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ASM01

HD Digital Signal Meter

USER MANUAL

ASM01 DIGITAL METER

Congratulations on your purchase of the ASM01 Digital Signal Meter

This device is a portable cordless HD digital signal meter for use in the installation and adjustment of satellite and terrestrial television antennas.

FEATURES:

- Cordless portable unit with rechargeable Lithium Ion battery (4000mAh)
- Comprehensive range of editable signal search functions
- Integral high resolution TFT LCD display
- Integral loudspeaker
- Durable impact absorbing case
- Remote control unit
- Durable carry bag
- Power adaptor, car charger and cables

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1 - SAFETY CONSIDERATIONS

Please read these instructions before use.

1.1 Charging the Battery

This is a cordless rechargeable device that first needs to be fully charged before use. It is recommended that this will take around 6 hours. The product has to be connected to the mains supply using the supplied charger. Only use the supplied power adaptor and cables. Please note that if you charge the battery using a car power supply, it will take longer to reach full charge.
The rechargeable Lithium Ion battery supplied is a self contained unit. Although the battery should give you years of trouble free use, you may need to make these observations:
• If you are not using the module for long periods of time, remove the battery from the unit.
• Avoid contact with children

1.2 Over Voltage

An over voltage on the mains supply, can cause short circuits or fire. Never overload the power lines.

1.3 Liquids

This module should be protected from any liquids or splashes. Do not place any containers containing liquids on this module and prevent any other persons splashing liquids on the module.

1.4 Cleaning

Disconnect the module before cleaning, use only a damp cloth and do not use solvents.

1.5 Ventilation

In order to assure an adequate air circulation and to prevent overheating, the ventilation holes should not be obstructed. The module should not be used in a hermetically sealed environment. Other electronic products or heat producing items may not be placed upon or near the module.

1.6 Accessories

The use of accessories not supplied or produced by the manufacturer could cause damage to the module and invalidate the warranty.

1.7 Locating the module in use.

Avoid using in wet, humid areas or places in direct sunlight.
Do not use near heat sources or devices producing heat.
Ensure the module is placed at least 10 cm from other equipment which is susceptible to electromagnetic radiation.
Do not place the module on unstable items, a fall can cause physical or material damage.
Do not place module where there is strong mechanical vibration.
Avoid placing module where there is a lot of dust.
Do not place any heavy items on this module
Avoid touching the LCD Display screen.

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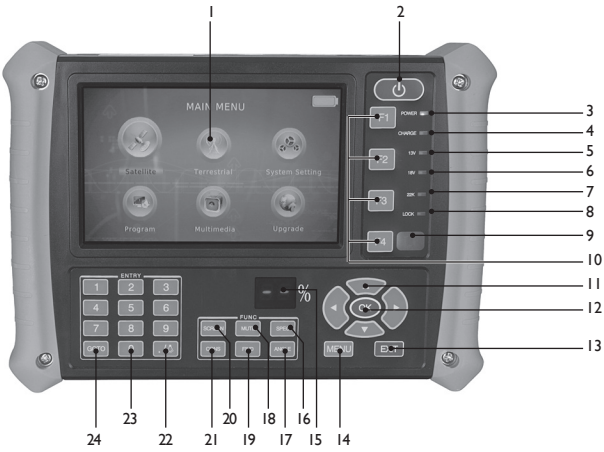
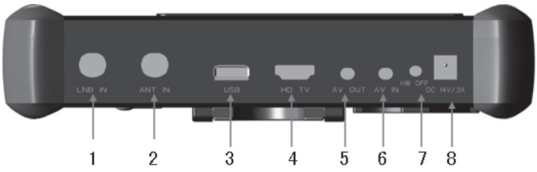
2 - Controls layout



1	LCD: TFT LCD display screen	13	EXIT: exit menu (main menu or sub menu)
2	On/Off (Press for 3-4 seconds)	14	MENU: Show main menu
3	Power Indicator	15	LED: Shows current signal quality
4	Battery Indicator (Red:charging, Green:charged)	16	SPEC: spectrum analyzer
5	13V Indicator	17	ANGLE: Angle calculation
6	18V Indicator	18	MUTE: turn sound on/off
6.	22KHz Indicator	19	FIND: Satellite search key
8	Signal Locked Indicator	20	SCREEN: Display on/off (Long press close backlight)
9	Remote Control Input	21	CONS: constellation analyzer
10	F1~F4: shortcut keys	22	[•]: use for input data, press 3-4 seconds for torch
11	Navigation keys:moves cursor up, down, left right	23	Numeric keys
12	OK: Confirm key	24	GOTO: Select satellite or transponder

Top side view



1.	F connector male for LNB IN	5.	AV OUT connector (3.5 PHONE JACK)
2.	F connector male for ANT IN	6.	AV IN connector (3.5 PHONE JACK)
3.	USB connector	7.	Reset key
4.	HD TV connector	8.	DC jack (for charger)

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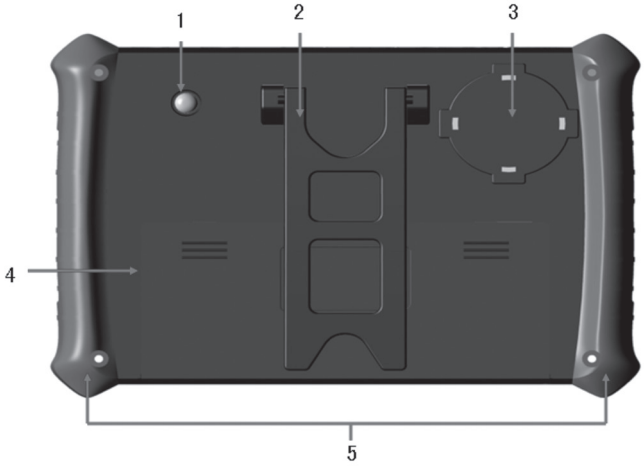
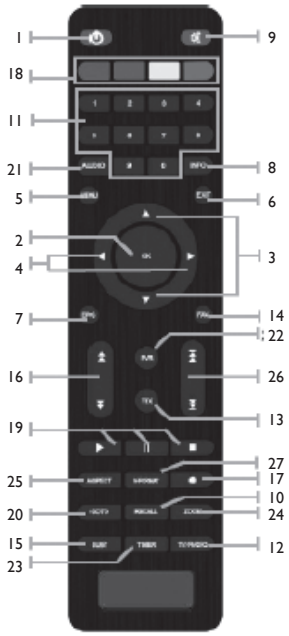
Rear view



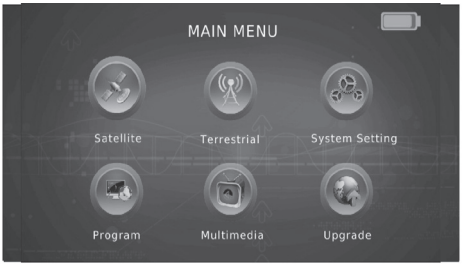
1. LED torch
2. Flip out stand
3. Loudspeaker
4. Battery compartment cover
5. Protective bumper

Remote Control Handset:

1 Power
2 Confirm the selection, Open the channel list
3 Up and Down
4 Left and Right
5 Main Menu
6 Exit
7 EPG
8 Display Information
9 Mute
10 Recall
11 Kepypad 0-9
12 TV / Radio.
13 Teletext (when available)
14 Favourite Channel
15 Subtitles
16 Fast Forward/ Fast Backward
17 Record Start
18 Multicoloured buttons
19 Play, Stop & Pause
20 Show Photo Grid
21 Audio Language
22 PVR,
23 Timer
24 Zoom
25 Aspect Ratio
26 Play previous, Play Next
27 Resolution



3. Operation Guide

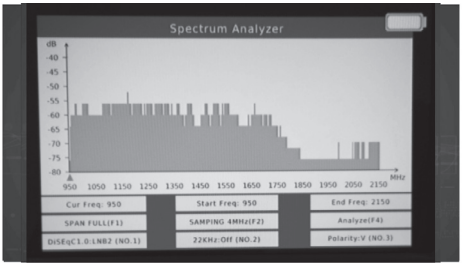


When you turn on the device, the main menu will appear. The options are:

Satellite, Terrestrial, System Setting, Program, Multimedia and Upgrade.

3.1 Satellite

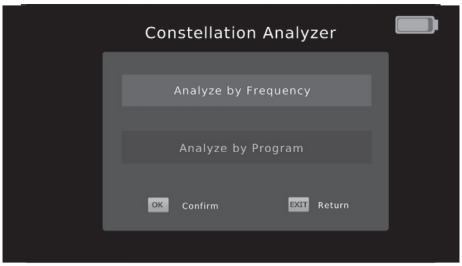
3.1.1 Spectrum Analyzer



Move cursor to **Spectrum Analyzer** and press **OK** to enter the **Parameter Setting** interface.

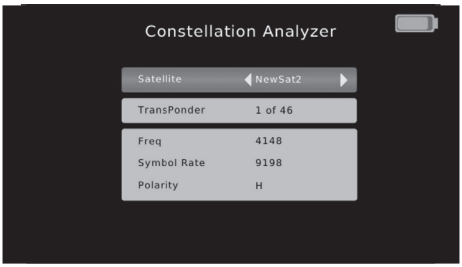
- Press **F1** to adjust the **SPAN** of the spectrum frequency, it is set to **FULL** as default, the smaller the span, the clearer it will show the signal status of frequencies.
- Press **F4** to pause current status.
- Press ▲ ▼ to move vertical coordinate's position.
- Press ◀ ▶ to move cursor to select frequency, the signal strength of the selected frequency will be displayed on the left-top corner.

3.1.2 Constellation Analyzer

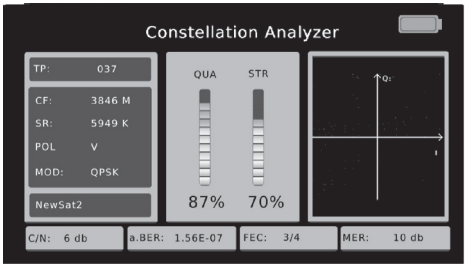


Move cursor to **Constellation Analyzer** and press **OK** to enter the Constellation Analyzer menu.

- Press ▲ ▼ to move cursor to choose **Analyze by Frequency** and press **OK**, then you will see this menu.
- Press ◀ ▶ to select the required satellite and then the Transponder options will change accordingly.
- Press ◀ ▶ to select Transponder and you can see TP frequency, Symbol Rate and Polarity change accordingly.
- Press **OK** to see the quality bar and the strength bar.
- Under Constellation Analyzer interface (by Frequency), press ▲ ▼ to switch between the different frequencies of selected satellite.
- Press **EXIT** and press ▲ ▼ to move cursor to



choose **Analyze by Program** and press **OK**, then you will see this menu:



- Under Constellation Analyzer interface (by Program) press ▲ ▼ to switch between the program searches.
- When a frequency with signal is detected (not locked), the signal strength bar will be displayed.
- When the signal is locked, the signal quality bar will be displayed. Meanwhile, the **LOCK LED** will light up.

3.1.3 Satellite Setting

- Move cursor to **Satellite Setting** and press **OK** to enter the **Dish Setup** menu.

- Under the Satellite list page, you can press ▲ ▼ to select the required satellite.
- Press **F1** to add a new satellite, setting Satellite Name, Longitude Direction, Longitude Angle or Band.
- Press **F2** to edit existing satellite, including Satellite Name, Longitude Direction, Longitude Angle and Band.

- Press **F3** to delete existing satellite. If you press **OK** the satellite be deleted or you can press **EXIT** to exit.

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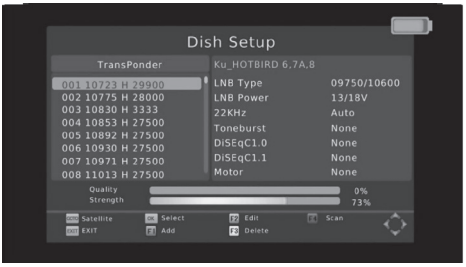
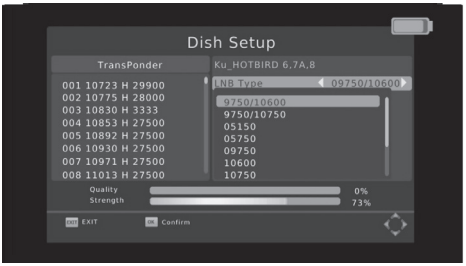
- Press **F4** to Begin Scan, with Default, Blind Scan, Network these three scan modes. When the signal is locked, the buzzer will sound with fast repetition The signal quality bar will also be displayed. Meanwhile, the **LOCK LED** will light up. (Press **MUTE** to stop the buzzer sounding).

- Press **GOTO** to get into the TP list, you can also use **F1**, **F2**, **F3**, **F4** to add, edit, delete or begin to scan the selected TP, and press **GOTO** to return to the satellite list.

- Select one of the satellites and press ▲ ▼ to get into the LNB TYPE setting.



- LNB Type: Press ▲ ▼ select LNB Type: 9750/10600, 9750/10750, 05150, 05750, 09750, 10600, 10750, 11300 and 11475.



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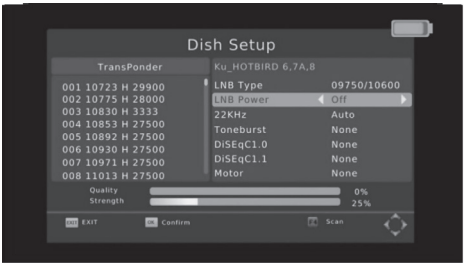
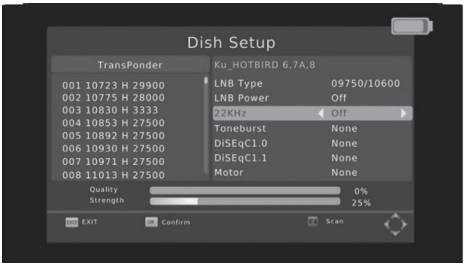
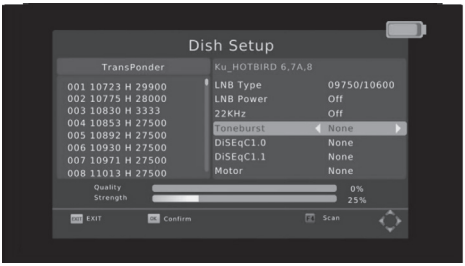
- LNB Power: Press ▲ ▼ Select: Off/13V/ (13V/18V)/18V.



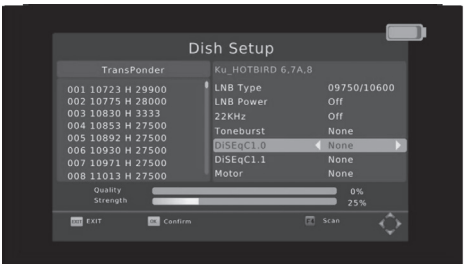
- 22K: Select: AUTO/ON/OFF.



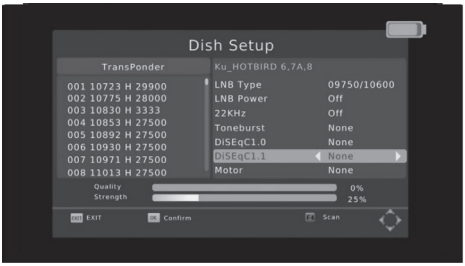
- Toneburst: Press ▲ ▼ Select: None/BurstA/BurstB.



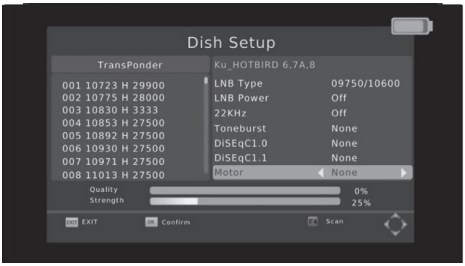
- DiSEqC1.0: Press ▲ ▼ Select: None/LNB1/ LNB2/ LNB3/ LNB4.



- DiSEqC1.1: Press ▲ ▼ Select: None/LNB1~LNB16.

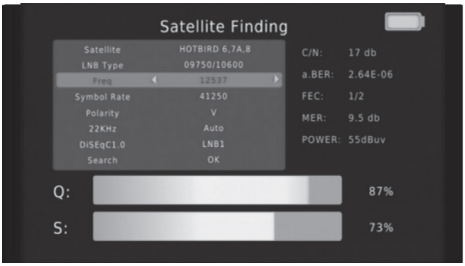


- Motor: Press ▲ ▼ Select: None/DiSEqC1.2/ DiSEqC1.3.

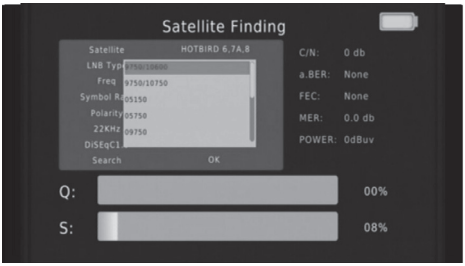


3.1.4 Satellite Finding

Move cursor to **Satellite Finding** and press **OK** to enter the **Satellite Finding** menu.

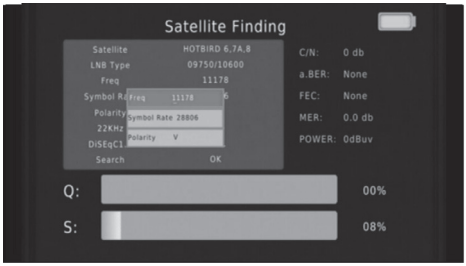


- Press **OK** on the Satellite option to see the following menu. Press ▲ ▼ to select the required satellite. Press **OK** to confirm.



- Press **OK** on the LNB Type option, to see the following window: Press ▲ ▼ to select the LNB
- Type. Press **OK** to confirm.

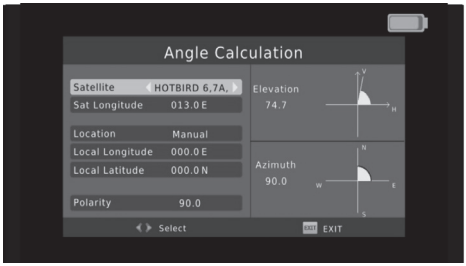
- Press **OK** on the Freq, Symbol Rate, Polarity option, this will bring up the following window:
- Use the numbered keypad to input the Frequency, Symbol Rate and Polarity manually. Press **OK** to confirm.
- When a frequency with signal is detected (not locked yet), the buzzer will sound according to the signal strength, the signal strength bar will also be displayed.
- When the signal is locked, the buzzer will sound with the fastest repetition. The signal quality bar will also be displayed. Meanwhile, the **LOCK LED** will light. (Press **MUTE** to stop the buzzer sounding.)



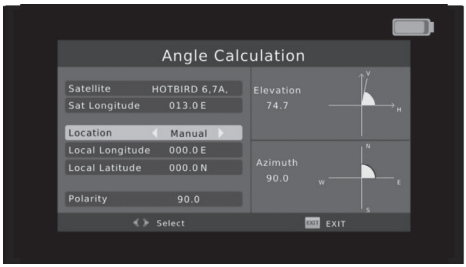
- Press **OK** on the Search option, and the satellite finder will begin to search for channels according to the TP you select or input manually. It will switch to the Program page after the search (if channels are found on the Transponder).

3.1.5 Angle Calculation

Move cursor to **Angle Calculation** and press **OK** to enter the **Angle Calculation** menu.

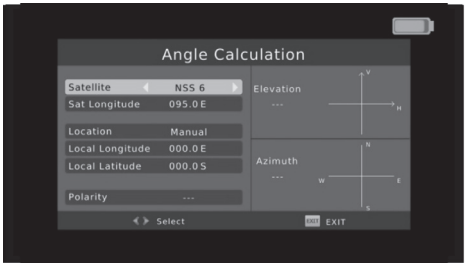


- Press ▲ ▼ on Satellite option to select the existing satellite, the longitude of the satellite will be changed accordingly.
- Press ▲ ▼ on Sat Longitude option. You can use the digital button to input the satellite longitude you want.



- If you select Manual, you can move cursor to the Local Longitude and the Local Latitude and use the Numbered keypad to input the number you want. (Press ◀ ▶ to select east or west local longitude, south or north Hemisphere).

- When a parameter has changed, the system will calculate the result and will show the picture on the screen automatically.



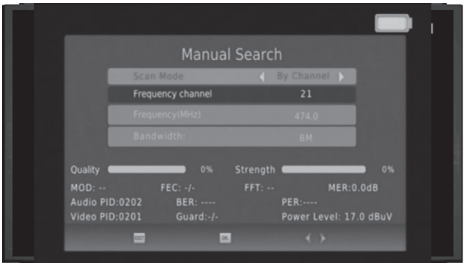
3.2 Terrestrial

Move cursor to **Terrestrial** and press **OK** to enter the **Terrestrial** menu.

- Press ◀ ▶ on Channel Check and press **OK** to enter the following menu:

- Press ◀ ▶ on Channel Search and press **OK** to enter the following menu:
- Select auto or manual search to scan for terrestrial channels

- Press ▲ ▼ on Manual Search and press **OK** to enter the following menu:

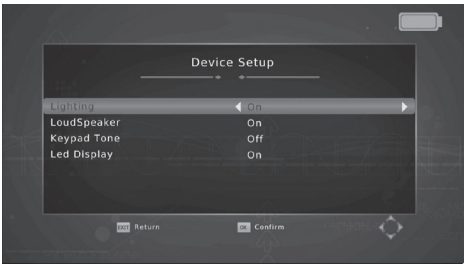


3.3 System Setting

Move cursor to **System Setting** and press **OK** to enter the **System Setting** menu.

3.3.1 Device Setup

- Press ▲ ▼ on **Device Setup** option and press **OK** to enter the following menu:
- Press ▲ ▼ on Lighting, Loud Speaker or Keypad Tone option, then press ◀ ▶ to choose Lighting, Loud Speaker, Keypad Tone or LED Display and select between **On** & **Off**



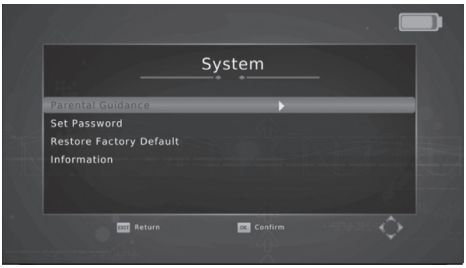
3.3.2 Time

- Press ▲ ▼ on Time option and press **OK** to enter the following menu:

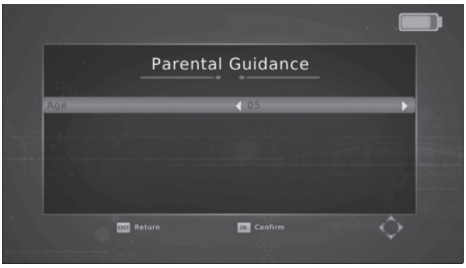
- Press ◀ ▶ to select Auto or Manual for Time Offset adjustments and to choose Time Zone, Date or Time when **Time Offset** is set to **Manual**.

3.3.3 System

- Press ▲ ▼ on System and press **OK** to enter the following menu:

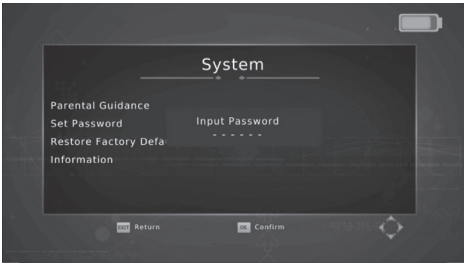


- Press **OK** to get into the Parental Guidance menu (the default password is 000000) .

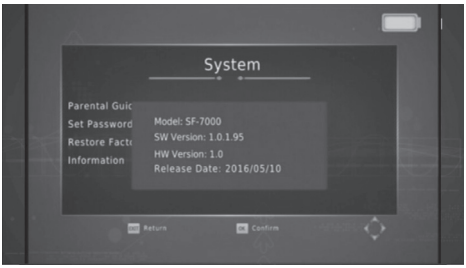


- Press **OK** on Set Password option to reset the user password.

- Press **OK** on Restore Factory Default to perform Factory Reset.



- Press **OK** on information option to get the hardware or software version.



3.3.4 Option

- Press ▲ ▼ on Option and press **OK** to enter the following menu:
- Press ▲ ▼ to choose desired OSD Language, Subtitle Language or Audio Language.

3.4 Program

- Move cursor to **Program** and press **OK** to enter the **Program** menu.

- Press ▲ ▼ on Program Edit option and press **OK** to see the saved TV channels.

Move

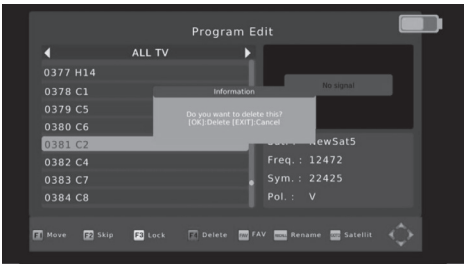
- Press ▲ ▼ on channel list, select the channels you want to edit in the channel list by pressing **Red F1** Key.
- Press ▲ ▼ move the cursor to the position you want and press the **OK** key.
- Press **EXIT** Key to save the settings.

Lock (Password: 000000)

- Press ▲ ▼ on channel list, select the channel you want to edit in the channel list by pressing **Yellow F3** Key.
- Press **Yellow F3** Key to lock or unlock the channel.
- Press **EXIT** Key to save the settings.

Delete

- Press ▲ ▼ on channel list, select the channels you want to edit in channel list by pressing **Blue F4** key.
- Press the **OK** key to delete the channel.
- Press **EXIT** key to save the settings.



FAV

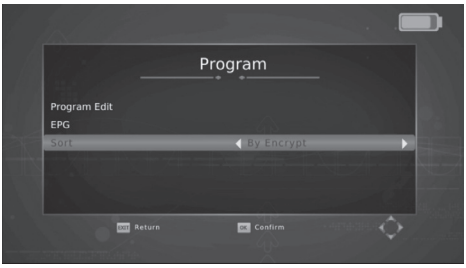
- Press ▲ ▼ on channel list, select the channels you want to edit in channel list by pressing **FAV** key.
- Press ▲ ▼ choose which channels to add to "Favourite Type" and press the **OK** key.
- Press **EXIT** key to save the settings.

Skip and Rename

- Following the same process you can amend the channel's name or Skip.

- Press ▲ ▼ on EPG option and press **OK** to see the all the program guide.

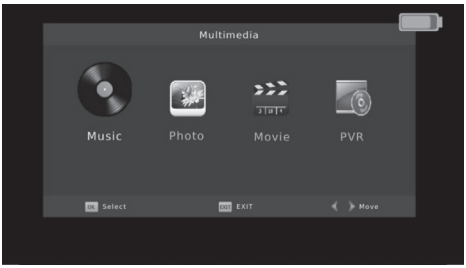
- Press ▲ ▼ on Sort option and press **OK** here you can Press ◀ ▶ to select **By Freq**, **By Service Name**, **Default** or **By Encrypt**.



3.5 Multimedia

Move cursor to **Multimedia** and press **OK** to enter the **USB** menu.

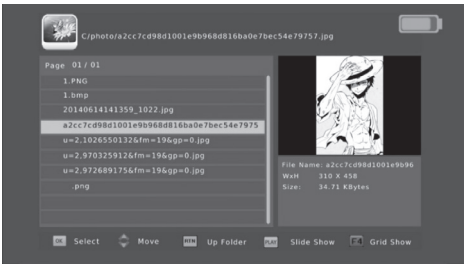
- Press ▲ ▼ on Multimedia and press **OK** to see the following menu.



- Press ◀ ▶ to select the item you want to get into and press **OK** to select the file you want to play.

Music

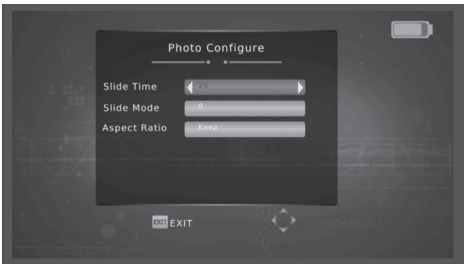
Photo



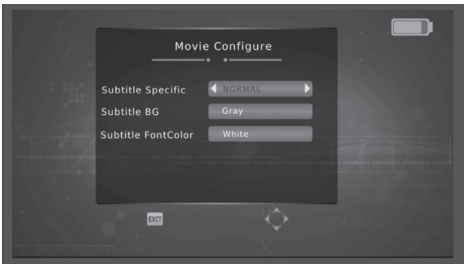
Movie

- Press ◀ ▶to select PVR and press **OK**.
  Press ▲ ▼ to select the **HBPVR** file and press **OK** to view recordings.

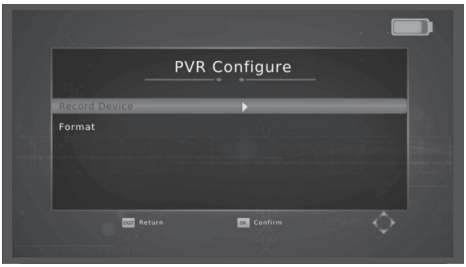
- Press ▲ ▼ on Photo Configure and press **OK** to see the following menu. In this submenu, you can set some parameters for photo play, like slide time/ mode and so on.



- Press ▲ ▼ on Movie Configure and press **OK** to see the following menu. In this submenu, you can set some parameters for movie play, like subtitle display function and so on.



- Press ▲ ▼ on PVR Configure and press **OK** to see the following menu. In this submenu, you can get the information about the USB device you insert and set the correct format for PVR.



3.6 Upgrade

Move cursor to **Upgrade** and press **OK** to enter the **Software Update** menu.

- If you want to restore the factory default and still retain the satellites' information, you can press Backup to USB. Following the factory default setting you will still see the satellites you have added.

4. Declaration of Conformity:

We, ANTIFERENCE LIMITED herewith declare that the ASM01 HD Digital Signal Meter complies with all essential requirements and any other applicable conditions set forth on directive 2014/30/EU.

According to the WEEE (Waste Electrical and Electronic Equipment) EU Directive, do not dispose of this product as household waste or commercial waste. Waste Electrical and Electronic Equipment should be appropriately collected and recycled as required by practices established for your country. For information on recycling of this product, please contact your local authorities, your household waste disposal service or the shop where you purchased the product.

Date of issue: October 2018

5. Technical Specifications

DVB-S Antenna Input/Demodulation	
Main Processor	600M Hz based CPU
Flash Memory	64M Bits
DDR SDRAM	1024M Bits
Tuner/Front-end	
Tuner Type	DVB-S/DVB-S2
Input Connector	F-type,Connector,Male
Frequency Range	950MHz~2150MHz
Signal Level	-65~-25dBm
Impedance	75Ω
LNB Power & Polarization	Vertical:+13V
	Horizontal:+18V
	Current:Max.500mA
	Overload Protection
DiSEqC Control	Version 1.0/1.1/1.2/1.3,USALS Available
22KHz Tone	Frequency:22±1KHz
Demodulation	QPSK,8PSK
Symbol Rate	2~45Msps
Tuner Type	DVB-T/DVB-T2
Input Connector	IEC-type, Connector, Male
Input Frequency	(UHF)470-866MHz,(VHF)170-230MHz
Signal Level	-82~-20dBm
Impedance	75Ω
Demodulation	QPSK,16-QAM, 64-QAM, 256-QAM
Bandwidth	6,7,8 MHz
Power Supply	
Input Voltage Adapter	Free Voltage (100~240V AC 50/60Hz)
Power Consumption	11W MAX
Power charger output	14V DC 3.0A
Battery	12.6V/4000mAh
Battery charging time	3~6H
Battery discharging time standard	>5H
A/V Data Input/Output	
A/V IN/OUT	Video CVBS input/output
	Audio L/R input/output
Audio output	Built-in Loudspeaker
HD TV	VER1.3 interface,up to 1080p
USB	1*USB 2.0 slot Compatible for Host
Transport Streem	MPEG-2/4,H.264
Physical Specification	
LCD Display	5 inch
Size[W*H*D]	210 x150x 52(mm)
Net Weight	0.93Kg
Operating Temperature	0°C ~ + 45°C
Storage Temperature	-10°C ~ + 70°C
Storage Humidity	5%~95% RH (Non-Condensing)