STRONG

Hybrid UHD Android Receiver

SRT 2400

Picture similar

User Manual
Bedienungsanleitung
Manuel d'utilisation
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Version 5.1 | Free-To-Air channels | share contents | Picture slideshow | video streaming | USB recording

DVB T2/C/S2 | 4K Ultra HD | DOLBY AUDIO | QUAD CORE Processor | HEVC Advance | Wi Fi | Bluetooth

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Fig. 1

Fig. 2

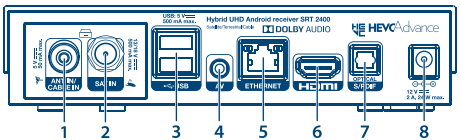
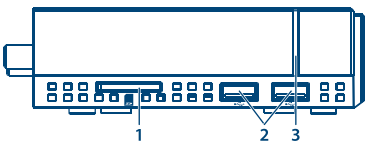


Fig. 3



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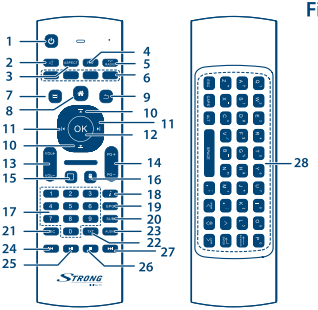

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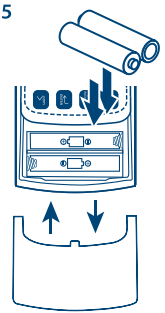

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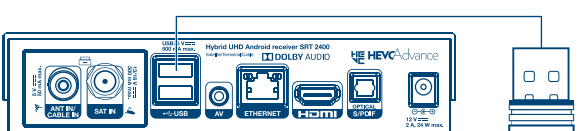

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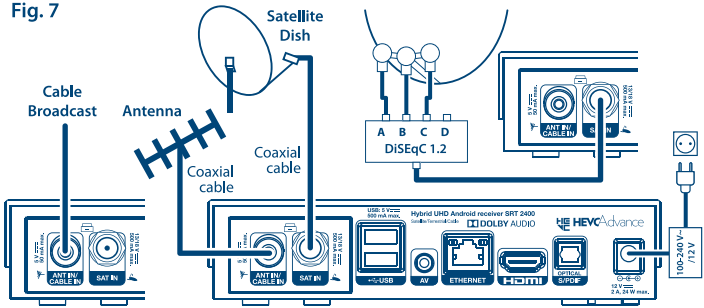

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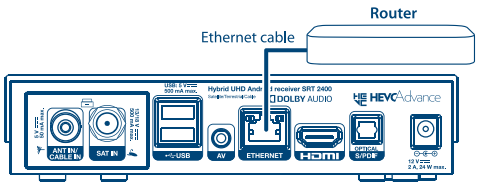

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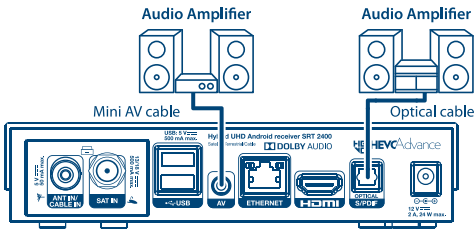
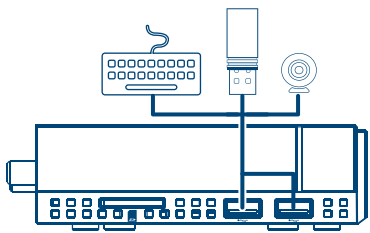


Fig. 10



SERVICE CENTER

AT
support_at@strong.tv
0820 400 150
(€ 0,12/Min. österr. Festnetz)

BG
support_bg@strong.tv
+359 32 634451

CEE
support_hu@strong.tv
+36 1 445 26 10

DE
support_de@strong.tv
0180 501 49 91
(€ 0,14/Min. deutsches Festnetz)
(€ 0,42/Min. max. Mobilfunknetze)

DK
support_dk@strong.tv

FR
support_fr@strong.tv
0826 029 928
(€ 0,15 par mn poste fixe en France)

IT
support_it@strong.tv
199 404 032
Da rete fissa 24,8 cent. al min.
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15,6 cent. scatto alla risposta

NL
support_nl@strong.tv

PL
support_pl@strong.tv
801 702 017

UA
support_ua@strong.tv
+380 (44) 228 24 73

Supplied by STRONG & Co, Japan
Represented by
STRONG Ges.m.b.H.
Franz-Josefs-Kai 1
1010 Vienna
Austria
Email: support_at@strong.tv

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1.0 INTRODUCTION

Thank you for choosing the Android receiver by STRONG. It has been produced with the latest new technology and offers extensive entertainment and great versatility. We wish you many hours of new great experiences exploring the Android world and watching IP, cable, terrestrial and satellite TV in High Definition and satellite even in Ultra High Definition quality!

1.1 Safety Instructions

DO NOT INSTALL YOUR RECEIVER:

- In a closed or poorly ventilated cabinet; directly on top of or under any other equipment; on a surface which might obstruct the ventilation slots.

DO NOT EXPOSE THE RECEIVER OR ITS ACCESSORIES:

- To direct sunlight or any other equipment that generates heat; to rain or intense moisture; to intense vibration and to any shock which may cause permanent damage to your receiver or to any magnetic objects, such as loudspeakers, transformers, etc.
- Do not use a damaged power cord. It may cause a fire or an electric shock. Do not touch a power cord with wet hands. It may cause an electric shock.
- When the receiver is not used for a long period of time, you should unplug the power cord from the wall socket.
- Do not use alcohol or ammonia based liquids to clean the receiver. If you wish, you may clean your receiver with a soft lint-free cloth slightly made damp with a mild soap solution, and only after disconnecting from the mains voltage supply. Make sure no foreign objects fall through the ventilation slots because this could cause fire or an electric shock.
- Do not place any objects on top of the receiver because this might prevent proper cooling of the components inside.

Safety Precautions

- Never try to open the receiver. Opening the receiver will void the warranty of the product. Refer all maintenance or servicing to suitably qualified personnel.
- When you are connecting cables, be sure that the receiver is disconnected from the mains supply voltage. Wait a few seconds after switching off the receiver before you move the receiver or disconnect any equipment.
- It is a necessity that you only use an approved extension and compatible wiring that is suitable for the electrical power consumption of the installed equipment. Please ensure that the electrical power supply corresponds with the voltage on the electrical identification plate at the back of the receiver.

If the receiver does not operate normally, even after strictly following the instructions in the user manual, it is recommended to consult your dealer or the appropriate service for your country.

1.2 Storage

Your receiver and its accessories are stored and delivered in a packaging designed to protect against electric shocks and moisture. When unpacking it, make sure that all the parts are included and keep the packaging away from children. When transporting the receiver from one place to another or

if you are returning it under warranty conditions, make sure to repack the receiver in its original packaging with its accessories. Failing to comply with such packaging procedures could damage the product and void your warranty.

1.3 Equipment Set-up

We recommend you to consult a professional installer to set up your antenna equipment. Otherwise, please follow the instructions below:

- Use a high quality, well shielded coaxial cable to receive antenna signals in highest levels
- Use a high quality, well shielded HDMI cable to watch also in highest screen resolutions.
- Refer to the user manual of your TV and antenna how to connect the cables.

The symbols will serve as follows:

WARNING:	Indicates warning information.
Tips	Indicates any other additional important or helpful information.
MENU	Represents a button on the remote control or the receiver. **(Bold characters)**
Move to	Represents a menu item within a window. *(Italic characters)*

1.4 Accessories

- Installation Instructions
- 1 remote control
- 1 USB adapter for the remote control
- 2x batteries (AAA type)
- HDMI cable
- Power adapter

WARNING:	The batteries should not be recharged, disassembled, electrically short-circuited, be mixed or used with other types of batteries.

1.5 Usage of external USB devices

- It is recommended to use USB 3.0 storage devices for records or playback of UHD /4K. If your device is not compatible to USB 3.0 specifications, recording, playback and other multimedia functions of the receiver might not work properly.
- The Timeshift of programmes in Ultra HD is not guaranteed with the currently available USB devices.
- STRONG cannot guarantee compatibility with all types of USB devices such as web cams, keyboards, mouse devices, storage devices.
- STRONG cannot guarantee perfect operation when a HDD and a web cam are used at the same time.

- If you are going to use external USB HDDs (Hard Disk Drives), please consider that power specifications may exceed the supported output of your receiver (max. 5 V/500 mA). If so, please connect your USB HDD to an external power adapter.
- It is advised not to store important information on USB storage devices used with the receiver. Always make backups of data on your USB storage device before using it with this receiver. STRONG will not take responsibility for any loss of information or circumstances caused by loss of information.

2.0 YOUR RECEIVER

2.1 DEFAULT PIN: 1234

2.2 Front Panel

Fig. 1

1. **IR sensor**

2.3 Rear Panel

Fig. 2

1.	**ANT IN/CABLE IN**	To connect to your antenna or wall connector provided by the cable operator for reception of broadcast signals.
2.	**SAT IN**	To connect to your satellite antenna for reception of broadcast signals.
3.	**2x USB**	To connect USB devices like: mouse/keyboard/storage devices
4.	**AV**	To connect your receiver to an analogue audio amplifier.
5.	**Ethernet**	To connect to a network switch, router or modem
6.	**TV (HDMI)**	To connect your receiver to your TV via HDMI cable.
7.	**S/PDIF (optical)**	To connect your receiver to an digital audio amplifier.
8.	**Power**	To connect the included power adapter of 12 V.

2.4 Side Panel

Fig. 3

1.	**SD card slot**	To insert an optional SD card.
2.	**2x USB**	To connect USB devices like: mouse/keyboard/storage devices
3.	**LED Indicator**	Blue color for working mode

2.5 Remote control

Fig. 4

1.	⏻	Turns the receiver ON/Standby
2.	🔇	Turns the sound on or off.
3.	**ASPECT**	Switches between the screen settings “AUTO” and “Full”.
4.	**FAV**	Accesses the favourite channels lists.
5.	**TV/RADIO**	Switches between TV and radio mode
6.	**COLOUR BUTTONS**	Different functions in menu mode

7. ☰	Opens the DTV menu/selection of wall papers
8.	Returns o the Android menu/shows the latest used apps
9.	Returns to the previous menu or exits the App
10. ▲▼	Switches to the next/previous channel in viewing mode or moves the highlight up/down in the menu.
11. ◀ ▶	Decreases/increases the volume level in viewing mode, navigates through the menus or changes values of settings in a menu
12. **OK**	Confirms a selection
13. **VOL+/VOL-**	Increases/decreases the volume level
14. **PG+/PG-**	Switches to the next/previous channel in viewing mode, jumps 12 places up or down in channel list
15. ☐	Switches to recently watched channels and apps
16.	Turns the air mouse function ON or OFF.
17. **0~9**	Channel number and numeric value input
18. **i**	Opens the information bar in the DTV mode
19. **EPG**	Displays the EPG (Electronic Programme Guide) in DTV viewing mode
20. **SUB**	Selects subtitles language from the available ones on the current channel
21. **REC**	Starts recording the currently watched programme.
22. **TXT**	Opens Teletext if available on the current channel.
23. **AUDIO**	Displays the audio selection menu with selections for available languages and audio modes
24. ⏮	Fast rewind during playback.
25. ▶/II	Turns Timeshift on or off in the DTV mode; starts/resumes playback in the multimedia mode
26. ■	Stops Timeshift in the DTV mode; stops playback of multimedia files in the multimedia mode
27. ⏭	Fast forward during playback.
28. **Standard QWERTY keyboard**	

2.6 Installing the batteries

Fig. 5

Open the cover on the remote control and insert 2x AAA batteries into the compartment.
The correct position of batteries polar diagram is shown inside the batteries compartment.

1. Open the cover.
2. Insert the batteries.
3. Close the lid.

WARNING: The batteries should not be recharged, disassembled, electrically short-circuited, be mixed or used with other types of batteries.

2.7 Using the remote control and USB adapter

Fig. 6

Please first insert the USB adapter of the remote control in a free USB port. This USB adapter receives the RF (radio controlled) signals from remote control. Without this adapter only the Standby button will work via the IR sensor (infrared). The remote control has an in-built "G-sensor" which is used as pointer on your screen in the Android mode. This is called as "Air mouse" function and allows you to move the pointer by moving the remote control through the air.

NOTE: As this function uses more power as normal pressing of buttons we recommend using Alkaline batteries to ensure longer operation time of your remote control. When the batteries are almost empty the LED indication on the remote control will start blinking for 15 seconds after you press any button.

Under normal conditions your remote control has been paired with the USB adapter in the factory and therefore the "Air mouse" function of your remote control will directly work for your receiver. In case you can only use the ⏻ button on the remote control and none of the other buttons have a function, or in case the red LED on the remote control keeps blinking, it could be that the pairing between the remote control and the USB adapter is not correct.
In that case you need to pair the USB adapter to the remote control manually:

1. Remove the USB adapter from the USB slot on the receiver.
2. Make sure the receiver is switched ON.
3. Remove the batteries from the remote control and insert them again. The LED on the remote control starts flashing.
4. Press and hold the **OK** and ⮌ buttons at the same time for a few seconds. The LED on the remote control flashes more quickly.
5. Insert the USB adapter into a free USB port of the receiver and wait until the LED on the remote control stops flashing (***fig. 6***).
6. Now the remote control is paired with the USB adapter.

NOTE: The function of Standby on the remote control is limited or not possible if there are obstacles in front of the remote control sensor on the front panel of the receiver. If only the Standby button is working and there is no reaction when pressing any other button it could be that the batteries are empty or the USB adapter was removed or, as mentioned above, you need to pair the USB adapter to the remote control manually.

3.0 CONNECTIONS

This chapter describes the basic satellite setup with 1 dish + 1 LNB and / or terrestrial or cable reception. For advanced dish setup, refer to section **3.2**.

3.1 Basic connection

Fig. 7

a. If you use satellite reception, connect the LNB of your satellite antenna to the SAT IN connector of your receiver using a good quality coaxial cable and suitable 'F-connector' plugs.
b. If you use terrestrial or cable reception, then connect the outdoor/indoor antenna or cable wall socket to the ANT IN connector of your receiver using a good quality coaxial cable and suitable 'IEC-connector' plugs.
c. Connect one end of a good quality HDMI cable to the HDMI output on your receiver and the other end to the HDMI input of your TV.
d. Connect the LAN cable from your router/Internet connection into the RJ45 LAN input.
e. Plug in the power plug from the 12 V adapter and insert the adapter into a suitable wall outlet.

3.2 Connecting multiple fixed LNBs using a DiSEqC 1.0/1.1/1.2 switch

Fig. 7

a. Connect the LNBs of your fixed antenna to the inputs of a DiSEqC 1.0/1.1 switch
b. Connect the output or "to receiver" connector of the DiSEqC 1.0/1.1 switch to the SAT IN connector on your receiver.

3.3 Connecting to the Internet

Fig. 8

a. For the best performance we advise using a wired connection to your router.
b. Alternatively, you can use the in-built wireless adapter to connect to the Internet via your wireless router.

NOTE: Be aware that the Internet speed will be reduced by walls or long distance between the receiver and the router when using wireless connection. This will lead to lower quality of video streams from the Internet.

3.4 Connecting to an analogue amplifier

Fig. 9

Use the 3.5 mm AV output for a RCA cable to connect your receiver to the analogue input of your Hi-Fi system or audio amplifier. Use the white and red RCA for an analogue amplifier. Optionally you can use the yellow RCA as an analogue low resolution video output. To enable this option, you need to remove the HDMI cable.

NOTE: Android is made for high resolution screens and will only be good to watch and to use on the HDMI output. The yellow RCA video output connector only supports low quality video.

3.5 Connecting to digital audio (video) amplifier

Fig. 9

Use the optical S/PDIF output to connect your Android receiver to the digital input of your Hi-Fi system or audio amplifier. In the Android Digital Sounds menu you can activate this output to select *S/PDIF audio*.The *Digital audio* option can be used to activate Dolby Digital audio by selecting *RAW data* or disable and select *PCM* for down mix to stereo audio. If you have a digital amplifier with HDMI connector, select *HDMI*. This will offer the best sound up to Dolby Digital Plus!

3.6 Connection of a wireless mouse or key board*

Fig. 10

For optimal usage of the Android part we recommend using also a mouse or wireless mouse for maximum freedom, besides the remote control. This enables tracking and dropping of functions, just as you can do on mobile phones.
Switch the main power *Off* and insert a mouse or wireless mouse dongle into one of the free USB slots. Switch the main power back *On*. The device will be automatically recognised and you can start using it.
In the same way you can use a keyboard.* It will make typing of information (web addresses, searching) much more convenient.

* Not included in the packaging.

3.7 Connection of a USB web camera*

Fig. 10

If you like to take pictures or talk to other people and watch with video conference apps as Skype™, you can connect a USB web camera with an in-built microphone to your Android receiver.
Download and install the latest new video app from the Store first. Then switch the main power *Off* and insert the USB webcam connector into one of the free USB slots. Switch the main power back *On*. The webcam will be automatically recognised and you can start using it.

* Not included in the packaging.

NOTE:	Please check on our web site www.strong.tv for the supported webcam models.

If you like to change the login name, camera model or if you don't get the webcam running, enter "Settings – Apps – Skype -- Clear data" first and then login to Skype™ to test a video call and if the new login works.

4.0 FIRST INSTALLATION

This procedure will enable you to enjoy and set up your Android receiver in just a few steps. It is recommended to follow the *First Installation* step by step. It will guide you through the basic installation and channel searching process.

4.1 First installation of Android

Step 1: *Language* Select your preferred language for the on screen menu. Use ◀ ▶ to change language and press **OK** to confirm your selection.

Step 2: *Resolution* Select the screen resolution you prefer. Default selection is *Automatic*, which already shows the best setting of the connected screen. Press **OK** to confirm your selection. A banner appears to confirm the new setting by selecting *OK*. Confirm again with **OK**. If you do not see this banner immediately, wait a couple of seconds and the screen will return to its previous state. Then try another resolution.

Step 3: *Screen Size* Use ▲▼ to adjust the size of the screen so it exactly fits the screen you are using. Press **OK** to confirm.

Step 4: *Network* If you have already connected the Ethernet cable to your router, in most cases the unit finds the correct settings automatically and jumps directly to *Step 5*. If you haven't connected a Ethernet cable, but prefer using Wi-Fi, select *Wi-Fi* and press **OK** to open the menu with the available Wi-Fi networks. Use ▲▼ to select your network and enter the key or password. The **0 ~ 9** buttons on the remote control can also be used for entering.

Step 5: *Date&Time*: If you have successfully connected to the Internet in *Step 4*, this screen will automatically show the date and your local time. If necessary, you can select an item to modify it manually. At the bottom you will find the selection *Setup Digital TV* and *Finish*. Select *Setup Digital TV* to install digital satellite channels through the next steps in the *Installation Wizard*. Select *Finish* if you want to install digital satellite channels at another time and directly to go to the Android menu.

Step 6: *Final step*: Select *Scan TV channel* if you would like to proceed directly to install Digital TV from satellite, terrestrial or cable signals. Select *Login in to Google* to set up a Google account. Select *Homepage* to skip the steps above and go directly to the Android main page.

4.2 First Installation of DTV

This menu allows you to install your Free-To–Air TV and radio channels from one of the three tuners. Select a *Satellite/DVB-T/Cable* search, *load list from USB* or to load a *preinstalled Germany channel list* of Astra 19.2.

Step 1: *Picture size*: Select *Full* for the official size or *Auto* to adjust the size with your screen.

Step 2: *Zap Mode*: Choose *Black Screen* to get a black screen when zapping through the channels. Select *Hold Screen* to hold the last watched screen when zapping through the channels.

Step 3: *Subtitle*: Select *Off* or the *Subtitle language* you would like to display.

Step 4: *LCN*: Select *On* if you would like to use LCN modes in DVB-T.

Step 5: *Tuner Type*: Select which tuners you would like to use: *Satellite and Terrestrial* or *Satellite and Cable*.

Select *Next* and confirm with **OK** to go to **Step 6**.

Step 6: *Start Scan*: Press **OK** to enter this menu which shows the option *Satellite Installation* to search satellite channels of your choice by using a satellite dish antenna. The

selection *DVB-T/T2 Installation* allows you to search terrestrial channels by using an indoor or outdoor antenna. The third option is *DVB-C* which allows you to search cable broadcasted channels.

Step 7: *Satellite Installation*:
The default setting is ASTRA 19.2 on DiSEqC port 1. Use ▲▼ if you would like to select a different satellite signal and press **OK** to select or deselect. To modify the settings, press ▶ to enter. When all settings are finished, press **BLUE** and select *Scan* to enter the scanning process menu. Select the *Scan type* here. By selecting *Sat Type* and *Multi*, you may scan multiple satellites, by selecting *Single* you scan only one satellite signal. Press **OK** to start.

Step 8: *DVB-T/T2 Installation DVB-C*:
The receiver shows the *Aerial Adjustment* screen. First select the country where you are using the device to set up the steps in the scanning process automatically.

Step 9: *Antenna Power*: Switch to *On* if you use an active antenna. By setting to *On*, 5 V will be present at the ANT IN connector of the receiver. Select *Off* for passive antennas.

Step 10: *LCN.*: Switch to *On* if your operator uses automatic channel sorting also called as LCN. This option does not allow any manual channel sorting afterwards. Select *Off* if you would like to sort the channels yourself after the scanning process.

Step 11: *Scan Type*: Select *All* to store scrambled and Free-To-Air channels or select *FTA* to store only Free-To-Air channels.

NOTE: Scrambled channels cannot be viewed with this receiver.

By the time all settings are finished, select *Auto scan* for full search of all channels or select *Manual Scan* for only one frequency. Press **OK** to start scanning. The receiver will search for all available channels now. When the scanning is finished, the receiver switches to viewing mode.

Step 12: *Load channel list from USB:*
Select this option and press ▶ if you like to load a channel list which has been made before and was saved as backup on a USB stick.

Step 13: *Load preset Satellite list Germany:*
Select this option and press ▶ if you like to load the channel list from ASTRA 19.2 made for German users including most important channels.

NOTE: Over time, channels can be moved to other frequencies, completely disappear and new channels can appear. Please add these manually if you miss them or check our website www.strong.tv for latest updates.

After the above steps have been made the receiver will go into viewing mode and you can use and enjoy it. Should some steps not be set as you wish or if you like to restart the wizard, you can do so from the DTV part. Please press ☰ and select *DTV settings* and confirm with **OK** to enter.

Select *System* and *Factory Reset*. After entering the PIN code, the unit is set back to default and all previous channels and settings will be deleted. The unit will return to the first installation wizard of DTV.

NOTE: The Android part is kept as it is and will not be restored to default. Restoring Android to default can be done in the *Android system settings* menu itself and will reset everything, including DTV.

5.0 HOW TO USE THE ANDROID PLATFORM

After turning on your receiver, *Home* opens. The app icons you keep in the tray remain visible on every *Home* screen. All app icons in the centre are permanent. Press to see all your apps and widgets. The middle of your *Home* screen can hold app and widget icons as well as folders. To open an app, folder or widget, click on its icon.

5.1 Connect to Wi-Fi networks

To fully use the Android platform, you first need to setup connection to the Internet. If you missed this setup in *Step 4* of the *First Installation Wizard* you can setup this connection by selecting *Settings* from the *Home* screen and press **OK**. Select *Network* and press **OK** again. In this menu you can choose if you want to connect via Wi-Fi or LAN (cable). Enter and store your passwords or gateway ports here. Passwords and IP settings are provided by your Internet provider (or in-house router). A message appears to inform about a successfully made setup. Press until you return to the *Home* screen. When all settings have been installed, select *Browser* and press **OK** to access the Internet.

Turn your Wi-Fi on and connect it to a Wi-Fi network

If a wireless network has been added during the first time installation, Wi-Fi is turned on automatically.

1. Click the settings icon *Setting* on the *Home* or *All Apps* screen.
2. Click the icon *More* and then choose Wi-Fi.
3. Slide the Wi-Fi switch to the *On* position. The device scans for available Wi-Fi networks and displays the names of those it finds. Secured networks are indicated with . If the device finds a network that you have connected to previously, it connects to it.
4. Click a network name to see more details or connect to it. If the network is secured, you will be prompted to enter a password or other credentials. (Ask your network administrator for details.)

To modify the settings of a network, click and hold the network name.

Forget a wireless network

You can make the device forget about the details of a wireless network that you have added, if you don't want your device to connect to it automatically or if it is a network that you use no longer.

1. Turn on Wi-Fi if it is not already on.
2. In the Wi-Fi settings screen, click on the name of the network.
3. Click *Forget* in the dialogue that opens.

When you connect to a wireless network, the USB device obtains a network address and other information it needs from the network, using the DHCP protocol.

5.2 Open the browser

Click on the *Browser* icon at the bottom of the *Home* screen or on the *Application* icon in the launcher. The browser also opens when you click on a web link in an email or text message. Use ▲▼◀▶ to select an item, menu or web address search bar to enter a website address (URL) of your wish. Alternatively you can press on the button to simulate ▲▼◀▶ with the mouse function. Press **OK** to confirm or to go one step back. You can press this button more times until you to return to the *Home* screen.

5.3 Picture gallery

Click on the *Gallery* icon in the launcher or on the *Home* screen. The gallery presents pictures stored on your SD card or USB storage device including pictures which have been downloaded from the web or other locations or that are stored in web albums. You can also edit the pictures on your USB device and share them with friends. Press to stop until you to return to the *Home* screen.

5.3.1 View and browse pictures

1. Open an album in the *Gallery* with a mouse click or press **OK** on one of the folders/pictures.
2. The folder gallery opens and on top of this screen you can select the picture grid view to change between *Film strip* or *Grid* view.
3. Select a picture to show it in full on your screen.
4. Use now ◀▶ to step through the pictures collection.
5. To start a slide show you can press **OK** once more.
6. Click to zoom in or out.
7. You can call more functions like *Rotate, Edit, Crop* and *Slideshow* setup with .

5.4 Video player

Click the *Video player* icon in the launcher or on the *Home* screen, then press **OK**.
Choose a video and press **OK** to display the video. The *Video player* presents the video on your SD card or USB storage device including videos which have been downloaded from the web or streamed from other locations.

5.5 Music library

Click on the *Music* icon in the launcher or on the *Home* screen. If you have copied music to your SD card or USB storage device and connected the SD card or USB storage device to one of the ports, it will search for music files and build a catalogue of your music, based on information about each file that is stored in the file itself. Depending on the number of files it can take from a few seconds to several minutes. When the catalogue is complete, the music library screen opens with tabs so you can click to view your music library sorted by artists, albums, songs or playlists. Choose the song you want to listen to and press **OK**.

5.6 S link for streaming from other devices

Click on the *S link* icon in the launcher or on the *Home* screen. You will conveniently be able to connect your mobile phone or tablet with your TV screen to watch pictures, videos and music from these devices. You can also install apps from the *Store* on these devices.

NOTE:	To be able to connect your mobile phone or tablet with your TV screen you must download a specific App supported in your own mobile device to use the S link function.

5.7 The Store

Click on the *Store* icon in the launcher or on the *Home* screen. When you open the Store for the first time, please read and accept the terms of service to continue.
You need to create a Google Account or enter your existing account and password before you can use the Store. This menu will guide you through the steps. Once ready you can start using the Store market by following the steps below.

5.8 Applications

NOTE:	STRONG cannot warrant and cannot be hold responsible of the (mal-) function and working of third party apps. Some applications function only well in devices with GPS.

5.8.1 Browse for applications

You can browse for apps by category and sort them in different ways.

1. Click a top-level category, such as *Apps* or *Games*. Click on a subcategory to view its list of apps.
2. Scroll to view subcategories and click on the one you want to explore. Click to view top paid, top free or the most recent apps in this subcategory. Click on an app to open its details screen.
3. Click *Top paid*, *Top free* or *Just in* to sort the subcategory further.

5.8.2 Search for applications

1. Click the *Search* icon at the top right-hand side of the screen
2. Enter what you want to search for and click *Search* again. You can enter all or only a part of an app's name or description or the developer's name which you want to search for. When you find an app you like, you can install it on your SD card or USB storage device.
3. Click on the *Search result* to open the details screen of that app.

The details screen describes the app and contains buttons for downloading it and performing other tasks. You can also press ☰ and enter *Setting*.

5.8.3 Download and install an application

Find an app you want and open its details screen. In the details screen of the app, you can read more about it including costs, rating and user comments and information about the developer. Click to download and install the app. (If it is a paid app, the button is labelled with the price.) Wait until it is installed and shows "open" to use this new app.

5.8.4 Create a Google Wallet™ account

You can pay for the items you purchase from the *Store* with a Google Wallet™ account. Set up a Google Wallet™ account the first time you purchase an item from the *Store* or prior in a web browser. In a web browser, go to https://wallet.google.com/ to establish a Google Wallet™ account. Another possibility is to set up a Google Wallet™ account the first time you use your Android receiver to buy an item from the Store when you are asked to enter your billing information.

WARNING: When you have used Google Wallet™ account once to purchase an app from the *Store*, the Android receiver remembers your password. For this reason, you should secure your Android receiver to prevent others from using it without your permission.

5.8.5 Managing your downloads

After downloading and installation of an app, you can access the Store and enter the app name again. Here you can rate it, view it in a list with your other downloaded apps and configure it to update itself automatically and much more. Also you have the option to uninstall the app. Alternatively you can select *Settings*, *More Settings* from the *Home* screen and click on *Apps*. In this menu you can clear data, force stop or even uninstall the selected app.

NOTE: Be careful what you do in these menus as it can lead to deletion of settings, app or users data.

5.8.6 View your downloaded applications

You can view a list of the apps that you have downloaded from the *Store* and use the list for a number of purposes. On the *Home* screen, select the *Settings* icon and select *Apps*. Then press **OK** to see the installed apps.

5.9 Open all applications

Click on the *All Apps* icon in the launcher or on the home screen. This menu displays all your apps short links on one or more screens. Press ▼ once and then use ◀ ▶ to see all apps. If you select one, you can open it by pressing **OK** or press ☰ to manage apps or go directly to the *Settings* menu.

6.0 SYSTEM SETUP

Click on the *Setting* icon in the launcher or in the home screen. This menu allows you to set up all your important settings such as *Network, Bluetooth, Display, Audio, Language* and more.

6.1 Network

In this menu you can change or setup the connection to the Internet by Wi-Fi or LAN (RJ45 cable). Enter and store your passwords and/or gateway ports here.

6.2 Bluetooth

This menu allows you to switch the Bluetooth connection *ON* or *OFF*, to setup new connected devices and to change the name of the Android receiver *Strong* to another.

6.3 Display

In this menu you can select your preferred HDMI output resolution, which is supported by the connected TV. The *AUTO* mode automatically selects the best output resolution of the combination (so called 'handshake'). Select *Screen position* if the size of your display is too large or too small for the connected screen. Select *Daydream* to set up a time when the screen shall be switched off or set up a time to switch off the receiver when it is not used for a period of time.

NOTE: Some apps can keep the receiver awake and overwrite this function.

6.4 Sounds

In this menu you can setup the correct audio output settings if you would like to use Dolby® Digital audio.
System sounds: Select *On* to hear a click when pressing a button on the remote control for any confirmation. Select *Off* to deselect the click sound.
HDMI audio: Select *HDMI* in the digital sound menu if you connect a digital amplifier via HDMI cable that supports Dolby® Digital and Dolby® Digital Plus or if you connect your TV.
S/PDIF audio: Select *S/PDIF* in the digital sound menu if you connect a digital amplifier via an optical cable that supports Dolby® Digital.
PCM audio: The selection *PCM* only provides Stereo sound to all outputs.

6.5 Storage&Reset

Select this ONLY if you would like to restore all settings back to factory default. All personal data will be removed from the internal memory storage, including information about your Google Wallet™ account, other accounts, system or app settings and app downloads. Also all settings in the DTV part will reset back to factory default, including all channel lists and favourite lists you have created. If you would like to make a "backup" from these DTV lists to a USB device, see details in the DTV chapter **7.3.5. Data base management**. When resetting the Android receiver, the software updates that were downloaded and installed will not be deleted. If you know the PIN code, enter it and confirm with **OK**. The default PIN code is **1234**.

6.6 Info

This menu allows you to change the name of your Android receiver and gives an overview about the software version. You may also access the update page.

6.6.1 System update

From time to time you can check if there is an improved software version available. This can be checked and downloaded from our website www.strong.tv. Enter the type number into the service support on our website. If there is an improved software version you can download the file and copy

it to the root of a USB device. Once ready insert the USB device to one of the free USB slots of the Android receiver. Select *Local update* and select the USB device and the upgrade file. Press **OK** and the upgrade process will start.
Alternatively you can select *Online update* to upgrade the software directly from the server online. This service is not available in all regions. Please, check information from your local dealer or visit our website www.strong.tv for more information.

NOTE:	Upgrades reset the Android receiver back to the factory settings. Make sure that you make a backup of the DTV part and apps, or note the apps you have downloaded before.

WARNING:	During the upgrade and flash process, do not switch off the main power! Wait until the Android receiver reboots and restarts automatically.

6.6.2 Device name IP box
This menu item allows you to change the name of your Android receiver to what you prefer it to be recognized by IP functions.

6.7 Date &Time
This menu allows you to modify the time and date of your time zone manually. The default setting implements an automatic time zone from network.

6.8 More Settings
In this menu you can set up, modify and change many settings of the Android part like you are used to from your tablet or smartphone. All basic functions can be modified as *Wi-Fi*, *Bluetooth*, *Ethernet*, *Sounds*, *Display*, *Storage*, *Permissions* and *Managing installed apps*.

7.0 DTV SERVICE
This application gives you access to digital FTA (Free-To-Air) TV to watch and enjoy your favourite TV and radio programmes from satellites of your choice. Select *DTV* from the Android main menu and confirm with **OK** to start this application.
If you skipped the DTV first installation (see **4.2 Setup DTV First Installation**) then when you enter the DTV app the first time the receiver will start with DTV. When the first installation is completed, you can navigate in the menu of the DTV application.
Press ☰ to open the menu of the satellite part. This gives access to the *Channel manager*, *Timer*, *DTV Settings*, *Recordings* and *Installation* menus. In all menus use ▲▼◄► to change and press **OK** to confirm your selections. To go one step back or exit press ⮌.

7.1 Channel Manager
In the *Channel manager* following settings can be made: *Delete Channel*, *Move Channel*, *Hide Channel*, *Lock/Unlock Channel* and *Rename Channel*. By pressing the **BLUE** button you can also use *Multi*

Select to select more channels in one go for these functions. There is also the possibility to set up to 16 favourite lists in the *Channel Manager*.

NOTE:	The default password of the *Channel manager* is **1234**. All operations in the *Channel Manager* are available on one page.

7.2 Timer

In the *Timer* menu you can set up wakeup and/or recording times.
If you want to make a recording, connect your USB device, SD card or hard disk drive to the receiver and choose start time and duration time. Press the **GREEN** button *Add* to open and create a timer. After set up, press **OK** to confirm.

NOTE:	The free storage capacity and write/read speed of your USB device, SD card or hard disk drive must be sufficient to store the recorded TV programmes.

7.3 DTV Settings

The *DTV settings* menu allows you to configure *AV Settings, Language audio/subtitles, OSD Settings, Parental Control, Database, Recording Settings, System info and reset* as you wish.
The *Tuner settings* allow you to make a main selection if you would like to either use an antenna or cable. As this receiver has only a single ANT IN connector you have to select whether you want to receive terrestrial or cable signals.

7.3.1 AV Settings

Aspect Ratio Select *Auto* for automatically adjustment of the screen size. Select *Full* to enlarge 4:3 video format to full screen in zoom mode.
Zap Mode Select *Hold Screen* to keep the last screen frozen until the next channel appears. Select *Black Screen* if you like a black screen between zapping of channels.
Audio Track Change audio track to *Left, Right* for multi audio or back to *Stereo*.
Time Settings Select *DTV Time* if you like to sync time from the digital broadcast. Select *IP Time* if you like to sync time from the Internet.

7.3.2 Language

First Audio Select your preferred main audio track language.
Second Audio Select your preferred audio track language if first not is available.
First Subtitle Select your preferred main subtitles language.
Second Subtitle Select your preferred subtitles language if first not is available.
Subtitle Select *Off* if you not want subtitles or *Normal* to switch on. Also Subtitles for Hard of Hearing can be selected.

7.3.3 OSD settings

Info Bar Select the duration time for displaying the info bar on screen *5, 10, 15, 20 seconds*. Also you can select *No timeout* to keep the info bar continuously.
Transparency Select the level of transparency of menus on top of the live screen.

7.3.4 Parental Control

Parental Rating Select the age rating for which the PIN code shall be entered before watching a parental rating protected channel. Select *All* to disable.
Channel Manager The channel manager menu is protected by the PIN code as default to prevent that your channel list(s) are changed or even deleted by others. Select *Off* if you want to disable this function.

7.3.5 Data Base Management

This menu allows you to make a backup or load a previously made channel list to a USB device.
Insert a USB stick (recommended) into one of the free USB slots.
Backup Backup the current channel list to a USB device.
Load Load previously made channel lists. The current one will be overwritten.

NOTE:	You can make more lists as backup and load them later by selecting them by date(s).

7.3.6 Recording settings

This menu allows you to setup settings for Timeshift and recordings to a USB device.
Insert a USB HDD into one of the free USB slots. Alternatively, you can use USB sticks but it must be high speed and high capacity for recording of HD content.
Storage Select the USB device you like to use for the recording function.
Recording Duration The recording time is set to 3 hours as default. For changing this time, select your default recording time. When you start a recording by pressing **REC** you change this default time to another. The next recording will show this default time.
Timeshift Default Timeshift time is set to *No limitation*. This means that during Timeshift the data keeps writing to the USB device until you press ■. For limiting the size of data to prevent that the whole space on your connected USB device is used you can select your maximum write time.
Auto Timeshift Select *On* to start Timeshift automatically right after channel switch. If you switch to other channels, Timeshift will be available by the time you re-switch. Select *Off* to deactivate this function.

7.3.7 System

This menu allows you to see the currently used software version of the DTV part and restore back to the factory defaults.
Run on Start-up Select *On* for starting the DTV immediately after you power ON the box with main power. Select *Off* to start in the Android mode.

Factory Reset This function resets your DTV receiver settings back to the default factory settings. Press **OK** and enter the PIN code to continue. Select **OK** to confirm executing the factory reset. This option will delete all your channels, favourite lists and settings from the DTV. The receiver will reboot and start with the *First Installation* menu of the DTV part.

WARNING: A factory reset will permanently delete all your personal settings, timers and stored channels. The Android part is kept as it is. Please consider this before you perform a factory reset.

7.4 Recording functions

The receiver supports instant recording, recording via timer and recordings booked via the Electronic Programme Guide (EPG). First select the storage device on which you like to store the recordings before you can use the recording functions. Connect the storage device and select *DVR settings* in the *DTV settings* menu. After you have made recordings you can watch them by selecting the option *DVR* from the DTV menu.
Press **OK** to open this menu. Select the recording you want to watch. At the right side of this menu you can see the date and size of the recording. Press **OK** to start playback and use the **multimedia buttons** for forwards, backwards, pause and stop. Press the **RED** *Delete* button to remove the selected recording from the list.

7.5 Installation

In this menu you can select *Satellite* or *DVB-T/Cable* search and save the corresponding settings for the channel search.

7.5.1 Satellite Installation

In this menu below you will find level and quality bars to optimize the signals for your dish.
Use ▲/▼ to select one or more satellites. Press **OK** to mark or unmark them. As soon as you have made your selection, press ▶ to jump to the right side of the screen where you can select a satellite and add the corresponding settings as DiSEqC ports.
By the end of the setup you can start the scan process by pressing the **BLUE** and *Scan* button.
SAT Select a satellite with ◀ ▶. If you only mark one satellite you cannot select another.
TP Select a transponder if you want to scan or adjust the dish on a selected frequency. Press **OK** to call the overview list.
LNB type Default is set to *9750/10600* which is the most common setting for LNBs (Universal type). Select another if you are using a different type LNB which needs other values.
LNB voltage Select *On* to increase the LNB voltage if you use a long coaxial cable to compensate for decrease of the LNB supply voltage.
SatCR Select one of the frequencies if you are connected to a SatCR system. SatCR is a special system which mainly is used in apartment buildings to provide one satellite dish system to many users at once. To use this function, contact your property management or system installer. If SatCR is activated, other settings below are not used. For normal use, default is set to *Off*.
LNB Power Default is set to 13/18V. The others functions are intended for specialized staff only.
22KHz Select *Off* or *On* if you use a special dish setup. For normal use this is default set to *Auto*.

ToneBurst If you are using a legacy type switch to switch between 2 satellites, setup your port to the satellite you selected above.
DiSEqC 1.0 If you are using a DiSEqC 1.0 switch to switch between 2, 3 or 4 satellites, setup your port to the satellite you have selected above.
DiSEqC 1.1 If you are using a DiSEqC 1.1 to switch between 5 to 16 satellites, setup your port to the satellite you've selected above.
Motor If you are using a motor drive to move between satellites, setup the motor drive by using *DiSEqC 1.2* or *Goto X* protocols.
Note:We strongly advise to ask your local installer to help install motor and settings.
There is also the possibility to change (add, edit or delete) a satellite or transponder by pressing **INFO** and search for channels: *Auto search, Manual search, Blind scan* and *Network search*. Press the **BLUE** button to display the *Scan* menu and press **OK** to confirm.

7.5.2 DVB-T / T2 Installation

In this menu you can select *Country, Antenna power, LCN modes* and search for channels.
Below in the screen you will find level and quality bars for optimizing the best signals of your terrestrial antenna.
Country Settings: Select your region.
Antenna Power: Set to *On* if you use an active antenna. When set to *On*, 5 V will be present at the ANT IN connector of the receiver. Select *Off* for passive antennas.
LCN: Set *LCN* (Logical Channel Numbering) to *On* to activate operator defined channel numbering or *Off* to store channels in found order. Sorting of channels in the channel list with LCN is not possible.
Auto Scan: Select to start searching all frequencies for available channels. All stored channel from before will be deleted.
Manual Scan: Select to start searching on one frequency for available channels. All stored channel from before will be kept in the channel list. When all settings have been made, press **OK** to start scanning.
Scan Type: Select *FTA* to search and store channels which can be watched freely. Select *All* to include encrypted channels in the channel list. However this device does not decode any channels.

7.5.3 DVB-C Installation

For cable installation select *DVB-C* in the *DTV* tuner section. If you don't make that selection the DVB-T menu options will be displayed. The process of auto search and manual search works in the same way as described in the **DVB-T** chapter above.

7.6 Electronic Programme Guide (EPG)

The Electronic Programme Guide (EPG) shows programme schedules and information for current programmes and coming programmes up to the 7 next days. Press **EPG** button on remote to open the EPG in viewing mode. To change to other channel, press the **RED** and **GREEN** buttons. Press ◄►▲▼ to navigate in the EPG menu. Press **OK** to get detailed information about the programme. Press the **BLUE** *Timer* button to set a reminder for a programme or to programme a recording.

8.0 TROUBLESHOOTING

There may be many reasons that affect the correct operation of your Android receiver. If the receiver does not work as you expect, please follow the steps outlined below. If after performing these operations the receiver still does not work well, contact your dealer or service centre in your area or write an email to our support via our website www.strong.tv.

If the DTV part shows problems with reception, first check if all cables and connectors still are in good condition. Check whether your dish/antenna still is fixed well and pointed optimally to the satellite of your choice. Check whether the satellite settings in the menus are still correct. If all is OK, you can reset the unit back to the factory settings and try to install again. Refer to chapter **7.3.7** of this user manual.

If you experience problems in the Android part, first check whether it is caused by an application. Try to clear the data or remove the app and check if this solves the problem. Please enter *Settings – Apps -- (select the app) -- Clear data* and then return to the menu and test if all works again.

If not successful you can reset the receiver back to the factory settings and try to install it again. Refer to chapter **6.5** of this user manual.

WARNING: Do not open the receiver cover. This action will damage the warranty seals and warranty repairs will be denied.

Problem	Possible reason	Remedy
The remote control is not working. The remote LED is blinking 15 seconds after pressing a button.	The battery is exhausted The remote control is incorrectly aimed. The USB adapter of the remote control has been removed.	Change the batteries Aim the remote control at the receiver, or check that nothing blocks the path to the receiver front. Insert the USB adapter belonging to the remote control.
Some buttons of the remote control are not working	The Air mouse function is activated	Press to switch this function OFF.
Cannot turn on the receiver	The power adapter is not connected to the 230 V outlet or 12 V plug into receiver.	Check whether the power connector is completely plugged into the DC socket of the receiver.
No signal or weak signal, intermittent reception.	Cables might have loosened. Moisture might have entered into cables or connectors. Heavy rain at present. Heavy storm at present.	Check the cable connections, LNB and other equipment connected between the LNB and the receiver, or adjust the dish. Wait for rain/storm to subside.

Problem	Possible reason	Remedy
	The satellite dish is not pointing at the (correct) satellite(s)	Adjust the dish. Ask a local satellite specialist for advice.
	The satellite dish is too small Trees or buildings are blocking the path.	Change to a larger dish Change the position of the dish
Scrambled service Message in DTV	The channel is scrambled.	Select an alternative channel.
No menu or signal from the Android satellite receiver on the TV	Wrong input on the TV	Check whether the correct HDMI input on your HDTV is selected.
	The connections are not done properly. The quality of the connected cables is insufficient.	Ensure that the connections are done correctly and are fitting well to the connected input/output. Check that the quality of all cables is good. Reconnect all cables between the receiver and the TV set.
No internet connection/ activities		Make sure the wireless network is connected and the security key for the encrypted network is correct.
		Make sure you select the correct IP address settings.
Some HDTVs cannot display the entire picture		Setup the screen ratio on your HDTV as automatic or change the screen size in the system menu.
The receiver switches off after 3 hours of no commands of the remote control	The power saving Auto standby function is activated	Switch off the Auto Standby / Daydream function.
Forgotten your PIN code	Default PIN is **1234**	Contact your local Service Hotline or send an email to our support via www.strong.tv
The external USB HDD does not start.	The power consumption is too high.	Connect an extra power supply adapter to your USB HDD device.

Problem	Possible reason	Remedy
Timeshift intermittent playback	Too many USB devices connected	Disconnect e.g. the USB camera
A recording does not start	HDD is not selected in the menu	Select the recording device in the DVR settings menu.

9.0 TECHNICAL SPECIFICATIONS

Tuner

Demodulator DVB-S2, DVB-T2:	DVB-T2/DVB-T, DVB-S2/DVB-S, H.264/AV, H.265/HEVC, UHD hardware decoding
Demodulator DVB-C: QAM modes:	16QAM, 32QAM, 64QAM, 128QAM, and 256QAM
Frequency range DVB-S2:	950 ~ 2150 MHz
Frequency range DVB-T2 :	174 MHz ~ 230 MHz / 474 MHz ~ 858 MHz
Frequency range DVB-C:	113 MHz ~ 858 MHz
Symbol rates DVB-S2:	QPSK/8PSK Pilot off 1- 55 Msps QPSK/8PSK Pilot on 1- 45 Msps QPSK Code Rates: 1/2, 3/5, 2/3, 3/4, 4/5, 5/6, 8/9 and 9/108 PSK Code Rates: 3/5, 2/3, 3/4, 5/6, 8/9 and 9/10
Symbol rates DVB-T2:	QAM modes: 4, 16, 64, 256 (with or without rotation) Bandwidths: 1.7, 5.0, 6.0, 7.0, 8.0 MHz FFT Sizes: 1K, 2K, 4K, 8K, 16K, 32K±600 KHz frequency

Video decoder

Video resolution:	2160p*, 1080p, 1080i, 720p

*2160p is only presented in the menu when HDMI is connected to a 4K UHD TV (HDMI cable of good quality advised).

Audio decoder

Audio support:	MEPG, OGG, OGA, FLAC, ALAC, Ape, M4A, RM, MPEG-1 layer1/2, MPEG-2 Layer II, (Dolby® Digital, Dolby® Digital Plus*, WMA, WMA Pro, WMV optional)

* Dolby Digital Plus, Dolby Digital and the double-D symbol are registered trademarks of Dolby Laboratories

System & Memory

Android Version:	5.1
Chipset:	Amlogic S905-B
CPU:	Quad Core Cortex-A53 2.0 GHz
GPU:	Mali-450MP
SDRAM:	DDR3, 1 GB
Flash:	eMMC: 8 GB

Connectors

ANT IN/CABLE IN IEC-169 Female
SAT IN F-type

AV
S/PDIF (optical)
Ethernet (RJ45)
HDMI
4x USB slots
SD slot
Power supply (12 V, 2 A)

General Data

WLAN:	802.11 b/g/n 2.4 GHz
Bluetooth:	4.0
Input voltage:	100 - 240 V AC, 50/60 Hz
Output voltage:	DC 12 V, 2 A
Power consumption:	7 W (typ.), 24 W (max.)
Power consumption in standby:	max. 0.5 W
Operating temperature range:	0 ~ +40 °C
Storage temperature:	-10 ~ +65 °C
Dimensions (W x D x H):	177 x 130 x 39 mm
Weight:	0.33 kg

STRONG declares that this item complies with the basic requirements and other relevant regulations of directives 2004/108/EC and 73/23/EC, RoHS 2002/95/EC

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