

# Ariva 4K Ariva 4K Combo

English





# WARNING !!!



Ferguson satellite receivers support recording on external hard disk drives (HDDs) and flash memories (pendrives). In all instances, the correct operation of the recording function depends on the type of connected memory! You must read the following limitations.

# **REMEMBER:**

1. In order to use an external USB memory, the memory must support the USB 2.0 standard. To ensure stable recording and playback, **you must use a memory with a recording speed of 9.0 MB/s or greater**. Slower hard disk drives and flash memories may not function properly, have problems with recording (image jitter), or not function at all!!!

2. Only disks with one basic NTFS or FAT32 partition (we recommend using the NTFS format) will function properly. If you do not have such a format, prepare the disk on your computer before connecting it to the receiver.

3. Highly fragmented or used memories may also not operate smoothly or correctly.

4. External hard disk drives should be autonomously powered, since the built-in USB port is unable to provide sufficient power.

5. Only one of the three USB ports can be used at the same time!

# CAUTION

1. Under no circumstances should you disconnect the USB device from the receiver during recording or playback. Disconnecting during operation may cause damage to the receiver and/or flash memory, and to the recorded data.

2. Do not touch the working device (and in particular the USB connector) with wet hands. Risk of electric shock and permanent damage to the receiver!

#### SAFETY MEASURES

We request that you read the instruction manual and recommendations set forward therein. Also remember to correctly position the satellite antenna!



In order to avoid an electric shock, never open the housing. Damage to the warranty seal shall void the warranty.



Disconnect the device from the mains during thunderstorms or when it is not to be used for an extended period of time. Please remember that the warranty does not cover damage to the equipment caused by a lightning strike.



Do not expose the device to direct sunlight. Place it away from sources of heat and humidity. Do not cover ventilation ducts, in order to ensure the correct circulation of air.



Place the device horizontally on a flat, even and stable surface.



If you move the device from a room that is warm to one that is cold (or vice versa), wait at min. 1 hour before connecting it to the mains. Otherwise, problems may arise.



The device should be placed away from vases, bottles, aquariums and other water containers in order to avoid damage. Do not touch the mains plug with your bare hands.



Do not place any objects on the housing of the device. This may cause  $\eta_{L}$  overheating and reception problems.

Before commencing maintenance or installation work, disconnect the receiver from the mains. Do not clean the receiver with alcohol or liquids containing ammonia. If necessary, clean it with a soft, lint-free cloth wetted with a gentle solution of water and soap.

- Do not connect any cables when the mains plug is in the socket.
- Check the condition of your cables. Damaged cables may cause a fire.
- Please disconnect the receiver from the mains before connecting any cables.

#### **DOWNLOADABLE SOFTWARE**

Ferguson has taken every effort to provide users with software updates in order to ensure that the parameters of the satellite television receiver are up to date. Ferguson reserves itself the right to amend, change or modify the software used in the satellite television receiver as it shall choose and without prior notification. The latest version of the software is available on the website <a href="http://www.ferguson-digital.eu">http://www.ferguson-digital.eu</a>

#### **GNU/GPL LICENSING INFORMATION**

Please consult the legal information available on your device under Settings > About Ariva 4K or visit http://source.android.com/source/licenses.html for more information.



Please keep in mind that new software may change the functionality of the Ferguson Ariva 4K. Photographs and descriptions included in the instruction manual are for informational purposes only. If you notice an error, please report it – we shall make every effort to have it rectified.

#### **Create a Google Wallet account**

You can pay for the items you purchase from Google Play market with a Google Wallet account. You can set one up the first time you purchase an item or ahead of time in a web browser.

Click the Google Play icon on the Home screen. When you open Google Play store for the first time, you must read and accept the terms of service to continue.

In a web browser, go to http://wallet.google.com to establish a Google Wallet account. OR The first time you use your Box to buy an item from Google Play market, when you're prompted to enter your billing information, you can set up a Google Wallet account.

Warning! When you've used Google Wallet once to purchase an application from Android Market, the Ferguson Ariva 4K remembers your password, so you don't need to enter it the next time. For this reason, you should secure your Ferguson Ariva 4K to prevent others from using and buying without your permission.

#### Download and install an application

1. Find an application you want and open its details screen

2. In the application's details screen, you can read more about the application including its cost, rating and user comments, and information about the developer.

3. Click to download and install the application. (If it's a paid application, the button is labeled with the price).

#### **Browse for applications**

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

1. On the Google Play home page, Click a top-level category, such as Apps or Games. Click a subcategory to view its list of applications.

2. Scroll to view subcategories and Click the one you want to explore. Click to view top paid, top free, or the most recent applications in this subcategory. Click an application to open its details screen.

## Multitasking & Closing application

Press and hold longer HOME button – to see all open application on your device. Choose any you want to switch too or press the up or down key to close them one by one.

### Uninstall an application

You can uninstall applications you downloaded from Market using Market. You can also uninstall applications you downloaded from Market and from other locations in the Settings application's Manage Applications screen

1.On the Android Market home screen, press Menu and Click My apps.

2.Click the application to uninstall.

3.Click Uninstall.

4.Click OK in the confirmation dialog.

5. Click the explanation that best matches why you're uninstalling and Click OK.

6. The application is uninstalled. You can install the application again at any time, without charge if it was a paid application.

## ABOUT THE INSTRUCTION MANUAL

Ferguson Sp. z o.o. has made every effort to provide the most current information about its products. Ferguson Sp. z o.o. does not grant any guarantee as to the contents of the present instruction manual and disclaims any implied guarantees concerning market value or suitability for specific purposes. The information contained herein is an instruction intended to enable the correct usage and maintenance of the receiver.

Ferguson Sp. z o.o. reserves itself the right to introduce amendments, changes or translations of the instruction manual without prior notification thereof. For this reason, we recommend you regularly visit our website in order to obtain the latest information.

#### Instructions and video tutorials can be found on:





#### MARKINGS AND SIGNS APPLIED TO THE RECEIVER



Digital signal transmission logo. This logo informs that the receiver conforms to the Digital Video Broadcasting standards.

Risk of electric shock - do not open. This notice warns the user not to open the receiver housing. The housing may be opened solely by authorized service technicians.



When this crossed-out wheeled bin symbol is attached to a product it means that the product is covered by the European Directive 2002/96/EC. Please inform yourself about the local separate collection system for electrical and electronic products.

Please act according to your local rules and do not dispose of your old products with your normal household waste. Correct disposal of your old product helps to prevent potential negative consequences for the environment and human health.



Your product contains batteries covered by the European Directive 2006/66/EC, which cannot be disposed with normal household waste. Please inform yourself about the local rules on separate collection of batteries because correct disposal helps to prevent negative consequences for the environmental and human health.



Your product is designed and manufactured with high quality materials and components, which can be recycled and reused.

CE logo.

The logo informs that the receiver
 conforms to the terms and conditions of Directive 2004/108/EC concerning observance by Member States of provisions regulating electromagnetic compatibility, and to the terms and conditions of Directives 2006/95/EC concerning observance by Member States of provisions regulating low voltage electricity and safety with relation to the handling and operation of electrical equipment.

Hereby Ferguson Sp. z o.o., declares R&TTE that the device is in compliance with the essential requirements and other provisions relevant of Directive 2014/53/EC. You can find the Declaration Conformity on of www.deklaracje.ferguson.pl This product has been designed, tested and manufactured according the European R&TTE directive 2014/53/UE

Double insulation logo.

This logo informs that the receiver is an electrically safe device, provided that it is used in accordance with the recommendations set forward in the chapter concerning safety.



#### Hot surface mark

CAUTION: HOT SURFACE. DO NOT TOUCH. The top surface over the internal heat sink may become hot when operating this product continuously. Do not touch hot areas, especially around the "Hot surface mark" and the top panel.



When this logo is attached to a product, it means a financial contribution has been paid to the associated national recovery and recycling system.

# **BASIC INFORMATION ABOUT THE RECEIVER**

# 1. Main features

- ✓ Reception of UHD (ultra high definition channels), HD
- ✔ HDMI 2.0,
- ✓ Availability of programmable timers
- ✓ Separate lists of favourite, TV and Radio channels
- ✓ Quick channel search function (QuickFind)
- ✓ Teletext and on-screen captions
- ✓ DiSEqC 1.0, 1.1 and DiSEqC 1.2, USALS
- ✔ MPEG-2, MPEG-4, MPEG-4 AVC/H.264/H.265 standards
- ✓ Compatible with DVB-S/S2, DVB-T/T2 and DVB-C systems (depending on model)
- ✓ Card reader for pay-per-view television
- ✓ Common Interface (depending on model)

# 2. Contents of box

Unpack the receiver and check whether all of the following elements are present

- ✓ 1 x remote control unit
- ✓ 1 x instruction manual
- ✓ 1 x receiver

## 3. Important instructions concerning handling of the receiver

The screen menu (OSD) simplifies operation of the receiver and has made it possible to reduce the number of keys on the remote control. All of the functions are displayed on the screen and may be controlled by means of a small number of keys. Common functions have been connected in one "MENU". The selected function is coloured. Depending on the selected option, various "function keys" are displayed: red, yellow, green, blue and white in the form of graphics and descriptions. The colours represent various functions in individual "Menus". The selected function is activated by pressing a key on the remote control unit. The so-called function keys are active only when in the appropriate field there is information about it. The user interface makes it possible to navigate within a menu and between functions in a number of different ways. Certain buttons on the remote control allow direct access to functions. The buttons are multi-functional, i.e. their functions depend on previously activated elements.



**NOTE:** Please keep in mind that new software may change the functionality of the receiver. Photographs and descriptions included in the instruction manual are for informational purposes only. If you should notice an error, please report it - we shall make every effort to have it rectified.



# 4. Remote control

Using the universal RCU660 remote control

RCU660 is 5 in 1 universal remote control is suitable for TV sets, A/V receivers, tuners, BD/DVD players, CD players, DVR players, various STBs (satellite, cable, terrestrial, IPTV), amplifiers and other devices from common manufacturers. The universal remote control can execute basic device functions.

# **Button description**

	<b>Power</b> button turns on the device or sets it in standby mode. Blue LED flashes to show that button is pressed.	tv stb aux dw st 30 <sup>c</sup> 2 3 <sup>c</sup> s <sup>tu</sup> 4 <sup>tu</sup> 6 <sup>tu</sup> 6 <sup>tu</sup>
	Ferguson Ariva 4K STBs. It is not possible to setup another code set and/or use learning function.	4 5 6 $q_{0}^{0}$ $u^{V}$ 8 $q^{0}$ 9 info $u^{2}$ 0 guide
tv stb aux dvd	<b>Device</b> buttons can be used for device of your choice. You can setup any code set and/or use learning function.	
1, 2, 3, 4, 5, 6, 7, 8, 9, 0	Select particular channel number on a channel list. Enter numeric values. enter the device code during set up	vol vol text audio sub fin
vol	Used to change the volume level higher ( <b>vol+</b> ) or lower ( <b>vol-</b> ).	
	Switches the sound on and off.	F1 F2 F3 F4
+ ch − Het	Switches to the next ( <b>ch+</b> ) or previous ( <b>ch-</b> ) channel/chapter/file.	
find	Learn a new code from original remote control	
other buttons	Depends on your device	

uide

## Installation of batteries

Remove the cover of the battery compartment on the rear panel of the remote control unit; slide it downwards and put it aside. Insert two AAA (R03) batteries into the compartment, observing the indicated polarity. **Do not mix old and new batteries, or batteries of different types.** Replace the battery compartment cover. Slide it upwards until it locks in place.

# Note:

• If the LED's become dim; please replace the batteries.



CEZ

## Set up device via auto search

1. Switch on the device that you like to control.

- 2. Point the remote control at your device. Press and hold down the **device** button (e.g. TV) for 5 seconds. The LED turns on and after a moment LED start flashing, that means RCU660 is in auto search mode and you can release **device** button.
- 3. The "Volume+" signal is automatically transmitted from the remote control to the device (code scan). As soon as the volume of the device (e.g. TV) changes, immediately press **device** button to stop the auto search.

If the device you are searching for is a CD player, Tuner, TAPE, or AUX then "Power" (instead of "Volume+") signal is automatically transmitted from the remote control to the device. As soon as the device turns off, press **device** key to stop the search. You need to turn on the device by **Power** button before you check other button function.

4. Check the function of the other buttons on the remote control. If none of the buttons function (i.e. the search was not be stopped in time) or the majority of the buttons do not function correctly, restart the search (see steps 2 to 4) to find a suitable code. If the majority of the buttons function correctly, set-up has been successful. Re-press the **device** button (e.g. TV) to save the code and to terminate the set-up mode.

## Note:

- Entering the auto searching mode, it will search forward from the current code.
- Sometimes, remote control does not work properly just because auto search was not stopped in time. In this case, just enter into manual search again, and press **Vol** button approx. every 1.5 seconds to search backward the code database.
- If you are not satisfied with certain buttons assignments, or some functions are missing, then you can use additionally learning function.

# Setup device via brand name code

- 1. Switch on the device that you like to control.
- 2. Find the code number of your device brand in the code list (e.g. Ferguson 1244) from the relevant device group (e.g. DVB-T).
- 3. Press and hold the **device** button (e.g. AUX) for three seconds. Release the device button as soon as LED lights up, now it is in set up mode.
- 4. Enter the 4-digit device code (e.g. 1244 for Ferguson DVB-T) within 10 seconds. If an entry is not made within 10 seconds, the set- up mode is automatically terminated.
- 5. The LED turns off if the remote accepts the code. If the LED flashes three times, that means the code may be wrong, and the remote control remains in set-up mode, enter the correct code from the list again in good time.
- 6. Check the function of the buttons on remote control. If it does not function correctly, try another 4-digit device code from the list under the same brand. Repeat steps 3 to 6 until all the basic functions operate correctly.
- 7. Exit the set-up mode by pressing the **device** button.

# Note:

- If you are not satisfied with certain buttons assignments, or some functions are missing, then you can use additionally learning function.
- mode is automatically terminated if no button is pressed for 10 seconds.

# Setup device via manual search

- 1. Switch on the device that you like to control.
- 2. Point the remote control at the device. Press and hold down the **device** button (e.g. TV) for 5 seconds. The LED lights up and the remote is in manual set-up mode, release the device button now.
- 3. Press the Vol+ button approx. every 1.5 seconds.
- 4. As soon as the volume of the device (e.g. TV) changes or the device turns off, check whether the other buttons on the remote control function correctly. If the majority of the buttons does not function correctly, press the Vol+approx. every 1.5 seconds to initiate the reactive code (manual search is continued, see steps 3 to 4).
- 5. If the majority of the buttons on the remote control functions correctly, save the code by pressing the **device** button (e.g. TV) to terminate the manual search.

# Note:

- If you are not satisfied with certain buttons assignments, or some functions are missing, then you can use additionally learning function.
- Sometimes, remote control does not work properly just because manual search was not stopped in time. In this case, just enter into manual search again, and press Vol- button approx. every 1.5 seconds to search backward the code database.
- The Manual Search is automatically terminated if no entry occurs during 30 seconds period.
- Manual search mode, search forward from the current code.

# Learning Function

The learning function is used to extend the pre-programmed codes. The standard code list already provides you with the most important functions, but it is possible to add a few additional functions. A fully functional original remote control is required for learning programming.

Please use fresh batteries for both the Learning Remote Control and the Original Remote Control.

- 1. Press down and hold the **device** button which you wanted to learn (e.g. BD player), and press **find** button at the same time, when LED turns on then release the both pressed keys, now remote control is in learning mode for BD codes.
- 2. Point the IR transmitter of the original remote control remotes face to the IR receiver of your RCU660 remote by approximately 30 mm apart. Keep two remotes at the same straight line to make the learning process more accurate.

- 3. Press and release the target button on your RCU660 remote control which you want to learn (e.g. **info**), the LED starts to flash.
- Press the one button (For example, info button) from your original remote control, when you see LED on new representation of the provided of the

- 5. Repeat step 3 to 4 to learn another code from original remote control.
- 6. When you finish learning all buttons you want to have, press **find** button to store all commands you have learnt from original remote and exit from Learning remote.

# Note:

- You can learn limited set of buttons on RCU660. Available buttons are shown on the image.
- When you can not choose any more RCU660 buttons for learning, it means that remote memory is full (RCU660 has limit for total 60 buttons).
- The learning mode is automatically terminated if no entry occurs during 14 seconds period.
- Press **TV** button and Number **6** button can delete all codes you have learnt for all devices.

# Display device code

- 1. Press and hold the **device** button, simultaneously press button **1** to display the thousands of the 4-figure code. Count how often the LED flashes, if the LED does not flash, then the number is zero.
- 2. Press and hold the **device** button, simultaneously press button **2** to display the hundreds of the 4-figure code.
- 3. Press and hold the **device** button, simultaneously press button **3** to display the tens of the 4-figure code.
- 4. Press and hold the **device** button, simultaneously press button **4** to display the ones of the 4-figure code.

For example for code 0169 for TV:

- 1. Press TV and 1 LED flashes Zero time
- 2. Press TV and 2 LED flashes One time
- 3. Press TV and 3 LED flashes Six times
- 4. Press TV and 4 LED flashes Nine times

**Reset / Delete Function** 

Just simply press TV button and Button 0 together, when LED flashes three times, now all settings will be deleted, and remote go back to factory default settings.

# 5. Front panel



# \*illustrative photo



# \*illustrative photo

CA: Socket for a subscriber's card – always insert with the chip facing down!

# 6. Rear panel



# \*illustrative photo

Depending on your receiver has inputs / outputs as shown below:

- ANT IN (depending on model)
- LNB IN
- USB
- AV
- Ethernet
- HDMI 2.0
- OPTICAL
- USB
- Recovery Swtch
- MICRO SD Card Reader

# 7. Connecting the satellite antenna

In order to check the correctness of connection of external equipment, for example a satellite antenna or converter, read the installation manual or hire a professional technician!

Good reception is conditional on the precise placement of the antenna. Even the best antenna will cause reception problems if it is incorrectly adjusted. Even slight placement errors may render reception impossible or considerably impair image/sound quality. Before installation make sure that the location is suitable. The proper direction may be initially determined by making a comparison with other antennas. There should be no objects directly in front of the antenna, for these may block the signal from reaching the bowl! Once you select an optimal location for the antenna, fix and adjust it initially, and then proceed to a precise adjustment. Each antenna is fitted with regulating screws that make it possible to correct its vertical and horizontal placement.

Adjusting is somewhat more difficult in the case of digital tuners. You cannot perform adjustments on the basis of the image, because this appears with a certain delay. What is more, the indicators available in the settings menu also act with a delay, and therefore adjustment may take considerable time and be very imprecise. An antenna signal meter will be indispensable for setting up the antenna. The meter must be connected to the antenna cable between the converter and the receiver. This will confirm the presence of a voltage that switches the converter from the tuner and show the signal strength for individual satellites. We strongly recommend hiring a professional technician!

## 7.1 Connecting an antenna system with a positioner

USALS type positioners manufactured by Stab will guarantee the correct operation of your Ferguson receiver. In order to connect an antenna system to a USALS positioner, you should connect the positioner out to the LNB IN of the Ferguson receiver. The role of the positioner installed between the mast and the antenna is to turn the bowl in such a way as to ensure that it is directed to various satellite positions.



The USALS function considerably simplifies configuration of the antenna. The Ferguson receiver requires that you enter the geographical coordinates of the antenna in order to automatically calculate the angle of revolution of the motor for individual satellites. The receiver activates the positioner automatically and turns the antenna to the selected satellite. When a signal is locked on, you should precisely adjust the antenna's elevation and azimuth settings in order to optimise signal reception. When correcting the azimuth, the entire antenna

assembly and positioner revolve with respect to the mast. If initially the antenna was not directed precisely south, you can correct this now. When you have finished with the first satellite, all other satellites will be remembered automatically, provided that you have introduced their satellite position values correctly.

Without the USALS function, programming of the system is much more difficult. To this end you should use the DiSEqC 1.2 function, which turns the antenna to the selected satellite in a nearly identical manner. Since, however, it does not take into consideration the local geographical coordinates, the movement is effected on the basis of the prime meridian and the equator. Therefore it is necessary to introduce corrections separately for each satellite. Due to these difficulties, manufacturers of DiSEqC 1.2 positioners frequently provide useful software on their websites, using which you can easily calculate the location of the satellite.

## 8. Connecting the terrestrial antenna (Combo models only)

There are no special antennas for DVB-T. For collection of digital television, the same antennas as analog TV reception. There is no need to change the antenna system. It is worth to check the quality and condition of the plant, which has so far been used for analog TV reception. Reception problems can be weathered with old antenna systems, or grid antennas. It is recommended to use directional antennas with signal amplifier, depending on the particular situation you may also establish impedance transformer. Indoor antenna may be used only in areas with high signal intensity.

### 9. Connecting the receiver

The following illustrations show cable connections for a television and other devices connected with the receiver. If you require any assistance in connecting individual devices, contact your local technician. Before connecting or altering cabling, disconnect the receiver from the mains !!!

**Note:** Availability and type of connection depends on your receiver model! Not all of the connections are applicable for your receiver!

### 9.1 Connection by means of an HDMI cable (recommended)

- 1. Connect the antenna to the LNB IN socket of the receiver.
- 2. Connect the HDMI to the receiver out and the television in.

Connection by means of an HDMI cable allows you to obtain the highest image quality.



If you have an amplifier with an HDMI out and in, which supports sound sent over HDMI, connect the devices by two HDMI cables. As in the following figure: one cable to the amplifier, and the other from the amplifier to the television set.



## 9.2 Connect composite port

- 1. Connect LNB IN port on a receiver to a satellite dish.
- Connect the video and audio by means of three cinch cables to the television set. One cable, colored yellow used to send video. The two remaining cable, red and white, are used to connect sound (right and left channel).



## 9.3 Connection of an audio system

• Digital sound (including surround sound, if broadcast) can be obtained from two sockets: optical SPDIF.



#### 9.4 Connection of an external memory

1. The receiver supports all types of hard disk drives in housings that are equipped with an independent power supply. The sole condition is that the hard disk has to have a single basic partition that is formatted in the NTSF (recommended) or FAT32 system.





External hard disk drives should be autonomously powered, since the built-in USB port is unable to provide sufficient power

Only one of the three USB ports can be used to connect external memory without power supply at the same time!!!

#### 9.5 Micro SD card mount:



Socket for a Micro SD card – make sure the gold side of the memory card is facing down.

#### 9.6 Internal HDD mount:





We recommend that you regularly archive data on your PC computer. A large number of files with recordings may slow down cooperation with the receiver (slow loading of the file list).

# 9.5 Connection to the LAN local network

## 1) wired

In order to connect the receiver to a local network, use an RJ45 cable.



#### 2) wireless

The receiver can be connected to the local network Wifi in both 2.4GHz and 5GHz. There is no possibility of the simultaneous use of two frequencies.



We recommend that you restart the receiver whenever the network settings are changed.

The android does not allow simultaneous use of the cable connection and WiFi. One of them should be off to the second work

#### **FIRST STEPS**

- 1. Insert the plug of the receiver and other additional devices to a wall socket.
- 2. Select AV signal source of your television set.

3. The satellite receiver is no supplied with reinstalled television channels. We suggest the use of the Fast Scan function as a basis to create your own list of channels.

**Note:** check all of the connections, i.e. antenna cables, audio and video signal cables, before connecting the receiver to the mains!

#### INFORMATION ABOUT THE USER MENU

The user interface allows you to use numerous settings and receiver functions. Some buttons on the remote control unit enable direct access to functions of the device. Certain of these buttons have been described, for example Guide, MENU, OK, or coloured for ease of usage. Other buttons are multi-functional and their operation depends on the type of device selected by the user. Hereunder we have presented a brief description of how to use certain device functions available through the user menu.

1. The up/down arrow keys on the remote control are used to move the cursor up and down on the menu.

2. The left/right arrow keys on the remote control are used to move the cursor left and right, and to switch on submenus

3. The OK button is used to enter submenus.

4. The BACK button is used to exit menus or functions.

5. When using a submenu, the OK button is used to confirm your selection; a green background informs that a function is active.

#### **10. First Installation Guide**

First installation guide helps you to choose prefer menu language, HDMI output resolution, screen size and configure internet connection through Ethernet or Wi-Fi.



#### Search Digital Satellite TV

DTV First Installation helps you to search digital Satellite TV/Radio channel automatic. Setup Aspect ratio output, subtitle and then choose next button to scan satellite TV/Radio channel.

Choose Satellite and configure LNB parameters and then press Blue button to search channel automatic.

Insta	llation					
Satellite	9		Eutelsat 3B/Rasco	m QAF 1	R (3.1E C-band)	
1	3.1E	Eutelsat 3B/Rascom QAF 1R (3.1E C-b	SAT	•	telsat 3B/Rascom QAF 1R (	•
2	3.1E	Eutelsat 3B/Rascom QAF 1R (3.1E Ku	ТР	•	3649 /V/ 2741	•
3	4.9E	Astra 4A/SES 5 (4.9E C-band)	LNB Type	•	5150/5750	•
4	4.9E	Astra 4A/SES 5 (4.9E Ku-band)	Increase LNB voltage	•	Off	•
5	7.0E	Eutelsat 7A/7B (7.0E Ku-band)	SatCR	•	Off	•
6	9.0E	Eutelsat 9A/Ka-Sat 9A (9.0E Ku-band)	LNB Power	•	13/18V	•
7	10.0E	Eutelsat 10A (10.0E C-band)	22KHz	•	Auto	•
8	10.0E	Eutelsat 10A (10.0E Ku-band)	ToneBurst	•	None	•
9	13.0E	Eutelsat Hot Bird 13B/13C/13D (13.0E)	DiSEqC1.0	•	None	•
10	16.0E	Eutelsat 16A (16.0E Ku-band)	DiSEqC1.1	•	None	•
11	17.0E	Amos 5 (17.0E C-band)	Motor		None	
Strengt	h ———	0%	Quality		0%	
F1 SAT/	TP Edit				Scan	

# 10.1 CAM application first run (required)

After first run of receiver it is required to run CAM application one time manually.

Please ensure that card is clean and put in card reader chip side down.

In main menu choose: Applications

Next choose CAM application icon and press OK

You should see window as bellow

Now you have to wait about 20 seconds. System will read all card parameters. From now on the application will start automatically every time you boot your device.



## **10.2 Updating CAM application**

- a) Download last version of CAM application (file name \* apk)
- b) Choose from main menu: Settings  $\rightarrow$  Applications  $\rightarrow$  Choose current CAM and app data
  - $\rightarrow$  Delete  $\rightarrow$  OK

c) Next choose Uninstall  $\rightarrow$  OK  $\rightarrow$  OK

d) Go back to main menu and choose Applications  $\rightarrow$  appInstaler  $\rightarrow$  choose memory drive where new cam file was saved (\* apk)  $\rightarrow$  choose it and press OK. Next follow installation by pressing OK

e) After installation is done choose OPEN application to run it.

#### Instructions and video tutorials can be found on:



## 11. Watching Live TV

Enjoy TV after search TV channel. Uses the VOL+/VOL- button to control the volume output. Uses the CH+/CH- to change the channel.



Press OK button to show channel list and choose channel. You could Sort channel by alphabet, FTA(Free To Air)/CAS(Scrambled), HD/SD etc.. You could also find channel quickly or filter channel by group in channel list.



#### **DTV Menu**

Press MENU button 🖃 to display DTV menu for more option. You could choose subtitle, audio track, turn on TELETEXT, add channel to Favorites group etc...



### 11.1 PVR (Personal Video Record)

The Ferguson Ariva 4K support instant PVR, timer PVR and GUIDE booking PVR. Please configure the storage device in DTV settings before start PVR. You could record your prefer live TV program to external USB storage and playback anytime anywhere. Press REC button again to open menu for change default recording duration. You could also change the default recording duration in DTV settings menu.



# **11.2 Recorded Files**

The user could manage recorded files; you can delete the files you've recorded by pressing the RED key.



#### 11.3 Time-Shift

This function is available only when an external USB memory device is correctly connected!!!

The time shift mode allows the user to control the television broadcast by "pausing" and then resuming it from the same point. From the moment you switch on the time shift mode, the Ferguson receiver will constantly record the signal from the satellite in a buffer. The buffer is created automatically on the external USB memory device.

#### Pausing the television broadcast

#### 1. Press PAUSE

2. The time elapsed bar will now be visible on the screen

3. Press the **PLAY** button in order to resume the television broadcast. The Ferguson receiver continues to record the television broadcast when viewing the previously broadcast programme.

Keep in mind that during buffer playback, the information bar may be hidden by means of the BACK button. In order to restore the bar, press PAUSE/PLAY again.



#### 11.4 INFO

Press information button to show present/following GUIDE when watching TV. Press information twice to show the detail information about present program.



## 11.5 GUIDE

Press the GUIDE button to show the 21 days GUIDE menu. Press Left/Right, Up/Down key to look for GUIDE in the next 21 days, press blue button to reserve play program or record program. Press OK key to get detail information of the program.

GUIDE					159.0	DW (Deutsch) 09/22/2015 18:28:27	
09/22 Tuesday	09/23 Wednesday	09/24 Thursday	09/25 Friday	09/26 Saturday	09/27 Sunday	09/28 Monday	
18:15~18:30	Wirtschaft						
18:30~19:00	Euromaxx	Nahaufnahme		_	G	•	
19:00~19:03	DW Nachrichten	Dec Miller and	en Ministerne en Minister			1	
19:03~19:15	Wirtschaft	Das Marchen von de Industrie E-Autos br	Das Marchen von der ElektromobilitätWie Politik und Industrie E-Autos bremsen Sie sind leise, sauber und gut				
19:15~19:45	Nahaufnahme	Zukunft. "Elektromo vom Öl zu werden".	Zukunft, "Elektromobilität, das ist die Chance, unabhängig				
19:45~20:00	Shift	Es geht um viel: Um Arbeitsplätze und um die Zukunft der Automobilbranche in Deutschland. Die deutsche Autoindustrie fährt weltweit vorne weg und sieht sich auch bei der Elektromobilität auf der Überholspur.					
20:00~20:03	DW Nachrichten						
20:03~21:00	Markus Lanz	Norhert Reithofer A	ufsichtsratschef de	Pr BMW AG spricht			
21:00~21:30	DW Nachrichten			1			
21:30~22:00	Kick off!						
9K Detail	-	34-	сн+	Canguage	•	Timer	

#### Timer

Ferguson Ariva 4K could helps you to record your prefer program automatic anytime with timer feature. You can choose what time to start recording and the duration time. Before this, of course, you must ensure your USB/SD card/ hard drive is connected to the receiver and its storage capacity would be sufficient to store the recorded TV programs.

Tin	ner						
	NO.	Starts 09/22/2015 18:30	Duration(Min) 30	A A	Actions	Channel DW (Deutsch)	Repeat
	002	09/22/2015 19:03	12	V	Watch	DW (Deutsch)	Once
				A	dd Timer		
			Actions	•	Record	- • • •	
			Repeat	•	Once	•	
			Starts	Γ	09/22/2015 18	:40 ]	
			Duration(Min)	Γ	180	]	
			Channel	Γ	DW (Deutsch)		
			ок		Can	icel	
			-	Delete	C Add		

# 11.7 Channel Manager

Channel manager support delete channel, move channel, hide channel, lock/unlock channel and rename channel. You could add your prefer TV/Radio channel to variety favorites group. The default password of channel manager is 0000. All channel manage operation are available in on one page.



## **11.8 DTV Settings Menu**

DTV Settings Menu is design for professional configures global parameters of DTV application. You could setup some global settings were illustration as below.

- 1) AV output Settings
- 2) Default Languages --- Helps you to setup default Subtitle language, TELETEXT language and Audio track.
- 3) OSD Settings --- Helps you to setup DTV OSD settings.
- 4) Parental Control --- Parental control feature helps to block the TV program that you don't allow your children to watching it alone.
- 5) DB Management --- Helps you to backup TV/Radio channel list to external USB Storage or restore TV/Radio channel list from external USB storage.
- 6) PVR Settings --- Helps you to setup which external USB storage for PVR and Time-Shift. You could also turn on/off auto Time-Shift feature in this menu.
- 7) System Settings --- Helps you to check the version number of the DTV application, reset DTV application to factory settings.



## 11.9 Installation

Installation feature in DTV menu helps professional search satellite TV/Radio channel manually. You could configure LNB parameters(LNB Type/DisEqC1.0/1.1/Motor) and manage Satellites/TP list in installation menu.

Install	ation					
Satellite	_		Telstar 18 (138.0E	Ku-banc	))	-
110	125.0E	ChinaSat 6A (125.0E)	SAT	•	Telstar 18 (138.0E Ku-band)	•
111	128.0E	JCSAT 3A (128.0E C-band)	TP	•	12272 /H/ 33333	•
112	128.0E	JCSAT 3A (128.0E Ku-band)	LNB Type	•	9750/10600	•
113	132.0E	JCSAT 5A/Vinasat 1/2 (132.0E C-band)	Increase LNB voltage	•	Off	•
114	132.0E	JCSAT 5A/Vinasat 1/2 (132.0E Ku-ban	SatCR	•	Off	•
115	134.0E	Apstar 6 (134.0E C-band)	LNB Power	•	13/18V	•
116	134.0E	Apstar 6 (134.0E Ku-band)	22KHz	•	Auto	•
117	138.0E	Telstar 18 (138.0E C-band)	ToneBurst	•	None	•
118	138.0E	Telstar 18 (138.0E Ku-band)	DiSEqC1.0	•	1/4	•
119	140.0E	Express AM5/AT2 (140.0E C-band)	DiSEqC1.1	•	None	•
120	140.0E	Express AM5/AT2 (140.0E Ku-band)	Motor		None	
Strength		42%	Quality		86%	
F1 SAT/TF	P Edit				Scan	

# 12. Install APP from Google Play Store

Press Home button to show home page and go to All APPs menu to launch Google Play Store.



Login to the Google Play Store with your account and then you could install your prefer APP for entertainment on your TV set.



#### **12.1 Customize your launcher**

You could add your prefer APP to home page and launch it quickly. Press Home button to show launcher and choose + icon by press OK button and then your could add your prefer APP to the home page.



You could delete APP shortcut from home page or uninstall the APP by press menu button when you move the cursor to the APP shortcut icon.



## 12.2 Miracast/Airplay/DLNA

The Ferguson Ariva 4K support Miracast/Airplay/DLNA, means you could share your Android Phone/iPhone screen to the TV set or share video/music/picture from your Android Phone/iPhone, Android Pad/iPad to the TV set through Ariva 4K. Launch S Link to start Miracast receiver and mirroring your Android Phone/Pad screen to the TV set. Compatible Miracast smart phone are Google Nexus Phone, LG Android smart phone, HTC Android smart phone, Sony Android smart phone etc...



#### NesTV brings new Entertainment Experience

Download NesTV APP from Google Play Store on your mobile phone and connect to the same Wi-Fi with the The Ferguson Ariva 4K. You could enjoy NesTV brings you new entertainment experience.

- 1) Control the STB on smart phone
- 2) Watching live TV on smart phone
- 3) Manage channel list on smart phone
- 4) Share video/music/photo to big TV screen from smart phone



Please download NesTV from Google Play Store or iOS APP Store with a QR code:





iOS APP Store

Google Play Store

#### 13. System Settings and upgrade

System settings and upgrade helps you to setup the Ferguson Ariva 4K in advance settings such as video/audio output, network connection, Bluetooth etc...

#### **System Settings**

You could open system settings menu from Launcher by choose Settings icon and press OK button. You could setup Network, Bluetooth, Video/Audio output, Language etc...

Choose More Settings to open Android system settings for advance settings. Although the media box supply System settings for configure it in advance settings mode, we don't recommend the user configure the media box without skillful master.



#### 13.1 System upgrade

Ferguson Ariva 4K could be upgraded through USB/SD card storage and OTA. You might see online update notification on the home page when new software available on internet. Click notification to download new software and upgrade the media box.



### Upgrade from USB/SD

You could download the new version from our customer service website and upgrade the media box through USB/SD card storage. Go to Settings--->About--->Upgrade--->Local update.



Choose the upgrade package from USB/SD card storage to update the media box.

🔉 Update	
DVBRecordFiles	
201508261958.zip	82.52 MB
repository.hdpfans.xbmc-addons-chinese.zip	50.96 KB
SD6BF30A_SF001-20150917-ota-v01.04.937.zip	428.20 MB
SN6B4AA_EU078-20150918-ota-v01.04.348.zip	326.48 MB
Android-APP-Store	
Selevision	
C Moi-dom.tv Android	



It is recommended to update from USB.

#### **GLOSSARY OF TERMS**

**CA - Conditional Access** – a coding system used in order to protect transmitted data against unauthorised access. Access to protected channels is available only to subscribers.

**CAM - Conditional Access Module** – an electronic device, usually fitted with card slots, that allows access to coded pay-per-view channels on a receiver equipped with a CI socket.

**CI** - **Common Interface** – CI sockets of digital receivers are used for the installation of CAM conditional access modules, and thus allow you to view coded pay-per-view channels through these modules.

**DVB-S** the Digital Video Broadcasting standard that defines modulation and error correction in satellite transmissions. In DVB-S, both the MCPC and SCPC modes can be used by the operator to transmit channels. MPEG-2 is used as the transport stream.

**Guide - Electronic Programme Guide** – a service that displays detailed information about current and future programmes on the television screen.

**FTA - Free-to-air** – uuencoded radio and television channels that may be received on any television set.

**LNB - low-noise block converter** – a converter – it converts satellite signals, and then sends them to the tuner through a coaxial cable. The basic parameters are: gain, noise factor and power consumption.

**MCPC - multiple channels per carrier** – more than one signal (channel) is transmitted on a given frequency (transponder). All of these channels comprise a single data stream, which is transmitted on one frequency following modulation.

**Monoblock** – a device that comprises two converters and a DiSEqC switch in a single housing, which receives signals from two satellites on similar orbits.

**Pay-TV** – Pay-per-view digital television, to which only subscribers have access. The service is provided by satellite, cable, over the ground or through the network.

**SCPC** - Single channel per carrier – only one signal (channel) is transmitted over a given frequency (transponder).

**STB - Set-top box** – an electronic device connected to the television set, which processes the signal received from the ground-based, cable or network satellite antenna. It enables the playback of video and sound.

**TP** - **Transponder** – a type of wireless communication device (transmitter), which automatically receives, modulates, strengthens and responds to a signal coming in real time over a specific frequency. The term is derived from the words "transmitter" and "responder". Usually, each transponder transmits numerous compressed digital channels.

**DiSEqC - (Digital Satellite Equipment Control)** a communication protocol, used between a satellite receiver and equipment such as switches or positioners, which supports switching between television signal sources and antenna control.

**USALS – (Universal Satellites Automatic Location System)** – a communication protocol used between satellite receivers and positioners, which makes it possible to control the positioner through the receiver. Used in connection with the DiSEqC 1.2 protocol.

**UHD** - also called 4K, refers to a display device or content having horizontal resolution on the order of 4,000 pixels.

**h.265** - video compression standard, one of several potential successors to the widely used AVC (H.264 or MPEG-4 Part 10). In comparison to AVC, HEVC offers about double the data compression ratio at the same level of video quality, or substantially improved video quality at the same bit rate.

# Device Brand Code List Kody urządzeń Geräte-Hersteller-Code Liste Marcas de dispositivos: Lista de códigos

Longer list of models can be downloaded from <u>ferguson-digital.eu</u> Dłuższą listę modeli można pobrać z <u>ferguson-digital.eu</u> Langer Liste der Modelle können aus <u>ferguson-digital.eu</u> heruntergeladen werden. Longer list of models can be downloaded from <u>ferguson-digital.eu</u>

Ferguson:		
RCU/device Pilot/urządzenie RCU/Gerät mando a distancia/ dispositivo	code kod Kode código	product cathegory Kategoria urządzenia Produkt Kathegorie categoria de producto
RCU-500 RCU-540	1251	STB DVB-S2
RCU-200 RCU-240	1244	DVB-T, DVB-T2
RCU-580	1246 1250	DVD
RCU150	1247	HDplayer
RCU310	1245	HDplayer
AV-770	1248	Tuner

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AEG	0057 0083 0056
AIWA	0056 0643
AKAI	0006 0015 0016 0041 0045 0050 0051 0052 0035 0061 0083 0057 0056 0101 0038 0106 0504 0505 0507 0508 0532 0538 0539 0544 0586 0178
AMSTRAD	0035 0041 0049 0051 0056 0083 0057 0111 0503 0507 0508 0520 0538 0539 0540 0568
BANG & OLUFSEN	0000 0501
BARCO	0000 0010 0560
BAUER	0064 0056 0042
ВЕКО	0021 0034 0036 0038 0057 0056 0085 0063 0506 0542 1094
BIAZET	0056 0002
BLAUPUNKT	0014 0015 0024 0026 0057 0059 0503
CARREFOUR	0057 0056 0517
CASIO	0057
CLATRONIC	0057 0503 0507 0508 0520 0526 0532 0542
DAEWOO	0006 0016 0050 0051 0052 0055 0056 0062 0063 0079 0081 0086 0087 0096 0057 0507 0532 0128 0129 0132 0135 0562 0595 0616
DELL	0516
ECHOSTAR	0051 0056 0006

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0035         0111         0112         0540         0510         0511         0575         0148         0607         0528         0529         0128         0130         0133         0542         0568         0574         0575         0148         0605         1078           LG         0007         0008         0009         0016         0006         0017         0523         0128         0128         0129         0132         0134         0543         0135         0549         0565         0145         0146         0586         0624           LOEWE         0000         0043         0056         0532         0556         0550         0551         0558         0571         0586         0571         0586         0591         0598         0599         0600         0601         057         0528         0530         0550         0562         0571         0586         0591         0598         0599         0600         0600         0601         0643         0686         0591         0588         0501         0517         0506         0517         0536         0511         0537         0590         0500         062         0605         051         0517         0536		0033 0045 0080 0060 0062 0068 0069 0074 0083 0002 0057
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LOEWE         0000 0043 0056 0065 0501 0532 0586 0177           MARANTZ         0056 0532 0586           MEDION         0057 0085 0081 0056 0503 0507 0509 0523 0529 0530 0127 0129 0538 0553 0556 0562 0571 0586 0591 0598 0599 0600 0601 0602 0603 0607 0643 0081 0176 0182 1001 1073           MITSUBISHI         0000 0056 0005 0015 0024 0033 0038 0050 0051 0060 0057 0109 0501 0517 0520 0532 0534 0551           NAD         0060           NEC         0024 0051 0005 0054 0082 0072 0057 0039 0059 0050 0062 0056 0517 0536 0591 0183           NISSAN         0053           NOKIA         0056 0049 0083 0035 0521 0147           NORDMENDE         0002 0010 0011 0012 0013 0037 0040 0063 0067 0056 0083 0057 0085 0501 0515 0527 0528 0532 0559 0570 0571 0574 0172           ORION         0005 0041 0049 0051 0059 0063 0056 0021 0057 0016 0038 0056           PACKARD BELL         0597           PANASONIC         0026 0047 0075 0084 0002 0038 0106 0107 0108 0054 0114 0537 0569 0579 0580           PHILIPS         0000 0006 0016 0018 0025 0026 0046 0071 0073 0076 0078 0094 0097 0099 0057 0056 0150 1110 0501 0511 052 0526 0532 0542 0545 0559 0562 0586 0674 0124 0125 0126 0128 0132 0143           PIONEER         0051 0049 0041 0056 0006 0021           RADIOSHACK         0060 0057 0056           RCA         0521           SABA         0011 0013 0011 0012 0113 0016 0028 0031 0037 0404 0056 0063 0002 0501 0527 0528 0559 0568 0570 0571 0574 0616		0132 0134 0543 0135 0549 0565 0145 0146 0586 0624
MARANIZ         0056 0532 0586           MEDION         0057 0085 0081 0056 0503 0507 0509 0523 0529 0530 0127 0129 0538 0553 0556 0562 0571 0586 0591 0598 0599 0600 0601 0602 0603 0607 0643 0861 0174 0176 0182 1001 1073           MITSUBISHI         0000 0056 0005 0015 0024 0033 0038 0050 0051 0060 0057 0109 0501 0517 0520 0532 0534 0551           NAD         0060           NEC         0024 0051 0005 0054 0082 0072 0057 0039 0059 0050 0062 0056 0517 0536 0591 0183           NISSAN         0053           NOKIA         0056 0049 0083 0035 0521 0147           NORDMENDE         0002 0010 0011 0012 0013 0037 0040 0063 0067 0056 0083 0057 0085 0501 0515 0527 0528 0532 0559 0570 0571 0574 0172           ORION         0005 0041 0049 0051 0059 0063 0056 0021 0057 0016 0038 0056           PANASONIC         0026 0047 0075 0084 0002 0038 0106 0107 0108 0054 0114 0537 0569 0579 0580           PHILIPS         0000 0006 0016 0018 0025 0026 0046 0071 0073 0076 0078 0094 0097 0099 0057 0056 0105 0110 0501 0513 0525 0526 0532 0542 0545 0559 0562 0586 0674 0124 0125 0126 0128 0132 0143           PIONEER         0057 0092 0093 0013 0046 0532 0132 0133 0574 0576 0586 RADIOSHACK         0060 0057 0056           RCA         051         0049 0041 0056 0006 0021           SABA         0001 0003 0010 0011 0012 0013 0016 0028 0031 0037 0040 0056 0063 0002 0501 0527 0528 0559 0568 0570 0571 0574 0616           SAMSUNG         0004 0006 0007 0008 0366 0045 0049 0051 0052 0053 0056 0058 0599 0660 0070 0016 0077	LOEWE	0000 0043 0056 0065 0501 0532 0551 0586 0177
MEDION         0057 0085 0081 0056 0503 0507 0509 0523 0529 0530 0127           0129 0538 0553 0556 0562 0571 0586 0591 0598 0599 0600           0601 0602 0603 0607 0643 0861 0174 0176 0182 1001 1073           MITSUBISHI         0000 0056 0005 0015 0024 0033 0038 0050 0051 0060 0057           019 0501 0517 0520 0532 0534 0551           NAD         0060           NEC         0024 0051 0005 0054 0082 0072 0057 0039 0059 0050 0062           0056 0517 0536 0591 0183           NISSAN         0053           NOKIA         0056 0001 0011 0012 0013 0037 0040 0063 0067 0056 0083           0057 0085 0501 0515 0527 0528 0532 0559 0570 0571 0574           0172           ORION         0005 0041 0049 0051 0059 0063 0056 0021 0057 0016 0038           0056         0047 0075 0084 0002 0038 0106 0107 0108 0054 0114           0537 0569 0579 0580         0016 0016 0018 0025 0026 0046 0071 0073 0076 0078           0094 0097 0099 0057 0056 0105 0110 0501 0513 0525 0526           0532 0542 0545 0559 0562 0586 0674 0124 0125 0126 0128           0132 0143           PIONEER         0057 0092 0093 0013 0046 0532 0132 0133 0574 0576 0586           RADIOSHACK         0051 0049 0041 0056 0006 0021           SABA         0051 0003 0010 0011 0012 0013 0016 0028 0031 0037 0400           056 0063 0002 0501 0527 0528 0559 0568 0570 0571 0574           056 0	MARANTZ	
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MATSOBISHI         0000 0030 0003 0013 0024 0033 0030 0031 0030 0031 0030 0037           NAD         0060           NEC         0024 0051 0005 0054 0082 0072 0057 0039 0059 0050 0062 0056 0517 0536 0591 0183           NISSAN         0053           NOKIA         0056 0049 0083 0035 0521 0147           NORDMENDE         0002 0010 0011 0012 0013 0037 0040 0063 0067 0056 0083 0057 0085 0501 0515 0527 0528 0532 0559 0570 0571 0574 0172           ORION         0005 0041 0049 0051 0059 0063 0056 0021 0057 0016 0038 0056           PACKARD BELL         0597           PANASONIC         0026 0047 0075 0084 0002 0038 0106 0107 0108 0054 0114 0537 0569 0579 0580           PHILIPS         0000 0006 0016 0018 0025 0026 0046 0071 0073 0076 0078 0034 0097 0099 0057 0056 0105 0110 0501 0513 0525 0526 0532 0542 0545 0559 0562 0586 0674 0124 0125 0126 0128 0132 0143           PIONEER         0051 0049 0041 0056 0006 0021           RADIOSHACK         0060 0057 0056 RCA           RCA         0521           ROYAL         0051 0049 0041 0056 0006 0021           SABA         0001 0003 0010 0011 0012 0013 0016 0028 0031 0037 0040 0056 0063 0002 0501 0527 0528 0559 0568 0570 0571 0574 0616           SAMSUNG         0004 0006 0007 0008 0036 0045 0049 0051 0052 0053 0056 0058 0059 0060 0070 0016 0077 0057 0102 0103 0115 0118 0119 0503 0504 0507 0520 0532 0127 0128 0129 0131 0132	MITCUPICHI	
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NICE         0056         0517         0536         0517         0537         0559         0557 <th< td=""><td>NEC</td><td></td></th<>	NEC	
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PACKARD BELL         0597           PANASONIC         0026         0047         0075         0084         0002         0038         0106         0107         0108         0054         0114           0537         0569         0579         0580         0046         0071         0073         0076         0078           PHILIPS         0000         0006         0016         0018         0025         0026         0046         0071         0073         0076         0078           0094         0097         0099         0057         0056         0105         0110         0501         0513         0525         0526           0532         0542         0545         0559         0562         0586         0674         0124         0125         0126         0128           0132         0143         0160         0057         0092         0093         0013         0046         0532         0132         0133         0574         0576         0586           RADIOSHACK         0060         0057         0056         0060         0021         0013         0016         0028         0031         0037         0040           SABA         0		0056
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0537 0569 0579 0580           PHILIPS         0000 0006 0016 0018 0025 0026 0046 0071 0073 0076 0078 0094 0097 0099 0057 0056 0105 0110 0501 0513 0525 0526 0532 0542 0545 0559 0562 0586 0674 0124 0125 0126 0128 0132 0143           PIONEER         0057 0092 0093 0013 0046 0532 0132 0133 0574 0576 0586           RADIOSHACK         0060 0057 0056           RCA         051         0049 0041 0056 0006 0021           SABA         0001 0003 0010 0011 0012 0013 0016 0028 0031 0037 0040 0056 0063 0002 0501 0527 0528 0559 0568 0570 0571 0574 0616           SAMSUNG         0004 0006 0007 0008 0036 0045 0049 0051 0052 0053 0056 0058 0059 0060 0070 0016 0077 0057 0102 0103 0115 0118 0119 0503 0504 0507 0520 0532 0127 0128 0129 0131 0132	PANASONIC	0026 0047 0075 0084 0002 0038 0106 0107 0108 0054 0114
PHILIPS       0000 0006 0016 0018 0025 0026 0046 0071 0073 0076 0078         0094 0097 0099 0057 0056 0105 0110 0501 0513 0525 0526         0532 0542 0545 0559 0562 0586 0674 0124 0125 0126 0128         0132 0143         PIONEER       0057 0092 0093 0013 0046 0532 0132 0133 0574 0576 0586         RADIOSHACK       0060 0057 0056         RCA       0521         ROYAL       0051 0049 0041 0056 0006 0021         SABA       0001 0003 0010 0011 0012 0013 0016 0028 0031 0037 0040         0056 0063 0002 0501 0527 0528 0559 0568 0570 0571 0574         0616         SAMSUNG       0004 0006 0007 0008 0036 0045 0049 0051 0052 0053 0056         0019 0053 0504 0507 0520 0532 0127 0128 0129 0131 0132		0537 0569 0579 0580
0094       0097       0099       0057       0056       0105       0110       0511       0513       0525       0526         0532       0542       0545       0559       0562       0586       0674       0124       0125       0126       0128         0132       0143       0132       0143       0132       0133       0574       0576       0586         RADIOSHACK       0060       0057       0056       0051       0049       0041       0056       0021         RCA       051       0049       0041       0056       0006       0021       0037       0040         SABA       0001       0003       0010       0011       0012       0013       0016       0028       0031       0037       0040         0056       0063       0002       0501       0527       0528       0559       0568       0570       0571       0574         0616       004       0006       0007       0008       0036       0045       0049       0051       0052       0053       0056         SAMSUNG       0004       0006       0007       0016       0077       0057       0102       0103       <	PHILIPS	0000 0006 0016 0018 0025 0026 0046 0071 0073 0076 0078
0532         0542         0545         0559         0562         0586         0674         0124         0125         0126         0128         0132         0132         0132         0132         0132         0132         0132         0132         0132         0132         0132         0133         0574         0576         0586           RADIOSHACK         0060         0057         0056         0060         0057         0056         0060         0021           ROYAL         0051         0049         0041         0056         0060         0021           SABA         0001         0003         0010         0011         0012         0013         0016         0028         0031         0037         0040           0056         0063         0002         0501         0527         0528         0559         0568         0570         0571         0574           0616         004         0006         0007         0008         0036         0045         0049         0051         0052         0053         0056           SAMSUNG         0004         0006         0007         0008         0036         0045         049         01051         0152 <td></td> <td>0094 0097 0099 0057 0056 0105 0110 0501 0513 0525 0526</td>		0094 0097 0099 0057 0056 0105 0110 0501 0513 0525 0526
PIONEER       0057 0092 0093 0013 0046 0532 0132 0133 0574 0576 0586         RADIOSHACK       0060 0057 0056         RCA       0521         ROYAL       0051 0049 0041 0056 0006 0021         SABA       0001 0003 0010 0011 0012 0013 0016 0028 0031 0037 0040         0056 0063 0002 0501 0527 0528 0559 0568 0570 0571 0574         0616         SAMSUNG       0004 0006 0007 0008 0036 0045 0049 0051 0052 0053 0056         019 0503 0504 0507 0520 0532 0127 0128 0129 0131 0132		0532 0542 0545 0559 0562 0586 0674 0124 0125 0126 0128
PIONEER       0057 0092 0093 0013 0046 0532 0132 0133 0574 0576 0586         RADIOSHACK       0060 0057 0056         RCA       0521         ROYAL       0051 0049 0041 0056 0006 0021         SABA       0001 0003 0010 0011 0012 0013 0016 0028 0031 0037 0040         0056 0063 0002 0501 0527 0528 0559 0568 0570 0571 0574         0616       0004 0006 0007 0008 0036 0045 0049 0051 0052 0053 0056         SAMSUNG       0004 0006 0007 0008 0036 0045 0049 0051 0052 0053 0056         0119 0503 0504 0507 0520 0532 0127 0128 0129 0131 0132	DIONEED	
RADIOSHACK         0060 0057 0056           RCA         0521           ROYAL         0051 0049 0041 0056 0006 0021           SABA         0001 0003 0010 0011 0012 0013 0016 0028 0031 0037 0040           0056 0063 0002 0501 0527 0528 0559 0568 0570 0571 0574           0616           SAMSUNG         0004 0006 0007 0008 0036 0045 0049 0051 0052 0053 0056           0119 0503 0504 0507 0520 0532 0127 0128 0129 0131 0132		
RCA         0521           ROYAL         0051 0049 0041 0056 0006 0021           SABA         0001 0003 0010 0011 0012 0013 0016 0028 0031 0037 0040           0056 0063 0002 0501 0527 0528 0559 0568 0570 0571 0574           0616           SAMSUNG           0004 0006 0007 0008 0036 0045 0049 0051 0052 0053 0056           0058 0059 0060 0070 0016 0077 0057 0102 0103 0115 0118           0119 0503 0504 0507 0520 0532 0127 0128 0129 0131 0132	RADIOSHACK	
KOYAL         0051 0049 0041 0056 0006 0021           SABA         0001 0003 0010 0011 0012 0013 0016 0028 0031 0037 0040           0056 0063 0002 0501 0527 0528 0559 0568 0570 0571 0574           0616           SAMSUNG         0004 0006 0007 0008 0036 0045 0049 0051 0052 0053 0056           0058 0059 0060 0070 0016 0077 0057 0102 0103 0115 0118           0119 0503 0504 0507 0520 0532 0127 0128 0129 0131 0132		
SABA         0001 0003 0010 0011 0012 0013 0016 0028 0031 0037 0040           0056 0063 0002 0501 0527 0528 0559 0568 0570 0571 0574           0616           SAMSUNG           0004 0006 0007 0008 0036 0045 0049 0051 0052 0053 0056           0058 0059 0060 0070 0016 0077 0057 0102 0103 0115 0118           0119 0503 0504 0507 0520 0532 0127 0128 0129 0131 0132		
0616         0004         0006         0007         0008         0036         0045         0057         0128         0139         0508         0570         0571         0574           SAMSUNG         0004         0006         0007         0008         0036         0045         0049         0051         0052         0053         0056           0058         0059         0060         0070         0016         0077         0057         0102         0103         0115         0118           0119         0503         0504         0507         0520         0532         0127         0128         0129         0131         0132	SADA	0001 0003 0010 0011 0012 0013 0016 0028 0031 0037 0040
SAMSUNG 0004 0006 0007 0008 0036 0045 0049 0051 0052 0053 0056 0058 0059 0060 0070 0016 0077 0057 0102 0103 0115 0118 0119 0503 0504 0507 0520 0532 0127 0128 0129 0131 0132		0616
0058 0059 0060 0070 0016 0077 0057 0102 0103 0115 0118 0119 0503 0504 0507 0520 0532 0127 0128 0129 0131 0132	SAMSLING	
0119 0503 0504 0507 0520 0532 0127 0128 0129 0131 0132		
		0119 0503 0504 0507 0520 0532 0127 0128 0129 0131 0132

	0134 0542 0135 0546 0549 0554 0140 0146 0654 0168 0207
SANYO	0000 0056 0006 0024 0033 0036 0052 0083 0102 0103 0504
	0505 0510 0512 0517 0519 0520 0521 0524 0526 0128 0130
	0131 0542 0138 0571
SCHAUB LORENZ	0016 0030 0036 0049 0050 0051 0053 0035 0080 0088 0063
	0002 0056 0169 0170 0171 0509 0550 1071
SCHNEIDER	0000 0006 0016 0017 0018 0021 0025 0026 0035 0038 0041
	0046 0051 0056 0057 0059 0071 0073 0076 0078 0083 0094
	0097 0099 0105 0110 0508 0532 0538 0574 0586 0616
SHARP	0006 0024 0033 0048 0502 0517 0519 0130 0137 0147 0592
SIEMENS	0015 0026 0056 0101 0519
SKYWORTH	0607 0160
SONY	0005 0024 0056 0077 0029 0105 0504 0507 0517 0519 0520
	0129 0130 0131 0136 0555 0571 0149 0421
TATUNG	0006 0016 0052 0005 0040 0056 0504 0532 0568 0586
TCL	0064
TECHNICS	0051 0054 0047
TECHNIKA	0041 0051
TECHNISAT	0057 0056
TELEFUNKEN	0001 0011 0012 0013 0016 0021 0028 0037 0040 0057 0056
	0531 0532 0533 0132 0133 0552 0554 0559 0570 0571 0574
	0583 0594
TEVION	0057 0063 0056 0532
THOMSON	0001 0003 0002 0010 0011 0012 0013 0014 0019 0028 0031
	0037 0038 0040 0061 0067 0085 0090 0113 0527 0528 0531
	0532 0533 0552 0559 0570 0571 0574 0583 0589 0591 0616
	0173 0166 0167
TOSHIBA	0056 0033 0034 0045 0063 0083 0511 0517 0130 0541 0136
	0139 0564 0141 0142 0144 0584 0593 1017
	0102 0056 0025
VESTEL	0009 0038 0083 0057 0056 0532 0542 0548 0553 0556 0586
	0596 0132 0214 0215 1252

# SAT

AMSTRAD	0806 0812
ARION	0354
BLAUPUNKT	0739
BSKYB	0812
CANAL SATELLITE	0822
CANAL+	0822
COMAG	0762 0349 0353 0363
ECHOSTAR	0759 0760 0770 0829 0830 0831 0832 0833 0870 0881 0882
ENIGMA	0358
FERGUSON	1251
FINLUX	0766 0769 0784 0849
GLOBECAST	1135
GOLDEN INTERSTAR	0205
GOLDSTAR	0776
GRANVISION	0350 0351
GRUNDIG	0398 0399 0722 0738 0739 0772 0780 0784 0845
HEAD	0361
HIRSCHMANN	0739 0775 0793 0810 0815 1161 1155
HITACHI	0784 0802
HUMAX	0773 0790 0360 0365 0366

ITD(SAGEM)	0311 0323
ITT/NOKIA	0753 0784 0802
KATHREIN	0383 0393 0739 0783 0345 0848 0856 0867 0208
LG	0381 0394 0776
MEDIASAT	0734 0822
MEDION	0382 0384 0385 0730 0742 0768 0778 0786 0788 0800 0820
	0833 0834 0857 0364 0873 0877 1167 1133 1132 1125
MITSUBISHI	0739 0784 0825
NEC	0785
NOKIA	0753 0784 0806 0819
NORDMENDE	0720 0724 0763 0784 0846
OCTAGON	0720 0722 0755
OPENBOX	0204
OPTEX	0758 0880 0338 1219 1220 1221 1222 1223 1224 1225 1226
	1227 1228 1229 1230 1231 1232 1233 1234 1235 1236 1237
	1238 1239 1240 1241 1242 1243
PACE	0739 0784 0796 0812 0816 0856
PHILIPS	0397 0399 0400 0736 0754 0755 0772 0778 0780 0784 0789
	0808 0817 0822 0825 0847 0854
PIONEER	0398 0822
POLSAT	0846
PREMIERE	0742 0758 0807 0822
SAGEM	0846 0876
SAGEM TNTSAT	0331
SAMSUNG	0378 0391 0395 0396 0720 0731 0207
SCHNEIDER	0754 0786 0833 0834
SCHWAIGER	0382 0385 0386 0387 0388 0725 0732 0735 0740 0784 0788
	0820 0826 0827 0828 0834 0855 0867 1160 1145 1141 1128
	1127
SEG	0720 0744 0806 0867 0869
SKY DIGITAL	0812
SKY+	0812
TECHNISAT	0386 0738 0797 0344 0822 0860
TOPFIELD	0781 0782 0343
VANTAGE	0362
VESTEL	0214 0215

# DVB

CANAL+	1163
ECHOSTAR	0989
FREEVIEW	0747 0751 0752 0771 0787 0798 0843
GRUNDIG	1159
HUMAX	0532
MEDION	0877
PACE	0752 0796
PHILIPS	0843
PIONEER	0858
PREMIERE	0843
SAGEM	0876 1137
SONY	0747
ТСМ	1121 1080
THOMSON	0798

DVB-T	
FERGUSON	1244

# CableBox

BT	0811
CANAL PLUS	0765
MOTOROLA	0779
PIONEER	0791 0792
SAMSUNG	1142
SCIENTIFIC ATLANTA	0794 0795
UPC	1137

# DVD

AEG	0670 1001
	0698 0703
ΑΚΑΙ	0670 0680 0694 0702 1001
AUDIOVOX	1031
BLAUPUNKT	0704
CAMBRIDGE	0697
DAEWOO	0683 0684 0685 0700
DENON	0455
DENVER	0701 1001 1084
DK DIGITAL	0686
ELTA	0670 0691 0702 1001
FERGUSON	1246 1250
FINLUX	0681 0687
FUNAI	0674
GOWELL	0429
GRUNDIG	0670 0680 0697 0699 0700
HARMON/KARDON	0712
HITACHI	0408 0409 0413 0419 0680 0692 0693 0705 0709
HYUNDAI	0681
JBL	0712
JVC	0690 0717 1051 1089
LG	0411 0421 0452 0453 1056
MARANTZ	0690 1062 1104
MEDION	0667 0671 0673 0674 0675 0676 0677 0681 0682 0686 0688
	0695 0453 1000 1001 1002 1003 1004 1005 1006 1007 1008
	1009 1021 1023 1046 1118 1119 1120 1096 1097 1098 1099
	1100
PACKARD BELL	1028 1029 1116 1085
PANASONIC	0412 0718 1055
PHILIPS	0403 0407 0416 0420 0674 0690 0445 1060 1061 1062 1124
DIONEED	
PIONEER	0404 0693 1054 1058
RCA	0/04 0/16
SAMSUNG	0413 0418 0673 0692 1016 1050
SANYO	0414 06/0 0680 0699
SCHAUB LORENZ	1001 1110
SCHNEIDER	0670 0680 0681 0682 0686 0700 1001
SCHWAIGER	0679
SHARP	0406 0415 0680 0711 0451 1087
SONY	0410 0417 0719 1066 1067 1068

TEAC	0670 0693 0704
TECHNICS	0716
TECHNIKA	0686
TOSHIBA	0407 0422 0690 1017 1057 1117 1122
VESTEL	0680 0441
X-BOX	0716
YAMAHA	0706 0443 1060 1061

# DVR

HITACHI	0705
JVC	1089
LITEON	1046 1090
MEDION	1002 1046 1100
PACKARD BELL	1029 1085
PHILIPS	1060 1061 1124 1105
SHARP	1087
SONY	1066 1067 1068
THOMSON	0689
TOSHIBA	0690 1057 1117
ҮАМАНА	1060 1061

# VCR

AIWA	0608 0643
AKAI	0611 0612 0613 0666
BLAUPUNKT	0621 0625 0626 0630 0652 0662
DAEWOO	0616 0627 0393
FINLUX	0621 0622 0647
FUNAI	0674
GRUNDIG	0610 0621 0626 0630 0631 0639 0640 0641 0657
HITACHI	0621 0628 0705 0455 0456 0459 0460 0462 0472 0481
JVC	0645 0646 0717
LG	0624 0455 0457 0459 0461 0470 0475 0479
LOEWE	0621 0625 0630 0662
MARANTZ	0621 0630 0636
MEDION	0608 0625 0629 0643 0673
MITSUBISHI	0621 0642 0645 0647
NEC	0645
PANASONIC	0625 0656 0660 0662 0458 1055
PHILIPS	0610 0614 0621 0630 0639 0657 0664 0454 0465 0473 0478
PIONEER	0621 0645
SAMSUNG	0654 0673 0463 0469 0476 1050
SANYO	0622 0634 0638 0467
SHARP	0636 0665 0464
SONY	0618 0651 0652 0653 0655 0719 0468 0477
TECHNICS	0625
THOMSON	0614 0616 0645 0646 0650 0663
TOSHIBA	0621 0627 0643 0659 0690 0456 0462 0466 0471 0474 0477 0480

# Aux/Tuner/Tape

AIWA	0698 0948
DUAL	0671 0677 0695 0908 0935 0958 0978 0990
ELTA	0886 0887 0935

FERGUSON	1248 1249
GRUNDIG	0911 0925 0926
HARMON/KARDON	0895 0896
IPOD	0998
JVC	1051
LG	1056
MEDION	0671 0677 0695 0908 0935 0964 0965 0966 0978 1120 1096 1098
NAD	0929 0930
ΟΝΚΥΟ	0955
PACKARD BELL	1116
PANASONIC	0807
PHILIPS	0925 0926
PIONEER	1054 1058
PREMIERE	0807
SAMSUNG	0945 1016
SONY	0931 0932 0933 0940 0941 0942 0943 0944
SONY NETWORK	0746
TEAC	0443
TECHNICS	0949
THOMSON	0846 0979
ҮАМАНА	0924 0946 0947

## HDD, HDplayer

AMSTRAD	0812
BSKYB	0812
ECHOSTAR	0882
FERGUSON	1245 1247
HUMAX	0878
HYUNDAI	0774
MEDION	0730 0788 0873 1167 1046 1125 1118 1100
PACE	0752 0812
PACKARD BELL	1085
PHILIPS	0614 1124
SAGEM	1137
SCHWAIGER	0788 1145 1127
SIEMENS	1148
SKY+	0812
SONY	0545 1066 1068
THOMSON	0614 0663 0798
TIVO	0614
TOPFIELD	0782
TOSHIBA	1117

# ADSL

FREEBOX TV	1162	
ORANGE	1166	
SAGEM	1163	
SAMSUNG	1143	
THOMSON	1166	
TPS ADSL	1165 1166	
UPC	1137	

CD/LD	
AKAI	0985 0986 0987
DENON	0619 0658 0885
GRUNDIG	0658 0894 0928
HARMON/KARDON	0897
HITACHI	0898 0899 0983
JVC	0900
KENWOOD	0901 0902
LG	0884
MARANTZ	0928
MEDION	0887 0891 0892 0927 0934 0935 0936 0959 0960 0963 0972 0980
MITSUBISHI	0658
NAD	0658 0888 0929
NAIM	0928
ΟΝΚΥΟ	0906 0907
PANASONIC	0883 0909
PHILIPS	0910 0928 0982
PIONEER	0658 0890 0893
ROTEL	0928
SAMSUNG	0945
SHARP	0889 0916 0917 0918
SONY	0888 0919 0920 0933 0937 0938 0939
TEAC	0957
TECHNICS	0909 0922
TELEFUNKEN	0658 0983
TOSHIBA	0923
YAMAHA	0916 0921 0947

# Blu-Ray, DVD

DENON	1186
LG	1191
MARANTZ	1192 1193
NAD	1194
ONKYO	1190
OPPO	1196
PANASONIC	1197
PHILIPS	1198 1199
PIONEER	1200 1201
SAMSUNG	1202
SHARP	1203
SONY	1204
ҮАМАНА	1207

## SPECIFICATION

Ariva	4K/4K Combo
Dimension (cm)	W: 258mm D: 158mm H: 43mm
Net Weight	800 q
Input Voltage	12V 2.0A
Power Consumption	Max 24W
Standby	< 0. 5 W
1.Main Chip Sets	
Chipset	Amlogic S905-B, Quad core Cortex A53 @ 2.02 GHz
Flash Memory	EMMC 8GB
DDR III Memory	1GB
2.DVBS Tuner & Demo	dulator
Tuner Type	ON BOARD
Frequency Range	950 ~ 2150MHz
Demodulator Mode	DVB-S (QPSK, ETS 300 421) and DVB-S2 (QPSK / 8PSK, ETS 302 307)
RF Input Connector	F-Female
3.DVBT/T2/C Tuner &	Demodulator (depending on model)
Demodulator Mode	ETSI EN 302-755 V1.3.1 and EN 300-744 V1.6.1 compliant
Frequency Range	52.5MHz to 866MHz
RF Input Connector	IEC-Female
4.TS Demux	
Demultiplexer	MPEG2/MPEG4
Input Bit Rate	Max 100Mbit/s
5.Video Video Decode	H.264/H.265 HEVC MP@L5.0 up to 4K UHD@60fps H.264/H.265 AVC MP@L5.1 up to 4K UHD@60fps H.264/H.265 MVC up to 4K UHD@60fps MPEG-4 ASP@L5 up to 1080P@60fps AVS Jizhun Profile up to 1080P@60fps MPEG-2 MP@HL up to 1080P@60fps MPEG-1 MP@HL up to 1080P@60fps RealVideo 8/9/10 up to 1080P@60fps WebM up to VGA
Video File Format	Support *.mkv, *.wmv,*.mpg,*.mpeg,*.dat,*avi,*.mov,*.iso,*.mp4,*.rm,*.jpg, *.bmp, *gif and others
HDMI Output	HDMI 2.0 (video format default @ Auto)
Aspect Ratio	Auto, Full screen
Video Resolution	4K@60Hz 4K@50Hz 1080p/i 720p
6.Network	
Wi -Fi	Built-in 802.11 b/g/n, 2.4G/5G dual band
Ethernet	100M Ethernet RJ-45
7.Audio Decode	
Audio Decode	Dolby Digital/Digital Plus, MEPG, OGG,OGA,FLAC,ALAC,Ape,M4A,RM, MPEG-1 layer1/2, MPEG-2 Layer II ( DTS passthru)
Sound Mode	LEFT/RIGHT/STEREO/MONO
Sampling Frequency	32KHz 44.1KHz 48KHz
8.PVR Function	

Record	Instant Record and Timer Record GUIDE Timer Record
Time-Shift	Support Auto Time-Shift
PVR Operation	Play/Pause/Stop/Step
	Fast Forward/Fast Backward 2/4/8/16
File System	Support NTFS, FAT32
PVR Manager	Delete recorded file
9.AV Output	
Video Bandwidth	SD:5.0MHz(-3dB), HD:30MHz(-3dB)
Video Impedance	75Ω
Video Voltage Level	1.0 Vp-p
Audio Freq. Range	20~20KHz
Audio Impedance	600Ω
Audio Voltage Level	2V rms(5.6Vp-p)
10.Environment	
Operating Temperature	0°C-40℃
Storage Temperature	-10℃-65℃
Humidity	<95%