

**4K Android single-tuner Satellite Receiver**

# **User Manual**

Rebox RE-8401UHD S-PVR



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# 1. Introduction

## Preface

Thank you for choosing this Rebox – 4K Android single tuner – satellite receiver, the RE-8401UHD S-PVR.

Being able to view broadcasts in UHD (\*) quality, support for a MultiStream, CAM701 and CAM803 module, and with this module use, having Live TV and being able to record at the same time (in the same transponder), makes this receiver a unique product.

(\*) To be able to watch UHD broadcasts, your TV must also be suitable for this.

## GOOD TO KNOW

This receiver was launched in November 2023. There will be a number of software updates, especially in the initial period (this is always the case with a new receiver model). Because although there is already a lot of functionality, we realize that something needs to be added here and there, certain things can be done differently/better, etc. And even though we put ourselves in the user's shoes as much as possible during development, things will always come up. Because after all, one home situation is not the same as the other.

We invite you to simply send us a message if you have any questions or comments. We will then see if we can include that in a next update. In this way, step by step, we arrive at an increasingly better/more complete box. Thanks in advance!

## From connecting to watching TV

Takes place in a few user-friendly steps, shown on your TV. You can read more about this in chapters 2 to 4.

## Internet connection

The underlying Android operating system makes it possible to use/install apps. If these apps use the internet, you must connect this receiver to your home network.

We generally make software/firmware updates available for download from our Rebox website. In some cases, an update may be offered OTA (Over The Air). You also need to connect this receiver to the internet. If you have any questions about this, consult our website, or contact your dealer or Rebox.

## Safety regulations

- Read the entire manual before connecting and using the TV receiver.
- Keep this manual.
- Please observe any comments/warnings.
- Follow all instructions.
- Do not use the receiver near water.
- Do not place the receiver near heat sources, such as radiators, ovens, or any other heat source. Placing the receiver on or under an amplifier or other heat-generating A/V equipment is strongly discouraged.
- Use a soft cloth and a mild solution of dish soap and water to clean the casing. Squeeze the cloth well and first remove the receiver from the power supply!
- Do not block ventilation openings, and install the receiver according to the instructions.
- The 12/220V power adapter supplied with this receiver complies with all safety regulations and should not be modified. If the plug does not fit, or if an adjustment needs to be made for certain reasons, have this carried out by a certified professional.
- Prevent the power adapter/connection cable from being damaged. This may cause fire or electric shock.
- Only use accessories supplied or recommended by Rebox.
- Disconnect the receiver from the power supply during thunderstorms/lightning, and during long periods of absence when the receiver is not being used.
- If maintenance needs to be carried out on the receiver (for example if there is damage to the plug, connecting cable, or internally due to liquid damage, or if the receiver has been dropped), have this done by qualified personnel.

- To avoid electric shock, the housing should not be opened.

**Warning:**

Avoid electric shock or fire. Do not allow liquid to enter the receiver.



Do not open the receiver housing. This may cause an electric shock.



The lightning flash with arrowhead symbol within an equilateral triangle alerts the user to the presence of uninsulated dangerous voltage within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock.



The symbol consisting of a triangle with an exclamation point indicates that the documentation accompanying the device contains important operating and maintenance instructions.

## Copyright

Everything in this manual is the property of Rebox and may not be reused without express written permission. Rebox's copyright is protected.

## Disclaimer

The manufacturer, distributor and resellers are not liable for any damage caused by the information contained in this manual. The instructions and descriptions are based on the status of the device during the production of this manual.

For reasons mentioned in the chapter “Providing the receiver with new software (firmware)”, Rebox releases new software versions from time to time. This may entail, for example, that the appearance of the receiver menu and/or the structure is changed, and/or that functionality is changed or added.

It is therefore possible that, from such a moment on, this supplied manual is no longer fully in line with the current software.

If at such a time there are significant changes that require additional explanation, additional information and/or an extra manual is usually created for this and published on the Rebox website for inspection or download.

### **NOTE:**

Additional information may include: News items, Tips & Tricks, FAQs, various manuals, addenda, walk-throughs, how-tos, films and other documents.

## Support

The main functions of this STB are watching/listening to TV/Radio channels, recording and playing them, and related matters, such as reading channels, etc.

All these kinds of things take place in our own Rebox DVB environment: the **rbxTV app**

This manual describes in particular: the functions you encounter in the rbxTV app. If you still have questions, please consult the Rebox website for possible additional information, as mentioned above in the '**NOTE**'.

In addition, you can always contact your point of sale, and Rebox itself, by email and telephone.

**As for the other apps that can be found and installed yourself.** These are from third parties, the continued operation of which we cannot guarantee. But ... if at any time something does not work, and it is within our power to do something about it, we will of course not hesitate to do so.

Our rbxTV app runs on the **Android operating system**.

This Android environment, which can be accessed via the Settings button on the RCU, for example, offers numerous setting and configuration options.

The most important functions will be discussed in this manual.

If there is something missing, please let us know. Then we can see whether this digital manual can be expanded, or whether additional information can be made available, as mentioned in the '**NOTE**' above.

## Abbreviations

Abbreviations that may be used in this manual are:

- STB : Set Top Box (collective name for various types of TV receivers)
- RCU : Remote Control Unit
- HDMI : High Definition Multimedia Interface (for Audio and Video transfer)
- FTA : Free To Air (free to watch/listen to channels)
- LNB : Low Noise Block (reception head, to be mounted on a satellite dish)
- DVB : Digital Video Broadcasting
- OTA : Over The Air
- TP : Transponder (frequency area containing a number of TV/Radio channels)
- CAS : Conditional Access System
- ISP : Internet Service Provider

## Giftbox Contents & Supplies

**In the giftbox you will find:**

- RE-8401UHD S-PVR single-tuner satellite receiver
- 12/220 Volt power adapter
- HDMI kabel 2.0, 1.2 meter
- Bluetooth remote control unit
- 2x AAA batteries
- Quickguide

### Supplies:

Rebox has developed this satellite receiver with the Canal Digitaal / TV Vlaanderen user in mind. In order to view the paid subscription channels, they must be decoded with a smart card associated with your subscription.

This receiver supports the following types:

- CAM803 (CI+ Module with built-in electronic Smartcard)
- CAM701 (CI+ Module with built-in electronic Smartcard)
- Smartcard inserted in a Multistream CI Module



### NOTE

This receiver does not have an internal smart card reader, only a CI slot.

At the time of developing this receiver, the M7 Group announced that the use of a smart card alone will no longer be supported, from the point of view of content security, among other things.

Furthermore, a satellite dish with 1 or more receiving heads (LNBs) is required, which is connected to this receiver (LNB input) with a coaxial cable. Depending on which channels you want to watch, you need 1 or more LNBs.

Just a simplified example:

At the time of this writing, German channels are offered via the Astra 1 satellite, and the Dutch channels via Astra 3. If you want to receive both, you will need a dish with 2 LNBs mounted on it. One aimed at Astra 1, and one aimed at Astra 3.

#### NOTE

On the Rebox website you will find an overview of Rebox points of sale in the Support menu. You can search and contact them based on your address for advice and supplies.

#### Internet connection

This STB has various apps pre-installed, and you can also install apps yourself. If these apps use the internet, connect this receiver to your home network.

In case a software/firmware update is offered OTA, you also need an internet connection.

## 2. Connect

1. Connect the coaxial cable from your satellite dish to the LNB input of the receiver.
2. Connect the receiver to your TV using the supplied HDMI cable. Don't forget to interact with the RCU, using the source/input/source button of the TV to select the HDMI port used. Then you will immediately see the Rebox logo plus the follow-up screens when you turn on the receiver.
3. Insert the CI/CI+ module to be used into the CI slot and feel that it clicks into place (If you are not using a module with a valid smart card, you can only watch/listen to the FTA channels).
4. Insert the 2 supplied AAA batteries into the RCU.
5. Plug the supplied 220/12 Volt power adapter into a wall socket and plug the power plug into the receiver.

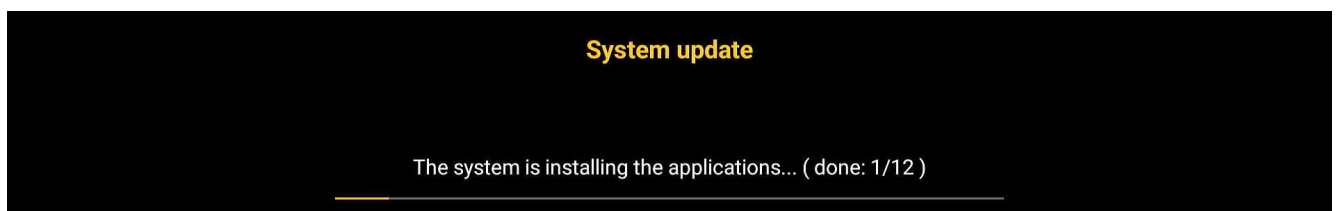
Your 'journey' can begin ...

## 3. First use

As mentioned, this – 4K Android single-tuner satellite receiver – has been developed with the Canal Digitaal/TV Vlaanderen user in mind. After starting the receiver and carrying out a few configurations, this manual will use the Canal Digitaal Fastscan as an example explanation.

### Installation

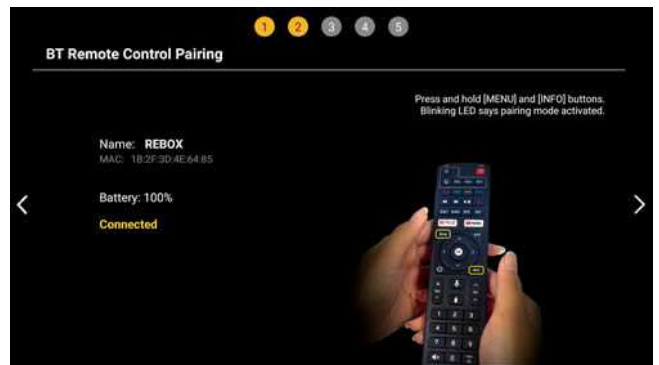
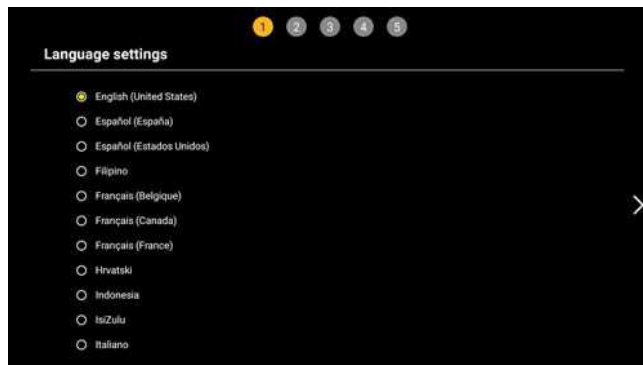
After inserting the 12/220 Volt adapter power plug into the STB, it will start up. The STB display shows: boot  
After the Rebox logo, the STB will first install some apps (software) from its internal storage.





After this you choose the language.

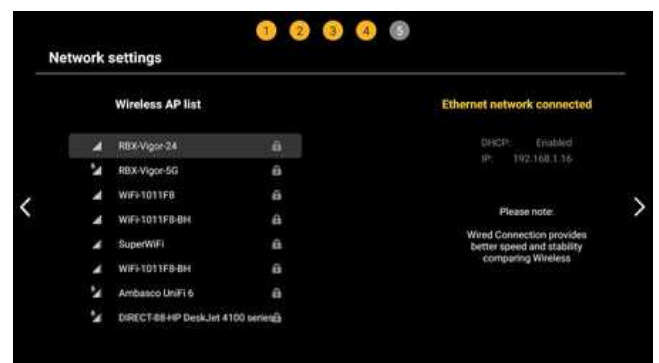
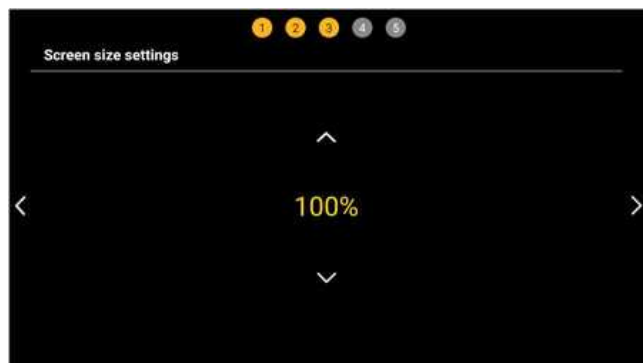
Note: Because the Bluetooth RCU is not yet paired with the receiver, which will be done in the next step, it is still in IR mode. So point the RCU at the STB when selecting (ARROW key up/down) the language. After your choice, click on the ARROW key on the right to go to the next screen to connect the RCU.



Point the RCU at the STB (about 25 cm is fine), and simultaneously press and hold the MENU and INFO buttons. Release them when the LED starts flashing. When the pairing/connection is successful, you will receive the 'Connected' confirmation after 5-10 seconds.

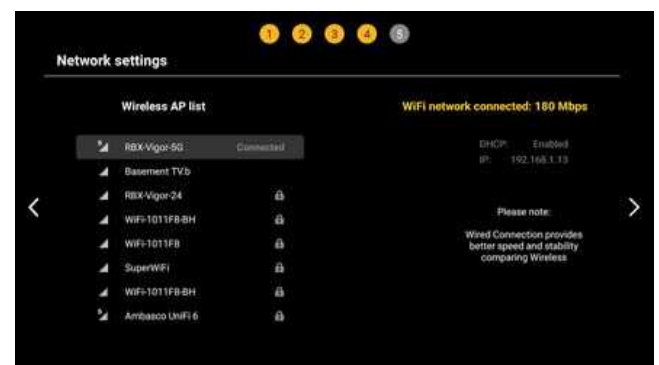
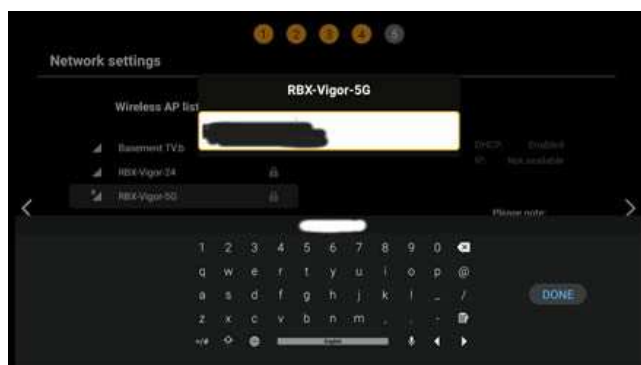
Click on the ARROW key on the right to go to the next screen.

Use the ARROW key up/down to adjust the scaling in this window so that the left and right arrows on the TV screen are clearly visible. If correct, click the ARROW key on the right to continue.



If you have connected the STB wired to the modem of your internet provider, the receiver will automatically be assigned an IP address. You are then connected to the home network and can use various apps that require an internet connection.

A wired internet connection is always faster and more stable. But, in addition to the built-in Bluetooth module, this receiver also has a built-in WiFi module. So if you choose WiFi, choose your network from the left list and click OK. Enter your password using the keyboard-on-screen, and when ready, select DONE and confirm with OK on the RCU.



If the connection is successful, it will appear behind your home network name that you are connected..

Click on the ARROW button on the right to indicate your time zone in the next window. Default is Europe/Amsterdam. When done, click the right ARROW key again..

## 4. Loading channels – Fastscan (Canal Digitaal / TV Vlaanderen)

We follow the standard Canal Digitaal/TV Vlaanderen Diseqc Switch settings. This means that almost everyone only has to click on “Start Search” and after a few seconds they will have read the channel list.

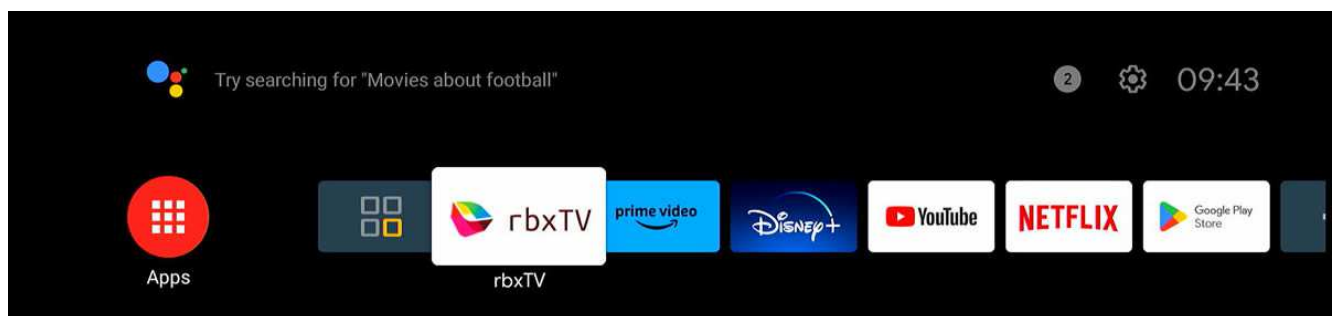
We therefore assume that these standard Diseqc Switch settings also apply to you, in terms of physical connection, namely:

Astra 1 : (Port) 1/OFF  
Astra 2 : (Port) 3/OFF  
Astra 3 : (Port) 2/OFF  
Hotbird : (Port) 4/OFF

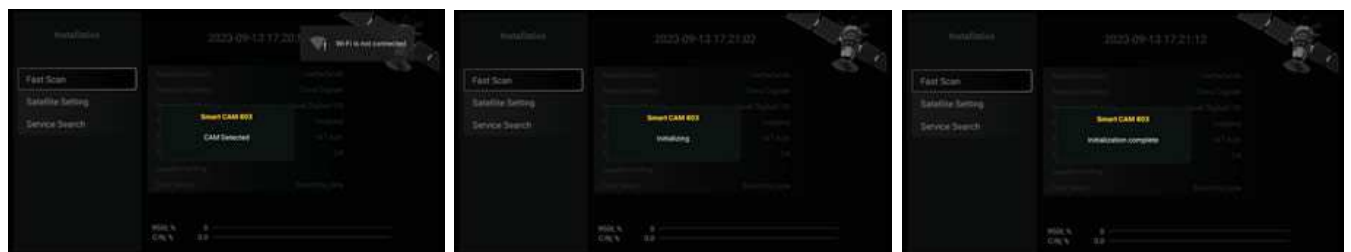
But first let's start our DVB app ...

### rbxTV

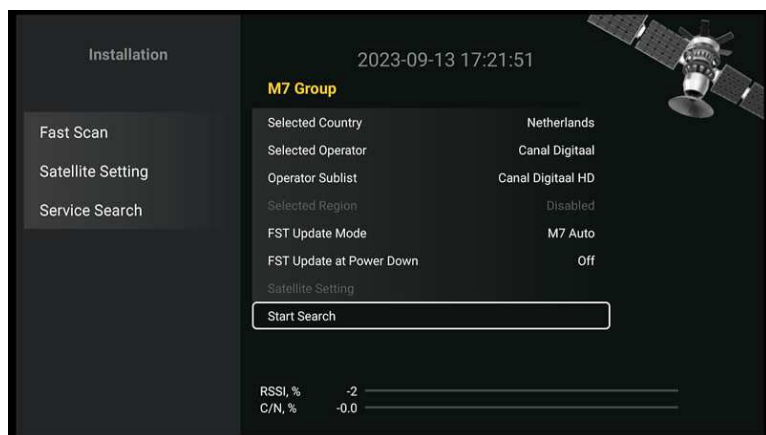
The rbxTV app is our DVB environment in which the most important things take place: Scan channels, watch TV, make recordings, play the recordings via your Playlist, and more.



Assuming that you have inserted a module, when you click/start the rbxTV app, this module will first be detected, initialized, and then reported as ready for use.



Then click on the ARROW key on the right (Fast Scan is the default starting point), so that the various items on the screen become available in a few seconds (they change from 'greyed-out' to white).

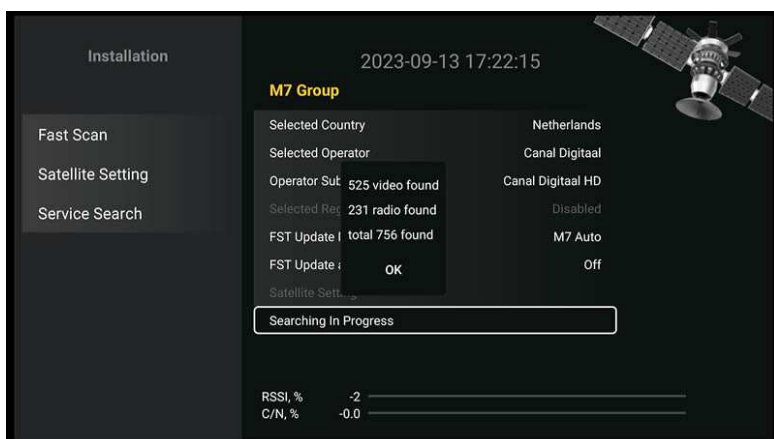


The default setting is:  
Netherlands/Canal Digital

The TV Vlaanderen Fastscan becomes available when you choose Belgium.

Wait until you see: M7 Group at the top of the screen.

Now all you have to do is select Start Search and click the OK button to start the Fastscan.



The scan will be ready in just about five seconds, confirm with OK and LiveTV will be started.

## 5. Remote Control Unit (RCU)

The RCU supplied with the RE-8401UHD S-PVR is a Bluetooth remote control and runs on 2x AAA batteries. If you want to use it in Bluetooth mode, it must be linked to the box.

See Chapter 3 – First use.

Once the RCU is connected, you no longer have to point it at the receiver to use it.

If you have not connected it, it works in IR mode, so you have to point it at the box.

This RCU also has a learning function. This allows you to read a number of basic functions of your TV remote control and thus operate your TV with it.



Sectie 1



Sectie 4



Sectie 2



Sectie 5



Sectie 3



#### Sectie 1:

- STB Standby (1 short click) / Deepsleep (press and hold for 3 sec.)
- TV Learning buttons for TV control. The procedure can be found later in this chapter

#### Sectie 2:

- Hotkeys RED, GREEN, YELLOW, BLUE => functions depending on the menus
- 2<sup>e</sup> row RW, FF, Play/Pause, plus the button to start a direct recording
- Gear icon Android Settings menu
- Audio No function currently / not implemented
- Guide EPG (Electronic Program Guide)
- Star icon Shows predefined Favorites categories, plus Radio station group
- Live TV Provides access to LiveTV, from the HOMEScreen for example
- Playlist Provides access to recordings

#### Sectie 3:

- MENU Provides access tot he Main menu
- EXIT Leaves a menu/sub-menu with this
- HOME icon Provides access to the HOMEScreen
- INFO From LiveTV it offers a popup with, for example, Satellite/TP information
- OK Ten behoeve van bijvoorbeeld menu-keuze bevestiging
- ARROWbutton up/down/left/right for menu navigation for example

#### Sectie 4:

- VOL icon +/- to control volume UP and volume DOWN
- MIC icon Microphone button to activate the Google Assistant for voice-control
- VOL X icon MUTE button to switch audio ON/OFF
- P up/down For channel UP/DOWN, and scroll per page in servicelist mode

#### Sectie 5:

- NUMbuttons For choosing channels directly, for example
- MOUSEbutton Activates mouse-cursor on screen. Can be handy in some apps

### Learning function

The buttons in the TV frame can be taught the functions of the corresponding buttons of your original TV remote control. This way you can operate your TV with the remote control of the RE-8401UHD S-PVR. The following functions can be learned: Power, Input (source), Volume +/-

1. Place the Rebox RCU and your original TV RCU, head-to-head, opposite each other, a few centimeters apart.
2. Press and hold the SET button of the Rebox RCU for 4 seconds. A LED will flash quickly a few times until it lights up permanently. The Rebox RCU is now in 'Learning Mode'.
3. Now click on the TV Power button of the Rebox RCU, after which the LED will flash slowly.
4. Now press and hold the TV Power button of the original TV RCU within 10 seconds. The LED on the Rebox RCU will flash quickly a few times, then stay on permanently.
5. Click on the SET button of the Rebox RCU to end the learning process.

Repeat steps 3 and 4 before clicking SET in step 5 to learn the other buttons.

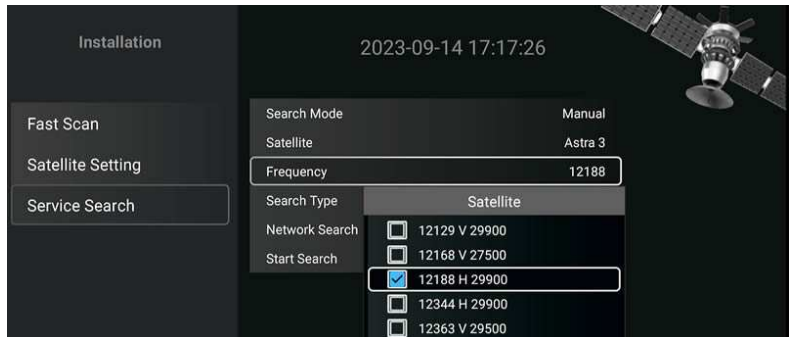
Need to start from scratch? Just pull out the batteries for 30 seconds.

## 6. Loading channels – Manual, Automatic

In addition to the Fastscan method, which is by far the most used, this STB also has the Manual and Automatic channel search option.

### Manual scan

A manual search method is usually used to scan an extra transponder (frequency), which is not included as standard with a Fastscan.



Choose the desired Satellite, and choose a TP to scan from the list, and start the search.

Another reason to search manually may be because one is simply not interested in the many hundreds of channels that come with a Fastscan.

People then simply choose only those TP's that offer the channels they want. The advantage of the Fastscan is that the channels are listed in a user-friendly order in the channel list.

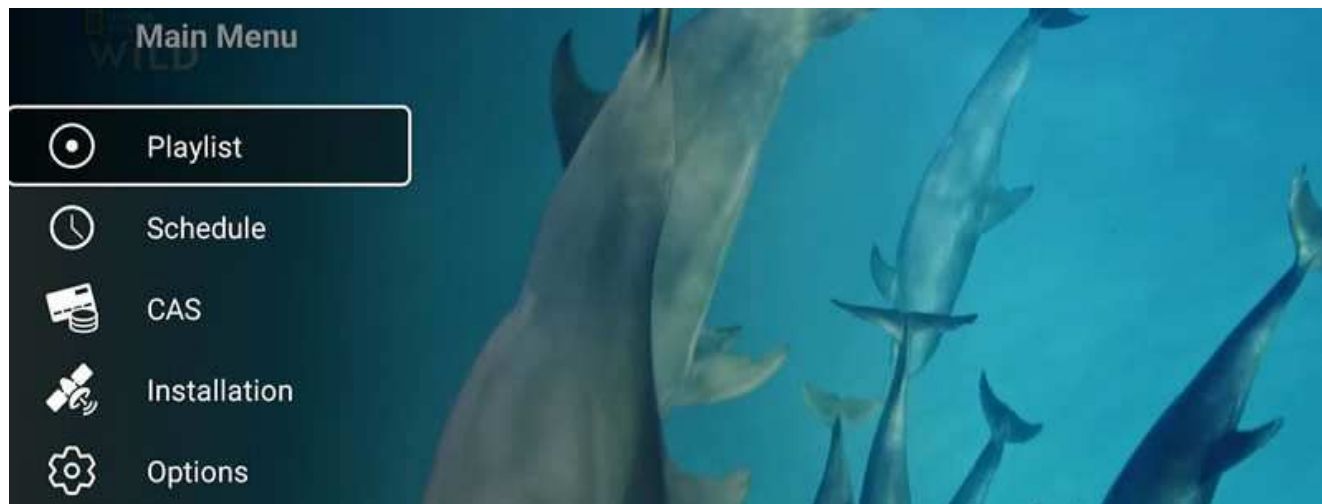
#### NOTE:

Lyngsat.com is a widely used website where transponders of a specific satellite with the desired channels can be found.

## 7. Main Menu

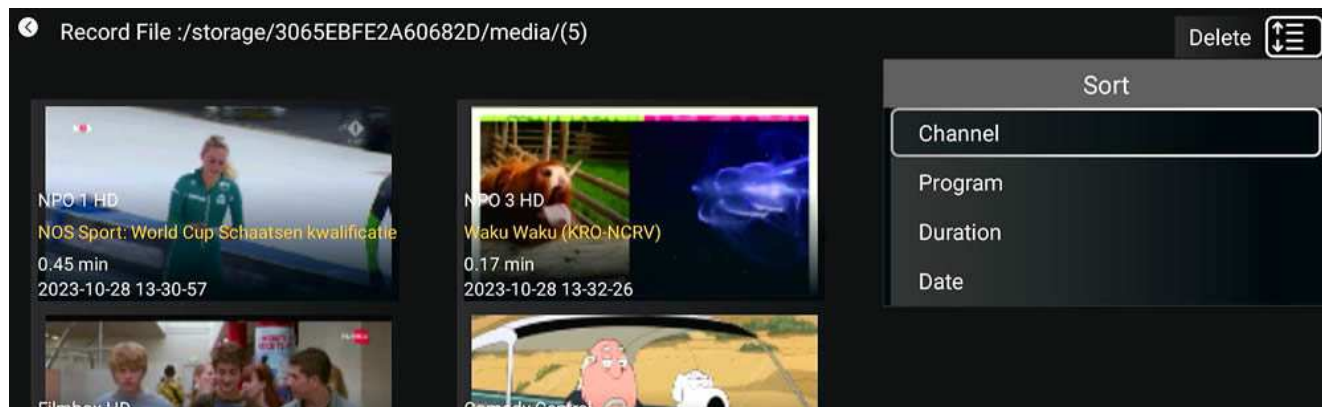
This main menu provides access to your recorded programs, programmed recordings, module/smart card information, installation and follow-up menus.

You can reach this menu by clicking on the RCU MENU button from Live TV. This menu is also accessible from the Installation menu, before you have performed a channel scan..



### Playlist (play recordings)

You can play recorded programs from the Playlist.



The recordings are displayed in icons and can be sorted by channel name, program name, duration, and date. Choose a sorting method from the menu, and get the result in ascending order. Choose the same sorting method again, to get it in descending order (or vice versa).

#### Play, FF/RW en stop

That's a matter of selecting a recording icon and clicking OK. The recording will automatically open in a Player app.

Click the Pause/Play button to pause and resume playback.

Click twice on the ARROW key 'down' to activate the 'jump bar'. Use the ARROW key right/left to fast forward/rewind through the recording. The jump bar will automatically disappear after a few seconds. Or click EXIT to speed that up.

Click the EXIT button to stop playback..

#### Delete a recording

To delete a recording, select 'Delete' from the menu. Use the ARROW keys of the RCU to browse through the



recording icons, click the OK button to give an icon a check mark, and click 'Delete' again in the menu. Confirm with OK the popup question whether you want to delete the selection.

If you want to delete everything, click 'Delete', followed by 'Select All', and 'Delete' again. Would you rather not delete it? Then choose 'Cancel'.

## Schedule | Event | Timer Manager

This Menu is currently still under development and will be expanded with updates. Currently you only see the recordings here that you have added via the EPG/Guide.

After updates the intention is that:

- Tasks can be deleted
- Tasks can be entered manually, including channel selection, recording duration, etc.

## CAS

In this Conditional Access System, you will find your smart card/module information.

CAM Slot indicates your type of Common Interface, or CI Module.

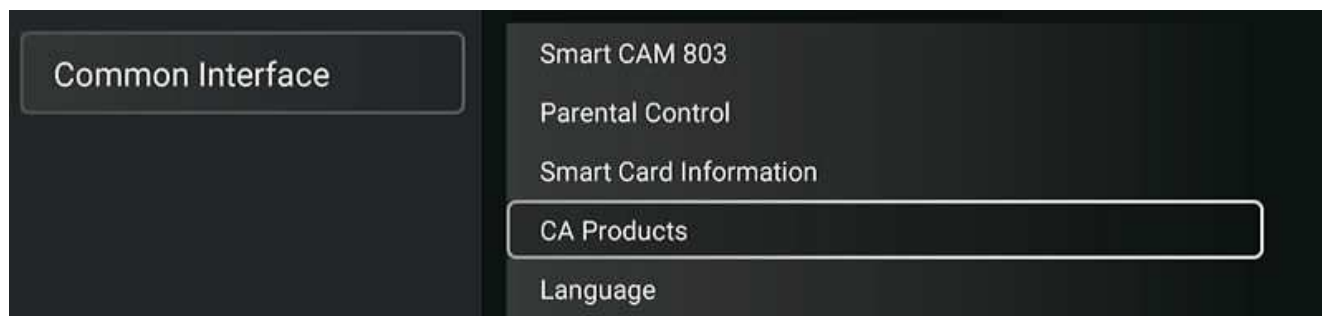
Via CAM Message you reach that information, of which only one is actually worth mentioning here. Namely the information that shows the validity of the smart card/module. In other words, whether it is (still) activated.

Periodically (1-2 months) the provider sends a pulse to the card to keep it active. The validity is thus extended again, and the date is pushed forward a little further.

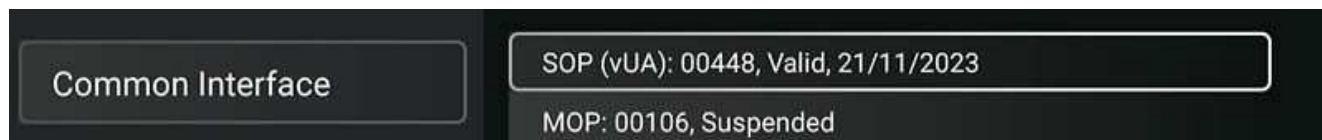
For example, if you receive the message on all channels for which you have paid via a subscription: Encrypted Channel / Encrypted Service / Scrambled Service => check the date for validity.

### CAM 803

You will find this information with this Module with built-in electronic smart card:



In the next window you will see:



In this example, this CAM 803 is valid until November 21, 2023.

If the date is before today's date, you will receive a 'Scrambled Channel' message when trying to watch a paid channel, and you will have to reactivate the (electronic) smart card on the Canal Digitaal website by entering your card number there (vUA).



## CAM 701

For this Module with built-in electronic smart card you will find this information under:

CAM Messages => Right consultation => CDS\_1 => Classes => the top, right, date shows the 'valid until' date.

## MultiStream Module with inserted Smartcard

For this Module with an inserted smart card you will find this information under:

CAM Messages => Smartcard Information => line 2/3 (Management/CanalDigitaal dates).

## Installation

In this menu you choose the type of scan to search for channels, select a desired satellite, frequency, and adjust Diseqc Switch settings, for example, if necessary.

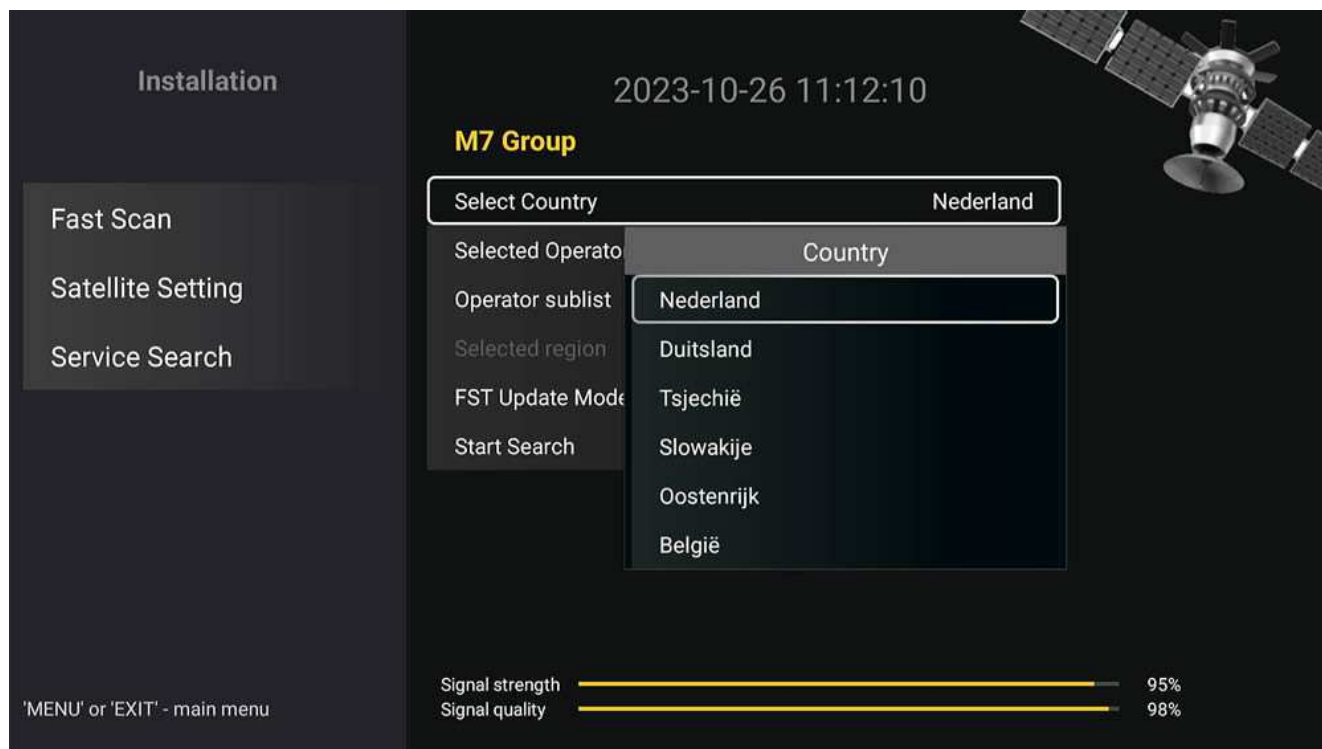
### Fast Scan

The Canal Digitaal/TV Vlaanderen Fastscan is by far the most used type of channel search option. Having the channels read in in about 5 seconds can rightly be called "Fast". In addition, the channels are listed in a user-friendly order in the channel list: NPO1 in 1st place, NPO2 in 2nd place, etc.

You successfully perform a Fastscan if you have signal strength/quality and have M7 Group at the top of the screen.

The Diseqc Switch settings required for this are set correctly by default, and we follow the Canal Digitaal/TV Vlaanderen guidelines:

- Astra 1 : (Port) 1/OFF
- Astra 2 : (Port) 3/OFF
- Astra 3 : (Port) 2/OFF
- Hotbird : (Port) 4/OFF



By default, Netherlands/Canal Digitaal is preselected.

If you want TV Vlaanderen as Operator, select Belgium from the Country list.

### FST Update Mode

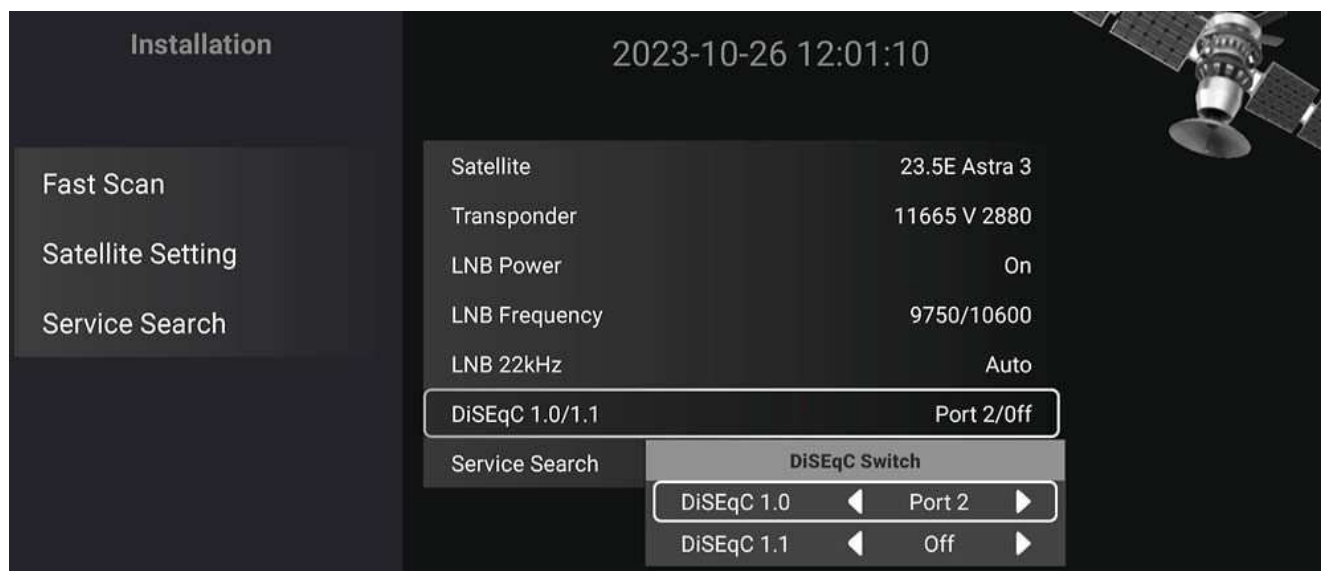
This is active by default. When starting the rbxTV DVB app, channel changes are checked and, if found, implemented.

Everything chosen well? Choose 'Start Search' to run the Fastscan..

### **Satellite Setting**

Based on the Fastscan, in a few cases it happens that a different Diseqc Switch sequence has been used in terms of 'physical connection' to the dish. Even when using a Multityenne dish, it happened (or still happens) that other Diseqc Switch settings are needed.

If applicable to you, choose the satellite(s) and adjust the Diseqc Switch setting that applies to you.



For most people, a maximum of 4 LNBs are used. Then TV/Radio channels can be received from a maximum of 4 satellites (usually Astra 1, 2, 3 and Hotbird).

When using a maximum of 4 satellites, you use the Diseqc **1.0** protocol. That is why Diseqc **1.1** is always set to Off for those users.

If you look at more satellites, and therefore have more LNB's on the dish, then you should use Diseqc1.1. This protocol switches between 16 LNB's maximum.

### Transponder [Add | Change | Delete]

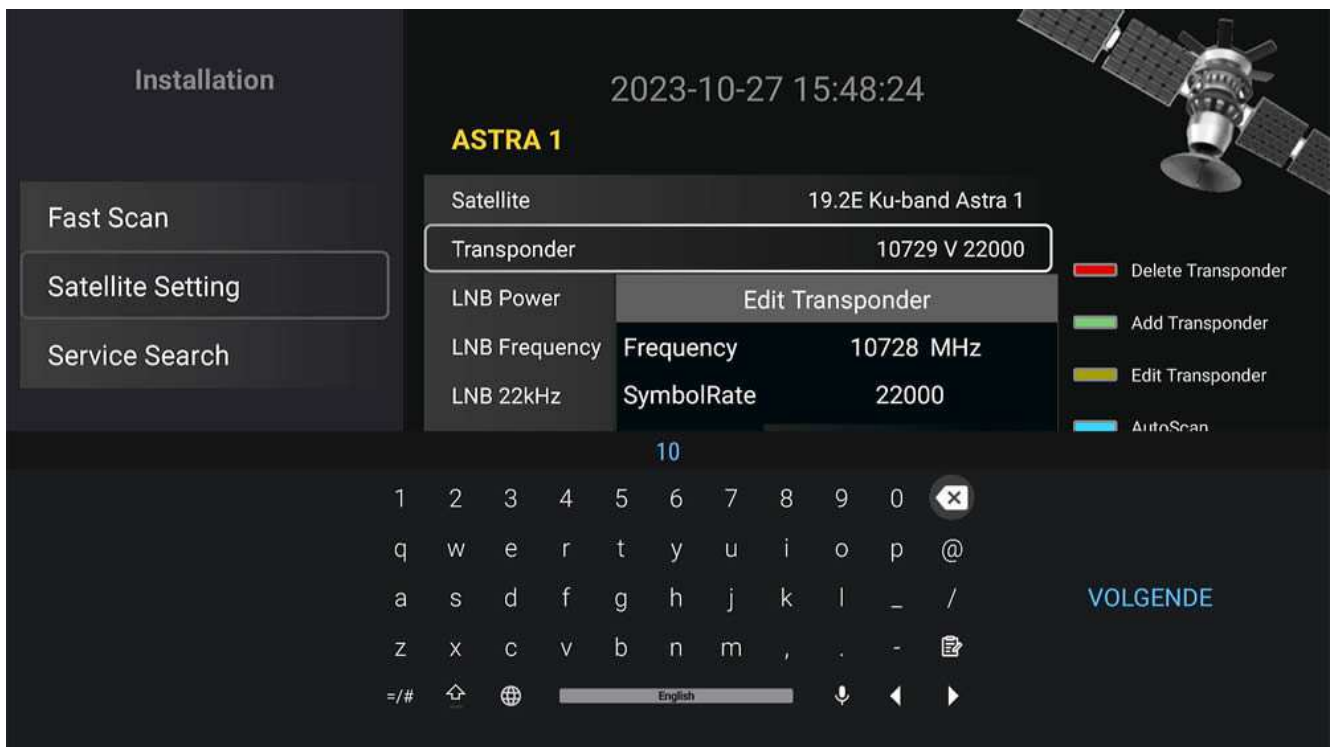
Suppose you want to watch a channel that, according to a website such as 'Lyngsat', is broadcast via a certain satellite, in a certain frequency (transponder), and with a certain symbol rate and polarization. And suppose that transponder is not in the list by default. Then you can easily add it here with the colored 'Hotkeys'.

In this fictional example we add a TP for the Astra 1 satellite, frequency 10888 MHz, symbol rate 22000, and Vertically polarized.



Select 'Transponder' and click on the **GREEN** Hotkey (Add Transponder), to add a new one. Use the RCU's numerical buttons and the ARROW keys to fill in the data and click OK when done.

If you want to change a Transponder, select it and click on the **YELLOW** Hotkey (Edit Transponder).



In the popup that appears, use the ARROW keys to move the cursor to the field to be changed and click OK. Make the desired adjustments with the onscreen keyboard that appears. Click on the EXIT button of the RCU to leave the onscreen keyboard and return to the popup.

Click OK to save changes and exit.

If there are other fields that need to be changed, move the cursor there and click OK again to open the onscreen keyboard..

Something entered and saved incorrectly? Then select the relevant frequency from the Transponder list and select the **RED** Hotkey (Delete Transponder). Answer the popup question if you are sure with OK.

LNB Power / LNB Frequency / LNB 22KHz are things that 'never' need to be changed.

### **Service Search**

If you do not want to use the user-friendly Fastscan method to search for channels, you can use an Auto (automatic) scan or a Manual scan.

#### Auto

This scan type searches all TPs present in the receiver database, and is therefore a rather lengthy search method. Choose the desired 'Satellite', and the desired 'Search Type' (All or only FTA), and choose 'Start Search'.

#### Manual

This type of channel scan is usually used to scan one or more TPs (extra). A Canal Digitaal Fastscan yields approximately 525 TV channels. Some users then scan an extra TP, including some that were not included with the Fastscan, such as Spanish or Italian channels.

Choose the desired 'Satellite' and 'Frequency', and start the scan with 'Start Search'.

And if the Frequency does not appear, you can simply add it, as described above in the 'Transponder' section..

## 8. Watching TV (and channel info)

Depending on the state the receiver is in, here's how to start LiveTV:

### At first use or after Factory reset

This is described in the previous chapters:

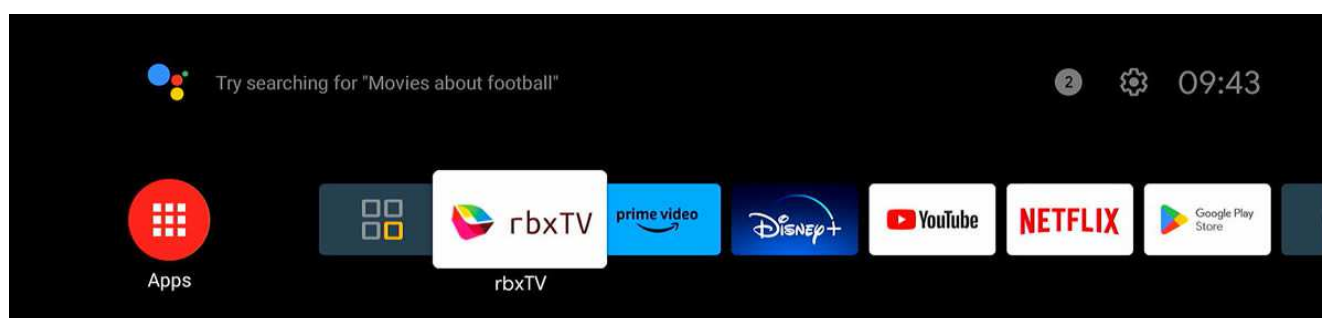
**First use** – Chapter 3, and connecting **Loading channels** – Chapter 4

### From Standby

If you brought the receiver to 'Standby' the last time you watched TV with a short click on the STB button, you can then return it to LiveTV with a short STB click again, with the channel last selected.

### From Deepsleep

Once the receiver has been brought to 'Deepsleep', press and hold the STB button for 3 seconds and start the box again with an STB click. First the Rebox boot animation appears, and then the HOME screen.



Click the rbxTV app, the channel will be loaded, but first wait until the module used is detected and initialized.

### Power OFF

If the receiver has been switched off by pressing the Front power button for 8 seconds, restart it with the same Front power button by pressing it for 5 seconds. The sequel is the same as described above under 'Deepsleep'.

### Choosing channels

Assuming a LiveTV situation, where you are tuned to any channel, choose one of the following methods to change channels:



Select "1" to select position 1 of the channel list. Thinking from a Channel Digitaal read-in channel list, you choose 'NPO1'. For example, choose a "6" immediately followed by a "4" to choose '24Kitchen'.

With P up/down you select the next or previous channel.

If you click the OK button from LiveTV, you will see the channel list.

Use the ARROW buttons up/down to scroll through the list, click OK to select a channel, and click OK again to leave the channel list and shortly afterwards view the program being broadcast..



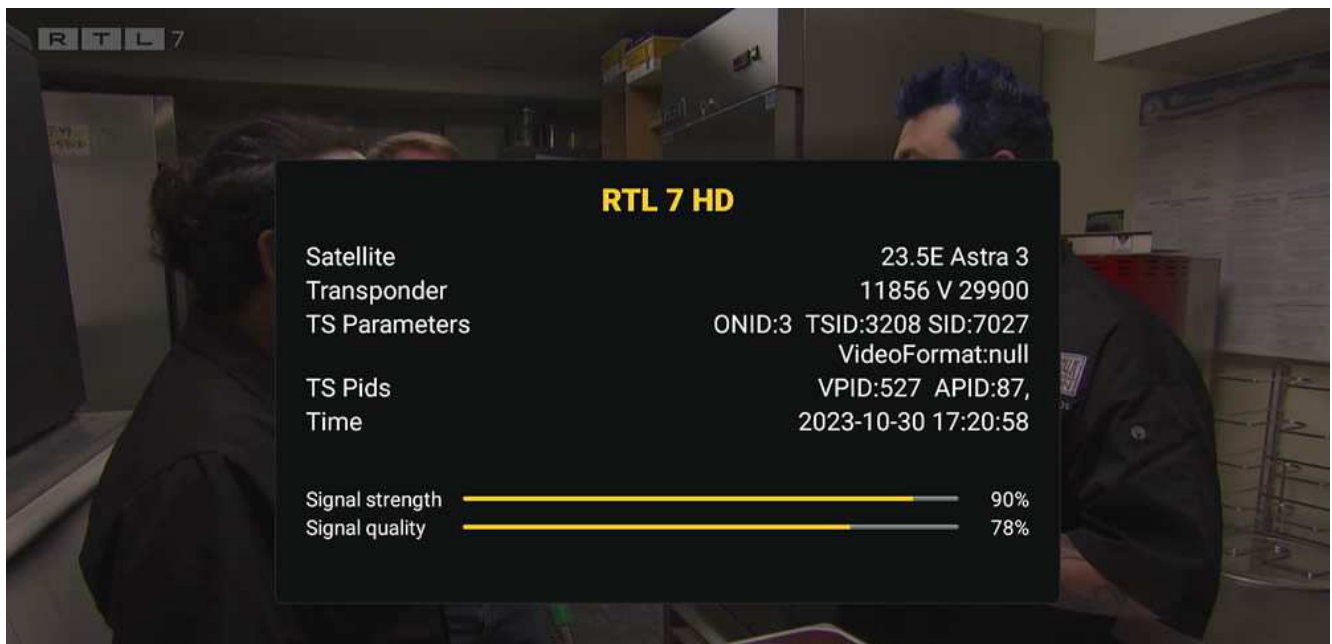
Selecting a channel on the left will display the currently broadcast program and a number of upcoming programs on the right.

### INFO popup

If you are in LiveTV, watching a program, and you click on the INFO button, a popup will appear like the one below.

Information about the satellite, frequency, polarization, and symbol rate can often be useful for support questions, for example.

Calling up the current time is also often useful.





## 9. Filter – Search – Lock – Favourite (channellist)

If you are in LiveTV, watching a program, and you click OK, you will see the channel list with the hotkeys at the bottom: RED, GREEN, YELLOW, BLUE

### **Filter => RED hotkey**

If you click here, the Category list with pre-defined groups will appear. For example, if you choose the 'Music' category, the other channels will be filtered out, so that you are only left with a service list with music-related channels, such as Mezzo, Stingray Classica, etc.

Click RED again => All channels => and you have the complete channel list again.

### **Search => GREEN hotkey**

If you click on this, an alphabetical list will appear in the middle. Click the ARROW key right to get to the list, and select a letter with the ARROW key up/down. If you choose "B", you will get a channel list with various BBC channels, Bloomberg, Bibel TV, etc. If you place the 'cursor' in the letter list and you do not choose a letter within 3 seconds, the cursor moves to the left again.

If you want to leave Search mode and just see the complete channel list again, simply click EXIT.

### **Lock => YELLOW hotkey**

If you want to put a channel behind a PIN code, select that channel and click on the yellow hotkey to 'Lock' it. A 'padlock' symbol will then appear behind the channel name.

If you go to that channel at any time, the PIN code popup will appear.

The default PINcode is: 0000

This code can be changed to whatever you want (numbers/letters) in: Main menu => Options => Parental

During one and the same TV session you will only be asked once for the PIN code when visiting that channel.

During the next TV session, after standby/deep sleep/power off, you will receive the PIN question again.

Locked channels are cleared after: Reset Service Data, Clear Application Data, and a Reset to Factory Defaults.

### **Favourite => BLUE hotkey**

Select a channel in the channel list and click the blue hotkey to mark it as a Favorite.

A 'star' appears behind the station name.

If you click on the STAR button of the RCU at any time from LiveTV, the 'Category' list will appear on the screen.

Select the 'Favorites' group and click OK, and a channel list with only your favorite channels will appear..

From LiveTV, click the STAR button again and choose the 'All channels' group to get the complete channel list again.

## 10. Options

In this menu you will find options for the age check, offset settings for recordings, recording device, time shift, language, and reset options.

### Parental

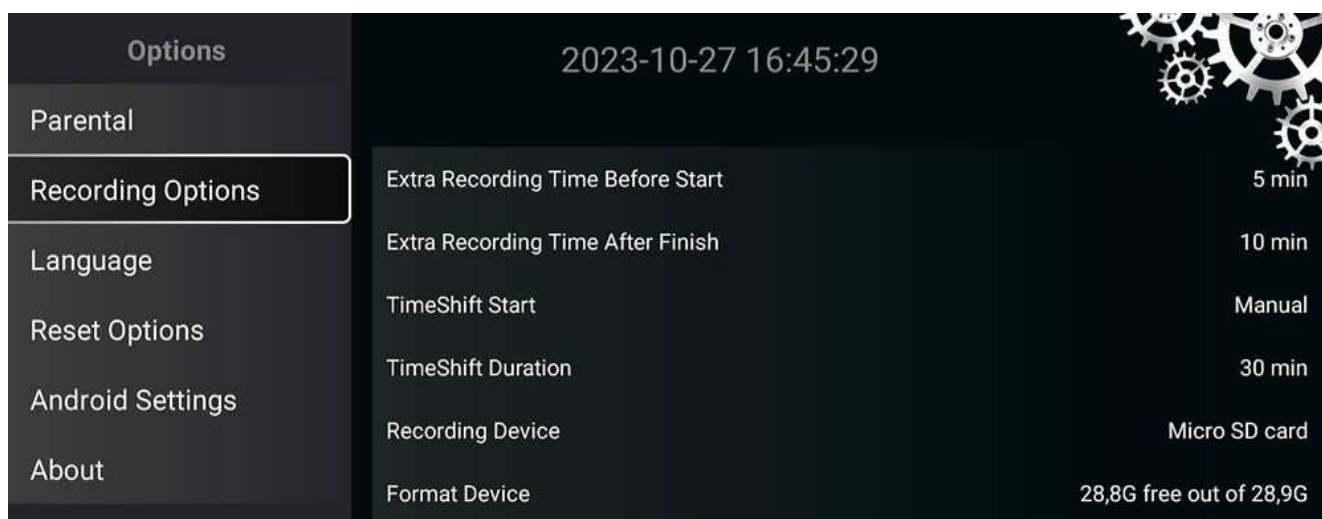
When you enable this option, the option to change the default PIN code (0000) to whatever you want is activated. Click 'CHANGE PIN CODE', enter the current code in 'Input old pin', enter your new code in 'Input new pin', and confirm your new code in 'Input new pin again'.

In the appearing 'onscreen keyboard' you can enter letters in addition to numbers for a new PIN code..

You can set a channel to a PIN code by selecting the channel in question and clicking on the YELLOW Hotkey (Lock).

### Recording Options

Here you set an Off-set for recordings, specify your TimeShift settings, and indicate where to record your



recordings to, and format your recording device.

- Extra Recording Time Before Start  
Default = Off, but you can choose from 1, 2, 3, 4, 5 or 10 minutes, to start the recording sooner.
- Extra Recording Time After Finish  
Default = Off, but you can choose from 1, 2, 3, 4, 5 or 10 minutes, to end the recording later.
- TimeShift Start (default = Off). Switch this to 'Manual' to use this function.
- TimeShift Duration (default = 30 minutes). You can also choose from 60, 90 or 120 minutes.

NOTE: If you have chosen Manual, you can click on the Play/Pause button during LiveTV to pause LiveTV. For example, when the telephone rings. Meanwhile, a recording is made (depending on the set duration). After your telephone conversation, click the Play/Pause button again to continue the program where you left off.

- Of course, all of the above only works if a storage medium has been made known to the receiver. You choose this under 'Recording Device'. Micro SD card is the default, and also absolutely recommended, as it is much faster than a connected eHDD or USB stick on a USB 2.0 port, and is also much less vulnerable than a conventional eHDD, due to its moving parts (hard disk crash). in case of impact or careless use).



- **ATTENTION:**

A Micro SD Card must have a maximum of 128GB.

An eHDD must be of the USB 2.0 type, using a maximum of 500mA, and a maximum size of 1TB.

- If you have clicked a new Micro SD Card into the receiver, first go to the 'Format Device' menu, click and confirm the OK question in the popup. The SD Card is now formatted with the so-called NTFS file system. This format can handle large files. A recording of a film quickly exceeds 4GB. However, most storage media, new out of the package, come standard with FAT32 formatting. If you used that file system, the recording would be aborted when 4GB was reached, because that is the maximum file size for FAT32.

**NOTE:** If you are going to connect an existing USB 2.0 eHDD to use as a storage medium, and it is still formatted FAT32, and there are already files/recordings on it, be aware that this Format Device option will make your eHDD empty if you format it here! So make a backup first if you want to keep those files.

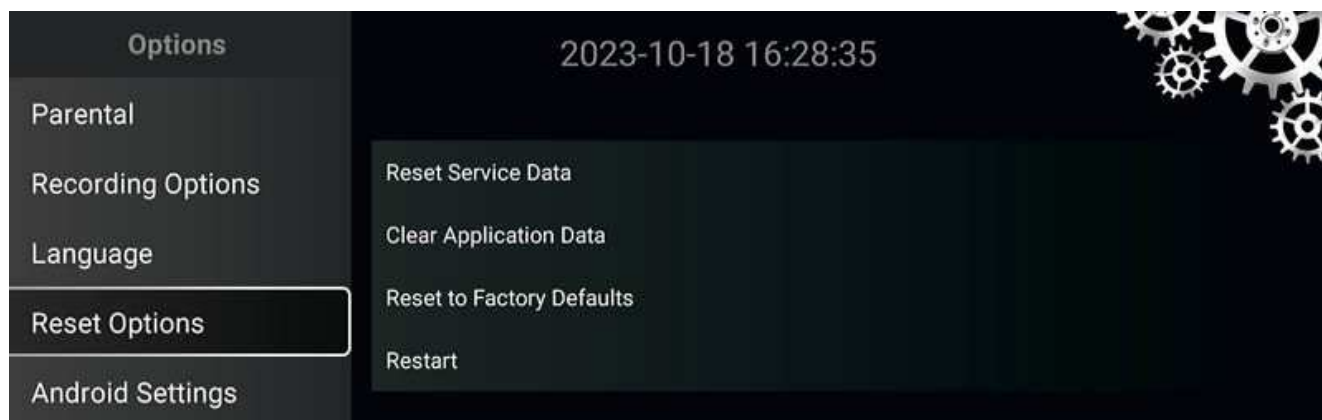
The 'Format Device' line also states how much free space is left on the connected device.

## Language

If a broadcast has multiple audio languages in the 'stream', this can be selected in this menu.

## Reset Options

In addition to 3 reset variants, you can also give the command to restart the box from this menu.



1. Reset Service Data

This will only delete the currently scanned channels. For example, if you have abnormal results on one or more channels with regard to image and/or sound, perform this reset, followed by a fresh Fastscan. After the reset, the Fastscan option will automatically appear on the screen and the module used will be detected/initialized.

2. Clear Application Data

Performing this reset will not only delete the channels, but also return any other 'rbxTV' adjustments to the default value. For example:

If you had set TimeShift to Manual, it will go back to 'Off'.

If you had set the Diseqc setting for Astra-2, for example, to 2/OFF, it will return to the default 3/OFF.

If you had recording timers set, they will be deleted.

Etc.

After this reset, the HOMEScreen is presented with the 'app bar', from which you start the rbxTV app again, after which the module used is detected/initialized. Your recordings have of course been

preserved.

### 3. Reset to Factory Defaults

With this option you give the receiver a total reset. Your recordings will of course be retained. After this reset, the receiver will first install a number of apps from the internal memory, just like during the first use. So take a few minutes into account.

#### NOTE!

The software of the '8401' roughly consists of 2 parts:

- The software IMAGE. This is the complete operating system with all the trimmings, and is about 1 to 1.5 GB in size.
- And the rbxTV APP, about 10MB in size.

After production of the receiver, an IMAGE was installed in it with the rbxTV APP 'baked in'. If you give the '8401' a Factory Reset, everything will be retained.

But if we come up with a new rbxTV app version, and you install it using a USB stick, and you would then give the box a Factory Reset, then you will fall back to the aforementioned IMAGE with the baked-in rbxTV app version, and your newly installed rbxTV app version will be nullified. Because you install such an app update ON the image, and not IN it, if you know what I mean.

So if you really need to factory reset the '8401', check the rbxTV app version in the Main Menu => Options => About, and check the Rebox website (Support/Downloads) to see if a newer version is available. is. If so, download it and install it using a USB stick.

However, from time to time we release a new IMAGE with the latest rbxTV app baked into it, so that the latest app version is retained if you have to give the box a Factory Reset.

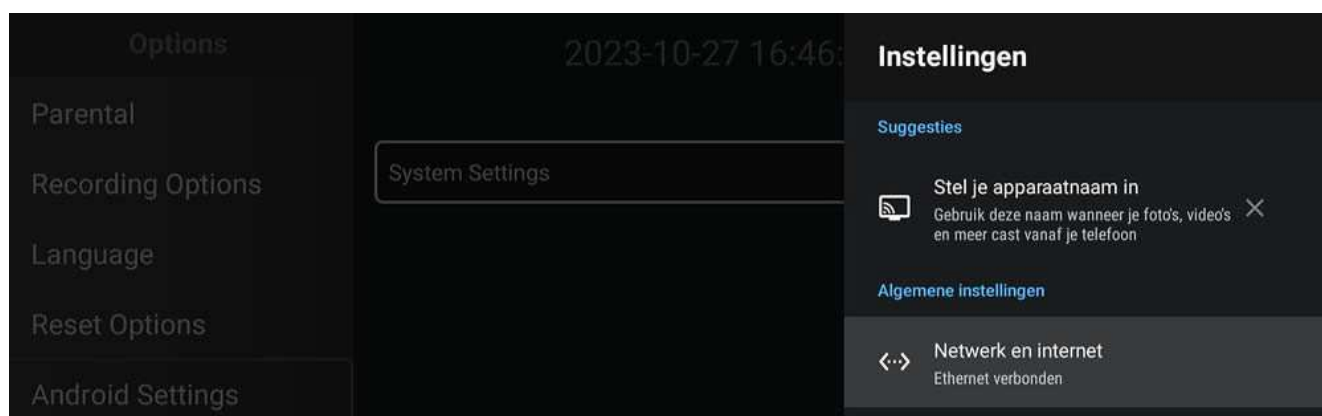
## Android Settings

This menu provides access to the numerous settings of the Android operating system, and is largely outside the scope of this manual. Moreover, the rbxTV app has been developed in such a way, and can be further expanded with software updates, that you can in principle arrange all the things you need for the operation of satellite TV reception in the app itself.

Nevertheless, there may be times when you still want to be in this menu.

We give some examples. Examples can be added in updates to this manual, for example in response to user questions from practice.

### Network and internet



Stel, Suppose you want to watch a YouTube video, you have connected the receiver wired to your ISP's modem, and yet the movie does not load/play, with or without an error message. Then go to:  
Android Settings => System Settings => Network and Internet

You can then see here whether you are connected or not. If you click one level further, you can also see which address your box has been assigned by the modem (192.168.1.18 in this example).

### **Screen percent**

When using the '8401' for the first time, or after a Factory Reset, you can arrange in one of the first steps that the output of this box is neatly displayed on your TV screen, without any letters falling out of view. for example.

But suppose that at some point you start using another TV, and the result on the screen is not quite right. Then you can of course give the box a Factory Reset, and adjust the picture setting in one of the first steps, but you can also go to:

Android Settings => System Settings => Device Preferences => Display => Screen percent

### **Language**

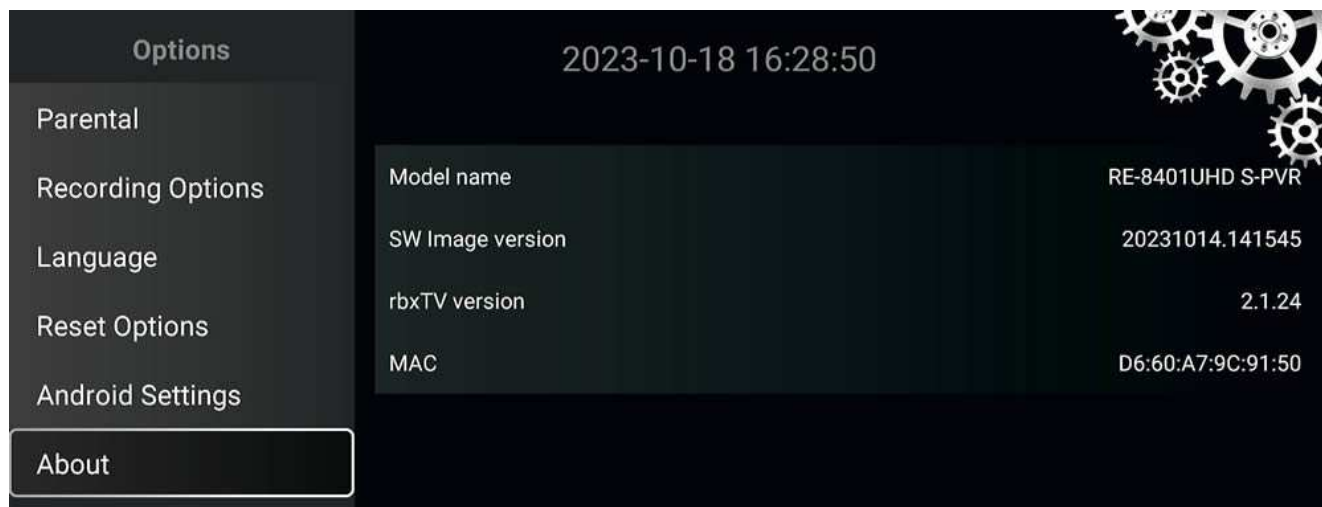
Tijdens When using the '8401' for the first time, or after a Factory Reset, you will encounter the language choice in one of the first steps. The default setting is 'Dutch'.

If you want to set something else, go to:

Android Settings => System Settings => Device Preferences => Language

## About

This menu reports the model of the Rebox satellite receiver, the version of the software image, the version of the rbxTV app, and a unique 'ID', the MAC address, also called hardware address.



### Software image

This should be seen as the entire Android operating system with all its settings and pre-installed supporting software apps. If Rebox releases a new image version, we will make it available for download on the Rebox website.

### rbxTV app

This is the Rebox DVB app, in which most of what this satellite receiver is intended for takes place: watching TV, scanning channels, making recordings, and other related matters. If Rebox releases a new version, we will make it available for download on the Rebox website.

For example, if you have a support question at any time, you may be asked which versions are installed on your receiver, as well as the MAC address if necessary.

## 11. Recording a TV program (and playback)

This chapter describes direct recording and recording via the Guide/EPG.

This chapter will be expanded with a description of how to schedule a recording, directly in a Timer/Event Manager, for example for making a long recording. This feature will become available with the next software/firmware updates.

### Via the direct recording button

While watching a TV program, click on the RCU button with the red dot.



The recording is in progress, and to confirm you will see the recording symbol in the top right corner of your TV screen.



If you click on the OK button on the RCU while the recording is running, the channel list will open. There too, a recording symbol is displayed next to the channel to be recorded.



You can also see which channels are available to watch at the same time. These are channels that are in the same transponder/frequency as the channel from which the recording is taking place.

Because the number of channels in each transponder varies, so during a recording you can sometimes have a handful of channels available to watch at the same time, and other times there can be, for example, 15-20 channels.

Via the Guide (EPG)

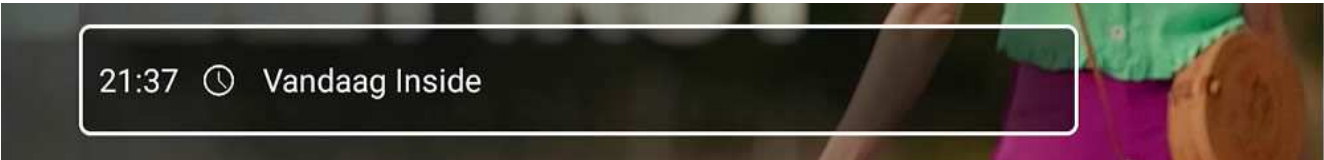
Via the Guide button you get the channel programming of the channel you are currently watching.



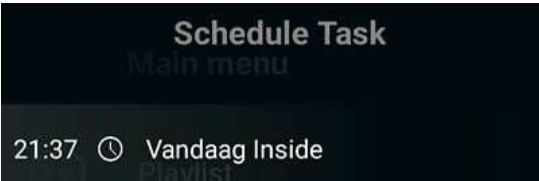
This Electronic Program Guide (EPG) offers a 7-day overview for many channels.



Use the ARROW keys to select the program to be recorded and click the OK button. A 'timer' indication is added to the program to be recorded..



If you use the MENU button to go to: Main menu => Schedule, you will see the added EPG recording there.



- When recording starts at the programmed time, the receiver will switch to the channel to be recorded, if you are tuned to a different channel.
- The left column list in the EPG overview gives you the opportunity to view the programming for the next 7 days.
- If you are in the EPG overview and want to view the EPG of another channel, click EXIT, select the other channel, and click the 'Guide' button again.

**NOTE:**

In a next software/firmware update it can be checked whether another channel can be called up more quickly from the EPG overview itself.

Functionality will also be added to the Schedule menu, such as removing an added task..

**Playback a recording**

This is described in Chapter 7 – Main menu => Playlist

## 12. Playback recordings made with an earlier Rebox STB

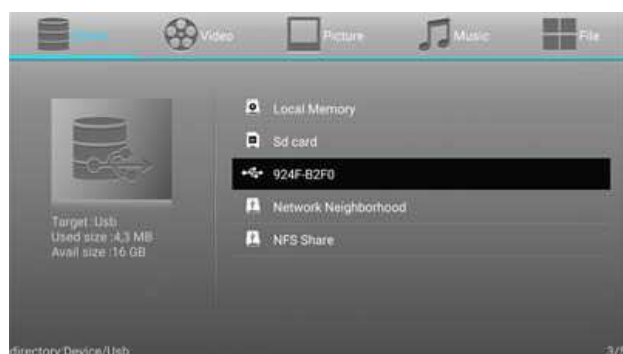
Did you previously have a Rebox receiver from the series: 22xx, 4000, 42xx, 8000, 8500, 9000, 8220

And if you have made recordings with it, you can play them as follows:

This assumes that the recordings, the so-called .TS files, are on a USB2.0 eHDD. The .TS files at that time had a maximum size of 4GB. However, a long movie could result in 2 or 3 of those .TS files being written. The old Rebox models also wrote three supporting files with such a recording, which ensured that you could experience playing such a long film as just one file. However, the '8401' cannot handle those supporting files. So your old recording consists of 2 .TS files, you have to play one first, and then the second.

If you find that really annoying, you can use a tool like 'Joiner' to join the 2 files together, so that you can play them as a whole in one go. You have to be somewhat handy on the computer and have the time and inclination to do it ..

Okay ... in the HOME screen go to App Drawer => File manager => select the USB indication in the overview and click OK.



Previous Rebox models always wrote the recordings to the 'Recordings' folder. Scroll through the list with the ARROW key => select Recordings, and click OK.

Now select a .ts file, click OK, and the recording will start playing.

**NOTE:** It is most desirable to first switch off the box, then connect the USB disk, and then switch the box on again.

## 13. Apps

The Rebox RE-8401UHD S-PVR is a receiver with the Android operating system. This makes it possible to use all kinds of 'apps'. Several of these software programs are already pre-installed on the receiver.

The most important is our rbxTV app. The app with which you scan channels, watch TV, make and play recordings, etc..

### NOTE:

In principle, we do not provide support for the use and operation of apps. Except on our own rbxTV app of course. All other apps are from 3rd parties, the (continued) operation of which we cannot guarantee.

### Install an app

Even though we do not offer support for 3rd party apps, we will give you an example of how to install something like this. Please note that not all apps can be installed/used. For example, an app may have been developed for a different Android version, or for just a smartphone. Etc

### Example:

Suppose you are a Formula 1 enthusiast and you want to install the F1 app on the '8401'. The Google Play Store is the place to see if your desired app is available there.



Please note that Google offers different types of Google Play Store environments.

The Playstore on an Android smartphone, for example, can be very different from that for an automotive device, or different from a TV receiver like this.

So if you cannot find your desired app in the Playstore, it is good to know that an app has the .apk extension. So if you are looking for a specific app with a certain functionality, you may find an 'xyz.apk' on a website such as 'APKPure' or APKMirror. Just Google it, there are several download sources.

Okay, back to Google Play Store ...

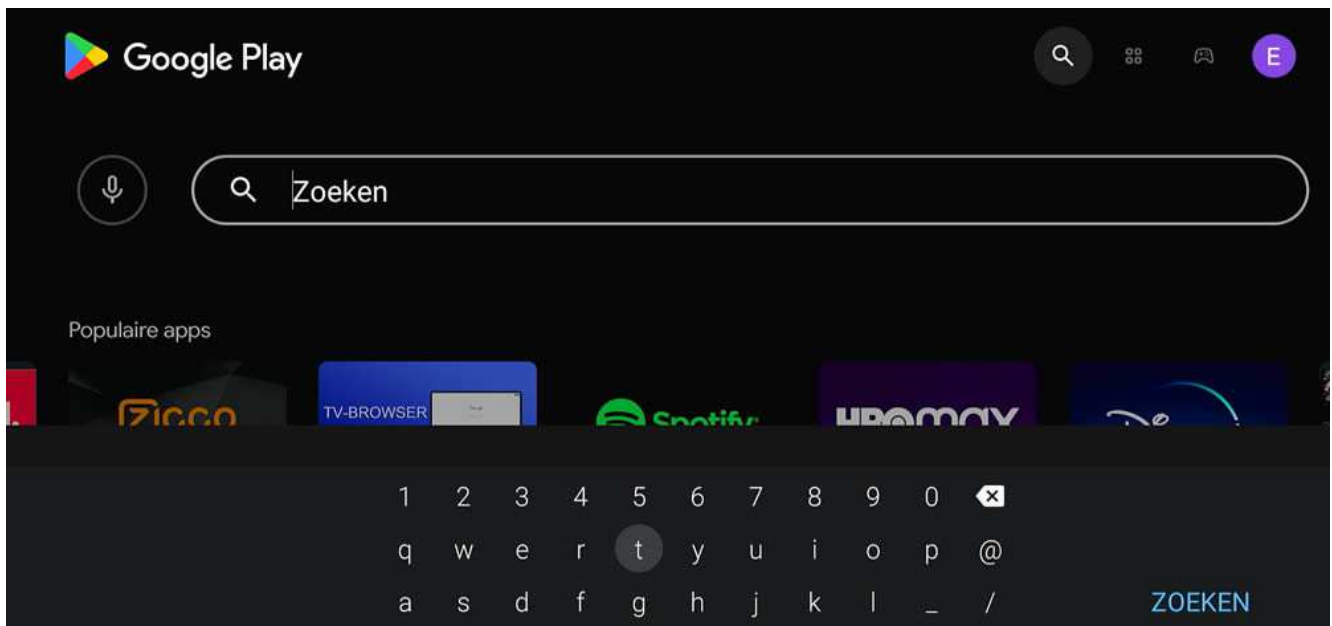
You do need a Google account (free to create) with which you log in.



Once logged in, you will return to the HOME screen and click on Google Play Store in the Apps bar again.

You can browse with the ARROW keys to search, or you can type a search query in the search field.



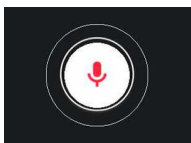


If you place the cursor in the search field, you can also click on the microphone button of the RCU,



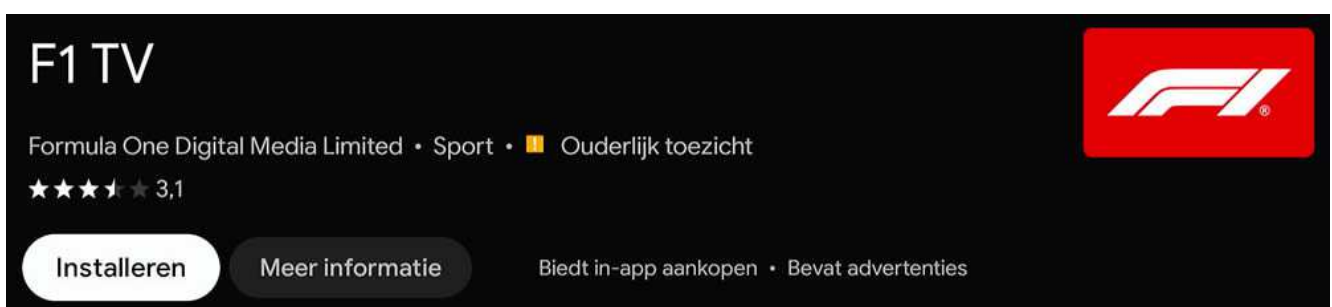
to perform a voice command with the Google Assistant (if a Dutch voice command does not yield anything, try it in English).

If this ...



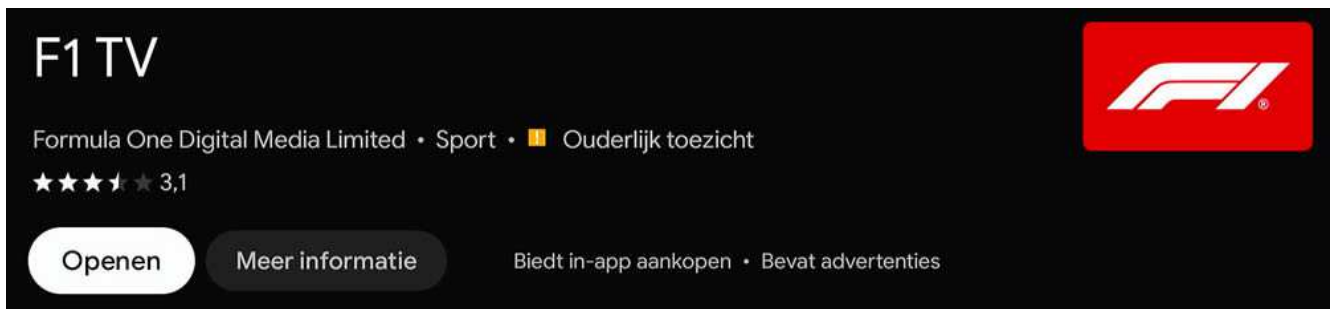
appears on screen, you can start to speak.

The result will be:



Click install, and when finished, you'll see

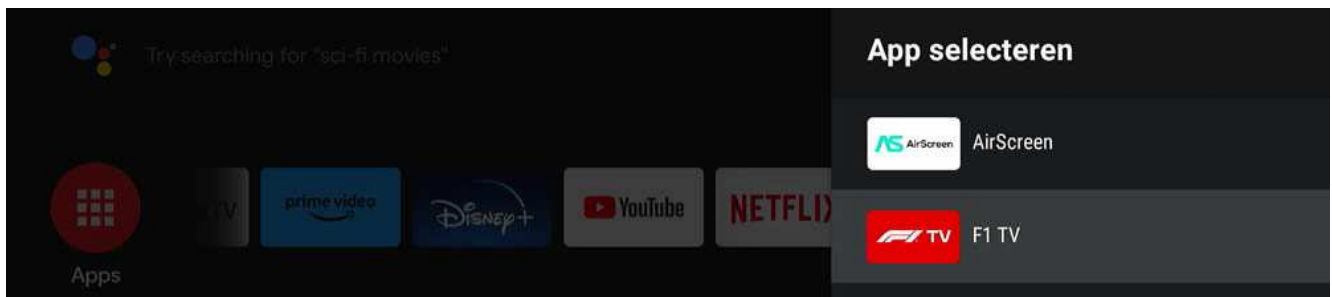




If you want to use the app immediately, click on 'Open'.

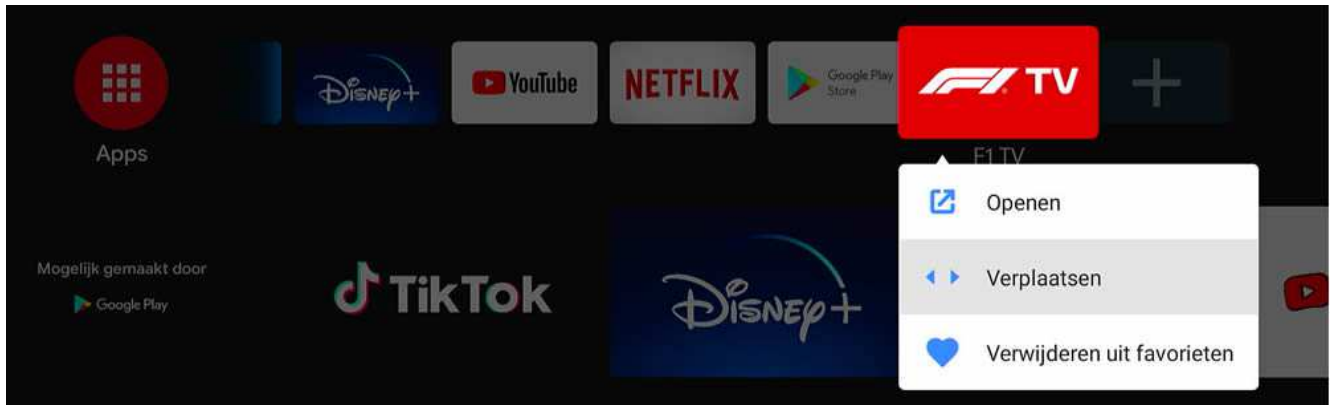
You can also choose to go back to the HOME screen with the HOME button, and for example click on the “+” icon in the Apps bar on the far right..

By selecting the F1 TV app there ...



Add it to the Apps bar in the HOME screen.

If you select it there and press the OK button for a few seconds, you can place it in the desired location in the bar (move with the ARROW keys and confirm with OK.).



#### NOTE:

If you give the receiver a factory reset, you will have to reinstall the apps you installed yourself.

## 14. Software updates

The RE-8401UHD S-PVR contains a so-called complete 'Image', which consists of the Android operating system with all its functionalities, plus various apps, including our rbxTV app.

Rebox launched this receiver in November 2023. Although the then applicable rbxTV app is already equipped with a lot of functionality, Rebox is aware that things still need to be added, expanded, dotted the i's, etc.

Moreover, although we put ourselves in the shoes of the user at home as much as possible during development, it is undoubtedly the case that a user at home may experience something that never occurred during our development. That's just how it always goes with a newly launched receiver.

And in response to such incidents, comments, plus our own ideas, etc., we continue to develop, to make the receiver better step by step, so that it increasingly matches the use of people at home, which will result in a new version of the rbxTV app.

Especially in the initial phase, new versions may follow each other relatively quickly.

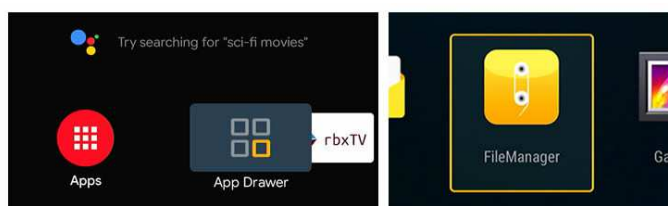
In any case, we always make new software versions available for download via the Support menu on the Rebox website.

## Install an rbxTV app

In this example we install the version downloaded from the Rebox website (menu Support/Downloads [accessible directly via [rebox.nl](http://rebox.nl) or [rebox.be](http://rebox.be)]): rbxTV\_2-1-27.apk

The .apk must be placed on a USB stick and inserted into the receiver..

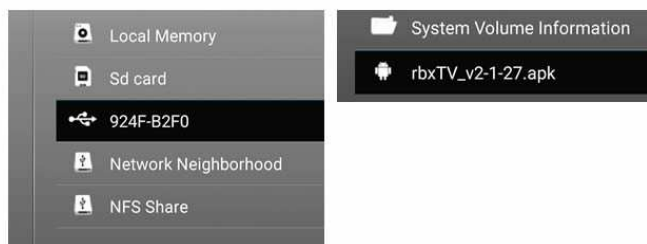
Click in the HOMEscreen on App Drawer => select FileManager, and click OK.



Click 'Allow'



In the window that appears, click on the USB stick indication, then select the rbxTV .apk and click on the OK button of the RCU.



You will then receive the standard Android message that you still have to give Filemanager permission to install something. So click on 'Settings or Preferences' in the popup => select Filemanager and click the OK button of the RCU.



The 'Switch' then shifts from left to right, from 'Not allowed' to 'Allowed'.

Then click on the RCU EXIT button, so that you return to the contents of the USB stick, with the rbxTV\_v2-1-27.apk selected.

Click OK again and choose 'Install' again. The installation will be completed and you will receive confirmation.

Now click on the HOME button, and start the rbxTV app, and go to the Menu => Options => About

You can now check the version here:



**NOTE:**

You have actually installed the newly installed updated version of the rbxTV app “on top” of the existing Image software. So it is not 'baked in' to the Image.

This means that if you factory reset the box, you will revert back to the rbxTV app version that came with the Image. So you have to put it back on again.

However, we also come, perhaps less frequently than with a new app, with new complete Images. The latest rbxTV app is then 'baked' into it, so that reinstalling that app after a factory reset is not necessary.

The procedure, and the 'looks', for installing a new Image is currently being refined and will be described in an updated version of this manual.

## 15. Technical Specifications

### **Product description:**

Quad core 64 bit 4K HDR Hybrid Box support DVBS2X with M7 Fastscan  
Android TV system  
H.264/H.265 10 bit HDR decoding up to 4K@60fps  
HDMI 2.0 max to 4K60 output  
Bluetooth RCU

### **System:**

CPU: Quad core 1.5G ARM Cortex A53  
GPU: Mali G31  
DRAM: LPDDR 2GB  
FLASH: EMMC 16GB  
OS: Android Google TV

### **Network:**

RJ45 Interface 10M/100M adaptive  
Built-in 2.4GHz + 5GHz WiFi 6 + BT 5.0

### **Tuner S2/S2X:**

Frequency range: 950 ~2150 MHz  
QPSK: 1-60 MSps  
8PSK: 1-60 MSps  
16APSK: 1-58 MSps  
32APSK: 1-55 MSps  
Roll-off factors for pulse shaping: 0.05-0.35  
Input level: -70 ~ - 10dBm  
LNB power: 13V/18V 500mA max  
Input impedance: 75Ω

### **I/O:**

Video output: HDMI 2.0 (4K60fps, AV)  
Network: RJ45, built-in WiFi  
Peripheral interface: USB 2.0 (2x)  
Power interface: DC 12V / 1.5A  
Digital television: LNB IN + Loop Through  
Display: LED 4x8

### **PCMCIA:**

CA interface: Conax, Nagra, Irdeto, etc

### **Media (video):**

H.265 Main 10@L5.1 decoder up to 4K@60fps  
VP9 Profile 2 decoder up to 4K@30fps  
AVS2 JiZhun 10 bit decoder up to 4K@30fps

Multi-format Video playback formats, including H.264 BP/MP/HP, H.263 BP, VP8, MPEG-1 MP/HL, MPEG-2 MP/HL, MPEG-4 SP/ASP@L5, AVS+/AVS JiZhun, WMV9/VC1

Format: MKV, TS, M2TS, MOV, MP4, RM, RMVB, AVI, MPG, MPEG, DAT, VOB, FLV

**Media (audio):**

Decoder: MPEG 1/2/2.5, Audio Layer 1/2/3, WMA version 4/4.1/7/8/9, WMA Pro, LPCM, PCM, Vorbis, Flac, ALAC, APE, AAC-LC/HEAAC/HE-AAC v2, Real Audio, AC-3/DD+/AC-4, MPEG-H

Format: MP3, WMA, WAV, OGG, M4A, AAC, APE, FLAC, ALAC, MPEG, MP1, MP2, MPA

Photo format: HD JPEG, BMP, GIF, PNG, TIFF

Other:

Measures: 165 x 135 x 30mm

Weight: 295 gr

Operation temperature: 0 ~ 40 C, Humidity < 95%

## 16. Rebox Contactinfo

Rebox BV

Hendrik Figeeweg 1X

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