User manual

◆FERGUSON

HYBRID HD TV
Ariva @*Link* 100

English

WARNING !!!

Supported network features as internet radio (Shoutcast, Jamendo) Youtube, YouPorn, Picasa, Flickr, etc depend on your network connection speed and quality and the server settings (limitations, bandwidth, location) which you are accessing.

Playback of copy protected content, damaged files, etc. may fail or be incorrect. Video files with a resolution higher than 1920x1080i, 1280x720p or with a video bitrate over 30Mbps may not play properly.

Ferguson satellite receivers support recording to external hard disk drives (HDDs) and flash memories (pen drives). 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 20.0 MB/s or faster**. Slower hard disk drives and flash memories may not function properly, have problems with recording (image jitter), or do not function at all!!!

2. Only memory with one basic EXT2, EXT3 or FAT32 partition (we recommend using the FAT32 format) will function properly. If your hard disk is not formatted in EXT2, EXT3 or FAT32, format the disk on your computer before connecting it to the receiver.

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

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 receiver (and in particular the USB connector) with wet hands. Risk of electric shock and permanent damage to the receiver!

Table of contents

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.
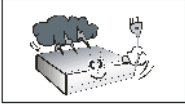
Disconnect the receiver from the mains during thunderstorms or when it is not to be used for an extended period of time. Please remember that the warranty does not cover damage to the equipment caused by a lightning strike.
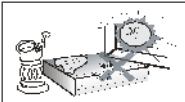
Do not expose the receiver to direct sunlight. Place it away from sources of heat and humidity. Do not cover ventilation ducts, in order to ensure the correct circulation of air.
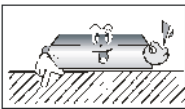
Place the receiver horizontally on a flat, even and stable surface.
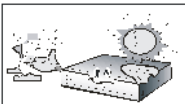
If you move the receiver from a room that is warm to one that is cold (or vice versa), wait at min. 1 hour before connecting it to the mains. Otherwise, problems may arise.
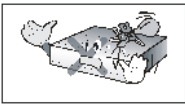
The receiver should be placed away from vases, bottles, aquariums and other water containers in order to avoid damage. Do not touch the mains plug with your bare hands.
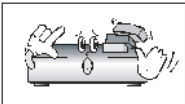
Do not place any objects on the housing of the receiver. This may cause overheating and reception problems.

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 http://www.ferguson-digital.eu

ABOUT THE INSTRUCTION MANUAL

Ferguson has made every effort to provide the most current information about its products. Ferguson 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 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.

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.

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.
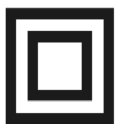
Double insulation logo.

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.

Take an active part in protecting the natural environment!

- Your receiver is made from materials that can be processed or recycled.
- At the end of its service life, take this unit to a designated collection point.

BASIC INFORMATION ABOUT THE RECEIVER

1. Main features

- ✔ Reception of high definition channels
- ✔ Upscaling of PAL signals to 720p or 1080i resolution
- ✔ 20 programmable timers
- ✔ Separate favorite, TV and Radio channels list
- ✔ Quick channel search function (Quick Find)
- ✔ Teletext and subtitle display
- ✔ DiSEqC 1.0, 1.1 and DiSEqC 1.2, USALS
- ✔ MPEG-2, MPEG-4, MPEG-4 AVC/H.264 standards
- ✔ Compatible with DVB-S and DVB-S2 systems
- ✔ Card reader for pay-per-view television

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 hybrid satellite receiver
- ✔ 1 x HDMI cable

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 colored. Depending on the selected option, various "function keys" are displayed: red, yellow, green, blue and white in the form of graphics and descriptions. The colors 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 keys on the remote control allow direct access to functions. The keys 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

STAND-BY — Switch between operation and Stand-by/deep Stand-by mode and to boot.

VOL+/VOL- — Adjust the audio volume.

CH UP/DOWN — Change channels (next/previous).

ARIVA TV — Enter/exit **ARIVA TV**.

ARIVA WEB — Enter/exit **ARIVA web**.

EDIT & LIST — Enter/exit the edit menu.

EJECT — Eject the USB memory.

ARIVA MEDIA — Enter/exit **ARIVA media**.

These coloured keys have different functions as displayed in the menus.

UP/DOWN
TV : Change channels (next/previous).
MENU: Navigate in the menus.

LEFT/RIGHT
TV : Adjust the audio volume.
MENU: Navigate in the menus and select options.

OK
TV : Enter the list mode.
MENU: Select options.

PAGE UP/DOWN — Scroll a page or list up and down. To scroll continuously hold the key.

MUTE Turn the sound on/off.

TV/RADIO Change between TV and Radio mode.

LAST Return to the previous channel.

NUMERIC KEYS **TV**___: Enter a channel number directly.
MENU: Enter values.

USER Enter/exit and edit user lists.

INFO Enter/exit information about the program, movie/recording.

EPG Enter/exit the program guide.

TEXT Enter/exit Teletext.

ZOOM Enter/exit the zoom mode.

FREEZE Pause a live program.

MENU Enter/exit the menu and save changes in menus.

EXIT Exit all menu modes.

RESO Change the screen resolution.

LANG Select audio languages and encode the text for movie subtitles.

FEED Select a Multifeed.

SUBT Select subtitle languages for programs and display the subtitle for movies.

AUDIO Select audio channels.

RECORDING Record a program and select the duration.

PLAY Start playback.

PAUSE Start the Timeshift recording. Pause playback.

STOP Stop playback.

SLOW MOTION Playback in slow motion. Each time you press this key the speed will increase (**10%**, **30%**, **50%**).

REWIND
FORWARD Each time you press this key the rewind/ forward speed will increase (**2**, **4**, **8**).

JUMP Jump back or forward during playback.

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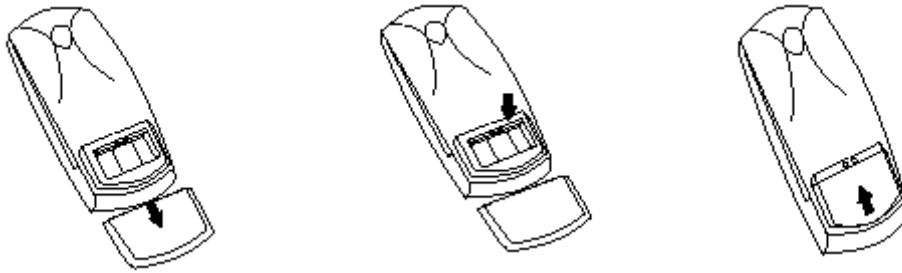
Remove the cover of the battery compartment on the rear panel of the remote control unit; slide it downwards and put it aside. Insert two AAA (R03) batteries into the compartment, observing the indicated polarity. **Do not mix old and new batteries, or batteries of different types.** Replace the battery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

5. Front panel

POWER:	Press power key one time to power off the receiver. Press again to reboot the receiver. To switch the receiver to Stand-by is only possible with the Stand-by key on the remote control.
▲▼:	Switches to the next/previous channel, moves the cursor up/down in the menu.
◀▶:	Moves the cursor left/right in the menu.
MENU:	To enter the menu for the general settings.
EXIT:	To exit the menu or an menu option.
LED:	Displays the channel number & functions, in Stand-by the time.
CA:	Socket for a subscriber's card.

Always insert the card with the chip facing up!!!

6. Rear panel

LNB IN:	Input of the antenna cable from the converter (LNB).
LOOP OUT:	Output of the signal from the LNB to another satellite receiver.
ETHERNET:	10/100Mbit RJ-45 Port for home network/Internet.
HDMI:	Digital Video/Audio output for high definition TV's.
USB:	USB 2.0 host connector.
COAXIAL:	Digital coaxial audio output (RCA).
COMPONENT:	Component video output 3 x RCA (YPbPr).
AUDIO (L/R):	Analogue stereo audio output (2 x RCA).
MODEM:	RJ-11 port.
ON/OFF:	Power on/off switch.

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!

8. 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 positioner is built in such a way that its axis of revolution is parallel to the direction towards the North Star. For this reason, its mounting is frequently termed the Polar mount. In consequence, when the satellite changes position, it is not necessary to adjust the azimuth and elevation independently. The antenna revolves only in one axis. Using the introduced scale, the motor inclines in such a way as to ensure the appropriate placement of the axis of revolution. The angle of inclination corresponds to the latitude of the location where the antenna is installed. As in the case of a fixed antenna, the angle of elevation of the bowl must first be set. For this purpose, use is made of a satellite located as close as possible to the south of your location. Ideally, the position of the satellite should not differ from that of the said direction by more than 5°. In other words, you should use the satellite position closest to the longitude of the point of installation. For example, if your longitude is 73° W, you should search for a satellite located at a position between 68° and 78° W.
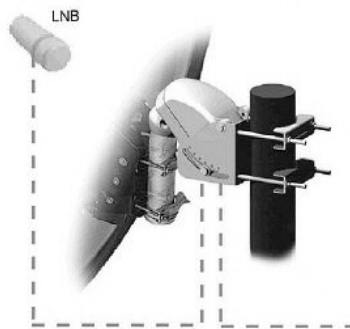
The USALS function considerably simplifies configuration of the antenna. The Ferguson receiver requires that you enter the geographical coordinates of the antenna in order to automatically calculate the angle of revolution of the motor for individual satellites. The receiver activates the positioner 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.

9. Connecting the satellite receiver

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

9.1 Connecting to the TV via 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 audio 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 Connecting to the TV via Component (YPbPr) cable

1. Connect the antenna to the **LNB IN** socket of the receiver.

2. Connect the video and audio with five cinch cables to the television set.

Three cables, colored green, blue and red, are used for the component signal. The two remaining cables, red and white, are used to connect audio (right and left channel).
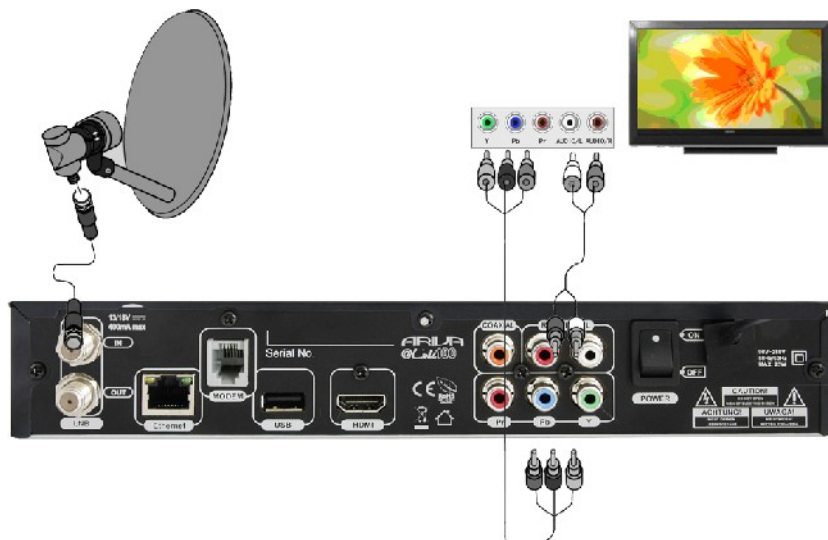
9.3 Connecting an audio system

1. Digital sound (including surround sound, if transmitted) may be obtained through the optical (SPDIF) socket. The following figure presents the SPDIF connection.

2. Stereo sound may be obtained by connecting cinch cables (white and red) for the left and right channels.
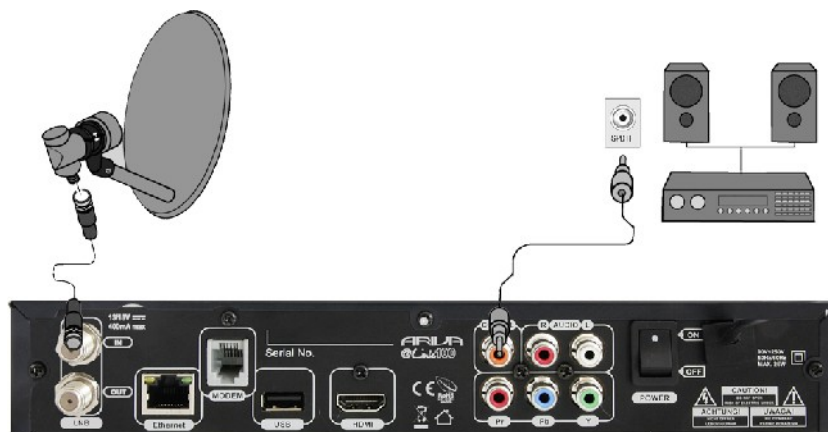
9.4 Connecting external memory

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 FAT32 (recommended), EXT2, EXT3.

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

Your receiver has one USB 2.0 host port to connect memory devices (memory stick, external hard disk) formatted in *FAT32*, *EXT2*, *EXT3*, *NTFS*.

> *For USB memory devices formatted in NTFS your receiver can only playback files (movies, MP3s, pictures). Recording is not possible.*

9.5 Connecting another receiver

Another receiver may be connected through the LNB OUT socket. Please keep in mind, however, that only one receiver may be used at any one time! Permanent damage may result if both are turned on simultaneously.

9.6 Connecting to the local network (LAN)

PSTN **Modem: RJ11 connector –** The receiver has a built-in modem to connect to an analog PSTN telephone line. Modem enables two-way communication in order to gain access to the Internet and has the function of interactive exchanges. Connect your receiver to the network with a Telephone cable.

Ethernet: RJ45 connector - Connect your receiver to the network with an Ethernet cable.

> *To operate all features of your receiver connect your receiver to your network via a **Router** which is connected to the **Internet**. If you cannot connect to your network or if **'Connection failed!'** is displayed for network features check again the address and the network connection and try again.*

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 supplied with reinstalled television channels. In order to watch other, i.e. non-default channels, you should use the channel search function.

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 keys on the remote control unit enable direct access to functions of the receiver. Certain keys have been described, for example EPG, MENU, OK, or colored keys for ease of usage. Other keys 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 receiver functions available through the user menu.

1. The **up/down** keys on the remote control are used to move the cursor up and down on the menu.
2. The **left/right** keys on the remote control are used to move the cursor left and right, and to switch options.
3. The **OK** key is used to enter submenus.
4. The **EXIT** key is used to exit menus or functions.
5. When operating a submenu, confirm your selection with the **OK** key.

Powering On/Off

Power ON/Booting
Connect the power cord of your receiver to a mains socket. Turn On the mains switch on the rear panel to start the booting.

Stand-by
Press the **STAND-BY** key to switch between Stand-by and operation mode. Timer recordings will record in this mode.

Deep Stand-by
Hold the **STAND-BY** key pressed for 3 seconds to switch to the Deep Stand-by mode. To switch again to operation mode, press the **STAND-BY** key again. Timer recordings will not record in this mode.

10. First installation

After you turned on your receiver for the first time or after a factory reset, the installation wizard will start automatically.

10.1 Operating the menu

Select an option with the ▲/▼, ◄/► keys.
Enter an option with the **OK** key.

10.1 Language selection

Menu language   Select the menu language.
Audio language   Select the standard audio language for programs.
Press **MENU** key to save the selection and to continue to the satellite search.

10.2 Satellite search

Satellite	Select a satellite.
Transponder	Select a transponder.
LNB	Select the LNB frequency.
22Khz	Select **On** or **Off**.
DiSEqC	Select the DiSEqC (**A**, **B**, **C**, **D**)/**Mini A**, **B** port for the selected satellite.
DiSEqC 1.1	Select the DiSEqC port (**1-16)** for the selected satellite.
LNB Power	Select the LNB power.
Search	Press 🔵 (blue) key to start the search.
Search options	
All/FTA/NIT/FAST SCAN	Select an option to start the search.
DiSEqC/USALS	Select this Option to search all satellites (**DiSEqC switch**) at one time.
NOTE	*Press **EXIT** key to install an Unicable/SCD/DiSEqC 1.2/USALS system.*

11. DAILY USAGE

11.1 Volume control

Volume	Press **VOL+/VOL-** or ◄/► keys (while watching a program) to adjust the volume.
Mute	Press MUTE key to turn the sound On and Off.

11.2 Changing channels

Change	Press **CH. UP/DOWN**, ▲/▼ keys or enter the channel number with the **0-9 numeric** keys to change channels.
Back	Press **LAST** ⬚LAST CH⬚ key to return to the previous channel.

11.3 Channel lists

Press **OK** key to display all *satellite*/*user lists* and *sort options*.

Operation	Select columns with the ◄/► keys and select a *sort option* or *channel* with the ▲/▼/**OK** keys.
Search channel	To search a channel name, enter first the channel list and enter the channel name with the **numeric** keys. You can search for a search term with max. 7 letters. The search term is displayed in the 1st column at the bottom. Press 🟥 (red) key to delete a letter.

11.4 User lists

Press **USER** key to display the 10 user lists.

List	Select a column with the ◄/► keys and select an option or channel with the ▲/▼/OK keys.
Rename	Select a list and press 🟨 (yellow) key to rename.
Edit	Press 🟥 (red) key to edit.

11.5 Zoom mode

Press **ZOOM** key to enlarge a part of the screen.
Move the Zoom window with the ▲/▼, ◄/► keys to the part of the screen to enlarge.

11.6 Information bar

Press **INFO** key to display the channel number & name, list name, time.
The current and next program information, if available, will be displayed. If detail information is available, press **INFO** key again to display them.

 is displayed for programs in High Definition.

is displayed, if subtitle languages are available.

is displayed, if Teletext is available.

is displayed, if Multifeeds are available.

is displayed for locked channels.

is displayed for pay TV channels.

 is displayed for programs in Dolby Digital.

 displays the audio channels (mono, stereo).

SIGNAL displays the signal quality and strength.

11.7 Screen resolution

Press **RESO** key to change the screen resolution.

TV Change the screen resolution (1080i-50Hz/60Hz, 720p-50/60Hz, 576p-50Hz, 480p-60Hz) as the TV system (**50Hz=PAL, 60Hz= NTSC**).
Select the resolution with the ▲/▼/**OK** keys.
If the TV is connected with a scart cable, select **Scart-PAL** (PAL TV) or **Scart-NTSC** (NTSC TV).

Movies & VLC streams.

 Full Screen.

 Cinema (Wide Screen).

 Original.

 Low Screen for low resolution movies.

 IPTV Screen for IPTV streams.

11.8 Audio channel

Press **AUDIO** key to select an audio channel (stereo, mono left/right).

 Stereo.

 Left/right channel (Mono).

11.9 Audio language

TV Press **LANG** key to select an audio language, if available. Select a language with the ▲/▼/**OK** keys.

Movies Press **LANG** key to select the matching subtitle text code to display all letters correctly.
Select the text code from the list with the ▲/▼/**OK** keys.

11.10 Freeze mode

Press FREEZE key to pause a live program.

11.11 Teletext

Press **TEXT** key to display Teletext, if available. Operate the menu with the **0-9 numeric** and coloured ( ) keys.

11.12 Edit channels, event list

Press (green) key to display detail information about the channel.

Lock Select *On* to lock the channel.
Save Press **MENU** key to save the changes.

Delete Press (red) key to delete the channel.

Event list Press (blue) key to display the event list for all recordings and reservations. Select an event with the ▲/▼ keys. Press (red) key to delete an event, press (green) key to delete all events.

11.13 Photos/Picasa/Flickr radio soundtrack

Enter ARIVA **media** in radio mode to view Photos, Picasa and Flickr with radio as soundtrack.

11.14 Jump time

Press the **Jump** keys to jump from a movie position backwards or forwards. Select the jump time (*1-10 min*.) with the ▲/▼ keys.

11.15 Multifeed

Some programs offer a variety of perspectives i.e. for sport events, these are called Multifeeds. Press **FEED** key to display Multifeeds for a program, if available. Select a feed with the ▲/▼/**OK** keys.

11.16 Subtitle language

TV	Press **SUBT** key to select subtitle languages, if available for a current program or recordings. Select a language with the ▲/▼/**OK** keys.
Movies	Supported formats: SRT, SMI, SUB. Press **SUBT** key to display subtitles. Press this key again to deactivate subtitles. If the subtitle and movie are asynchronous, synchronize the subtitle time. Press the ◄/► keys and adjust the time from *-5 seconds* to *+5 seconds* in *0.1 second* steps.
NOTE	*To display movie subtitles, the subtitle and menu language must be the same and the movie file and subtitle file must have the same title.*

11.17 Edit/search window

Select the edit/search window to rename (user lists, channels, recordings), to insert (address, password, username) and to enter a search term.

Letter	Select a letter with the ▲/▼/**OK** keys.
Delete	Press (red) key to delete a letter.
A/a/…	Press (green) key to change between capital/lower case letters and to display special letters for a language.
Save	Press (yellow) key to save.
Cancel	Press (blue) key to cancel.

12. Program guide

Press **EPG** key to display the electronic program guide for current, next and scheduled programs.

Now/next schedule.

Select a channel with the ▲/▼ keys to display the now/next schedule.

Enter the *now*/*next* schedule with the ◄/► keys.

Press **OK** key to change to the program.

Press **OK** key again to watch it in full screen.

Press **INFO** key to display detail information, if available.

Week schedule.

Select a program with the ▲/▼, ◄/► keys.

Press the **OK** or **INFO** key to display detail information, if available.

Reserve	Press 🔴 (red) key to reserve programs (TV or Radio) to change to this program at the scheduled time.
Mode	Select an option (once, daily**,** weekly, daily (Mon-Fri)).
Date	Enter the date with the **0-9 numeric** keys for programs without EPG schedule.
Begin	Enter the start time with the **0-9 numeric** keys for programs without EPG schedule.

Press **MENU** key to save the event.

Record	Press 🟩 (green) key to set the timer for recordings.
Week	Press 🟨 (yellow) key to switch between the *now/next* and week schedule of the selected channel.
Event list	Press 🟦 (blue) key to display the *event list* for all recordings and reservations. *20 Timer events* (recordings and reservations) can be programmed.
Delete	Select an event with the ▲/▼ keys. Press 🔴 (red) key to delete.
Delete all	Press 🟩 (green) key to delete all events.

13. RECORDING

13.1 Recording guide

USB memory

To record programs an USB memory 2.0 must be connected formatted in **FAT32**, **EXT2**, **EXT3**.

To format an USB memory larger than 32GB with your windows PC in *FAT32*, download the *Fat32Formatter* program from the internet to your PC.

To record HD programs the USB memory must have a minimum writing speed of **20 Mbps**. It is recommended to record HD channels to a USB hard disk.

NOTE   *Ensure that there is enough free memory before recording. The recording will not start, if there is not enough free memory.*

Do not disconnect the USB memory from the receiver during recording or playback as this could cause damage to the receiver and/or USB memory.

Highly fragmented or used memory may also not operate properly.

Recording to an USB memory formatted in NTFS is not possible.

USB Eject

Press the 🔼 key to eject all connected USB memories. Always use this option before disconnecting an USB memory.

This function allows you to safely remove an USB memory connected to your receiver to prevent loss of data.

Channel change
You can watch channels while recording one program of the same frequency. If the recorded channel is not scrambled (FTA) you can select any other channel to watch. If the recorded channel is scrambled, you can only select and watch not scrambled channels.
Press **CH UP/DOWN** keys to change channels.
Press **OK** key to display the channels you can change to and select a channel with the ▲/▼/**OK** keys.

Stand-by
Press **STAND-BY** key during a recording to switch the receiver to Stand-by mode after the recording is finished.
For timer recordings, the receiver will switch to operation mode and start recording at the specific time. After the recording is finished, the receiver will switch back to Stand-by mode (**after 1 minute**).

Timer	**20 Timer events** (recordings and reservations) can be programmed.
TV/Radio	Record **TV** and **radio** programs.
Playback	Enter **Recordings** (**ARIVA media**) to playback recordings.

13.2 Instant recording

Recording	Press RECORDING key to start the recording.

Recording list
Press **EXIT, STOP** or **INFO** keys to display the recording list.

Duration	The duration as set in **Multimedia** (**User** menu) is displayed. Press the ◄/► keys to change the duration (**max. 240 min.**) in **10 min. steps**.
Stop	Press **OK** key to stop a recording.

13.3 Timeshift recording

Timeshift enables you to record and playback a program you are watching, while it is still being broadcasted.

Start	Press **PAUSE** key to start the Timeshift recording and to pause the program. Press **PLAY** key to start the playback.
Stop	The recording stops, if you change to another channel, or if you press **STOP** key.
Playback	Press the **REWIND/FORWARD/SLOW MOTION/JUMP** keys to playback the recorded part.
File	The Timeshift recording is stored in the **TimeShift** (**tms**) file in **Recordings**.

13.4 Timer recording

Press **EPG** key to program a timer.

Select a channel or program and press (green) key.

Mode	Select an option (**once**, **daily, weekly, daily** (**Mon-Fri**)).
Date	Enter the date with the **0-9 numeric** keys for programs without EPG schedule.
Begin	Enter the start time with the **0-9 numeric** keys for programs without EPG schedule.
Duration	Select the duration (min. 10 min., max. **24**0 min.) for a recording.

Press **MENU** key to save the event.

14. MENU

14.1 Operating the menu

Menu	Select an option with the ▲/▼, ◄/► keys. Enter an option with the **OK** key.
Values	Change values with the ◄/► keys. Insert values with the **0-9 numeric** keys. Enter the **edit window**.

15. INSTALLATION

15.1 Antenna

Select the Antenna **type**.

Fixed	Select this option for a fixed antenna.
DiSEqC 1.2	Select this option for a DiSEqC 1.2 motor.
USALS	Select this option for an USALS motor. Enter the **longitude** (**East**/**West**) and **latitude** (**North**/**South**) of your location.
Unicable/SCD	Select this option for a Single Cable Distribution Antenna to deliver broadcast over a single cable to multiple users. Select the user **Band B1-B8**. Select the **Band frequency**.

Press **MENU** key to save.

15.2 Satellite search

Satellite	Select a satellite.
Transponder	Select a transponder.
LNB	Select the LNB frequency.
22Khz	Select **On** or **Off**.
DiSEqC	Select the DiSEqC (**A**, **B**, **C**, **D**)/**Mini A**, **B** port for the selected satellite.
DiSEqC 1.1	Select the DiSEqC port (**1-16)** for the selected satellite.
Satellite position	This option is activated, if you selected **Unicable/SCD** antenna in the **Antenna menu**. Select the position. **P1**: User band B1, B2, B3, B4 **P2**: User band B5, B6, B7, B8
LNB Power	Select the LNB power.
Search	Press 🔵 (blue) key to start the search.

Search options

All/FTA/NIT/FAST SCAN	Select an option to start the search.
Transponder	Select this option to add, edit or search transponders.
DiSEqC/USALS	Select this option to search all installed satellites (**DiSEqC**, **DiSEqC 1.2** & **USALS**) at one time.
PID	Select this option to edit PIDs.

15.3 Edit satellite

Satellite	Select a satellite. If a satellite is missing, select a user define satellite (**Others**) and enter the name.
Edit	Press the 🔴 (red) key to enter a new name or to rename a satellite.
Position	Enter the position.

15.4 Fastscan

Satellite	Select a satellite.
Search	Select a fast scan search option.
Channel list	Select to *add* the searched channels to the channel list (end) or to *replace* the searched channels.
Search	Press ▢ (blue) key to start the search.

15.5 Transponder search

Satellite	Select a satellite.
Frequency	Select the frequency or insert a new one.
Symbol rate	Insert the symbol rate.
Polarization	Select the polarization (*horizontal*/*vertical*).
DVB	Select the transmission (*DVB-S*/*DVB-S2*).
Modulation	Select the modulation for DVB-S2 (*QPSK*/*8PSK*).
FEC	Select the FEC value for DVB-S2. For DVB-S select *auto*.
Pilot	Select the Pilot function for DVB-S2.
Search	Press ▢ (blue) key to start the search.
Search options	Select an option (*FTA*/*NIT*/*Transponder*) to start the search.
Edit	Press ▢ (red) key to edit a transponder.
Save	Press **MENU** key to save the edited/new transponder.

15.6 DiSEqC/USALS-Multi search

Satellite	Select the installed satellites (DiSEqC switch, DiSEqC 1.2 motor/USALS motor) with the ▲/▼/**OK** keys.
Search	Press ▢ (blue) key to search all selected satellites at one time.

15.7 Edit PID

Satellite	Select a satellite.
Transponder	Select a transponder.
Channel	Rename/name the channel.
Video PID	Enter the Video PID.
Audio PID	Enter the Audio PID.
PCR PID	Enter the PCR PID.
Save	Press **MENU** key to save the changes.

15.8 DiSEqC 1.2

Satellite	Select a satellite.
Transponder	Select a transponder.
Go to position	Press **OK** key to move the motor to the stored position.
Move	Press the ◄/► (*West*/*East*) keys to move the motor to the desired position/limits.
Steps	Select the motor steps (*1-127*).
Move in steps	Press the ◄/►(*West*/*East*) keys to move the motor in the selected steps.
Save position	Save the selected satellite position.
Save limits & options	
East/West limit	Select this option to save the limits.
Delete	Select this option to delete the stored limits.
Recalculate	Select this option to recalculate the positions of the satellites based on one satellite position and to re-adjust them.
Go to center	Select this option to move the motor to the center.
Save	Press **MENU** key to save the Motor settings and enter the *Satellite search* menu to start the search.
Search	Press ▢ (blue) key to search all selected satellites at one time.

15.9 USB update

Download	Download from www.ferguson-digital.eu the latest system software to your PC and transfer the file to an USB memory.
USB	Connect the USB memory to your receiver.
NOTE	*It is only possible to update via an USB memory formatted in FAT32.*
Start	Enter this menu option to start the update.
Reboot	After an update the set will automatically shutdown. Reboot the set after the shutdown.

15.10 Network update

Update your receiver with the latest system software via the Internet.

Network update	Select Network update to start the network update.
Reboot	After an update the set will automatically shutdown. Reboot the set after the shutdown.

15.11 Factory reset

Reset all channel data to the receiver factory settings. All stored channels, lists and settings will be deleted.

NOTE: *It is recommended to make a factory reset after you updated your set via network or USB. Before you make a factory reset, export all data to the USB memory with the export data function (chapter 18.4) and import them again after the factory reset. In case the data cannot be imported, setup your set again.*

16. SETTINGS

16.1 Network connection

During booting your receiver will connect automatically to the network.

Auto	To connect automatically by DHCP.
Manual	To connect manually with a static IP address.
IP	Enter the fixed IP address.
Subnet mask	Enter the subnet mask address. In general it is 255.255.255.0.
Gateway	Enter the router's IP address.
DNS Server	Enter the DNS Server's IP address. In general it is the router's IP address. You can enter 2 DNS Server IP addresses.

Press **MENU** key to connect.

Modem	To connect with your telephone line.
Phone number	Enter the phone number to dial in.

Press **MENU** key to connect.

16.2 ARIVA share

Stream movies, MP3s, photos (***only supported formats***) from your PC ***Shared Documents Folder*** to the receiver in your local network.

Enter **ARIVA share** (**Settings** menu) to connect.

Windows	Select the PC Windows system (***XP/Vista/Windows7***).
PC IP address	Enter the IP address of your PC. If required enter a ***Username***/***Password***.
PC Folder name	Select the name of the ***Shared documents folder***. XP: ***Shared/SharedDocs***. Vista: ***Public***. ***Windows 7***: ***Users***.

Press **MENU** key to connect.

In case a connection cannot be established check your PC settings.

Enter the shared documents folder settings and activate the option: ***share this folder in the network***.

Enter the LAN (Local area network) settings and activate the option: File and Printer Sharing for Microsoft Networks.

Check the shared documents folder names (**XP**-**Shared/SharedDocs**, **Vista-Public**, **Windows 7**-**Users**). If the folder name is different, create a new shared folder with the required name and activate the options to share the folder in the network.

16.3 Television

Screen format	Select the screen format (**Auto**, **Pan & Scan**, **4:3/Letterbox**).
Menu transparency	Select the transparency (**50%-100%**).
Information bar	Select the automatic display time of the information bar for TV, movies, recordings. If you select **Off**, the information bar will not be displayed.
Dolby Digital	Select **On** to output dolby digital audio via S/PDIF.

16.4 Software version

The receiver software, hardware version and the date of the last update are displayed. Press **OK** key to check if a new software update is available.

16.5 Card reader

View information about the inserted subscriber's card.

17. USER

17.1 Menu & audio language

Menu language	Select the menu language.
Audio language	Select the standard audio language for programs.

17.2 Time & date

Mode	Select an option (**auto**/**manual**).
Date	Enter the date manually.
Time	Enter the time manually.
UTC	Select your local zone.
Summer Time	Select the option (**On**/**Off**).
Sleep time	Set the time to turn off your receiver automatically.
Wake up time	Set the time to turn on your receiver automatically.

17.3 PIN code

PIN	The 4 digit PIN code is initially set to **0000**.
Change	Enter the New PIN code twice for confirmation and the **Current PIN** code to change the PIN code.
NOTE	*Contact your local dealer, if you forgot your PIN code.*

17.4 Menu & channel lock

Menu lock	Select **On** to block the access to the **MENU**.
Channel lock	Select **On** to lock channels.

17.5 Multimedia

Recording duration	Select the preset recording duration (**max. 240 min.**).
Timeshift duration	Select the preset Timeshift recording duration (**max 180 min.**).
Jump time	Select the preset jump time (**max 10 min.**).
EXT 2 formatting	Format the USB memory in **EXT2** format.

18. CREATE & EDIT

18.1 Edit channel

Delete	Press ■ (red) key delete a channel.
Lock/unlock	Press ■ (green) key to lock/unlock a channel.
Move	Press ■ (yellow) key to move the position of a channel or multiple channels at once.
	Press ■ (yellow) key to select a channel or multiple channels.
	Press ▲/▼ keys to select the new position.
	Press ■ (red) key to move the channel/channels.
	Press **OK** key to preview a channel.
Rename	Press ■ (blue) key to rename a channel.
List	Select a channel list with the ◀/▶ keys.
Channel	Enter the channel number.
	Press **OK** key to preview a channel.

18.2 Edit user lists

Edit the *10* user *lists*.

|	
List	Move between columns with the ◀/▶ keys and select an option or channel with the ▲/▼/**OK** keys.
Rename	Select a list and press ■ (yellow) key to rename the user list.
Edit	Select a list and press ■ (red) key to edit.
	Select a list option (1st column) to display (2nd column).
	Select a channels and press **OK** key to *copy* the channel to the *user list* (3rd column).
	Enter the list and press **OK** key to *delete* a channel from the user list.
	Press ■ (red) key to *watch* a channel.

18.3 Delete satellite & transponder

Select a satellite or transponder to delete.

18.4 Export/Import data

Save your settings to an USB memory and export/import them i.e. after a factory reset. Stored settings: All SAT/TP data and antenna settings (LNB, DiSEqC, Motor, etc.), all channel lists (Satellite/User lists), all settings from the *Settings* and *User* menu.

Export data:
Select this option to export the data with the option to rename the file.

Import data:
Select this option to import the data.

18.5 Ariva-i

Ariva–i is an interface to connect your receiver via network with your PC.

- Edit satellite & user lists from your PC.
- Browse the directories of the connected USB memories to copy & delete files.
- Stream live channels from your receiver to your PC (coming soon).
-

Enter the ariva–i menu to operate the ariva–i program from your PC. Download the ariva–i program from http://www.ferguson-digital.eu/ to your PC and unzip the file.
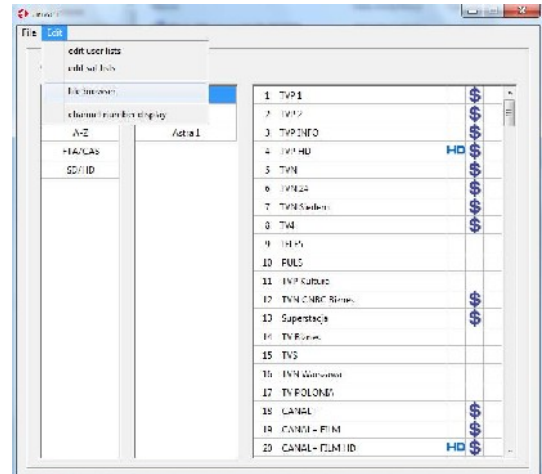
Channel editor

Connect	Open *File - Connect to STB*. Enter the IP address of the receiver.
Import data	Import the data directly from your receiver via the **ariva–i** menu.
	Export the data to a USB memory and import/copy the file to your PC (open *File - Import data*).
Select channels	Press **CTRL** key to select a channel/channels in a list.
Edit sat lists	Right-click the mouse over a Satellite, transponder, channel to edit.
Edit user lists	*Copy:* To copy channels to a *User list* select the channels and click on the **<< icon**.
	Delete: To delete channels click on the **X** icon.
Move channel position	Select a channel in a list and press **CTRL** key and use the *UP/DOWN* keyboard keys to move the channel position.
Channel number display	Open **Edit - Channel number display** to change the displayed number of channels in a list and enter the channel numbers (min. *10*, max. *30* channels).
Export data	Open *File - Update STB* to export the data from the PC to your receiver via the **ariva–i** menu.
	Open *File - Export data* to export the file to a USB memory and import/copy the file to your receiver.

USB file browser

Connect	Open *Edit - File Brower*. Enter the IP address of the receiver.
PC	Browse the directories of your PC.
Disk	Browse the directories of the USB memories connected to your receiver.
>> / <<	Copy files between your PC and USB memory.
Delete	Select a file and right click with the mouse to delete.

19. ARIVA MEDIA

19.1 Operating the menu

Select a menu option with the ◄/► keys.
Select an option file/folder with the ▲/▼/**OK** keys.

Press 🟦 (blue) key to change between **ARIVA share** and connected **USB memory**.

1 ▌ Browse the directory of the **USB memory (Storage 1)**.

品 Browse the directory of the **shard documents folder** of the connected PC.
Enter **ARIVA share** (**Settings** menu) to connect to your PC.

NOTE *To enter **ARIVA media** an USB memory must be connected or the receiver must be connected via the network with the PC.*

19.2 Media guide

🌐 **Status** Displays the memory status (**USB/PC**).

Preset folders

ariva_records	Recordings are saved in this folder.
download	Downloaded files are saved in this folder.
youtube	YouTube videos & thumbnails are saved in this folder.
youporn	YouPorn videos & thumbnails are saved in this folder.
thumbnail	Thumbnails from the photo menu are saved in this folder.
jamendo	Jamendo Top 100 MP3s & thumbnails are saved in this folder.

NOTE *For USB memory devices formatted in NTFS your receiver can only playback files (movies, MP3s, pictures).*
A file cannot start playback, if the file name has more than 55 letters or too many punctuation. In this case, shorten the file name.
Delete from time to time files which you are not using anymore in the preset folders, i.e. YouTube, YouPorn, Jamendo, thumbnail images.

19.3 Recordings & movies

Recording format	Trp.
Movie formats	MPEG-4 recordings (.trp), DivX/Xvid (**.avi, .divx**), FLV (**.flv**), PAL (50Hz) VOB (**.vob**), PAL (50Hz) MPEG-2 (**.mpg, .m2v, .ts, .trp**).
Playback	
Preview	Select a movie or recording and press **OK** key.
Full screen	Select a movie or recording and press **OK** key twice or **PLAY** key. Press **STOP** key to stop.
Details	Press **INFO** key to display the title, present & total playtime.

Edit movies/recordings & folders

Sort	Press 🟩 (green) key to sort (**A-Z**/**Z-A**, **Date**).
Delete	Press 🟥 (red) key to delete.
Lock	Press 🟨 (yellow) key to lock/unlock a **folder** or a r**ecording**.
Edit	Press **INFO** key to enter the **file browser**.

NOTE *For YouTube videos and some video files **rewind/forward**, **Jump, slow motion** does not work.*

Playback of TRP recordings
To play SD or HD TRP (.trp) files recorded by other devices, select the matching codecs.

Video Codec	Select between **SD** and **HD** Recordings.
Audio Codec	Select between **MPEG**, **AC3** and **DDPLUS** (Dolby Digital Plus).

NOTE *Your set will reboot, if you selected the wrong video codec.*

19.4 Music

Format	MP3.
Playback	Select a song and press **OK** key. Press **STOP** key to stop.
Playlist	Press **PLAY** key to playback the songs of a folders. Press **JUMP** keys to select the previous/next song. Press **STOP** key to stop.
Soundtrack	Enter *Photo Menu*, *Flickr*, *Picasa* with *MP3 songs* as soundtrack.

Edit MP3 & folders

Sort	Press ▮ (green) key to sort (*A-Z*/*Z-A*, *Date*).
Delete	Press ▮ (red) key to delete.
Edit	Press **INFO** key to enter the *file browser*.

19.5 Photos

Format	JPG.
Full screen	
List	Select a photo and press **OK** key to preview the photo. Press **OK** key again to view the photo in full screen.
Thumbnails	Select a photo and press **OK** key to view the photo in full screen. Select the *next/previous* photo with the ◄/► keys.
Thumbnails/ list	Press ▮ (yellow) key to change between *thumbnails* and *list* mode.
Slideshow	Press **PLAY** key to start the slideshow of a folder. Press **STOP/EXIT** keys to stop.

Edit Photos & folders

Sort	Press ▮ (green) key to sort (*A-Z*/*Z-A*, *Date*).
Delete	Press ▮ (red) key to delete.
Edit	Press **INFO** key to enter the *file browser*.

19.6 File Browser

Edit files (recordings, movies, MP3s, Photos).

New folder	Press ▮ (yellow) key to create a new folder in the selected directory.
Delete	Press ▮ (blue) key to **delete**.
Copy	Press ▮ key to **copy** a file.
Move	Press **INFO** key to **move** a file from one folder to another.
Rename	Press **EPG** key to rename a file.
Sort	Press **USER** key to sort (**A-Z**/**Z-A**, **Date**)
NOTE	*Unlock a locked recording or movie to copy/move it. Add new folders for recordings or move/copy recordings only in the ariva_records directory.*

19.7 Shoutcast

Shoutcast Streaming	Stream more than 25.000 Internet radio stations. Select a station and press **OK** key. Press **STOP** key to stop.
List	Press ▮ (red) key to display the genre. Select a genre and press **OK** key.
Search	Press ▮ (yellow) key to search for a radio station.
Sort	Press ▮ (green) key to sort (**A-Z**/**Z-A**).
Userlist	Press **INFO** key to display the user list. You can save up to 4000 favorite radio stations in the user list.
Add/delete	Press ▮ (blue) key to *add* or *delete* a favorite station from the user list.
Soundtrack	Enter *Photo Menu*, *Flickr*, *Picasa* with *Shoutcast* as soundtrack.

19.8 Jamendo

Jamendo Streaming	Stream more than 1.700 Jamendo Internet radio stations. Select a station and press **OK** key. Press **STOP** key to stop.
Sort	Press (red) key to sort (*A-Z*/*Z-A*).
Soundtrack	Enter *Photo Menu*, *Flickr*, *Picasa* with *Jamendo* stations as soundtrack.

Play & download MP3s from the Jamendo Top 100 chart.

Jamendo MP3	Press (yellow) key to enter the Jamendo Top 100 MP3 chart. Select a Song and press **OK** key to start the download. After the song is downloaded it will start to play. Press **STOP** key to stop.

19.9 Flickr & Google Picassa

Photos	View photos from Flickr & Google Picasa.
Search	Press (red) key. Enter the search term. Press (yellow) key to save and to start the search.
List	Select a photo with the ▲/▼ keys. Press **OK** key for full screen mode and press **EXIT** key to abort. Scroll pages with the **PAGE** ▲/▼ keys.
Picasa	Select the next and previous photo of an album in full screen mode with the ◄/► keys.

19.10 Musicbox

Play & download MP3s from the Jamendo Top 100 chart.

Jamendo **MP3**	Press (yellow) key to enter the Jamendo Top 100 MP3 chart. Select a Song and press **OK** key to start the download. After the song is downloaded it will start to play. Press **STOP** key to stop.

20. ARIVA WEB

20.1 Operating the menu

Select an option with the ◄/►, ▲/▼ / **OK** keys.

Scroll pages with the ▲/▼ and **PAGE** ▲/▼ keys.

To enter **ARIVA web** your receiver must be connected with the internet.

20.2 Ferguson news

Information about latest updates and other news are displayed.

20.3 RSS

Integrated RSS news feeds in multiple languages are displayed.

20.4 Twitter

Twitter	Display and send Twitter tweets.
Search	Press **OK** key to display the search window.
	Enter the search term.
	Press 🟨 (yellow) key to start the search.
Write	Press 🟦 (blue) key to write a tweet.
	Press 🟥 (red) key to enter your **username**.
	Press 🟩 (green) key to enter your **password**.
	Press 🟨 (yellow) key to **write** a message of 140 characters or fewer. Press **OK** key to **send** the message.
NOTE	*You need a twitter account to send messages. To set up an account enter www.twitter.com.*

20.5 Weather

Weather forecasts for regions, countries (7 days) and cities (4 days) are displayed.

20.6 Advertising

Advertising, if available, is displayed.

20.7 World Time

The current time for cities in different time zones is displayed.

21. ARIVA TV

21.1 Operating the menu

Select an option with the ◄/► keys and **OK** key to enter.
Select an option, file/folder with the ▲/▼/**OK** keys.
Enter a value with the the the **0-9 numeric** keys.
NOTE   To enter **ARIVA TV** an USB memory must be connected.

21.2 YouTube & XXX (YouPorn)

Playback YouTube & YouPorn videos.

List	Press ▊ (green) key to display the categories and time periods. Select the time period. Scroll pages with the **PAGE ▲/▼** keys.
Search	Press ▊ (red) key. Enter the search term. Press ▊ (yellow) key to save and to start the search.
Playback	
Preview	Select a video and press **OK** key.
Full screen	Press **PLAY** key or **OK** key twice. Press **STOP** key to stop.
Details	Press **INFO** key to display the title, present & total playtime.
NOTE	*No audio is available for YouTube Videos, if your TV does not support an audio sample rate of 22Khz via HDMI. In this case, connect the set via Components video and audio L/R to output video and audio.*

21.3 Ariva net

ARIVA net	Share movies, MP3s, photos (**only supported formats**) with your family and friends in your network or via the internet between your receiver and PC/FTP servers.
moviebox	Play & download movies from the internet, if available.
NOTE	*A download of a file with* **ARIVA net** *cannot start, if the file name has more than 55 letters or too many punctuations. In this case, shorten the filename.*
FTP	Press **OK** key to enter the IP address of the *FTP server* and if required the *Username*/*Password*. Press **MENU** key to connect.
Directory	Browse the directory with the ▲/▼/**OK** keys.
Download	Press **OK** key.
PC	To have access to a PC install a FTP server program on the PC.

21.4 Download guide

Download	Select a file and press **OK** key.
Stop	Press **OK** key again to stop.
Continue	Press **OK** key again to continue the download from the already downloaded part.
Status	*100%* is displayed when the download is complete.
Delete	Press ▊ (red) key to delete.
Playback	Press **PLAY** key to start playback during download. Press **STOP** key to stop.
Pause	Press **PAUSE** key to pause.
Details	Press **INFO** key to display the title, present & total playtime.
Screen	Press **RESO** key to change the screen format of a movie.

NOTE	*Play & download of a movie depends on your internet connection. Start playback after you downloaded more than 20%. If you have a slow connection, start playback after you downloaded more than 50%.*

21.5 Moviebox

Movies	Press **OK** key to display the available movies for download.

21.6 ARIVA net

FTP	Press **OK** key to enter the IP address of the **FTP server** and if required the **Username**/**Password**. Press **MENU** key to connect.
Directory	Browse the directory with the ▲/▼/**OK** keys.
Download	Press **OK** key.
PC	To have access to a PC install a FTP server program on the PC.

21.7 VLC Media Player

Stream video/audio from a PC in your network or via the internet with VLC Media player (http://www.videolan.org).
Stream **movies**, i.e. movie formats which are not supported by your receiver or which cannot be played back.
Stream **Webcams** & **TV cards**, **Internet TV & PSP**.

Operating the menu

IP	Enter the IP address of the PC to connect.
Playlist	Select a movie/stream and press **OK** key to start streaming. Activate the **VLC Web interface** to display the playlist.
Streaming	Press **PAUSE** key to pause and **PLAY** key to resume streaming. Press **STOP** key to stop.
Screen	Press **RESO** key to change the screen format.

Playlist

Activate the **VLC Web interface** to display the playlist with your receiver.
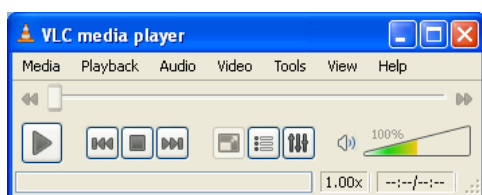
View → Add interface → Web Interface

Open media

VLC	Activate VLC Media player on your PC. Open the streaming option: **Media → Streaming**
Streaming	
Disc	Select the **Disc type** and options (title, chapter, etc.). To select a title and chapter, play the DVD with VLC and enter **Playback** option to view the title and chapter no..
File	Select a movie file.
Capture Device	Select the capture device & options.
Network	Select the network protocol of the TV internet stream.

Select **Stream** after the selection is made.

Stream output

Source	The selected source is displayed. Select **next**.
Destinations	
Destinations	Select **UDP** from the list. Select **Add** and enter the IP address of your receiver (open the port 1234 of your firewall).
Display locally	Select this option, if you stream in a local network.
Transcoding options	
Activate	Select **Activate Transcoding**.
Profile	Select **Video – MPEG-2 + MPGA (TS)** from the list. Click on the settings icon to display the **Form** window.
Form	
Encapsulation	Select **MPEG TS**.
Video codec	Select **MPEG-2** as **Codec**. A **bitrate** of *2048 Kb/s* is recommended. Select a **Frame Rate** of 25 fps.
Audio codec	Select the **audio codec** and **bitrate**.

Select **Save**.

Options - *Generated stream output string*

Insert the Video and Audio PID **{pid-video=100,pid-audio=101}** after **mux=ts**

:=std{access=udp,mux=ts{pid-video=100,pid-audio=101},dst=192.168.1(

Select **Stream** to complete the setting. Add DVDs and IPTV streams the same way. You can select and add only one file, DVD or IPTV stream to the playlist. It is not possible to add multiple files to the playlist.

Streaming Internet TV

Stream Internet TV with VLC Media Player from your PC to your receiver.

P2P Programs

P2P	To stream channels from TVants, Sopcast, TVU install these P2P programs to your PC.
VLC	The P2P program must be running the complete time on your PC to stream with VLC to your receiver.
Tips	Enter www.myp2p.eu to find download links for the P2P programs, tips & tricks and streaming schedules (i.e. sport events).

P2P Settings for VLC Player

P2P	Activate the P2P program. Select a channel.
VLC	After that activate VLC Player and open the **Streaming** option and enter **Network**.
VLC settings	
Protocol	Enter the **Protocol** for the URL location. For Sopcast, TV Ants and TVU it is **HTTP**.
Address	
TVants	Right click over the streaming channel of TVants and select properties. Enter the **asf** location of the stream i.e. http://localhost:16900/1.asf
TVU	Enter http://localhost:8901
Sopcast	Enter http://localhost:8902/tv.asf. The end port can change to 8912 or 8922.
Others	Enter the URL location.

Continue to set the **stream output chapter a**nd activate the **VLC Web interface** to stream channels to your receiver**.**

ATTACHMENT A - 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.

EPG - 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.

SPECIFICATION

Transport stream A/V Decoding

Aspect Ratio	16:9, 4:3, Letterbox
Video Resolution	576i, 576p, 720p, 1080i
Profile Level	MPEG-2 MP@ML, MP@HL, MPEG-4 H.264/AVC HP@L4
Frame Rate	50Hz PAL
Audio Decoding	MPEG-1 Layer 1, 2, MP3 & Dolby AC3/AC3+
Teletext	VBI support

Tuner

Demodulation	QPSK, 8PSK
Frequency	950-2150 MHz
Symbol Rate	DVB-S QPSK: 2- 45Ms/s, DVB-S2 8PSK/QPSK: 10-30Ms/s
DiSEqC Control	1.0, 1.2, USALS

Conditional Access Interface

Smart Card	1 Slot

Power Supply

Input Voltage	90-250V AC, 50/60Hz
Power Consumption	Max. 25W
Stand-by Mode	Max. 1W
Type	Switching Mode Power Supply

Physical Specification

Dimension (w x h x d)	260 x 45 x 210 (mm)
Weight	~ 1.5 kg
Operating Temperature	0°C ~ 45°C
Storage Temperature	-10°C ~ 60°C

Display & Control

4 Digit Blue LED Display
IR Remote Control

Operating System

Linux	Kernel 2.6

A/V & Data In/Out

USB 2.0	USB Host Connector
HDMI	Digital Video/Audio Output
Component	Y/Pb/Pr Video Output (RCA)
S/PDIF	Coaxial Output (RCA)
Ethernet	RJ-45 10/100 Base-T
Audio	Audio L/R Output (RCA)
PSTN Modem	RJ-11 (Analog)

Supported Formats

Photo	JPEG
Video	AVI, VOB, FLV, MPEG2 TS/TRP, MPEG 1/2
Subtitle	SMI, SRT, SUB

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