



FK-8500 HD EN  **User manual**
*high definition
satellite receiver*





EN 

This equipment is marked with the above recycling symbol. It means that at the end of the life of the equipment you must dispose of it separately at an appropriate collection point and not place it in the normal domestic unsorted waste stream. This will benefit the environment for all.

PL 

To urządzenie oznakowane jest specjalnym symbolem odzysku. Po okresie użytkowania trzeba je zwrócić do odpowiedniego punktu zbiórki i nie wolno umieszczać go razem z nieposortowanymi odpadami domowymi. Takie działanie przynosi korzyść dla środowiska.

DE  **AT** 

Dieses Produkt trägt das Recycling-Symbol gemäß der EU-Richtlinie 2002/96/EC. Das bedeutet, dass das Gerät am Ende der Nutzungszeit bei einer kommunalen Sammelstelle zum Recycling abgegeben werden muss (kostenlos). Eine Entsorgung über den Haus-/Restmüll ist nicht gestattet. Dies ist ein aktiver Beitrag zum Umweltschutz.

CZ 

Toto zařízení je označeno výše uvedeným recyklačním symbolem. To znamená, že na konci doby života zařízení musíte zajistit, aby bylo uloženo odděleně na sběrném místě, zřízeném pro tento účel, a ne na místech určených pro ukládání běžného netříděného odpadu. Přispěje to ke zlepšené stavu životního prostředí nás všech.

HU 

A készülék a fenti újratervezési szimbólummal van megjelölve. Ez azt jelenti, hogy a készülék használati időtartama után egy külön gyűjtőhelyen kell leadni. A normál háztartási hulladékkal és egyéb szeméttel együtt a készüléket kidobni nem szabad. Ezáltal hozzájárulunk környezetünk védelméhez.

ES 

Este equipo está etiquetado con el símbolo de reciclado que puede verse arriba. Esto quiere decir que al final de la vida del equipo, éste debe ser llevado a un punto de recogida específico para equipos electrónicos, y no a los contenedores normales de residuos domésticos. Esto beneficiará al medio ambiente para todos.

RU 

Это устройство обозначено специальным символом утилизации. После истечения эксплуатационного срока следует его вернуть в соответствующий пункт сборки, и запрещено его размещать с не отсортированными домашними отходами. Этим Вы не наносите вреда для окружающей среды.

NL 

Dit Produkt draagt het Recycling-Symbool volgens de EU-norm 2002/96/EC en kan worden gerecycled. Deponeer hem bij een recycle-punt .

ENGLISH 

ENGLISH



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1. What's in the box?



FK-8500 HD high definition satellite receiver



User manual



Remote Control Unit



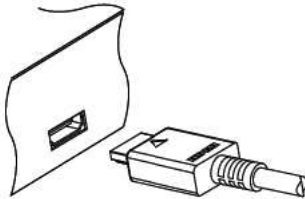
2x AAA batteries



HDMI cable

2. Connect - basic audio/video and dish connection

HDMI (Best quality, cable supplied)






and

Dish (LNB, cable not supplied)



Qucik Start Guide

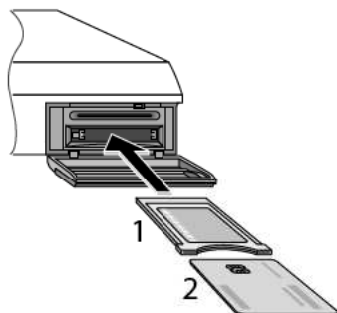
3. Setup

- 1 Press  to turn on.
- 2 Use   keys to select a language option in the menu and press **OK** to confirm.
- 3 The receiver is delivered with pre-programmed TV channels and can be used immediately. You can search more channels by using **Installation > Start Search** or **Installation > TP Setup** menu.

and

CAM and smartcart (optional, not supplied)

- 1 Insert CAM module.
- 2 Insert smartcart to CAM module, if required.



CAUTION!

Refer to the user manual for more information.

Introduction

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Specification

Glossary

Safety Information

- Please observe all warnings and instructions on the equipment and contained in these operating instructions. You must install the dish with correct direction and angle.
- Please carefully read this user's manual before using the receiver.
- To avoid electric-shock hazards, do not open the cabinet, refer servicing to qualified personnel only. If cabinet is opened warranty will be invalid.
- Please switch off completely the receiver during thunder, during abnormal phenomenon, before cleaning it and in case it remains out of service for a long period.
- Do not expose the receiver under the sunlight. And keep it away from the heat source or humid environments. Do not block ventilation holes of the receiver so that air can circulate freely.
- Please place the receiver in horizontal and stable conditions, keeping it away from vibrating.
- If device is moved from warmer place to a colder one some problem might occur. Please switch off the receiver and turn it on after 1 or 2 hours.
- Keep the receiver away from flower vases, tubs, sinks, etc., in order to avoid damaging the equipment. Do not touch power supply with wet hands.
- Don't put any objects on the device.
- Be sure to turn the receiver off and disconnect the AC power cord before cleaning the receiver surface. If the surface is dirty, wipe clean with a cloth which has been dipped in a weak soap/and/water solution and wrung out thoroughly, and then wipe again with a dry cloth.

- Do not connect cables while power is plugged.
- Do not use damaged cables for connections: you could cause fires.
- Please switch off completely the receiver while making all connections.
- The product purchased is a sophisticated electronic device which is not suitable for children under 18 years.
- We do not assume responsibility for damages caused to people or object, deriving from use of the device made by people under 18 years.

User manual

Ferguson has used all the available means to ensure the latest information regarding its products. Ferguson does not give a warranty regarding the contents of this User Manual and waives any implied warranties regarding market value or fitness for specific purposes. The information contained herein provide guidelines allowing the operation and maintenance of the receiver.

Ferguson reserves the right to make changes, corrections or to translate the User Manual without giving prior notice of such changes. Therefore, it is recommended that users visit our website regularly to receive the latest information.

Symbols used on the receiver

The Digital Video Broadcasting logo

This logo tells you that this receiver is compliant with the DVB standards.

The caution risk of electrical shock - do not open symbol

This symbol tells you that you are not allowed to open the receiver. Only authorized (service) technicians are allowed to open the box.

The CE mark

This mark tells you that the receiver is following the provisions of Council Directive 89/336/EEC on the approximation of the laws of the Member States relating to the electromagnetic compatibility and the provisions of Council Directive 73/23/EEC and 93/68/EEC on the approximation of the laws of the Member States relating to low voltage and electrical safety.

The double insulation symbol

This symbol tells you that the receiver is electrically safe within the normal use of the receiver as stated in the safety chapter.

The RoHS mark

This mark tells you that the receiver is following The Directive on the Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment 2002/95/EC (commonly referred to as the Restriction of Hazardous Substances Directive or RoHS)

Software upgrade

Ferguson has used all the available means to deliver to its users software updates guaranteeing the best possible parameters of the satellite television receivers. Ferguson reserves the right to make corrections, changes or modifications of the software used in the receiver on any basis whatsoever and without prior notice. The current version of the software is available on the following website <http://www.ferguson-digital.eu>

General information

This digital satellite receiver is a highly cost-effective digital satellite receiver integrated. It provides 6000 channels storage with fast searching and inter-channel switching capability. The receiver is definitely one of the best choices to deliver your digital life.

1. Main Features

- For high definition TV (up to 1920x1080)
- High Definition OSD
- USB PVR function
- internal scaler - upscaling standard definition channels up to 1920x1080
- Up to 6000 Channels TV & Radio Programmable
- Common Interface slot in order to support CAM modules
- Up to 100 Satellites Programmable
- Digital Audio Stream through optical and coaxial S/PDIF
- Component (YPbPr) output
- HDMI - 1080i, 720p, 576p and 576i resolution
- USB 2.0 port
- Advanced Electronic Program Guide (EPG)
- Supports 10 Timers
- Supports Teletext and Subtitles
- Multi Language OSD Menu
- Quick search function
- Separate TV/Radio List & Favourite Group List
- SCPC & MCPC Receivable from C/Ku-Band
- Channel search in automatic and manual way
- DiSEqC1.0 and DiSEqC1.2, USALS Control Compatible
- Channel list and software update through USB port.
- Audio files playback
- Photo viewer

2. Unpacking

Unpack the receiver and check to make sure that all of the following items are included in the packaging.

- 1x Digital Satellite Receiver
- 1x HDMI cable
- 1x Remote Control Unit (RCU)
- 2x AAA batteries
- 1x User's Guide

3. General Operation of STB

Throughout this manual you will notice that the everyday operation of your STB is based on a series of user friendly on screen display and menus. These menus will help you get the most from your STB, guiding you through installation, channel organizing, viewing and many other functions.

All functions can be carried out using the buttons on the RCU, and some of the functions can also be carried out using the buttons on the front panel.

Please be aware that new software may change the functionality of the receiver.

Should you experience any difficulties with the operation of your unit, please consult the relevant section of this manual, including the Problem Shooting, or alternatively call your dealer or a customer service adviser.

NOTE:

Please be aware that new software may change the functionality of the receiver. The photo and the function explanation involved in this specification is for reference only. If there is any mistake, please refer to the entity.

Functional Overview

Remote Control Unit (RCU-500)

Due to standardization fact most of Ferguson units is using the same remote control unit RCU-500. That is why NOT all keys are being used by this STB modell!!



POWER - Turns the receiver on or switches it to standby mode
MUTE - Turn on/off sound

FORMAT - Selects various video resolution
SAT - Changes the satellite on the channel list
TV/STB - Not used in this model
TV/RADIO - Switches between TV and Radio mode

Alphanumeric keypad 0-9 - Selects numbered items in a menu
BACK - Returns to the previously viewed channel
EPG - Displays EPG (Electronic Program Guide)

MENU - Displays the menu on the screen
INFO - Displays the program information bar (InfoBar)
◀ ▶ ▲ ▼ - Cursor buttons for moving left, right, up, down.
OK - Shows the channel list or selects an item on the menu
VOL + - - Increase / decrease the volume
CH + - - Turns to the next or previous channel
EXIT - Returns to the previous menu and the screen

TEXT (RED) - Shows the TELETEXT on the screen if the TV can be available
AUDIO (GREEN) - Selects the audio track for the current channel if applicable.

SUB.T (YELLOW) - Selects the subtitle language for the current channel if applicable.

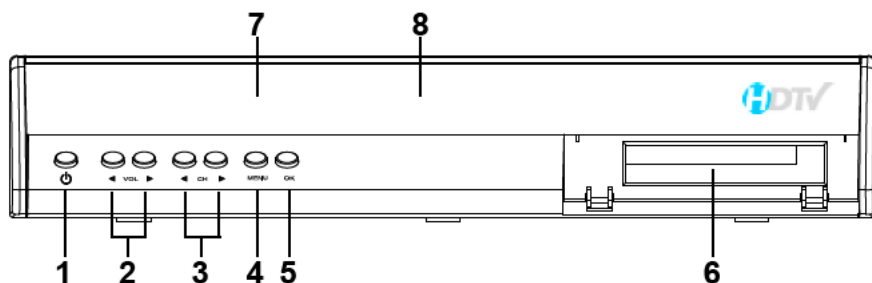
FIND (BLUE) - Quick Find channel function
EDIT (WHITE) - You can edit the current channel information
OPT - Used in submenus (E.g. in EPG for setting up timer events)
USB/PVR - Shows USB menu
FAV - Displays the favorite channel list

REW - Starts reverse playback. Subsequent presses increase the rewind speed.

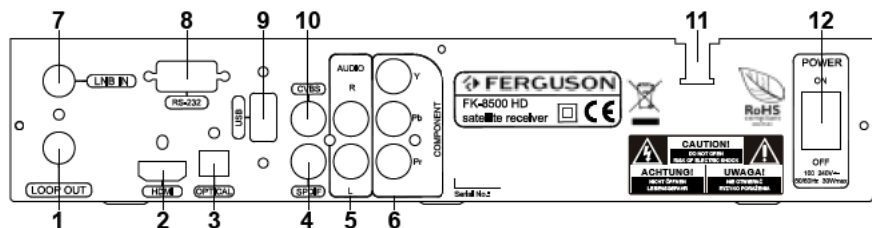
PLAY - Starts playback
PAUSE - Pauses live television or playback of a recorded program
FF - Starts fast motion playback. Subsequent presses increase the playback speed.

STOP - Stops playback or recording
PG DOWN - To move down faster on any list
PG UP - To move up faster on any list
REC - Activates manual recording

Front and Rear panels



- ❶ **POWER** - Turns the receiver on or switches it to standby mode
- ❷ **VOL + -** - Increase / decrease the volume; Cursor buttons for moving left, right.
- ❸ **CH + -** - Turns to the next or previous channel; Cursor buttons for moving up, down
- ❹ **MENU** - Displays the menu on the screen
- ❺ **OK** - Shows the channel list or selects an item on the menu
- ❻ **Common Interface slot**
- ❼ **IR Sensor**
- ❽ **VFD display**

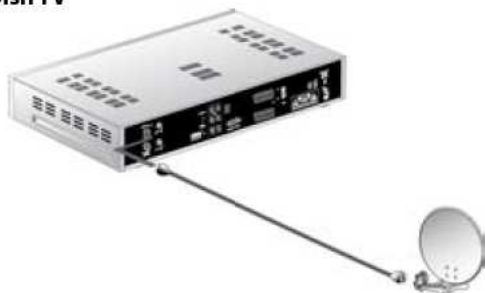


- ❶ **Loop Out** - connect to another satellite receiver if required
- ❷ **HDMI** - Audio and video output socket for the high definition television set
- ❸ **OPTICAL (Digital Audio Out)** - connect to coaxial audio input of an amplifier
- ❹ **SPDIF (Digital Audio Out)** - connect to coaxial audio input of an amplifier
- ❺ **Stereo Audio Out** - connect to audio left and right input of a stereo system
- ❻ **Y Pb Pr (Component Video Out)** - connect to Y, Pb and Pr input of a TV
- ❼ **LNB in** - connect the coaxial cable from the LNB
- ❽ **RS-232** - for data transfer
- ❹ **USB port** - for firmware update, data transfer and PVR function
- ❺ **CVBS** - provides a composite video output to standard definition TV or other equipments.
- ❻ **Main (AC Power Cord)** - connect to a standard AC outlet
- ❼ **Power** - power switch

Connection Diagram

This section explains the installation of the receiver. Refer to the manuals supplied with the equipment for the installation of outdoor equipment such as the dish antenna. When adding new equipment, be sure to refer to the related parts of the manual for the installation.

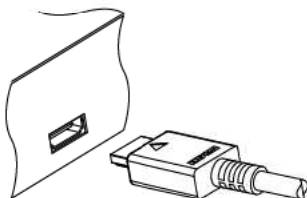
1. Connecting to Dish TV



Connect satellite antenna cable directly to the LNB IN socket of the receiver.

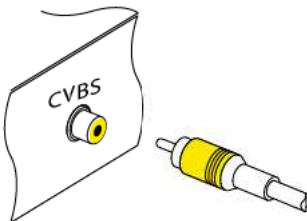
2. Connecting to TV

According to your TV type, please connect Receiver with:



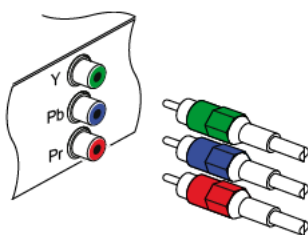
- **HDMI** If you have a high definition television set you should use a HDMI cable for best results. Plug one end of the cable into the HDMI socket on the digital receiver, and plug the other end into the matching socket on your television. In this case, you do not have to make audio connection because the HDMI connector can output stereo audio or Dolby digital audio.

or



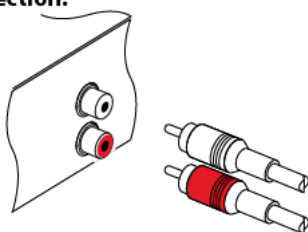
- **CVBS** RCA cable. You need to obtain a composite video cable (RCA cable) to use the composite video connector. Plug one end of the cable into the VIDEO (yellow) socket on the digital receiver, and plug the other end into the matching socket on your television.

or

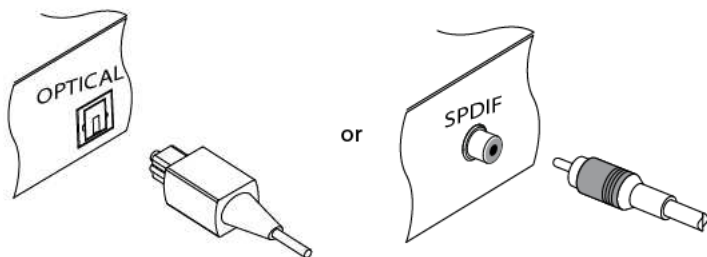


- **Component Y Pb Pr RCA cables.** You need to obtain a component video cable (3x RCA cable) to use the component video connector.

3. To make the audio connection:



You need to obtain an audio cable (2x RCA cable) to connect the audio connectors. Plug one end of the cable into the AUDIO L (white) and AUDIO R (red) sockets on the digital receiver, and plug the other end into the matching sockets on your television or audio system.



To enjoy Dolby digital audio, your television or audio system must be able to decode Dolby Digital audio, and you need to obtain a S/PDIF cable. Plug one end of the cable into the S/PDIF socket on the digital receiver, and plug the other end into the matching socket on your audio system.

4. Connecting to dishes using DiSEqC Mode

In order to connect external equipment including a satellite dish and converter, use the installation instructions or assistance from expert - installer!



The precise setting antenna is the basis for good reception. Even the best antenna, which is ill-adjusted will cause problems with quality. Even small mistakes can prevent the receipt or very worsen its quality. Before the installation, make sure whether the place lends itself to that. The competent direction can be pre-determined by comparing with other antennas. Immediately before the antenna can not be any obstacles cover seeking to signal the dish! When you are choosing the best place for the antenna, to attach and it initially set, it still must

be carefully adjusted. Each antenna is enabling regulatory adjustment screws in vertical position and level.

In digital receivers regulation is difficult. Settings can no be done base on picture, because it appears with delay. Also available indicators in the menu settings receiver typically operate with a delay, so the regulation can take a long time and be very inaccurate. For the antenna setting is necessary some meter antenna signal. Meter turns on a cable television converter between a receiver. We will confirm the presence of switch voltage converter with a tuner, and will show the size of the signal to satellites encountered. We invite you to benefit from expert assistance - installer!



If you want to use a DiSEqC switch for more than one satellite, connect DiSEqC switch OUT to LNB IN connector of the receiver.

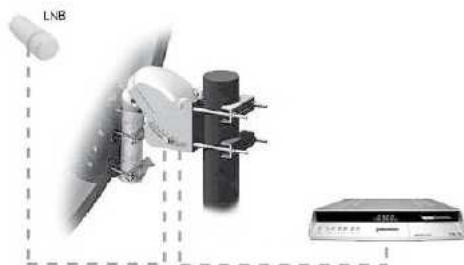
You can use Toneburst switch or DiSEqC 1.0 / 1.1 / 1.2 switch.

5. Connecting to Dish using USALS Mode

Proper work of Ferguson receiver ensures motorized system by USALS company Stab. To connect the installation of the dish with motorized system USALS, connect the output of USALS to LNB IN on rear panel of Ferguson receiver. The motor is what actually moves the antenna between the various satellite positions and is installed in between the antenna mast and the antenna mount. It is designed such that the axis of rotation is aligned with the North Star. This type of mount is often referred to as a Polar Mount. As a result, azimuth and elevation do not have to be adjusted individually. Instead, the antenna rotates on only one axis. The antenna motor is installed on the already existing vertical mast. The local latitude position of the location is then setup on the motor's scale thus aligning the axis of rotation in the correct position. Similar to a fixed antenna installation, the elevation scale on the antenna mount must be set for a satellite as close to south as possible. In the southern hemisphere you would be looking for a northern-most satellite. The selected satellite should lie within 5° of your southern-most position; the southern-most position being equal to your local longitude. For example, if your local longitude is 73° west, then the satellite you select should be located within $\pm 5^\circ$ of 73° west, or within the range 68° to 78° west.

USALS greatly simplifies the antenna setup. Ferguson receiver simply asks you for your local geographical coordinates and calculates the satellite positions on its own using a complex mathematical formula. The receiver then drives the motor directly to the selected satellite position. Once you have a signal, you need only finely adjust the antenna mount and horizontal position (on the mast itself) for maximum signal. If the initial southern setting was slightly off, it would now be corrected. Once the first satellite is perfectly set, all the other satellites in the arc would also be automatically set as soon as the orbital position of these additional satellites is entered into the receiver.

Without USALS, the alignment of the antenna system is somewhat more difficult. DiSEqC 1.2 drives the antenna to the selected satellite position in almost the same way. But since the local geographical data is missing, the motor drives to a satellite position based on the prime meridian and the equator. Therefore, when aligning the motor for the first time – and then again later on with all the other satellite positions – alignment with the actual satellite position has to be achieved with the motor commands "move east/west". Because of these difficulties, manufacturers of these motors make available helpful software on their web sites that enable you to easily calculate the true position of a satellite.



If you want to use a USALS motorized antenna, connect antenna OUT connector to LNB IN connector of the receiver.

Menu Options

The user interface has various ways to navigate through the menus and functions. Some of the keys on the remote control unit give direct access to functions. The most important keys are identified as EPG, colored keys, MENU and OK. Other keys are multi-functional which means that their function changes dependent of the mode that you are in.

Unless otherwise specified; this note explains the way you can navigate through the pages of the user menu.

1. Use the ▲▼ keys to move the cursor up or down from one line to another line.
2. Use the ◀▶ keys to move the cursor left or right from one line to another line.
3. Use the **OK** key to enter the sub-menu.
4. Use the **EXIT** key to leave the menu and return to the view mode.
5. In a sub-menu:
 - use the ◀▶ keys to select one from the preprogrammed options in the sub-menu.
 - use the **OK** key to confirm the selection;
 - the orange cursor indicates the active selection

Main menu

This receiver setup is carried out via the TV, enabling you to customise the receiver to suit your particular requirement.

Press **MENU** key on the RCU to display the following menu on the non-menu mode.

The menu consists of 5 sub-menus such as the following:



- Edit Channel
- Installation
- Settings
- Functions
- PVR

Edit Channel menu



- Channel Edit
- Favorite Edit

1. Channel Edit

If you want to edit your channel list press **OK** button on this menu. You will be prompted for password (Default password is "0000").

1.1 Rename Channel



To rename a channel:

1. Select the desired channel.
2. Press **RED** key.
3. In the keypad dialog window type new name
GREEN key can be used to cancel a letter on the caption bar at a time.
RED key is used to cancel all letters
BLUE key is used to place a blank
◀▶▲▼ keys are used to move the cursor.
4. Press **EXIT** to exit.

1.2 Delete Channel



To delete a service:

1. Firstly press **GREEN** key on the RCU
2. Secondly select the channel you want to delete and press **OK** to confirm.
3. After pressing **OK**, a "X" mark appears on the right side of the selected service name. That means this service is going to be deleted.
 Press **GREEN** key again to cancel the deleting mark.
4. Press **EXIT** to exit.

Warning:

If you delete a service from the current activated list, it is also deleted from all lists.

1.3 Move Channel



To move the channel:

1. Firstly select the desired channel you want to move.
2. Secondly press **YELLOW** key on the RCU and move the selected channel to the position you want to place
4. Finally press **OK** key to confirm.

1.4 Lock Channel



To lock a channel, please follow the instructions shown as below.

1. Select the desired channel you want to lock.
2. After pressing **BLUE** key, a lock mark appears in the selected channel name. It means that this service is locked.

If somebody want to play this channel, the correct password is required.

2. Favorite Edit



If you want to add several TV programs to Favorite. When you enter the Favorite Edit menu, default favorite list will be shown on the screen as Movies. By pressing **BLUE** key on the RCU, you can access the next favorite list.

In left program list, select the program that you want to add and press **OK** key. The selected program is shown in the right FAV list. In the same way, you can add more programs to right FAV list.

If you want to cancel one program in FAV list: move cursor to right column and select desired one, and you will delete this item from FAV list by pressing **GREEN** key on it.

RED key is used to rename the favorite group.

Installation menu



- Start Search
- TP Setup

When you enter this menu you will be prompted for password (Default password is "0000").

1. Start Search

1.1 Satellite



Select the desired satellite by using ◀▶ keys. You can also press **OK** key to display a draw-down list, the pre-programmed satellites is list here. You can select one or more satellites by using ▲▼ keys, and press **OK** to confirm. The selected satellites will be marked with the checkmark symbol.

1.2 Antenna Config



Satellite: Select the desired satellite.

LNB Type: Select the desired option among WideBand, User, Standard and Universal1.

High Frequency: The settings can be altered using the numeric buttons.

Low Frequency: The settings can be altered using the numeric keys.

LNB Power: If your receiver is connected to the LNB, select YES. But if your STB is connected to another receiver through Loop Through support, you should check which receiver is connected directly to the LNB. In case the other receiver is directly connected to the LNB, then select OFF.

22kHz : Select the switch with which you want to configure the antenna.

1.3 DiSEqC

The individual satellite can be allocated directly to a DiSEqC position. Please select the proper option among #1, #2, #3, #4, TONEA, TONEB and none.

Menu Options

1.4 Positioner

The settings are for the motor control of the satellite antenna. These only apply to an antenna with corresponding function.

Caution:

Leave the setting-up of the motor control to properly-trained personnel. Otherwise the satellite equipment may not function correctly.

1.4.1 DiSEqC1.2



Satellite: Make a choice from the pre-programmed satellites by using ◀▶ keys.

TP: Select the desired TP under the current satellite.

Limit Setup: Use this item to set the East and West limits of the motor. This should be used to prevent your dish from hitting anything that may be obstructing the path of the dish. Highlight this item and press ◀▶ keys to move your motor east or west until the motor is at the position you wish to use as your East Limit.

Warning: If this item is disabled, your motor will be able to move beyond any limits. Please take care in case there is anything obstructing the path of your dish.

Movement : Please select this item and then keep pressing ◀ or ▶ key on the RCU to move your antenna east or west. Use the signal strength and signal quality bars at the bottom of the screen to judge the best position of the antenna.

Nudge: Press ▶ to nudge the antenna until it is turned into the desired direction.

Recalculation: It is used to shift the position for all the satellites. Recalculation by using OK key makes above movement function.

Go to Reference : A starting point for the satellite search function can be selected by pressing the OK key.

1.4.2 USALS



Satellite: Make a choice from the pre-programmed satellites by using ◀▶ keys.

TP: Select the desired TP under the current satellite.

Local Longitude: Enter here the longitude of the local satellite antenna.

Local Latitude: Enter here the latitude of the local satellite antenna.

Dish Position: Set the position of satellite antenna.

Go to Reference: Select YES or NO.

Go to : Press OK to toward the satellite.

1.5 Search



Single Search: The function is used to search channels in one satellite, which has been selected.

Multi Search: The function is used to search channels in all satellites, which has been selected.

Press **OK** key to enter the Search window. First select search mode by using arrow keys, and press **OK** to search channels for TV and Radio.



2. TP Setup



In the menu, firstly select a desired satellite and TP, then you can set the frequency, symbol rate and polarity for the current TP.

Transmission: DVB-S, DVB-S2

FEC: Auto, 1/2, 2/3, 3/4, 5/6, 7/8, 8/9, 3/5, 4/5, 9/10, 6/7.

If you want to delete the current TP, press **Green** key and select YES.

Press **Yellow** key to add a new TP.

After setting finished, press **Red** key to search channel under the current TP.

Menu Options

Settings menu



- Language
- Parental Control
- Local Time Setting
- Timer Setting
- A/V Setting
- Advance Settings
- System Information
- Factory Default

1 Language



Select the desired language for menu.

2 Parental Control

You will be prompted for password (Default password is "0000").



Channel Lock: Select YES or NO. If "YES" is selected, you must input the correct password before playing the locked channel.

Menu Lock : Select YES or NO. If "YES" is selected, you must input the correct password before entering the menu.

Change Password: The password can be changed and any four-digit number can be set as a personal password. Select the menu item "Change Password" and press **OK** button. Enter the new password using the numeric buttons, then press the new password again to confirm. The new password has now been accepted.

3 Local Time Setting



GMT Usage: Press ◀▶ key to select YES or NO.

GMT Offset: You can set the time zone in where you live.

Summer Time: " YES" sets summer time, "NO" sets standard mean time.

4 Timer Setting

The receiver can be programmed so that at a set time it switches over to a specified channel. Up to ten timer functions are possible. This function can be used, for example, to record a programme on a DVD recorder.



Timer Number: Select the number of the timer from 1 to 10.

Enable: Select Yes or No. If "No" is selected, the following items can not be used.

Execute: Select the desired timer type between one time and daily.

Event Type: Select the desired type between turn ON and turn OFF.

Channel Number: Input the number of the channel.

Channel Name: It is changed according on the channel number.

Date: Enter the value using the numeric keys.

Hour: Enter the value using the numeric keys.

5 A/V Setting



Resolution: 576p/720p 50Hz/720p 60Hz/1080i 50Hz/1080i 60Hz

Match Method: 4:3 Ignore, 16:9 LetterBox, 16:9 PanScan, 16:9 Combined, 16:9 Ignore, 4:3 LetterBox, 4:3 PanScan, 4:3 Combined.

TV Mode: Select the one that fits your television.

6 Advance Settings



VFD Text Display Mode: Select preferred mode: Channel name/ChannelNum + Name.

VFD Scroll Mode: Select preferred mode: Always/One Time/No Scroll

VFD Brightness Set: Select preferred brightness level.

InfoBar Time Out Set: Select delay time to hide InfoBar.

7 System Information

You can check the information about model name, firmware version, hardware version.

8 Factory Default

In this menu, you can make all data and configurations as factory default status.

You will be prompted for password (Default password is "0000").

Warning: All stored data, channel list, settings will be erased and returned to factory default.

Functions menu



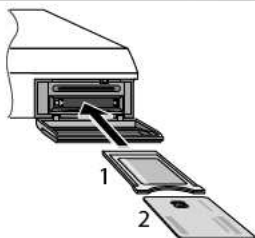
- Common Interface
- OTA Upgrade
- USB Device

1 Common Interface

The Digital Satellite Receiver makes you enjoy various scrambled channels encrypted by smartcard.



To be able to receive scrambled digital satellite channels you need a Smartcard and a Common Interface CA (Conditional Access) module from the Service Provider of your choice. The Smartcard and the CA module may also provide access to special menus not described in this manual. If so, please follow the instructions from the Service Provider. Only free to air channels are available without the Smartcard and CA Module.



Insert the CA Module in the slot of the receiver and insert the Smartcard to the CA module. This will give you access to scrambled channels.

2 USB Device



Note: Make sure that the USB-disc is plugged in the USB port of STB before your operation. In this menu, move cursor to the desired item and press **OK** to enjoy.

You can enjoy music or audio books with the Ferguson receiver. To play supported files enter Audio files menu item, select desired file and press **OK** button.

You can view photos with the Ferguson receiver. To view supported files enter Photos menu item, select desired file and press **OK** button.

2.1 Firmware Upgrade

Warning: Do not turn off the power during the update. This risks lasting damage to equipment.

Note: It is not possible to load lower version firmware onto higher firmware version.

- 1 Format your USB disk to FAT32 file system.
- 2 Download firmware from DOWNLOAD section of <http://www.ferguson-digital.eu/>.
- 3 Extract *.rs232 file from .zip archive and copy it to USB disk.
- 4 Power on receiver.
- 5 Insert USB disk to receiver's USB port.
- 6 Press USB button on RCU.
- 7 Select "Update" menu item.
- 8 Select proper firmware file and press OK.
- 9 Press RED button to confirm firmware upgrade.
- 10 Receiver will upgrade firmware by itself. The software upgrading takes a few minutes to be complete. Receiver will display the progress of updating. When the software is successfully upgraded, the receiver restart by itself.

Note: Remember that after upgrade receiver can be automatically set to factory default settings.

Note: The software version can be checked on TV screen.

- 1 On remote control, press "MENU" button.
- 2 Go to "Settings" menu.
- 3 Select "System information" menu item.
- 4 Check "SW Version" (second line).

2.2 Save and restore user channel list

Save channel list

- 1 Power on Ferguson receiver.
- 2 Insert USB disk to receiver's USB port.
3. Press **USB** button on RCU, select "UPDATE" submenu
4. Press **GREEN** button
5. Press **OK** button to confirm
6. Channel list will be saved to "channel_list_data_YYYY-MM-DD.rs232" file

Note: This kind of channel list has 512KiB.

Restore user channel list

- 1 Power on Ferguson receiver.
- 2 Insert USB disk to receiver's USB port.
3. Press **USB** button on RCU, select "UPDATE" submenu
4. Select channel list file
5. Press **OK** button to confirm
6. Press **RED** button
7. Wait until Ferguson reboot itself

Note: Remember that your current channel list will be replaced with loaded one.

2.3 Update embeded channel list

Note: Only this kind of channel list are available on Ferguson website. Channel list file has 64KiB.

- 1 Power on Ferguson receiver.
- 2 Insert USB disk to receiver's USB port.
3. Press **USB** button on RCU, select "UPDATE" submenu
4. select channel list file
5. press **OK** button
6. press **RED** button (now embeded channel list is replaced by new one)
7. wait until Ferguson reboot itself
8. after reboot language selection window will appear – select proper language
9. restore factory defaults (now user channel list is replaced by new one)
10. wait until Ferguson reboot itself
11. after reboot language selection window will appear – select proper language

Note: Remember that your current channel list will be replaced with loaded one.

PVR menu



- PVR File List
- Recording info
- Schedule List
- PVR Setting
- USB Uninstallation
- HDD Format

1 PVR File List

You can also get directly to this menu by pressing **USB/PVR** button and selecting PVR File List menu item.



Note: When a program is recorded, no additional contents such as multiple audio tracks or teletext are available.

The instructions on how to play a recording are as follows:

1. Put the highlight bar on a desired recording.
2. Press the **OK** button to start playback.
3. To stop playback, press the **STOP** button.

Press **RED** button to delete the selected file. The system will ask your confirmation when return the menu.

Press **YELLOW** button to rename the selected file.

2 Recording info

When there is recording, you can enter the Recording Info directly by pressing **REC** button on the RCU.



Recording Info displays current recording information such as: Mode, Valid Record Time, Past Time and Duration. There are two modes quick and schedule. Quick means manual recording (activated by REC button on RCU), and Schedule means scheduled earlier recording. If Quick is selected, the default duration is set to three hours.

Press **RED** button to stop recording, **GREEN** button is used to resume recording.

If duration is changed, press **YELLOW** key to save the new time.

Menu Options

ENGLISH

3 Schedule List

You can set a channel to be recorded at a specific time. Even if the Ferguson receiver is in standby mode, it will switch into operation mode and start recording at a specified time.



To input a timer recording, select the Schedule List menu; then the timer list will be displayed.

To add a new timer event, press the **GREEN** button, and a box like the left figure appears. Take the following steps:

1. Set the Schedule Type option to Record to make a recording
2. Set the Schedule Start Time and Schedule End Time options to a desired date and time
3. Select Schedule Mode. There are three timer modes:

- Once means literally 'one time'.
- Daily means literally 'every day'.
- Weekly means 'one day every week'.

4. Set the channel which provides the program you want. Pressing the **OK** button displays a channels list, from which you can select your desired channel.

NOTE:

1. The time when channel recording start-up and finished can not be the same. The maximal recording time can be 24 hours.
2. Can not record more than one channel simultaneously.

For a selected item, press **RED** key to delete the item and you can also press **BLUE** key to delete all the items. The system will ask your confirmation when exit the menu.

To modify a schedule item press **YELLOW** button.

4 PVR Setting



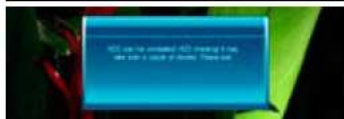
TimeShift Mode: You can enable or disable TimeShift function.

5 USB Uninstallation



Before pull out the USB device from Ferguson receiver, please uninstall.

Select USB Uninstall item in PVR menu and press **OK**, a message will display on the screen for your confirmation. After successful uninstallation, you could remove USB device from Ferguson receiver.



NOTE: USB device removed without uninstallation will be checked as soon as you connect device again. Disc checking may take up to couple of minutes.

6 HDD Format



You can delete all contents stored in the hard disk drive by formatting it.

Select HDD Format item in the PVR menu. This operation will format your USB device (external hard disk, pendrive) to FAT32. Before format, the system will ask your confirmation. If you select Yes, formatting will start.

CAUTION: Formatting the hard disk will delete all files permanently.

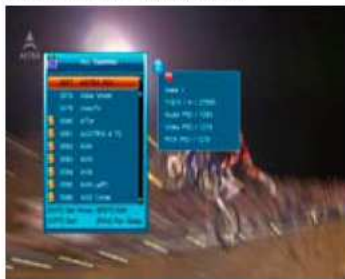


NOTE: If a new hard disk drive is installed, it must be formatted because the file system of the Ferguson receiver (FAT32) is different from the personal computer (usually NTFS). You can neither record nor use TimeShift with an unformatted hard disk.

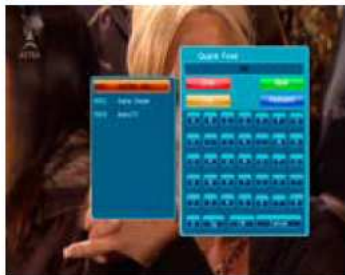
General Viewing Function

1 Watching television

To change channels, press the **▲**, **▼** or **CH+ / CH-** button. Pressing the **BACK** button switches to the previously viewed channel. In addition, you can switch to your desired channel by entering its channel number with the numeric buttons. You can also select a channel to watch in the channel list

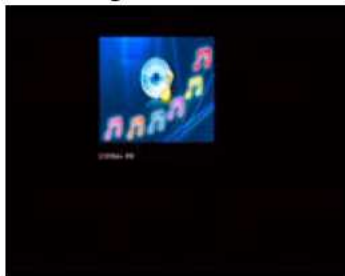


To view the channel list, press the **OK** button. A dollar sign (\$) may be marked on some entries, indicating pay channel. To watch pay channels, you need the subscription card. You can select a channel to watch on a favourite list as well as on the channels list. To display the favourite lists, press the **FAV** button.



By pressing **Find** button, you can activate Quick Find function. Type whole channel name or starting characters to quickly find desired channel.

2 Listening radio



To switch between TV and radio channel lists press **TV/RADIO** button.

3 Viewing program information



Pressing the **INFO** button displays the InfoBar box.



Pressing the **INFO** button more displays detailed information about the current program. To hide the InfoBar box, press the **EXIT** button.

4 Selecting audio tracks



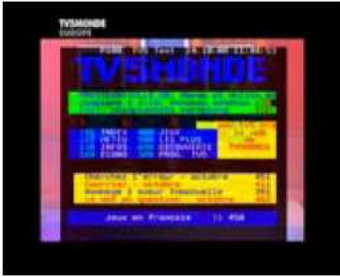
Some programs are provided with audio tracks in one or more languages. Pressing the **AUDIO (GREEN)** button displays available audio tracks. Once you select an audio track, it will be sounded.

5 Selecting subtitle tracks



Some programs are provided with subtitle tracks in one or more languages. Pressing the **SUB.T (YELLOW)** button displays available subtitle tracks. Once you select a subtitle track, it will be displayed. To turn off subtitle, press the **EXIT** button.

6 Viewing teletext



On some services, such information as weather reports, news or stock quotations is provided by means of teletext. Press the **TEXT (RED)** button to view teletext pages. Select a page to view by entering its page number with the numeric buttons. To clear the teletext screen, press the **EXIT** button.

7 Viewing EPG (Electronic Program Guide)



The Electronic Program Guide shows the current and scheduled programs that are or will be available on each channel with a short summary for each program.

Pressing the **EPG** button displays the electronic program.

8 Pausing live television (Using TimeShift function)

Note: USB disk should support USB 2.0 with writing speed over 8 MiB/s for stable time shift function.



You can pause and resume a live television program, and even rewind and replay it. When you are watching a program and you miss something, you can rewind and replay it. Or when your attention is needed elsewhere, you can pause it and resume it a short time later without losing any of it.

When you do this, you are no longer watching the live program, instead you are watching a delayed presentation of it. This is called time shifted function. Then, you can skip commercials until you catch up to the live broadcast.

In order to use the time shift function, the TimeShift Mode (menu PVR > PVR Settings) must be set to ON. When enabled, the Ferguson receiver will keep as much as 1.8GiB recording buffer of current service by utilizing the connected USB storage. The buffer will reset each time you change to another service.



When TimeShift mode is enabled, the following operations are possible:

- To pause current program press **PAUSE** button.
- To resume paused program press **PLAY** button.
- To go back in time, press the **REW** button; to go forward, press the **FF** button. To change play speed press again **REW** or **FF** button.
- In **PAUSE**, **FF**, **REW** mode, press **PLAY** key to resume to normal play speed.
- To end time shift, press the **STOP** button. The live program will be presented.

9 Manual recording

Note: USB disk should support USB 2.0 with writing speed over 8 MiB/s for stable recording.



To manually record the program you are watching at present, press the **REC** button.

Pressing the **PAUSE** button will pause the live show and begin time shifting within the current recording even with the Time Shifting Mode disabled.

To stop recording, press the **STOP** button, Ferguson will ask you for confirmation.



It is possible to pause a recording. After a recording is started, pressing the **REC** button displays a menu like the left figure, in which you can set the recording duration, pause and resume.

Note: The default duration of manual recording is set to three hours.

While a recording is going on, you can watch another FTA service from the same transponder (frequency).

Daily Usage

10 Scheduling recordings using the EPG (program guide)

Note: USB disk should support USB 2.0 with writing speed over 8 MiB/s for stable recording.



If the EPG (electronic program guide) is properly provided, you can make timer events on it. The instructions on how to make timer recordings using the EPG guide are as follows:

1. Press the **EPG** button to display the EPG.
2. Select a channel you want to record
3. Select a program you want to record
4. To make a timer event with recording, press **OPT**.
5. EPG Schedule menu will appear.
6. Adjust settings if needed and press OK.

11 Playing recordings

Note: USB disk should support USB 2.0 with writing speed over 8 MiB/s for stable playback.



Press **USB/PVR** button and select PVR File List menu item.

Press **PLAY** to start playback

Press the **REW** key to fast rewind, **FF** key to fast forward. The system support 2X, 4X, 8X, 16X and 32X.

Press **PAUSE** key to stop playback.

When in Pause, FF and REW mode, press **PLAY** to resume to normal mode

Press **STOP** to stop playing and exit to PVR File List menu.

During playback mode, press **PLAY** to display the playback process bar. It shows current playing file information including process, pass time, etc.

WARNING

Under no circumstances should you try to repair the system yourself, as this will invalidate the warranty. Do not open the system as there is a risk of electric shock.

If a fault occurs, first check the points listed below before taking the system for repair. If you are unable to remedy a problem by following these hints, consult your dealer for help.

Problem	Solution
The display on the front panel does not light up.	<ul style="list-style-type: none"> - Main cable is not connected. Check that the main cable is plugged into power socket.
No sound or picture, but the front panel red light is ON.	<ul style="list-style-type: none"> - The unit is in standby mode. Press the standby button.
No sound or picture.	<ul style="list-style-type: none"> - The satellite dish is not pointing at the satellite. Adjust the dish. Check the Signal Level in the Antenna Setup menu. - No signal or weak signal. Check the cable connections, LNB and other equipment connected between the LNB and the receiver, and/or adjust the dish.
Bad picture / Blocking error	<ul style="list-style-type: none"> - The satellite dish is not pointing at the satellite. Adjust the dish. - Signal is too strong. Connect a signal attenuator to the LNB input. - Satellite dish is too small. Change to a larger dish. - LNB noise factor too high. Change to an LNB with lower noise factor. - The LNB is faulty. Change the LNB.
The RCU is not working.	<ul style="list-style-type: none"> - Battery exhausted. Change the battery. - RCU is incorrectly aimed. Aim the RCU at the unit, or check that nothing blocks the front panel.
I'm not able to record on my external hard disc/pendrive.	<ul style="list-style-type: none"> - Disc is not formatted to FAT32. Format this disc. - Your pendrive is too slow therefore PVR function has been disabled. USB flash memory should support USB 2.0 with writing speed over 8 MiB/s for stable recording and playing. Use another faster device. - Device were not uninstalled. Disc checking is in progress. Please wait. - Device is not supported. Use another supported device.

Specifications

Tuner

Input Frequency	950 to 2150MHz
Input Level	-65 to -25dBm
LNB Supply	13.5V / 18.5V / OFF, max 500mA
Demodulation Type	QPSK, 8-PSK
Symbol Rate	2~45 MS/s (DVB-S), 10~30 MS/s (DVB-S2)

Audio/ Video Processing

Audio Standard	ISO/IEC 13818-3
Audio Decoding	MPEG-1 & MPEG-2 layer I and II
Audio Sampling Freq.	32, 44.1 48kHz
Video Standard	ISO/IEC 13818-2, MPEG-2 MP@ML, MPEG-4 AVC/H.264 HP@ L4
Aspect Ratio	4:3, 16:9
Video Resolution	1920×1080i, 1280×720P, 720×576 (PAL), 720×480 (NTSC)

Power Supply

Input voltage	AC100 – 240V, 50/60Hz
Power consumption	30W

Physical Characteristics

Rear Panel Connectors	1x LNB IN / 1x ANT IN LOOP through output 2x Audio L/R (RCA) 1x Video SIGNAL (RCA) 1x RS-232 (9-pin D-sub male) 1x S/P DIF (Optical) 1x Digital Audio (RCA) 1x HDMI 1x Y Pb Pr 1x USB 2.0
Dimensions (w x h x d)	292 x 63 x 240 mm
Weight	approximately 2kg

*Specifications subject to change
without prior notice*

CA - Conditional Access - Encryption system used to secure content and grant access only to subscribers.

CAM - conditional access module - is an electronic device, usually incorporating a slot for a smart card, which equips a set-top box with the appropriate hardware facility to view conditional access content that has been encrypted using a conditional access system.

CI - Common Interface - is the slot on a digital television receiver into which a conditional access module (CAM) may be inserted for satellite television. A receiver with a common interface allows the user to access encrypted television broadcasts as opposed to free-to-air (FTA) channels.

DVB-S is the original Digital Video Broadcasting forward error coding and modulation standard for satellite television. DVB-S is used in both MCPC and SCPC modes for broadcast network feeds, as well as for direct broadcast satellite services. The transport stream delivered by DVB-S is mandated as MPEG-2. Today the main use for this standard is the distribution of SDTV services.

DVB-S2 is an enhanced specification to replace the DVB-S standard. Today the main use for this new standard is the distribution of HDTV. The development of DVB-S2 coincided with the introduction of HDTV and H.264 (MPEG-4 AVC) video codecs.

EPG - Electronic Program Guide, also known as an Interactive Programme Guide or IPG, provides an on screen guide to channel listings, programme information or pay per view events.

FTA - Free-to-air - broadcasts that are sent unencrypted and may be received via any suitable receiver.

JPEG: A very common digital still picture format. A still-picture data compression system proposed by the Joint Photographic Expert Group, which features small decrease in image quality in spite of its high compression ratio.

LNB - low-noise block converter - is used in communications satellite (usually broadcast satellite) reception. The LNB is usually fixed on the satellite dish.

MCPC - multiple channels per carrier - several subcarriers are combined into a single bitstream before being modulated onto a carrier transmitted from a single location to one or more remote sites.

Monoblock LNB - is a unit consisting of two LNBs and is designed to receive satellites spaced close together.

Pay-TV - Pay television or **Premium Television** refers to subscription-based television services, provided digital cable or satellite, but also by digital terrestrial methods.

SCPC - Single channel per carrier - refers to using a single signal at a given frequency and bandwidth.

STB - Set-top box - Receiver device that processes an incoming signal from a satellite dish, aerial, cable, network or telephone line.

TP - Transponder - One of the transmitters on a satellite. A transponder transmits on a particular frequency to which a set-top box must tune to receive a signal. Typically each transponder can carry multiple compressed digital television channels.

DiSEqC - (Digital Satellite Equipment Control) is a communication protocol for use between a satellite receiver and a device such as a multi-dish switch or a small dish antenna rotor. It is compatible with the actuators used to rotate large C band dishes if used with a DiSEqC positioner.

USALS - (Universal Satellites Automatic Location System) - is a satellite motor protocol that automatically creates a list of available satellite positions in a motorised satellite dish setup. It is used in conjunction with the DiSEqC 1.2 protocol.

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