



dvb-c mpeg-4 hd tv-tuner

for digital free to cable tv channels usb port with pvr

DENVER DVBC-110HD MK2



Important safety instructions to be kept with the product Please read attentively



To prevent fire and electric shock, do not expose this receiver to rain or moisture. In order to avoid any possible risk of electric shock, never attempt to open the unit. In case of breakdown, reparation should be made by qualified technicians. No part of this unit should be repaired by users.

WARNING

Presence of dangerous tension inside apparatus! Do not open. Risk of electric shock! No part should be repaired by users. The maintenance of the receiver should be carried out exclusively by qualified persons.

If the power cord is damaged, it must be replaced or repaired by the manufacturer, its after-sales service, qualified electrician or persons of similar qualification in order to avoid possible danger.

The product must be installed in accordance with national regulations.

The used batteries must be disposed of safely. Throw them in collection bins provided is prohibited (inquire after your retailer for more details) in order to protect the environment.

Proper Installation

- Place the receiver on a flat, firm and stable surface. Do not put it on a carpet or rug.
- Do not place the receiver on top of another device, such as an amplifier. This may lead to overheating.
- Do not put anything above the unit (for example, CDs or magazines).

Sufficient Ventilation

- Place the receiver in a well-ventilated location to prevent accumulation of internal heat. Allow a gap of at least 10cm to the rear and the top of the unit, as well as a space of 5cm to both sides to avoid overheating.
- Do not obstruct any ventilation openings with items such as newspapers, tablecloths, curtains, etc.

Protecting the Receiver from High Temperatures, Humidity, Water and Dust

- The receiver should not be exposed to dripping water or splashing.
- No objects filled with liquids, such as vases, shall be placed on the unit.
- Do not place any objects that might damage your unit near it (e.g. liquid filled objects or candles)
- Do not place any source of flames such as lit candles on the receiver.
- This receiver is to be used in a temperate climate and should not be used in a tropical climate.

Electricity Supply

- Please unplug the receiver in case of prolonged non-use.
- If the power cord is damaged, it must be replaced or repaired by the manufacturer, its after-sales service, qualified electrician or similar qualifications to those to avoid possible danger.

- This device must be connected to a 230V ~ 50Hz electrical network.
- The plug must remain readily accessible after the installation of the product.

Welcome Section

Congratulations on choosing to buy a **DENVER** product. By doing so you now have the assurance and peace of mind that comes with purchasing a product made by one of the leading manufactory.

Main features:

- Slim size (180mm)
- MPEG-2, MPEG-4(H.264) decoding
- USB2.0 for software update , music ,image, movie and recording
- LCN(Logical Channel Number) supported;
- Parental control
- Favorite lists
- Timer
- EPG/TXT/SUBTITLE supported
- Digital sound through COAXIAL output (S/PDIF)
- PVR ready supported

Automatic Standby: the STB preset to automatically switch from active mode into standby if 3 hours no interaction and/or channel change from user, with alert message 2 minutes before going into standby. User can choose OFF (turn off this function) or other hours.

FAQ - DENVER DVB-C

Congratulations with your digital cable-tv tuner. With this settop box you can enjoy digital TV signal, and get HD channels in full quality.

To get a proper signal you need good cables with proper connectors and assembling. If you don't have this, it can be hard to receive proper signal.

This is why it is important to check your cables. Bad assembling and bad quality of assemblings can do so that you don't get signal at all, or in best case pixelating channels.

Check your cables.

If possible, the DVB-C box shall be connected directly to the input connector of the house. And you should maximum use 10 meter cables. If you put more cables in a row (with connectors), you risk to loose a lot of signal, so use one long cable instead of several with connectors.

It is also important to use double shielded cables, and preferrable of the type with mounted connectors.

If you need to split the signal to more than one tv, it is best to do this after the box is connected. OR best of all use a
connector box with F-connectors. And not the T-pieces that you use as normal antenna plug.

F-Connector looks like this:



Please make sure not to make sharp turns on the cable. You risk to damage the inside of the cable this way.

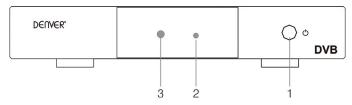
If you follow these rules, you will get digital cable tv in super quality.

Please notice that in some houses it might be necessary to use a signal amplifier. If you use this, make sure it is made for digital cable tv, and has the proper shielding. It might be a good idea to ask you tv provider what amplifier they suggest.

1. Installation of STB	ENG-5
1.1 Front Panel	ENG-5
1.2 Rear Panel	ENG-5
1.3 Connection	ENG-6
1.4 Remote	
2. Installation Guide	
3. Basic Operation	ENG-8
3.1 Program Organizer	ENG-8
3.2 Installation Guide	ENG-9
3.3 System Setup	ENG-9
3.4 Tools	ENG-11
3.5 Timers	ENG-11
3.6 Record	ENG-11
3.7 MutiMeida	ENG-12
3.7 Audio key	ENG-12
3.8 TV Channel and radio Channel list	ENG-12
4. Other functions introduction	ENG-12
4.1 Program information	
4.2 Favorite List	ENG-13
4.3 EPG (Electronic program guide)	
5. Troubleshooting	ENG-13

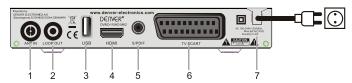
1. Installation of STB

1.1 Front Panel



- (1) Power: Switch between Standby mode and active mode.
- (2) on/off: Power lamp, red color in Standby mode, green color in active mode
- (3) IR sensor: Receives the remote control signal.

1.2 Rear Panel



1. ANT IN

Connect cable signal.

2. LOOP OUT

Connect to TV.

3. USB

It is used for playing wma,m4a, aac, JPEG,BMP,PNG,AVI, XVID,MKV and USB PVR(USB stickers, mobile HDD with external power supply and FAT32 format). **USB harddisc on products with PVR function:**

Please notice that we recommend using a hard disc with OWN power supply on this unit. This is to ensure that it has enough power to work properly.

You can buy many hard discs without power supply, but our experience is that they need too much power to work stable. MAXIMUM power for hard discs without power supply is 500mAh.. If they use more than this, they will fail when recording.

4. HDMI

Connecting to the HDMI input on the TV set.

5. S/PDIF

Digital audio signal output, It is Coaxial output

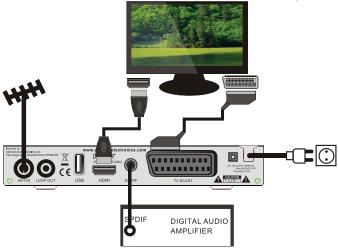
6.TV SCART Connector

Connect your receiver to your TV Scart port using a SCART cable.

7. Power Cord

1.3 Connection

Note: Before connect this STB to other devices, please close all devices' power.



1.3.1 Connecting to cable signal

To receive the broadcast signal, the cable signal should be connected to the CABLE IN connector at the back of the receiver.

1.3.2 Connecting to TV

- 1. Connect the HDMI connector of the receiver to the HDMI connector of TV set.
- 2. Connect the TV Scart connector of the receiver to the Scart connector of TV set.

1.3.3 Connecting to Digital Audio Amplifier

Connect S/PDIF(COAXIAL) connector of your receiver to digital audio input of your amplifier.

1.4 Remote



Switch between operation and standby modes.

Press to temporarily cut off the sound.

0-9: Enter number or select a channel number to watch.

RCL: Switches to Last channel viewed.

TV/R: Switch between TV and Radio mode.

MENU: Displays the main menu.

AV:switch AV and TV mode

EXIT: Return to the previous menu or escape from the item

OK: Confirm.

▲◀▶▼: Move cursor up/down/left/right, page up/down.

Volume +/-.Chanel +/-

FAV: Press to display the TV favorite list.

EPG: Shows the EPG (Electronic Program Guide) only

when menu is off.

V+/V-: Volume+/-.

AUDIO: Display the Audio Select window.

INFO: Shows information of the current channel.

Play in multimedia playback

 $\textbf{ZOOM} \\ : \\ \textbf{Zoom the piture in media player} \\ ; \\ \textbf{under menu of} \\$

: Direct entrance to list of recorded programs; timeshift;

Music, Movie, PVR, press Zoom button, show GOTO on menu, then input time which you want.

P+/P-: Page up or down in menu list.

PAUSE: Pause in multimedia playback & timeshift

SUB: Show the list of subtitled languages the current.

channel supports.

TEXT: Shows current service's Teletext on OSD.

REC: Records a live program.

44:

Slow playing.

▶►: Fast playing.

:

Stop.

Colored buttons (RED, GREEN, YELLOW, BLUE): special function keys, there is function description in menu bottom side, different functions in different menu option.

2. Installation Guide

After all connections have been made properly, switch on TV and make sure the receiver is connected to the Main Power. Press Power button to switch receiver on. If you are using the receiver for the first time or restored to Factory Default, the Main Menu will appear on your TV screen.

(1) select [Country] and press RIGHT/LEFT key to select an country to determine the time region.



- (2) Select [OSD Language] and press RIGHT/LEFT key to select an language
- (3) select [Display mode] and press RIGHT/LEFT key to select an resolution
- (4) select [Aspect Mode] and press RIGHT/LEFT key to set the display format.
- (5) Select [Channel Search] and press RIGHT or OK key to begin Automatic channel search
 - (6) Once channel tuning is complete, you are now ready to watch TV

3. Basic Operation

3.1 Program Organizer

To access the Menu, press the MENU button and select [Program organizer]. The Menu provides options to adjust the Program Manage Settings. Press the EXIT button to exit the Menu.



3.1.1 Channel Manager

To edit your program preferences (lock, skip, favourite, move or delete), you will need to en

skip, favourite, move or delete), you will need to enter the Program Edit Menu. This Menu requires a password to access. Enter the default password '0000'.

3.1.2 Channel sort

- Sort your channels from the following options:
 [LCN] Sort the channels in ascending order
 [ONID]-Sort the channels according to the original network
 [Service Name] Sort the channels in alphabetical order
 [Service ID] Sort the channels according to the station
- 2. LCN (Logical channel number)

Set LCN on or off.

3.1.3 Delete All Channel

Delete All channel by enter password " 0000"

3.2 Installation Guide

To access the menu, press MENU and select [Install Guide]. The Menu provides options to adjust the Channel Search settings. Select an option and press OK or RIGHT to the setting page.Press EXIT to exit the Menu.



3.2.1 Search Setup

- (1) Country:Setup an country that it determine the time region.
- (2) Standby Loop Through: You can select Standby Loop Through On or Off.

3.2.2 Auto Search

Search and install all channels automatically. This option overwrites all preset channels.

- 1. Input the symbol.
- 2. Press LEFT or RIGHT key to select QAM and search mode.
- 3. Press OK to start searching channels

3.2.3 Manual Search

Install new channels manually. This option adds new channels without changing the current channels list.

- 1. Select [Manual Search] then press OK or RIGHT. The channel search screen will appear.
 - 2. Input the frequency and symbol.
 - 3. Press LEFT or RIGHT key to select QAM and search mode.
 - 4. Press OK to start searching channels
- If a channel is found, it is saved and added to the channels list. If channels can t be found, and then exit the menu.

3.2.4 Net Work Search

You can search channels by net work. Input the local Network ID which your program provider provides.

3.3 System Setup

To access the menu, press MENU and select [System setup]. The menu provides options to adjust the system settings.

Press the UP/DOWN key to select an option and press OK to enter the setting page.

Press EXIT to exit the Menu.

3.3.1 Language Setting

You can set menu language that was the OSD language.
You can set the audio language that was the default choice when the program



has multi-audio.

You can set the subtitle language that was the default choice when the program has multi-subtitle

3.3.2 OSD setting

You can set the OSD transparent and infobar show time.

3.3.3 TV Setting

(1) TV mode

If the video does not appear correctly, you need to change the settings.

This should match the most common setting for TVs in your country.

[NTSC]: for NTSC system TV.

[PAL]: for PAL system TV.

(2) Screen Mode

You must set the display format to either4:3 Full, 4:3 Pan& Scan, 4:3 Letter Box, 16:9 Wide Screen or Auto to get the maximum display when watching TV.

(3), Scart Output

You can set the video output mode.

(4). HDMI output

If the video does not appear correctly, change the setting. This setting is to match the most common setting for HDMI.

[576i]: for PAL system TV.

[576P]: for PAL system TV. [720P]: for NTSC or PAL system TV.

[1080I]: for NTSC or PAL system TV.

3.3.4 Audio Settina

It control the Digital Audio Amplifier output.

3.3.5 Time Setting

This menu provides options to adjust the time settings.

Press UP/DOWN to select an option and press RIGHT/LEFT to adjust the setting. Press EXIT to exit the menu.

(1) Time offset

Select auto or manual for GMT offset adjustments.

(2) Region

It indicate the setup country capital. It would not be changed in this menu.

(3) Time Zone

Select the Time Zone Offset when [Time Offset] is set to Manual.

3.3.6 Auto Standby

Select the Sleep time.

The machine will automatic switch off after 3 hours without user activity.

3.3.7 Parental Guidance

You can restrict access to channels that are unsuitable for children. To restrict/lock the channel you will need to enter either the default password '0000' or your own

password.

3.3.8 Restore Factory Default

Reset your Set Top Box to the Default Factory Settings.

In Main Menu select (Restore Factory Default) and press OK or RIGHT to select. Enter your password or the default password '0000' and press OK to confirm. This option will delete all preset channels and settings.

3.4 Tools

To access the menu, press MENU and select [Tools]. The menu provides options to adjust the system settings.

Press the UP/DOWN key to select an option and press OK to enter the setting page.

Press EXIT to exit the Menu.

(1) Information

View model, hardware and software information.

(2) Change Password

Set or change the password for locked programs. Enter your old password or the default password '0000'. You will then be asked to enter your new password. To confirm re-enter your new password. Once it is confirmed, press EXIT to exit the Menu.

(3) USB Upgrade

It support the upgrade the software when choose the right file which the manufacture provide .

(4) Remove USB device

Remove the USB device safely.

3.5 Timers

In this menu, you can select the channel number which you want to record, set the start date, start time, end time and select the repeat mode(Once, Daily or Weekly), then set the mode to Record, press Ok to save the timer. This channel will be recorded

3.6 Record

This menu contains video list ,USB device information ,Record setup and remove USB device (the the usb device is interted,this option would be appear)

Video list: you can see PVR.

USB device information :You can format the usb device to FAT32 or NTFS







Record setup: you can view record device information.

3.7 MutiMeida

You can play music, view the photo, see the movie

Multimedia player feature also has been integrated on the receiver. You could show your preference photo, playing music and movie on multimedia player. Known supported file were illustration below. NTFS, FAT32 and FAT16 file system could be supported at the moment.



Player	Supported file		
Photo	JPEG, BMP, PNG		
Music	*.wma, *.m4a, *.aac		
Movie	*.AVI, *.MKV, *.XviD, *.mpeg, *.dat, *.vob, *.ts, *.mp4(GMC not		
	supported), *.motion JPEG		

Photo Configure

You can set Slide Time, Slide Mode and Aspect Ration

Movie Configure

In this menu, you can set Subtitle Specific, Subtitle BG and Subtitle Fontcolor...

3.7 Audio key

The program might have multilingual audio language and the audio broadcast on different audio mode such as Stereo, Left or Right. All the available audio languages will display on the audio track windows while you press AUDIO key. The screenshot is illustrated below. If there is no audio output after you select the audio language, it indicates that there is no audio on the current audio mode, so you have to select preferable audio mode.

3.8 TV Channel and radio Channel list

Press OK key to display all TV channel or all Radio channel. Follow the help information at the bottom of the window to select preference channel.

4. Other functions introduction

4.1 Program information

If you press the **INFO** button once, a banner is displayed on the upper part of the screen, and if you press the button again before the upper banner is disappeared, the banner will show the details of the currents channel.

4.2 Favorite List

If you press "FAV" on the remote controller at No menu state, the favorite group list will be displayed on the screen. You can select one favorite group and press "OK" key to enter the favorite channel list

4.3 EPG (Electronic program guide)

The EPG is an on-screen TV guide that shows scheduled programs seven days in advance for every tuned channel. Press the EPG button on the Remote Control to access guide.

When entering EPG for the first time on a channel it can take up to 2 minutes before EPG is fully shown. If you change channels, the 2-minute loading time can be starting over again. This is not an error, but a normal waiting time for the EPG to load."



You can use the UP/DOWN key to select the preferred program and press color key to change time that view event. Press "**OK**" key, you can view or record program by timer

5. Troubleshooting

There may be various reasons for the abnormal operation of the receiver. Check the receiver according to the procedures shown below. If the receiver does not work properly after checking it, please contact the dealer. Don't open the receiver cover. This may cause a dangerous situation.

Symptom	Cause	Remedy
The LED display on front panel does not light up.	The power cord is not plugged in.	Check that the power cord is plugged in to the wall outlet.
No picture or sound	Wrong connection of the Audio/ Video output of the receiver to TV. Audio muting. TV power off.	Connect the Audio/ Video output of the receiver to TV correctly. Press the MUTE button Turn TV on.
No picture	The receiver can't receive the signal Incorrect values of some tuner parameters Wrong direction of the antenna.	Check the antenna cable, replace the cable, or connect the cable to the receiver tightly. Set the values of the tuner parameters correctly in the installation menu. Check the antenna connect.
The remote control does not work	The batteries of the remote control are not inserted or exhausted	Check whether the batteries are inserted correctly in your remote control. Check the batteries, and if exhausted replace the batteries in the remote control.

Tips: If you refer to this troubleshooting, but no resolve that problem you encountered. Please you contact the local dealer or technical support instantly, don't to discover the machine, because that do is very dancer, and it damage that machine in that cases.



www.denver-electronics.com



Electric and electronic equipment and included batteries contains materials, components and substances that can be hazardous to your health and the environment, if the waste material (discarded electric and electronic equipment and batteries) is not handled correctly.

Electric and electronic equipment and batteries is marked with the crossed out trash can symbol, seen below. This symbol signifies that electric and electronic equipment and batteries should not be disposed of with other household waste, but should be disposed of separately.

As the end user it is important that you submit your used batteries to the approriate and designated facility. In this manner you make sure that the batteries are recycled in accordance with legislature and will not harm the environment.

All cities have established collection points, where electric and electronic equipment and batteries can either be submitted free of charge at recycling stations and other collection sites, or be collected from the households. Additional information is available at the technical department of your city.

Imported by:
DENVER ELECTRONICS A/S
Stavneagervej 22
DK-8250 Egaa
Denmark
www.facebook.com/denverelectronics





MED ENSAMRÄTT UPPHOVSRÄTT DENVER ELECTRONICS A/S

ALLE RETTIGHEDER TILHØRER DENVER ELECTRONICS A/S COPYRIGHT DENVER ELECTRONICS A/S

ALL RIGHTS RESERVED, COPYRIGHT DENVER ELECTRONICS A/S

ALLE RECHTE VORBEHALTEN URHEBERRECHTE DENVER ELECTRONICS A/S