bar. Press ◄► key to move the cursor, then press OK key to operate function.

These functions are Rotate, Delay setting, ZOOM, Play/Pause, Previous Picture, Next picture, Stop.

3.3.4 Upgrade

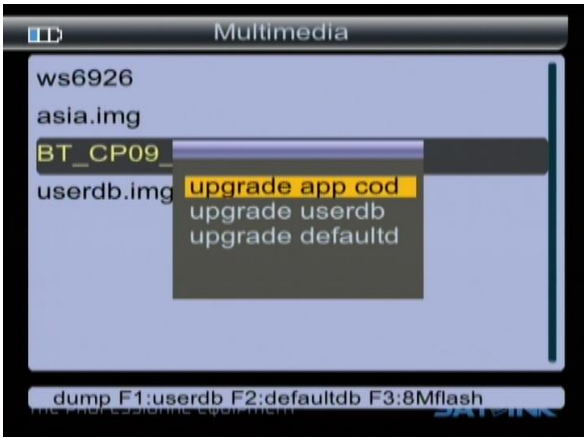
Press F1 key to dump user database.

Press F2 key to dump default database.

Press F3 key to dump flash.

Press ▲▼ key to select update file,

Then press OK key to select upgrade part: app code; user



database; default database.

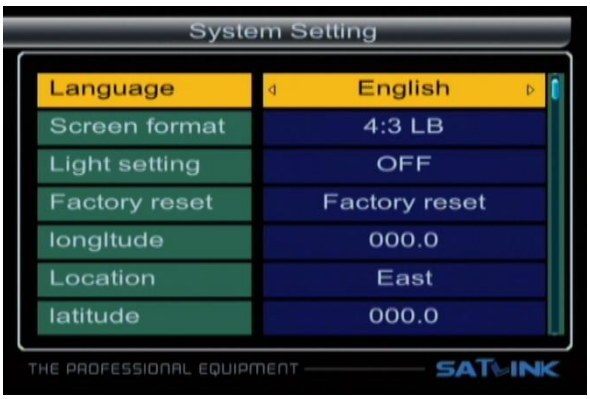
EXP:

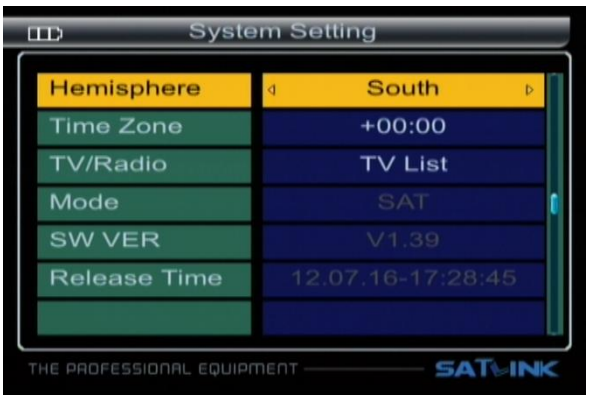
1. If you want to update main code, please select the main code file liking BT_CP09_V1_39_SA~N.img, the size of file about a few Mbytes, then select upgrade app code.
2. If you want to update user database, please select the userdb file liking userdb.img, the size of file is 256k bytes, then select upgrade userdb.
3. If you want to update default database, please select the default file liking asia.img, the size of file is128k bytes, then select upgrade defaultdb.

Warning: while updating meter software data, should not power off and must wait for finish write data.

3.4 System Setting

This menu consists of sub-menus as shown below:





3.4.1 Language

Press ◄► key to select language.

3.4.2 Screen format

Press ◄► key to select Screen format: 4:3PS/4:3LB/16:9PS/16:9LB.

3.4.3 Factory reset

The factory 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 reset to the default values.

Warning: On selecting factory default you will lost all of data and information, which was previous installed.

3.4.4 Longitude & Latitude; Location &Hemisphere

Input the value by using the numeric; the value must be no bigger than180;

If the location longitude A is bigger 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 Channel reset

Press OK key to Restore default Channel setting

3.4.7 Mode, SW VER, Release Time

You can look into information of hardware and software.

4. Channel

4.1 Manager Channel

Press F4 key into the manager channel interface

4.1.1 Rename Channel

1. Press F1 key. You will notice the Keyboard menu in screen.
2. Press the arrow keys to Input channel name.
3. Press F3 key to switch caps lock; press F1 key to backspace; press F4 key to complete edit.
4. Press MENU key, the Warning window will appear, if you select yes, the modification will be save

4.1.2 Del Channel

1. Press ▲▼ key to select TV.

2. Press F2 key, the TV will be marked with the symbol “X”, marking all channel of you need delete.

3. Press MENU key, the Warning window will appear, if

you select yes, the modification will be save.

4.1.3 Lock Channel

Press ▲▼ key to select TV.

Press F3 key, then input “0, 0, 0, 0” ,the TV will be marked with the symbol lock, marking all TV of you need lock.

Press MENU key, the Warning window will appear, if you select Yes, The modification will be save

4.1.4 Skip Channel

1. Press ▲▼ key to select TV.
2. Press F4 key, the TV will be marked with the symbol “↑↓”.
3. Press ▲▼ key to skip TV, Press F4/OK key to confirm, skip all TV of you need.
4. Press MENU key, the Warning window will appear, if you select Yes, the modification will be save.

4.2 Favorite Manager

Press F3 key into the manager channel sort interface, then press menu key to return favorite manager.

4.2.1 Rename

Please make reference to rename of “4.1.1 Rename channel”.

4.2.2 Sort order

1. Press F2 key, you will notice the sub-menu with sort order in screen.
2. Select the desired one of the four sort order in screen and press OK.

3. Press MENU key, the Warning window will appear, if you select yes, the modification will be save.

4.2.3 Favorite set

Press ▲▼ key to select TV.

Press OK key, the TV will be marked with the symbol '❤'.

Press MENU key, the Warning window will appear, if you select yes, the modification will be save.

4.2.4 Favorite Sort

Press F3 key, you will notice the sub-menu with sort order in screen.

Press ▲▼ key to select sort.

Favorite setting will into this sort.

Press MENU key, the Warning window will appear, if you select yes, the modification will be save.

4.2.5 TV/Radio

Press TV/Radio key to switch TV or radio list.

4.2.6 Sat sort

1. Press F4 key, you will notice the sub-menu with sort order in screen.

2. Press ▲▼ key to select satellite sort, the channel list will change.

3. Press MENU key, the Warning window will appear, if you select yes, the modification will be save.

4.3 EPG

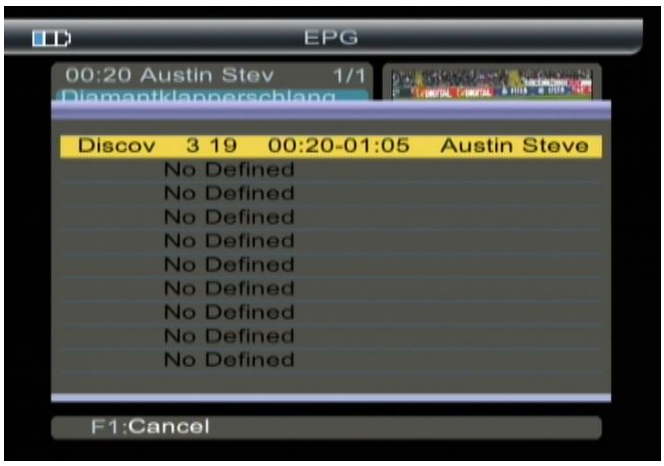
Press the F2 key to show EPG menu.

The Guide supplies information such as program listing, starting and ending items for alll available programs.

1. Press ▲▼ key to change current channel.
2. Press ◄►keys to view the information in 7 days.
3. Press F2 key to view the booked items data.

In the booked items menu, press F1 key to cancle the current item,press menu to return.

Press F1 key to items setecting.



Press F1 key, return to channel select.

1. Press ▲▼ key to select item.
2. Press F4 key to change detail information page.
4. Press F2 key to book the current item,and into the booked items menu.

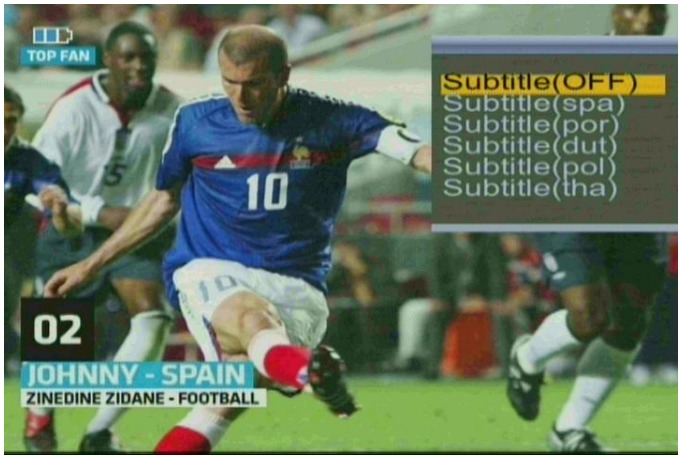
4.4 Program List

Press OK key into program list interface.

Please make reference to “4.2 Favorite Manager”.

4.5 Subtitle

1. Press F1 key, you will notice the sub-menu with sort order in screen.
2. Press▲▼ key to change subtiltle.
3. Prss OK key to confirm.



5 Technical Specification

TRANSMISSION STANDARDS	
DVB-S2/S, MPEG-2,MPEG-4, H.264	
SATELLITE INPUT/DEMODULATION	
Connector Type	F Type
Input Frequency	950 to 2150 MHz
Signal Input Level	- 65 to -25 dBm
Band Switch Control	22KHz
LNB Supply	13V/18V, IMax 400mA
Demodulation Type	QPSK,8PSK
Symbol Rate	2<Rs<45 M band(SCPC/MCPC)
LCD FEATURES	
LCD Type	TFT TRANSMISSIVE
Number of Dots	320(RGB) x240
Active area (W x H)	70.08x52.56 mm^2
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	
Video decompression	MPEG-2 MP@HL, MPEG-1 Decoding,MPEG-4 ASP@L5 HD resolution,H.264 MP&HP@L4,HW JPEG decoding
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 decompression	MPEG-1 Layer I/II ， MPEG-2 Layer I/II,
Audio output mode	Stereo, Mono, R/L
DATA SERVICE PORT	
Connector	USB
Data protocol	USB2.0 interface

File management system	NTFS,FAT32,FAT16
file format	wma,mp3,mp4,avi,jpg,jpeg,bmp,img
MICROPROCESSOR	
Microprocessor	Amlogic
Clock Frequency	180MHz
SDRAM Memory	512Mbit
Power SUPPLY	
Li_Ion Battery	8.4V/3000mAh
Adapter	OUTPUT :DC12V/1.5A, INTUPT :100-240VAC 50/60Hz
Power consumption	Max. 10W
PHYSICAL CHARACERSTICS	
Size (W x D x H)	9.5x15.5x4.5(cm^3)
Net Weight	1kg

6 Trouble Shooting

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. LNB and other equipment connected between the LNB and the meter and adjust the dish.
	The satellite dish in 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
	The LNB is faulty.	Change the LNB
AV out No picture(Video)	The system is connected by SCART cable and TV is not in AV mode.	Check the UHF channel fixed in your system and tune the UHF properly.
The key is not working.	Out of battery	Even on adapter
	Key blocks	make sure no blocks between 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.