TOPFIELD

SRP-2411
User Guide

High Definition

Digital Satellite Receiver

Personal Video Recorder

Common Interface

DVB
Digital Video
Broadcasting

Contents

Chapter 1

Introduction

The SRP-2411 digital receiver is fully compliant with the international Digital Video Broadcasting (DVB) standard, and thus is able to receive digital broadcasts of that standard.

For its operation you need an antenna, which must be installed appropriately.

NOTE

In general we equate a channel with a frequency. However, unlike analogue broadcasts, 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

This digital receiver has the following features:

- Supports DiSEqC 1.0, DiSEqC 1.1, DiSEqC 1.2 and US-ALS.

- Can store up to 10000 television and radio services.

- You can edit the services list.

- Can create favourite lists of your favourite services.

- Can view information about the current television or radio programme.

- Has an electronic programme guide that provides an overview of scheduled programmes.

- You can record one service while you are currently watching another.

- You can record many programmes using a built-in hard drive with large storage capacity.

- Time-shift is a special technical feature available on this digital receiver. You can pause a programme you are watching and resume it again at a later time. Then you can quickly go to any part of the current programme by fast forward or rewind search.

- If you have an external hard drive connected to the digital receiver via the USB or eSATA port, you can record television programmes into it.

- You can play back media files of various formats including DivX.

- You can play a network game with other users via the Internet.

1.2   Controlling the digital receiver

You can operate the digital receiver with the remote control or 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, specific lamps and a display to indicate its status. The following indicates what they mean.
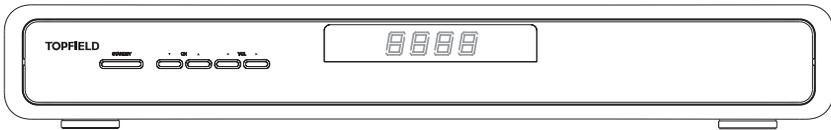
Front display shows the current time in standby mode, and displays the current service in operation mode.

⏻/⏽ button switches the digital receiver between standby mode and operation mode.

CH ▼, ▲ buttons switch to the previous or next service.

VOL ◀, ▶ buttons decrease or increase the volume.

1.2.2   The remote control
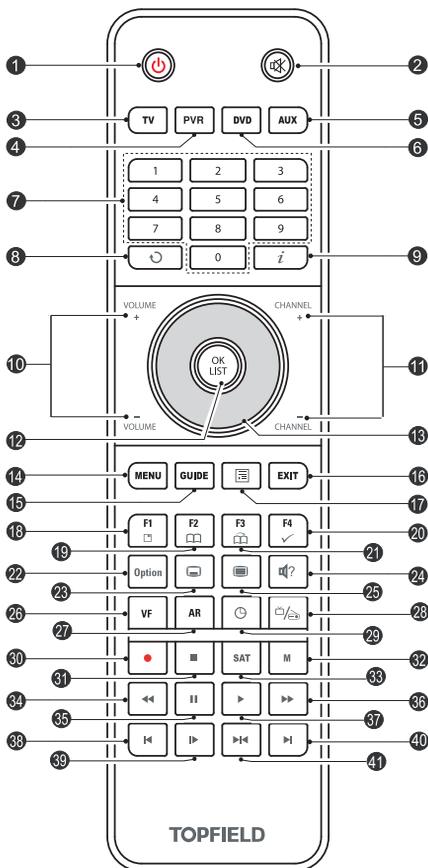
1 ⏻ button switches the digital receiver between standby mode and operation mode.

2 🔇 mutes the sound. Press again to switch it back on.

3 TV switches the remote control to television mode to operate your television.

4 PVR switches the remote control to receiver mode to operate the digital receiver.

5 AUX switches the remote control to operate your audio-video receiver.

6 DVD switches the remote control to DVD mode to operate your DVD player.

7 Numeric buttons are used to enter a service number for service change or to specify values for menu options.

8 ↺ switches between the current service and the previously viewed one.

9 *i* displays the service information box. It is also used to display more information about a programme.

10 VOLUME−, VOLUME+ buttons decrease or increase the volume.

11 [CHANNEL−], [CHANNEL+] buttons switch to the previous or next service.

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

13 Navigation buttons are used to navigate in menus or to change values for menu options.

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

15 [GUIDE] displays the electronic programme guide.

16 [EXIT] is used to exit a menu or to hide on-screen information.

17 ▣ is used to display the list of recorded programmes that are stored in the internal hard drive. See §7.2 for more details.

18 [F1] has different functions per menu.

19 [F2] is used to make a bookmark during playback or timeshift.

20 [F4] is used to edit a recording.

21 [F3] is used to jump to next bookmark position.

22 [Option] has different functions per menu.

23 ▣ is used to select a subtitle track.

24 ◁? is used to select an audio track and a sound mode, or a video track of multifeed programme.

25 ▣ displays teletext.

26 [VF] changes video resolution. See §4.2.1 for more details.

27 [AR] changes aspect ratio. See §4.2.2 for more details.

28 ⌨ switches between television services and radio services.

29 ⊙ is used to set a sleep timer in 10 minute increments.

30 • is used to start recording.

31 ▪ is used to stop playback, to stop recording, or to jump back to live television from time-shifted television.

32 M switches the output of the TV SCART socket between the digital receiver and the device connected to the VCR SCART socket. See §4.2.4 for more details.

33 SAT displays the satellites list with their services list.

34 ◄◄ is used to start reverse playback. Subsequent presses increase the rewind speed.

35 ⅠⅠ pauses live television or playback of a recorded programme.

36 ►► is used to start fast motion playback. Subsequent presses increase the playback speed.

37 ▸ resumes normal playback speed, or displays the progress bar for navigation on playback or time-shift. To play a recorded programme, see button **17**.

38 Ⅰ◄ is used to jump back to beginnng of recording during a playback.

39 ▸Ⅰ is used to start slow motion playback. Subsequent presses change the playback speed.

40 ►Ⅰ is used to jump to end of recording during a playback.

41 ►◄ has different functions per menu.

The **F1**, **F2**, **F3**, **F4** and Option buttons have additional different functions per menu besides their own function. They will be guided by on-screen help.

NOTE

When using the remote control, point it at the remote sensor on the front panel of the digital receiver.

1.3   What is common interface?
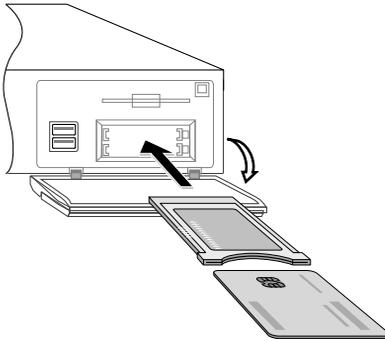
Some broadcasts are scrambled so that only paid subscribers can enjoy them. Scrambled services can only be viewed with a Conditional Access Module (CAM) and a subscription card matching with the scrambling system.

Common Interface (CI) is the slot on a digitial receiver into which a conditional access module may be inserted. 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 into a common interface on the front of the digital receiver.
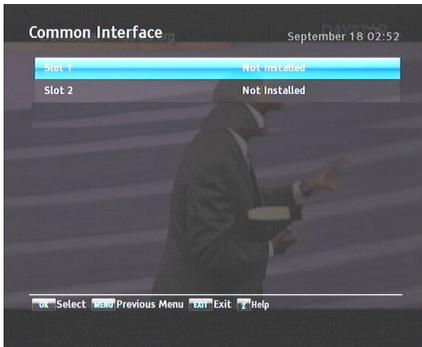
To view the information about the module and subscription card which is inserted into the digital receiver, select the Information > Common Interface menu. You should see a screen like the left figure.

Chapter 2

Setup

2.1 Unpacking

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

- Remote control
- Two batteries for the remote control (AAA 1.5 V)
- One HDMI 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 mains socket. For the power consumption of the digital receiver, refer to Table 2.1.

- The mains 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 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 specification

Input voltage	90 to 250 V AC, 50/60 Hz
Power consumption	60 W at maximum in operation
	Under 1 W in passive standby

Table 2.2: Physical specifications

Size	430 × 60 × 265 mm
Weight	3.1 kg
Operating temperature	0 to 45 °C
Storage relative humidity	5 to 90 %

2.3   Rear panel connections

The SRP-2411 has a wide range of connections on the back.
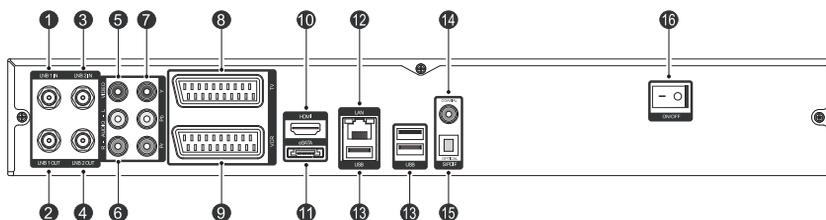
Check what connections your television set has in comparison with the digital receiver.

1 LNB 1 IN   Satellite broadcasting signal input socket for the first tuner

2 LNB 1 OUT Satellite broadcasting signal output socket through the first tuner

3 LNB 2 IN   Satellite broadcasting signal input socket for the second tuner

4 LNB 2 OUT Satellite 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-video receiver (white/red)

7 Y/Pb/Pr   Component video output socket for the television set (green/blue/red)

8 TV   Audio and video output socket for the television set

9 VCR   Audio and video input/output socket for another device such as a video recorder

10 HDMI   Audio and video output socket for the high definition television set

11 eSATA   eSATA port for connecting to an external hard drive

12 LAN   Local area network port

13 USB   USB port for firmware update and data transfer

14 S/PDIF COAXIAL Digital audio output socket of coaxial type for the audio-video receiver

15 S/PDIF OPTICAL Digital audio output socket of optical type for the audio-video receiver

16 ON/OFF   Power switch

Table 2.3: Connectors specifications

HDMI	High definition video output
	Digital audio output
YPbPr	Component video output
TV	CVBS/S-Video/RGB video output
	Left & right audio output
VCR	CVBS video output
	Left & right audio output
	CVBS/S-Video/RGB video input for bypass
	Left & right audio input for bypass
VIDEO	Composite video (CVBS) output
AUDIO	Left & right audio output
S/PDIF	Digital audio output
LAN	10/100 Ethernet
USB	2.0 Host (5 V DC, 500 mA)
eSATA	External SATA 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 devices. If you have any problem with your setup or need help, contact your dealer.

2.4.1   Connecting to the antenna
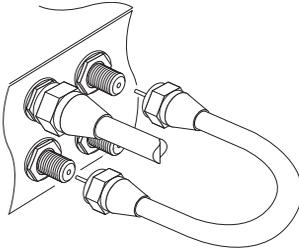
Whatever sort of connection you have between the digital receiver and the television, you need to connect the digital receiver to the antenna so that it can receive digital television services. Connect the antenna cable to the LNB 1 IN connector on the back panel of the digital receiver. Also, you must ensure that there is a connection to both the LNB 1 IN and LNB 2 IN connectors on your digital receiver, so that both tuners work properly.

Normally you do that by using a loop cable to link from the LNB 1 OUT connector to the LNB 2 IN connector. If you have two antennas without DiSEqC switch, then you have to connect a cable from the other antenna directly to the LNB 2 IN connector rather than using the loop cable.

> **NOTE**
>
> The digital receiver can supply a current of 500 milliampere at maximum for antenna devices including LNB, DiSEqc switch and antenna rotor through each antenna input connection separately but not simultaneously. If there are too many antenna devices to be supplied with power through antenna input connections simultaneously for a long time, your LNBs may lack power to operate. So it is recommended to link the LNB 1 OUT connector to the LNB 2 IN connector with a loop cable even though the digital receiver is designed to operate over two antennas alternatively.

> **NOTE**
>
> Perhaps you are expecting that the satellite antenna could simultaneously catch all frequencies coming from a satellite and send them to the digital receiver. However, the satellite

antenna only sends the frequencies that it can catch with the LNB frequency and polarisation specified by the digital receiver. So if you have linked from the LNB 1 OUT connector to the LNB 2 IN connector, you would have some limitations in using some features such as dual recording. Likewise, if you have another digital receiver linked from the LNB 2 OUT connector, you can only use it limitedly. See §3.1 for more details.

2.4.2   Connecting to your television set

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

1. HDMI connector (HDMI)
2. Component connector (YPbPr)
3. SCART connector (TV)
4. Composite connector (VIDEO)

You should configure audio and video settings after connecting up the digital receiver. See §4.2 for a detailed description.

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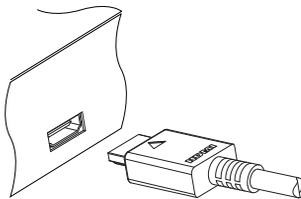
If you have a high definition television set, you should use a HDMI cable for best results. Plug one end of the cable into the HDMI socket on the digital receiver, and plug the other end into the matching socket on your television. In this case, you do not have to make audio connection because the HDMI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

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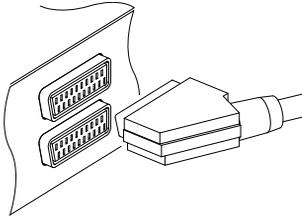
For best results with a standard television set, you should use a SCART cable. Plug one end of the cable into the TV socket on the digital receiver, and plug the other end into a free SCART socket on your television.

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

NOTE

You cannot view high definition video with a SCART connector.

To use the Component video connector
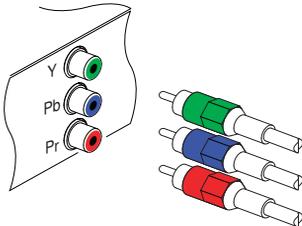
You need to obtain a Component video cable (RCA cable) to use the Component video connector. Plug one ends of the cable into the Y (green), Pb (blue) and Pr (red) sockets on the digital receiver, and plug the other ends into the matching sockets on your television.

NOTE

If using a Component connection, remember to also plug in the additional white and red audio cables from the digital receiver to the back of your television.

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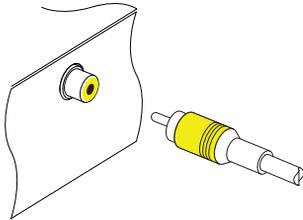
You need to obtain a Composite video cable (RCA cable) to use the Composite video connector. Plug one end of the cable into the VIDEO (yellow) socket on the digital receiver, and plug the other end into the matching socket on your television.

NOTE

You cannot view high definition video with a Composite video connector.

To make the audio connection
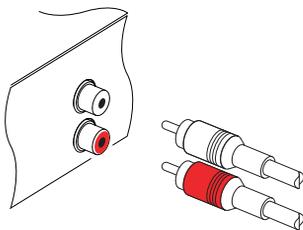
You need to obtain an audio cable (RCA cable) to connect the audio connectors. Plug one end of the cable into the AUDIO L (white) and AUDIO R (red) sockets on the digital receiver, and plug the other end into the matching sockets on your television or audio-video receiver.
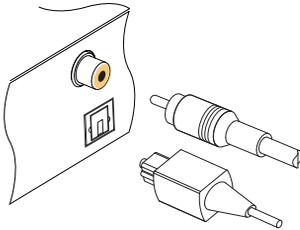
To enjoy Dolby digital audio, your television or audio-video receiver must be able to decode Dolby digital audio, and you need to obtain an S/PDIF cable. If you want to use the COAXIAL connector, prepare a coaxial S/PDIF cable (RCA cable); otherwise, to use the OPTICAL connector, prepare an optical S/PDIF cable.

2.4.3   Connecting to your video recorder

The digital receiver can also output video to another device such as a video recorder through an auxiliary SCART connector.
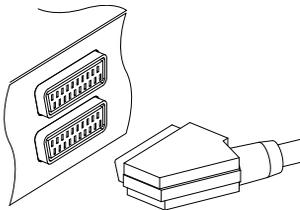
You need to obtain a SCART cable to use the auxiliary SCART connector. Plug one end of the cable into the VCR socket on the digital receiver, and plug the other end into the matching socket on your video recorder or suchlike.

2.5   Switching on for the first time

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

Before switching on the digital receiver, you should insert batteries into the remote control. 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.

Press the ⏻ button on the top left corner on the remote control. In a little time, you may see a picture displaying a menu.

If you do not see a picture, try pressing the $\boxed{\text{VF}}$ 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 §3.1 to search for 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 menu in order to configure the video settings.

NOTE

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.

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

Chapter 3

Service Search

3

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

NOTE

If there is no service stored, you will be not able to access all menus. A SERVICE is another name for a CHANNEL.

3.1   Searching broadcasting services

This digital receiver can be operated with both fixed antenna and motorized antenna. You have to configure antenna settings according to your antenna system in the following order:

1. Configure LNB settings.

2. Set the position of your desired satellites if you have a motorized antenna. You can control the antenna in DiSEqC 1.2 mode or USALS mode. Refer to §3.1.2 for DiSEqC 1.2, and refer to §3.1.3 for USALS.

3. Perform a service search.

3.1.1   Configuring LNB settings

There are two large frequency bands for satellite broadcasts. One is C band which ranges approximately from 4 to 6 GHz. The other is K_u band which ranges approximately from 12 to 18 GHz.

The LNB (Low Noise Block converter) is used to take a wide band of relatively high frequencies, amplify and convert them to similar signals that is carried at a much lower frequency, which is called Intermediate Frequency (IF). High frequencies from satellites are converted into 950 to 2150 MHz by a LNB.
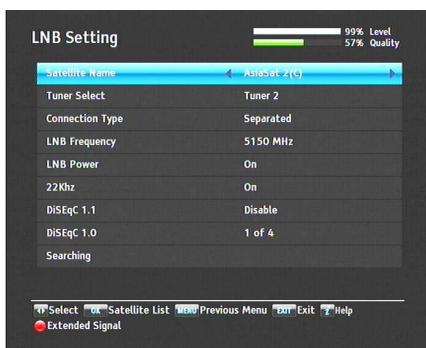
Select the Installation > LNB Setting menu to configure the LNB settings. You should see a screen like the left figure.

Pressing the (OK) button on the Satellite Name option displays the satellite list in alphabetic order. Select the satellite toward which your antenna is set to face. Even if you cannot find your desired satellite, you can add your desired satellite to the satellite list. See §3.3 for a detailed description.

You have to specify which tuner is connected to your selected

satellite. If it is LNB 1 IN, set the Tuner Select option to Tuner 1; otherwise, set it to Tuner 2.

If you have connected the LNB 1 OUT and LNB 2 IN with a loop-through cable, then set the Connection Type option to Loop Through; otherwise, set it to Separated.

NOTE

Both the LNB 1 IN and LNB 2 IN sockets should be connected to your antennas either directly or via the loop-through cable. If you have connected only one socket, some features such as dual recording will not function.

The digital receiver has a database of broadcasting satellites and their transponders, containing the following information: satellite position, frequency range, symbol rate, polarization and LNB frequency corresponding to the frequency range. So you might not have to specify the LNB Frequency option. However, if you have selected the Other entry at the Satellite Name option to specify a satellite that is not in the satellite list, you might have to fill in the correct LNB frequency. The absolute difference between a broadcasting frequency and its LNB frequency must be within 950 to 2150 MHz. For example, if the frequency band of your desired satellite ranges from 3660 to 4118 MHz, you have to set the LNB Frequency option to 5150 MHz.

The LNB has to be supplied with electric power to operate. Set the LNB Power option to On if it does not have any other power supply.

If you use a dual LNB or two antennas which is connected to the 22 kHz tone switch box, set the 22 kHz option to On.

The digital receiver is designed to be compatible with DiSEqC (Digital Satellite Equipment Control) switches. It is possible to connect several antennas to one digital receiver by DiSEqC switches. A DiSEqC 1.0 switch allows switching between up to

four satellite sources and a DiSEqc 1.1 switch allows switching between up to 16 satellite sources.

Set the DiSEqC 1.0 option and the DiSEqC 1.1 option according to your antenna configuration.
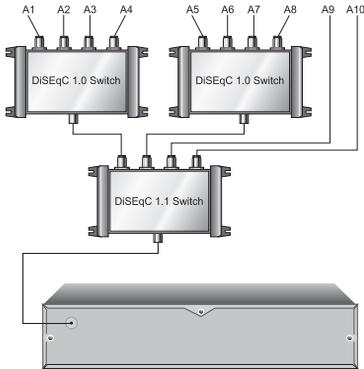
For example, to select the antenna connected to the A5 input in the left figure, set the DiSEqC 1.1 option to 2 of 4 and the DiSEqC 1.0 option to 1 of 4. If you have a mini DiSEqC 1.0 switch which has only two inputs, you should set the DiSEqC 1.0 option to Mini A instead of 1 of 4.

3.1.2   Configuring DiSEqC 1.2 settings

Your motorized antenna will turn toward your desired satellites horizontally by DiSEqC 1.2.

When you switch to an service, if the service is provided by a satellite other than current one, it will take longer time than usual because the antenna has to turn to its position.
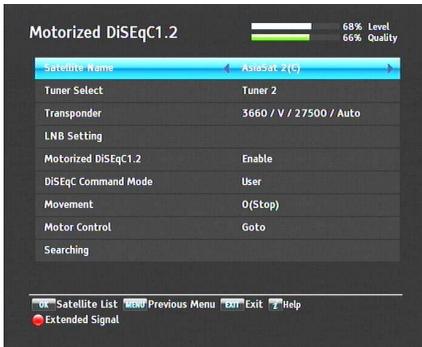
To use the DiSEqC 1.2 protocol, select the Installation > Motorized DiSEqC 1.2 menu. You should see a screen like the left figure. At first you have to set the Motorized DiSEqC 1.2 option to Enable.

To get the correct position of your desired satellite, perform the following steps:

1. Choose your desired satellite at the Satellite Name option.

2. Select the tuner that is connected to the motorized antenna at the Tuner Select option.

3. Set the DiSEqC Command Mode option to User.

4. Set the Motor Control option to Goto. Then the antenna will turn toward your selected satellite by the position data that the digital receiver has.

5. If the receiving quality, which is displayed at the bottom right of the screen, is not good, tune the antenna finely with the Movement option. If you set it to 2(E), the antenna will move to the east by two degrees. At this time you had better check the receiving quality of every transponder and choose the best one at the Transponder (or Frequency) option. It will be helpful to your fine tuning.

6. Finally set the Motor Control option to Store to save the tuned position when the receiving quality is best.

There are more motor control options for installers, but this guide does not describe them. If you are an installer, refer them to the manual about the *STAB* rotor.

3.1.3   Configuring USALS settings

USALS (Universal Satellite Automatic Location System), also known as DiSEqC 1.3, calculates the positions of all available satellites from your location. Compared to DiSEqC 1.2, it is no longer required to manually search and store every satellite position. Just pointing to a known satellite position is enough. This position will act as a central point. The USALS will then calculate positions of visible satellites.
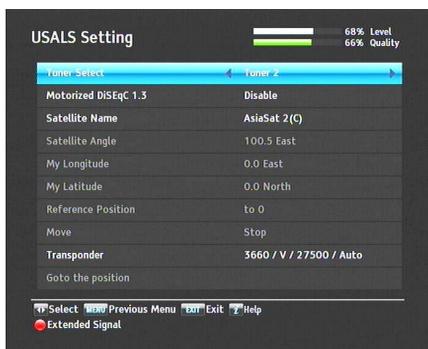
To use the USALS protocol, select the Installation > USALS Setting menu. You should see a screen like the left figure. At first you have to set the Motorized DiSEqC 1.3 option to Enable.

To get every satellite position calculated, perform the following steps:

1. Choose your desired satellite at the Satellite Name option.

2. Select the tuner that is connected to the motorized antenna at the Tuner Select option.

3. Enter your location to the My Longitude option and the My Latitude option with the ⊚, ⊚ and numeric buttons.

4. Enter the position of your selected satellite to the Satellite Angle option if it is not correct.

5. Select the Goto the position option; then the antenna will turn toward your selected satellite as calculating its position.

6. If the receiving quality, which is displayed at the bottom right of the screen, is not good, then tune the antenna finely with the Move option. The changed position is automatically saved. At this time you had better check the receiving quality of every transponder and choose the best one at the Transponder (or Frequency) option. It will be helpful to your fine tuning.

3.1.4 Searching services
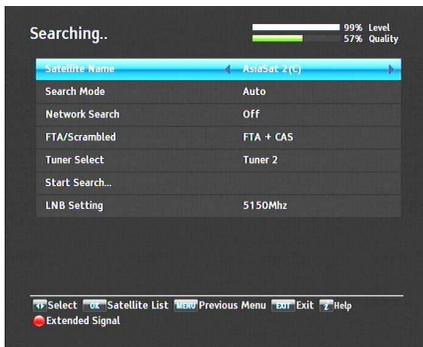
To perform a service search, select the Installation > Searching menu. You should see a screen like the left figure.

There are four service search methods:

- Searching every service of a satellite.
- Searching every service of a transponder.
- Searching one service of a transponder.
- Searching every service of a SMATV (Satellite Master Antenna Television) system.

Searching every service of a satellite

To search every service of a satellite, perform the following steps:

1. Choose your desired satellite at the Satellite Name option.

2. Set the Search Mode option to Auto.

3. If you set the Network Search option to On, the digital receiver will check up the up-to-date channel information as searching services, but it takes rather longer time.

Searching every service of a transponder

To search every service of a transponder, perform the following steps:

1. Choose your desired satellite at the Satellite Name option.

2. Set the Search Mode option to Manual, and then press the (OK) button to diaply additional options.

3. Choose your desired transponder at the Frequency option or enter it with the numeric buttons.

4. Enter the symbol rate of your desired transponder to the Symbol Rate option with the numeric buttons.

5. Set the Polarization option to the polarization of your desired transponder.

6. If you set the Network Search option to On, the digital receiver will check up the up-to-date channel information as searching services, but it takes rather longer time.

7. Set the Modulation option to the modulation type of your desired transponder. If your desired transponder has high definition broadcasts, you should set this option to DVB-S2 QPSK or DVB-S2 8PSK. Then the FEC option and the Pilot option will become enabled. You also should set these options correctly.

> **NOTE**
>
> You may get transponder information from a satellite magazine or website such as http://www.satcodx.com or http://www.lyngsat.com.

3

Searching one service of a transponder

To search one service of a transponder, perform the following steps:

1. Choose your desired satellite at the Satellite Name option.

2. Set the Search Mode option to Advanced, and then press the (OK) button to diaply additional options.

3. Choose your desired transponder at the Frequency option or enter it with the numeric buttons.

4. Enter the symbol rate of your desired transponder to the Symbol Rate option with the numeric buttons.

5. Set the Polarization option to the polarization of your desired transponder.

6. Set the Modulation option to the modulation type of your desired transponder. If your desired transponder has high definition broadcasts, you should set this option to DVB-S2 QPSK or DVB-S2 8PSK. Then the FEC option and the Pilot option will become enabled. You also should set these options correctly.

7. Specify the packet identifiers of your desired service at the PID option with the numeric buttons. A packet identifier is used to verify audio and video streams.

Searching every service of SMATV system

To search every service of a SMATV system, if the digital receiver is connected to it, perform the following steps:

1. Choose your desired satellite at the Satellite Name op-
   tion.

2. Set the Search Mode option to SMATV, and then press
   the (OK) button to diaply additional options.

3. Choose your desired transponder at the Frequency op-
   tion or enter it with the numeric buttons.

4. Enter the symbol rate of your desired transponder to the
   Symbol Rate option with the numeric buttons.

You can search pay services as well as free services as follows:

- To search only free services, set the FTA/Scrambled option
  to FTA only.

- To search only pay services, set it to CAS only.

- To search both free services and pay services, set it to FTA
  + CAS.

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.

3.2   Copying services

The digital receiver maintains a separate services list with each
tuner. If a certain service is registered on only one tuner, it
may be impossible to watch one service while recording. You
can copy entries of one tuner's services list to the other tuner's
services list to avoid such inconvenience.

To copy service entries, select the Installation > Services Copy
menu. There are three copy options. To copy service entries
of the first tuner to the second tuner's services list, select the
Tuner 1 to Tuner 2 option. To copy on the contrary, select the
Tuner 2 to Tuner 1 option. To copy reciprocally, select the ALL
option.

3.3   Editing the transponder list
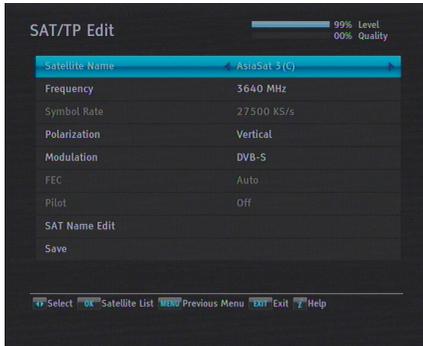
You can change attributes of a transponder. Select the Installation > SAT/TP Edit menu. You should see a screen like the left figure. To change the information of a satellite entry, perform the following steps:

1. Choose your desired satellite at the Satellite Name option.

2. Choose your desired transponder at the Frequency option or enter it with the numeric buttons.

3. Change the Polarization option to the polarization of your desired transponder.

4. Change the Modulation option to the modulation type of your desired transponder. If your desired transponder has high definition broadcasts, you should set this option to DVB-S2 QPSK or DVB-S2 8PSK; then the FEC option and the Pilot option become enabled. You should also set these options correctly.

5. To change a satellite entry's name, select your desired entry at the Satellite Name option and select the SAT Name Edit option. Then the on-screen keyboard appears. Change the name and save it. See §6.3 for how to use the on-screen keyboard.

6. Select the Save option and press the (OK) button to save the changes. To stop at any time or to exit without saving, press the (EXIT) button.

3.4   Resetting to factory settings

The digital receiver maintains the following data:

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

You can reset all data of the digital receiver. To do that, select the Installation > System Recovery > Factory Setting menu, and then you get 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.

NOTE

A factory reset will not delete any recorded programmes. However, you have to search services again after a factory reset.

3.5   Resetting to user settings

You can store your own data including the following:

- Satellite list
- Services list
- Favourite lists
- Preference settings

Also you can restore them at any time.

To store your data, select the Installation > System Recovery > Store System Data menu; then you get asked for confirmation. If you select Yes, your data will be stored. Whenever you store your data, they are all overwritten.

To restore your data, select the Installation > System Recovery > Recover System Data menu; then you get asked for confirmation. If you select Yes, your data will be restored.

3.6 Clearing the services list

If you only want to clear the services list, select Installation > System Recovery > Reset Service List; then you get asked for confirmation. If you select Yes, the services list will be cleared. After this, you have to search services again.

3

Chapter 4

Preference Settings

4.1   Language settings

You can select the language in which the menu would be displayed. In addition to that, you can select the language of audio track and of subtitle track. Select the Settings > Language menu. You should see a screen like the left figure.

4.1.1   Menu language

The digital receiver provides menus in several different languages. Set the Menu Language option to your desired language. Once you select a language, the menu will be immediately displayed in the selected language.

4.1.2   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 no 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 a detailed description.

Some broadcaster may send a subtitle track dedicated to persons who have difficulty in hearing. Even when one or more subtitle tracks are available, that subtitle track will be displayed prior to those you have designated for the 1st Subtitle Language and the 2nd Subtitle Language options if the Hard of hearing option is set to On.

4.1.3   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 outputted. If the first language is not available but the second language is, the audio of the second language will be outputted.

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

4.2   Video and audio settings

You have to configure the video and audio settings appropriately for your television set and other devices. Select the Settings > A/V Output menu. You should see a screen like the left figure.

4.2.1   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 the quality is. However, if your television set does not support high definition, you cannot enjoy high definition quality picture.

If you have the digital receiver linked to your television via the Component video connector (Y/Pb/Pr) or the HDMI connector, you have to set the HD Output option to Component. Otherwise, you have to set it to SCART. The available values for the Video Format option vary depending on how you set this option.

Set the Video Format option as you desire. 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.

It is recommended to set it to Auto if you have a high definition television. With that setting the digital receiver will present a programme as it is without any resolution conversion. While watching television you can change the resolution with the (VF)

button. Whenever you press it, the video resolution is changed in turn.

> **NOTE**
>
> You can enjoy only standard definition video with the following video outputs:
>
> - Composite video connector (VIDEO)
> - SCART connector (TV)

4.2.2   Television aspect ratio

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

You can enjoy both wide-screen programmes and normal-screen programmes with your wide-screen television as the above figures show. To watch normal-screen programmes in full screen like the left figure, set the Display Format option to Full. Normal-screen pictures then will be inflated to fit to the width of the wide screen. Otherwise, to watch them in the original ratio like the right figure, set it to Center.

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 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. Then wide-screen pictures will be cut out on the left and right sides equally to fit to the width of the normal screen.

4.2.3   Colour format

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 independently of the SCART connector.

In general, it is known 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 the most desirable option for this.

4.2.4   Anothter video device

You can have the digital receiver linked to another video device like a video recorder or a DVD player via the VCR SCART connector. In this 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 device 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.

It is impossible for the digital receiver to record the video from the video device since the digital receiver is just a bypass for the video recorder.

4.2.5   Audio 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 a detailed description.

The digital receiver can output two types of digital audio signals via the S/PDIF connector. One is an encoded signal, and the other is a decoded signal. If you have the digital receiver linked to your audio-video receiver via the S/PDIF connector, you have to set the Dolby Digital option to Off, which means that the digital receiver will output encoded Dolby Digital audio without decoding so that your audio-video receiver can decode it. Otherwise, set it to On, then the digital receiver will output decoded Dolby Digital audio, scaling down it to two channels.

NOTE

Only if the service you are currently watching provides a Dolby digital audio track, you can enjoy Dolby digital sound.

4.3   Local time setting

You should set your local time for timer events. If you do not set the local time correctly, the programme time table provided by the programme guide may be distrustful. For the programme guide, refer to §5.3.

Select the Settings > Time 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.

2. Set the Time Offset option to the time difference between your time zone and GMT referring to Table 4.1.

3. To get Greenwich mean time, set the GMT Collection option to one among the followings:

   Normal from all transponders

   CAS Only from transponders of pay services

   User Select from transponders specified by you

   If you set it to User Select, then the Satellite option and the Transponder option become enabled. Select your desired satellite and transponders at those options. With the above settings, the digital receiver will scan all specified transponders one by one until to get the Greenwich Mean Time.

4. Make sure that your local time is correctly displayed on the Local Time item.

To set the local time manually, 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.

4

4.4   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.

Table 4.1: 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

Select the Settings > 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' as a default.

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 item is set to Locked, you have to enter the personal identification number when accessing the Time menu. If you enter a wrong number, you cannot use the menu. To release a shut item, set it to Unlocked.

4.5   To use MediaHighway programme guide

Almost every service provider would provide the electronic programme guide. However, you can get more abundant programme information from a specific transponder that provides only programme guides. For detailed description about electronic programme guide, see §5.3. MediaHighway stands for the transponder dedicated to the electronic programme guide.

If you want to use this feature, select the Settings > MediaHighway EPG menu. You should see a screen like the left figure.

Set the MediaHighway EPG option to On to activate this feature, then the other options become enabled. Set the Satellite Name and Home Transponder options to available ones, and set the Tuner Select option to the tuner through which to receive the specified transponder. The digital receiver will try to receive programme guide within the duration specified at the EPG Gathering Time option.

4.6   Options for recording

To set the options for the recording feature, select the Settings > Recording menu. You should see a screen like the left figure.

To enable the time-shift function, you should set the Time Shifting option to any other than Disable. The available range for this option is 30 minutes to 5 hours. You will have the latest

of the current programme as long as the duration specified at
this option

You can record a programme into both an external and the
built-in hard drive. If you want to record a programme into
an external hard drive, set Recording Drive option to External;
otherwise, set this option to Internal.

If you set the Time Shift Storage option to Enable, the saving
parts which for the time-shift will be recorded in the TimeShift
folder of the hard drive. You can set the duration of the timer
recording. Set the Timer Recording Duration option as you
desire. Its available range is 10 minutes to 3 hours. In addition,
you can adjust the time padding of timer recording. Set the
Time Padding of Timer Recording option as you desire. Its
available range is 0 to 30 minutes.

You can adjust the duration of the instant recording. Set the
Instant Recording Duration option as you desire. Its available
range is 30 minutes to 5 hours.

4.7 Options for playback

To set the options for the play-
back feature, select the Settings
> Playback menu. You should
see a screen like the left figure.

If you want to play back a recorded file from beginning, set
Starting Position option to Beginning. To play back a recorded
file from the part where you were watching, set this option to
Continuing.

To record again a scrambled recording file with descrambling during playback, set the Descramble Mode option to Auto Recording; otherwise, set this option to Normal.

You can adjust the jump time interval which is used in playback. Set the Jump Time Interval option as you desire. Its available range is 10 seconds to 3 minutes.

If you want to use extensional trick mode, set the Trick Mode Level option to 2x, 4x, 8x, 16x, 32x, 64x; otherwise, set this option to 4x, 16x, 64x.

You can enjoy video files of DivX, VOB, MKV, and MP4 formats with the digital receiver. If you have subtitle files such as .smi, .sub, .idx, and .srt, the digital receiver can also display them. The Media Subtitle item provides some options for video subtitle. When you play back a video file with a subtitle file, if the subtitle does not match the video, then you can synchronise the subtitle with the video by adjusting the value of the Sync option. In addition, you can change the colour and size of subtitle by setting the Font Color and Font Size options to one you prefer.

4.8   Options for the On-Screen Display

To set the options for the On-Screen Display (OSD), select the Settings > OSD menu. You should see a screen like the left figure.

To adjust the transparency level of the OSD, set the OSD Trans-parency option as you desire. Its available range is 0 to 50

percent.

To adjust the display time of the information box, set the Info Box Display Time option as you desire. Its available range is 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 $\boxed{i}$ button will display the information box. If you set this option to Never Hide, the information box will always be displayed. For the information box, see §5.2.3.

In addition, you can raise or lower the position of the information box. To do that, set the Info Box Position option as you desire. Its available range is −10 to +3 lines. The higher you set the option, the lower the information box will be positioned.

To use an animation effect when changing menu, set the Animation option to Enable.

To make a long service name scroll at the services list screen, set the Text Scroll option to any other than Disable. With the choice of Full Scroll, it will be fully scrolled until its end disappears; with the choice of Part Scroll, it will be scrolled only to its end.

4.9 Options for the front display

To set the options for the front display, select the Settings > Front Display menu. You should see a screen like the left figure.

If you want to use the front display scrolling continuously, set the Main Display Scrolling option to Unlimited. Setting it to

Once do the scrolling one time. Set it to Disable not to use the scrolling.

To display the current time on the sub display of the front display, set the Sub Display Content option to Time. Otherwise, set this option to Default to display the name of the upper menu.

To adjust the brightness of the front display in operation mode, set the Brightness in Operation Mode option as you desire.

You can also adjust the brightness of the front display in standby mode. To do that, set the Brightness in Standby Mode option as you desire.

4.10   Options for standby mode

You can display the current time on the front display in standby mode. To display the time, select the Settings > Others menu and set the Standby Mode option to Active; otherwise, set it to Passive. When you set the Standby Mode option to Active, the receiver can also bypass the signal from the antenna.

To use the automatic power down feature, select the Settings > Others menu and set the Automatic Power Down option to Enable. Then the receiver will be automatically powered down if you do not operate the receiver over three hours.

Chapter 5

Daily Usage

5.1 Volume control

Use the [VOLUME−] and [VOLUME+] 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 previous level.

5.2 Watching television

To change services, press the [CHANNEL−] or [CHANNEL+] button. Pressing the ⟲ 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 as follows:

- Service number and name
- Transmitting satellite
- Receiving tuner: T1 stands for the first tuner; T2 stands for the second tuner.
- Transponder information

A dollar sign (**$**) may be marked on some entries, indicating pay service. To watch pay services, you need a subscription card. To select a desired service, put the highlight bar on its entry with the ⊙ or ⊚ button and press the (OK) button; then the selected service will be presented.

Pressing the ⊚ or ⊚ 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 ▱ button.

To sort the services list by service name, press the [F2] button. Pressing this button once more makes it sorted by service number.

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

- Select your desired satellite at the Satellite option, then only services provided by the selected satellite will be listed.

- Select your desired tuner at the Tuner option, then only services provided through the selected tuner will be listed.

- 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 delete the highlighted service, select the Delete option; then you get 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 §3.1 for service search.

- 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
  Satellite by satellite
  FTA–CAS from free services to pay services
  CAS–FTA from pay services to free services
  Provider by broadcaster
  Fav–NoFav from favourite services to unfavourite services.
  Transponder by transponder

5

5.2.2   The favourite service lists

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

To display the favourite lists, press the [F2] button at the services list screen. For the services list, see §5.2.1.

To select a favourite list, put the highlight bar on a desired favourite group list and press the [OK] button; then favourite services belonging to the highlighted group are listed.

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

To select a favourite service, put the hightlight bar on a desired service and press the [OK] button. Once you select a desired service with the [OK] button, it will be displayed. To select other group, press the [↺] button.

After you have selected a favourite service, if you then switch to another service using the ⊚ or ⊛ 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.

To return to the services list, press the [F1] button. Besides that, you can add or delete a favourite group or service.

To add the service you are currently watching into a favourite group, press the [Option] on the favourite group list. Then, select Add this service item and press the [OK] button.

To delete a service, press the [Option] on the favourite group list. Then, select Delete item and press the [OK] 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
- Transmitting satellite
- Receiving tuner
- 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.
- Dolby Digital symbol (◖◗ D) if a Dolby Digital audio track is provided on the current programme.
- 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.

If the electronic programme guide is provided on the current service, you can see the information about the current and next programmes with the ⊚ or ⊙ button. You can also see the information about other services with the ⊙ or ⊙. In this case, you can change a service by pressing the ⎛OK⎞ button.

Pressing the ⟨ *i* ⟩ button once more displays detailed informa-
tion 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, that track will be
heard. 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 infor-
mation 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 page to view by entering its page number with the
numeric buttons. You can zoom into a teletext page with the
⟨F3⟩ button, and adjust its transparency level with the ⟨F4⟩
button. To clear the teletext screen, press the ⟨EXIT⟩ button.

5.3   Viewing electronic programme guide

The Electronic Programme Guide (EPG) 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 the programme with the ⊙ or ⊚ button and press the $\boxed{i}$ button. To switch to another service, press the ⊚ or ⊚ button. You can travel over previous days with the $\boxed{F2}$ button, and can travel over next days with the $\boxed{F3}$ button.

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

Pressing the $\boxed{F1}$ button displays the programme guide in the form of spreadsheet. To switch it back, press the $\boxed{F1}$ button again.

You can make a timer recording on the electronic programme guide. See §7.1.3 for detailed description.

You can make a timer event on the electronic programme guide as follows:

1. Select a service you want.

2. Press the GUIDE button to display its programme guide.

3. Select a programme you want with the (OK) button, then **P** is marked up on the entry. At the same time, a timer event with the selected programme will be made in the timer list. Refer the timer list to §**??**.

4. To remove the marking, press the (OK) button once again.

5.4   Watching multifeed programme

Some broadcasts such as sports channels can provide a variety of perspectives on a programme at the 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 live TV and resume a short time later without losing any of the programme.

When you do this, you are no longer watching the live programme, instead you are watching a delayed presentation. This is called time-shifted television. You can skip commercials until you catch up to the live broadcast.

In order to use the time-shift feature, set the Time Shifting option to desired duration of time. Then the digital receiver will keep as much time as you set in the option. See §4.6.

The time-shift will reset each time you change to another service. With the time-shift, 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 backward and forward by pressing the F4 and F3 buttons. You can change the jump time at the Jump Time Interval option. See §4.7.

- You can change playback speed. See §7.3.2 for slow motion. 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 §7.1.4.

- To end time-shift, press the ▪ button. The live programme will be displayed.

NOTE

You can adjust some options of the time-shift. Refer to §4.6.

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 installation > Edit Services > Edit Service List 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 F1 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 §4.4 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

Satellite by satellite

FTA–CAS from free services to pay services

CAS–FTA from pay services to free services

> Fav–NoFav from favourite services to unfavourite services
> Provider by broadcaster
> Transponder by transponder

6.2   Editing the favourite lists

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

Select the installation > Edit Services > Edit Favorite List menu. You should see a screen like the left figure. There are three columns:

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

The services list contains all available services, whereas the favourites 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 favourites list.

You can add up to 30 groups. To add a group, select the NEW item 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 F2 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 F3 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 $\boxed{\text{OK}}$ 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 $\boxed{\text{OK}}$ button. The selected service entry gets added to the favourite list. Repeat this step to add more entries.

3. Press the $\boxed{\text{F1}}$ button and the highlight bar gets moved to the favourite list. You can delete a favourite entry with the $\boxed{\text{OK}}$ button.

4. To select another group, press the $\boxed{\text{F1}}$ button again. By pressing the $\boxed{\text{F1}}$ button, the highlight bar gets moved to each column.

Furthermore, 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 $\boxed{\text{F2}}$ button. Move it to a desired place and press the $\boxed{\text{OK}}$ 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.

For how to use the favourite service lists you organised, refer to §5.2.2.

6.3   How to use on-screen keyboard

You can move the highlight key horizontally with the ⊚ and ⊚ buttons and vertically with the ⊚ and ⊚ buttons. Pressing the (OK) button on a key enters its letter in the input line.

To type a space, select the Space key or alternatively press the ⏩ button. To type lower case letters or numerals, select the Shift key or alternatively press the ▸ button. To delete a letter, put the cursor to the right of the desired letter on the input line and then select the Del key or alternatively press ⏪ button. You must select the Save key or alternatively press the ▪ button to complete naming; otherwise if you press the (EXIT) button, it will not be named.

6

Chapter 7

Recording and Playback

You can record TV programmes into an external hard drive as well as the built-in hard drive.

NOTE

To use an external hard drive, you must connect the external hard drive to the USB port or the eSATA port of the digital receiver. 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.kmplayer.com where you can find an MPEG player able to play them back.

CAUTION

Do not disconnect the external hard drive while recording or playing back. It may cause damage to recorded programmes. You should disconnect the external hard drive in standby mode only.

You can record a service while watching another one with this digital receiver. You can record two different services

while watching another one only if two among the services are provided through the same transponder. The digital receiver has two tuners so that you can enjoy the following:

- 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.

7.1   Recording a programme

Once a recording gets 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 different service from the service being recorded, you will see a number on the centre of the symbol, this indicates the order that the recording has started. To record two programmes simultaneously, two tuners are allocated for the recording. Therefore, you can only change to a limited number of services while the two programmes are being recorded.

CAUTION

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

7.1.1   Instant recording

To instantly record a programme you are watching at present, press the ⬤ button.

Pressing the ⏸ button will not pause the current recording like it does with a video recorder. Instead, 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 has 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 enabled. Once the After this program option is selected, the current recording will stop at the time when the current programme is scheduled to end. Likewise, once the After next program option is selected, the current recording will stop at the time when the next programme is scheduled to end.

To stop recording, press the ▪ button; then a box like the left figure appears, which shows the programmes currently being recorded. Select recording by using navigation buttons then press (OK) button to stop the recording.

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 the program name if available or after its service name with a suffix of a number. To view the recorded programme list, press the ▤ button or alternatively select the Recording > Recorded Program menu. See §7.2 for detailed description about the recorded programme list.

7.1.2   Timer recording

You can set a programme 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 a 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 add a timer recording, select the Recording > Reservation menu; then the timer list will be displayed. To add a new timer event, press the F1 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 recorder or suchlike in this case.

2. You may have four sources for recording: TV, radio, the video rom the external deveice linked to the Composite video input, and the video from the external device linked to the Component video input. Set the Type option to your desired source.

3. Set the Satellite option to the satellite which transmits the service you want. Pressing the OK button on this option displays a satellite list, from which you can select your desired satellite. Set the Tuner Select option to a tuner to receive your desired service.

4. 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.

5. Set the Mode option as you desire. 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 broadcast at weekends and you wish to record every episode of the programme, set the Mode option to Every Weekend.

6. 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*.

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

8. 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.

9. To set a recording reservation with the above settings, select the OK item; 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 (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 to remove and press the F2 button, then you get asked for confirmation. With the choice of Yes, it will be deleted. To delete all timer event, press the F3 button.

You can sort timer events by time with the F4 button.

7.1.3   Scheduling recordings 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 programme you want to record with the navigation buttons.

3. 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 [•] button; then the letter **R** is displayed.

4. Pressing the [OK] button once more will cancel the timer.

7.1.4   Recording a time-shifted programme

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 recording.

5. Press the ▪ button once more to stop time-shift.

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

7.1.5   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 a proper subscription card so that they can be descrambled and recorded. In that case, you can enjoy them without the subscription card like free services.

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 hard drive of the digital receiver. You can select a recording to play back from the recorded programme list.

Select the Recording > Recorded Program menu or alternatively press the 🔳 button to display the recorded programme list. The file information is comprised of the following elements: file number, filename, 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.

7.2.1   To delete a recording

To delete a recording, put the highlight bar on it and press the F4 button; then you get 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 [Option] button to display additional options.

2. Set the Sorting option to Alphabetic, Time or Size as you want.

3. Press the [EXIT] button.

4. They will be sorted by the specified option.

7.2.3 To lock a recording

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

1. Put the highlight bar on a desired recording.

2. Press the [Option] button to display 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 [Option] button to display 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 [F2] 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

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 F3 button. If an external hard drive is connected to the digital receiver, you get asked to select between the built-in and external hard drive. Select Internal; 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 track or subtitle track are also recorded together. So you can enjoy them while playing back a recording.

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

1. Select the Recording > Recorded Program menu or alternatively press the ▦ button to display the list of recorded programmes.

2. Put the highlight bar on a desired recording and press the OK button, then additional options appear.

3. To play from beginning, set the Starting Position option to Beginning; to play from the point that you have stopped at the last time, set it to Continuing. To start playback, select the Play item.

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 i 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, by the skip forward menu setting time, by pressing the <mark>F3</mark> button.

- To jump to start of a recording, press the ⊲⊲ button.

- To jump to end of a 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 4 steps: 1/2, 1/4, 1/8 and 1/16 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. 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. To resume normal speed, press the ▶ button.

You can change the playback speed in 3 steps (4, 16 and 64 times) or in 6 steps (2, 4, 8, 16, 32 and 64 times). See §4.7.

7.3.4   To make a bookmark

You can mark favourite parts of a recording by creating bookmarks, and then jump to them. 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 **F2** 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 **F3** 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 black.

5. Press the ⏮ button again to start repeated playback.

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 or alternatively select the Recording > Recorded Program menu to display the list of recorded programmes.

2. Select each desired recording with the F1 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

back, 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 §7.1.5 for how to record a pay service programme.

7.4 Editing a recording

You can cut out or save a part such as 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 black.

5. Press the 𝗙𝟰 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.

NOTE

Edited files cannot be fast-forwarded and rewinded. The 𝗙𝟰 and 𝗙𝟯 buttons are still active for this feature.

7.5   Copying a recording

When you record a pay service without the subscription card, the recorded file will not be descrambled. You can descramble and record the 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 copying, press the ⏹ button.

7.6   Formatting the hard disk

NOTE

If a new hard drive is installed, it must be formatted because you can neither record nor use time-shift with an unformatted hard disk.

You can delete permanently all contents stored in a hard drive by formatting it. Select the Installation > System Recovery > Format Hard Disk menu; then select the hard drive you want to format. To format the built-in hard drive, select the option to Internal; otherwise, select the option to External to format the external hard drive which is connected to the digital receiver. With pressing the OK button, you get asked for confirmation. Formatting will start with the choice of Yes.

NOTE

The hard drive on the digital receiver will be formatted in the JFS file system.

Chapter 8

Entertainment

This digital receiver provides several special features for entertainment.

> **NOTE**
>
> To fully enjoy all of the features described in this chapter, you had better configure the network settings properly. For how to configure the network settings, refer to §9.2.

8.1   Copying files

> **NOTE**
>
> If your external hard drive is formatted in the FAT16/32 or NTFS, it can only be read. To enable to write and read, the hard drive must be formatted in the JFS or Ext2/3 file system. For how to format hard drive on the digital receiver, refer to §7.6.

You can copy files between the built-in hard drive and external hard drive.

To copy from internal to external hard drive perform the following steps:

1. Connect an external hard drive to the digital receiver.

2. Press the 🔲 button and then press the ⏪ or ⏩ button to select a desird file list except the External list.

3. Put the highlight bar on a desired file and press the [F3] button.; then you get asked to select between the built-in and external hard drive.

4. Select External; then the folders are listed.

5. Select a folder and press the (OK) button; then the selected file will be copied into the external hard drive.

To copy from external to internal hard drive, perform the following steps:

1. Connect an external hard drive to the digital receiver.

2. Press the 🔲 button and then press the ⏪ or ⏩ button to select the External List.

3. Put the highlight bar on a desired file and press the [F3] button.; then the list of folders gets displayed.

4. Select a folder in the built-in hard drive.

5. Press the (OK) button; then the selected file will be copied into the built-in hard drive.

8.2   Playing back MP3 files

You can enjoy music or audio books in MP3 format on the digital receiver.

Refer to §8.1 for how to copy a file from an external hard drive into the built-in hard drive of the digital receiver.

To play an MP3 file, perform the following steps:

1. Select the Entertainment > MP3 Player or press the 📖 button and then the ⏪ or ⏩ button to display the MP3 file list.

2. Put the highlight bar on a desired file; if you want to play several files, select them with the **F1** 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 and to change from one file to the next or back use the ⏭ or ⏮ buttons.

8.3   Playing back video files

You can enjoy video files in DivX, vob, mkv, or mp4 format on the digital receiver.

NOTE

This digital receiver supports only version 3.x, 4.x, 5.x, and 6.x of the Divx format.

Refer to §8.1 for how to copy a file from an external hard drive into the built-in hard drive of the digital receiver.

To play a video file, perform the following steps:

1. Select the Entertainment > Media Player or press the 📖 button, and then the ⏪ or ⏩ button to display the video file list.

2. Put the highlight bar on a desired file; if you want to play several files, select them with the **F1** button.

3. Press the ▶ button to start playback.

4. To stop playback, press the ■ button.

8.4   Network game

You can play a network game named Battle Tank on the digital receiver. You can play the game by yourself or with others via the network.

8.4.1   Single mode

To play the game in single mode, select the Entertainment > Game > Battle Tank (Single); then perform the following steps:

1. Select game mode.
2. Select a character.
3. Buy items as you desire.
4. Select a map. If you play the game by yourself, you do not need to select a map.
5. Start playing.

If you want to out of the game while palying, press the EXIT button on the remote control.

Selecting game mode
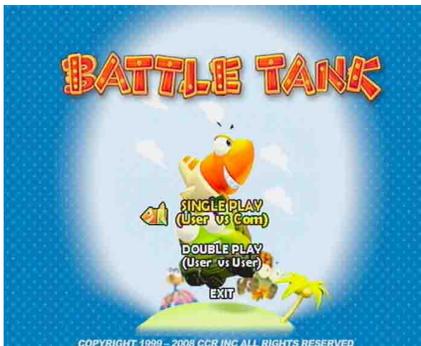
When you select the Entertainment > Game > Battle Tank (Single), you should see a screen like the left figure.

You can select game mode as you desire. If you want to out of the game, select the EXIT option.

There are two modes as below:

Single play playing by yourself.

Double play playing with another user.

Select a mode with the ⊙ and ⊙ buttons and press the OK button.

Selecting a character

After selecting game mode, you should see a screen like the left figure.

Select a character referring to Table 8.1.

If you select the ⑦, a character will be chosen randomly.

When you play the game for the first time, you can select only two characters. To get a new character, you have to play in single mode and clear all 13 stages.

Table 8.1: Buttons for selection

Action	1 Player	2 Player
Left	⊙	•
Right	⊙	▶
Up	⊙	‖
Down	⊙	◄
Select	OK	F2

You can see the selected character's information of the 1 Player on the left bottom of the screen. Also you can see the selected character's information of the COM or 2 Player on the right bottom of the screen.

NOTE

You have to select a character in 30 seconds; otherwise, the character will be selected automatically.

Buying items

After selecting a character, you should see a screen like the left figure. Buy a item referring to Table 8.1.

When you finish selecting items, select the READY on the screen as follows:

- **1 Player** : Select the READY using the (MENU) button and press the (OK) button.

- **2 Player** : Select the READY using the [F1] button and press the [F2] button.

Selecting a map

After buying items, you should see a screen like the left figure.

Select a map with the ⊚ and ⊚ buttons.

After selecting a map, select the START on the screen.

8

Select the START using the [MENU] button and press the [OK] button.

> **NOTE**
>
> If you play the game by yourself, you do not need to select a map.

Playing the Battle Tank

When you start the game, you should see a sceen like the following figure. Play the game referring to Table 8.2.

1 The character's weapons.

2 The angle of the character.

3 You can see the direction and speed of wind.

4 You can see the information of the character as follows:

ENERGY displays the character's energy.

POWER displays the power of shot.

MOVE displays the movement bar.

5 You can check your position and enemy's position on this mini-map.

6 You can use those items during playing game.

7 Displays current player.

8 Displays the turn time. If the time is over, turn will be changed to the other player.

Table 8.2: Buttons for playing

Action	Remote Control
Changing weapon	③ ④
Changing angle	⊚ ⊚
Moving character	⊚ ⊚
Using items	⑦ ⑧ ⑨ ⓪
Skipping turn	⑤
Changing view of map	● ▶ ❙❙ ◀
Firing a shot	OK

8.4.2 Network mode

To play the game in network mode, select the Entertainment > Game > Battle Tank (Network); then perform the following steps:

1. Select a game server.
2. Log on to the game server.
3. Joining a game.
4. Selecting a character, map and items for playing.
5. Start playing.

8

NOTE

Refer to the BATTLE TANK user guide for how to play Battle Tank in network mode. You can download the guide from the Topfield website, http://www.i-topfield.com.

Chapter 9

Accessing to The Digital Receiver via The Internet

> **NOTE**
>
> The following section describes complex functions that should only be used by owners with advanced computer knowledge.

This digital receiver provides features of web service and FTP service, by which through the network you can make scheduled recordings, or transfer recording files to your computer.

Here you need a router, which will connect the digital receiver to your computer or to the Internet.

To use the network features of the digital receiver, you should take the following steps:

1. Configuring your router for the digital receiver.

2. Configuring the network settings on the digital receiver.

3. Accessing the home page of the digital receiver. Refer to §9.3 for detailed description about things you can do by using the web service of the digital receiver.

4. Accessing the FTP Server of the digital receiver.

> **NOTE**
>
> The web server and FTP server of the digital receiver do not work in standby mode. So it must be powered up at all times if you wish to use the web service at any time.

9.1   Configuring the router

In this section, the setup program of *WRT54G*, which is a router manufactured by *Linksys*, will be referred to as an example of how to configure the router for network access.

> **NOTE**
>
> For detailed description about how to set up the router, refer to the manual of your router.

9.1.1   To access within the local area network

Once your router is powered up, a local area network gets created whether or not it is connected to the Internet.

You can let the router automatically assign a dynamic IP address to the computers or devices connected to the network by enabling the DHCP server of the router. In this case, you can access the digital receiver with the IP address which is assigned to the digital receiver by the router.

If the digital receiver reboots, a new dynamic IP address will be assigned to it. You had better assign a static IP address to the digital receiver to avoid this inconvenience. For how to assign a static IP address, refer to the manual of your router;

for how to specify a static IP address on the digital receiver, see §9.2.

9.1.2 To access over the Internet

When you are away from home, you can access the digital receiver inside your home if your router is configured to route access to the digital receiver by means of port forwarding. Via this feature, your router will lead you to the digital receiver when you access your router with its IP address.

Port Range					
Application	Start	End	Protocol	IP Address	Enable
PVRHTTP	80 to	80	Both	192.168.1. 161	☑
PVRFTP	20 to	21	Both	192.168.1. 161	☑
	0 to	0	Both	192.168.1. 0	☐
	0 to	0	Both	192.168.1. 0	☐

Your router may be assigned to a dynamic IP address by an Internet service provider. So if the router has rebooted, you cannot access it unless someone in your home can inform you of the changed IP address. However, many routers support Dynamic Domain Name System (DDNS) service, which can settle this problem. The following image is an example of one such DDNS service provider.
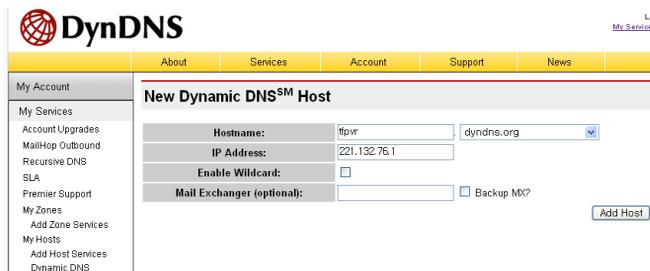
If you use a DDNS service, you can access your router with

a domain name. The instructions on how to use the DDNS service are as follows:

1. Make an account on a web site providing DDNS service, which should be supported by your router.

2. Configure your router with the account so that it can communicate with the web site.

Whenever a new dynamic IP address is assigned to the router, it will inform the DDNS service provider of the new IP address. This makes it possible that you access the router with a domain name at any time.

9.2   Configuring the network setting on the digital receiver

You should configure the LAN settings to enable the web service and FTP service.
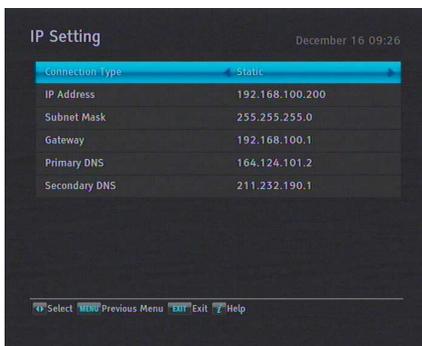
Select the Installation > Network Setting > IP Setting menu.

9

You may get the digital receiver to be assigned a dynamic IP address. If so, set the Connection Type option to DHCP.

You can view the dynamic IP address assigned to the digital receiver by your router at the IP Setting menu.

Sometimes when the digital receiver is restarted, the dynamic IP address will be changed and you will have to check it at the IP Setting menu to access the digital receiver. To avoid this cumbersome thing, you had better assign a static IP address rather than dynamic one.

To assign a static IP address, set the Connection Type option to Static, then the IP Address, Subnet Mask, Gateway, Primary DNS and Secondary DNS options become enabled. You have to set these options to match with the configuration of your router.

9.3 Accessing the web server

To Access to the web server, set the Installation > Network Setting > Web Server option to Enable.

Select the Installation > Network Setting > User Info menu. At this time, you have to enter Personal Identification Number (PIN). Then, set the User ID and Password options as you desire. And select OK to save the settings. When you access to the web server, you will be asked for the account that was made with these options.

In way of the web server of the digital receiver, you can do the following:

- Download recording files.
- Create new recording timers.
- View information about the programme currently being recorded.
- View the system information of the digital receiver.

To access the digital receiver's home page through your web browser, enter its IP address, or domain name if you use a

DDNS service. For the DDNS service, refer to the user manual of your router.

You cannot only download but also upload recording files or MP3 files in the File Management page. However, if you wish to download or upload a file of which size is 2 gigabyte or more, it is recommended using the FTP server rather than the web server.

9
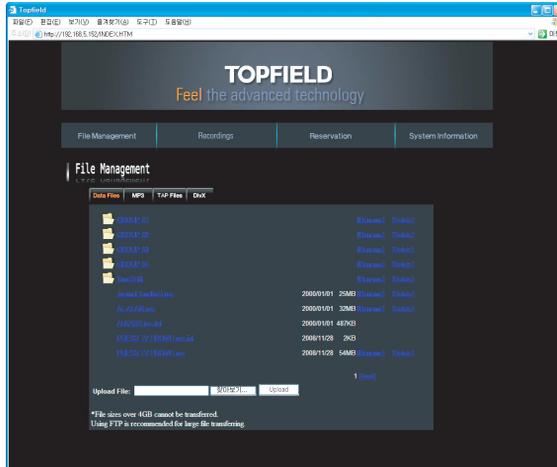
NOTE

The maximum number of user connections is one. This means that you cannot access the web server while someone else is occupying it.

9.4   Accessing the FTP server

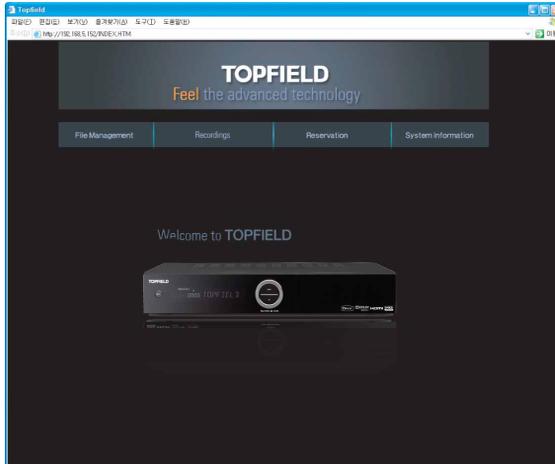To Access to the FTP server, set the Installation > Network Setting > FTP Server option to Enable.

Select the Installation > Network Setting > User Info menu. At this time, you have to enter Personal Identification Number (PIN). Then, set the User ID and Password options as you desire. And select OK to save the settings. When you access to the FTP server, you will be asked for the account that was made with these options.

NOTE

You can access the FTP server with an anonymous account.

However, with an anonymous account you can only download files. You cannot upload files.

You need an FTP client program to access the FTP server of the digital receiver.
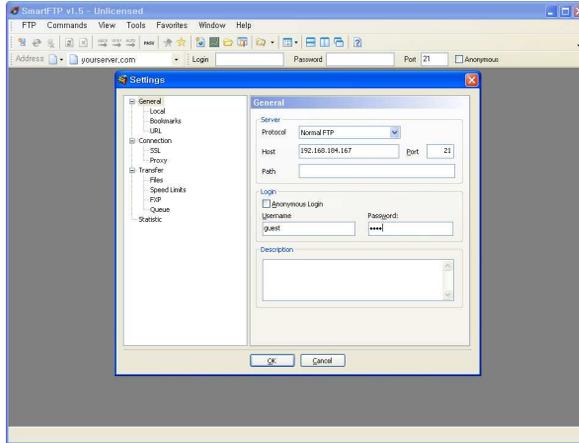
You can log into the FTP server with the user name and password specified in the Installation > Network Setting > User Info menu.
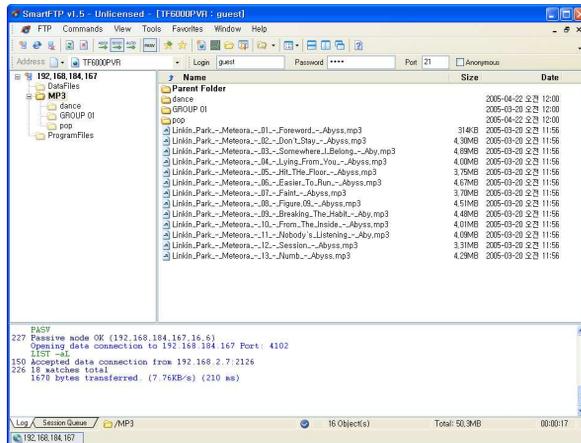
NOTE

The maximum number of user connections is one. This means that you cannot access the FTP server while someone else is occupying it.

Chapter 10

Firmware Update

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

10.1 Checking the firmware information

System Status	August 11 14:30
System ID	22121
Loader Version	v1.02
Device Version	v1.0.1
Application Version	TF-BCPCE 1.00.02
Last Update	Jul 24 2009

MENU Previous Menu EXIT Exit

You have to check the firmware information of your digital receiver before downloading a new firmware. Select the Information > System Status menu. You should see a screen like the left figure. Remember the number of the System ID item, and download the latest firmware with the same system identification.

10

> **NOTE**
>
> It is only allowed to update with the firmware of which system identification is identical to that of yours. Otherwise you will fail in firmware update.

10.2   From a USB memory

If you have a USB memory stick, you can update the firmware from it by performing the following steps:
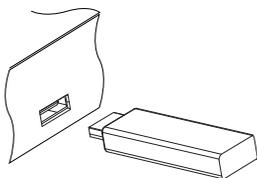
1. Download a new firmware from the Topfield website.

2. Copy the firmware file to your USB memory stick.

3. Insert the USB memory stick into the USB port on the digital receiver.

4. Select the Installation > Firmware Upgrade > USB Firmware Upgrade menu, and the files in the USB memory will be listed.

5. Place the highlight bar on the right firmware file and press the (OK) button, and a countdown will be displayed on the front display of the digital receiver.

6. When the 'END' message appears, restart the digital receiver.

10.3   From the firmware server via the Internet

You can update the firmware from the firmware server which is run by Topfield via the Internet. Make sure that the digital receiver is connected to your router before configuring the network settings on the digital receiver.

> **NOTE**
>
> For detailed description about how to set up the router, refer to the manual of your router.
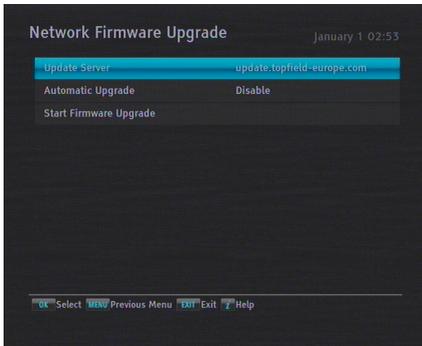
Select the Installation > Firmware Upgrade > Network Firmware Upgrade menu. You should see a screen like the left figure.

To enable the digital receiver to update the firmware automatically when a new firmware is available, set the Automatic Upgrade option to Enable. Otherwise if you want to do that by yourself, select the Start firmware upgrade option; then you get asked for confirmation. If you select Yes, it checks up whether a new firmware is available, and if any, it will start firmware update.

To change the update server name, press the OK button at the Update Server option; then, the on-screen keyboard appears. See §6.3 for how to use the on-screen keyboard. You can get the server name from the web site, http://www.i-topfield.com.

10
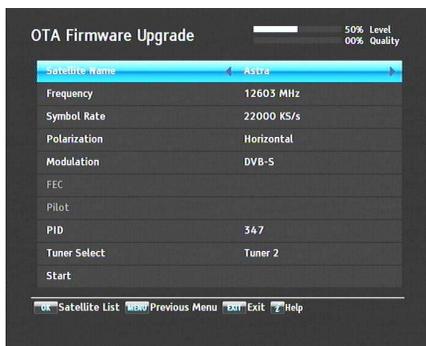
10.4   Over the air

You can get a new firmware over the air. Select the Installation > Firmware Upgrade > OTA Firmware Upgrade menu. You should see a screen like the left figure. Selecting the Start command starts firmware update.

Satellite	*Astra* (19.2°E)
Frequency	12603 MHz
Symbol Rate	22000 KS/s
Polarisation	Horizontal
PID	347

On the left table is presented the transponder information appointed by the manufacturer, Topfield, for firmware update.

This transponder information can be changed. You can get the information from the website, http://www.i-topfield.com.

Appendix A

Universal Remote Control

The universal remote control allows you to operate the most important functions such as power on/off and volume control on your television, audio-video receiver, or DVD player. For the use of buttons , refer to Table A.1. To be able to control the device, you must adapt the remote control to the device first. Take the following steps:

1. Turn on the device you want to operate.

2. Point the remote control at the remote senser on the device.

3. Hold down the $\boxed{\text{OK}}$ and device button simultaneously for two seconds until LED lamp flashes on. For example, if you want to operate your television with the remote control, press the $\boxed{\text{OK}}$ and $\boxed{\text{TV}}$ buttons simultaneously.

4. Find the manufacturer of the device from the codes list.

5. Enter the three-digits code you have found for your device and press the $\boxed{\text{OK}}$ button.

6. If the setting is finished correctly, LED lamp blinks twice and the device will be turned off. Otherwise, repeat from the step 2.

A

If you cannot find a code for your device, do as follows:

1. Turn on the device you want to operate.

2. Point the remote contorl at the remote senser on the device.

3. Hold down the (OK) and device button simultaneously for two seconds until LED lamp flashes on. For example, if you want to operate your television with the remote control, press the (OK) and (TV) buttons simultaneously.

4. Press the (CHANNEL+) or (CHANNEL−) button until the device turns off.

If you want to find out the number which you set for your device, do as follows:

1. Hold down the (OK) and device button simultaneously for two seconds. For example, if you want to know the number which you set for your television, press the (OK) and (TV) buttons simultaneously.

2. Press the (_i_) button. Then LED lamp will show the number with blinks. For example, if the number is 3, LED lamp will blink three times. In case of 0, LED lamp will blink ten times.

You can reset the settings. To do that, do as follows:

1. Hold down the (TV) and (0) buttons simultaneously for more than five seconds.

2. Each device button blinks three times in the following order: (PVR) → (DVD) → (AUX) → (TV)

3. After that, all settings will be reset to the manufacturer's factory settings.

NOTE

Some buttons may not work properly depending on a device. If your device code is not listed on the following pages, you will not be able to use this remote as a universal remote for your specific device.

A

Table A.1: Operating buttons

PVR	TV	DVD	AUX
⏻	Power on/off	Power on/off	Power on/off
VOLUME +	Volume up	Volume up	Volume up
VOLUME −	Volume down	Volume down	Volume down
🔇	Mute	X	Mute
CHANNEL +	X	X	Channel up
CHANNEL −	X	X	Channel down
0	0	0	X
1	1	1	1
2	2	2	2
3	3	3	3
4	4	4	4
5	5	5	5
6	6	6	6
7	7	7	7
8	8	8	8
9	9	9	9
i	TV INPUT	X	X
⊙	X	Up	X
⊙	X	Down	X
OK	X	OK	X
⊙	Left	Left	X
⊙	Right	Right	Right
MENU	X	Menu	X
GUIDE	X	Guide	X
EXIT	X	Exit	Exit
■	X	Stop	X
◀◀	X	Rewind	X
❚❚	X	Pause	X
▶	X	Play	X
▶▶	X	Fast forward	X

A.1 Code list for television sets

A

ACCENT	049, 063
ACEC	112
ACURA	195
ADMIRAL	065, 076, 163, 171, 190, 307, 324, 369
ADYSON	379
AGASHI	076, 379
AGEF	324
AIKO	049, 063, 076, 102, 141, 172, 195, 225, 379
AIM	049, 063
AIWA	376, 377
AKAI	019, 049, 050, 055, 063, 076, 102, 107, 123, 133, 139, 141, 150, 172, 174, 182, 195, 209, 225, 326, 333, 379, 428, 432, 433, 437
AKIBA	006, 049, 063, 123, 380
AKITO	049, 063, 106
AKURA	006, 049, 076, 096, 123, 195, 419, 426
ALARON	042, 334
ALBA	018, 044, 049, 050, 107, 123, 134, 163, 179, 184, 195, 225, 228, 232, 239, 379, 413, 421, 431
ALBIRAL	121, 326, 372
ALCYON	407
ALLORGAN	050, 094, 236, 334
ALLSTAR	049, 063
AMPLIVISION	113, 379, 421, 425
AMSTRAD	004, 011, 049, 063, 076, 123, 131, 172, 195, 225, 426
ANAM	049, 063, 195
ANGLO	076, 195
ANITECH	049, 063, 076, 195, 407
ANSONIC	045, 049, 063, 107, 112, 195, 210, 242, 391, 413, 421
APOLLO	165
ARC EN CIEL	029, 034, 074, 182, 186, 415, 424
ARCAM	029, 379, 424
ARDEM	392
ARISTONA	049, 050, 063, 065, 079, 112, 158, 160, 188
A.R.SYSTEM	049, 063
ARTHUR MARTIN	075, 107, 127, 133, 136, 139, 148, 153, 307, 425
ASA	003, 020, 065, 078, 080, 091, 117, 146, 171, 197, 235, 307, 319, 324, 341, 375, 406, 408
ASBERG	049, 063, 407
ASORA	195
ASTRA	195
ASUKA	006, 050, 076, 123, 379
ATLANTIC	049, 050, 063, 113, 236, 242, 379
ATORI	195
AUCHAN	107, 425
AUDIOSONIC	031, 049, 063, 074, 076, 195, 213, 379, 392, 421
AUDIOTON	050, 076, 379, 392, 421
AUSIND	075, 090, 407
AUTOVOX	050, 071, 078, 079, 080, 083, 090, 147, 156, 236, 254, 305, 319, 323, 324, 379, 407, 413, 416

A

AWA	018, 049, 063, 131, 195, 206, 320, 379, 426, 433
AYOMI	411

B

BAIRD	074, 102, 182, 209, 321, 329, 379, 409
BANG & OLUFSEN	324
BARCO	107, 355, 371, 372, 422
BASIC LINE	006, 031, 049, 107, 123, 159, 195, 207, 226
BASTIDE	379
BAUR	012, 049, 053, 063, 107, 150, 172, 244, 245, 246, 247, 301, 357, 414, 416
BAZIN	379
BEKO	063, 184, 240, 241, 392, 421, 433
BEON	049, 063, 163
BEST	213, 421
BESTAR	049, 063, 421
BINATONE	379
BLACK STAR	413
BLACKTRON	006
BLACKWAY	006
BLAUPUNKT	019, 053, 057, 060, 113, 118, 244, 245, 246, 247, 248, 249, 308
BLUE SKY	006, 049, 063, 123, 195, 232
BLUE STAR	006
BONDSTEC	413
BOOTS	050, 106, 379
BPL	006, 049, 063
BRANDT	074, 182, 218, 415, 424, 436

BRANDT ELECTRONIQUE	029, 034, 074, 182, 186
BRINKMANN	049, 063, 163
BRION VEGA	049, 063, 065, 083, 167, 172, 173, 181, 196, 324, 356
BRITANNIA	379
BROTHER	076
BRUNS	056, 065, 324
BSR	094, 107, 110, 139, 168, 314
BTC	123
BUSH	006, 018, 049, 076, 094, 106, 107, 123, 134, 139, 142, 143, 172, 179, 195, 209, 223, 225, 226, 232, 239, 307, 379, 416
BUSH(UK)	107, 147, 168

C

CAPSONIC	076
CARAD	049, 063
CARENA	049, 063, 380
CARREFOUR	018, 406
CARVER	177
CASCADE	049, 063, 064, 195
CASIO	049, 063
CATHAY	049, 063
CCE	049, 063, 379
CENTURION	049, 063
CENTURY	044, 054, 065, 163, 189, 324, 411, 413
CGE	002, 044, 054, 090, 093, 094, 096, 107, 139, 142, 163, 168, 189, 369, 407, 413, 421
CIHAN	111
CIMLINE	031, 123, 134, 195
CITY	195

CLARIVOX	056, 121, 125, 163, 406
CLATONIC	076, 123
CLATRONIC	031, 045, 049, 063, 076, 113, 123, 195, 225, 379, 407, 413, 421, 431
CMS HIGHTEC	379
COMTEL	111, 125
CONCORDE	195
CONDOR	006, 045, 049, 050, 063, 113, 163, 195, 210, 379, 413, 421
CONTEC	018, 131, 195, 206, 302, 320, 379
CONTINENTAL EDISON	029, 034, 074, 182, 186, 232, 415, 424
COSMEL	195, 213
CROSELY	044
CROSLEY	054, 065, 090, 093, 094, 104, 107, 139, 324, 407, 413
CROWN	049, 063, 154, 163, 170, 195, 209, 232, 372, 407, 419, 421, 431
CS ELECTRONICS	031, 123, 379, 413
CTC	413
CTC CLATRONIC	045
CURTIS MATHES	126, 190, 212
CYBERTRON	123

D

DAENYK	042
DAEWOO	063, 123, 140, 145, 161, 193, 195, 379
DAINICHI	123, 379
DANSAI	063, 076, 141, 195, 379
DANSETTE	426
DANTAX	392, 421

DATSURA	209
DAWA	049, 063
DAYTRON	049, 063, 195, 226
DE GRAAF	023, 107, 122, 139, 209, 307
DECCA	049, 063, 102, 106, 111, 120, 200, 331, 379
DECCA(UK)	046, 050, 102, 106, 131
DEITRON	049, 063
DENKO	076
DENON	126, 212
DER	321
DERWENT	105
DESMET	049, 063, 113
DIAMANT	049, 063
DIGILINE	049, 063
DIXI	063, 195, 379, 413
DOMLAND	423
DORIC	104, 105
DREAN	049, 063
DTS	195
DUAL	049, 050, 063, 095, 107, 139, 156, 168, 182, 242, 243, 379, 414, 416, 423, 424
DUAL-TEC	195, 168, 050, 040
DUMONT	045, 065, 080, 102, 139, 146, 319, 324, 339, 341, 375, 379, 406, 408
DUMONT-FINLUX	020, 045, 061, 075, 078, 091, 104, 117, 147
DUX	049, 063, 112
DYNATRON	049, 063

E

ELBE	049, 063, 107, 121, 123, 172, 194, 210, 242, 337, 368, 369, 391, 411, 421, 435

A

ELBIT	111	FERGUSON	001, 032, 050, 073, 074, 076, 080, 082, 102, 103, 121, 158, 182, 204, 218, 244, 245, 246, 251, 306, 319, 321, 322, 328, 329, 344, 409, 411, 436
ELCIT	045, 046, 047, 062, 065, 104, 107, 150, 168, 324, 413		
ELECTA	006, 076	FIDELITY	049, 050, 063, 076, 107, 158, 225, 307, 364, 379
ELECTRO TECH	195		
ELEKTA	006, 076	FIDELITY(UK)	133
ELEKTRONSKA	318	FILSAI	050, 379
ELG	049, 063	FINHER	359
ELIN	003, 020, 049, 063, 107, 139, 172, 195, 379, 408, 416	FINLANDIA	033, 122, 139, 172, 197, 209, 223, 307, 375, 419
ELITE	031, 049, 063, 123	FINLUX	003, 020, 042, 045, 049, 061, 063, 075, 078, 080, 090, 091, 102, 104, 107, 117, 139, 146, 147, 163, 197, 210, 235, 319, 324, 339, 341, 375, 379, 406, 407, 408, 428, 429, 437
ELMAN	045, 168		
ELTA	076, 195, 379		
EMERSON	004, 006, 042, 044, 049, 063, 065, 113, 225, 324, 327, 406, 413		
EMPEROR	006	FIRST LINE	045, 049, 063, 094, 102, 107, 134, 139, 191, 195, 209, 210, 379, 411, 413, 416
ERRES	063, 112		
ESC	049, 063		
ETRON	049, 063, 107, 139, 195	FISHER	018, 041, 050, 056, 065, 069, 102, 104, 107, 117, 139, 143, 156, 172, 189, 206, 209, 320, 324, 379, 408, 414, 416, 421
EURO-FEEL	076		
EUROMANN	049, 063, 076, 379, 421		
EUROPA	049, 063		
EUROPHON	044, 045, 046, 049, 050, 063, 068, 107, 120, 168, 318, 336, 379, 413	FLINT	031, 049, 063, 102, 123, 379, 380
		FNR	045
		FORGESTONE	158
EXPERT	107, 236, 242, 425	FORMENTI	090, 107, 113, 139, 307, 324, 379, 407
EXQUISIT	049, 063, 413		
		FORMENTI-PHOENIX	050, 075, 104, 113, 148, 307
F			
		FORTRESS	190, 324
FAMILLY LIFE	049, 063	FRABA	049, 063, 421
FENNER	063, 195	FRIAC	045, 049, 063, 195

FRONTECH	076, 139, 195, 307, 379, 413, 416
FUJITSU	042, 045, 102, 107, 195, 236, 327, 379
FUJITSU GENERAL	195, 379
FUNAI	042, 076, 094, 314, 327

G

GALAXI	045, 049, 063
GALAXIS	045, 049, 063, 163, 421
GBC	031, 104, 107, 139, 143, 168, 195
GE	006, 074, 182, 218
GEANT CASINO	107, 425
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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.