DVB-T267 User's manual

HD DVB-T2/T DIGITAL TV RECEIVER

Transport Stream: MPEG-4AVC/H.264 HP@L4,MPEG-2 MP@HL/ML HEVC (H.265)

Video Aspect Ratio: 4:3/16:9

Video System: PAL/NTSC

Video Output: 1±0.3Vpp

Video Resolution HD Resolution:720*576@25fps/720*480@30fps/HD 1920×1080P/1920×1080i

Audio Decoder: MPEG-2/HE_AAC(DD/DD +optional)

Audio Channel: R/L/ST

Audio Output: 1Vpp 47Kohm Adjustable With E Volume

Power Cable And Jack: 4Pins:

1. DC+12~24V Input

2. ACC

3. GND

4.NC

IR Extension Jack: For IR Extension Box

A/V Output Jack: Video RCA Jack×1,Audiop RCA Jack(R/L) ×2

Upgrade and Multimedia Port: USB

S-AV connector :

1. Input Jack :Video RCA Jack×1, Audio RCA Jack (R/L)×2

2. Output Jack: Video RCA Jack×2

ANT1,ANT2 Input Jack: Female SMA Type

Operating Temperature: -10℃～+50℃

Storage Temperature: -40℃～+65℃

Power Supply: DC+10V～24V±10%

Power Consumption: Running: 4.5W Max

Standby: <0.85W

Dimension: 28(H)*78(L)*118(W) mm

NOTE

Designs and specifications are subject to change without prompt notice. Weight and dimensions shown are approximate.

4. Accessories Included

Name	Specification	Quantity
Remote control		1
Power line		1
AV line		1
User's manual		1
Antennas		2
IR line		1

5. Technical Specification

Tuner Module : DVB-T EN300 744/DVB-T2 EN302 755 V1.3.1 Standard

RF Input: UHF: 470MHz～862MHz   VHF:174MHz~230MHz

Input Impedance:75Ω

Signal Level: -80dBm～-10dBm

Connector Type: SMA type terminal×2

Channel Band Width: 6M/7M/8M

FFT size:1K,2K,4K,8K (normal), 8K (extended), 16K(normal),

16K (extended), 32K (normal), and 32K (extended)

Modulation: QPSK, 16QAM, 64QAM,128QAM,256QAM

Guard Interval: 1/128，1/32, 1/16, 19/256,1/8,19/128, 1/4

Pilot pattern: PP1 TO PP7

Servic type :Support both single PLP (Mode A)and Multiple PLP (Mode B)

Support Single Frequency Network(SFN) in accordance with ETSI TS 101191[6]

Precautions

Install correctly, your new equipment will provide you with years of enjoyable and safe usage.

Installing this unit requires technical expertise. This unit should be installed by a qualified technician or service personnel. If you try to install this unit by yourself, do it properly, referring to the installation and wiring diagram ms in this operating manual. Improper installation may result in fire or electric shock.

1.Do not operate this equipment while driving-safe driving should always be your highest priority.

2.Do not install components in areas which are susceptible to rain, moisture direct sunlight, extremely heat or cold, excessive dust, dirt or humidity.

3. Immediately unplug the power cord and send the monitor to your local dealer or service center as soon as possible:

 a) If there is sm ENTER or any peculiar odor present during used

 b) If there is damage to any of the internal components

4. To avoid damage to the unit and risk of electronic shock, do not permit any of this equipment to become damp or wet from water or liquid. If this does occur, immediately unplug the power cord and send the unit to your local dealer or service center as soon as possible.

5. Do not attempt to repair, open or disassemble any of the components. Dangerous high voltages are present which may result in electric shock.

6. Use only a power source with DC12~24 volts car battery (negative ground).

7. Do not place or suspend objects on the power cord, as this may damage the cord.

8. Do not twist or place the power cord near any source of heat in the vehicle.

9. Avoid dropping any metal objects or inflammable items into the unit ventilation slots.

10. After the unit is installed, do not arbitrarily pull it down or strike it. This may loose the mounting screws and cause it fall down.

11. Do not install your monitor where:

 a) it will obstruct the driver's view.

 b) it will obstruct the operation of the air bag system.

 c) it will obstruct the operation of the vehicle, especially the steering wheel, shift lever, or brake pedal.

 d) a diver or passengers may injure themselves when getting into or out of the car.

12. Do not damage any pipes, tubes, the fuel tank or electric wiring when installing this unit. this can cause a fire. if you drill a hole in car panels, make sure that any hidden car parts will not be damaged.

13. Do not use any nuts or bolts for safety devices such as steering linkage, fuel supply or braking systems. this can cause a fire or an accident .take care to prevent cords and wires from getting tangled or crimped in the moving portion of a seat rail.

CONTENTS

3. Fault problems and solutions

Before contacting your local service, please make sure following instructions, If the product does not work normally after completing the following fault problems and solutions, please contact your local product distributor or service center.

Fault problems	Solutions
No picture and sound	Check the main power cable and check that it is plugged into a suitable power outlet. Check whether Power Switch is On.
No signal	Check the antenna position and installation. Check the area setting whether correct ,if not need to reset again.
No sound	Check the volume level of the TV and the remote control. Check the Mute status of the TV and product.
Poor picture&sound quality	Check if the weak reception of antennas, and install antennas again.
Can't search signal	Check the setting of country and area if correct, or maybe the weak signal.
Poor pictures and sound quality when car moving	Maybe the weak signal in the local position, try in another place.

2. Press PLAY/PAUSE again, continue to watch the program from where paused.

Press EXIT to exit the record program, means to exit time shifting function. And return to current real-time program as below.


2.5.7 Program Record

1. You can record programs when watch TV, press Yellow button pop-up the recording time setting floating panel, then you can set record time according to the USB storage device disk space, press ENTER button to start record program you're watching ,and save the video file as below.

From the MENU-USB-Multimedia-PVR, you can find the record program in the USB device disk, and select to play the record program.

1. Introduction
1.1 Layout of the Main Unit
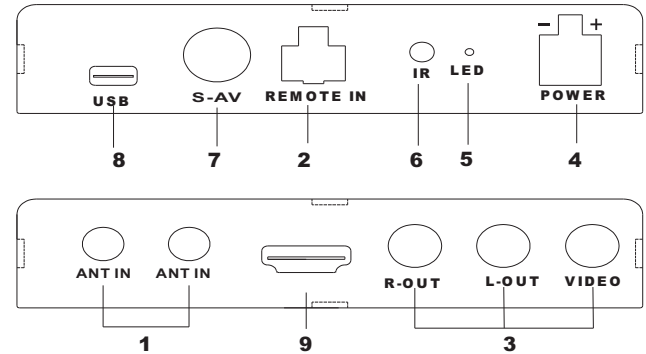
1.Twin Antenna Input (SMA connector)
2. Ext. Remote Sensor
3. AV Output
  a) Video Output (Yellow RCA)
  b)Left Audio Output (White RCA)
  c) Right Audio Output (Red RCA)
4. Power Input DC12~24 Volts
5. Power LED
6. Remote Sensor
7. S-AV Port Definition
  a) One AV Input Port
  b)Two Video Output
8.USB Connector
9.HD Out

1.2 Connections
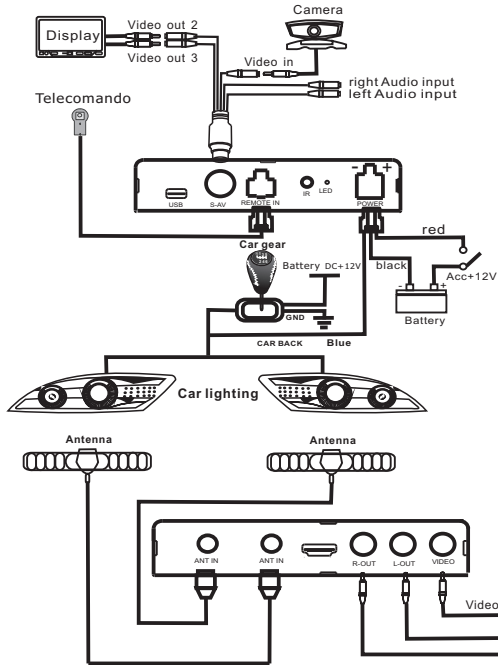
Cautions

1. The red power wire connect to the ACC line which can control the auto, don't connect to the storage battery directly from the auto, to guard against long term operation can't stop. The ACC line and the GND line should install firmly, avoid some unnecessary machine issues.

2. If the machine don't use the AV input terminal, please connect the CAR BACK blue line to the ground line, and use the AV input terminal. please connect the CAR BACK blue line to the positive pole of the visual light after.

3. The two antennas should be parallel installation near the car roof, the input voltage is DC12V.

If current user udder mute, remove user mute, then close mute icon.

Press VOL+/- button: remove user mute, close mute icon, and show Volume menu.

Press MUTE button: remove user mute, close mute icon, and show current Sound Mode.

2.5.6 Time shifting

Time shifting means you can stop watching the real-time ongoing program, to answer calls or make calls, when you finish you can continue to watch from where you stopped and not miss any wonderful programs.

1. Under full screen ongoing state press PLAY/PAUSE, the video picture is paused. If there is external USB device, the TV receiver will start record the current program automatic as below.

When not INFO menu, press INFO button show as above INFO menu, press EXIT to exit the menu.

When have INFO menu, press INFO button show as below, display channel detail informations, press EXIT to exit the menu.

2.5.4 Volume menu

Consist of the progress bar and digital, display at the bottom of the screen, progress bar show the percentage of current volume, the numbers show the size of the current volume. The volume adjustment range is 0-32, default 15.

Press VOL+/- to plus/minus volume, and show volume menu. Press MENU button to close Volume menu, and show main menu.

Press EXIT to close Volume menu.

2.5.5 Mute Menu

When Mute display at the left bottom screen means current user mute.

Press MUTE button: if current user under not mute, display Mute icon the mute.

2. Parts menu introduction
2.1 Remote control function brief

⏻	Press to turn on/off the DTV
Mute	Select sound or remove sound
Enter	Confirm the selection
Display	Displays current channel/program information
TV/RADIO	Switch between TV and Radio modes
0-9	Input channel number
SUB	Change the subtitle language
EPG	Display the Electronic Program Guide
AUDIO	To change audio menu
TTX	Display teletext features
FAV	Add or remove TV channels from one of the four favorite channel lists
Exit	Menu exit
VOL+/-	Volume adjust
Menu	Display the main Menu
CH+/-	Change the channel one by one and up/down in the menu
<	Menu selection and Volume adjustment
>	Menu selection and Volume adjustment
Search	Scan program
Play/Pause	Press to turn/off the Time shift and in the multimedia
PVR	Press to turn on/off the recording

2.2 Function brief and ports introduction

The HD TV receiver support HEVC (H.265), H.264,MPEG2, MPEG4 such video decoding.

Support PCM, AAC Leve12,ACC Leve14 such audio decoding TV receiver.
Input Port: DTV ,USB
Output Port: AV, HD, Audio

2.3 Installation Guide

The TV box will show installation guide before search channels, You can select language and country then enter auto search.
Show as below picture:

Press ◄/► button select language and country ,when select channel search, press ► button enter auto search. Show as below picture:

Press EXIT button: Close Audio Language menu.

Press ▲/▼ button: Fluctuation options ,switch audio to selected language and audio type.

Press ◄/► button: Set sound channel as "LEFT RIGHT" ,cycle options.

2.5.2 EPG Navigation Menu

This page show channel information page.

Press ▲/▼ to move cursor, switch channel.

Press OK button to select the need to reserve watch programme.

Press ◄/► to search channel information.

Press Yellow/Blue button to execute programme page up and down function.

Press INFO button, switch to the details information of selected scheduled programme, screen display Schedule.

2.5.3 Info Menu

Slide Time Slide time: This function closed.
Slide Mode: This function closed.
Aspect Ratio is Images broadcast ratio, Keep for keeping picture Original ratio, Discard for picture stretching full screen play.
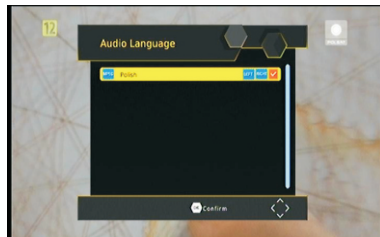
2.4.6.3 PVR Configure

Record Device: Checking record device
Format: format of record device

2.5 Other menus

2.5.1 Audio Languages

Audio Languages only show current audio types in code stream.
Press MIS/I/II/NICAM button: under DTV, when not Audio Language menu, show Audio Language Under Audio Language menu, close Audio Language menu.

Press EXIT stop search, popup whether to stop search tooltip, press OK exit auto search function, and save search information then exit search page.
Press MENU to skip the displayed channel search to continue to search for the next channel status.
Note: Auto search will immediately delete all channel informations.
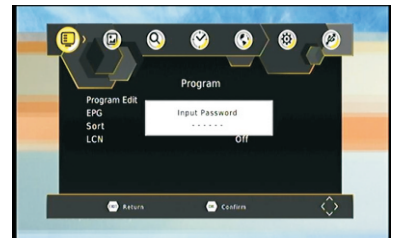
2.4 Main Menu

Traditional style full screen main menu, and matrix style menu.
Press MENU to open main menu, including: Program, Picture, Channel Search, Time, Option System, USB six submenu.
Press ◀/▶ button to select submenu , then press OK to enter submenu page, press EXIT to exit submenu back to current page.

2.4.1 Menu-Program

Press ▼/▲ to move the highlight bar to select debugging project. Press EXIT/MENU back to main menu.

Press ◄/► to select focus adjust project.

2.4.1.1 Program-Progran Edit

Under the program Edit option press OK/▼ enter, firstly prompt customer to enter a password, default setting password:000000.

If the password is correct, enter the Program Edit menu, if enter wrong password, it prompt for password error, press EXIT button back to password error menuprompt.

RED button (Move):Press Red button to select the need to move channel, at customer's satisfy location, press OK, the channel number will move to the appropriate location.

FAV button(FAV):After press FAV button, the selected channel will add to FAV List. Press up and down buttons to select multiple channels.

Green button (Skip):After press Green button, the selected channel will skip during channel switch ,can't be selected.

Yellow button (Lock):After press Yellow button, the selected channels will be locked. When watch need to enter password for viewing.

Blue button(Delete):After press Blue button, popup confirmation for customer whether delete dialog, press ENTER button will delete the channel.

Exit button: back to Program Edit menu;

   Note: If the Program Edit has been modified, press EXIT button back to Programpage, will popup the save display box, keep save then exit.
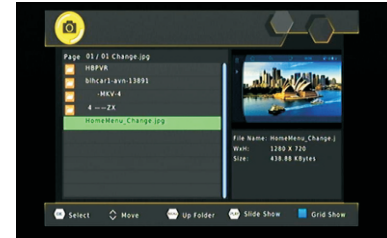
Press ▲/▼ to move cursor to select display picture.

Press OK can change to full screen play.

Press EXIT back to previous menu, press PLAY: pictures display from top to down.

Note:

   1) Only support USB storage device, can't support mobile phone or camera such multimedia devices. Support removable hard disk, maximum support 400G.Support NTFS and RAT 32 format.
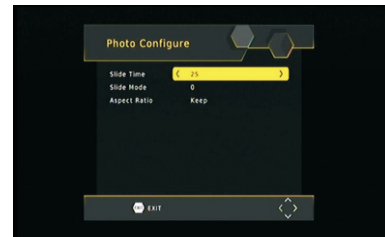
   2)The maximum depth of the USB folder support:308.

   3) The maximum number of files for each folder support:5000.

   4) Only support single and dual channel audio formats.

2.4.6.2 Photo Configure

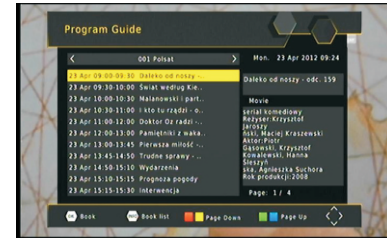Under Photo Configure option press OK to enter Photo Configure page.

Enter Media press ◄/► to move the highlight bar to select Music or Photo, Movie PVR. Press OK to confirm. Press EXIT back to previous page.

Multimedia-Music

Music support play WMA/MP3/AAC format files.

Press ▲/▼ to move the cursor select play songs, press OK to enter next menu, press EXIT back to previous menu.

Press <PLAY/PUSE>, <PRE> ,<NEXT>, <FORWARD>, <BACKWARD> to Play/Pause, previous song, next song, fast forward, fast backward. Press EXIT to exit play mode.

Multimedia-Photo support play jpg/bmp/png format files.

2.4.1.2 EPG

Under the Program Edit option press OK/ ▼ button, select EPG, to get more information about the program and program news gong to play at current or future, press EPG button to enter electronic program guide menu page as below:
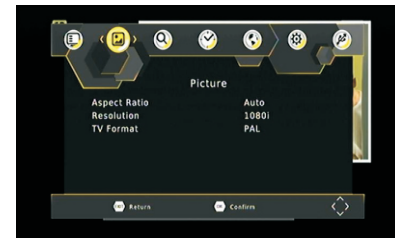

2.4.1.3 Program-Sort

Press ◄/► to select the way of Sort : By LCN;By ONID;By Service name;By Service ID; default setting By LCN.

2.4.1.4 Program-LCN

Press ◄/► to select whether open LCN, default setting ON.

2.4.2 Menu- Picture

Press ▲/▼ to move the highlight bar to select debugging project. Press
EXIT/MENU back to main menu.
Press ◄/► to select focus adjust project.
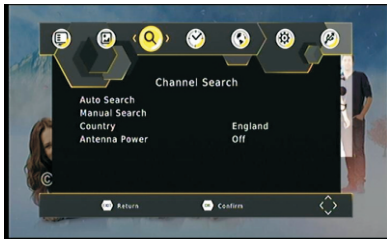Aspect Ratio select range:16:9 Wide Screen; Auto; 4:3Full; 4:3Pan&scan;4:3
Letter Box, default 16:9 Wide Screen;
Resolution select range:480P,576P,720P,1080I; default 1080I;
TV Format select range: NTSC, PAL, default PAL;
Video output select range: CVBS, RGB.

2.4.2.1 Menu-Channel Search

2.4.2.2 Channel Search-Auto Search

Under Auto Search option press OK/ ► button popup dialog to confirm
whether enter to search, press ENTER button to confirm auto search menu
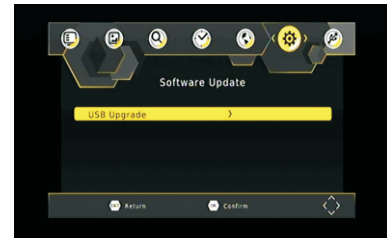page, the TV receiver under the processing of searching channels.

Press OK/ ► then pop-up enter password menu, enter the initial password:
000000,STB perform reset action, enter engineering default state, restore to
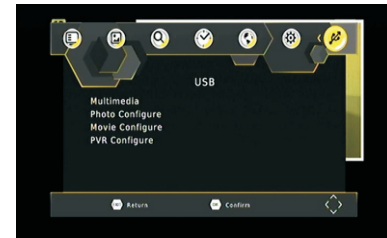default setting.

2.4.5.3 System-Information

Press OK/ ► show message box: Model, SW Version (software version), HW
Version (type of main engine).

2.4.5.4 System- Software Update

Under Software option press OK to enter this page.

2.4.6 Menu-USB
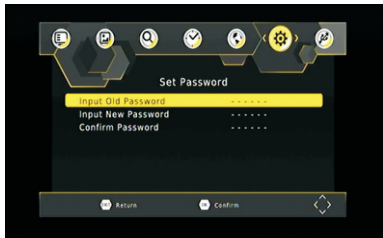

2.4.6.1 Menu-Multimedia

Press ▲/▼ to move the highlight bar to select debugging project. Press
EXIT/MENU back to main menu.
Press OK/ ► to enter the option menu page under the Multimedia menu.

This page is a child lock function, the channel is age limit, can't watch for child.

Press ◄/► to select age limit range, press OK to confirm setting ,press EXIT/MENU back to previous page.

Input old Password: enter the initial 6-digit password, default password is 000000, if enter wrong password will pop-up password error massage box, press EXIT to exit the prompt box.

Input new password: enter new 6-digit password.

Confirm password: enter the password again to confirm new password, if enter correct again, will pop-up set successfully prompt box , press EXIT to exit prompt box, password setting successfully.
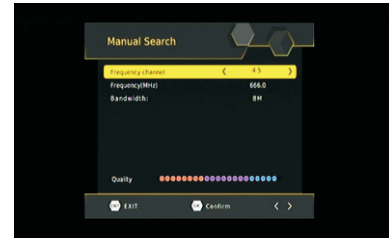
2.4.5.2 System-Restore Factory Default

Press EXIT to stop auto search, if the processing of searching didn't finish, will popup the dialog to confirm whether exit search, after confirmation will exit search.

Press MENU to skip the displayed channel search to continue to search for the next channel status.

Note: Auto search will immediately delete all channel informations.

2.4.2.3 Channel Search- Manual Search

Under Manual Search option press OK/ ► to enter Manual search channel menu, press EXIT to quit Manual search menu.

The menu show Frequency channel, Frequency, Bandwidth, Quality.

Press OK to entered Channel Search processing.

2.4.2.4 Installation-Country

Press ◄/► to select country, different country different frequency range and bandwidth.

2.4.3 Menu-Time

Press▲/▼ to move the highlight bar to select debugging project. Press EXIT/MENU back to main menu. The OK button doesn't work in this page.

2.4.3.1   Time-Time Offset
Select range: Auto, Manual, default Auto.

2.4.3.2   Time-Country Region
When Time offset is Manual, Country Region option in gray can't be selected. Different country different selection, default ,Paris.

2.4.3.3   Time-Time Zone
Select range: GMT-12~GMT+12,default GMT+1,Select range: GMT-12~ GMT+12, default GMT+1,When Time offset is Auto, Time Zone option in gray can't be selected.

2.4.3.4   Sleep
This function has been closed.

2.4.4   Menu-Option

Press ▲/▼ to move the highlight bar to select debugging project. Press EXIT/MENU back to main menu.
Press OK/ ▶ to enter the option menu page under Configuration menu.

2.4.4.1   Option- Language
Under Language option press OK/▶button enter language page, press◀/▶to select focus adjust project, press EXIT/MENU back to Configuration menu.

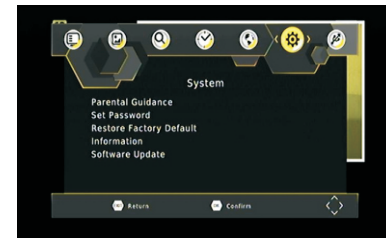OSD Language range :English, French, German, Italian, Portuguese, Spanish.
Subtitle Language: In order to take care of hearing disability, will add special subtitles when program recording.
Audio Language: Audio language selection type.
Digital Audio select range: PCM, RAW, Off, default PCM.
Audio Description: This option closed.

2.4.5   Menu-System

2.4.5.1   System- Parental Guidance
Under Parental Guide option press OK to enter, first show 6-digit password input box, enter correct password ,enter to Parental Guide menu page.