

**TOPFIELD**

# **TF 5100 PVRt HDMI**

## User Guide

*Digital Terrestrial Receiver  
Personal Video Recorder*

CONAX



**DVB**  
Digital Video  
Broadcasting



# Contents

<b>1</b>	<b>Introduction</b>	<b>1</b>
1.1	Features	1
1.2	Controlling the digital receiver	2
1.2.1	The front panel	3
1.2.2	The remote control	4
1.3	What is common interface?	7
<b>2</b>	<b>Setup</b>	<b>8</b>
2.1	Unpacking	8
2.2	Safety precautions	8
2.3	Rear panel connections	10
2.4	Connecting up your digital receiver	12
2.4.1	Connecting the antenna	12
2.4.2	Connecting to your television	13
2.4.3	Connecting to your video cassette recorder	15
2.5	Switching on for the first time	15
2.5.1	Inserting batteries in the remote control	16
2.5.2	Powering on and checking picture	16

<b>3</b>	<b>Preference Settings</b>	<b>17</b>
3.1	Language settings . . . . .	17
3.2	Video and audio settings . . . . .	19
3.2.1	Television standard . . . . .	19
3.2.2	Colour model . . . . .	19
3.2.3	Video cassette recorder . . . . .	20
3.2.4	Television aspect ratio . . . . .	20
3.2.5	High definition television . . . . .	21
3.2.6	Sound mode . . . . .	22
3.3	Local time setting . . . . .	22
3.4	Parental control . . . . .	24
3.5	Adjusting the on-screen display . . . . .	25
3.6	To turn on the time shift feature . . . . .	26
<b>4</b>	<b>Service Search</b>	<b>27</b>
4.1	Searching broadcasting services . . . . .	27
4.2	Resetting to factory settings . . . . .	28
<b>5</b>	<b>Daily Usage</b>	<b>29</b>
5.1	Volume control . . . . .	29
5.2	Watching television . . . . .	29
5.2.1	The services list . . . . .	29
5.2.2	The favourite services list . . . . .	31
5.2.3	Viewing programme information . . . . .	33
5.2.4	Selecting audio tracks . . . . .	33
5.2.5	Selecting subtitle tracks . . . . .	34
5.2.6	Viewing teletext . . . . .	34
5.3	Viewing electronic programme guide . . . . .	34
5.4	Watching multifeed programme . . . . .	35
5.5	Using time shift . . . . .	36
5.6	Using picture in picture . . . . .	37

---

<b>6</b>	<b>Listing Services</b>	<b>39</b>
6.1	Editing the services list . . . . .	39
6.2	Editing the favourite list . . . . .	41
6.3	How to use on-screen keyboard . . . . .	43
6.4	Transferring receiver data . . . . .	43
<b>7</b>	<b>Recording and Playing</b>	<b>45</b>
7.1	Recording a programme . . . . .	46
7.1.1	Instant recording . . . . .	46
7.1.2	Current programme recording . . . . .	48
7.1.3	Timer recording . . . . .	49
7.1.4	Scheduling a recording using the programme guide . . . . .	52
7.1.5	Recording a time-shifted programme . . . . .	52
7.1.6	Recording a pay service programme . . . . .	53
7.2	File archive . . . . .	54
7.2.1	To delete a recording . . . . .	54
7.2.2	To sort recordings . . . . .	54
7.2.3	To lock a recording . . . . .	55
7.2.4	To rename a recording . . . . .	55
7.2.5	To make a new folder . . . . .	55
7.2.6	To move a recording to another folder . . . . .	56
7.3	Playing back a recording . . . . .	56
7.3.1	To navigate using the progress bar . . . . .	57
7.3.2	To play in slow motion . . . . .	57
7.3.3	To play in fast motion . . . . .	57
7.3.4	To make a bookmark . . . . .	58
7.3.5	To play back a recording repeatedly . . . . .	58
7.3.6	To play back recordings in sequence . . . . .	59
7.3.7	To play back a scrambled recording . . . . .	59
7.4	Editing a recording . . . . .	60

7.5	Copying a recording . . . . .	60
7.6	MP3 playback . . . . .	61
7.7	Transferring recording files . . . . .	61
7.8	Formatting the hard disk . . . . .	63
<b>8</b>	<b>Topfield Application Program</b>	<b>64</b>
<b>9</b>	<b>Firmware Update</b>	<b>66</b>
9.1	Checking the firmware information . . . . .	66
9.2	From your computer via USB port . . . . .	68
9.3	From your computer via RS-232 port . . . . .	69
9.4	From another digital receiver via RS-232 port . . . . .	70
	<b>Index</b>	<b>71</b>

# Chapter 1

## Introduction

The TF 5100 PVRt HDMI digital receiver is fully compliant with the international Digital Video Broadcasting (DVB) standard, and can receive digital broadcasts. For its operation you need an antenna, which must be installed appropriately.

### NOTE

In general we equate a channel with a frequency. Unlike analogue broadcasts, however, digital broadcasts are not all assigned to their own frequencies; instead, multiple television broadcasts are transmitted through a single frequency. The frequency in digital broadcasting is usually called transponder. To reduce confusion in this manual, the word **service** is preferably used than **channel** as a term to indicate one television or radio broadcast.

### 1.1 Features

The TF 5100 PVRt HDMI digital receiver has the following features:

- Can store up to 2000 television and radio services.

- You can edit the services list.
- You can create favourite lists of your favourite services.
- You can view information about the current television or radio programme.
- Has an electronic programme guide that provides an overview of scheduled programmes.
- You can update the firmware of the digital receiver to the latest version, provided by the manufacturer.
- You can record one broadcasting service while you are currently watching another.
- The large storage capacity of the built-in hard disk drive allows you to record up to about 60 hours of television—in case of 250 gigabytes—in excellent picture and sound quality.
- Time shift is a special technical feature available on the TF 5100 PVRt HDMI. You can pause the programme you are watching and resume it again at a later time. Then you can quickly go to whatever part of the current programme by fast forward and rewind search.

### 1.2 Controlling the digital receiver

The digital receiver can be operated with the remote control and the buttons on the front panel.

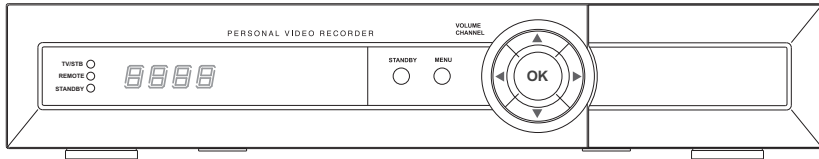
#### **NOTE**

When the digital receiver is off but plugged into a wall outlet, we say that it is in standby mode; on the other hand, when it is on, it is in operation mode. Even when you are not using the digital receiver, you should keep it plugged into a wall outlet to be in standby mode so that it can run timer events at any time.



### 1.2.1 The front panel

The front panel of the digital receiver has buttons to control the digital receiver, and specific lamps and a display to indicate its status. The following indicates what they mean.



TV/STB lamp lights up while your video recorder operates instead of the digital receiver. See § 3.2.3 for more details.

REMOTE lamp lights up whenever you press a button on the remote control.

STANDBY lamp lights up while the digital receiver is in standby mode.

Front display displays the current time in standby mode, and displays the current service in operation mode.

STANDBY button switches the digital receiver between standby mode and operation mode.

MENU button displays the main menu. It is also used to return to the previous menu from a submenu.

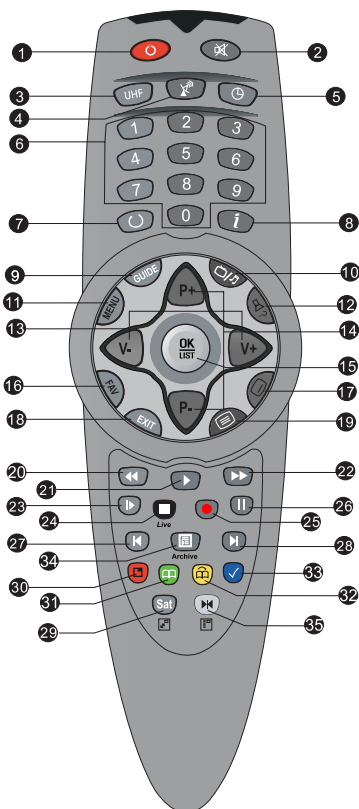
CHANNEL ▼, ▲ buttons switch to previous or next service. They are also used to navigate in menus and interactive screens.

VOLUME ◀, ▶ buttons decrease or increase the volume. They are also used to change values for menu options.

OK button displays the services list. See § 5.2.1 for more details. It is also used to select a menu item.

Pull the right edge of the front panel to open the flap. You have to insert your subscription card into the front slot to watch pay services.



















### 1.2.2 The remote control

















- ① button switches the digital receiver between standby mode and operation mode.
- ② mutes the sound. Press again to switch it back on.
- ③ is not used in this model.
- ④ switches the output of the TV SCART socket between the digital receiver and the device connected to the VCR SCART socket. See § 3.2.3 for more details.
- ⑤ is used to set a sleep timer.
- ⑥ Numeric buttons are used to enter a service number for service change or to specify values for menu options.
- ⑦ switches between the current service and the previously viewed one.
- ⑧ displays the service information box. It is also used to display more information about a programme.

⑨ displays the electronic programme guide.

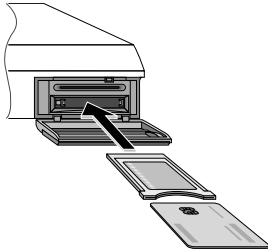
⑩ switches between television services and radio services.

- ⑪  displays the main menu. It is also used to return to the previous menu from a submenu.
- ⑫  is used to select an audio track and a sound mode, or a video track of multifeed programme.
- ⑬   buttons decrease or increase the volume. They are also used to change values for menu options.
- ⑭   buttons switch to previous or next service. They are also used to navigate in menus and interactive screens.
- ⑮  displays the services list. See § 5.2.1 for more details. It is also used to select a menu item.
- ⑯  displays the favourite lists.
- ⑰  is used to select a subtitle track.
- ⑱  is used to exit the current screen.
- ⑲  displays teletext.
- ⑳  is used to start reverse playback. Subsequent presses increase the rewind speed.
- ㉑  resumes normal playback speed, or displays the progress bar for navigation on playback or time shift. To play a recorded programme, see button 34.
- ㉒  is used to start fast motion playback. Subsequent presses increase the playback speed.
- ㉓  is used to start slow motion playback. Subsequent presses change the playback speed.
- ㉔  is used to stop playback, to stop recording, or to jump back to live television from time-shifted television.
- ㉕  is used to start recording.
- ㉖  pauses live television or playback of a recorded programme.

- ⑳  changes the position of sub-screen counterclockwise. It is also used to jump back to beginning of recording during a playback.
- ㉑  changes the position of sub-screen clockwise. It is also used to jump to end of recording during a playback.
- ㉒  swaps the sub-picture with the main picture. See § 5.6 for more details.
- ㉓  is used to display, minify or hide the sub-screen. See § 5.6 for information about picture-in-picture.
- ㉔  is used to make a bookmark during playback or time shift.
- ㉕  is used to jump to next bookmark position or to jump forward by 30 seconds.
- ㉖  is used to jump back 10 seconds for an instant replay. It is also used to edit a recording.
- ㉗  is used to display the list of recorded programmes that are stored on the internal hard disk drive. See § 7.2 for more details.
- ㉘  displays the services list for sub-screen. It is also used to specify a block for editing or for repeated playback.

The , , ,  and  buttons have additional different functions per menu besides their own function. They will be guided by on-screen help.

### 1.3 What is common interface?

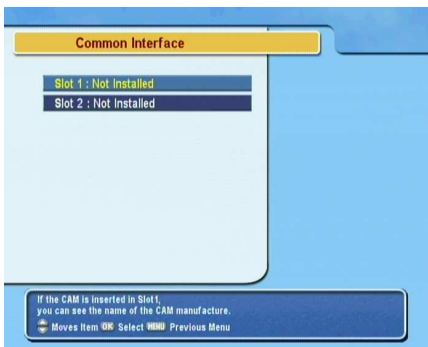


Some broadcasts are scrambled so that only paid subscribers can enjoy them. Scrambled services can only be viewed with a Conditional Access Module (CAM) and a subscription card belonging with the scrambling system.

Common Interface (CI) is the slot on a digital receiver into which a conditional access module may be inserted. The front of the digital receiver has two common interfaces.

To watch a pay service, you should take the following steps:

1. Purchase a conditional access module and a subscription card for the pay service you want to watch.
2. Insert the subscription card into the conditional access module.
3. Insert the conditional access module into a common interface on the front of the digital receiver.



To view the information about the module and subscription card inserted into the digital receiver, select the Common Interface menu. You should see a screen like the left figure.

## Chapter 2

# Setup

### 2.1 Unpacking

Before going any further, check that you have received the following items with your digital receiver.

- Remote control unit
- Two batteries for the remote control (AAA 1.5 V)
- One loop cable to link the first tuner with the second tuner
- One SCART-to-component cable
- One S-Video cable
- A copy of this user guide

#### **NOTE**

Accessories may vary according to your local area.

### 2.2 Safety precautions

Please read carefully the following safety precautions.

- The mains power must be 90 to 250 volts. Check it before connecting the digital receiver to the wall outlet. For the power consumption of the digital receiver, refer to Table 2.1.
- The wall outlet should be near the equipment. Do not run an extension lead to the unit.
- Do not expose the digital receiver to any moisture. The digital receiver is designed for use indoors only. Use dry cloth when cleaning the digital receiver.
- Place the digital receiver on a firm and level surface.
- Do not place the digital receiver close to heat emitting units or in direct sunlight, as this will impair cooling. Do not lay any objects such as magazines on the digital receiver. When placed in a cabinet, make sure there is a minimum space of 10 centimetres around it. For the physical specification of the digital receiver, refer to Table 2.2.
- Protect the power cord from being walked on or pinched. If the wires are exposed or the cord is damaged, do not use the digital receiver and get the cord replaced.
- Never open the digital receiver casing under any circumstances. The warranty will be void.
- Refer all servicing to a qualified service technician.

**Table 2.1: Power specifications**

---

Input voltage	90 to 250 V AC, 50/60 Hz
Power consumption	25 W at maximum in operation 7 W in standby

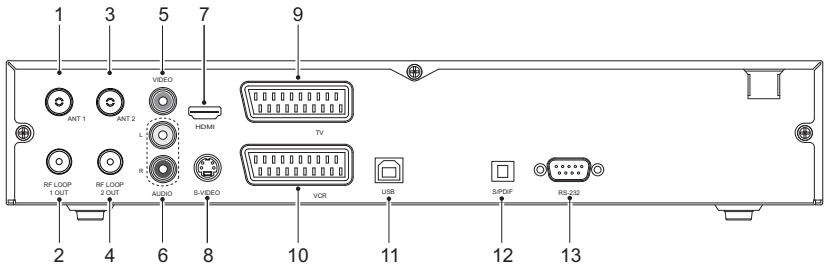
---

**Table 2.2: Physical specifications**

Size	340 × 60 × 265 mm
Weight	3.4 kg
Operating temperature	0 to 45 °C
Storage relative humidity	5 to 95 %

### 2.3 Rear panel connections

The TF 5100 PVRt HDMI has a wide range of connections on the back panel.



Check what connections your television set has in comparison with the digital receiver.

- ① ANT 1 Terrestrial broadcasting signal input socket for the first tuner.
- ② RF LOOP 1 OUT Terrestrial broadcasting signal output socket through the first tuner.
- ③ ANT 2 Terrestrial broadcasting signal input socket for the second tuner.
- ④ RF LOOP 2 OUT Terrestrial broadcasting signal output socket through the second tuner.
- ⑤ VIDEO Composite video output socket for the television set. (yellow)



- ⑥ AUDIO L/R Stereo audio output socket for the television set or the audio system. (white/red)
- ⑦ HDMI Audio and video output socket for the high definition television set.
- ⑧ S-VIDEO Super video output socket for the television set.
- ⑨ TV Audio and video output socket for the television set.
- ⑩ VCR Audio and video input/output socket for the video cassette recorder or suchlike.
- ⑪ USB USB port for firmware update and data transfer.
- ⑫ S/PDIF Dolby digital output socket for the audio system.
- ⑬ RS-232 Serial port for firmware update and data transfer.

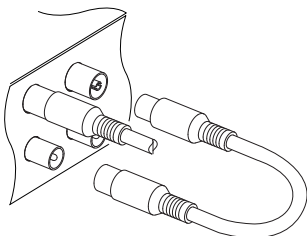
**Table 2.3: Connectors specifications**

HDMI	High definition video output Left & right audio output Dolby digital audio output
VIDEO	Composite video (CVBS) output
AUDIO	Left & right audio output
S-VIDEO	Super video (S-Video) output
TV	CVBS/S-Video/RGB/YUV video output Left & right audio output
VCR	CVBS video output Left & right audio output CVBS/S-Video/RGB/YUV video input for bypass Left & right audio input for bypass
S/PDIF	Dolby digital audio output
RS-232	115,2 kbps at maximum
USB	2.0 device

## 2.4 Connecting up your digital receiver

There are several ways to set up the digital receiver. Set up the digital receiver suitably to your television and other appliances. If you have any problem with your setup or need help, contact your dealer.

### 2.4.1 Connecting the antenna



Whatever sort of connection you have between the digital receiver and the television, you need to connect the digital receiver to your television antenna so that it can receive digital television services.

Connect the antenna cable to the ANT 1 connector on the back panel of the digital receiver.

Also, you must ensure that there is a connection to both the ANT 1 and ANT 2 connectors on your digital receiver, so that both tuners work properly.

Normally you do that by using a loop cable to link from the RF LOOP 1 OUT connector to the ANT 2 connector.

#### **NOTE**

However, if you are in a weak signal area, or are using a signal amplifier with more than one output, you may achieve better results by connecting a cable from the antenna or amplifier directly to the ANT 2 connector rather than using the loop cable.

If you have another digital receiver, or you want to still receive analogue channels on your television, link it from the RF LOOP 2 OUT connector.

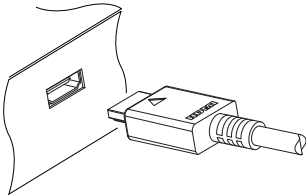
## 2.4.2 Connecting to your television

Between all the following connectors of the digital receiver, we recommend you to use the first connector to get best picture quality. If your television does not have the matching connector, then use the next connector in the following order for better picture quality.

1. HDMI connector (HDMI)
2. SCART connector (TV)
3. S-Video connector (S-VIDEO)
4. Composite connector (VIDEO)

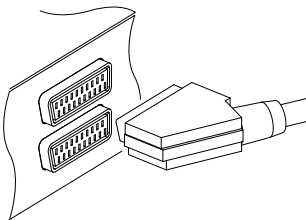
You should configure audio and video settings after connecting up the digital receiver. See § 3.2 for detailed description.

### To use the HDMI connector



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 the other end into the matching socket on your television. In this case, you do not have to make audio connections because the HDMI connector can output stereo audio or Dolby digital audio.

### To use the SCART connector



For best results with a standard television set, you should use a SCART cable, plugging one end into the TV socket on the digital receiver and the other end into a free SCART socket on your television.

Some televisions have inputs via Component connector or S-Video connector rather than SCART.

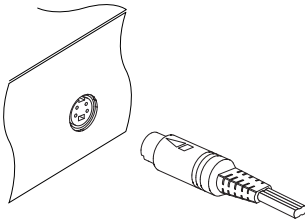
If you have such a television, use an appropriate conversion cable to link the TV socket on the digital receiver to the matching socket on your television.

If you connect with a standard SCART cable, you do not have to make audio connections because the SCART connector can output stereo audio. But if you use a conversion cable, such as SCART-to-Component, you have to make audio connections.

### NOTE

You cannot view high definition video with the SCART connector.

### To use the S-Video connector

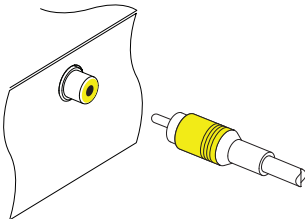


### NOTE

You cannot view high definition video with the S-Video connector.

You will need to obtain a S-Video cable to use the S-Video connector. Plug one end of the cable into the S-VIDEO socket on the digital receiver, and the other end into the matching socket on your television.

### To use the composite video connector

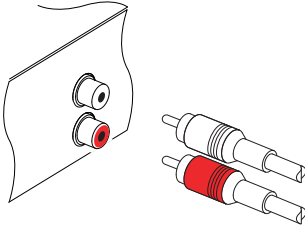


### NOTE

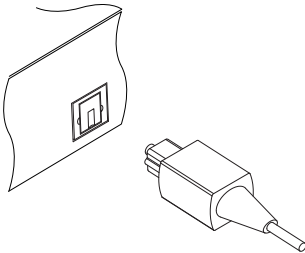
You cannot view high definition video with the composite video connector.

You will 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 the other end into the matching socket on your television.

### To connect the audio connectors



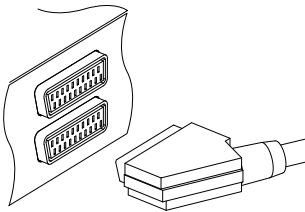
You will need to obtain an audio cable (RCA cable) to connect the audio connectors. Plug one end of the cable into the AUDIO L (white) and AUDIO R (red) sockets on the digital receiver, and the other end into the matching sockets on your television or audio system.



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

### 2.4.3 Connecting to your video cassette recorder

The digital receiver can also output video to another appliance such as a video cassette recorder or video receiver through an auxiliary SCART connector.



You will need to obtain a SCART cable to use the auxiliary SCART connector. Plug one end of the cable into the VCR socket on the digital receiver, and the other end into the matching socket on your video cassette recorder or suchlike.

## 2.5 Switching on for the first time

Now that you have your digital receiver connected, you should plug it in to a mains socket. Ensure that your television set is turned on, so that you will be able to see the display from the digital receiver.

### 2.5.1 Inserting batteries in the remote control


To insert the batteries, open the battery compartment by removing the lid, and then insert the batteries observing the polarity, which is marked on the base of the battery compartment.

If the digital receiver no longer reacts properly to remote control commands, the batteries may be flat. Be sure to remove used batteries. The manufacturer accepts no liability for the damage resulting from leaking batteries.

#### NOTE

Batteries, including those which contain no heavy metals, may not be disposed of with household waste. Please dispose of used batteries in an environmentally sound manner. Find out about the legal regulations which apply in your area.

### 2.5.2 Powering on and checking picture

Now, press the  button in top left corner on the remote control.

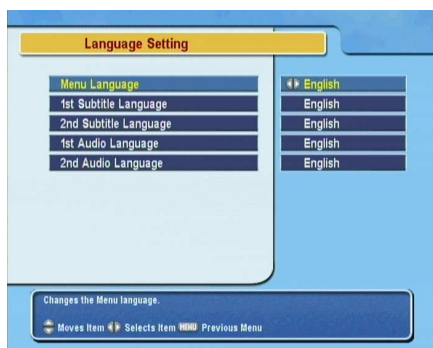
If you do not see a picture, try pressing the **(V.Format)** button on the remote control. If after several tries you still get no picture, check that the television is set to the correct input.

If the picture is good, you can skip to § 4.1 to search for the available television and radio services. Otherwise, you may need to temporarily connect the composite video connector (VIDEO) to your television set so that you can see the on-screen menus in order to configure the video settings.

## Chapter 3

# Preference Settings

### 3.1 Language settings



You can select the language in which the menu would be displayed. In addition to that, you can select which language of audio track and of subtitle track should be output.


Select the System Setting > Language Setting menu. You should see a screen like the left figure.

#### Menu language

The digital receiver supports many menu languages: Dutch, English, German, French, Italian, Russian, Turkish and so forth. Set the Menu Language option to your desired language. Once you select a language, the menu will be immediately displayed in the selected language.


### Subtitle language

Set the 1st Subtitle Language option and the 2nd Subtitle Language option to your desired languages. When you watch a programme, if the programme has a subtitle track of the language that is designated for the 1st Subtitle Language, it will be displayed. If the first language is not available but the second language is available, the subtitle of the second language will be displayed. If there is not any available language, no subtitle will be displayed.

Apart from this setting, you can select a subtitle track with the  button. See § 5.2.5 for detailed description.

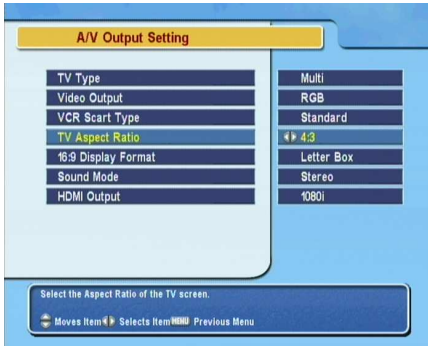
### Audio language

Set the 1st Audio Language option and the 2nd Audio Language option to your desired languages. When you watch a programme, if the programme has an audio track of the language that is designated for the 1st Audio Language, it will be output. If the first language is not available but the second language is available, the audio of the second language will be output.

Apart from this setting, you can select an audio track with the  button. See § 5.2.4 for detailed description.



## 3.2 Video and audio settings



You have to configure the video and audio settings appropriately to your television set and other appliances.

Select the System Setting > A/V Output Setting menu. You should see a screen like the left figure.

### 3.2.1 Television standard

The digital receiver supports two television standards. One is PAL standard, and the other is NTSC standard. PAL was adopted in European countries while NTSC is adopted in USA, Canada, Mexico and so forth.

If you have a PAL television, you have to set the TV Type option to PAL. In that case, if you switch to a service of the NTSC standard, the digital receiver will presents the pictures converting into the PAL standard. However, it is inevitable to lose a little picture quality. Likewise, the contrary case brings about the same result.

The best thing is to watch PAL services with a PAL television and to watch NTSC services with a NTSC television. However, a multi television set is able to process both of them. So if you have a multi television set, you had better set the TV Type option to Multi. Then the digital receiver will present pictures without standard conversion.

### 3.2.2 Colour model


Through the TV SCART connector, the digital receiver is able to output video in various colour models. If you have the

digital receiver linked to your television via this connector, you should set the SCART Output option to your desired colour model. If you have connected via the RCA connector labeled VIDEO on the back panel, you do not have to set this option because the digital receiver outputs CVBS video through the RCA connector independent of the SCART connector.

However, if you have connected via the S-VIDEO connector, you have to set this option to S-Video because the output through S-Video connector comes from the SCART interface.

It is known in general that the RGB colour model provides the best video quality with little difference from the YUV colour model but the CVBS colour model does the least. So RGB would be most desirable for this option.

### 3.2.3 Video cassette recorder

You can have the digital receiver linked to your video cassette recorder or such an appliance via the VCR SCART connector. In that case, the digital receiver will operate differently depending on the setting of the VCR Scart Type option. If the option is set to Standard, the digital receiver will pass the video from the video cassette recorder to your television when it starts playback. But if the option is set to External A/V, the digital receiver will not pass the video automatically. To pass it, you have to press the  button.

#### NOTE

It is impossible for the digital receiver to record the video that the video recorder plays back because the digital receiver is just a bypass for the video recorder.

### 3.2.4 Television aspect ratio

If you have a wide-screen television, set the TV Aspect Ratio option to 16:9.

Otherwise, if you have a normal-screen television, set the TV Aspect Ratio option to 4:3.



You cannot fully enjoy wide-screen programmes with your normal-screen television as the above figures show. The left figure shows a normal picture displayed in the normal screen. To watch wide-screen programmes in the shape like the centre figure, set the 16:9 Display Format option to Letter Box. Wide-screen pictures then will be reduced to fit to the width of the normal screen. Otherwise, to watch them in the shape like the right figure, set it to Center extract. Wide-screen pictures then will be cut out on the left and right sides equally to fit to the width of the normal screen.

### 3.2.5 High definition television

The digital receiver supports various video resolutions from 576 to 1080. In general a resolution of 720 or more is considered high definition. The higher the resolution is, the better quality you can enjoy. However, if your television set does not support high definition, you cannot enjoy high definition quality picture.

Set the HDMI Output option as you desire. The available values for this option are changed according to the TV Type option. If you set this option to 576P, the digital receiver will present even high definition programmes in resolution of 576. On the contrary, if you set it to 1080I, the digital receiver will present even standard definition programmes in resolution of 1080.


**NOTE**

You can enjoy only standard definition video with the following connectors:

- Composite video connector (VIDEO)
- S-Video connector (S-VIDEO)
- SCART connector (TV)

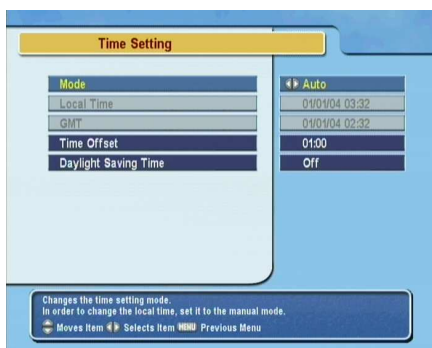
**3.2.6 Sound mode**

Basically, there are two audio sources as you can find two audio sockets on the back panel of the digital receiver. You can enjoy only one source or both of them in either stereo or mono. Set the Sound Mode option as you desire.

Apart from this setting, you can change the sound mode with the  button. See § 5.2.4 for detailed description.

**3.3 Local time setting**

You should set your local time for timer events.



Select the System Setting > Time Setting menu. You should see a screen like the left figure.

You can set the clock manually or use the time signal, Greenwich Mean Time (GMT), carried as part of the digital television broadcast.

To use Greenwich Mean Time, take the following steps:

1. Set the Mode option to Auto; then the Time Offset option becomes enabled.

Table 3.1: Time offset table

Time offset	City
GMT – 12:00	Eniwetok, Kwajalein
GMT – 11:00	Midway Island, Samoa
GMT – 10:00	Hawaii
GMT – 09:00	Alaska
GMT – 08:00	Pacific Time US, Canada
GMT – 07:00	Mountain Time US, Canada
GMT – 06:00	Central Time US, Canada, Mexico City
GMT – 05:00	Eastern Time US, Canada, Bogota, Lima
GMT – 04:00	Atlantic Time Canada, La Paz
GMT – 03:30	Newfoundland
GMT – 03:00	Brazil, Georgetown, Buenos Aries
GMT – 02:00	Mid-Atlantic
GMT – 01:00	Azores, Cape Verde Islands
GMT	London, Lisbon, Casablanca
GMT + 1:00	Paris, Brussels, Copenhagen, Madrid
GMT + 2:00	South Africa, Kaliningrad
GMT + 3:00	Baghdad, Riyadh, Moscow, St. Petersburg
GMT + 3:30	Tehran
GMT + 4:00	Abu Dhabi, Muscat, Baku, Tbilisi
GMT + 4:30	Kabul
GMT + 5:00	Ekaterinburg, Islamabad, Karachi, Tashkent
GMT + 5:30	Bombay, Calcutta, Madras, New Delhi
GMT + 6:00	Almaty, Dhaka, Colombo
GMT + 7:00	Bangkok, Hanoi, Jakarta
GMT + 8:00	Beijing, Perth, Singapore, Hong Kong
GMT + 9:00	Tokyo, Seoul, Osaka, Sapporo, Yakutsk
GMT + 9:30	Adelaide, Darwin
GMT + 10:00	Eastern Australia, Guam, Vladivostok
GMT + 11:00	Magadan, Solomon Islands, New Caledonia
GMT + 12:00	Fiji, Auckland, Wellington, Kamchatka

2. Set the Time Offset option to the time difference between your time zone and GMT referring to Table 3.1.
3. Make sure that your local time is correctly displayed on the Local Time option.

To set the local time yourself, set the Mode option to Manual and enter your local time to the Local Time option with the numeric buttons. The time format is *day/month/year 24-hour:minute*.

If daylight saving time is observed in your state at the moment, set the Daylight Saving Time option to On.

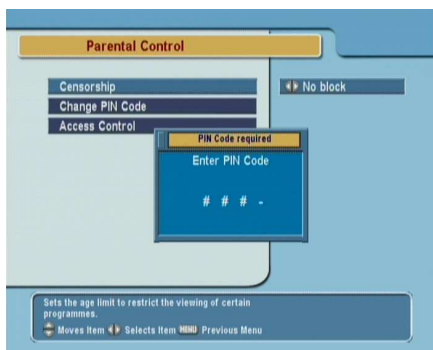
### NOTE

Daylight saving time adds one hour to the time when the option is set to On. When setting the time offset from Greenwich Mean Time, make sure that time offset does not include daylight saving time.

## 3.4 Parental control

In general, television programmes are classified according to the level of violence, nudity and language of their content. When you are watching a programme, you can check its programme classification on the information box. For the information box, see § 5.2.3.

You can prevent your children from watching specific programmes by specifying a programme classification.



Select the System Setting > Parental Control menu. You should see a screen like the left figure, and you will be asked your Personal Identification Number (PIN). The number is initially set to '0000'.

If you wish to block 15 or above rated programmes, set the Censorship option to 15 (age). Setting it to No block blocks no programme; on the other hand, setting it to Total block blocks every programme.

**NOTE**


If a programme does not have any programme classification information, your censorship setting will not take effect.

If anyone is trying to watch a programme that is of or above the censorship setting, the person has to enter the personal identification number to override.

To change the number, select the **Change PIN Code** menu; then an input box appears. You have to enter a desired number twice for confirmation.

You can also restrict uses of some menus. Selecting the **Access Control** menu displays a list of menus that you can lock. If the **Time Setting** item is set to **Locked**, you have to enter the personal identification number when accessing the **Time Setting** menu. If you enter a wrong number, you cannot use the menu. To release a shut item, set it to **Unlocked**.

### 3.5 Adjusting the on-screen display

You can adjust the transparency level of the on-screen display. Select the **System Setting** menu and set the **OSD Transparency** option as you desire. Its available range is from 0 to 50 percent. You can adjust the display time of the information box. For the information box, see § 5.2.3. To adjust its display time, select the **System Setting** menu and set the **Info Box Display Time** option as you desire. Its available range is from 1 to 30 seconds. If you set this option to **No Info Box**, the information box will not be displayed when you switch services. However, pressing the  button will display the information box. If you set this option to **Never Hide**, the information box will always be displayed.

In addition, you can raise or lower the position of the information box. Select the **System Setting** menu and set the **Info Box Position** option as you desire. Its available range is from -10 to +3 lines. The more high you set the option, the more low the information box will be positioned.

### 3.6 To turn on the time shift feature

Time shift means that the most recent hour of the television service you are watching gets saved temporarily on the hard disk of the digital receiver. When this feature is enabled, you can reverse and pause live television as if playing back a recording. To enable this feature, select the **System Setting** menu and then set the **Time Shifting** option to **Enable**. See § [5.5](#) for how to use this feature.

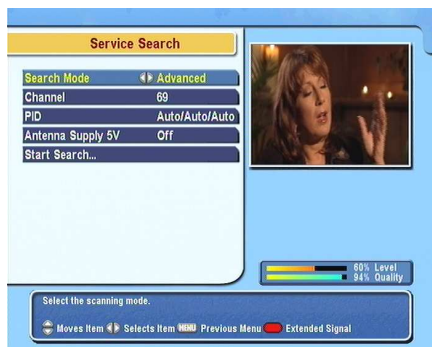


## Chapter 4

# Service Search

After connecting up the digital receiver, you will need to perform a service search.

### 4.1 Searching broadcasting services



To perform service search, select the Installation > Service Search menu. You should see a screen like the left figure.

If you have an antenna booster, you should set the Antenna Supply 5V option to On to supply power to it.

You should set the Search Mode option to Auto for the first time after connecting up the digital receiver; then the digital receiver will search for all available services.

You may choose to only search for services of a specific transponder because more than one service are provided via each

transponder. To do that, set the **Search Mode** option to **Manual**, and then at the **Channel** option select your desired transponder. The number ranges from 5 to 12 in VHF and 21 to 69 in UHF.

To search one service of a transponder, set the **Search Mode** option to **Advanced**, and at the **PID** option specify the PIDs of your desired service with the numeric buttons. **PID** (Packet Identifier) is a set of numbers that identifies transport stream packets.

To start service search, select the **Start Search** item; then a list box appears, in which found services will be listed. When it has completed, press the **OK** button to save found services. To stop at any time or to exit without saving, press the **EXIT** button.

## 4.2 Resetting to factory settings

The digital receiver maintains the following data:

- Services list
- Favourite list
- Timer list
- Preference settings

You can reset all data of the digital receiver. To do that, select the **Installation > Factory Setting** menu, and then you are asked for confirmation. If you select **Yes**, service entries, favourite entries and timer events will all be deleted, and preference options will be reset to the manufacturer's factory settings.

The digital receiver will ask for your location and language after resetting all the data. You have to designate them so that you can perform service search again.

### **NOTE**

A factory reset will not delete any recorded programmes.

## Chapter 5

# Daily Usage

### 5.1 Volume control

Use the **[V-]** and **[V+]** buttons to alter the volume to a comfortable level. You may need to adjust the volume on your television set too. To temporarily switch off the sound, press the **[MUTE]** button. Press it again to restore the sound to previous level.

### 5.2 Watching television

To change services, press the **[P+]** or **[P-]** button. Pressing the **[PREV]** button switches to the previously viewed service. In addition, you can switch to your desired service by entering its service number with the numeric buttons. You can also select a service to watch in the services list.

#### 5.2.1 The services list

To view the services list, press the **[OK]** button.



On the services list, you can see the service information:

- Service number and name
- Transponder information

A dollar sign (\$) may be marked on some entries, indicating pay service. To watch pay services, you need the subscription card.

To select a desired service, put the highlight bar on its entry with the (P+) or (P-) button and press the (OK) button; then it will be presented.

Pressing the (V-) or (V+) button skips over 10 entries up or down. Entering a service number with the numeric buttons puts the highlight bar on its entry.

You can switch between the television services list and the radio services list by pressing the (OFF) button.

Pressing the (O) button displays the additional options, with which you can do the following:

- By setting the Show Provider option to On, you can view service entries by groups of broadcasters.
- To change the name of the highlighted service, select the Rename option; then the on-screen keyboard appears, with which you can enter a new name. See § 6.3 for how to use the on-screen keyboard.
- You can prevent other family members from watching the highlighted service by setting the Lock option to Locked.

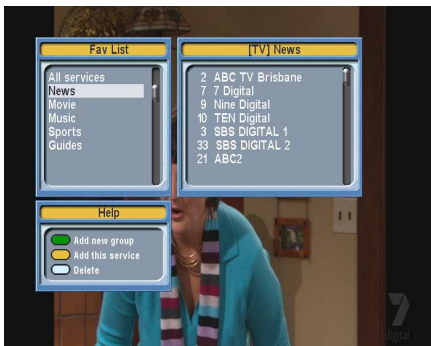
You have to enter your personal identification number to watch or unlock it.

- To add the highlighted service into a favourite group, select the **Add to Fav** option; then the favourite groups will be displayed. Put the highlight bar on a desired group and press the **OK** button.
- You can additionally sort the services list with the **Sorting** option as follows:
  - Default by service number
  - Alphabetic by service name
  - FTA–CAS from free services to pay services
  - CAS–FTA from pay services to free services
  - Fav–NoFav from favourite services to unfavourite services.
- To delete the highlighted service, select the **Delete** option; then you are asked for confirmation. If you select **Yes**, it will be deleted. If you want to restore it as before, you have to perform service search again.

See § 6.1 for how to edit the services list.

### 5.2.2 The favourite services list

You can select a service to watch on a favourite list as well as on the services list.



To display the favourite lists, press the **(FAV)** button. You should see a screen like the left figure. As you move the highlight bar up or down on the favourite group list at the left box, favourite services belonging to the highlighted group are listed on the right box.

For how to edit the favourite lists, refer to § 6.2.

To select a favourite service, put the highlight bar on a desired group and press the **(V+)** button; a highlight bar appears on its favourite services list. Once you select a desired service with the **(OK)** button, it will be presented. Otherwise, to select other group, press the **(V-)** button.

After you have selected a favourite service, if you then switch to another service using the **(P+)** or **(P-)** button, it will be also another favourite service of the selected group. The digital receiver will remind you what group you have selected by displaying its name at the top right of the screen whenever you switch services. If you wish to get out of the current group, select the **All services** group on the favourite group list.

Besides that, you can add or delete a favourite group or service. To add the service you are currently watching into a favourite group, put the highlight bar on a desired group and press the **(+)** button. To create a new group, press the **(+)** button; then the on-screen keyboard appears. Enter your desired name and save it. See § 6.3 for how to use the on-screen keyboard. To delete a group or a service, press the **(-)** button; then you get asked for confirmation. If you select **Yes**, it will be deleted.

### 5.2.3 Viewing programme information

Pressing the **i** button displays the information box, on which you can see all of the following:



- Service number and name
- Transponder information
- Signal level and quality
- Programme name
- Programme classification symbol
- Programme summary
- Broadcasting time
- Current time


In addition, you might see the following symbols:

- Subtitle symbol (☐) if subtitle tracks are provided on the current programme.
- Teletext symbol (☐☐☐) if teletext pages are provided on the current service.
- Lock symbol (🔒) if the current service is locked.
- Dollar symbol (\$) if the current service is a pay service.
- Multifeed symbol (☐☐) if the current programme is provided as a multifeed programme. To use this feature, refer to § 5.4.



Pressing the **i** button once more displays detailed information about the current programme. To hide the information box, press the **EXIT** button.

### 5.2.4 Selecting audio tracks



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



In addition, you can enjoy audio tracks in four sound modes: Stereo, Mono, Left or Right. However, if a multifeed programme is provided at the moment, video tracks will be displayed. In this case, you have to press the  button once more to select an audio track.

### 5.2.5 Selecting subtitle tracks

Some programmes are provided with subtitle tracks in one or more languages. If the current programme provides subtitle tracks, the subtitle symbol () will be marked on the information box. Pressing the  button displays available subtitle tracks. Once you select a subtitle track, it will be displayed.

### 5.2.6 Viewing teletext

On some services, such information as weather reports, news or stock quotations is provided by means of teletext. If the current service provides teletext, the teletext symbol () will be displayed on the information box. Press the  button to view teletext pages.

Select a desired page to view by entering its page number with the numeric buttons. You can zoom into a teletext page with the  button, and adjust its transparency level with the  button. To hide the teletext screen, press the **EXIT** button.

## 5.3 Viewing electronic programme guide

The Electronic Programme Guide shows the current and scheduled programmes that are or will be available on each service with a short summary for each programme.





Pressing the **GUIDE** button displays the electronic programme guide, on which you can see the following:

- Scheduled programmes
- programme summary
- Broadcasting date
- Broadcasting time

To see detailed information of a desired programme, put the highlight bar on your choice with the **P+** or **P-** button and press the **i** button. To switch to another service, press the **V-** or **V+** button. You can travel over previous days with the **←** button, and can travel over next days with the **→** button.

To see the programme guide for radio broadcasts, press the **📻** button. To switch it back, press the **📺** button again.


Pressing the **📅** button displays the programme guide in the form of a spreadsheet. To switch it back, press the **📅** button again.

You can make a timer recording on the electronic programme guide. See § 7.1.4 for detailed description.

## 5.4 Watching multifeed programme

Some broadcasts such as sports channels can provide a variety of perspectives on a programme at a same time. We call it a multifeed programme. You can select and watch a perspective you prefer.

If a multifeed programme is provided on the current service, the multifeed symbol (**📺**) will be marked on the information box. Press the **📺** button, then available video tracks will be listed. Once you select one, it will be presented. At this time,

you have to press the  button once more to select audio tracks.

## 5.5 Using time shift

You can pause and resume a live television programme, and even rewind and replay it. When you are watching a programme 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 programme, instead you are watching a delayed presentation of it. This is called time shifted television. Then, you can skip commercials until you catch up to the live broadcast.

In order to use the time shift feature, the Time Shifting option must be set to Enable. See § 3.6.

When enabled, the digital receiver will keep as much as one hour recording buffer of current service by utilizing the hard disk drive storage. The buffer will reset each time you change to another service.

With time shift enabled, the following operations are possible:

- To go back in time, hold down the  button; to go forward, hold down the  button. The progress bar is displayed momentarily with a preview window.
- You can navigate using the progress bar, refer to § 7.3.1.
- You can jump forward 30 seconds at a time by pressing the  button.

- You can jump backward 10 seconds at a time by pressing the  button.
- You can change playback speed. For slow motion see § 7.3.2. For fast motion see § 7.3.3.
- To check your current position in time shift, press the  button. The time difference compared to live programme is displayed momentarily in top right corner of screen. A value of -02:00 means two minutes behind live programme.
- To make a recording of what is in time shift, see § 7.1.5.
- To end time shift, press the  button. The live programme will be presented.


When time shift option is disabled and pause is kept for more than 10 seconds, the time shift feature will be switched on to stop you losing part of the programme. In such case it will remain enabled until you change services.



## 5.6 Using picture in picture



You can watch two services at the same time with one of them presented in a sub-screen. We call this feature picture-in-picture.




The instructions on how to use the picture-in-picture feature are as follows:

1. Press the  button to display a sub-screen, on which another service will be presented.

2. Pressing the  button once more minifies the sub-screen, and pressing it once again hides the sub-screen.
3. To display the services list for the sub-screen, press the  button.

**NOTE**

When a recording is in progress, the available services in the services list may be limited.

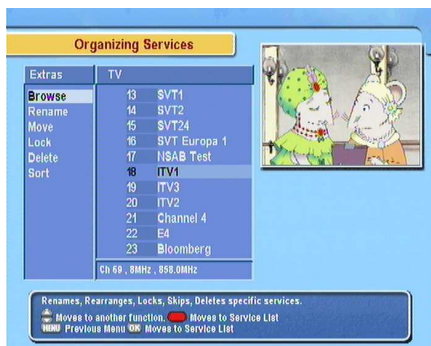
4. Pressing the  button moves the sub-screen counter-clockwise, and pressing the  button moves it clockwise.
5. Pressing the  button swaps the main picture with the sub-picture. Even when you play back a recording, you can watch a live programme in the sub-screen. However, you cannot swap the pictures in that case.
6. If both pictures are pay services, only the main-picture will be presented.

## Chapter 6

# Listing Services

### 6.1 Editing the services list


You would have got the services list after service search. You can rename, move, lock or delete service entries on the services list.



Select the Organizing Services menu. You should see a screen like the left figure.

There are editing options on the left column and service entries on the right column.

Once you put the highlight bar on a desired option on the left column and press the **OK** button, you can select a desired service to edit on the right column. To go over to the other column, press the **Left Arrow** button.

To edit the radio services list, press the  button; then radio service entries will be listed on the right column. To switch back to the television services list, press it again.

To change the name of a service, select the **Rename** and select a desired service; then the on-screen keyboard appears. See § 6.3 for how to use the on-screen keyboard.

Unlike analogue broadcasts, each service does not have a proper service number in digital broadcasts. Service numbers are just assigned to services in the order that they were found in service search. So you can reassign a service number by moving a service entry. To move a service entry, select the **Move** option and select a desired service; then the selected service becomes darker. As you move it up or down, it gets renumbered according to the position. Press the **OK** button to fix it.

You can lock some services to prevent your children from watching them. To lock a service, select the **Lock** option and select a desired service; then the selected service gets marked with a lock symbol (🔒) on it. If anyone tries to watch a locked service, the person has to enter the personal identification number that is set to the **Change PIN Code** option. See § 3.4 for this option. Pressing the **OK** button on a locked service entry turns it back to be unlocked.

To delete a service, select the **Delete** option and select a desired service with the **OK** button, and then press the **EXIT** button; you get asked for confirmation. If you select **Yes**, the selected service will be deleted. If you want to undo the deleted service, there is nothing you can do but perform a service search again.

Once you select the **Sort** option on the left column, sorting options are displayed as follows:

Default by service number

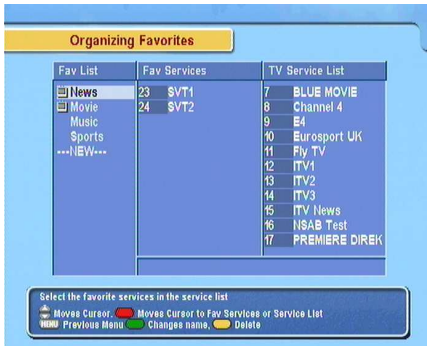
Alphabetic by service name

FTA–CAS from free services to pay services

CAS–FTA from pay services to free services

## 6.2 Editing the favourite list

You can make your own favourite services list. In fact, you can define multiple favourite services lists, each being a 'group' of chosen services.




Select the Organizing Favorites menu. You should see a screen like the left figure.


There are three columns:

- Group list (left)
- Favourite list (centre)
- Services list (right)

The services list contains all available services, whereas the favourite list contains only chosen services that have been added to the highlighted group. As you move the highlight bar up or down on the group list, favourite services belonging to the highlighted group get shown in the favourite list.


You can add up to 30 groups. To add a group, select the NEW option in the group list; then the on-screen keyboard appears. See § 6.3 for how to use the on-screen keyboard.






To rename a group, put the highlight bar on the group entry you want and press the  button; then the on-screen keyboard appears. See § 6.3 for how to use the on-screen keyboard.



To delete a group, put the highlight bar on the group entry you want and press the  button; then a message box appears asking you for confirmation. If you select Yes, it will be deleted.


You can add a favourite service to a group by taking the following steps:

1. Put the highlight bar on a desired group entry in the

group list and press the  button to select it. The highlight bar then moves to the services list.

2. To add a service to the selected group, put the highlight bar on a desired service entry and press the  button. The selected service entry gets added to the favourite list. Repeat this step to add more entries.
3. Press the  button and the highlight bar get moved to the favourite list. You can delete a favourite entry with the  button.
4. To select another group, press the  button again. By pressing the  button, the highlight bar gets moved to each column.

Besides, you can rearrange a group's favourites by moving a favourite entry. To move a favourite entry, put the highlight bar on the favourite entry you want and press the  button; then the selected entry becomes dark. Move it to a desired place and press the  button.

To add radio services, press the  button; then radio service entries get listed in the services list. To recall the television services list after adding radio services, press the  button again.

With your favourite services list, you can select your favourite services more easily. Refer to § 5.2.2 for detailed description.



## 6.3 How to use on-screen keyboard



You can move the highlight key horizontally with the **(V-)** and **(V+)** buttons and vertically with the **(P+)** and **(P-)** buttons. Pressing the **(OK)** button on a key enters its letter in the input line. To type a space, select the **Space** key. To type lower case letters or numerals, select the **Other** key.

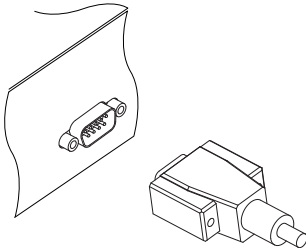
To delete a letter, put the cursor to the right of the desired letter on the input line and then select the **Del** key. You must select the **Save** key to complete naming; otherwise, if you press the **(EXIT)** button, it will not be named.

## 6.4 Transferring receiver data

The digital receiver retains the following data:

- Services list
- Favourite lists
- Preference settings

It is possible to transfer the receiver data from the digital receiver to another same digital receiver by connecting them with a RS-232 cable. To have the receiver data transferred, perform the following steps:



1. Plug one end of a RS-232 cable (9 pin D-sub cable) into the RS-232 port on the digital receiver, and the other end into the matching port on the other digital receiver.
2. Turn on the source digital receiver.
3. Select the Installation > Transfer Firmware > Transfer Data to Other IRD menu, then you get asked for confirmation; select Yes.
4. To start the data transfer, turn on the target digital receiver.
5. A progress bar appears showing the progress of the data transfer.
6. Restart the target digital receiver when the data transfer is complete.

## Chapter 7

# Recording and Playing

You can record two different services while watching another if two of the services are provided through the same transponder. The TF 5100 PVRt HDMI digital receiver has two tuners so that you can enjoy the following:

- While playing a recording back, you can watch a service in the sub-screen using the picture-in-picture feature.
- You can record two different services while playing back a previously recorded programme.
- You can record two different services while watching one of them using the time shift feature. See § 5.5 for the time shift feature.
- You can even record two different services while watching two other different services—only if two or more services are provided in a same transponder and the other services are provided in another same transponder. In this case you can watch two services at the same time using the picture-in-picture feature. See § 5.6 for the picture-in-picture feature.

## 7.1 Recording a programme



Once recording has started, a symbol like the left figure will be displayed at the top right of the screen for a few seconds. When you are watching a service different from the service being recorded, you can view a number on the center of the symbol, which indicates the order that the recording is started.

To record two programs simultaneously, two tuners are allocated for the recording. Therefore, you can only change to a limited number of services while the two programs are being recorded.



### CAUTION

**Do not move the digital receiver nor pull out the plug while it is running. It may cause damage to recorded programmes. Note that Topfield is not responsible for damages inflicted on files that are stored on the hard disk drive.**

### NOTE

When a recording is complete, it might not be saved if its recording duration is less than one minute.

### 7.1.1 Instant recording

To instantly record the programme you are watching at present, press the  button. Pressing the  button will not pause the current recording like it does with a video cassette recorder.




Pressing the **⏸** button will pause the live show and begin time shifting within the current recording even with the Time Shifting option disabled. However, it is still possible to pause a recording. After a recording is started, pressing the **⏸** button displays a menu like the left figure, in which you can set the recording duration.

To specify an arbitrary recording duration, set the Duration option as you desire with the **⏮** and **⏭** buttons and press the **OK** button; the recording will end at the specified time.


If the information about the next programme is provided by the electronic programme guide, the After this program and After next program options will be available. Once the After this program option is selected, the current recording will stop when the current programme is scheduled to end. Likewise, once the After next program option is selected, the current recording will stop when the next programme is scheduled to end.


Selecting the Record pause option pauses recording. When you press the **⏸** button again, you will see this option is changed to Record continue. To resume recording, select it.



To stop recording, press the  button; then a box like the left figure appears, which shows programmes currently being recorded. If you select one, its recording will stop.

While a recording is going on, you can watch or record another service.

To additionally record another service, switch to the service you want to record, and press the  button.


Once a recording is started, it is put on the recorded programme list even though it is not finished yet. The recording file is named after its service name with a suffix of a number. To view the recorded programme list, press the  button. See § 7.2 for detailed description about the recorded programme list.

### 7.1.2 Current programme recording



You can record the current programme including the bits that you have already watched as long as you have not changed services at all. To do so, select the Recording menu.

You can record two services at the same time. Set the Record No option to distinguish two recordings.

Set the Service option to the service which provides the programme you want. Pressing the  button on this option

displays a services list, from which you can select your desired service.

To start recording immediately from now on, set the **Start Time** option to **Quick**. If you are watching a programme by time shift and wish to record it from the beginning, set this option to **Current Event**.

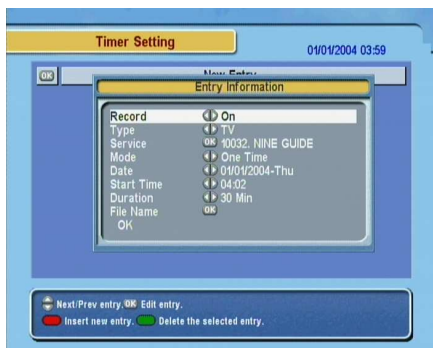
Set the **Duration** option to a desired time, in which the recording will be finished.

Pressing the **OK** button on the **File Name** option displays the on-screen keyboard, with which you can specify a file name for the timer recording. If you do not specify anything, it will be named after the service name. See § 6.3 for how to use the on-screen keyboard.

Once the **Record Start** option is selected, the recording is started and the **Stop** option becomes enabled. To stop the recording, select the **Stop** option.

### 7.1.3 Timer recording

You can set a service to be recorded at a specific time. Even if the digital receiver is in standby mode, it will switch into operation mode and start recording at the specified time. When the recording comes to the end, the digital receiver will switch back into standby mode again in one minute. However, if you press any button on the remote control or on the front panel even just one time, the digital receiver will not switch into standby mode.




To input a timer recording, select the System Setting > Timer Setting menu; then the timer list will be displayed.

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


1. Set the Record option to On to make a recording. If this option is set to Off, the digital receiver will turn on at the specified time but not record; instead, you may record with your video cassette recorder or suchlike in this case.
2. If you want a radio programme, set the Type option to Radio; otherwise, set it to TV.
3. Set the Service option to the service which provides the programme you want. Pressing the **OK** button on this option displays a services list, from which you can select your desired service.
4. There are five timer modes:
  - One Time means literally 'one time'.
  - Every Day means literally 'every day'.
  - Every Weekend means 'Saturday and Sunday every week'.
  - Weekly means 'one day every week'.
  - Every Weekday means 'from Monday to Friday every week'.


If your favourite programme is broadcasted at weekends and you wish to record every episode of the programme, set the Mode option to Every Weekend.



5. Set the Date option to a desired date, on which the digital receiver will turn on. The date format is *day/month/year-day of the week*.  
Set the Start Time option to a desired time, at which the recording will be started. The time format is *hour:minute*.
6. Set the Duration option to a desired time, in which the recording will be finished.
7. Pressing the  button on the File Name option displays the on-screen keyboard, with which you can specify a file name for the timer recording. If you do not specify anything, it will be named after the service name. See § 6.3 for how to use the on-screen keyboard.
8. To set a timer recording with the above settings, select the OK option; otherwise, it will not be saved and will not occur.

You can also edit or delete timer events in the timer list.

To edit a timer entry, put the highlight bar on the entry you want and press  button; then appears a box in which you can change its settings in the same manner as making a new one.

To delete a timer event, put the highlight bar on the entry you want to remove and press the  button; then you are asked for confirmation. If you select Yes, it will be deleted.

### 7.1.4 Scheduling a recording using the programme guide









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

1. Press the **[GUIDE]** button to display the electronic programme guide.
2. Select a service you want to record with the **[V-]** and **[V+]** buttons.
3. Select a programme you want to record with the **[P+]** and **[P-]** buttons.
4. To make a timer event without recording, press the **[OK]** button; the letter **P** is displayed. To make a timer event with recording, press it once more or alternatively press the **[RECORD]** button; then the letter **R** is displayed.
5. This timer event is placed on the timer list. To change its settings, press the **[RECORD]** button to show a box in which you can edit. Refer to § 7.1.3 for detailed description.
6. Pressing the **[OK]** button once more will cancel the timer.

### 7.1.5 Recording a time-shifted programme

See § 5.5 for detailed description about the time shift feature. While watching a programme with time shift, you can record it by performing the following steps:

1. Press the  button to display the progress bar.
2. To move to the beginning of the desired scene, hold down the  or  button until it is reached.
3. Press the  button to start recording. The time shift buffer from that position onwards will now be recorded.
4. Press the  button to stop time shift.
5. Press the  button once more to stop recording.

### 7.1.6 Recording a pay service programme

You can record a pay service programme without the subscription card. However, you need the subscription card to play it back because it has not been descrambled. So it is recommended to record pay service programmes with the subscription card so that they can be recorded in descrambled form. In that case you can enjoy them without the subscription card like free service ones.

To record a programme of a pay service in descrambled form, perform the following steps:

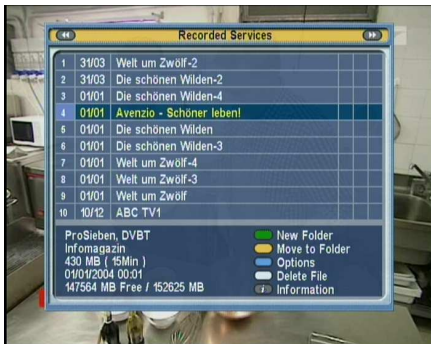
1. Select a programme of a pay service you want to record.
2. Make sure that the subscription card is inserted in the slot on the front of the digital receiver.
3. Start recording.
4. Do not switch to other service nor use time shift until it is finished.

#### NOTE

If you switch to other service or use time shift in the middle of recording a pay programme, it will be recorded without descrambling from that moment. Even if the recording is only partially descrambled, you need the subscription card to play it back.

## 7.2 File archive

When a programme is recorded, it is stored as a file on the built-in hard disk drive of the digital receiver. You can select a recording to play back from the recorded programme list.



Press the button to display the recorded programme list. The file information is comprised of the following elements: file number, file name, recording time, playing duration, file size and so on.

In addition to the recorded programme list, there are an MP3 list and a TAP list. To view other lists, press the or button. See § 7.6 for MP3 playback. See Chapter 8 for description about TAP.

You can play, move, delete, rename and lock a recording file. You can also sort the recording files by file name, playing duration or file size. In addition, you can make a new folder.

### 7.2.1 To delete a recording

To delete a recording, put the highlight bar on it and press the button; then you are asked for confirmation. If you select Yes, it will be deleted.

### 7.2.2 To sort recordings


To sort the recordings, perform the following steps:

1. Press the button to display the additional options.

2. Set the Sorting option to Alphabetic, Time or Size as you want.
3. Press the **EXIT** button.
4. They are sorted by the specified option.

### 7.2.3 To lock a recording


To lock a recording so that other people cannot play it, perform the following steps:

1. Put the highlight bar on a desired recording.
2. Press the  button to display the additional options.
3. Set the Lock option to Locked.
4. Press the **EXIT** button.
5. The lock symbol (🔒) is displayed on it.


If you select a locked recording to play it back, you will be asked for your personal identification number.

### 7.2.4 To rename a recording


To change the name of a recording, perform the following steps:

1. Put the highlight bar on a desired recording.
2. Press the  button to display the additional options.
3. Select the Rename option, and the on-screen keyboard appears. Change the name and save it. See § 6.3 for how to use the on-screen keyboard.

### 7.2.5 To make a new folder

To make a new folder, press the  button; then a new folder named GROUP # is created. You can change its name in the same manner as renaming a recording. See above.




### 7.2.6 To move a recording to another folder

To move a recording to another folder, put the highlight bar on a desired recording and press the  button; then the folders are listed. Once you choose a folder, the recording is moved to it.








### 7.3 Playing back a recording

When a programme is recorded, its additional contents such as audio tracks or teletext are also recorded together. So you can enjoy them while a recording is played.


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








1. Press the  button to display the list of recorded programmes.
2. Put the highlight bar on a desired recording.
3. Press the  button to start playback.
4. To stop playback, press the  button.

During a playback, you can enjoy the following tricks:



- To see the detailed information about the currently played recording, press the  button; then the information box appears and shows its file name, playing duration, programme information, and so on.
- To pause playback, press the  button. To resume it, press the  button.
- To go forward, hold down the  button; to go backward, hold down the  button.
- To display the progress bar, press the  button; to hide it, press the  button again.
- when the progress bar is hidden, you can move to a desired scene by entering the percentage with the numeric buttons

### 7.3.1 To navigate using the progress bar





First press the  button to display the progress bar, then:

- To go forward, hold down the  button; to go backward, hold down the  button.
- To bookmark a position, refer to § 7.3.4.
- If there are no bookmarks, you can jump forward 30 seconds at a time by pressing the  button.
- You can jump backward 10 seconds at a time by pressing the  button.
- To jump back to beginning of recording, press the  button.
- To jump to end of recording, press the  button.
- To hide the progress bar, press the  button again.

### 7.3.2 To play in slow motion

To watch in slow motion during a playback, press the  button. If you press it repeatedly, the playback speed changes in 3 steps: 1/2, 1/4 and 1/8 times. To resume normal speed, press the  button.







### 7.3.3 To play in fast motion

To watch in fast motion during a playback, press the  button. If you press it repeatedly, the playback speed changes in 3 steps: 2, 4 and 6 times. To resume normal speed, press the  button. You can play not only forward but also backward in fast motion. To play backward, press the  button. If you press it repeatedly, the playback speed changes in 3 steps: 1, 2 and 3 times. To resume normal speed, press the  button.

### 7.3.4 To make a bookmark






You can mark favourite parts of a recording by creating bookmarks, and then jump to them. You can have up to 64 bookmarks. Bookmarks are stored with the recording so that you can use them again afterwards. To make bookmarks, perform the following steps during playback:


1. Press the  button to display the progress bar.
2. To add a bookmark, press the  button at a desired scene; then you will see a small dot appear above the progress bar like in the picture above.
3. To jump forward to next bookmark, press the  button.
4. To jump to first bookmark, press the  button then the  button.
5. To delete a bookmark, jump to it and then press the  button.

### 7.3.5 To play back a recording repeatedly






You can play back a recording repeatedly both in whole and in part.

To play back in whole, press the  button when the progress bar is hidden; then the repetition symbol () is displayed on the information box. To cancel it, press the  button again.

To play back in part, perform the following steps:






1. Press the  button to display the progress bar.



2. Move to the beginning scene of the part you want to play repeatedly by holding down the  or  button.
3. Press the  button, then the pointer starts to blink.
4. Move to the end scene; the part is marked in purple.
5. Press the  button again, then the part turns green, and repeated playback starts.
6. To cancel it, press the  button when the progress bar is displayed.

### 7.3.6 To play back recordings in sequence

You can play several recordings continuously in sequence by performing the following steps:

1. Press the  button to display the list of recorded programmes.
2. Select each desired recording with the  button. once a recording is selected, it gets numbered.
3. Press the  button to start playback.
4. The selected recordings are played in the sequence that they are numbered.
5. To jump to start of next selected recording, press the  button to display the progress bar, then press the  button.

### 7.3.7 To play back a scrambled recording






If you have recorded a programme of a pay service with the subscription card, you can play it as freely like one of a free service. Otherwise you need the subscription card to play it, because it has been recorded without unscrambling even though it may have been partially descrambled.

On the recorded programme list, a purely green \$ indicates the recording has been wholly descrambled; on the other hand, a yellowish green \$ indicates it has been partially descrambled, and a purely yellow \$ indicates it has not been descrambled at all.

Refer to § 7.1.6 for how to record a pay service programme.



## 7.4 Editing a recording



You can cut out or save a part such as a commercial from a recording by performing the following steps:

1. Press the  button to display the progress bar during a playback.
2. Move to the beginning scene of the part you want to edit by holding down the  or  button.
3. Press the  button, then the pointer starts to blink.
4. Move to the end scene; the part is marked in purple.
5. Press the  button, then the edit options are displayed
6. If you choose the Cut option, it will be removed from the original recording and discarded.
7. If you choose the Save option, the cut will be saved in a new file which is named after the original recording with a suffix of 'CUT' and a number.



## 7.5 Copying a recording

You can copy a recording file in whole or in part during a playback by performing the following steps:

1. Start playback of a recording you want.
2. Move to a scene from which you want to start copy by holding down the  or  button.

3. Press the  button, then it will be copied in a new file which is named after the original recording with a suffix of 'COPY' and a number.
4. To stop copy, press the  button.







**NOTE**


You can make a copy of a long recording more quickly by starting to play the original recording, then pressing  button until the speed has increased to six times, then pressing the  button. The copy will be done at six times normal speed.

## 7.6 MP3 playback

You can enjoy music or audio books in MP3 format with the digital receiver. For how to transfer MP3 files to the digital receiver from your computer, refer to § 7.7.

To play a MP3 file, perform the following steps:

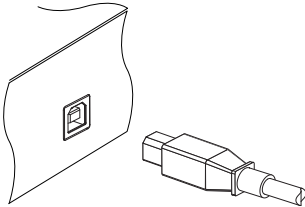
1. Press the  button and then the  or  button to display the MP3 list.
2. Put the highlight bar on a desired file; if you want to play several files, select them with the  button.
3. Press the  button to start playback.
4. To stop playback, press the  button.

To play all MP3 files in a subfolder, put the highlight bar on a desired folder, and press the  button.

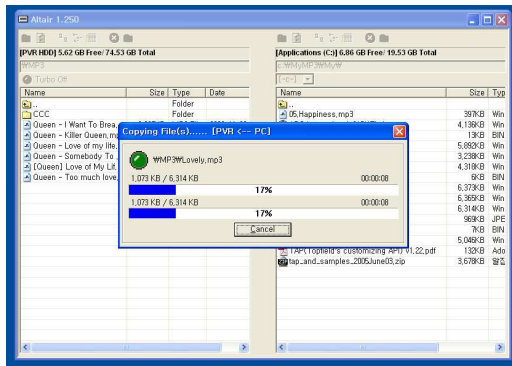
## 7.7 Transferring recording files

You can transfer files between the digital receiver and your computer via USB connection with *Altair*, which is a program used to transfer files. You can download it from the Topfield website, <http://www.i-topfield.com>.

To transfer files, take the following steps:



1. Download the *Altair* programme and the USB driver from the Topfield website.
2. Install them on your computer.
3. Plug one end of a USB cable into the USB port on the digital receiver, and the other end into the matching port on your computer.
4. Turn on the digital receiver.
5. Run *Altair*, then its screen will appear like the figure below.



The instructions on how to use *Altair* are as follows:

1. Select files to transfer. The left panel shows files and folders that are on the digital receiver, while the right panel shows files and folders that are on your computer.
2. To transfer files from the digital receiver to your computer, press the right arrow button (→).
3. To transfer files from your computer to the digital receiver, press the left arrow button (←).

At the top of the panel, you will see a message that says Turbo Off. Turbo mode is a way of speeding up the transfer of files to and from the digital receiver. You can click the circle to the left of the message to turn turbo mode on or off.

Turbo mode makes transferring files faster, but the digital receiver stops responding to commands from the remote control. If you want to use the digital receiver while transferring, or if any scheduled recordings are due to start, you should not use turbo mode.

**NOTE**

You cannot play back the recordings with a regular MPEG player on your computer because they are formatted differently from the standard MPEG format.

Visit <http://www.videolan.org> or <http://www.elecard.com> where you can find a MPEG player able to play them back. If you wish to author DVDs with them, visit <http://www.haenlein-software.com> where you can find a DVD authoring program able to process them.

## 7.8 Formatting the hard disk

You can delete all contents stored in the hard disk drive by formatting it. If you wish to do that, select the Installation > Format Hard Disk menu, then you are asked for 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 digital receiver is different from any of the personal computer. You can neither record nor use time shift with an unformatted hard disk.

## Chapter 8

# Topfield Application Program






If you are good at programming with C++ language, you can make a program executable to run on the digital receiver. We call this a Topfield Application program (TAP). In making a TAP, it is recommended to use *Diab* compiler of *Wind River*, whose website address is <http://www.windriver.com>. Some variants of *GCC* compiler also might be available as a compiler for TAPs. You can get the Application program Interface (API) libraries for TAPs from the Topfield website, <http://www.i-topfield.com>.

Your TAPs will be run under the following conditions:

- Their extension name is *tap*. If they have any other extension name, they will be ignored.
- They are in the Program Files folder. If they are in other folders, they will be ignored.

For how to transfer your program to the digital receiver, refer to § 7.7.


To run a TAP in the digital receiver, perform the following steps:

1. Press the  button and then the  or  button to display the program file list.
2. Place the highlight bar on a file entry you want to run.
3. Press the  button to start the program.
4. To exit the program, press the  button.



The figure on the left is a running screen of a TAP, *Image Viewer*, which displays image files of BMP, GIF and JPG format. This TAP is available from the website, <http://www.i-topfield.com>.

In the program file list, you can use a variety of file control functions including: renaming, sorting, deleting and so on. For detailed descriptions about the file control functions, refer to § 7.2.

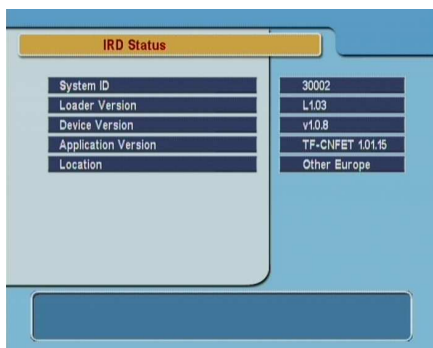
If you want a program to run automatically when the digital receiver starts up, move the program to the Auto Start folder. Press the  button at start-up if you want the program not to run.

## Chapter 9

# Firmware Update

The digital receiver has a stable and convenient firmware to use. However, a new firmware may be released to improve the digital receiver. You can get the latest firmware and an update utility which runs on most versions of Windows from the Topfield website, <http://www.i-topfield.com>.

### 9.1 Checking the firmware information



You have to check the firmware information of your digital receiver before downloading a new firmware. Select the Information > IRD Status menu. You should see a screen like the left figure.

Remember the System ID, and download a firmware with the same system identification.



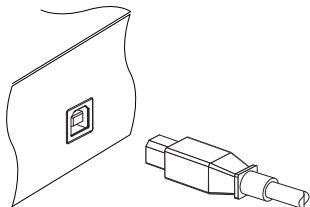
**NOTE**

You can only update with firmwares of which system identification is identical to that of yours. Otherwise you will fail in firmware update.

## 9.2 From your computer via USB port

You can transfer a new firmware to the digital receiver from your computer by connecting them with a USB cable. You need *TFDN\_USB*, a firmware transfer utility for this, which is available from the website, <http://www.i-topfield.com>.

To update the firmware with this method, perform the following steps:



1. Download a new firmware applicable to your digital receiver from the Topfield website.
2. Plug one end of a USB cable into the USB port on the digital receiver, and the other end into the matching port on your computer.
3. Turn on the digital receiver.
4. Run *TFDN\_USB*.

The instructions on how to use *TFDN\_USB* are as follows:

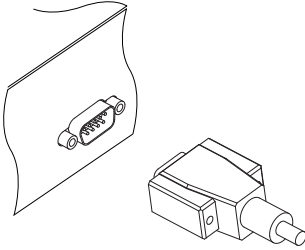


1. Press the Find button to select the new firmware file.
2. Press the download button, and then restart the digital receiver to start the file transfer.
3. A countdown will be displayed on screen
4. Restart the digital receiver once more when the file transfer is complete.

## 9.3 From your computer via RS-232 port

It is possible to transfer a new firmware to the digital receiver from your computer by connecting them with a RS-232 cable. You need *TFD-Down*, a firmware transfer utility for this, which is available from the website, <http://www.i-topfield.com>.

To update the firmware with this method, perform the following steps:



1. Download a new firmware applicable to your digital receiver from the Topfield website.
2. Turn off the digital receiver.
3. Plug one end of a RS-232 cable (9 pin D-sub cable) into the RS-232 port on the digital receiver, and the other end into the matching port on your computer.
4. Run *TFD-Down*.

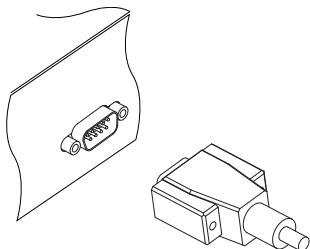
The instructions on how to use *TFD-Down* are as follows:



1. Press the Find button to select the new firmware file.
2. Press the download button, and then turn on the digital receiver to start the file transfer.
3. A countdown will be displayed on screen
4. Restart the digital receiver when the file transfer is complete.

## 9.4 From another digital receiver via RS-232 port

It is possible to transfer the firmware from the digital receiver to another same digital receiver by connecting them with a RS-232 cable. To update the firmware with this method, perform the following steps:



1. Turn off the target digital receiver.
2. Plug one end of a RS-232 cable (9 pin D-sub cable) into the RS-232 port on the digital receiver, and the other end into the matching port on the other digital receiver.
3. Turn on the source digital receiver if not already on.
4. Select the Installation > Transfer Firmware > Transfer Firmware to Other IRD menu, then you get asked for confirmation; select Yes.
5. Turn on the target digital receiver to start the firmware transfer.
6. A progress bar appears showing the progress of the firmware transfer.
7. Restart the target digital receiver when the firmware transfer is complete.





### **Correct disposal of this product**

This marking shown on the product or its literature indicates that it should not be disposed with other household wastes at the end of its working life. To prevent possible harm to the environment or human health from uncontrolled waste disposal, please separate this from other types of wastes and recycle it responsibly to promote the sustainable reuse of material resources.

Household users should contact either the retailer where they purchased this product or their local government office for details of where and how they can dispose this product for environmentally safe recycling.

Business users should contact their supplier and check the terms and conditions of the purchase contract. This product should not be mixed with other commercial wastes for disposal.

Topfield continues to improve the digital receiver which this guide explains. So some explanations and illustrations in this guide could be different from the actual digital receiver.