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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.

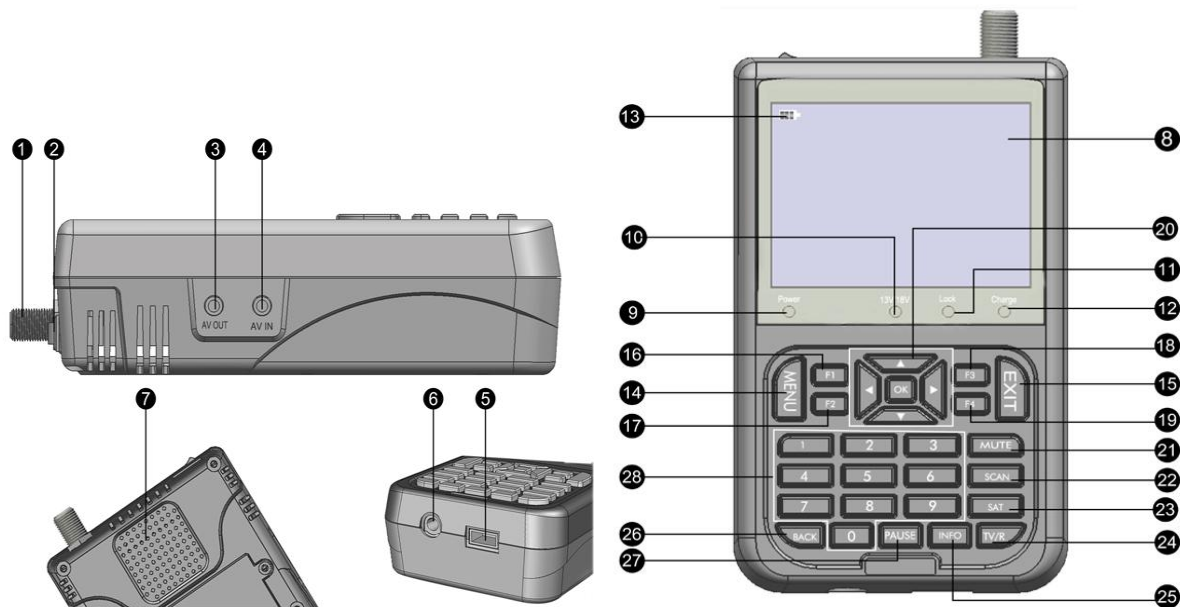
1.2 Unpacking Equipment

Open the package and make sure it includes all below items, if **anything 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. USB cable

7. Carrying bag
8. Strap of carrying case

1.3 PRODUCT OVERVIEW & ILLUSTRATION



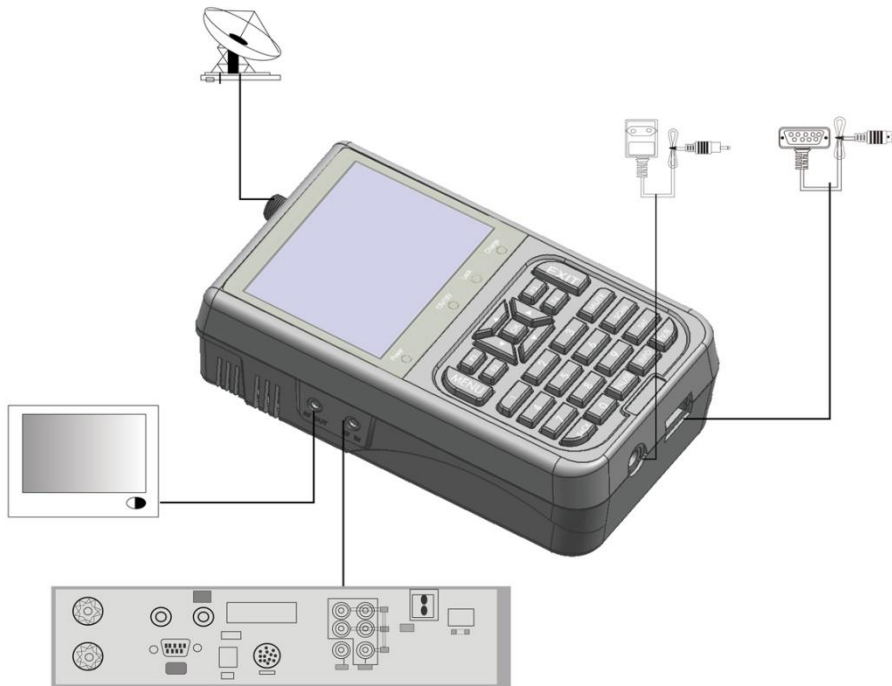
NO	Description	FUNCTION
1	LNB IN	Connect to satellite antenna cable
2	Power witch	Turn on/off meter
3	AV OUT	Connect to AV port for TV
4	AV IN	Connect to AV port for meter
5	USB Port	USB PORT TRANSFORM RS232 PORT
6	DC Slot	Connect to Adaptor Input
7	Speaker	Speaker Integrated
8	LCD Screen	Video display
9	Power	Power indicator light
10	13V/18v	Vertical /Horizontal polarization voltage output light
11	LOCK	Signal lock indicator light
12	Charger (Note1)	Charger indicator light
13	 (Note 2)	When power on the meter ,displays the battery level
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	Turn on or off the LCD screen

17	F2	No function
18	F3	Open or close the voice when signal is locked
19	F4	No function
NO	Description	FUNCTION
20	NEVIGATION KEY	Volume Control or move cursor, channel or change, confirm etc
21	MUTE	Enable or disable the audio output
22	SCAN	'Quick Search' menu shortcut key
23	SAT	display the satellite list of searched channels
24	TV/R	Switch between TV Channel and Radio Channel
25	INFO	To display channel status or various program information of current channel
26	BACK	Move to the previous channel
27	PAUSE	switch between Pause and Play
28	0-9	Select channels or enter programming

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.

Note 2: When the battery is on power failure, the system will send a voice alarm, please timely charging, do not continue to use to avoid the internal battery run out and shorten the usage time.

1.4 INSTALLATION OF METER



2 OUTLINES

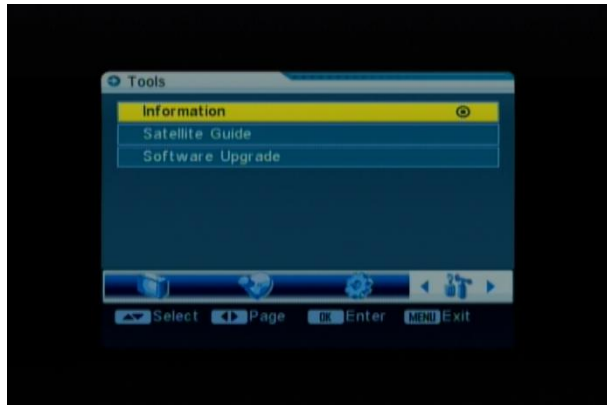
- 3.5 inch High definition TFT LCD Display
- Support both AV out and AV in
- Support Auto Satellite and PID Search
- Measurement type: strength\quality; bit error rate
- Input Impedance: 75Ω
- Input Frequency Range: 950~2150MHz
- Input Level: -65~-25dbm
- Supports DISEQC 1.0/1.2, 0/22KHz Tone
- Both lock light and beep for the indicator of signal
- 3 Operation Modes: Digital TV; Digital Radio; Favorite
- EPG for on Screen Channel Information
- Easy Graphic Menu Interface
- RS232 port for software upgrades

- 8.4V/3000mAh Li-ions Battery included
- Max operating time: 4 hours

3 THE MENU OPERATION

Once you have installed and connected the cables to the receiver, press menu key on the RCU to display the Main Menu.

This menu consists of 4 menu options shown as below.



- ✧ Channel
- ✧ Satellite
- ✧ System
- ✧ Tools

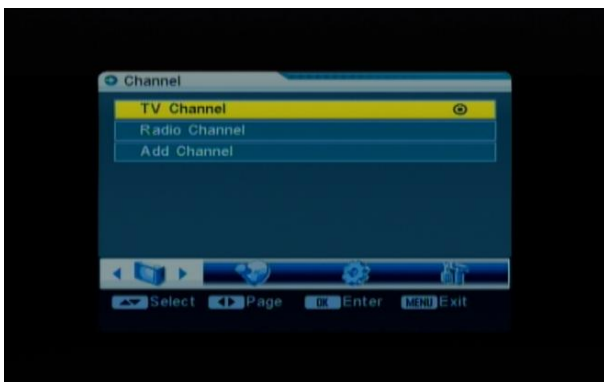
Use the ◀▶ keys to move the cursor up or down in the menu. Use the OK key to confirm a selection. To escape the menu system at anytime, press EXIT key on the RCU.

3.1 Channel

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

3.1 .1 TV channel

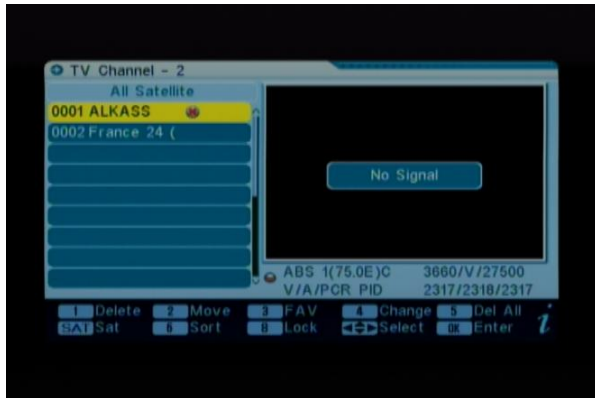
You can manage the stored channels, TV and radio channels, deleting, shorting, locking, skipping them very easily.



Access to the editing channels screen, through the main menu:

1. Press MENU to enter the main menu.
 2. The option Channel will be highlighted.
 3. Select TV Channel to manage the TV channels, or Radio Channel to manage the radio channels.
- Press OK, you will see the edition channels screen.

3.1.1.1 To delete a channel



1. In the edition channels screen, press “1” in the remote control, then input “0, 0, 0, 0”.

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. Pressing the arrow keys select option “OK” and press

OK to confirm the deletion, or select Cancel and press OK to cancel.

3.1.1.2 To move a channel:



1. In the edition channels screen, press “2” in the remote control, then input “0, 0, 0, 0”

2. Pressing the arrow keys, select the channel you want to move and press OK. You will see the channels marked with the symbol.

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

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

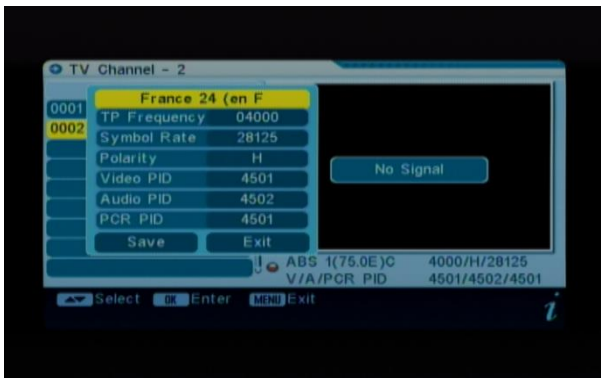
3.1.1.3 To add channels to the favorite lists:



1. In the edition channels screen, locate the channel you want to favorite and press “3” in the remote control, then input “0, 0, 0, 0”.

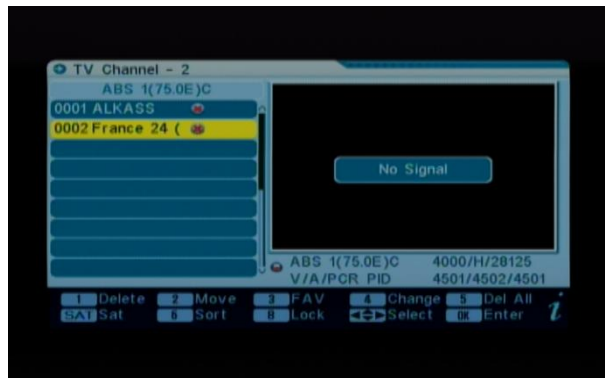
2. You will notice the sub-menu with favorite order in screen. Select the desired one of the six favorite order, and press OK.
3. The channel will be marked with the symbol.
4. Repeat step 1, 3 and 4 with those channels you want to favorite

3.1.1.4 To edit the channel:



1. In the edition channels screen, locate the channel you want to edit and press "4" in the remote control, then input "0, 0, 0, 0".
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.

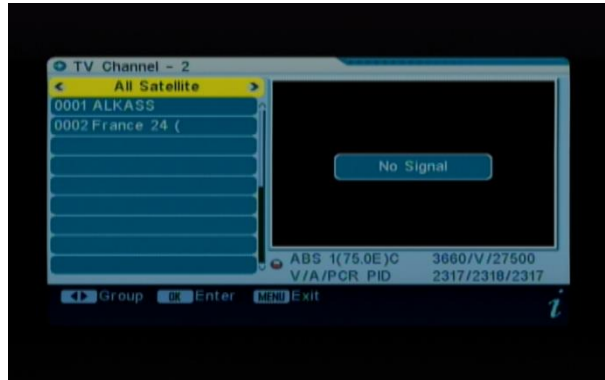
3.1.1.5 To delete all channels:



1. In the edition channels screen, press "5" in the remote control, then input "0, 0, 0, 0".
2. All channels will be marked with the symbol "X"
3. To confirm the deletion, press EXIT to exit the edition channels menu. You will see a confirmation message.
4. Pressing the arrow keys select option "OK" and press OK to confirm the deletion, or select Cancel and press

OK to cancel.

3.1.1.6 To change satellite:



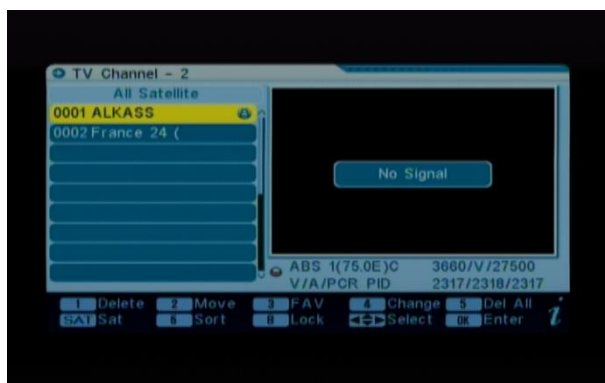
1. In the edition channels screen, press “SAT” in the remote control.
2. The cursor will jump to the title at the top of window.
3. Press to select the desired one from the stored satellites. The channel list will show all programs under the current satellite.
4. Press OK to go back the channel list.

3.1.1.7 To Sort channel:



1. In the edition channels screen, Press “6” in the remote control, then input “0, 0, 0, 0”.
2. You will notice the sub-menu with sort order in screen.
3. Select the desired one of the three sort order in screen and press OK.
4. The channel will be rearranged

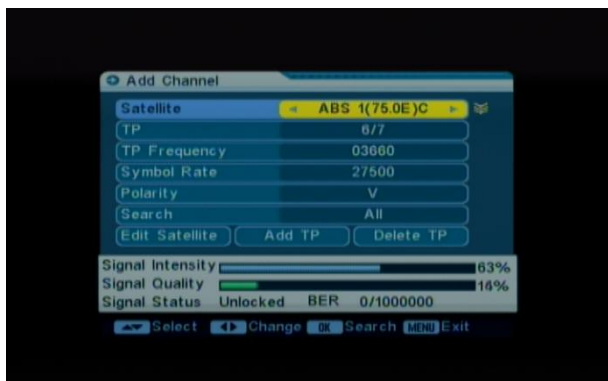
3.1.1.8 To Lock channel:



1. In the edition channels screen, press “8” in the remote control, then input “0, 0, 0, 0”.
2. The channel will be locked
3. You must input password if you want to watch the locked number 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, Select the satellite you want to check with pressing ▲ ▼ You can also press ◀ ▶ to select the satellite.

TP: Transponder, select the desired one from the pre-program options.

TP Frequency: input the value by using the numeric keys.

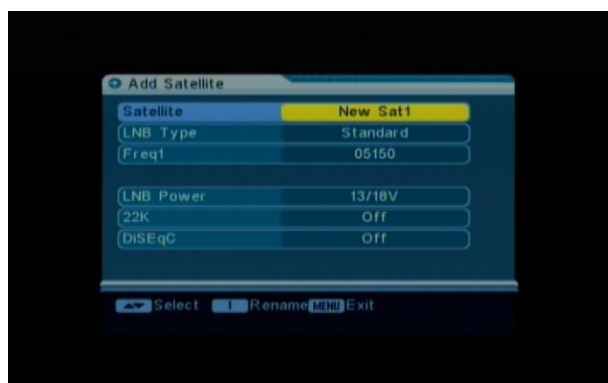
Symbol rate: Symbol rate of the current transponder

Polarization: Vertical or Horizontal polarization

Search: Select the desired mode for searching.

3.2 Satellite

3.2.1 Add Satellite



Satellite: Press OK to enter the submenu, and rename the name of the new satellite. Press MENU to exit this menu.

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 using the numeric keys on the

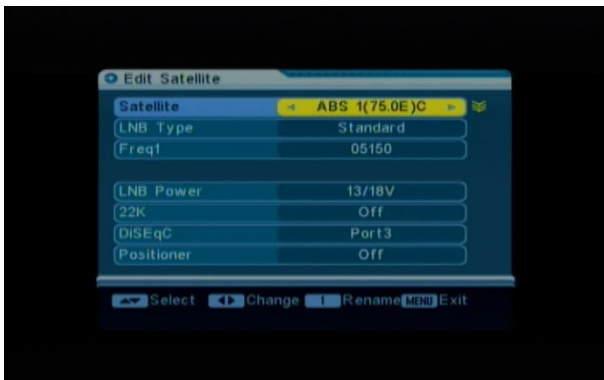
RCU.

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, Select the satellite you want to check with pressing ▲▼. You can also press ◀▶ to select the satellite.

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 using the numeric keys on the RCU.

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.

Positioner: To set satellite Position.

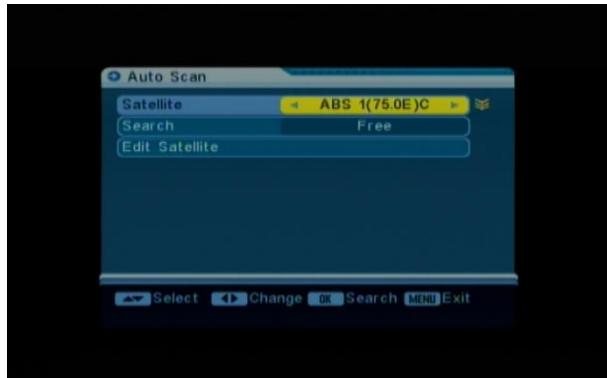
3.2.3 Delete Satellite



1. Press OK to enter the Delete Satellite menu.
2. Locate the satellite you want to delete, and press OK.
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.

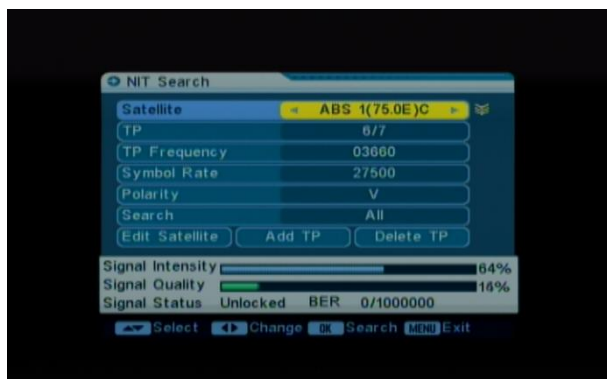
5. Pressing the arrow keys select option “OK” and press OK to confirm the deletion, or select Cancel and press OK to cancel.

3.2.4 Auto Scan



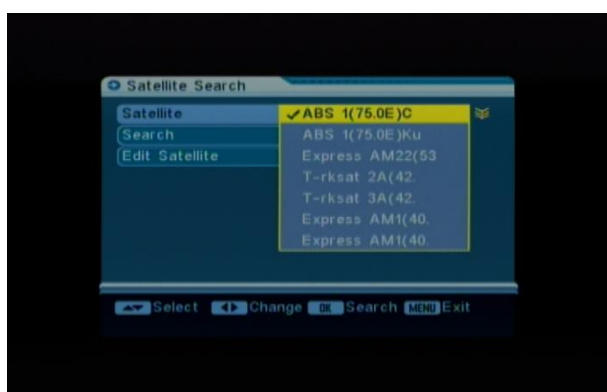
1. Press OK to enter the Auto Scan menu.
2. Press OK to deploy the satellite list. Select the satellite you want to scan with pressing ▲▼. The satellite will be marked with the symbol "✓". You can also press ◀▶ to select the satellite.
3. Select the desired mode for searching and then press OK to start search channel automatically.
4. You can also enter the Edit Satellite to reset the current satellite.

3.2.5 NIT Search



1. Press ok to enter the Satellite Search.
2. Press ok to deploy the satellite list, select the satellite you want to search with pressing ▲▼; the satellite will be marked with the symbol "✓". You can also press ◀▶ to select the satellite.
3. Select TP by pressing ◀▶, or modify TP Frequency, Symbol Rate and Polarity you want.
4. Select the desired mode for searching and then press ok to start searching automatically.
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



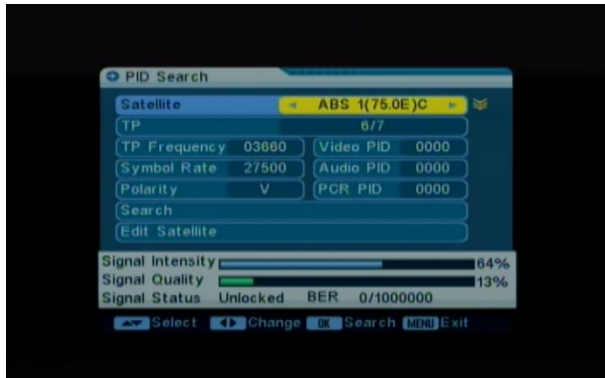
1. Press ok to enter the Satellite Search.
2. Press ok to deploy the satellite list, select the satellite you want to search with pressing ▲▼, the satellite will

be marked with the symbol"✓". You can also press ◀▶ to select the satellite.

3. Select the desired mode for searching and then press ok to start search the prestored 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 ok to deploy the satellite list; select the satellite you want to search with pressing ▲▼ .The satellite will be marked with the symbol"✓".You can also press ◀▶ to select the satellite.

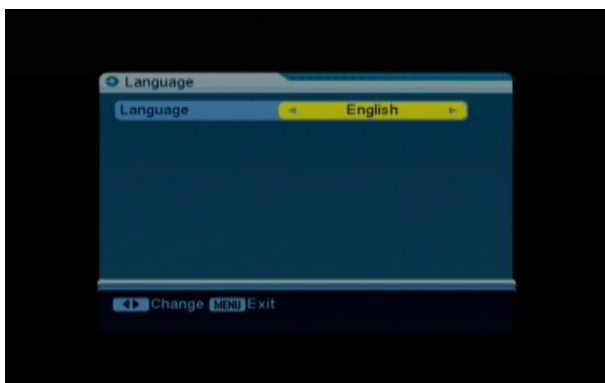
3. Select the desired TP and input Video PID. Audio PID. PCR PID for searching and then press ok to start search

automatically.

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

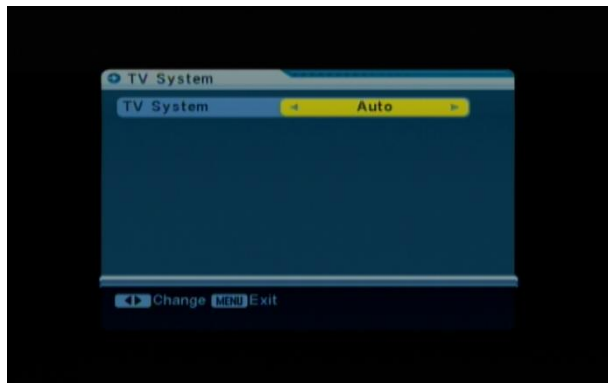
3.3 System

3.3.1 Language



Select the desired language for menu

3.3.2 TV System



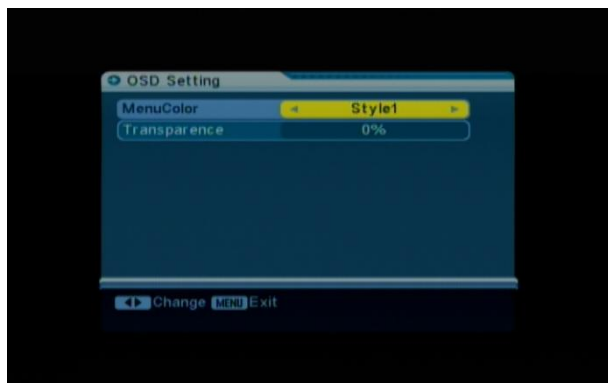
You can set the TV type by pressing the arrow keys. If the source program is PAL, TV set PAL, source program is NTSC, and TV set NTSC.

3.3.3 Auto Shut Down



To set the time for stopping work automatically.

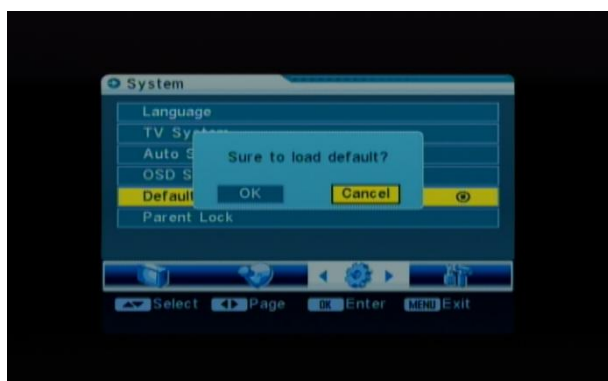
3.3.4 OSD Setting



Menu Color: Allows you to select the desired color for menu.

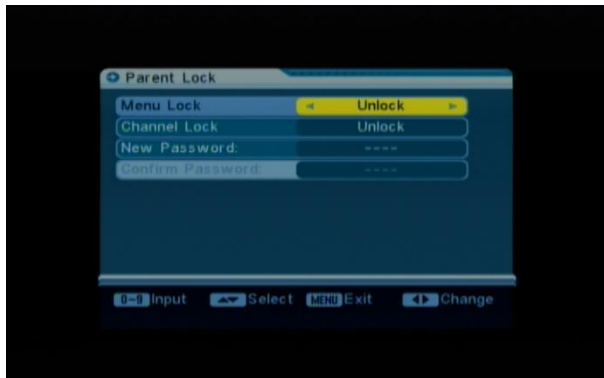
Transparence: You can adjust the transparency level by using the arrow keys from 0% to 80%.

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



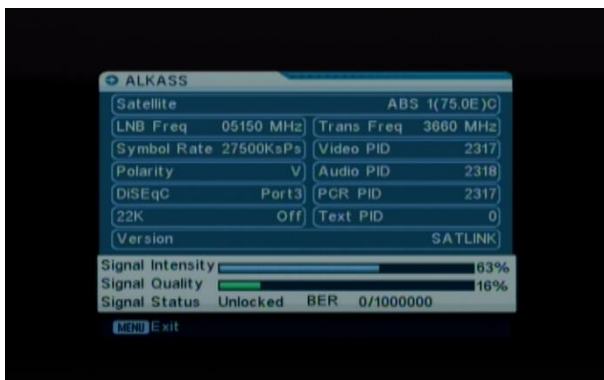
This function allows you to lock the channel with a password in order to prevent children from accessing the channel. You can also protect your installed data and information using the Install Lock.

If the STB Panel 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.

3.4 Tools

3.4.1 Information



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

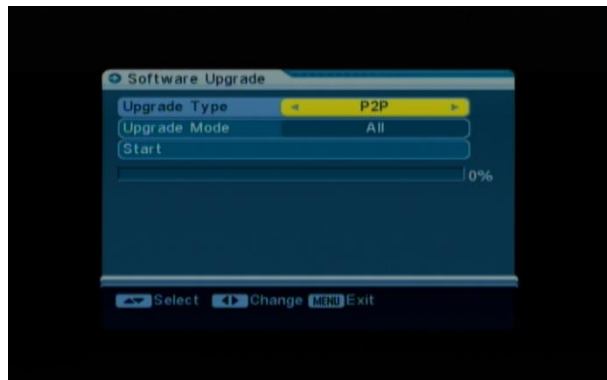
3.4.2 Satellite Guide



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

antenna will be display on the screen.

3.4.3 Software Upgrade



By this function , you can upgrade software via **DB9**.

Upgrade Mode: Select the desired upgrade mode from code, logo, program list and all.

Start upgrade: After you press OK key , STB will reboot for upgrade.

4 Technical Specification

TRANSMISSION STANDARDS	
DVB-S	
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
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)	70.08x52.56mm 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	
Resolving rate	PAL-25 frame@720*576,NTSC-30 frame@720*480,
Signal compatibility	Support conversion for different video formats
Audio output mode	Stereo, Mono, R/L
DATA SERVICE PORT	
Connector	USB
MICROPROCESSOR	
Microprocessor	M3329C
Clock Frequency	120MHz
SDRAM Memory	16Mbit
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	0.5 kg

5 Trouble Shooting

Problem	Possible Causes	What To Do
No display light up	Power switch is not on Run out of batteries	Check to make sure power on. Even on adapter
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 in not pointing at the satellite	Adjust the dish.
	Signal is too strong	Connect a signal attenuator to the antenna, or don't use antenna

	Antenna impedance mismatch	Change a mismatch antenna
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 turn 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 the above references. Please contact the local dealer or their after-sales service center.