





# FREEVIEW™ HD TV receiver **T2-HD115 Zapper**

Part No. 305200

# **OPERATING MANUAL**



Check you can get FREEVIEW HD in your area. Text your postcode, followed by your house number or name to **80560\***. Or visit **www.FREEVIEW.co.uk** \*e.g. NW9 6NY 1 (Costs no more than a normal text.)

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# **Operating Manual**

- The illustrations and the OSD in this operation manual are for explanation and guidance purposes only.
- The examples used throughout this manual are based on the T2-HD115 model.

## **Dear Triax customer**

Thank you for purchasing the TRIAX T2-HD115 (FREEVIEW™ HD TV receiver). To ensure safety and many years of trouble-free operation, please read the Important Safety Precautions carefully before using this product.

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# **Important Safety Precautions**

- Cleaning Unplug the AC power adapter from the AC outlet before cleaning the product.
   Use a damp cloth to clean the product. Do not use liquid cleaners or aerosol cleaners.
- Use a soft damp cloth to gently wipe the product when it is dirty. To protect the product, do not use a chemical cloth to clean it. Chemicals may cause damage or cracks in the casing of the product.
- Water and moisture Do not expose the unit to wet or damp conditions.
- Do not place vases or any other water-filled containers on this product.
   The water may spill onto the product causing fire or electric shock.
- Ventilation The vents and other openings in the casing are designed for ventilation.
  Do not cover or block these vents and openings since insufficient ventilation can cause overheating and/or shorten the life of the product. Do not place the product on a bed, sofa, rug or other similar surface, since they can block ventilation openings. This product is not designed for built-in installation; do not place the product in an enclosed place such as a bookcase or rack, unless proper ventilation is provided or the manufacturer's instructions are followed.
- Heat sources Keep the product away from heat sources such as direct sunlight, radiators, heaters, stoves and other heat-generating products (including amplifiers).
- To prevent fire, never place any type of candle or naked flames on the top or near the product.
- The product uses power even in Standby. Unplug the product from the AC outlet when you are not using it.
- Servicing Do not attempt to service the product yourself. Removing covers can expose you to
  electric shock and other dangerous conditions. Maintenance should be performed by a suitably
  qualified person.

## **Remote Control Unit**

#### 1 HDMI

Select HDMI resolution 576p, 720p, 1080i and 1080p (Page 17).

#### 2 MENU

"MENU" screen on/off (Page 16).

#### 3 TEXT

Display Digital Text (Page 12).

#### 4 CH LIST

Opens the "CHANNELS" screen (Page 11).

# 5 GUIDE / ELECTRONIC PROGRAMME GUIDE Display the EPG (Page 12).

#### 6 NAVIGATION ▲▼◀▶ (Cursor)

Move up/down/left/right in menus and on screen displays (Page 11).

#### OK

Confirm selection in menu/on-screen display.

#### 7 BACK

Return to the previous "MENU" screen.

#### 8 VOL+/-

Increase/decrease the volume (Page 10).

#### 9 MUTE

Volume on/off.

#### 10 AD

Switch Audio Description on/off (Page 18).

#### 11 WIDE

Adjust the aspect ratio (page 17).

# 12 (Standby/On)

Switch between standby and on (Page 10).

#### 13 SUBI

Switch subtitles on/off (Page 19).

# 14 AUDIO

Select the desired audio language (Page 10).

# 15 COLOUR BUTTONS

For interactive use and navigating menus.

#### IO INFO

Displays programme information (Page 10).

## 17 EXIT

Closes the "MENU" screen.

#### **I8 LAST**

Toggles between the current channel and the previous channel (Page 10).

#### 19 PROG +/-

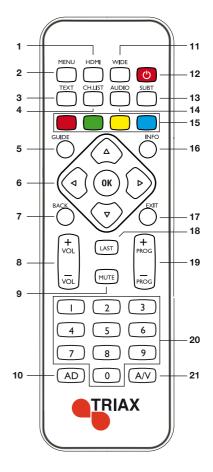
Select the channel (Up/Down).

# 20 NUMBER PAD

Enter values and select the channel number directly by entering its number. Set the page in digital text mode.

#### 21 A/V

Switch to the A/V input (Page 10).

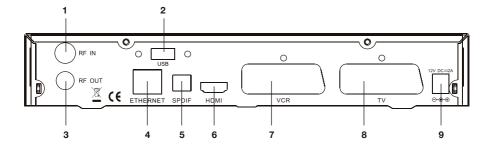


# **Receiver (Front View)**



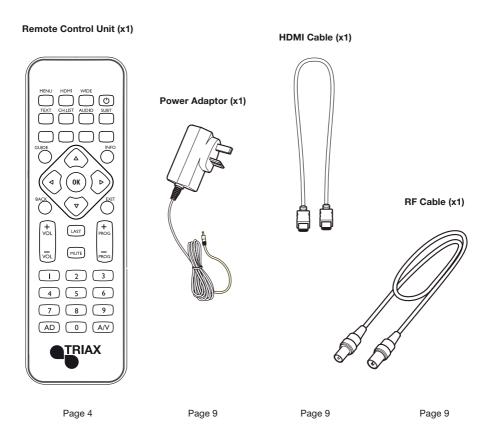
- + CHANNEL UP
- CHANNEL DOWN
- **(**) STANDBY BUTTON

# **Receiver (Rear View)**



- 1 RF IN (Antenna in) terminal
- 2 USB terminal For service only
- 3 RF OUT (Antenna out) terminal
- 4 ETHERNET terminal for future services
- 5 SPDIF (Digital audio output) terminal
- 6 HDMI terminal
- 7 VCR (SCART) terminal
- TV (SCART) terminal
- 9 12V DC terminal

# **Supplied Accessories**



- Triax T2-HD115 Operating Manual
- "AAA" size zinc-carbon battery (x2) Page 7

# Preparation

# Inserting the batteries

Before using the Receiver for the first time, insert the two supplied "AAA" size zinc-carbon batteries. When the batteries become depleted and the remote control unit fails to operate, replace the batteries with new "AAA" size batteries.

- 1 Open the battery cover.
- Insert the two supplied "AAA" size zinc-carbon batteries.
  - Place batteries with their terminals corresponding to the
     (+) and (-) indications in the battery compartment.
- 3 Close the battery cover.



Improper use of batteries can result in chemical leakage or explosion. Be sure to follow the instructions below.



- Do not mix old and new batteries. Mixing old and new batteries can shorten the life of new batteries or cause chemical leakage in old batteries.
- Remove batteries as soon as they have worn out. Chemicals that leak from batteries can cause a rash.
   If you find any chemical leakage, wipe thoroughly with a cloth.
- If you will not be using the remote control unit for an extended period of time, remove the batteries from it.
- When replacing the batteries, use zinc-carbon batteries instead of alkaline ones.

#### Note on disposing batteries:

The batteries provided contain no harmful materials such as cadmium, lead or mercury.

Regulations concerning used batteries stipulate that batteries may no longer be thrown out with the household rubbish Deposit any used batteries free of charge into the designated collection containers set up at your local recycling centre.

# Using the remote control unit

Use the remote control unit by pointing it towards the front of the Receiver.

Objects between the remote control unit and sensor may prevent proper operation.

# Cautions regarding the remote control unit

- Do not expose the remote control unit to shock. In addition, do not expose the remote control unit to liquids, and do not place in an area with high humidity.
- Do not place the remote control unit under direct sunlight. The heat may cause deformation of the unit.
- The remote control unit may not work properly if the remote control sensor of the Receiver is under direct sunlight or strong lighting. In such cases, change the angle of the lighting or the Receiver, or operate the remote control unit closer to the remote control sensor.



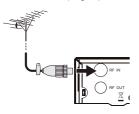
# **Quick Guide**

## Initial installation overview

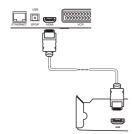
Follow the steps below one by one when using the Receiver for the first time



1 Connect the antenna cable to the RF IN terminal (Page 9)



2 Connect the Receiver to your TV using the supplied HDMI cable (Page 9)



3 Connect the power adapter to the Receiver (Page 9)



# Run the Initial Settings

- 1 Turn on the standy button on the Receiver (Page 10)
- 2 Run the first time installation (Page 9)

Ensure the antenna is connected



Press OK to continue

# **Start Searching Channels**

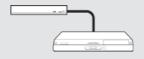
You will receive a message when installation is complete.



- 1 Congratulations! You can now watch TV
- 2 If neccessary, adjust the antenna to attain maximum signal reception

# Connect External Devices

1 Connect external devices such as DVD player / recorder as instructed (Page 14)

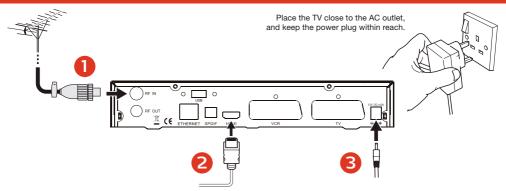


2 Connect external audio devices such as speakers / amplifier as instructed (Page 15)



# **Quick Guide**

# Before turning on the power



- 1 Connect the antenna (IEC 169-2) 75  $\Omega$  coaxial cable, CAI Benchmarked cable such as Triax TX100
- 2 Connect the HDMI cable
- 3 Connect the power adaptor

# Initial auto installation

When the Receiver is powered on for the first time after purchase, the first time installation screen appears. Follow the on-screen instructions to search for all available channels.

#### Confirm the following before turning on the power

- Is the antenna cable connected?
- Is the power adapter connected and plugged in?
- Is the HDMI cable connected between the Receiver and your TV?
- 1 Ensure the antenna cable is connected before switching on.
- 2 Press on the Receiver or Remote Control.
- The first time installation screen is displayed.
- 3 Press OK to start the channel search.
- The Receiver will search for, sort and store all receivable channels.

#### NOTE

- The first time installation process will be aborted if the Receiver is left unattended for more than 30 minutes before searching for channels.
- After the first time installation has been completed, the default PIN is automatically set to '0000'.
   To change the PIN setting, refer to Page 20.



# Watching TV

# **Daily operation**

# Switching On / Off

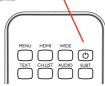
## Standby mode

# Select Standby mode

If the receiver is switched on, you can switch it to standby by pressing  $\circlearrowleft$  on the remote control unit.

# • Switching on from Standby

From standby, press  $\circlearrowleft$  on the remote control unit.



#### NOTE

- If you are not going to use this Receiver for long periods of time, be sure to remove the power adapter from the supply.
- A small amount of electrical power is still consumed with the Receiver in standby mode.

# Adjusting the Volume

Press the **VOL**+ button to increase the volume and the **VOL**- button to decrease the volume.

 We advise setting the volume to full on the receiver and then use the TV remote for adjusting the volume as normal

# **Changing Channels**

#### With PROG +/-



#### With number pad



0

# Switching Between Channels

Switch between the current channel and the previous channel by pressing **LAST**. Each press of the **LAST** button will toggle between the current channel and the previous channel

# **Programme Information**

- Press the INFO button once to display current time, channel information, programme name and start/finish times of selected programmes.
- 2 Press the INFO button again to display additional information about the current programme.

# Selecting a Video Output Source

Once the receiver is connected to your TV using either a HDMI cable or SCART cable, you can select the appropriate output source by pressing **A/V** on the remote control unit.

# Selecting an Audio Language

Some programmes are broadcast with multiple audio channels. Press **AUDIO** to display the audio menu.



- 1 Press **▲**/▼ to select the desired channel.
- 2 Press **OK** to confirm the audio channel.

# Watching TV

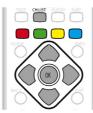
## Channel list

# **Basic Operation**

#### Standby mode

# Display / Close the Channel List

1 Press CH.LIST





# Navigating the Channel List

#### Select a channel.

Press ▲/▼ to select a channel.

Press OK to watch the current programme

# **Useful Functions**

#### 2 Lock a channel.

You can lock a channel to prevent children viewing scenes of an adult nature.

- Press ▲/▼ to select the channel you want to lock.
- 2 Press the RED coloured button. A padlock icon will appear next to the channel name.

# NOTE

- If parental controls are enabled (Page 20) the parental settings PIN must be entered before a channel can be locked / unlocked.
- To unlock a channel, select the channel using the ▲/▼ buttons and press the RED coloured button.

## Set a channel as a favourite.

You can set a channel as a favourite for quick access. All favourite channels will be displayed in the favourites list.

- Press ▲/▼ to select the channel you want to add to the favourites list.
- 2 Press the GREEN coloured button.
- The favourites list will be shown listing all favourite channels and the channel you have just added.
- 3 Press ◀ to return to the channel list.

#### NOTE

 To delete a channel from the favourites list, press the YELLOW coloured button. You can choose to delete the channel or cancel.

# Deleting a channel.

- Press ▲/▼ to select the channel you want to delete.
- Press the YELLOW coloured button.
- The delete channel screen will be displayed you can choose to delete the channel or cancel.

#### NOTE

 To view a channel once it's been deleted, you will need to perform a first time installation (Page 22)

#### **6** Viewing the favourites list.

- Press ▶ to view the favourites list.
- While viewing the favourites list, you can select and watch channels in the same way as the channel list.

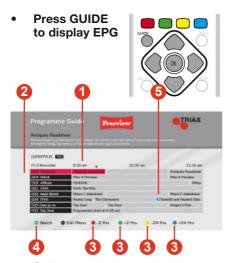
#### O View the EPG.

1 To view the EPG (Page 12) press the **BLUE** coloured button

# Watching TV

# Selecting a programme using the EPG

# **Basic Operation**



- Select a programme
- Select the time span.

Press **◄**/**▶** to select the time span you want to search

- Continue to press ▶ to display the programmes in the next time span.
- Select the desired programme.

Press ▲/▼ to select the desired programme.

 If ▲ or ▼ are displayed on the left of the services, continue to press ▲/▼ to display the next or previous screen.

# **Useful Functions**

## Navigate the time span.

- Press the RED button to move backwards 2 hours.
- 2 Press the GREEN button to move forwards 2 hours.
- 3 Press the YELLOW button to move backwards 24 hours
- 4 Press the **BLUE** button to move forwards 24 hours.

# Watch a Programme

#### Watch a programme now.

- 1 Press ▲/▼ to select a programme.
- 2 Press OK to watch the programme.

## 6 Set a reminder for a programme.

- Press ▲/▼/◄/▶ to select a future programme.
- Press OK. A clock icon will be shown next to the selected programme.

#### NOTE

 If you set a reminder, just before the programme start time, a message will appear reminding you that the programme is about to start. You can choose to automatically switch channels or cancel the reminder.

# **Digital Text**

## What is digital text?

Some channels are broadcast with digital text which contains pages of information and entertainment. News, weather, sports information, stock exchange prices and programme previews are among the many services.

## Accessing digital text

- Select a channel which broadcasts digital text
- 2 Press TEXT or the RED button.
- Not all channels broadcast digital text.
- You may not be able to receive digital text if you have a poor quality signal.

# **Buttons for digital text operation**

Buttons	Description
<b>▲/▼/∢/</b> ▶	Navigate the digital text index page and menu system
Coloured Buttons	Access digital text shortcuts. These are often displayed on the bottom of the page
Numeric Buttons 0-9	Directly select a page
EXIT / TEXT	Exit digital text

# Connecting External Devices

- Before connecting...
- Be sure to turn off the Receiver and any external equipment before making connections.
- Firmly connect a cable to the external device.
- Refer to the operation manual of each device for full instructions regarding connection types.
   This will also help ensure you get the best possible audio / visual quality from the Receiver and connected device.

#### NOTE

The cables illustrated in pages 13 to 15 are commercially available items.

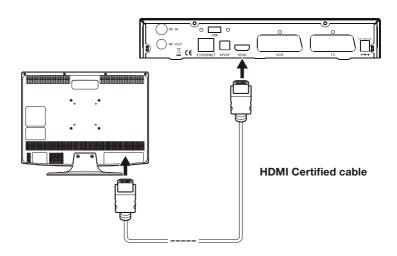
# **Video Connections**

## **HDMI Connection**

## Example of connectable devices

## HD Ready TV

The HDMI connection permits digital video and audio transmission via a connection cable to a TV. The digital picture and sound data are transmitted without data compression and therefore lose none of their quality. Analogue to digital conversion is no longer necessary in any connected devices, which would also result in quality losses.

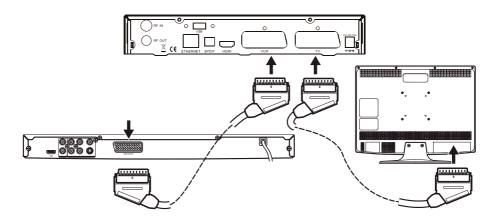


# **Connecting External Devices**

# **SCART Connection**

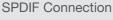
# **Example of connectable devices**

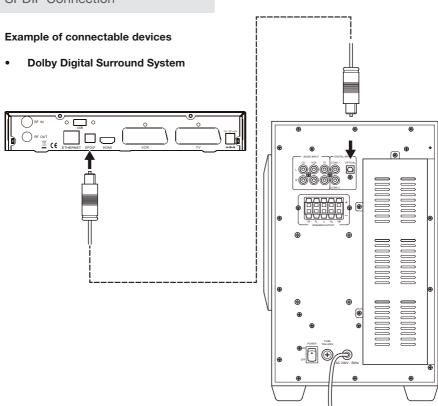
- NON-HD Ready TV Sets
- DVD Recorders



# **Connecting External Devices**

# **Audio connections**





# After connecting

## Digital audio output setting

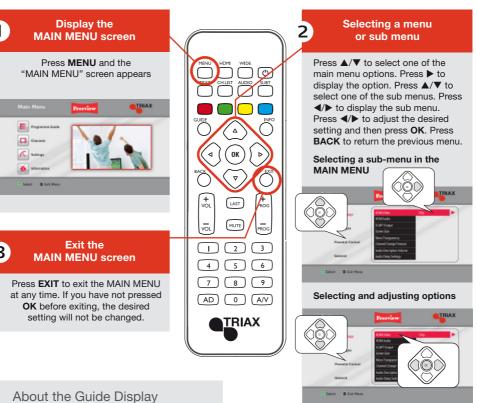
After connecting to a surround sound system with a SPDIF cable, you should set an audio output format compatible with the programme you are watching or the device connected (Page 17).

# Menu Operation

## What is the Main Menu?

- You need to call up the On Screen Display (OSD) to perform settings for the Receiver. The OSD for the settings is called "MAIN MENU"
- The "MAIN MENU" enables various settings and adjustments.

# **Basic Operation**



The guide display at the bottom of the MAIN MENU screen shows operation with the OSD

The guide display is an operational guide for the remote control unit. The bar will change in accordance with each sub-menu and menu setting.



Item	
Programme Guide	View the EPG (Pg 12).
Channels	View the Channel List (Pg 11).
Settings	Adjust various settings for the Receiver (Pg 17)
Information	View system and software information for the Receiver.

# **AV Settings**



# AV Settings

# **HDMI Video**

Adjusts the video resolution when the receiver is connected to your TV using a HDMI cable. This allows you to watch High Definition (HD) TV.

	Item
576p	Sets the video resolution to 576p
720p	Sets the video resolution to 720p
1080i	Sets the video resolution to 1080i
1080p	Sets the video resolution to 1080p

#### NOTE

- Consult the documentation supplied with your TV to select the correct TV resolution.
- If your TV is not HD Ready but has a HDMI socket, select the 576p video resolution.

#### **AV Settings**

#### **HDMI** Audio

Adjusts the audio output type when the Receiver is connected to surround system using a HDMI cable. This allows you to enjoy realistic live sound.

Item	
Stereo	The Receiver will output Stereo sound when connected to a standard surround sound system using the HDMI cable.
Dolby Digital	The Receiver will output Dolby Digital surround sound when connected to a compatible surround sound system using the HDMI cable.

#### NOTE

- Only select Dolby Digital if you have a compatible surround sound system. If you choose this setting with a non-compatible sound system the audio will not be heard.
- Not all channels are broadcast with Dolby Digital sound.

## **AV Settings**

# SCART Output

Adjusts the video signal type when the Receiver is connected to your TV using a SCART cable.

	Item
RGB	This selects an RGB video signal type. The video signal will be split into separate red, green and blue signals to provide the best picture quality.
Composite	This selects a composite video signal when RGB is not available.

#### NOTE

 If your TV is not compatible with RGB signals, select the composite video output.

#### AV Settings

## Screen Size

Adjusts the screen size (aspect ratio) between 16:9 widescreen and various 4:3 picture sizes.

	Item
16:9 Widescreen	Displays a 16:9 widescreen picture. This ensures the best aspect ratio for widescreen TV's
4:3 Widescreen (16:9)	In this mode, the picture is stretched towards each side of the screen. This displays a picture similar to 16:9 widescreen on 4:3 TV's
4:3 Centre Cut Out	Displays a 4:3 picture in the centre of the screen. With some programmes, bars may appear on the left and right hand side of the screen.
4:3 Letterbox (16:9)	Displays a 16:9 picture in the centre of the screen. With some programmes, bars may appear on the top and bottom of the screen.

#### NOTE

- If you have connected the Receiver to a widescreen TV, you should select the 16:9 widescreen setting.
- The wide mode feature lets you adjust the screen size using the WIDE button on the remote control unit. Press WIDE to cycle through the available screen sizes while watching TV.
- If you have selected 16:9 widescreen in the AV settings menu, the wide mode will have on effect.

# **AV Settings**

#### **AV Settings**

# Menu Transparency

This function allows you to adjust the transparency of the OSD's.

	Item
Off	The picture will not be visible behind the OSD
25%	The picture is partially visible behind the OSD
50%	The picture is mostly visible behind the OSD
75%	The picture is clearly visible behind the OSD

#### NOTE

 The menu transparency settings will not affect the main menu.

## **AV Settings**

# **Channel Change Timeout**

This function allows you to adjust the length of time the information screen is displayed if no other buttons are pressed.

# **Audio Description**

Some programmes are broadcast with audio descriptions (AD) which provides a voice-over describing visual information such as scenery, body language and facial expressions.

Press **AD** on the remote control unit to toggle audio description on or off.

#### NOTE

 If audio description is available for a programme, the AD symbol will be displayed in the information screen (Page 10) and the EPG (Page 12)

#### **AV Settings**

# Audio Description Volume

Adjusts the volume of the audio description when available.

## **AV Settings**

# Audio Delay Settings

Synchronises the audio and video outputs when the Receiver is connected to a Dolby Digital Surround Sound System using the SPDIF (digital audio output) connection.



- Press ▲/▼ to increase or decrease the audio delay time.
- 2 Press EXIT to complete the setting.

# Languages



#### Languages

# Subtitle Language

This function allows you to set the default subtitle language to English, Welsh, Gaelic or Irish.

#### NOTE

 Some subtitle languages are available with enhanced subtitles. These provide additional information about the programme for the hard of hearing.

# Switching on Subtitles

1 Press **SUB** on the remote control unit to toggle subtitles on or off.

## NOTE

- Not all programmes are broadcast with subtitles. If subtitles are available for a programme, the SUB symbol will be displayed in the information screen (Page 10) and the EPG (Page 12).
- If subtitles are available they will be displayed at the bottom of the screen in the default subtitle language.

#### Languages

# Audio Language

This function allows you to set the default audio language to English, Welsh, Gaelic or Irish.

# Selecting Audio Languages

 Press AUDIO on the remote control unit to toggle switch between the available audio languages.

#### NOTE

 Not all programmes are broadcast with alternative audio languages. If the selected audio language is not broadcast, English will be used.

#### Languages

# Audio Description Language

This function allows you to set the default audio description (AD) to English, Welsh, Gaelic or Irish.

#### NOTE

 Not all programmes are broadcast with alternative audio description languages. If the selected audio language is not broadcast, English will be used.

#### Parental control

# Parental Settings PIN

The Parental Control feature allows you to prevent accidental changes being made to the Receiver. In addition channels can be locked to prevent children viewing scenes of an adult nature.



The default personal identification number (PIN) must be entered before the parental control settings can be adjusted.

1 Enter the default four digit PIN (0000) using the numeric buttons.

#### NOTE

 If you have changed the default PIN, this must be entered before the parental control settings can be adjusted.

## **Parental Control**

# Allow First Time Installation

This function allows you to prevent a first time installation being performed without first entering the parental settings PIN.

	Item
Enabled	This will allow a first time installation to be performed without entering the parental settings PIN.
Disabled	This will prevent a first time installation to be performed unless the parental settings PIN is entered.

# Parental Control Change PIN



This function allows you to change the PIN

# Changing the Parental Settings PIN

- 1 Enter the default (0000) or current four digit PIN using the **0-9** numeric buttons.
- 2 Enter the new four digit PIN using the 0-9 numeric buttons.
- 3 Confirm the new four digit PIN using the 0-9 numeric buttons

#### NOTE

 As a precautionary measure, make a note of your PIN on the back of this operational manual (see page 25). Keep it in a safe place that children cannot reach.

# General



## General

# **Auto Standby**

This function allows you to automatically switch the Receiver into standby mode when there is no user activity for 3 hours.

	Item
Enabled (default)	The Receiver will automatically switch into standby mode when there is no user activity for 3 hours.
Disabled	The Receiver will remain on constantly unless switched into standby mode by the user.

#### General

# Power Save in Standby Mode

This function allows you to control the power saving features of your Receiver.

	Item
Enabled (default)	The Receiver uses a very low amount of power when in standby.
Disabled	Power saving features are disabled.

#### General

# Upgrade Software

This function allows you to control when software upgrades are installed.

	Item
Automatic	The receiver will automatically install software upgrades when available
Manual	The receiver will display a message allowing you to confirm or cancel the software upgrade

## General

## Auto Retune

This function allows you to control when new services (channels) are added and stored on the Receiver.

Item		
Always Start	Whenever new services (channels) are detected, the Receiver will automatically tune and store them.	
Always Ask	Whenever new services (channels) are detected, a message will appear on screen. You can choose to tune and store the new services or cancel the auto retune.	

## General

# Auto Retune Messages

This function controls when retune messages are displayed.

Item		
All messages are displayed.		
No Minor Messages	Only major messages are displayed.	
Information Messages	nformation Only information messages are displayed.	
None	No messages are displayed	

## NOTE

 During the digital switchover, Auto retune messages may be displayed. Follow the onscreen instructions to retune.

# Manually tuning channels

#### General

## Manual Tune

You can manually tune new services after the first time installation has been completed.



- Press ◀/▶ to select the desired UHF channel
- 2 Press ▼ to select 'Frequency' (kHz).
- 3 Press **◄/▶** to adjust the frequency.
- 4 Press ▼ to select 'Bandwidth'.
- **5** Press **◄/▶** to adjust the bandwidth.
- 6 Press ▼ to select 'System'.
- **7** Press **◄/▶** to select a system.
- 8 Press the BLUE button to start scanning for the specified channel. If the channel is found it will be stored in the Receiver and will be available in the channel list and EPG.

Item		
UHF Channel	Select channel 21-68	
Frequency	The frequency of the service (channel) you are manually tuning.	
Bandwidth	The bandwidth of the service (channel) you are manually tuning.	
System	The type of tuning system.	

# NOTE

 You can enter the UHF channel and frequency using the 0-9 numeric buttons.

#### General

# First Time Installation

This function allows you to perform a first time installation.

- 1 Press Menu on your remote control
- 2 From the Menu options on screen, select Settings
- 3 Then select General
- 4 Use the navigation buttons to highlight First Time Installation
- 5 Press OK to select.
- 6 A warning banner will be shown. Press OK to proceed or exit to cancel.
- 7 Press OK to scan for new services. You may have to wait a couple of minutes for the scan to complete.
- 8 You will receive a message to confirm when installation is complete.
- 9 Press OK to start watching TV

# **Troubleshooting**

The following conditions in the table below do not always indicate a problem. Please perform the checks described below before calling for service. If the problem cannot be corrected by the use of this manual, remove the mains plug from the power socket and contact the **Helpline on 01443 778908 + Option 5** to obtain service or advice (Normal operator charges apply).

Alternatively you can email us at: technical@triax.co.uk.

In the unlikely event of this equipment requiring repair during the guarantee period, you will need to provide proof of purchase to your point of sale. Please keep your purchase invoice or receipt in a safe place.

#### WARNING

Under no circumstances should you try and repair this product yourself. This will invalidate the guarantee. Do not open the unit as there is risk of electric shock.

Problem	Possible Solution		
No power	Check if you pressed ① on the remote control unit Is the AC power adapter disconnected? Check if you pressed ① on the receiver		
The receiver cannot be operated	Turn off receiver at AC adaptor, leave for two minutes and switch back on		
Remote control unit does not operate	<ul> <li>Are batteries inserted with polarity (+, -) aligned?</li> <li>Are batteries worn out? (Replace with new batteries.)</li> <li>Are you using it under strong or fluorescent lighting?</li> <li>Is a fluorescent light illuminating the remote control sensor?</li> </ul>		
Picture format incorrect	Refer to page 17.		
Power is suddenly turned off	Is auto standby activated? (Page 21)		
No picture	Are connections to external equipment correct? (Pages 13 to 15)     Is the input signal type selected correctly after connection? (Page 17)     Is the correct output source selected? (Page 10)     Is the antenna connected properly? (Page 9)		
No sound	Is the volume too low?     Check if you pressed mute on the remote control unit.     Check SCART lead is inserted correctly if used.		
Freezing / Blocking	Check Freeview reception information as shown on the cover of this manual.     Refer to page 22 to perform the First Time Installation.		

# **Specifications**

Item		T2 HD 115 Digi	tal Terrestrial HD Receiver	
	Receiving Signal Type	All combinations of the below parameters can be received and automatically detected (Except bandwidth)		
		Channel Bandwidth	7, 8 MHz Selectable	
	(DVB-T)	Modulation Type	QPSK, 16QAM, 64QAM	
Tuner /		FFT Mode COFDM System	2K, 8K	
Demodulator		Code Rate FEC	1/2, 2/3, 3/4, 5/6, 7/8	
		Guard Internal	1/4, 1/8, 1/16, 1/32	
	Receiving Signal Type (DVB-T2)	All combinations of the below parameters can be received and automatically detected (Except bandwidth)		
		Channel Bandwidth	6, 7, 8 MHz	
		Modulation Type	QPSK, 16QAM, 64QAM, 256QAM	
	(=== ==,	FFT Mode	1K, 2K, 4K, 8K, 16K, 32K	
		Code Rate	1/2, 3/5, 2/3, 3/4, 4/5, 5/6	
		Guard Internal	1/4, 5/32, 1/8, 5/64, 1/16, 1/32, 1/64, 1/128	
	CPU / Clock	STi7 105/ST40 core, 450MHz	:	
	Transport	DVB Demultiplexer		
System	Flash Memory	16MB		
	System Memory	1 GB x 2 DDR		
	Software	Pixsan Elgist and MHEG middleware		
	CPU Core	ST231 / 450 MHz		
	Video Standards	MPEG-1 ISO/IEO 11172-2 MPEG-2 MP@ML and MP@HL, ISO/IEC 13818-2 MPEG-4 AVC MP@L4 and HP@L4.1		
	Field / Frame Rate	50/25 Hz for PAL		
	HD / SD Decoding Capability	Interlaced Mode / Progressive Mode: 1080i, 720p, 576p and 576i		
Video	Aspect Ratio	16:9 Widescreen 4:3 Widescreen (16:9) 4:3 Centre Out Out 4:3 Letter Box (16:9)		
	Video Input / Output	Digital Video HDMI with HDCP supported CVBS, R/G/B for TV SCART OUT CVBS for VCR SCART OUT CVBS, R/G/B for VCR SCART IN		
	Output Modes	HD	1080p / 1080i / 720p / 576p Output format changed by specific hot-key (software switchable)	
		SD	576i	
Teletext / Subtitle	Decoding and display for supporting Closed Captions & Teletext			
	CPU Core	ST231 / 450MHz		
Audio	Audio Standards	MPEG-1 layer I & layer II, MP3 MPEG-2 layer II, Dolby Digital MPEG-2 AAC/AAC+		
	Audio Input / Output	AL/AR for TV SCART OUT (Volume Adjustable) AL/AR for VCR SCART OUT (Fixed Volume) AL/AR for VCR SCART IN AL/AR for one pair RCA connectors (Volume Adjustable) Optical Digital Audio SPDIF		
	Digital Audio SPDIF Output Format	IEC-60958 for PCM data IEC-61937 for Encoded Bitstream Data		
	Sampling Rate	32, 44.1, 48 and 96 KHz		

# **Specifications**

Item		T2 HD 115 Digital Terrestrial HD Receiver
Software Upgrade	Over Air Download	Yes, via DVB-SSU
	USB Port	Yes
Front Panel	Keypad	3 Keypads: Power, CH Up/Down
	IR Sensor	Yes
	RF Input Connector	IEC Type, Female (for PAL), 75 Ohm
	RF Loop Through Output Connector	IEC Type, Male / Female, 75 Ohm
Rear Panel	Stereo (left & right) Audio Output CVBS, R/G/B Video Ouput	Dual SCART for TV/VCR For TV SCART: w/ OSD and Volume adjustable For VCR SCART: w/o OSD and Fixed Volume
	Digital Video & Audio Output	HDMI Connector
	Optical Digital Audio SPDIF	TosLink Interface
	RJ 45	Ethernet Connection with unique IP address
	Input Voltage	100-240 VAC, 50/60Hz - DC 12V/2A
	Power Consumption	Normal Operation: Max power consumption: 220V-50Hz AC: 8W Standby Mode: Less than 1W with built in power save mode to meet European initiatives EuP
	Accessory	Customer Selectable Remote controller (and Batteries) User Manual
		HDMI Cable (1.5m)
	EMC / Safety	Compliant to CE
	ATC	HDCP
	Dolby	Dolby Digital Stereo EAC3, Dolby Digital+ (HE AAC)
	Software	Dbook 6.1 compliant Tested to DTG test suite Audio Description, receiver mix MHEG5 HD Dbook 6.1 MHEG5 interaction channel MHEG5 iPlayer ready
Dimensions (H x W xD)		42 x 257 x 157 (mm)

Triax reserves the right to change the specifications without prior notification.

Triax accept no liability in respect of loss arising from errors in or changes to the information provided.

# **PIN CODE Reminder**



#### NOTE

You need to insert the PIN code here and refer it to the pages in the manual where this is covered.

# **IMPORTANT**

Removal of a lost PIN code could be subject to a service charge.

#### **Trademarks**



The FREEVIEW service is subject to coverage. An aerial upgrade may be required. The FREEVIEW, FREEVIEW+, FREEVIEW HD and FREEVIEW+ HD words and logos are trade marks of DTV Services LTD. DTV Services Ltd 2002, 2008.



This product is capable of receiving and decoding Dolby Digital Plus. Manufactured under licence from Dolby Laboratories. Dolby and the double D symbol are trademarks of Dolby Laboratories.



This product has a HDMI connector so that you can watch high definition TV with a HDMI lead when connected to a HD Ready TV.

HDMI, the HDMI logo and High-Definition Multimedia Interface are trademarks or registered trademarks of HDMI Licensing LLC.



A digital box lets you access digital channels that are broadcast in the UK. It uses a digital signal, received through your digital terrestrial aerial and lets you watch it through your existing television.

## Information on the software license for this product

#### Software composition

The software included in this product is comprised of various software components whose individual copyrights are held by TRIAX UK Ltd or by third parties.

#### Software developed by TRIAX and open source software

The copyrights for the software components and various relevant documents included with this product that were developed or written by TRIAX are owned by TRIAX UK LTD and are protected by the Copyright Act, international treaties, and other relevant laws. This product also makes use of freely distributed software and software components whose copyrights are held by third parties. These include software components covered by a GNU General Public License (hereafter GPL), a GNU Lesser General Public License (hereafter LGPL) or other license agreement.

#### Obtaining source code

We are unable to answer any questions about the source code for the open source software. The source code for the software components whose copyrights are held by TRIAX are not distributed.

# End of life disposal



#### Attention:

Your product is marked with this symbol. It means that used electrical and electronic products should not be mixed with general household waste. There is a separate collection system for these products.

## A. Information on Disposal for Users (private households)

#### 1. In the European Union

Attention: If you want to dispose of this equipment, please recycle.

Used electrical and electronic equipment must be treated separately and in accordance with legislation that requires proper treatment, recovery and recycling of used electrical and electronic equipment.

Following the implementation by member states, private households within the EU states may return their used electrical and electronic equipment to designated collection facilities free of charge\*. In some countries your local retailer may also take back your old product free of charge if you purchase a similar new one.

\* Please contact your local authority for further details.

If your used electrical or electronic equipment has batteries or accumulators, please dispose of these separately beforehand according to local requirements.

By disposing of this product correctly you will help ensure that the waste undergoes the necessary treatment, recovery and recycling and thus prevent potential negative effects on the environment and human health which could otherwise arise due to inappropriate waste handling.



#### The battery supplied with this product contains traces of Lead.

For EU: The crossed-out wheeled bin implies that used batteries should not be put to the general household waste! There is a separate collection system for used batteries, to allow proper treatment and recycling in accordance with legislation. Please contact your local authority for details on the collection and recycling schemes.

# Important Notice

# Digital switchover and your TV equipment

By 2012, television services in the UK will go completely digital.

This process is happening TV region by TV region.

To continue using this HD TV receiver during and following digital switchover you will need to 're-tune' your T2-HD115 receiver.

Users of this product will need to 're-tune' on at least 2 different occasions (normally around 1 month apart) when switchover happens in your TV region. Digital UK, the body leading the digital TV switchover, will advise you when to re-tune your receiver on each occasion.

If you do not re-tune your channels when advised to do so by Digital UK, you risk losing some or all of your TV services until you do re-tune.

If you are missing any channels, it may be that they are not available in your area, or that your aerial needs upgrading.

Visit www.digitaluk.co.uk or call Digital UK on 0845 6 50 50 50 to check.

#### To re-tune your T2-HD115 receiver please follow the procedure below.

- 1. Press Menu on your remote control
- 2. From the Menu options on screen, select Settings
- 3. Then select General
- 4. Use the navigation buttons to highlight First Time Installation
- 5. Press **OK** to Select.
- 6. A warning banner will be shown. Press OK to proceed or EXIT to cancel.
- Press **OK** to scan for new services. You may have to wait a couple of minutes for the scan to complete.
- 8. You will receive a message to confirm when re-tune is complete.
- 9. Press OK to watch TV

# Terms of Guarantee

This product is supplied with a 12 month manufacturers guarantee from date of original purchase.

In the unlikely event of an issue occurring within this period, please contact your point of sale. Proof of purchase will need to be supplied.

- 1 This guarantee only applies to defects due to faulty workmanship or materials. It does not cover faults or damage caused by (but not limited to) accident, misuse, fair wear and tear, signal related issues, neglect, tampering with the product or repair other than by a facility appointed by Triax UK Ltd.
- 2 This product is intended for private domestic use only.
  The guarantee will not apply if the product is used in the course of a business, trade or profession.
- 3 The product must be correctly installed and operated in accordance with the instructions contained in this operating manual.
- 4 Triax UK Ltd disclaims any liability for incidental or consequential damages.
- 5 This guarantee is in addition to, and does not diminish your statutory or legal rights.

# **Declaration of Conformity**

Company Name: Triax UK Ltd

Company Address: Abergorki Industrial Estate,

Treorchy, Rhondda-Cynon-Taff

CF42 6DL, UK

Object of the Declaration: Triax T2-HD 115 Zapper, Part Number 305200.

The object of the declaration described above is in conformity with the requirements of the following documents:

Low voltage directive 2006/95/EC
EMC Directive 2004/108/EC
WEEE Directive 2002/96/EC
Batteries and Accumulators Directive 2006/66/EC
RoHS Directive 2002/95/EC
REACH Regulation 1907/2006/EC
CE Marking Directive 93/68/EEC
Packaging Directive 94/62/EC

The product identified above complies with the relevant EC Directives by meeting the following standards:

BS EN55013:2001+A1:2003+A2:2006 Test Limits for STB Receivers Disturbance Characteristics

BS EN55020:2007 Test Limits for STB Receivers Immunity Characteristics

BS EN60065:2002:A1:2006+A11:2008 Audio and Video Equipment Safety Requirements

BS EN 61000-3-2:2006 Test Limits for EMC Harmonic Currents

BS EN61000-3-3:2008 Test Limits for EMC Voltage Changes and fluctuations

The Declaration of Conformity is made in relation to the associated tests carried out and verified by our suppliers and their authorised test facilities.

Signed for and on behalf of:

TRIAX UK LTD

KEVIN EDWARDS......QUALITY MANAGER. 19th April 2010

# Notes







www.triax.co.uk

The FREEVIEW service is subject to coverage. An aerial upgrade may be required. The FREEVIEW, FREEVIEW+, FREEVIEW HD and FREEVIEW+ HD words and logos are trade marks of DTV Services LTD. DTV Services Ltd 2002, 2008.