

TOPFIELD

TF 5100 PVR

User Guide

*Digital Terrestrial Receiver
Personal Video Recorder*

CONAX



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Chapter 1

Introduction

The TF5100 PVR 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. However, unlike analog broadcasts, digital broadcasts are not all assigned to their own frequencies; instead, multiple television and radio broadcasts are transmitted through a single frequency. The frequency in digital broadcasting is usually called transponder. To reduce confusion, the word **service** is preferably used than **channel** as service indicates one television or radio broadcast in this manual.

1.1 Features

The TF5100 PVR digital receiver has the following features:

- Can store up to 2000 television and radio services.
- Has an electronic program guide that provides an overview of program schedules for next few hours.

- You can make a favorite list with your favorite channels.
- You can view the information of the current television or radio program.
- You can update the firmware of the digital receiver to the latest version, which will be 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 80 hours of program—in case of 160 gigabytes—in excellent picture and sound quality.
- Time shift is a special technical feature available on the TF5100 PVR. You can pause the program you are watching and resume it again at a later time. You can also quickly go to whatever part of the current program by fast forward and rewind search.

1.2 Controlling the digital receiver

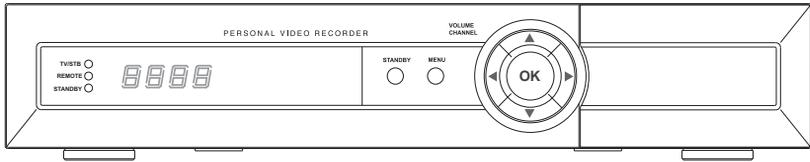
The digital receiver can be operated with the remote control and the buttons on the front panel.

NOTE

When the digital receiver is off but plugged to a wall outlet, we say that it is in standby mode; on the other hand, when it is on, it is in operation mode. You should keep the digital receiver plugged to a wall outlet on standby mode so as 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 description.

REMOTE lamp lights up whenever you press a button of 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 and status of the digital receiver in operation mode.

STANDBY button switches the digital receiver between standby mode and operation mode. (On/Off)

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

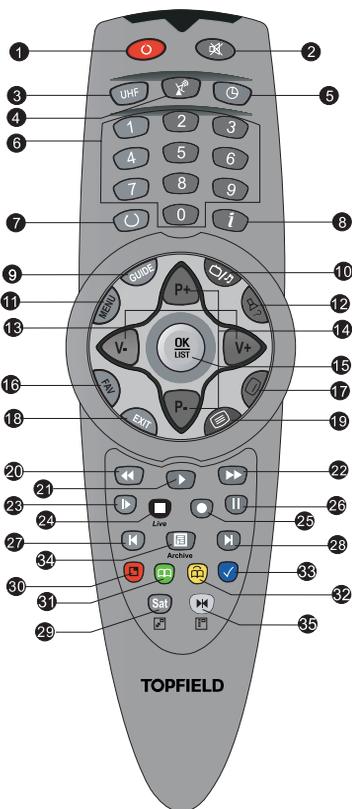
CHANNEL ▲, ▼ buttons move to the next or previous service. They are also used to navigate in the menus and interactive screens.

VOLUME ◀, ▶ buttons increase and decrease the volume. They are also used to change options for a menu item.

OK button displays the service list. It is also used to select menu items.

You have to insert your subscription card into the subscription card slot to watch pay services.

1.2.2 The remote control



- ①  button switches the digital receiver between standby mode and operation mode. (On/Off)
- ②  button mutes the sound. Press again to switch it back on.
- ③  button displays the RF setting menu. See § 3.2.6 for more description.
- ④  button 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 description.
- ⑤  button sets a sleep timer.
- ⑥ Numeric buttons are used to enter service numbers and menu options.
- ⑦  button switches between the current service and the previously viewed one.
- ⑧  button displays more information about the current program or a program highlighted in the electronic program guide.
- ⑨  button displays the electronic program guide. (EPG)
- ⑩  button switches between television services and radio services.
- ⑪  button displays the main menu. It is also used to return to the previous menu from a submenu.

- ⑫  button is used to select an audio track and sound mode, or a video track of multifeed program.
- ⑬ ,  buttons increase and decrease the volume. They are also used to change options for a menu item.
- ⑭ ,  buttons move to the next or previous service. They are also used to navigate in the menus and interactive screens.
- ⑮  button displays the service list. It is also used to select menu items.
- ⑯  button displays the favorite list.
- ⑰  button is used to select a subtitle track.
- ⑱  button is used to leave the current screen.
- ⑲  button displays teletext.
- ⑳  button rewinds. Subsequent presses change the rewind speed.
- ㉑  button plays a recorded program, or displays the progress bar for navigation when playback has already started.
- ㉒  button fast forwards. Subsequent presses change the playback speed.
- ㉓  button starts slow motion playback. Subsequent presses change the playback speed.
- ㉔  button is used to stop playback, to stop recording, or to jump back to live television from time-shifted television.
- ㉕  button starts recording.
- ㉖  button pauses live television or playback of a recorded program.

- ⑳  button changes the position of the sub-screen counterclockwise.
- ㉑  button changes the position of the sub-screen clockwise.
- ㉒  button swaps the sub-picture with the main picture. See § 5.6 for more description.
- ㉓  button displays, minifies or hides the sub-screen. See § 5.6 for detailed description.
- ㉔  button makes a bookmark on playback or time shift.
- ㉕  button plays from the next bookmark position.
- ㉖  button is used to edit a recording.
- ㉗  button displays the list of recorded programs that have been saved on the hard disk of the digital receiver. See § 7.2 for more description.
- ㉘  button displays the service list for sub-screen, or specifies a block for repeated playback.

If you do not have wide-screen television but normal screen television, pressing the  button changes, depending on broadcasting conditions, the display format as follows:

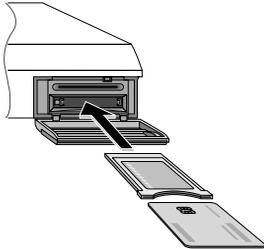
When you are viewing a wide-screen television, pressing the  button cycles through the display format options as follows:

4:3 Center Extract → 4:3 Letter Box → 16:9

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?

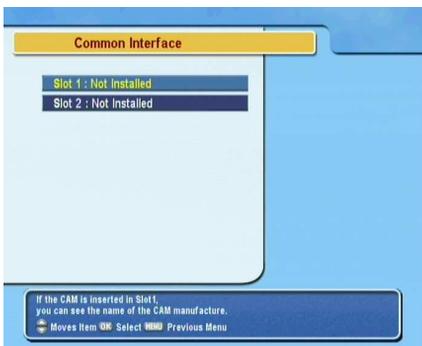
Some broadcasts are scrambled so that only paid subscribers can enjoy them. Scrambled services can only be viewed with a Conditional Access Module (CAM) and a subscription card belonging with the scrambling system.



Common Interface (CI) is an interface for conditional access modules. The front of the digital receiver has two common interface slots.

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 to a common interface slot on the front of the digital receiver.



To view the information about the module and subscription card inserted to the digital receiver, select the Common Interface menu.

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 1.5V)
- One loop cable to link the first tuner with the second tuner
- One SCART-to-component cable
- One composite cable (RCA cable)
- User manual

NOTE

Accessories may vary according to the local area.

2.2 Safety precautions

Please read the following safety precautions carefully.

- The mains power must be 90 to 250 volt. 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 centimeters 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 wires are exposed or cord is damaged, do not use the receiver and get cord replaced.
- Never open the digital receiver casing under any circumstances. Warranty will be void.
- Refer all servicing to a qualified service technician.

Table 2.1: Power specification

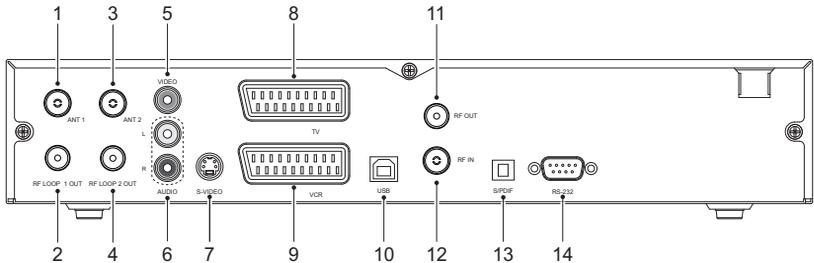
| | |
|-------------------|--|
| Input voltage | 90 to 250 V AC, 50/60 Hz |
| Power consumption | 25 W at maximum in operation 8 W in standby |

Table 2.2: Physical specification

| | |
|---------------------------|-------------------|
| 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 PVR has a wide range of connections on the back panel.



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

- ① ANT 1 Broadcasting signal input socket for the first tuner.
- ② RF LOOP 1 OUT Broadcasting signal output socket through the first tuner
- ③ ANT 2 Broadcasting signal input socket for the second tuner.
- ④ RF LOOP 2 OUT 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 audio system. (Red/White)

- ⑦ S-VIDEO Super video output socket for the television set.
- ⑧ TV Audio and video output socket for the television set.
- ⑨ VCR Audio and video input / output socket for the video cassette recorder or suchlike.
- ⑩ USB USB port for firmware update and data transfer.
- ⑪ RF OUT Analog television output socket.
- ⑫ RF IN Analog television input socket.
- ⑬ S/PDIF Dolby digital output socket for the audio system.
- ⑭ RS-232 Serial port for firmware update and data transfer.

Table 2.3: Connectors specification

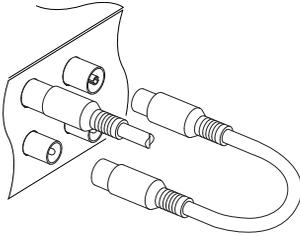
| | |
|---------|--|
| VIDEO | Composite video (CVBS) output |
| AUDIO | Left & right audio output |
| S-VIDEO | Super video (S-Video) output |
| TV | CVBS/S-Video/RGB/YUV video output Left & right audio output |
| VCR | CVBS video output Left & right audio output CVBS/S-Video/RGB/YUV video input for bypass Left & right audio input for bypass |
| S/PDIF | Dolby digital audio output |
| RS-232 | 115.2 kbps at maximum |
| USB | 2.0 |

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 to 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 socket on the back panel of the digital receiver.

However your digital receiver is connected to the television, 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, link it from the RF LOOP 2 OUT connector.

2.4.2 Connecting to your television

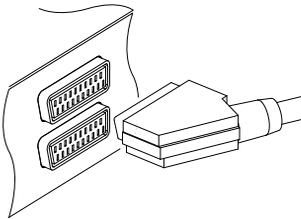
Between all the following connectors of your digital receiver, we recommend you use the first connector to get best picture

quality. If your television does not have the matching connector then use the next connector in the following order for best picture quality.

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

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

To use the SCART connector

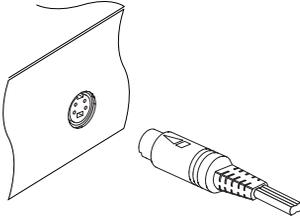


For best results with a standard television set, you should use a SCART cable, plugging one end into the TV socket on the digital receiver and the other end into a free SCART socket on your television.

Some televisions have inputs via Component or S-Video connectors 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.

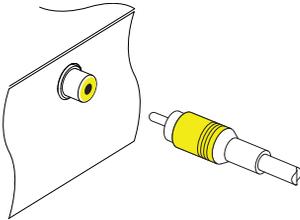
If you connect with a standard SCART cable, you do not have to make audio connections because the SCART connector can output stereo audio. But if you do with a conversion cable, such as SCART-to-Component, you have to make audio connections.

To use the S-Video connector



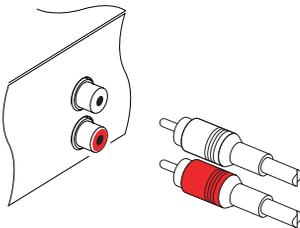
You will need to obtain a S-Video cable to use the S-Video connector. Plug one ends of the cable into the S-VIDEO socket on the digital receiver, and the other end into the matching socket on your television.

To use the composite video connector

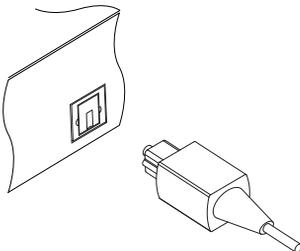


You will need to obtain a composite video cable (RCA cable) to use the composite video connector. Plug one end of the cable into the VIDEO (yellow) socket on the digital receiver, and the other end into the matching socket on your television.

To connect the audio connectors



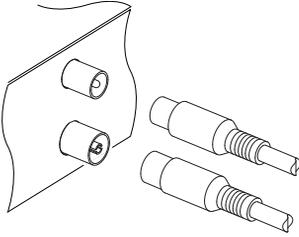
You will need to obtain an audio cable (RCA cable) to connect the audio connectors. Plug one ends of the cable into the AUDIO L (white) and AUDIO R (red) sockets on the digital receiver, and the other ends into the matching sockets on your television or audio system.



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/PIDF socket on the digital receiver, and the other end into the matching socket on your audio system.

To use the RF connector

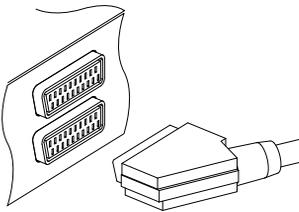
If your television does not have any video and audio input, you will need to use the radio frequency output from the digital receiver.



In this case, you will need to connect a cable from the RF OUT socket to the antenna connector on your television. To ensure your television can also pick up existing analogue channels as well, you will need to connect a cable from your television antenna or from the RF LOOP 2 OUT connector on the back of the digital receiver to RF IN connector.

2.4.3 Connecting to your video cassette recorder

The digital receiver also can output video to another appliance such as 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.

2.4.4 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 damage resulting from leaking batteries.

NOTE

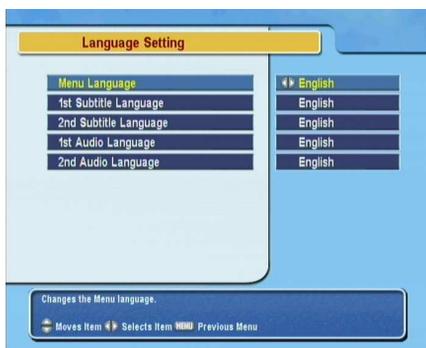
Batteries, including those which contain no heavy metals, may not be disposed of with household waste. Please dispose of used batteries in an environmentally sound manner. Find out about the legal regulations which apply in your area.

Chapter 3

Preference Settings

3.1 Language settings

You can designate languages for menus, audio tracks and subtitle tracks.



Select the System Setting > Language Setting menu.

Menu language

The digital receiver supports a lot of menu languages: Dutch, English, German, French, Italian, Russian, Turkish and so forth. Set the Menu Language option to your choice. Once you se-

lect a language, the menu will be immediately displayed in the selected language.

Subtitle language

Set the 1st Subtitle Language and the 2nd Subtitle Language options to your choices. When you watch a program, if the program has the subtitle track of the language which is designated at 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 § 5.2.4 for detailed description.

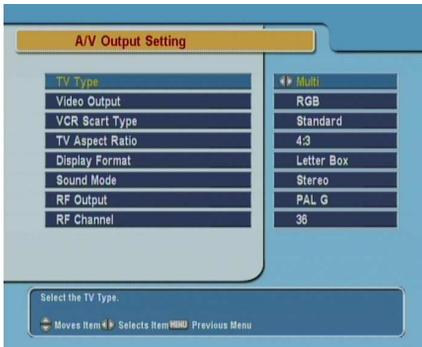
Audio language

Set the 1st Audio Language and the 2nd Audio Language options to your choices. When you watch a program, if the program has the audio track of the language which is designated at 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 § 5.2.3 for detailed description.

3.2 Video and audio settings

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



To configure the video and audio settings, select the System Setting > A/V Output Setting menu.

3.2.1 Television standard

The digital receiver supports two types of television standard. One is the PAL standard, and the other is the 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 this case, if a service is broadcasted in NTSC standard, the digital receiver converts it into the PAL standard for your PAL television. However, its quality would somewhat fall. The opposite 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, the multi television set is able to process both of them. So if you have a multi television set, set the TV Type option to Multi. With this option, the digital receiver will output them without standard conversion. This setting is most recommended especially if you are not sure what standard television you have.

3.2.2 Color model

Through the TV SCART connector, the digital receiver is able to output video in various color models. If you have the digital receiver linked to your television from this connector, you

should set the **Video Output** option to your desired color model. If you have connected them by RCA connector at which VIDEO reads on the back panel of the digital receiver, you do not have to set this option because the digital receiver outputs CVBS video through RCA connector independent of SCART connector.

However, If you have connected them by 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 color model provides the best video quality with little difference from the YUV color model but the CVBS color model does the least. So RGB would be most desirable for this option.

3.2.3 Video cassette recorder

You would have the digital receiver linked to your video cassette recorder or such an appliance from the VCR SCART. 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 recorder to your television when the video recorder starts playback. But if the option is set to **External A/V**, the digital receiver will not pass the video even though the video recorder starts playback. To pass it, you have to press  button.

NOTE

In this case, it is impossible that the digital receiver records 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.



You can enjoy well both wide-screen programs and normal-screen programs with your wide-screen television as the above figures show. The left figure shows a wide picture displayed in the wide screen, and the right figure shows a normal picture displayed in the wide screen.

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



You cannot fully enjoy wide-screen programs 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 programs in the shape like the center 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 the option 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 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 § 5.2.3 for detailed description.

3.2.6 Radio frequency output

If you have connected your television to the **RF OUT** socket, you should configure the radio frequency output. The digital receiver can make the analog television from the digital television and output it through the **RF OUT** socket.

Set the **RF Output** option to the television standard that your country supports referring to Table 3.1.

Table 3.1: Television standards by country

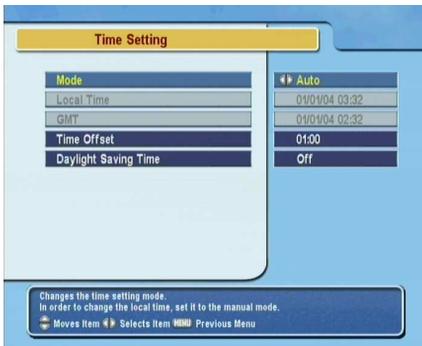
| Signal type | Country |
|-------------|---|
| PAL G | Australia, Austria, Cyprus, Czech Republic, Egypt, Estonia, Finland, Germany, Greece, Iceland, Iran, Israel, Italy, Kuwait, Latvia, Libya, Lithuania, Luxembourg, Netherlands, New Zealand, Norway, Portugal, Slovakia, Slovenia, Spain, Sweden, Switzerland, Syria, Yugoslavia |
| PAL I | Hong Kong, Macao, Republic of Ireland, South Africa, United Kingdom |
| PAL K | Czech Republic, Hungary, Poland |
| NTSC M | Bahamas, Belgium, Bolivia, Chile, Ecuador, Fiji, Guam, Jamaica, Mexico, Panama, Peru, United States, Venezuela |

Set the **RF Channel** option to a channel number as you desire. You have to tune your television to the channel set to this option to watch television.

If you have connected your analog television antenna to the **RF IN**, you can watch analog broadcasts via the digital receiver.

3.3 Local time setting

You should set your local time for timer events.



Select the System Setting > Local Time Setting menu.

You can set the local time either as Manual or Auto using Greenwich Mean Time (GMT). However, it is recommended to use the auto setting.

To set the local time using the auto setting, follow these steps:

1. Set the Mode option to Auto; then the Time Offset option becomes enabled.
2. Set the Time Offset option to the time difference between your time zone and GMT referring to Table 3.2.
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*.

NOTE

Daylight saving adds one hour to the time when On and removes one hour when Off. When setting time offset via GMT, make sure time doesn't include daylight saving.

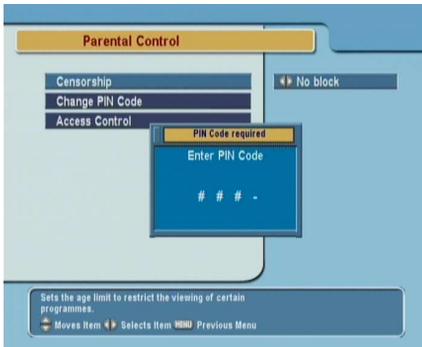
Table 3.2: Time offset table

| 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 |

3.4 Parental control

In general a television program is labeled a rating according to the level of violence, nudity and language of its content. When you are watching a program, you can check its program rating on the information box. Refer the information box to § 5.2.2.

You can prevent your children from watching specific programs by specifying a basis rating.



To specify a basis rating, select the System Setting > Parental Control menu; then you will be asked the Personal Identification Number (PIN). The number is initially set to '0000'.

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

NOTE

If a program does not have any rating information, your rating setting will not take effect.

If anyone is trying to watch a program that is out of the basis rating, 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 to access 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. Refer the information box to § 5.2.2. 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 displays 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 then set the **Info Box Position** option as you desire. Its available range is from -10 to +3 line. The more high the value is set, the more low the information box will be positioned.

3.6 To use the time shift feature

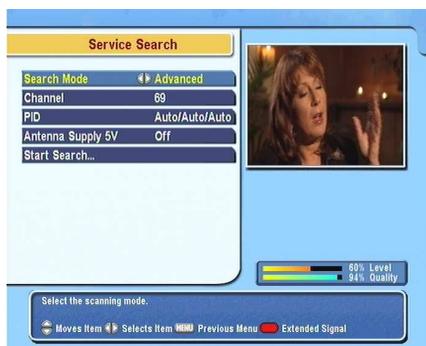
You can use the time shift feature with this digital receiver. Time shift means that the most recent hour of the television service you are watching gets saved on the hard disk of the digital receiver. To enable this feature, select the **System Setting** menu and set the **Time Shifting** option to **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.

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 all available services with this mode.

You can search only services of a specific transponder because more than one service are provided via one transponder. To do that, set the **Search Mode** option to **Manual**, and then select your desired transponder at the **Channel** option. The transponder 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 specify the PIDs of your desired service at the **PID** option 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 appears a list box, in which found services will be listed. Press the **OK** button to save found services when it is completed. 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:

- Service list
- Favorite list
- Timer list
- Preference settings

You can reset all data of the digital receiver. If you want to reset all the data, select the **Installation > Factory Setting** menu, then you are asked for confirmation. If you select **Yes**, service entries, favorite entries and timer events will be all 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.

Chapter 5

Daily Usage

5.1 Volume control

Use the  and  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  button. Press it again to restore the sound to the previous level.

5.2 Watching television

To change services, press the  or  button. Pressing the  button switches to the previously viewed service. 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 service list. To view the service list, press the  button.



On the service list, you can view the service information as follows:

- Service number
- Service 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.

Pressing the **[Red]** button displays the additional options, with which you can do the followings:

- By setting the Show Provider option to On, you can view the provider of the services, which is usually the name of the television company responsible for broadcasting them.
- To change the name the highlighted service, select the Rename option; then the on-screen keyboard appears, with which you can enter a new name. See § 6.1 for how to use the on-screen keyboard.
- You can prevent other family 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 favorite group, select the Add to Fav option; then the favorite groups will be displayed. Put the highlight bar on a desired group and press the **OK** button.

5.2.1 Watching favorite services

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



To display the favorite list, press the **FAV** button; it will be displayed. Whenever moving the highlight bar on or down on the favorite group list, favorite services belonging to the highlighted group are listed.

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

If you switch to another service after you have selected a favorite service, it will be also another favorite service of the selected group. The digital receiver will remind you what group you have selected displaying its name on the right top of the screen whenever you switch services. If you wish to get out of the current group, select the **All services** group on the favorite list.

Besides, you can add or delete a favorite group or service. To add a service you are watching currently into a favorite group, put the highlight bar of the group list on a desired group and

press the  button. To add a group, press the  button. To delete a group or a service, press the  button. For how to edit the favorite list, refer to § 6.1.

5.2.2 Viewing program information

Pressing  button displays the information box, on which you can see the followings:



- Service number
- Service name
- Signal level and quality
- Program name
- Program rating
- Program summary
- Broadcasting time
- Current time

In addition, you might see the following symbols:

- Subtitle symbol () if subtitle tracks are provided on the current program.
- Teletext symbol () if teletext pages are provided on the current program.
- Lock symbol () if the current service is locked.
- Dollar symbol () if the current service is a pay service.
- Multifeed symbol () if the current program is provided in multifeed service.

Pressing the  button once more displays detailed information about the current program. To hide the information box, press the  button.

5.2.3 Selecting audio tracks

Some programs are provided with audio tracks in one or more languages. Pressing the  button displays available audio tracks. Once you select a audio track, it will be sounded. In addition, you could enjoy audio tracks in four sound modes: Stereo, Mono, Left or Right. However, if a multifeed program 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.

5.2.4 Selecting subtitle tracks

Some programs are provided with subtitle tracks in one or more languages. If the current program 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.

5.2.5 Viewing teletext

On some programs, such information as weather reports, news or stock quotations is provided by means of teletext service. If the current program provides teletext service, the teletext symbol () will be marked on the information box. Press the  button to view teletext pages. Select a desired page to view by entering the page number with the numeric buttons. You can zoom in a teletext page with the , and adjust its transparency with the  button. To clear the teletext screen, press the  button.

5.3 Viewing electronic program guide

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



Pressing the **[GUIDE]** button displays the electronic program guide, on which you can see the followings:

- Scheduled programs
- Program summary
- Broadcasting date
- Broadcasting time

To see detailed information of a desired program, put the highlight bar on your choice with the **[P+]** or **[P-]** button and press **[i]** button. To switch to other service, press the **[V-]** or **[V+]** button.

To see the program guide for radio broadcasts, press the **[DAB]** button. To turn it back, press the **[DAB]** button again.

Pressing the **[SPREADSHEET]** button displays the program guide in the form of spreadsheet. To turn it back, press the **[SPREADSHEET]** button again.

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

5.4 Watching multifeed program

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

In similar method, it is possible to provide multiple copies of a program at short intervals.

| Order | Starting time |
|-------|---------------|
| 1 | 13:00 PM |
| 2 | 13:15 PM |
| 3 | 13:30 PM |
| 4 | 13:45 PM |
| 5 | 14:00 PM |

For example, assume a movie is broadcasted at five steps like on the left table. Even if you have missed the movie of the first step, you can watch one of the subsequent steps.

If a multifeed program 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

When you are watching a program, you can reverse or pause it as if playing back a recording. This feature is called time shift. When you are using the time shift feature, the program is in fact being recorded temporarily.



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

The instruction on how to use the time shift feature is as follows:

1. Press the  button to display the progress bar.
2. To move forward, hold down the  button; to move backward, hold down the  button.

3. You can move backward 10 seconds at a time by pressing the  button.
4. To hide the progress bar, press the  button again.
5. To end time shift, display the progress bar with the  button and press the  button.

5.6 Using picture in picture



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

The instruction on how to use the picture-in-picture feature is as follows:

1. Press the  button to display the sub-screen, on which another service will be presented.
2. Pressing the  button once more minimizes the sub-screen, and pressing it once again hides the sub-screen.
3. Pressing the  button swaps the main picture with the sub-picture. Even when you play back a recording, you can watch a live service in the sub-screen. However, you cannot swap the pictures in that case.
4. Pressing the  button moves the sub-screen counter-clockwise, and pressing the  button moves it clockwise.

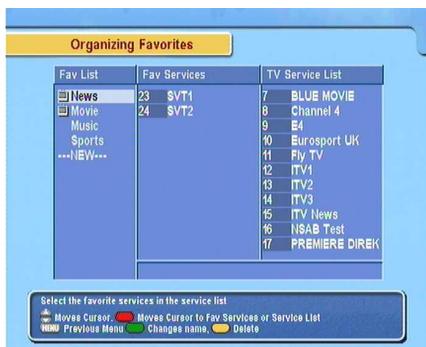
5. To display the service list for the sub-screen, press the  button.
6. If both pictures are pay services all, only the main-picture will be presented.

Chapter 6

Listing Services

6.1 Editing the favorite list

You can make your own favorite service list. To edit your favorite list, select the Organizing Favorites menu; then an editable favorite list appears.



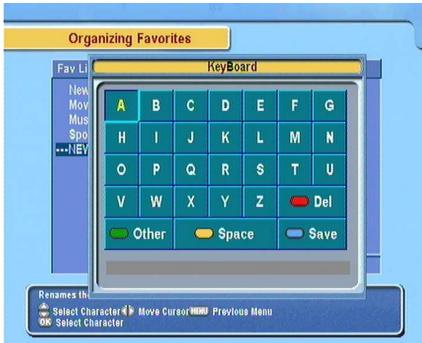
There are the group list on the left column, the favorite list on the center column and the service list on the right column.

You can add a favorite entry by performing the following steps:

1. Put the highlight bar on a desired group entry in the group list and press the **OK** button.

2. Then the highlight bar of the service list becomes movable. Put the highlight bar on a desired service entry and press the **OK** button.
3. Then the selected service entry is added in the favorite list. You can select more entries to add.
4. Press the **+** button to select another group. By pressing the **+** button, the highlight bar of each column moves in turn.

You can up to 30 groups. To add a group, select the **NEW** option in the group list; then the on-screen keyboard appears.



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 on a desired letter at 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.

To rename a group, put the highlight bar on a desired group you wish to rename and press the **+** button; then the on-screen keyboard will appear as above.

To delete a group, put the highlight bar on a desired group you wish to delete and press the **+** button; then a confirmation box appears. If you select **Yes**, it will be deleted.

Similarly, you can delete a favorite entry with the **OK** button in the favorite list. Besides, you can rearrange a group's favorites by moving a favorite entry. To move a favorite entry, put the highlight bar on a desired entry to move and press the **IR** button; then the selected entry becomes dark. Move it to a desired place and press the **OK** button.

To add radio services, press **CR** button; then radio service entries will be listed in the service list. To recall the television service list after adding radio services, press **CR** button again. With your favorite service list, you can select your favorite services more easily. Refer to § 5.2 for more information.

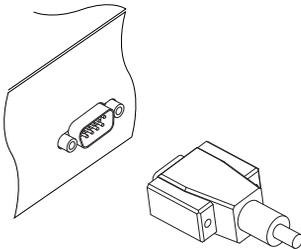
6.2 Transferring receiver data

The digital receiver retains such data as follows:

- Service list
- Favorite list
- Preference settings

It is possible to transfer receiver data to your digital receiver from another same digital receiver connecting them with a RS-232 cable.

To transfer receiver data, 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 both of them.
3. Select the Installation > Transfer Firmware > Transfer Data to Other IRD menu.
4. Restart the digital receiver.

NOTE

You had better memorize some important data such as video settings before starting transfer to avoid resetting them.

Chapter 7

Recording and Playing

With one tuner of the digital receiver, you can record a service and at the same time watch another service if the two services are provided through a same transponder. The TF5100 PVR digital receiver has two tuners so that you can enjoy the followings:

- You can 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. You can watch two services using the picture-in-picture feature at the same time in this case. See § 5.6 for the picture-in-picture feature.
- 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 record two different services while playing a recording back.
- While playing a recording back, you can watch a service in the sub-screen using the picture-in-picture feature.

7.1 Recording a program



Once recording has started, a symbol like the left figure will be displayed on 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.

NOTE

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

7.1.1 Instant recording

To instantly record the program you are watching at present, press the  button. Pressing the  button pauses the current recording. To resume recording press it again.



After a recording is started, pressing the  displays a box 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  button; the recording will end at the specified time.

If the information about the next program is provided by the electronic program guide, the **After this program** and **After next**

program options would be available. Once the **After this program** option is selected, the current recording will stop the moment the current program ends. Likewise, once the **After next program** option is selected, the current recording will stop the moment the next program ends.

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.

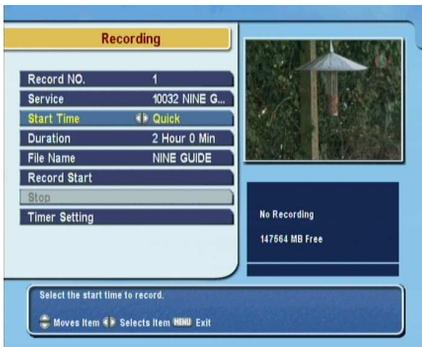


To stop recording, press the  button; then a box like the left figure appears, which shows programs being currently recorded. If you select one, its recording will stop.

While a recording is going on, you can watch or record another service. To record another service additionally, switch to the service you want to record, and press the  button.

Once a recording is started, it is put on the recording 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 recording list, press the  button. See § 7.2 for detailed description about the recording list.

7.1.2 Current program recording



You can record the current program 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 program you want. Pressing the **[OK]** button on this option displays a service 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 program 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 § 6.1 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 input a program to be recorded at a specific time. Even if the digital receiver is off, it will turn on and start recording at the specified time. The digital receiver will turn off again as the recording is finished.



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  button, and a box like the above 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 program, set the Type option to Radio; otherwise, set it to TV.
3. Set the Service option to the service which provides the program you want. Pressing the **OK** button on this option displays a service 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 per week’.

Weekly means ‘one day per week’.

Every Weekday means ‘from Monday to Friday per week’.

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

5. Set the Date option to a desire 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 **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 § 6.1 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 recordings in the timer list. To edit a timer entry, put the highlight bar on the entry you want and press **OK** 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 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 program guide



If the electronic program guide is properly provided, you can make timer events on it by taking the following steps:

1. Press the **[GUIDE]** button to display the electronic program guide.
2. Select a service you want to record with the **[V-]** and **[V+]** buttons.
3. Select a program 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; then the letter **R** is displayed.
5. This timer event is added on the timer list. To change its settings, press the **[O]** button to show a box in which you can edit.
6. To remove the marking, press the **[OK]** button once again.

7.1.5 Recording a time-shifted program

While watching a program 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 a desired scene, hold down the  or  button until it is reached.
3. Press the  button to start recording.
4. Press the  button to stop time shift.
5. Press the  button once more to stop recording.

See § 5.5 for detailed description about the time shift feature.

7.1.6 Recording a pay service program

You can record a pay service program without the subscription card. However, you need the subscription card to play back it because it has not been descrambled. So it is recommended to record pay service programs 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 program of a pay service in descrambled form, perform the following steps:

1. Select a program 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 program, 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 program is recorded, it is stored as a file on the built-in hard disk of the digital receiver. You can select a recording to play back on the recording list.



To see the recording list, press the button. In addition to the recording list, there are the MP3 list and the TAP list. You can enjoy music or audio books in MP3 format with the digital receiver. To view other lists, press the or button. See Chapter 8 for description about TAP.

The file information is comprised of the following elements: file number, file name, recording time, playing duration, file size and so on.

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.

To delete a recording

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

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  button.
4. They are sorted by the specified option.

To lock a recording file

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  button.
5. The lock symbol () is displayed on it.

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

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.
4. Change the name and save it. See § 6.1 for how to use the on-screen keyboard.

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.

To move a recording to other folder

To move a recording to other 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 program is recorded, its additional contents such as audio tracks or teletext are also recorded together. So you can enjoy them when a recording is played.

The instruction on how to play a recording is as follows:

1. Press the  button to display the recording list.
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, service 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.

You can move to a desired scene by entering the percentage with the numeric buttons when the progress bar is hidden.

7.3.1 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.

7.3.2 To play in fast motion

To watch in fast motion duration 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.

7.3.3 To make a bookmark



You can mark favorite parts of a recording by creating bookmarks, and jump to them. You can make 64 bookmarks at maximum. Bookmarks are stored with the recording so that you can use them again afterwards. To make bookmarks, perform the following steps:

1. Press the  button to display the progress bar during a playback.
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 the picture above.

3. To jump to a bookmark, press the  button.
4. To delete a bookmark, jump to it and then press the  button.

When there is no preset bookmark, pressing the  button makes to jump forward 30 seconds at a time.

7.3.4 To play back a recording repeatedly

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

To play a recording repeatedly in whole, press the  button when the progress bar is hidden; then the repetition symbol () is displayed on the information box. To quit repeated playback, press the  button again.

To play a recording file repeatedly in part, perform 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 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 withdraw it, press the  button when the progress bar is displayed.

7.3.5 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 recording list.

2. Select your desired recordings with the  button. When a recording is selected, it is numbered.
3. Press the  button to start playback.
4. The selected recordings are played in the sequence that they are numbered.

7.3.6 To play back a scrambled recording

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

On the recording 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 been not descrambled at all.

Refer to § 7.1.6 for how to record a program of a pay service.

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.

7. If you choose the **Save** option, it 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 form 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 play MP3 files 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 press 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.

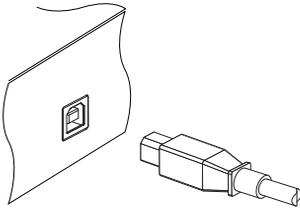
3. Press the **OK** button to start playback.
4. To stop playback, press the **□** button.

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

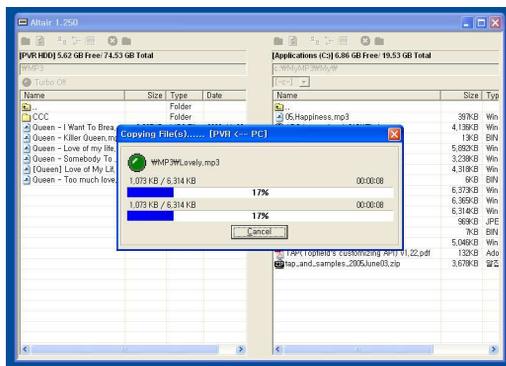
7.7 Transferring recording files

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 the Topfield web site, <http://www.i-topfield.com>.

To transfer files, take the following steps:



1. Download the *Altair* program and the USB driver from the Topfield web site.
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 instruction on how to use *Altair* is 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. It is not recommended that you use turbo mode if you want to use the digital receiver while transferring, or if any scheduled recordings are due to start.

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

7.8 Formatting the hard disk

To format the hard disk of the digital receiver, select the Installation > Format Hard Disk menu.

Formatting the hard disk will delete all files permanently. 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 in the digital receiver. We call this Topfield Application Program (TAP). In making a TAP, it is recommended to use *Diab* compiler of *Wind River*, whose web site address is <http://www.windriver.com>. Some variants of GCC compiler also might perhaps be available as a compiler for TAPs. You can get the Application Program Interface (API) libraries for TAPs from the Topfield web site, <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  button to display the program file list.

2. Place the highlight bar on a file entry you want to run.
3. Press the **OK** button to start the program.
4. To exit the program, press the **EXIT** 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 Topfieldweb site, <http://www.i-topfield.com>.

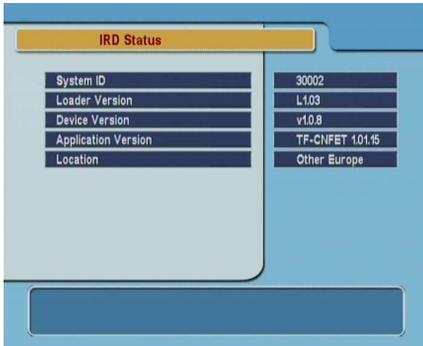
In the program file list, you can use a variety of file control functions including: renaming, sorting, deleting and so on. For detailed descriptions about file control functions, refer to § 7.2.

If you want a program to run automatically when the digital receiver starts up, move the program to the **Auto Start** folder. Press the **0** 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 a latest firmware and an update utility from the Topfield web site, <http://www.i-topfield.com>.



You should check the firmware information of your digital receiver before downloading a new firmware. To check the current information of the digital receiver, select the Information > IRD Status menu.

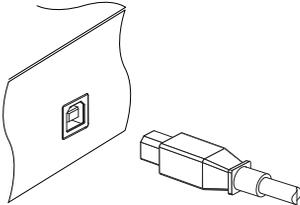
NOTE

You have to update with only the new firmware of which System ID is identical to yours. otherwise you will fail in firmware update.

9.1 From your computer via USB port

You can transfer a new firmware to the digital receiver from your computer connecting them with a USB cable. You need *TFDN_USB*, a firmware transfer utility for this, which is available at the Topfield web site, <http://www.i-topfield.com>.

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



1. Download a new firmware applicable to the digital receiver from the Topfield web site.
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 instruction on how to use *TFDN_USB* is as follows:



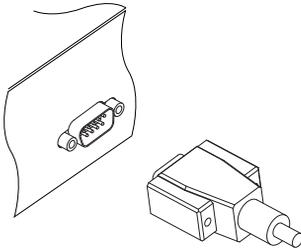
1. Press the Find button to select the new firmware file.
2. Press the Download button to start the file transfer.
3. Press the Stop and Exit button to cancel the file transfer.
4. Restart the digital receiver.

9.2 From your computer via RS-232 port

It is possible to transfer a new firmware to the digital receiver from your computer connecting them with a RS-232 cable. You

need *TFD-Down*, a firmware transfer utility for this, which is available at the Topfield web site, <http://www.i-topfield.com>.

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



1. Download a new firmware applicable to the digital receiver from the Topfield web site.
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 your computer.
3. Turn on the digital receiver.
4. Run *TFD-Down*.

The instruction on how to use *TFD-Down* is as follows:

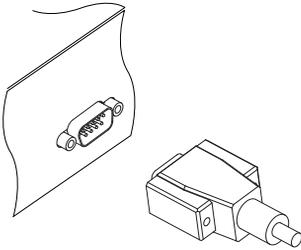


1. Press Find button to select the new firmware file.
2. Press Download button to start the file transfer.
3. Press Stop button to cancel the file transfer.
4. Restart the digital receiver.

9.3 From another digital receiver via RS-232 port

It is possible to transfer a new firmware to the digital receiver from another same digital receiver connecting them with a RS-232 cable.

To update the firmware with this method, 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 both of them.
3. Select the Installation > Transfer Firmware > Transfer Firmware to Other IRD menu.
4. Restart the digital receiver.

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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. Note that Topfield is not responsible for damages inflicted on files that are stored on the hard disk drive.