

IKUSI SMART mini

DTT Receiver

WITH USB PORT

FOR DIGITAL RECORDING TO EXTERNAL HARD DRIVE
AND PLAYBACK OF MULTIMEDIA FILES



IKUSI

Receiver **SMART**mini

Thank you for choosing the *SMARTmini* receiver by IKUSI, which will permit you to watch Digital Terrestrial Television (DTT) programmes with maximum quality image and sound. You will be able to receive all of the FTA channels broadcast in your region, including radio programmes. In addition, through its USB port, the device will allow you to digitally record TV programmes; view videos and photos; listen to audio files; and have fun playing the various games that it includes.

Using the *SMARTmini* receiver is very simple, but reading this manual before starting is essential. Keep it safe for future reference.

INFORMATION AND WARNING SIGNS

Throughout the manual, you will find these symbols :



Provides information of interest or advice to facilitate the use of the device



Warns of potential hazards that could damage the device

Contents of the package

- 1x *SMARTmini* receiver
- 1x DC power supply
- 1x Remote control
- 2x 1.5 V batteries (AAA - LR03)
- 1x 1.2 m SCART cable [For Australian market : 1x 3.5 mm Jack - (3x) RCA cable]
- 1x User Manual

SAFETY INSTRUCTIONS

- The receiver is powered with the +12 VDC power supply provided, which in turn is connected to the 230/240 V 50 Hz mains. Unplug the power supply unit and disconnect the antenna during electrical storms or when the receiver is not in use for a prolonged period of time.
- The receiver, the power supply and the remote control can only be repaired by authorised service personnel. Never open them.
- Do not obstruct the air vents of the receiver or the power supply, or place other devices on top of them. Leave enough space around them to allow the heat they produce to dissipate.
- Place the receiver and the power supply away from heat sources and direct sunlight. Do not use them in areas with high humidity (swimming pools, etc.) and avoid contact with insecticides or solvents.
- To clean the receiver, the power supply and the remote control, use a dry or slightly damp soft cloth.

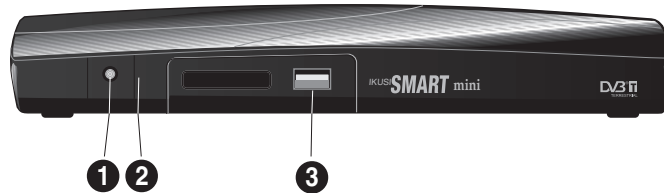


Do not dispose of the receiver or the power supply by throwing them out with normal household waste. Take them to the special collection points made available by your local authorities. The packaging is recyclable; deposit it in the paper and cardboard recycling bin.

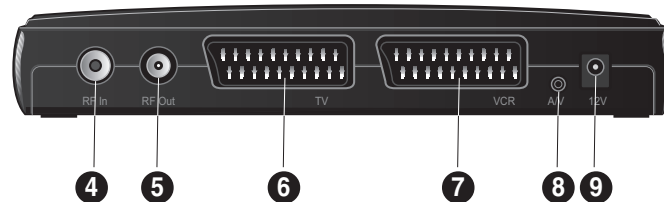
1. PANEL DESCRIPTION	4
2. PREPARATION	
2.1 Preparing the remote control	5
2.2 Connections	5
2.2.1 Connecting the antenna	5
2.2.2 Connecting to the TV set	6
2.2.3 Connecting to a Hi-Fi system	6
2.2.4 Connecting to a video projector	6
2.2.5 Connecting an external USB device	7
2.2.6 Connecting the power supply	7
2.3 Turning the receiver ON and OFF	7
2.3.1 Turning ON the receiver	7
2.3.2 Turning OFF the receiver	7
3. REMOTE CONTROL BUTTONS	8
4. RECEIVING DTT	
4.1 Initial startup	9
4.2 Receiver settings	10
4.2.1 Channel searching	10
4.2.2 Channel list	11
4.2.3 Configuration	13
4.2.4 Factory settings	17
4.2.5 Receiver version	18
4.2.6 Software update	18
4.3 Daily use	19
4.3.1 Turning ON and turning OFF the receiver	19
4.3.2 Adjusting the volume	19
4.3.3 Changing between TV channels and Radio channels	19
4.3.4 Changing channel	19
4.3.5 Viewing channel information	20
4.3.6 Returning to the last viewed channel	20
4.3.7 Selecting the audio language	20
4.3.8 Image zoom	20
4.3.9 EPG - Electronic Programme Guide	20
4.3.10 Teletext	22
4.3.11 Subtitles	22
5. MULTIMEDIA	
5.1 Multimedia playback	23
5.1.1 USB Cinema	23
5.1.2 USB Music	23
5.1.3 USB Photos	24
6. PVR (Personal Video Recorder)	
6.1 Instant recording	25
6.2 Scheduled recording	25
7. GAMES	26
8. USB UNIT	27
9. TECHNICAL CHARACTERISTICS	28
10. APPENDIX	
Troubleshooting	29
Guarantee	30
Alphabetical index	31

1. PANEL DESCRIPTION

FRONT PANEL



REAR PANEL



- ① operating LED
- ② infrared sensor
- ③ USB : external device connection port
- ④ RF In : antenna input
- ⑤ RF Out : antenna output, for TV set, DVD or additional SMARTmini
- ⑥ TV : audio/video input/output for connecting to TV set
- ⑦ VCR : audio/video input/output for connecting to DVD
- ⑧ A/V : video and stereo audio output
- ⑨ 12V : power input (+12 VDC)

2. PREPARATION

2.1 Preparing the remote control

Remove the battery compartment cover and insert the two supplied batteries (1.5V, AAA-LR03), making sure that they are inserted the right way round. Replace the cover.

When using the remote control, point it directly at the front of the SMARTmini receiver. If the remote control does not work correctly, it is likely that the batteries have run out and should be replaced. Use only alkaline batteries. If the receiver is not going to be used for a prolonged period of time, remove the batteries from the remote control.

2.2 Connections



Disconnect from the mains supply the devices to be connected to the receiver.

2.2.1 Connecting the antenna

Using a coaxial cable, connect the antenna to the receiver's RF In input (Fig. 1).



If required, this same antenna signal can be sent to a second SMARTmini receiver being used with another TV set. To do so, use a second antenna cable and connect the RF Out output on the first receiver to the RF In input on the second (Fig. 2).

NOTE: This connection can only be made if the RF Out output is not going to be used to connect the antenna signal to the TV set itself (see Fig. 5 on next page).

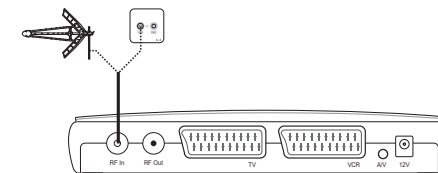


Fig. 1

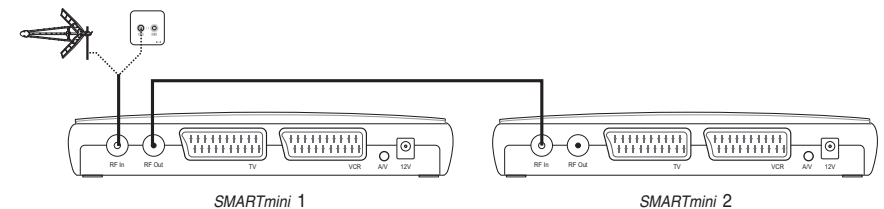


Fig. 2

2.2.2 Connecting the TV set

Using the supplied SCART cable, connect the SCART socket marked **TV** on the receiver to an available SCART socket on the TV set (Fig. 3).



The format of the video signal provided by the receiver can be either RGB or CVBS PAL/NTSC composite video. The TV set must therefore be compatible with one of these two video formats.



If your TV set does not have a free SCART socket, disconnect one of the other devices from the TV set –typically a DVD player– and connect this device to the SCART socket marked **VCR** on the *SMARTmini* receiver (Fig. 4). When the device is turned on, the signal will automatically be diverted to the TV set.



If you install your *SMARTmini* receiver before the analogue switchover comes into effect in your region, you should connect the antenna to the TV set (and to your video or DVD) in order to continue receiving the analogue channels. To do so, use a second antenna cable and connect the **RF Out** output on the *SMARTmini* receiver to the antenna input on the TV set (Fig. 5).

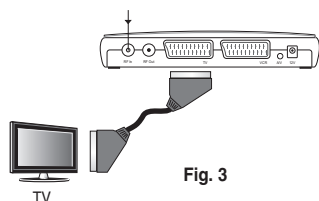


Fig. 3

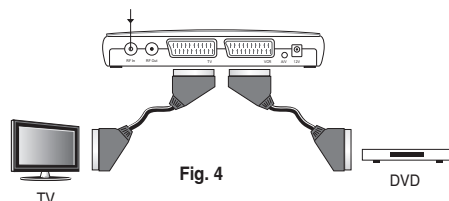


Fig. 4

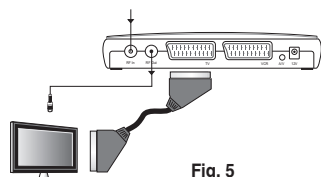


Fig. 5

Connecting the TV set in AUSTRALIA :
Using the supplied Jack-(3x)RCA cable, connect the mini-jack of the cable to the **A/V** output on the *SMARTmini*, and then make the video and audio connections to the TV set.

2.2.3 Connecting to a Hi-Fi system

The *SMARTmini* receiver can also deliver the analogue audio signal to your Hi-Fi system, allowing you to enjoy a far better sound quality than that provided by a normal TV set. For this you will need a Jack-(3x)RCA cable (not supplied). Connect the cable to the **A/V** output of the *SMARTmini* and then make the audio connections indicated in figure 6.

2.2.4 Connecting to a video projector

You will need the previously mentioned Jack-(3x)RCA cable. Connect the mini-jack of the cable to the **A/V** output on the *SMARTmini*, and the video connector to the input on the projector.

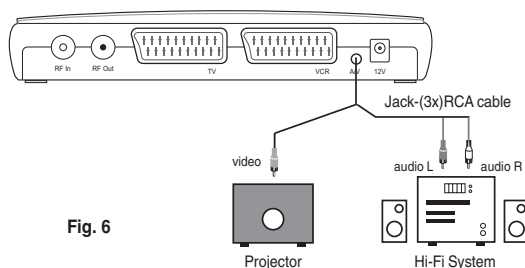


Fig. 6

2.2.5 Connecting an external USB device

You can use your *SMARTmini* to play video, music and photo digital files stored on external USB devices (flash drives, hard disks), as well as record onto these devices the video and audio from the DTT channel which is currently tuned in. Using a USB cable, connect the USB connector of the external device to the **USB** port on the front panel of the receiver.

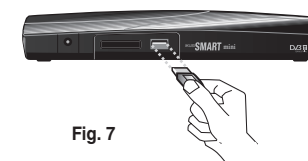


Fig. 7



The *SMARTmini* is mainly designed to work with external hard disks that have their own power supply, i.e. which are powered from the mains supply. However, although we cannot guarantee that they will work with the receiver, the use of self-powered disks may also be possible. In any event, the disk must be formatted using the FAT32 file system.



IKUSI takes no responsibility for the loss of any data from the external device caused by the incorrect use of the *SMARTmini* receiver. We recommend that a backup copy of all data is made prior to use.

2.2.6 Connecting the power supply

Insert the jack connector of the power supply into the **12V** input on the *SMARTmini* receiver and then plug the power supply unit into the mains socket.

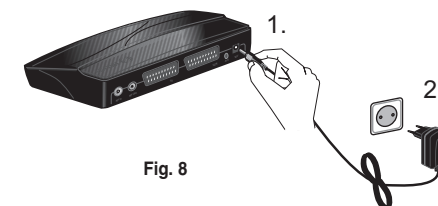



Fig. 8

2.3 Turning the receiver ON and OFF

2.3.1 Turning ON the receiver

When the power supply is plugged into the mains socket, the light on the front panel will light green (receiver in *on* mode). When in daily use the light is red or out (receiver in standby mode), press the  button on the remote control; the light will turn green (receiver in *on* mode).

2.3.2 Turning OFF the receiver

With the receiver in *on* mode (the light on the front panel is green), press the  button to turn it off (receiver in standby mode).



The *SMARTmini* receiver does not feature a switch for completely disconnecting the power supply. When you wish to completely disconnect it from the mains, unplug the power supply from the mains socket. The light on the front panel will go out.

Unplug the power supply if you are not going to use the receiver for a prolonged period of time (e.g. whilst on holiday).

3. REMOTE CONTROL BUTTONS



PLAY/PAUSE
(pause/continue multimedia playback)

STOP
(stop multimedia playback)
(stop instant recording)

SLOW
(change video playback to *slow motion*)

REC
(start instant recording)
(schedule recording from EPG guide)

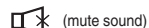
FRW & FFW
(change day of week in EPG guide)
(fast-forward & rewind video or audio playback)

PREV & NEXT
(play previous & next multimedia file)



(on/standby)

TV/RADIO
(change between TV channels and Radio channels)



(mute sound)

NUMBER BUTTONS 0 - 9
(select channels)
(enter numeric values)

EPG
(open electronic programme guide)

RECALL
(return to the last viewed channel)

MENU
(exit TV viewing and enter main menu)

FAV
(open favourite channels list)

INFO
(display channel information in TV Viewing mode)
(display buttons operation in Menu mode)

EXIT
(close OSD window)
(return to previous menu)
(exit main menu and enter TV viewing)

OK
(open channel list)
(confirm selection in list or menu)

▲ / ▼
(move up/down in list or menu)
(flip photo in multimedia playback)

◀ / ▶
(move left/right in menu)
(choose option in circular menu)
(rename channel in Channel Managing)
(open Calendar in date selection)
(see weekly programme information in the EPG guide)
(rotate photo in multimedia playback)

CH+ / CH-
(next/previous channel in channel list)

VOL+ / VOL-
(raise/lower volume)

F1 - red button
(mark a channel as favourite in Channel Managing)
(go to next month in Calendar)
(go to Today from Week in the EPG guide)

F2 - green button
(remove channel in Channel Managing)
(go to next year in Calendar)
(go to Week from Today in the EPG guide)
(select action when managing recorded files)

F3 - yellow button
(move channel in Channel Managing)
(go to previous month in Calendar)
(show additional programme information in EPG guide)
(repeat the playback of video and audio files)
(state duration of instant recording)

F4 - blue button
(lock channel in Channel Managing)
(go to previous year in Calendar)

SUBT
(select language or deactivate subtitles, if available)

AUDIO
(select audio language, if available)
(change between stereo, left channel and right channel)

TXT
(open teletext, if available)

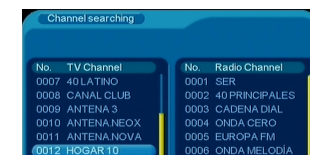
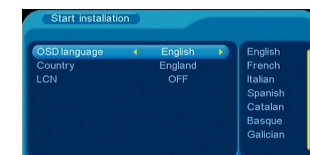
ZOOM
(activate image zoom in TV viewing)

4. RECEIVING DTT (Digital Terrestrial Television)

4.1 Initial startup

When you turn on the *SMARTmini* receiver for the first time, the TV set displays the **Start installation** screen. From here you can automatically install all of the digital channels received via the antenna. But first you must make the correct choices regarding the following parameters:

1. **OSD language** : this is the language used for the menus and the messages that the receiver displays on screen. By default, this is set to English. To change this option, press the ► button on the remote control to open the list of languages on the right-hand side; now use the ▲ / ▼ buttons to highlight the desired language and press OK. From this moment onwards, all of the text displayed on the screen will be in that language.
2. **Country** : this is where the receiver is installed. By default, this is set to England. If you are in another country, change this option in the same way as indicated above.
3. **LCN** (Logical Channel Numbering) : this refers to the automatic classification of the channels. Select ON or OFF in the same way as indicated above.



Press the OK button. A confirmation message appears. Press ◀ to select "Yes" and then press OK again. The channel search begins. The receiver will detect all the channels received via the **RF In** input and will automatically create a list of channels. Once the process has finished, the television screen will begin to display images from the first channel on the list.

You are now watching DTT on your TV !



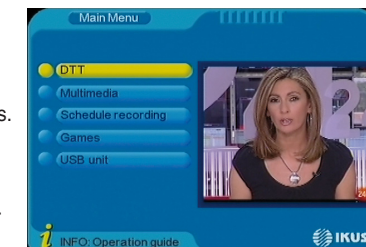
Accessing the menus

Your *SMARTmini* receiver has stored information about all of the channels that it receives through the antenna and has created the Channel List. You can already view any of the channels in this list (take a look at section 4.3.4 on page 19) but please carry on reading this manual in order to first discover all of the features of the receiver and to familiarise yourself with its use.

On the screen you are seeing images from the first channel in the list. Press the MENU button on the remote control. The **Main Menu** page appears, with these options :

- 1) **DTT**, to watch the television or listen to the radio.
- 2) **Multimedia**, to play back video or audio files or to view photos.
- 3) **Schedule recording**, to external hard disk.
- 4) **Games**, just for fun.
- 5) **USB unit**, for managing the external USB device.

The **DTT** option is the main function of the *SMARTmini* receiver and is the subject of this chapter 4.



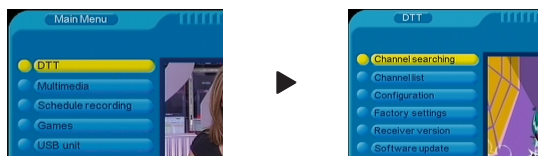
When the receiver is turned on during its daily use, the screen displays the channel that was tuned in the last time the device was turned off.

If you are watching the television («TV viewing») and you wish to access the **Main Menu**, press the MENU button on the remote control.

If you are on the menu screen and wish to return to the TV viewing, press the EXIT button several times.

4.2 Receiver settings

With the **Main Menu** on the screen, use the ▲ / ▼ buttons to highlight the **DTT** option. Press OK. The **DTT** menu will appear :



- Channel searching
- Channel list
- Configuration
- Factory settings
- Receiver version
- Software update

4.2.1 Channel searching

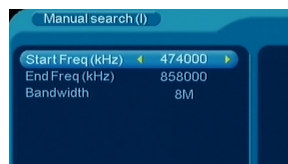
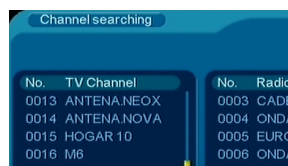
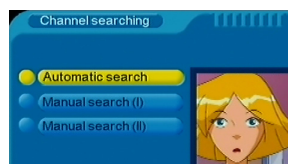
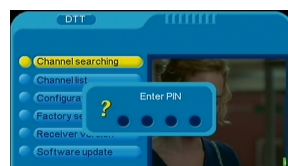
This option can be used when, for whatever reason, all of the channels have been deleted from the channel list or when you wish to add an additional channel to the current list.

In the **DTT** menu, highlight **Channel searching** and press OK. You will be asked to enter the PIN number; enter it using the number buttons on the remote control (by default, the PIN number is "0000", and you can change it via the **PIN number** option in the **Configuration** menu, see page 17). The **Channel searching** menu appears, which will help you to create the list of channels. There are 3 ways to proceed:

- 1) Automatic search
- 2) Manual search (I)
- 3) Manual search (II)

Automatic search

The **SMARTmini** receiver makes an intelligent search for all the DTT channels broadcasted over the country where you are installing it (the country you selected in the "Start installation" screen). Use the ▲ / ▼ buttons to highlight the **Automatic search** option and press OK. The 'Channel searching' page will appear, and at once the search starts –if you want to stop it at any moment press EXIT–. The receiver will detect all the multiplex (digital channels) received via the antenna and will automatically create the channel list. When the search ends, the screen returns to the **Channel searching** menu. Press EXIT to return to the DTT menu. To go to the Main Menu, press EXIT again.



Manual search (I)

This option as well the next one –Manual search (II)– are intended for expert users of DTT. Use the ▲ / ▼ buttons to highlight the **Manual search (I)** option and press OK. The 'Manual search (I)' page will appear; it allows to search the channels by frequency bands. Most countries broadcast DTT only in UHF band. Before starting the search, you should enter, if they have not already been entered, the following values :

Start Frequency : 474000
End Frequency : 858000
Bandwidth : 8M

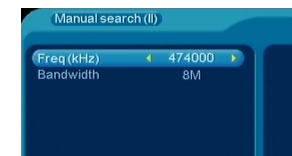
Press OK to start the search. The receiver will detect all the multiplex (digital channels) existing in the selected band and will automatically create the channel list. When the search ends, the screen returns to the **Channel searching** menu.

If another band must be scanned, carry out a new search by entering the corresponding frequency values. Then press EXIT to return to the DTT menu. To go to the Main Menu, press EXIT again.

ONLY FOR AUSTRALIA			
Start Frequency :	177500	Start Frequency :	529500
End Frequency :	226500	End Frequency :	816500
Bandwidth :	7M	Bandwidth :	7M

Manual search (II)

This type of search is indicated to add a new multiplex to the current channel list. Open the 'Manual search (II)' page as explained for the Manual search (I). Here you must enter the frequency and the bandwidth of the multiplex you wish to search for, and then press the OK button. Afterwards, the screen returns to the **Channel searching** menu each time, ready to search for another multiplex.

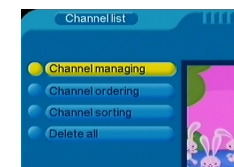
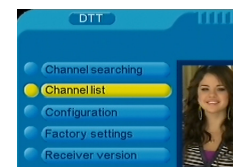


4.2.2 Channel list

In the DTT menu, highlight the **Channel list** option and press the OK button. The screen will change to the **Channel list** menu. This menu allows you to a) manage, b) order, c) sort and d) delete the channels found in the search. You can change from television channels to radio channels by pressing the TV/Radio button on the remote control.

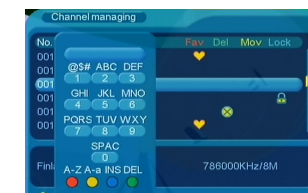
a) Channel managing

Using the ▲ / ▼ buttons, highlight the **Channel managing** option and press OK. The 'Channel managing' screen will appear, showing the list of channels found in the search :



The page offers five options: **Favourite channel (Fav)**, **Delete channel (Del)**, **Move channel (Mov)**, **Lock channel (Lock)** and **Rename channel**. Using the ▲ / ▼ buttons, select the channel in question and then press the corresponding remote control button :

- press the red button to mark the channel as a **favourite**;
- press the green button to mark the channel as **deleted**;
- press the yellow button to **move** the channel to another position on the list. Use the ▲ / ▼ buttons to move it to the desired position and then press OK;
- press the blue button to mark the channel as locked (**parental lock**). You will be asked for the PIN number ("0000" by default);
- press the ► button to **rename** the channel. A virtual keyboard will open on the screen. Use the number and coloured buttons to enter the new channel name. The editing functions that the coloured buttons carry out are indicated at the bottom of said keyboard.



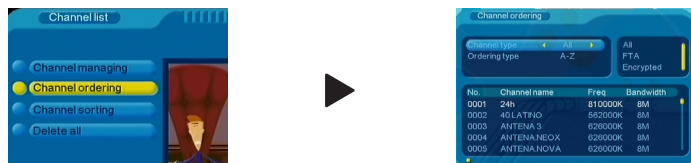
Press the OK button for the marks or actions carried out to take effect.

Press the EXIT button to leave the 'Channel managing' screen and return to the **Channel list** menu. If any channel was marked as "deleted", a confirmation message will appear. Use the ◀ / ▶ buttons to select "Yes" or "No" and press OK to finish. Press EXIT to return to the DTT menu. To go to the Main Menu, press EXIT again.



The abbreviations Fav, Del, Mov and Lock at the top of the 'Channel managing' page are the same colours as the buttons that are used to carry out the actions represented by these abbreviations. This information is also available in the window that opens when the INFO button is pressed. Press EXIT to close this window.

b) Channel ordering



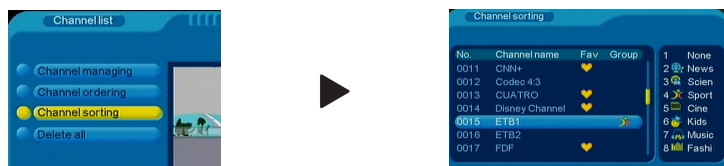
In the channel list that was created when the receiver was turned on for the first time, the channels appear in ascending order of frequency of the corresponding radio-electric multiplex, and in accordance with the LCN function (if this was activated and works in your country). The 'Channel ordering' page allows you, if you so wish, to change the order of the channels. There are two selection options :

- Type of channel : all, only FTA, or only encrypted.
- Type of ordering : in alphabetical order (A-Z or Z-A) or, if applicable, according to LCN+ or LCN-.

Select the option using the ▲ / ▼ buttons. Press ► to go to the right and select the desired parameter. Press OK : the lower box will display the new list, ordered as per your selection.

Press the EXIT button to return to the **Channel list** menu. Press it again to go to the DTT menu. To go to the Main Menu, press EXIT again.

c) Channel sorting

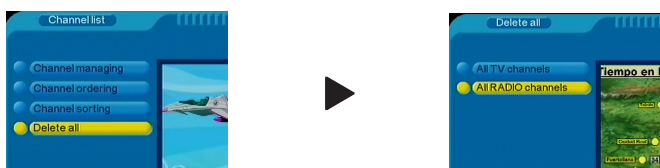


This page lets you associate channels with different themes : cinema, sports, music, kids, etc. This makes it possible, in the TV Viewing mode, to list themed groups of channels, thus making it easier to choose a channel.

Using the ▲ / ▼ buttons, select the channel you want to associate with a theme and then press the remote control number button that corresponds to that theme, as indicated in the list on the right-hand side. The symbol of the chosen theme will then appear on the line of the selected channel.

Press the EXIT button to return to the **Channel list** menu. Press it again to go to the DTT menu. To go to the Main Menu, press EXIT again.

d) Delete all



When you highlight the *Delete all* option and press OK you will be asked for the PIN number ("0000" by default). The **Delete all** menu will appear.

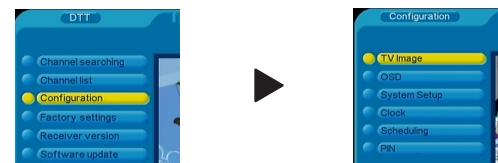
How to delete channels from the list one by one using the *Channel managing* option has already been explained. This page, 'Delete all', allows you to remove, in one go, either all of the TV channels or all of the Radio channels.

Select the correct option using the ▲ / ▼ buttons and press OK. A dialogue box will appear; use the ◀ / ▶ buttons to select "Yes" and then press OK. Once the action has been completed, the screen will display the message "DATABASE EMPTY" if all of the TV and Radio channels have been deleted.

Press the EXIT button to return to the **Channel list** menu. Press it again to go to the DTT menu. To go to the Main Menu, press EXIT again.

4.2.3 Configuration

In the DTT menu, highlight the *Configuration* option and press OK. The **Configuration** menu appears, with 6 options :



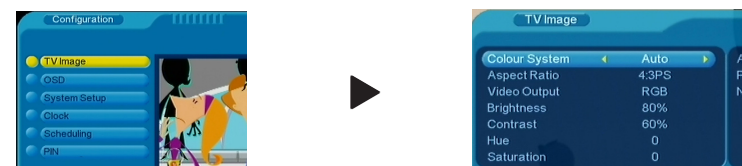
- TV Image
- OSD
- System Setup
- Clock
- Scheduling
- PIN number



As you will see, the options a), b), c) and d) have numerous selection and adjustment parameters. However, most default values of these parameters may be perfectly suitable for your purposes, and so you will probably need to change not many of them.

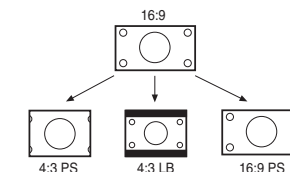
a) TV Image

Using the ▲ / ▼ buttons, highlight the *TV Image* option and press OK. The 'TV Image' page appears :



This page lets you adjust various parameters regarding the TV image provided by the *SMARTmini*, allowing you to fine-tune it to your particular television set :

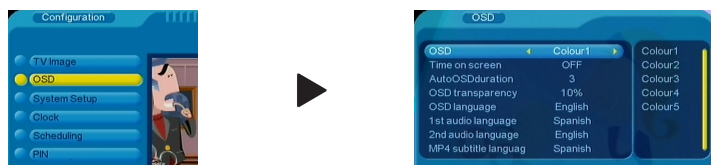
1. **Colour System** : here you can choose the colour system of the CVBS (composite video) signal that the receiver provides through the TV SCART and A/V mini-jack connectors. Highlight the correct line using the ▲ / ▼ buttons and then press ◀ / ▶ to select that system. There are 3 options: PAL, NTSC and Auto. The default option is Auto.
2. **Aspect Ratio** : this selection is made in the same way. If your television screen is 4:3, that is to say, not panoramic, you can choose between 4:3 PS and 4:3 LB. If it is panoramic, you should select 16:9 PS. The default option is 4:3 PS.
3. **Video Output** : this is the type of video signal provided by the receiver. The options are RGB and CVBS (composite video). The default option is RGB.
4. **Brightness** : this is the brightness of the image. Highlight the line using the ▲ / ▼ buttons. Next, press ► to go to the list on the right-hand side and select there, once again using the ▲ / ▼ buttons, the percentage brightness that you prefer. The default value is 80%. Press OK to confirm.
5. **Contrast** : this is the contrast of the image. Follow the same selection process as used to set the brightness. The default value is 80%.
6. **Hue** : this should only be adjusted if the NTSC colour system has been selected. The default value is 0.
7. **Saturation** : this is the level of colour saturation. Follow the same selection process as before. The available levels range from 0 to 12, with 0 being the default value.



Press OK to confirm the completed adjustments. The screen returns to the **Configuration** menu. Press EXIT to return to the DTT menu. Press it again to go to the Main Menu.

b) OSD

Using the ▲ / ▼ buttons, highlight the *OSD* option and press OK. The 'OSD' (On Screen Display) page appears:



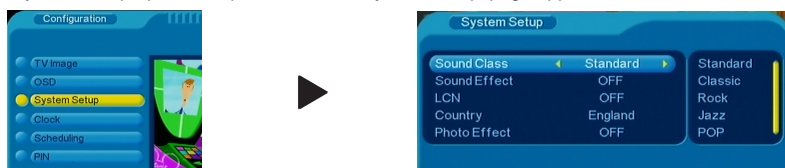
This page allows you to configure 8 parameters of the OSD (On Screen Display) functions :

1. OSD : here you can select the colour scheme of the OSD. Highlight the line using the ▲ / ▼ buttons and then press the ◀ / ▶ buttons to choose the colour you prefer.
2. Time on screen : use this option to select whether or not the time is displayed over the TV image. Highlight the line using the ▲ / ▼ buttons and then press ◀ / ▶ to select either «On» or «Off».
3. Automatic OSD duration : this is the amount of time that the OSD message will automatically appear for after certain actions are carried out in the menus or when watching the TV. Make the selection by repeatedly pressing the ◀ / ▶ buttons. Values range from 1 to 6 seconds (3 secs. by default).
4. OSD transparency : this is the degree of transparency of the OSD messages. It can be set to between 0% and 60%. Make the selection by repeatedly pressing the ◀ / ▶ buttons.
5. OSD Language : the language in which the on-screen text is displayed. Highlight the line using the ▲ / ▼ buttons; next, press the ▶ button to move to the section on the right-hand side; select the language you prefer using the ◀ / ▶ buttons. Press OK to confirm your choice.
6. 1st audio language : choose the language that you want to appear first in the list of available languages on the TV channels (AUDIO button). Press OK to confirm.
7. 2nd audio language : choose the language which will appear in second place.
8. MP4 subtitle language : this is the language of the subtitles when playing DivX files. Highlight the line using the ▲ / ▼ buttons; next, press the ▶ button to move to the section on the right-hand side; select the language you prefer using the ◀ / ▶ buttons. Press OK to confirm your choice.

Lastly, press OK to confirm all of the OSD settings. The screen returns to the **Configuration** menu. Press EXIT to return to the DTT menu. Press it again to go to the Main Menu.

c) System Setup

Highlight the *System Setup* option and press OK. The 'System Setup' page appears :



Here you can set different parameters regarding the general system of your *SMARTmini* receiver :

1. Sound Class : this setting allows you to choose a particular type of sound. Highlight the line using the ▲ / ▼ buttons and then repeatedly press the ◀ / ▶ buttons to choose between Standard, Classical, Rock, Jazz and Pop. The selection by default is Standard. Press OK to confirm.
2. Sound Effect : select a «stage» effect. This can only be changed if the sound class was set to Standard. Highlight the line using the ▲ / ▼ buttons and then repeatedly press the ◀ / ▶ buttons to choose between Off, Concert, Church, Passive or Live.
3. Active Antenna: the possible options are ON and OFF. If you select ON, the receiver sends a voltage of +5 V through the antenna connector. **If there is no active antenna connected, you should select OFF.**



If you select "ON" and there is no active antenna connected (indoor antenna equipped with preamplifier), the receiver may become damaged and cease to work.

4. LCN : this refers to the automatic classification of channels in the channel list.

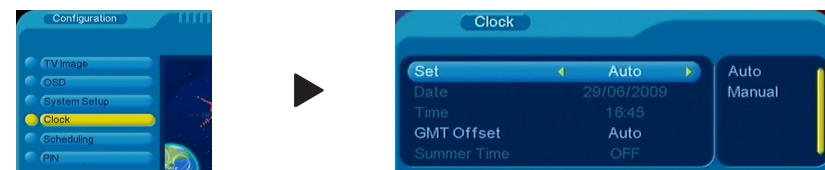
5. Country : select your country.

6. Photo Effect : select ON if you want the receiver's multimedia playback feature to include artistic transition effects when displaying photo slide shows.

Press OK to confirm the completed adjustments. The screen returns to the **Configuration** menu. Press EXIT to return to the DTT menu. Press it again to go to the Main Menu.

d) Clock

Using the ▲ / ▼ buttons, highlight the *Clock* option and press OK. The 'Clock' page appears :



The DTT channels transmit the date, and the time and GMT offset. This information can be used by the receiver to automatically adjust the system date and time.

The 'Clock' page allows you to set the date and time of the system either automatically or manually.

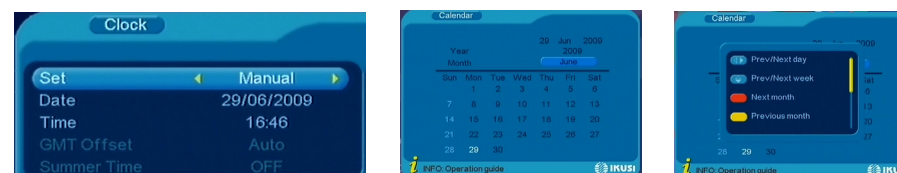
To set them automatically, do the following :

1. Setup : using the ◀ / ▶ buttons, select Auto. The Date and Time lines are disabled.
2. GMT Offset : the default value, «Auto», should normally be left unless the receiver is being installed in a time zone that is different to that of the rest of the country; in the Canary Islands, for example. If this is the case, highlight the line using the ▲ / ▼ buttons and then press ▶ to move to the box on the right-hand side; select +1:00 for summer time or 00:00 otherwise. Press OK to confirm your choice.
3. Summer Time : this line is enabled only if Auto was not selected on the previous line. Select ON if you are currently in summer time, or OFF otherwise.

If for whatever reason you wish to manually set the date and time of the system, proceed as follows :

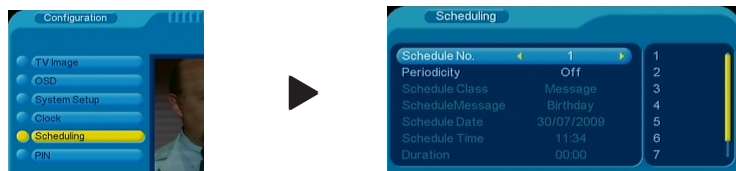
1. Setup : using the ◀ / ▶ buttons, select Manual. The Date and Time lines are now enabled (see left-hand image below).
2. Date : highlight the line using the ▲ / ▼ buttons and then press ▶ . The Calendar window appears (see centre image below) in which you should use the buttons on the remote control to select the day (to see what buttons to use, press INFO; an information window will pop up, see right-hand image below; press EXIT to close this window). Press OK to confirm the date setting. You are returned to the Clock page.
3. Time : highlight the line using the ▲ / ▼ buttons and enter the time using the ◀ / ▶ movement buttons and the number buttons.

Press OK to confirm the settings (automatic or manual). The screen returns to the **Configuration** menu. Press EXIT to return to the DTT menu. Press it again to go to the Main Menu.



e) Scheduling

Using the ▲ / ▼ buttons, highlight the *Scheduling* option and press OK. The 'Scheduling' page appears :



This page allows you to schedule the turning on and off of the receiver, channel tuning and the appearance of OSD messages. Up to 8 schedules are possible.

1. **Schedule Number** : highlight the line using the ▲ / ▼ buttons and press the ► button to go to the section on the right-hand side; using the ▲ / ▼ buttons, select the number you wish to assign to the schedule and press OK.
2. **Periodicity** : highlight the line using the ▲ / ▼ buttons and then press the ◀ / ▶ buttons once or several times to choose between "Off", "Once", "Weekly", and "Yearly". The "Off" option is used to deactivate or change a schedule.
3. **Schedule Class** : this option works in the same way. The available options are "Off", "Message", "Channel" and "On". The "Off" and "On" options refer to the scheduled turning on or off of the receiver on the date and time set below.



4. **Schedule Message** (if Message was selected in Schedule Class) : Highlight the line using the ▲ / ▼ buttons and then press the ◀ / ▶ buttons once or several times to choose between a birthday, anniversary or thank-you message.
- Schedule Channel** (if Channel was selected in Schedule Class) : Highlight the line using the ▲ / ▼ buttons and then press ► to move to the section on the right-hand side; select the channel to schedule using ▲ / ▼ . Press OK to confirm.
5. **Date** : highlight the line using the ▲ / ▼ buttons and then press ► . The 'Calendar' page appears, in which you should select the schedule date in the same way as that used in the *Clock* option (see page 15). Press OK to confirm the settings. You are returned to the 'Scheduling' page.
6. **Time** : highlight the line with the ▲ / ▼ buttons and enter the time for the schedule in the same way as that used in the *Clock* option. Press OK to confirm the settings.
7. **Duration** (only if Channel was selected in Schedule Class) : Highlight the line using the ▲ / ▼ buttons and enter the desired duration of the action that is being scheduled, using the ◀ / ▶ movement buttons and the number buttons. Press OK to confirm the duration.

Press EXIT to leave the Scheduling page and return to the **Configuration** menu. Press EXIT to return to the DTT menu. Press it again to go to the Main Menu.

f) PIN number

Using the ▲ / ▼ buttons, highlight the *PIN number* option and press OK. The 'PIN number' page appears :



This page allows you to change the PIN number that is required to access certain settings (channel searching, lock channel, delete all channels, factory settings) :

1. **Old PIN number** : Highlight the line using the ▲ / ▼ buttons and then enter the current PIN number using the number buttons on the remote control. The default PIN number is "0000".
2. **New PIN number** : Enter the new PIN number (4 numerical digits).
3. **Confirm New PIN number** : Enter the new PIN number once more.

If no errors were made when entering the digits, an acceptance message appears and the screen returns to the **Configuration** menu. The new PIN number is now activated.

Press EXIT to return to the DTT menu. Press it again to go to the Main Menu. If you press it once more, the screen will return to TV Viewing mode.

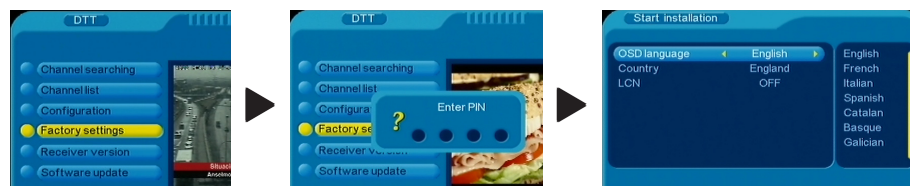


Record the new PIN number in a safe place, since if it is forgotten you will not be able to access the menus or options that require it. If the PIN number has been forgotten, use the *Software update* option (see section 4.2.6) either by loading a new software version or by reloading the current one. This will allow you to use the default PIN number, "0000".

4.2.4 Factory settings

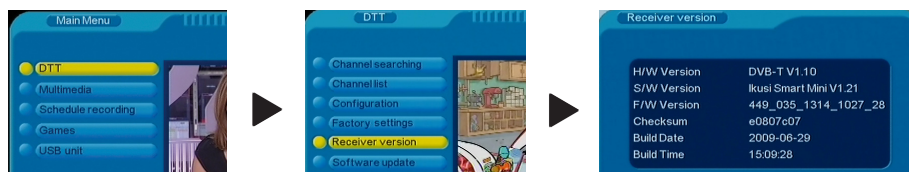
If for whatever reason you wish to delete all of the personal settings that you have configured on your *SMARTmini* receiver, this option in the **DTT** menu allows you to restore the configuration that the receiver had when it left the factory.

In the **DTT** menu, highlight the *Factory settings* option and press OK. You will be asked for the PIN number; enter it using the number buttons on the remote control (the default PIN number is "0000"). In the dialogue box that appears, select "Yes". Once the action has been carried out, the television will display the **Start installation** screen. Now follow the instructions given in section 4.1.



4.2.5 Receiver version

Using the ▲ / ▼ buttons, highlight the *Receiver version* option and press OK. The 'Receiver version' page will appear, where you can view the hardware and software versions of your *SMARTmini*, along with some other related information :



Press EXIT to return to the DTT menu. Press it again to go to the Main Menu. If you press it once more, the screen will return to TV Viewing.

4.2.6 Software update

This **DTT** menu option allows you to update the software of the *SMARTmini* receiver, either to add new features or improve the current ones. To complete said update, a ".bin" software file is needed, which can be downloaded from <http://www.ikusi.com>. This file can then be copied to a USB storage device (a flash drive, for example).



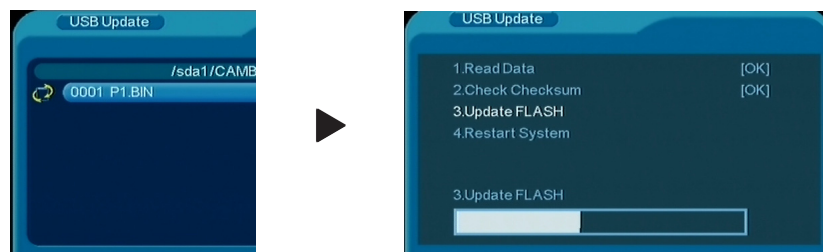
When you update the *SMARTmini* software, all of the personal settings that you have configured will be lost. As a result, you will need to search for the channels once more and configure the receiver.

Connect the flash drive containing the file to the USB port on the front panel of the receiver. On the **DTT** menu screen, use the ▲ / ▼ buttons to highlight the *Software update* option and press OK. The 'Software update' page appears :



Although the updating process is fast (approx. 20 secs.), it is important to ensure that it is not interrupted by anything whilst running. An electricity cut, for example, could render the receiver permanently inoperable.


Press OK. The screen will now display all of the folders and files stored on the flash drive. Highlight the file using the ▲ / ▼ buttons and press OK. The update process will now begin.



When the process has finished, the screen will close and return to TV Viewing mode.


4.3 Daily use

The operation of your *SMARTmini* receiver is very simple. Only a few of the buttons on the remote control will be used regularly :


- the number buttons to go directly to a particular channel
- the CH+ and CH- buttons to change to the next or previous channel in the channel list
- the  button to mute the sound
- the EPG button to go to the programme guide

You will also use other buttons, but only occasionally. The most common tasks that you will carry out are described in the following sections.

4.3.1 Turning on and turning off the receiver

To turn on or turn off (standby mode) the receiver, press the  button. When it is turned on, the channel that was tuned in when the receiver was last turned off will appear on the screen.

4.3.2 Adjusting the volume

Press the VOL+ or the VOL- button to change the volume. The screen will display adjustment bars. Press the  button to completely mute all sound. Press it again to return the sound to its previous volume.

4.3.3 Changing between television channels and radio channels

Press the TV/RADIO button to change between television channels and radio channels.

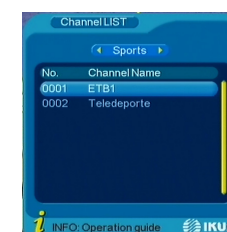
4.3.4 Changing channel

This can be done in any of 3 ways :

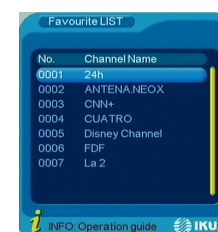
- Using the number buttons, enter the number of the channel assigned to it in the channel list (*). If the number has two digits, the second one must be entered in less than 2 seconds after the first.
(*) The list is opened by pressing OK and closed by pressing EXIT.
- Press CH+ to go to the next channel in the list, or CH- to go to the previous one.
- Press OK to open the channel list (see left-hand image below). Press ▲ / ▼ to select the channel. Press OK to confirm your choice. Next press EXIT to close the list.
 - If there are channels which have been sorted by theme (in the option *Channel sorting*, page 12), open the channel list and, using the ◀ / ▶ buttons, select the desired theme («Sports», for example; see centre image below). The list will now show only those channels that you have associated with this theme. Press ▲ / ▼ to select the channel. Press OK to confirm your choice. Next press EXIT to close the list.
 - If there are channels which have been set as favourites, and the one you wish to view is one of them, you can select it quicker by pressing the FAV button. The list of favourite channels appears (see right-hand image below). Press ▲ / ▼ to select the channel. Press OK to confirm your choice. Next press EXIT to close the list.



General channel list



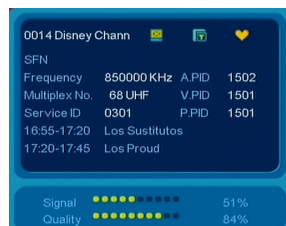
Themed channel list



Favourite channel list

4.3.5 View channel information

Press the INFO button to open up a window containing the name of the channel and the names and times of the programme that is currently being broadcast and the one that is to be shown next. If you press the button again, the window will also display certain technical parameters (frequency and number of the multiplex, and the service, video, audio and PCR PIDs), as well as some information about the reception level and the quality of the signal. Press EXIT to close the window



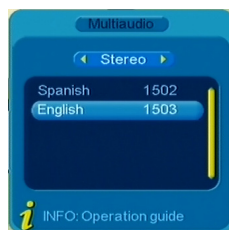
4.3.6 Returning to the last viewed channel

Press the RECALL button to return to the channel that you were watching before the current one. By using this button you can easily alternate between two different programmes.

4.3.7 Select the audio language

Press the AUDIO button. A window appears, showing all of the available audio languages (and their PID numbers). Using the ▲ / ▼ buttons, select the desired language.

If the sound is stereo, you can use the ◀ / ▶ buttons to choose between listening in stereo (i.e. both audio channels), listening to just the left-hand channel, or listening to just the right-hand channel, according to what is indicated in the above selection box. Press OK to confirm the settings or EXIT to leave without making any changes



4.3.8 Image zoom

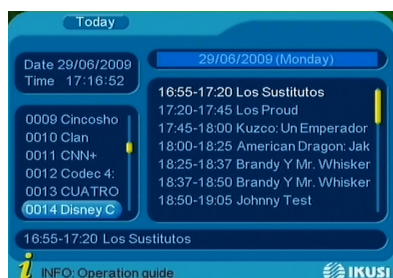
Press the ZOOM button to activate the image zoom mode. The image is enlarged x2. By pressing this button repeatedly, the zoom can be changed to x3, x4, x1/2, x1/3, x1/4, and off. When the zoom is set to x2, x3 or x4, the image frame can be moved using the ◀ / ▶ and ▲ / ▼ buttons.

Information about the zoom level remains on display on the screen. To return to the normal image, set the zoom to "off"; the information will then disappear once the time set for automatic OSD messages has elapsed.

4.3.9 EPG - Electronic Programme Guide

Press the EPG button to enter the 'EPG' page, the electronic programme guide. The guide provides information about today's and this week's programmes for all of the channels, as long as this information is transmitted by the channels.

By default, the "Today" page appears, showing the receiver's channel list. Highlighted in the list is the channel which is currently tuned in. The box to the right shows the programme grid for that channel for today.



- Use the ▲ / ▼ buttons to highlight a different channel in the list. At the same time, the corresponding programme grid will be displayed on the right-hand side. Press ◀ / ▶ to move between the channel list and the programme grid. To move through the grid, press ▲ / ▼.
 - With the name of a programme highlighted, press the yellow button to display *extended* information about it. Press EXIT to return to the "Today" page.
 - With the name of a programme highlighted, press the REC button to schedule it for recording using the PVR function of the receiver (see section 6.2 on page 25).
- Press the EXIT button to leave the EPG guide.

Whilst on the «Today» page, press the green button to enter the "Week" page, where you will be shown the programmes for today and for the six following days :



- Use the ▲ / ▼ buttons to highlight a channel in the channel list.
- Use the FRW / FFW buttons to highlight a day of the week.
- Press ◀ / ▶ to see information about the programmes of the channel and on the selected day in their different schedules.
- With the name of a programme highlighted, press the yellow button to display *extended* information about it. Press EXIT to return to the "Week" page.
- Press the red button to return to the "Today" page.

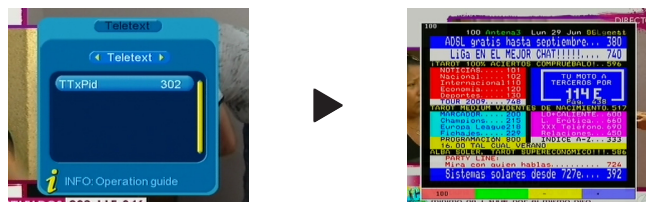
Press the EXIT button to leave the EPG guide.



Press the INFO button to open a window containing information about the actions of the buttons. Press EXIT to close the window.

4.3.10 Teletext

Some channels feature a teletext service. Whilst watching a programme, press the TXT button. If the channel features teletext, a window will appear indicating the PID number of the service. Press OK. A standard teletext window will open, which you can use as normal.



To select a teletext page, enter the three-digit page number using the number buttons on the remote control.

- If you make a mistake, finish entering any three digits and then enter the correct page number once more.
- If the page counter does not stop, it means that the page you have requested is not available. In this case, enter another page number.

Press ▲ / ▼ to go to the next/previous page.

Press ► to move forward 100 pages.

Press ◀ to return to the starting page, 100.

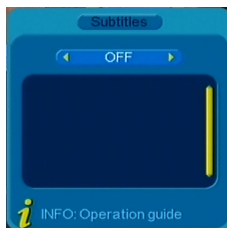
Press EXIT to leave teletext.

4.3.11 Subtitles

Press the SUBT button whilst watching a channel. The Subtitles window will appear, indicating the subtitle languages that that channel offers and their PID number. The top part of the window features a selection box; use the ◀ / ▶ buttons to choose between Subtitles, TTX Subtitles and OFF :

- If you select Subtitles, the box below will show the available languages; select the one you want to use using the ▲ / ▼ buttons and press OK.
- If you select TTX Subtitles, the box will indicate the number of the teletext page that transmits them.
- Select OFF if you do not wish subtitles to appear for the programmes on that channel.

Press EXIT to close the window.



5. MULTIMEDIA

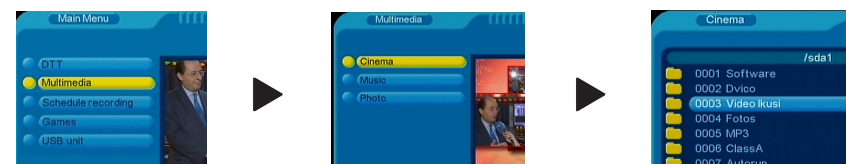
Multimedia playback

The *SMARTmini* receiver features a USB port on its front panel for the connection of external devices such as flash drives, MP3 players, hard disks and digital cameras. The receiver can reproduce MP3 audio files, MPEG-2/4 and DivX video files, and JPEG images, amongst other file types.

Press the MENU button on the remote control to bring up the **Main Menu**.

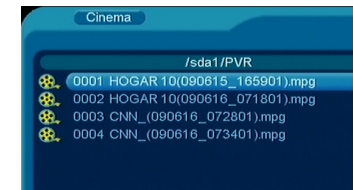
5.1 USB Cinema

Connect the external device to the USB port. With the main menu on screen, press ▲ / ▼ to highlight the **Multimedia** option and then press OK. The screen will change to the **Multimedia** menu. Select the **Cinema** option and press OK. The 'Cinema' screen will appear, displaying all of the folders and video files stored on the external device :



Use the buttons on the remote control to carry out the following operations :

- Press ▲ / ▼ to highlight the folder
- Press OK to open the highlighted folder
- Press EXIT to return to the previous folder
- Press ▲ / ▼ to select the video file
- Press OK to start playback of the video
- Press FFW to fast-forward (x2, x4, x8, x20, x1)
- Press FRW to rewind (x2, x4, x8, x20, x1)
- Press SLOW for slow-motion playback (1/2, 1/4, 1)
- Press Play/Pause to pause playback; press it again to continue
- Press PREV to play the previous video in the list; press NEXT to play the next one
- Press the yellow button to repeat playback of one or all of the files in the folder
- Press STOP to stop playback and return to the list of videos
- Press EXIT several times to return to the main menu.



5.2 USB Music

Connect the external device to the USB port. With the main menu on screen, press ▲ / ▼ to highlight the **Multimedia** option and then press OK. The screen will change to the **Multimedia** menu. Select the **Music** option and press OK. The 'Music' screen will appear, displaying all of the folders and audio files stored on the external device :



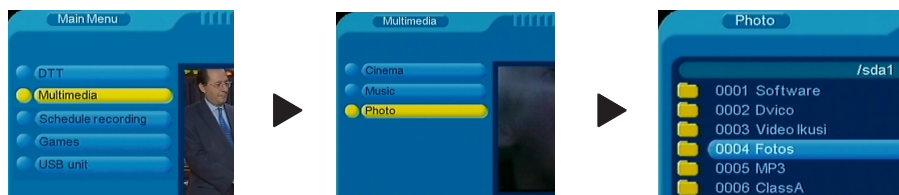
Use the buttons on the remote control to carry out the following operations :

- Press ▲ / ▼ to highlight the folder
- Press OK to open the highlighted folder
- Press EXIT to return to the previous folder
- Press ▲ / ▼ to select the audio file
- Press OK to start playback of the audio file
- Press FFW to fast-forward (x2, x4, x8, x20, x1)
- Press FRW to rewind (x2, x4, x8, x20, x1)
- Press Play/Pause to pause playback; press it again to continue
- Press PREV to play the previous file in the list; press NEXT to play the next one
- Press the yellow button to repeat playback of one or all of the files in the folder
- Press STOP to stop playback and return to the list of audio files
- Press EXIT several times to return to the main menu.



5.3 USB Photos

Connect the external device to the USB port. With the main menu on screen, press ▲ / ▼ to highlight the **Multimedia** option and then press OK. The screen will change to the **Multimedia** menu. Select the **Photos** option and press OK. The 'Photos' screen will appear, displaying all of the folders and image files stored on the external device :



Use the buttons on the remote control to carry out the following operations :

- Press ▲ / ▼ to highlight the folder
- Press OK to open the highlighted folder
- Press EXIT to return to the previous folder
- Press ▲ / ▼ to select the image file (photo)
- Press OK to view the photo
- Press ◀ / ▶ to turn the photo 90° to the left/right
- Press ▲ to flip the photo horizontally
- Press ▼ to flip it vertically
- Press PREV to view the previous photo in the list; press NEXT to view the next one; press OK to start an automatic slide show of the photos
- Press STOP to return to the list of photos
- Press EXIT several times to return to the main menu.



If the **Photo Effect** option on the 'System Settings' page of the **Configuration** menu (see page 15) is set to ON, the slide show will include artistic transition effects.

6. PVR (Personal Video Recorder)

Recording programmes

The PVR feature of the **SMARTmini** function allows you to record programmes, in digital format, to an external hard disk or flash drive. The disk should have its own power supply, and this device as well the flash drive should be formatted using the FAT32 file system.

- The recording is MPEG-2 compatible, and only includes the video and the main audio from the channel. Subtitles, teletext and multiple audio streams are not recorded.
- Check that the hard disk has enough free space. 1.5 GB should be available for each hour of recording. When the disk is full, recording stops.
- The recording is saved in the ".mpg" format, in a folder called PVR which is created automatically. Recorded files can be played using the **Cinema** option in the **Multimedia** menu (page 23).
- The maximum file size for recordings is 3.8 GB. If a recording exceeds this limit, a second file will be created.

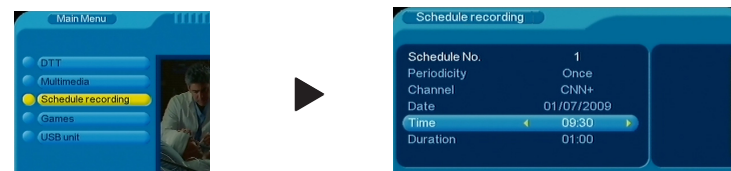
6.1 Instant recording

Connect the external device to the USB port. To start recording the programme that you are currently watching, just press the REC button. REC is displayed over the image. Press STOP to stop recording.

- **STATE DURATION**: Once the recording is started, you can state its duration between 15 and 120 min in 15 min steps. Press the yellow button and select the duration with the ◀ / ▶ buttons. Then press OK.

6.2 Scheduled recording

With the main menu on screen, press ▲ / ▼ to highlight the **Schedule recording** option and then press OK. The screen will change to the 'Schedule recording' page :



1. **Schedule Number** : highlight the line using the ▲ / ▼ buttons and press the ▶ button to go to the section on the right-hand side; using the ▲ / ▼ buttons, select the number you wish to assign to the schedule and press OK. Up to 8 schedules are possible.
2. **Periodicity** : highlight the line using the ▲ / ▼ buttons and then press the ◀ / ▶ buttons once or several times to choose between "Off", "Once", "Daily" and "Weekly". The "Off" option is used to deactivate or change a schedule.
3. **Channel** : highlight the line using the ▲ / ▼ buttons and then press ▶ to move to the section on the right-hand side; select the channel to schedule using ▲ / ▼ . Press OK to confirm.
4. **Date** : highlight the line using the ▲ / ▼ buttons and then press ▶ . The 'Calendar' page appears, in which you should select the schedule date in the same way as that used in the **Clock** option in the **Configuration** menu (see page 15). Press OK to confirm the settings. You are returned to the 'Schedule recording' page.
5. **Time** : highlight the line with the ▲ / ▼ buttons and enter the time for the schedule in the same way as that used in the **Clock** option. Press OK to confirm the settings.
6. **Duration** : highlight the line using the ▲ / ▼ buttons and enter the predicted duration of the programme that is being scheduled, using the ◀ / ▶ movement buttons and the number buttons. Press OK to confirm the duration.

Press EXIT to leave the 'Schedule recording' page and return to the main menu.



Do not forget to have the USB device (hard disk or flash drive) connected to the receiver at the scheduled time on the scheduled date.

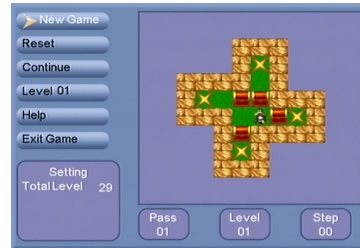
7. GAMES

The *SMARTmini* receiver includes some games for your entertainment. With the main menu on screen, press the ▲ or ▼ button on the remote control to highlight the *Games* option, and then press OK. The screen will change to the **Games** page, which includes the folder Embedded Games. Press OK again.

7.1 Box Man

Select BoxMan and press OK :

1. On the left-hand side the six available functions are shown, which are selected using the ▲ / ▼ buttons.
2. To start a game, select the option New Game and press OK. The functions that are greyed out cannot be used.
3. Press the ▲ , ▼ , ◀ , ▶ arrow buttons to move the character.
4. Press OK to pause the game.
5. Select Exit Game to end the game and return to the 'Embedded Games' page.



7.2 Tetris

Select Tetris and press OK :

1. On the left-hand side the five available functions are shown, which are selected using the ▲ / ▼ buttons.
2. Select Settings to adjust the speed and difficulty level.
3. To start a game, select the option Start Game and press OK.
4. Press the ◀ / ▶ buttons to move the object left or right.
5. Press the ▲ button to rotate the object.
6. Press the ▼ button to make the object fall faster.
7. Press OK to pause the game.
8. Select Main Menu to end the game and return to the previous menu. Here, select Exit Game to leave.



7.3 Hit Rat

Select Hit Rat. The gameplay screen will appear :

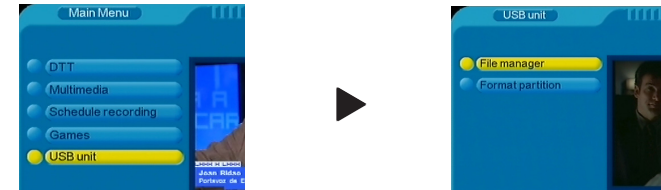
1. On the left-hand side the five available functions are shown, which are selected using the ▲ / ▼ buttons.
2. Set the Speed using the ◀ / ▶ buttons.
3. To start a game, select the option New Game and press OK.
4. The number buttons 1, 2, 3, 4, 5, 6, 7, 8, 9 are used to point to top-left, top-centre, top-right, middle-left, middle-centre, middle-right, bottom-left, bottom-centre, and bottom-right, respectively.
5. Press OK to pause the game.
6. Select Main Menu to end the game and return to the previous menu. Here, select Exit Game to leave.



8. USB UNIT

This main menu option is dedicated to managing the USB device (hard disk or flash drive) used for the PVR feature described on page 25.

Connect the device to the USB port. With the main menu on screen, press the ▲ or ▼ button on the remote control to highlight the *USB unit* option, and then press OK. The screen will change to the **USB unit** menu :



The menu presents two options : *File manager* and *Format partition*.

a) File manager

Using the ▲ / ▼ buttons, highlight the *File manager* option and press OK. The 'File manager' page will appear, showing all of the «.mpg» files in the PVR folder on the device, along with their duration and size. From here you can play or delete any of the files.

First you must select in the top part of the screen which of these actions to carry out. To do so, press the green button on the remote control once or more.

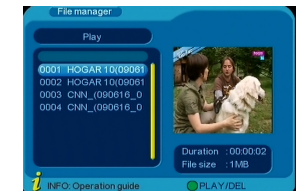
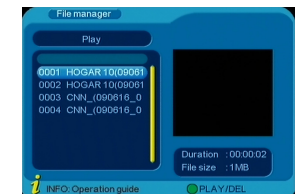
Select the "Play" action if you wish to monitor a file. Highlight the file using the ▲ / ▼ buttons and press OK. The file will play on the right-hand side of the window.

Press OK again to restart the playback or press STOP to stop it.

- Select the "Delete all" action if you wish to delete all of the files in the list. Press OK. A message will appear, asking you to wait, followed by another asking you to confirm.

- Select the "Delete one" action if you wish to delete a single file from the list. Highlight the file to delete using the ▲ / ▼ buttons and press OK. A message will appear, asking you to wait, followed by another asking you to confirm.

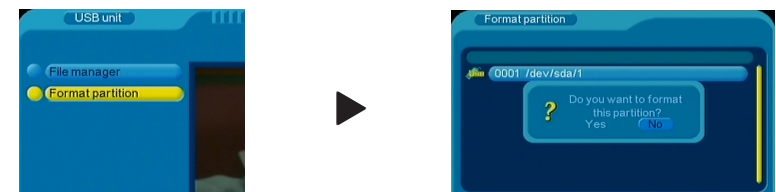
Press EXIT several times to return to the main menu.



b) Format partition

This option can be used to format the USB device used for the PVR feature with the FAT32 file system, if it has not already been done.

Connect the device to the USB port. Using the ▲ / ▼ buttons, highlight the *Format partition* option and press OK. A dialogue box will open asking you to confirm that you wish to format the device :



Upon formatting the USB device, all of the data stored on it will be permanently deleted.

9. TECHNICAL CHARACTERISTICS

RF input

- DVB-T FTA, MPEG-2, COFDM
- Frequency band : 170-858 MHz
- Signal level : 29-99 dB μ V
- COFDM modes : 2K and 8K
- Channel bandwidth : 6 / 7 / 8 MHz
- Loop-through bandwidth : 47-862 MHz
- Indoor antenna remote powering : +5 VDC

MPEG-2 decoding

- Standard MPEG-2 MP@HL

A/V inputs/outputs

- TV SCART : RGB out, PAL/NTSC out, stereo audio out
- VCR SCART : PAL/NTSC in/out, stereo audio in/out
- A/V jack : PAL/NTSC out, stereo audio out

Front panel

- Type-A female USB2 port
- Red/green LED indicator
- Infrared sensor

Rear panel

- 1x female IEC 169-2 (RF input)
- 1x male IEC 169-2 (RF loop-through output)
- 2x SCART (TV , VCR)
- 1x 3.5 mm mini-jack
- 1x DC jack (12V input)

Power supply

- AC in (power supply unit) : 100-240 V, ~50/60 Hz
- DC out (power supply unit) / DC in (receiver) : +12 VDC
- Consumption (receiver) : 5.5 W (max)

Accessories

- 44-button remote control
- Batteries : 2x 1.5 V (AAA - LR03)
- 1.2 m SCART cable [For Australian market : 1x 3.5 mm Jack - (3x) RCA cable]
- DC power supply with bipolar plug
- User manual

General

- Operating temperature : 0°C to +45°C
- Relative humidity : 25 to 75%
- Dimensions (width x height x depth) : 210 x 30 x 90 mm
- Weight : 270 g

Software

- Multi-language OSD
- List of favourite channels
- Electronic Programme Guide (EPG)
- Parental control (channel and configuration lock)
- Functions for ordering, renaming, sorting and deleting channels
- Subtitles and teletext (if available)
- Last channel memorised and previous channel button
- PAL/NTSC support
- Image zoom
- Scheduling of messages and channel tuning
- Quick software updating
- MPEG-2 recording to external hard disk or flash-drive
 - instant
 - scheduled
- Multimedia reader (MP3, JPEG, MPEG-2, MPEG-4, DivX 3.11)
- Games

10. APPENDIX

Troubleshooting

Problem	Possible cause	What to do
There is no image or sound	The TV set is not receiving a signal from the <i>SMARTmini</i> receiver or is not set up correctly	Check that all of the devices are turned on and connected correctly. Check that the television set is using the appropriate A/V input
There is an image but no sound	"Mute" is activated on the receiver or the TV set	Check the volume setting on the receiver and on the TV set
The image and the sound cut out temporarily or "freeze"	The signal received through the antenna is weak	Check the signal level indicated on the information screen for that channel (INFO button, pressed twice). Consult an antenna technician to ensure that the antenna orientation is correct.
A particular channel cannot be found	The corresponding signal through the antenna is very weak	Consult an antenna technician to ensure that the antenna is correctly installed
The remote control does not work	The batteries have run out	Change the batteries
	The remote control does not point correctly	Point the remote control at the front panel of the receiver
	There is an obstacle between the receiver and the remote control	Remove any obstacles preventing direct visual contact
The receiver does not work after having updated the software	The receiver has locked up	Wait a few minutes. If the receiver does not recover, unplug and plug the power supply
	This is normal. The update process deletes all of the channels and any personal settings.	Search for the channels and configure the receiver again
	The PIN number used to lock channels has been lost	Use the "Software update" option. You will have to search for the channels and configure the receiver again, using the default PIN number, "0000".

Technical Assistance

If you experience any doubts or difficulties using your *SMARTmini* receiver, contact the establishment where you purchased the device. Do not forget to present the sales receipt.

CE Marking

In reproducing the CE marking, IKUSI guarantees compliance, of both the *SMARTmini* receiver and the supplied power supply, with all corresponding regulations in accordance with directives EMC 2004/108/EC and LVD 2006/95/EC.



Guarantee

Notwithstanding any claims presented to the direct reseller of the product, IKUSI offers the user of the *SMARTmini* receiver a guarantee of two years starting on the date of the sales invoice, validated through the presentation of the sales document.

During the period of the guarantee, IKUSI will take care of any faults caused by defects of materials or manufacture, repairing the receiver or replacing it for another which corresponds to the current equivalent technology. The guarantee does not cover breakdowns or defects caused by the incorrect use of the device or the failure to follow the instructions detailed in this user manual.

The guarantee does not cover any claims other than the aforementioned; in particular, the guarantee does not cover the services provided by the authorised reseller (e.g. installation, configuration, software updates) nor repairs for any damage or any harm that the client or any third party may suffer as a result of the installation or operation of the receiver, lightning strikes or other natural phenomena.

Alphabetical index

A

Active antenna	15
Aspect ratio	13

B

Brightness of image	13
---------------------------	----

C

Changing channel	19
Channel information	20
Colour system	13
Configuration	13
Connections	5
antenna	5
multimedia USB devices	7
music centre	6
power supply	7
television set	6
video projector	6
Contrast of image	13

D

Deleting a channel	11
Deleting all channels	12

E

EPG (programme guide)	20
-----------------------------	----

F

Factory settings	17
Favourite channel, create	11

G

Games	26
-------------	----

L

Language	
audio	20
OSD	14
subtitles	22
List of channels	19
List of favourite channels	19

M

Moving a channel in the list	11
------------------------------------	----

O

Ordering the channels	12
OSD	14

P

Panel description	4
Parental lock	11
Photo Effect	15
PIN number	17
Playing audio	23
Playing video	23

R

Radio, listening	19
Recording programmes	25
Remote control	
function of the buttons	8
preparing	5
Renaming a channel	11
Return to previous channel	20

S

Safety instructions	2
Saturation of image colour	13
Scheduling	16
channels	16
messages	16
recordings	25
turning off the receiver	16
turning on the receiver	16
Searching for channels	10
Sorting channels	12
Sound	
muting	19
raise/lower volume	19
Subtitles	22
System clock	15
System setup	14

T

Technical characteristics	28
Teletext	22
Time of the system	15
Time on screen	14
Transparency of OSD	14
Troubleshooting	29
Turning off the receiver	7
disconnecting from the mains	7
standby mode	7
Turning on the receiver	7
TV image	13

U

Updating software	18
USB unit	27
file manager	27
formatting a partition	27

V

Versions of SW and HW	18
Video output signal	13
Viewing photos	24

Z

Zoom, changing level	20
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IKUSI - Ángel Iglesias, S.A.

Paseo Miramón, 170
20009 San Sebastián
SPAIN

Tel.: +34 943 44 88 00

Fax: +34 943 44 88 11

www.ikusi.com

