



# JVC

ENGLISH

## TU-DB1SU

DIGITAL TERRESTRIAL SET TOP BOX

INSTRUCTIONS



**DVB**<sup>®</sup>  
Digital Video  
Broadcasting

*Trade Mark of the DVB Digital Video Broadcasting  
Project (1991 to 1996) Number: 3205*

# CONTENTS

<b>Safety Precautions</b>	<b>2</b>
<b>In the box</b>	<b>3</b>
<b>Over Air Download</b>	<b>3</b>
<b>STB buttons</b>	<b>4</b>
<b>Remote control buttons</b>	<b>5</b>
<b>Preparation</b>	<b>7</b>
Connections	7
Switching on	8
Initial settings	8
<b>Everyday Operation</b>	<b>9</b>
Changing Channels	9
Channel List	10
Electronic Programme Guide	10
Digital Teletext	11
Widescreen	12
<b>Advanced Operation</b>	<b>12</b>
Configuring Your Receiver	12
Editing The Channel List	13
Channel and Menu Protection	14
Favourite Channels	15
Programme Reminders and Timers	15
Installation	16
<b>Specification</b>	<b>18</b>
<b>Connecting the external devices</b>	<b>19</b>
<b>Troubleshooting Guide</b>	<b>20</b>

# SAFETY PRECAUTIONS

## **POWER**

Always use the provided AC adapter.

Operate only from the power source specified (AC 100-240 V,50/60Hz) on the AC adapter.

In using, the AC adapter get heat on the surface of the case. It is normal, not defective.

Do not be covered with any material on case of AC adapter while it is in operation. Leave the 15 cm space(minimum) around the AC adapter.

The rating information and safety caution of the AC adapter are on its case.

## **LEADS**

Ensure the power supply lead, and all other leads, are positioned so they are not likely to be walked on or pinched by things placed on or against them. Pay particular attention to the power lead, where it enters the mains plug and where it comes out of the STB. Do not connect or adjust leads when the STB is plugged in.

## **TEMPERATURE AND MOISTURE**

Do not leave or use the STB in a hot, cold or humid area. Do not allow the STB to get wet - from drips or splashes - as this may be dangerous. Do not place water-filled objects such as flower vases, on top of the STB.

## **VENTILATION**

Slots and openings in the STB cover are for ventilation. Do not cover or block them as this could lead to overheating.

## **CLEANING**

Unplug the STB before it is cleaned. Use a lightly dampened cloth only. Do not use liquid or aerosol cleaners.

## **HEAT AND FLAMES**

The receiver should not be placed near to naked flames or sources of intense heat, such as an electric fire. Ensure that no naked flames sources, such as lighted candles, are placed on top of the STB.

## **LIGHTNING**

Unplug your STB from the wall socket if there is a storm or lightning, or if it is to be unused for a long time.

## **REPLACEMENT PARTS**

If your STB needs a replacement part, ensure the person undertaking the repair uses parts which are specified by the manufacturer or have the same specifications as the original part. Other parts may cause a fire, electric shock or other hazards.

## **BATTERY DISPOSAL**

Please ensure that exhausted batteries from the remote control handset are disposed of safely.

## **SERVICING**

Ensure the person who services your STB is qualified to do so. Do not remove the cover yourself - you could get an electric shock.

We are proud to offer a high-quality product. To keep this level of quality, your STB should be serviced at a JVC authorised service centre.

## IN THE BOX

**Thank you for buying this JVC Digital Terrestrial Set Top Box.**

**Inside your package you should have:**

Digital Terrestrial Set Top Box (STB) receiver

AC adaptor x1

Remote control unit: RM-C1890S

Dry battery for the remote control unit AA (R06) x2

Instruction book

Warranty Card

Aerial cable x1

Scart cable x1

## OVER AIR DOWNLOAD

OverAir Download (OAD): To ensure that your STB always has the most up to date information. Please ensure that after use it is set to its standby mode. The **STB** automatically powers up at 3AM each day and searches for any new information which may be broadcast and will download this to your receiver automatically. This operation will normally take approximately 30 seconds.

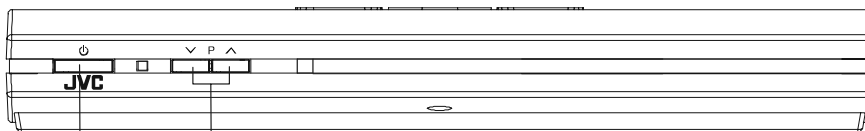
If you have an important recording to make at 3AM which must not have a 30 second interrupt then you can disable the auto OAD search by performing the following:

1. Press Menu button and using the up / down buttons to choose Configuration and press the OK button,
2. Use the up and down buttons to choose "RECEIVER UPGRADE" and press OK button.
3. Using the left / right button change function from Enable to Disable.
4. Press OK button then MENU and MENU to return to Normal operation.

Do not forget to re enable the automatic OAD function after you have made your recording by repeating the above instructions but this time selecting ENABLE.

# RECEIVER BUTTONS

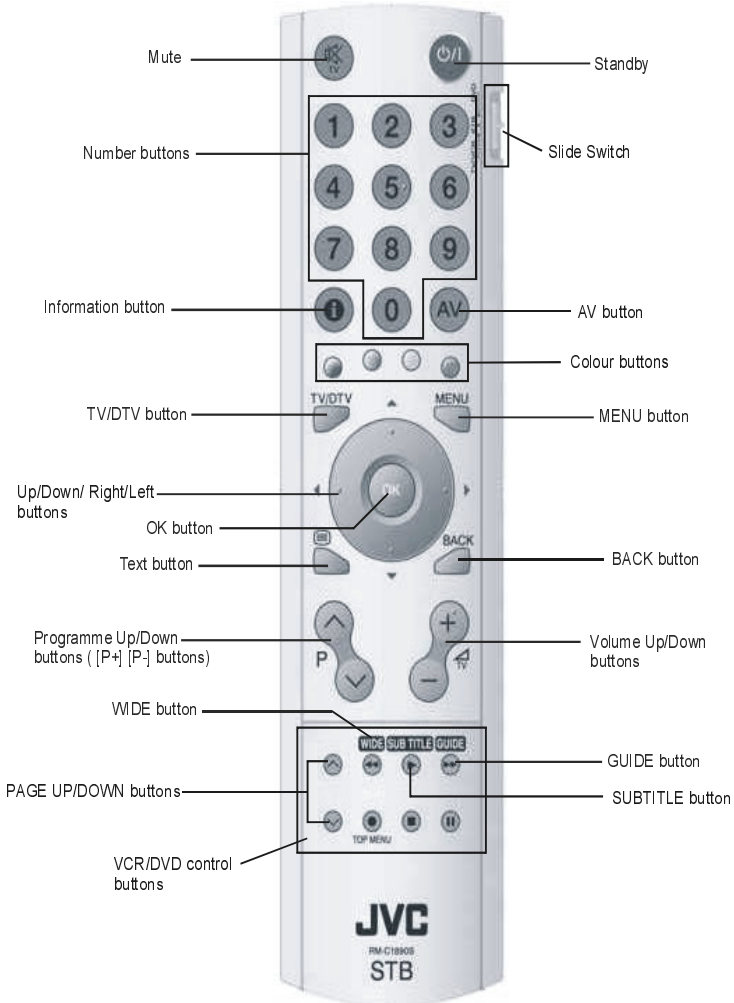
Front:



Standby button

Program down/up buttons

# REMOTE CONTROL BUTTONS



## REMOTE CONTROL BUTTONS

### **To operate this STB:**

Set the Slide Switch to STB position.

For details of the use of each buttons, see each section's explanation.

Note: Volume-/+ buttons and the Mute button work for the volume from the TV.

### **To operate a JVC brand TV or VCR:**

Set the Slide Switch to the TV/VCR position.

Pressing a button that looks the same as the device's original remote control button has the same effect as the original remote control.

Note: Even you operating a JVC brand TV or VCR some buttons may not work.

### **To operate a JVC brand DVD player:**

Set the Slide Switch to the DVD position.

Pressing a button that looks the same as the device's original remote control button has the same effect as the original remote control.

Note: Even you operating a JVC brand DVD player some buttons may not work.

# PREPARATION

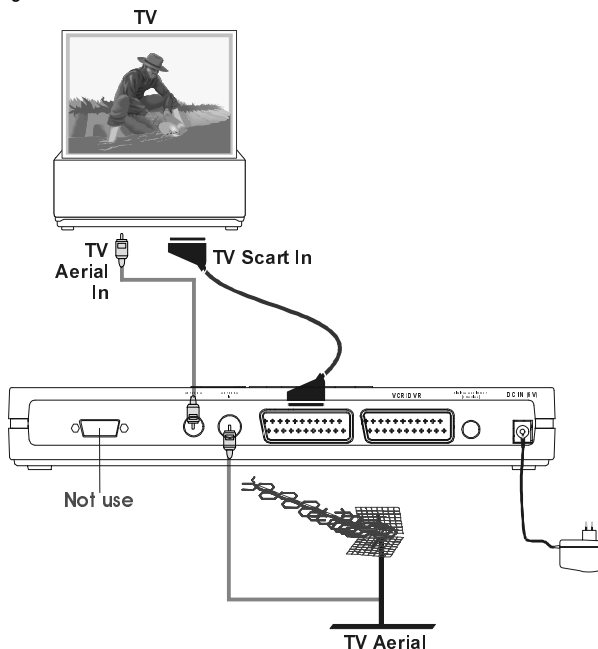
## Connections

Place your receiver on a firm, level surface with at least a 10cm gap around all sides of the case and in a position convenient for connection to your television, a mains power outlet and a TV aerial wall outlet (or the 'flying lead' from your TV aerial, as appropriate).

Please refer to the Safety Precautions on page 2.

Turn off your television at the mains and disconnect the lead going to the aerial wall outlet (or the flying aerial lead) and connect this to the ANTENNA IN socket on the rear of the receiver. Connect the aerial cable supplied from the TV OUT socket on the receiver to the TV set's aerial socket.

Connect the TV SCART socket on the rear of the receiver to a suitable SCART socket on your television. There may be more than one SCART socket on your television and, if unsure which to use, you should refer to its manual for guidance.



If you have a VCR or other equipment connected to your television, please connect the receiver as described here and refer the "Connecting the external devices" on page 19.

Connecting the AC adapter to the DC IN.

Finally, plug the receiver into the mains outlet, then the power lamp lights to red.

Inserting the batteries into the remote control handset.

Remove the battery compartment cover from the rear of the remote control handset by lifting the catch at one side. Insert two AA(R6) sized batteries, taking care to observe the correct orientation as marked on the inside of the compartment. Replace the compartment cover.



## PREPARATION

### Switching on

Turn on your TV set and select the SCART input (with the AV key, or similar, on the television remote control). Press the [STANDBY] key on the remote control handset. The power lamp change to green and the receiver's menu will be seen on the TV screen.

If you do not see the receiver's menu on the television screen, press the AV button on your TV remote control until you see the First Time Installation menu.

### Initial settings

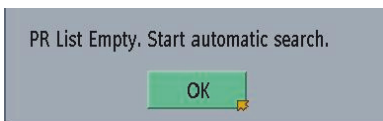
Because this is the first time that the receiver has been used, there are no channels stored in the receiver's memory and the First Time Installation menu is displayed on the screen.

First you have to choose the country and language using UP/DOWN/LEFT/RIGHT keys. Then you have to press OK. As you press OK, the TV Type selection screen is displayed.



You should select the type of TV set you have connected to the STB. Press the [LEFT] or [RIGHT] keys on the remote control handset to switch the indicator on the screen to show either 16:9, if you have a 16:9 or 'widescreen' TV, or to 4:3 if you have a standard TV set. Then press [OK] to start the installation process. The next menu will appear.

Using the [LEFT] or [RIGHT] keys on the remote control, make sure YES, and press the [OK] key to start the automatic search.



The receiver will automatically tune to the UHF transmission channels 21 to 68 looking for digital terrestrial TV broadcasts and displaying the names of channels found. This process will take about five minutes.

When the search is finished, the first channel of the channel list and the information banner is displayed you can now watch digital terrestrial broadcasting, selecting the channel you require as described in the next section.

### HINT

**Depending on the reception conditions in your particular area, you may find that the list of channels found includes one or more repeated names. This is because the receiver may detect and store some channels, including those it cannot receive clearly, from adjacent areas alongside the strong channels from a transmitter nearby. This is not a problem and the weaker channels can be deleted from the receiver later, as described in - ADVANCED OPERATION - Editing the channel list/PR list on page 13.**

If no digital terrestrial television broadcasts are found the receiver will display a message:



You should then refer to the Troubleshooting Guide on page 20 to establish the cause of the problem.

When you have finished watching digital terrestrial broadcasting, you may wish to switch the receiver to standby to save power - although the receiver can remain powered up continuously, even when the television is turned off, without harm to the television or itself.

#### Hint

***In standby, the receiver still consumes power and thereby contributes to air and water pollution and the exhaustion of the World's natural resources. Overnight, or when your receiver is not going to be used for long periods of time, you can turn it off at the mains and this will save energy (and save you money). You will not have to re-install the receiver when it is turned on again.***

## EVERYDAY OPERATION

While using the **STB** to the full there are great many buttons to use in different situations. Many of the menu screens displayed by the receiver have reminders as to which keys do what, at the base of the screen. In addition, many screens have further help available which is displayed when the [i] key is pressed, as prompted at the bottom right of the screen.

Providing your TV set SCART socket has switch control, pressing the [TV/DTV] key at any time while watching television programmes will switch the TV set between displaying the digital terrestrial television programme and its normal analogue television reception.

## CHANGING CHANNELS

You can choose the channel by using the P<sub>v</sub>/^ buttons or the number buttons.

When using the number buttons, enter the programme number as follows.

Example: PR6 → press 6, PR12 → press 12 , PR123 →press 1,2 and 3.

#### Hint

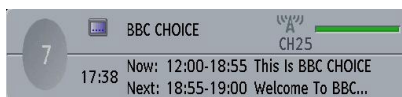
***The channel list numbers are assigned by the broadcasters. Because not all channels are broadcast free-to-air and stored by the receiver, the channel list numbers do not run continuously. The fifteenth channel in the list, for example, may not be channel number 15 but channel number 17.***

#### Hint

***If you enter a number which does not correspond to a stored channel, the next valid channel number is selected instead. If you enter a number greater than the highest numbered channel in the channel list, the receiver will select the last channel in the list.***

#### Information Banner

Whenever you change channel, using the [P+] and [P-] keys or the number keys, the receiver displays the channel picture along with an information banner at the bottom of the screen. This will remain on the screen for approximately three seconds. The information banner can also be displayed at any time while watching TV by pressing the [i] key on the remote control. Pressing the [i] key again removes the banner.




#### Hint

***Not all channels broadcast the programme data. If the name and times of the programme is not available then 'No Information' is displayed in the information banner.***

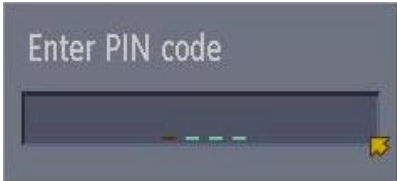
The information banner gives a number of facts on the channel selected and the programmes on it. The name of the channel is displayed, along with its channel list number and an indication of the strength of the signal received on this tuning channel.

The name and the start and finish time of the programme currently showing on the selected channel are given, and the current time.

Icons are also displayed in the information banner and if this channel is a favourite channel (see - ADVANCED OPERATION - Favourite Channels on page 15).

favorite channel icon 

If the selected channel is locked (see - ADVANCED OPERATION - Channel Protection on page 14), you must enter the correct four digit code to view the channel.

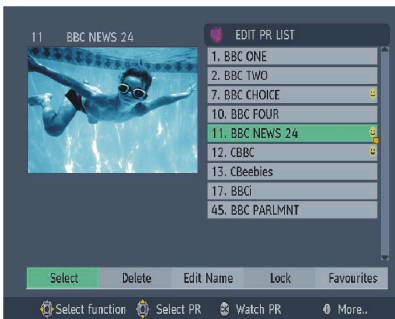


### **CHANNEL LIST**

You can also select the required channel directly from the on-screen channel list. This is displayed using the receiver's Main Menu. First bring up the menu with the [MENU] key on the remote control handset.



Using the [UP] or [DOWN] keys on the remote control, choose the Edit PR List and press the [OK] key, to display the channel list.



Here, you can preview any channel stored by the receiver before viewing it full screen. The complete list of channels is displayed in pages of 11 channels at a time, with their channel list number and a favourite channel icon if appropriate (see - ADVANCED OPERATION - Favourite Channels). The name and a quarter-screen image of the channel last viewed is displayed in the top right of the screen.

Using the [UP] or [DOWN] keys, the highlight is moved through the list to the channel required. Pressing [OK] now changes the quarter-screen display to show the highlighted channel.

### **Hint**

***From the Channel List screen, it is possible to edit the channel list, including changing the name of stored channels or deleting them. Editing the list is covered in - ADVANCED OPERATION - Editing The Channel List on page 13. When using the Channel List to select channels, use the [LEFT] or [RIGHT] keys to ensure that the highlighted button at the bottom of the screen is SELECT, so no editing functions are accidentally begun.***

When you leave the Channel List screen, by pressing [MENU] the channel showing on the quarter screen is selected for normal viewing on the whole screen.

### **ELECTRONIC PROGRAMME GUIDE**

The fourth way of selecting a channel is with the electronic programme guide, or EPG. The EPG is accessed by pressing the Guide key, [GUIDE]. Like the Channel List, the EPG screen displays a list of the stored channels along with information on what programmes are being broadcast.

Depending on the area where you are located, you will have either 7 days EPG or Now and Next EPG.

The EPG views information about services on a 7 day basis.



The channels are listed at the left of the screen, each with the 'current event' (the name of the programme showing at that time) and the 'next events' (the following programmes). When the EPG screen is first displayed, the channel last watched is highlighted in the list of channels.

Details of the selected programme on that channel (the name of the programme and, typically, a synopsis with details of the stars involved, the teams playing, or similar information) along with the start and finish times are displayed at the bottom of the screen.

Moving the highlight through the list of channels using the [UP] and [DOWN] keys will change the programme details in the text window to reflect the channel highlighted.

You can leave the EPG screen, by pressing the [GUIDE] key again, or the [MENU] key.

### Hint

***Not all channels broadcast all the programme information data. Some channels do not provide the current and next event data and/or the programme details. In this case the programme names and/or the details are not displayed. This is not a fault with your receiver.***

While the EPG screen is displayed, pressing the [UP] or [DOWN] keys changes the time and displays the highlighted channel's programme details for the next events in time in the text window. As before, you can browse through the list, checking the programmes coming up next on all the channels.

Pressing the [OK] key while the next event details are displayed will set a reminder to watch that programme. The scheduled icon will appear.

You can return to the list of channels by pressing the [LEFT] key or to the time and short event description list by pressing [RIGHT] key.

You can change the day by pressing [BLUE] or [YELLOW] keys. Pressing [YELLOW] will display events of the next day. Pressing [BLUE] will display the events of the previous day.

You can return to normal television viewing (to watch the channel last selected in the EPG screen) by pressing the [GUIDE] key again, or the [MENU] key.

## DIGITAL TELETEXT

Many digital terrestrial television channels not only broadcast pictures and sound for programmes but also pages of information on the programmes, the weather, news and many other topics. This digital teletext can be displayed by the receiver.

Some channels are entirely given over to digital teletext and carry no normal TV programme at all. These dedicated digital teletext channels will not give a quarter-screen image in the EPG or the Channel List screen. When such a channel is selected, after a brief pause, they will usually display the opening page of information automatically.

Other channels have digital teletext pages broadcast alongside the television programme and often include a reduced-size broadcast picture within digital teletext pages. These usually require the [TEXT] button to be pressed to activate the digital teletext pages.

In both cases, moving through the different pages of information is accomplished in a variety of ways, dependent on the individual broadcasters, but including use of the [UP], [DOWN], [LEFT], [RIGHT] and [OK] keys to select items from on-screen menus, and the coloured keys to jump directly to particular pages.

You can exit any digital teletext channel by changing channel in any of the normal ways. You can leave the digital teletext function of a combined digital teletext/programme channel, to return to normal television viewing of that channel, by pressing the [TEXT] key.

### Hint

***When you press the (i) button or (MENU) button, information banner or menu appears. When you press those buttons again, the previous digital teletext screen is displayed. When you press the (Text) button while subtitles are on, the subtitles are turned off.***

***When you press the (Text) button again, the digital teletext screen is displayed.***

## WIDESCREEN

TV sets are available with screens of the standard (4:3) format and widescreen (16:9) format. When you first installed your receiver you specified the format of the connected TV (this can now be altered if necessary; see Section 3 - ADVANCED OPERATION - Configuring Your Receiver).

Digital terrestrial television broadcasts are also made in both standard and widescreen formats. In particular, films and dramas tend to be broadcast in widescreen format to closer emulate the cinema experience, but even some news bulletins are widescreen. To help get the most from both TV set and programme when a widescreen film is watched on a standard TV, or a standard broadcast is viewed on a widescreen set, the receiver includes the [WIDE] key.

So long as the receiver has been correctly set up for the TV set connected, a widescreen programme will always be displayed correctly on a widescreen set, and a standard format programme will correctly fill the screen of a standard format TV.

With a standard format TV displaying a widescreen programme, the [WIDE] key switches between displaying the picture with black bars at the top and bottom of the screen, and filling the whole height of the screen but cropping the sides off according to instructions broadcast with the programme (called 'pan and scan').

The effect of the [WIDE] key on the picture display is cancelled by pressing [WIDE] again, changing channel or turning the receiver to standby.

### **Subtitle**

With Digital terrestrial broadcasting, some programmes are broadcast with subtitles.

Subtitles can be displayed when watching these programmes.

Subtitle ON

Subtitle OFF

### **TV / DTV Key**

If there is no connected VCR device, The TV/DTV key is used to switch TV and DIGITAL TV modes. When the set-top box is in TV mode, the TV scart is not switched and the TV operates in analog mode.

When the set-top box is in DIGITAL TV mode, this time the TV scart is switched on and the TV is switched to AV/RGB mode. And also, when there is no menu on the screen, pressing TV/DTV key will manually toggle the set top box between VCR mode and TV mode. In VCR mode set top box will display the output of VCR device, In TV mode set top box displays its own outputs. If box scart mode is not changed by pressing TV/DTV key, scart mode will be automatically detected. (For example if a dvd player is connected to VCR scart and powered on, then the set top box will immediately switch to VCR mode. The set top box will switch to TV mode if dvd player is switched off)

## ADVANCED OPERATION

### CONFIGURING YOUR RECEIVER

Many aspects of your receiver can be set up to reflect your circumstances and preferences. The Configuration menu screen is accessed from the Main Menu. Press the [MENU] key to display the Main Menu and the [DOWN] key twice to highlight Configuration, then press [OK] to display the Configuration menu screen.



The various configuration functions are displayed in a list, along with a quarter-screen image of the currently selected channel. You can select a function by highlighting the corresponding menu line with the [UP] or [DOWN] keys. There are seven configuration functions.

## **SYSTEM**

Use LEFT/RIGHT buttons to toggle System Menu Language. Press OK on the preferred language.

## **COUNTRY**

Use LEFT/RIGHT buttons to toggle Country options. Press OK on the preferred Country.

## **Audio Language**

Digital terrestrial television channels can broadcast simultaneous soundtracks in more than one language. This function selects which language soundtrack you will hear when switching to a channel broadcasting with multiple soundtracks. See also Section 2 - EVERYDAY OPERATION - Audio Control.

Highlight the Audio Language line in the Configuration menu and use the [LEFT] or [RIGHT] keys to cycle through the language options.

Return No Menu to normal TV viewing by pressing the [MENU] key.

## **Subtitle Language**

Digital terrestrial television channels can broadcast with subtitles displayed on-screen for the hard-of-hearing. This function selects the desired subtitle language and enables the automatic display of subtitles whenever subtitle information is broadcast.

Highlight the Subtitle line in the Configuration menu and use the [LEFT] or [RIGHT] keys to cycle through three language options of English, Welsh or Garic.

Return NO MENU to normal TV viewing by pressing the [MENU] key.

## **TV TYPE**

Digital terrestrial television channels can broadcast programmes in a widescreen format which must be output differently to normal and widescreen TV sets. This function tells the receiver the screen format of the TV connected so that broadcasts are displayed correctly.

Highlight the TV Type line in the Configuration menu and use the [LEFT] or [RIGHT] keys to select 4:3 if you have a standard TV set connected or 16:9 if it is a widescreen TV. This function duplicates the selection made at the time of first installation (see 1 - PREPARATION - Tuning In) and can be used if you change TV sets. Return to normal TV viewing by pressing the [MENU] key.

## **TV OUT**

The receiver can output either an RGB/Y/C, Video signal from the TV SCART on the rear panel. Although the RGB format results in a better quality picture, not all equipment - particularly some VCRs - can cope with an RGB signal (see Appendix C - Connecting A VCR).

## **Enter PIN code:**

Use UP / DOWN buttons to go to Enter PIN code option. Use OK button to enter new password. New Password Menu is displayed. Use NUMBER buttons to enter new password. New Password is asked twice for confirmation.

## **ANTENNA POWER SUPPLY**

Use UP/DOWN buttons to go to Antenna Power Supply Setting. The setting will be OFF as default. If you want connect the receiver to an active antenna that is an instrument amplifying the received signal then you must change the Antenna Power Supply setting to ON. The DVB-T receiver can supply 5V DC at 30mA maximum. **Please do not use a normal passive antenna ( do not short circuit the ANT IN connector) while Antenna Power Supply setting is ON. This may cause breakdown in your DVB-T receiver.**

## **EDITING THE CHANNEL LIST**

The digital terrestrial television channels found by the receiver when first installed are stored in its memory as a channel list. This list can be altered and amended to remove unwanted channels and to suit your own preferences.

First bring up the Main Menu with the [MENU] key on the remote control handset. Then, using the [UP] or [DOWN] keys on the remote control, choose the Edit PR list and press the [OK] key, to display the Channel List.



The Channel List screen displays the list of channels in the receiver's memory, with a quarter-screen image window showing the selected channel, and can be used to change channels for viewing, delete channels from the memory, edit the name of the channel as it appears in the list and on-screen, lock a channel against viewing by younger members of the family, and set up favourite channels.

Channel List functions are carried out on one channel at a time. The channel to be affected is first highlighted in the list using the [UP] or [DOWN] keys.

### **SELECT**

This function selects a channel for viewing and is an alternative to using the [P+] and [P-] keys, channel number or EPG. Highlight the channel to be viewed, highlight the OK button at the base of the screen using the [LEFT] or [RIGHT] keys and press [OK]. The highlighted channel now appears in the image window and you can leave the Channel List to view the channel by pressing [MENU].

### **DELETE**

The initial installation of the DVB - T3 receiver can produce duplicate entries in the channel list from transmitters operating at different frequencies in adjacent areas, and you may wish to delete these duplicate entries from the list. In addition, other channels which you do not want in the list.

Highlight the channel to be deleted, highlight the DELETE button at the base of the screen using the [LEFT] or [RIGHT] keys, and press [OK]. The highlighted channel is deleted from the list.

You can now perform further editing on the channel list, or return to normal broadcast viewing by pressing the [MENU] key.

### **EDIT NAME**

The channel names which appear in the channel list and the information banner are assigned by the broadcasters and some longer names are abbreviated to become unrecognisable. You can edit the names to suit your preferences with the Edit Name function.

Highlight the channel to be renamed, highlight the EDIT NAME button at the base of the screen using the [LEFT] or [RIGHT] keys, and press [OK]. The highlighted channel name appears on the right of the screen with the first character highlighted by a cursor. Any of the 15 characters that make up a channel name can be highlighted using the [LEFT] or [RIGHT] keys and the highlighted character changed by pressing the [UP] or [DOWN] keys to cycle through the alphabet, numbers and other characters available.

When the required changes have been made, pressing [OK] stores the new name and returns to the Channel List screen. Alternatively, pressing [MENU] will abandon the name change and return to the previous name.

You can now perform further editing on the channel list, or return to normal broadcast viewing by pressing the [MENU] key.

Using the other two functions of the Channel List menu screen - LOCK and FAVOURITES - is dealt with in the next sections.

### **Hint**

*You can also enter a channel name using the number keys on the remote control. Each key represents several letters and pressing a key several times will enter each letter (in both capitals and lower case), and the number, in turn, in the character position marked by the cursor. The zero key enters all the punctuation marks available and a blank space. With practise, this is a very quick means of entering the required letters into the channel name.*

## **CHANNEL AND MENU PROTECTION**

### **CHANNEL LOCK**

Some channels broadcast material which you do not want younger members of the family to watch. Any channel can be 'locked' so that it cannot be selected for viewing without first a four-digit PIN code being entered. In this way any channel not suitable for younger viewers can be protected.

The channel lock is applied with the Channel List menu. Press the [MENU] key on the remote control handset to display the Main Menu and then, using the [UP] or [DOWN] keys on the remote control, choose the Edit PR list and press the [OK] key.

Highlight the channel to be locked using the [UP] or [DOWN] keys. Now select the LOCK button at the base of the screen with the [LEFT] or [RIGHT] keys and press [OK].

A window requesting the PIN code is displayed and the four-digit code should be entered using the number keys on the remote control, followed by the [OK] key. A lock icon is then displayed alongside the channel name in the channel list.

### **Hint**

*The PIN is factory set to 0000. This code should be reset (as described below) to another sequence of numbers, known only to you, when you have finished setting up the receiver.*

You can now leave the Channel List screen and return to normal TV viewing by pressing [MENU]. Any attempt to change channel to the locked channel will now display the same window requesting the PIN code and the channel will only be displayed on entry of the correct code. To remove the lock on a channel, repeat the same process as to lock the channel.

## FAVOURITE CHANNELS

There will be some channels that you tend to watch more often and some only occasionally. Although some duplicate channels you may want to delete from the channel list, others although not watched frequently, you will not want to do away with altogether. The favourite mode allows the most-watched channels to be accessed more easily, leaving the less-watched channels accessible but out of the way.

When the favourite mode is activated, the [P+] and [P-] keys cycle through the favourite channels only and the EPG will list the favourite channels only (other channels can still be accessed by channel list number or from the Channel List menu screen).

Any channel can be a favourite channel and the Channel List menu is used to label those channels you want as favourites.

Display the Channel List menu screen by highlighting Channel List on the Main Menu and pressing [OK].



Use the [LEFT] or [RIGHT] keys to highlight the FAVOURITE button at the base of the screen and then, in turn, highlight each channel that is required to be a favourite channel, using the [UP] and [DOWN] keys (and the [PAGE UP] or [PAGE DOWN] keys), and press [OK]. A channel selected as a favourite appears in the main channel list with a favourites icon against the channel name.



A channel can have this icon removed by repeating this procedure, to remove the icon. Leave the Channel List menu by pressing [MENU]. Once the required channels have been marked as favourite channels, the favourite mode can be activated to allow easy access to them. Press the [MENU] key to display the Main Menu, the [DOWN] key to highlight Configuration, and press [OK] to display the Configuration screen. Press the [DOWN] key to highlight the Favourite Mode line and using the [LEFT] or [RIGHT] keys change the setting from Off to On.

When you leave the Configuration menu by pressing [MENU] the favourite mode is activated. Now, changing channel using the [P+] or [P-] keys will switch to only those channels marked as favourites in the channel list.

You can still access all the channels in the channel list by pressing in their channel list number or by selection from the Channel List in the Edit PR List. Alternatively you can switch off the favourite mode from the Favourite Mode line of the Configuration menu.

### Hint

***The favourite mode can only be activated if one or more channels in the channel list are marked as favourites. Similarly, if the favourite status is removed from all the channels in the Channel List, the favourite mode is turned off automatically.***

## PROGRAMME REMINDERS AND TIMERS

With the greatly extended channel choice that digital terrestrial television brings, it is all too easy to miss a favourite programme. The receiver has two facilities built in to help you make sure you catch all the TV shows you want.

### PROGRAMME REMINDERS

Programme reminders can be set to signal that a programme is about to start when you are watching another channel. A reminder is set from the Electronic Programme Guide screen.

Press the [GUIDE] key to display the EPG screen and press [RIGHT] to display the next programme details in the text window and highlight the name of the next programme in the list of channels. Press [OK] when a programme you want to watch is highlighted and the reminder icon is displayed against that programme's name.



You can exit the EPG screen in the normal way - pressing [GUIDE], [MENU]. Later, shortly before the programme is due to start, the receiver will display a reminder on the screen over the picture of the channel being viewed.

Use the [LEFT] or [RIGHT] keys to highlight the YES or NO buttons as appropriate and press [OK]. If you select the YES button, the receiver switches over to the reminder channel.

**Note:** Reminder events are ignored if any timer event is active at that time.

### EVENT TIMER

You can also set a timer to switch the receiver to any channel without your intervention. This is intended for making video recordings of programmes when you are out. If a single programme is to be recorded, the receiver can be left switched to the required channel and the timer set on the VCR. However, if two or more programmes on different channels are to be recorded then the receiver's own timer is set as well, to select the required channel when it is needed.

Display the Main Menu by pressing the [MENU] key and highlight and select the Timers line to display the Timer menu screen. Up to five separate timer events can be set and each is displayed in the Timer screen, showing the event number, the channel to be selected, the start time, end time, date and the mode - whether that event is active (and will be acted on) or not.

No.	Name	Start	End	Date	Mode
1	BBC ONE	00:00	00:00	01/01/2004	Inactive
2	BBC ONE	00:00	00:00	01/01/2004	Inactive
3	BBC ONE	00:00	00:00	01/01/2004	Inactive
4	BBC ONE	00:00	00:00	01/01/2004	Inactive
5	BBC ONE	00:00	00:00	01/01/2004	Inactive

At the bottom of the screen, there are three options: Change Mode, Edit timer settings, and More..

To set an event, highlight its mode button using the [UP] or [DOWN] keys and press [OK] to display the timer entry window. Here the five settings of channel name, start time, end time, date and frequency mode can be set. You can move freely between each setting using the [UP] and [DOWN] keys. The channel name is set using the [LEFT] or [RIGHT] keys to display the channel which broadcasts the programme to be recorded. The start time, end time and date are each set with the number keys on the remote control in 24-hour format. The frequency mode determines how often the receiver operates this event and is set with the [LEFT] or [RIGHT] keys to be either Once, Daily, or Weekly.

Name	BBC ONE
Start	21:00
End	22:00
Date	27/06/2004
Mode	Once

### Hint

**If an invalid number for the start or end times or the date is entered, the highest valid number is automatically entered in its place. So, entering 28:30 as the time will automatically change to 23:30, and a date of 15:14:2002 will change to 15:12:2002.**

Pressing [MENU] or [OK] returns to the Timer screen with the settings in place in the timer event list. The event mode is automatically set to Active and you can now return to normal viewing (press the [MENU] keys) and at the appointed time the receiver will switch over to the required channel and at the end of the event, switch the receiver to standby.

When the Timer screen is displayed, any event can be set to be Inactive (so it will not occur) or the channel, times and frequency mode altered by highlighting the event's Mode button and pressing [OK] as before.

You can exit the Timer screen and return to normal TV viewing by pressing [MENU].

### Hint

**If you are watching digital terrestrial TV at the time the timer event starts, a message is flashed onto the screen announcing that the receiver is 'Switching to timer channel' so you understand what is happening.**

## INSTALLATION

Although your receiver will not lose its settings or stored channels when switched off, you may wish to re-install the receiver because you have moved to a different area with different broadcast frequencies, you wish to reinstate a channel previously deleted from the channel list, or you want to watch new channels which have started broadcasting.

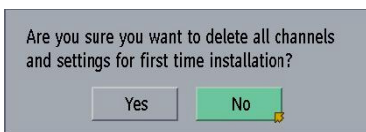
Press the [MENU] key to display the Main Menu and using the [UP] or [DOWN] keys, highlight the Installation line and press [OK] to display the Installation Menu.

You can either perform a First Time Installation, effectively resetting the receiver to its factory setting condition, or just search for channels.



### FIRST TIME INSTALLATION

To reset the receiver, highlight the First Time Installation line in the menu and press [OK]. A warning screen is displayed in case of accidental operation.

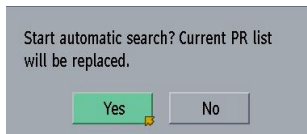


Highlight the YES button with the [LEFT] or [RIGHT] key and press [OK] to erase all the channels and settings and switch the receiver to standby. You can now start again as detailed in - PREPARATION - Initial settings on page 8.

### ADD CHANNELS

The receiver can search for channels automatically (searching all the broadcast frequencies for free-to-air channels) or manually (searching one specified broadcast frequency only for any channels to be found there).

To perform Automatic search, Select Automatic Search with the [UP] or [DOWN] keys and press [OK]. A warning message is displayed. This starts the automatic tuning process and searches through all the available broadcast frequencies for free-to-air channels. Previous channels will be replaced on automatic search.



If, alternatively, from the search options menu the Manual Search line is highlighted and [OK] pressed, the manual search screen is displayed.

Highlight the YES button with the [LEFT] or [RIGHT] key and press [OK] to start the automatic search.

This is for searching for digital channels on a single broadcast frequency. The frequency channel number (21-69) is entered in the box at the top left of the screen and the received signal level and signal quality can be observed on the two bar graphs at the bottom. When [OK] is pressed, the receiver searches that frequency and display a list of the channels found. Before returning to the Installation menu.

### Hint

***The bar graphs of signal quality and signal level give a good indication of whether any channels are likely to be found. If only the signal level graph shows a high value then it is likely that an analogue channel occupies that broadcast frequency. If the signal quality bar is high as well then it is a digital frequency and digital channels will probably be found.***

Again, channels which duplicate those already in the channel list are ignored. However, the manual channel search will find all channels on the broadcast frequency.

When either search is finished, press the [MENU] key to return to normal broadcast viewing, to watch the new digital terrestrial television channels found.

# SPECIFICATION

## **GENERAL**

Broad casting system	DVB-T 2k & 8k
Video system	PAL
Number of preset channels	200
Channel frequencies	47 - 858 Mhz
Stereo system	MPEG Layer I & II 32/44.1/48 KHz
Power requirements	DC 6V, AC adapter: 100 - 240V, 50/60 Hz

## **Terminals**

U/V Input	PAL type
U/V Output	PAL type
SCART-1 (TV)	RGB, Y/C, Video output and Audio output are available.
SCART-2 (Aux)	RGB, Y/C, Video output, Audio output and Video input are available.
Digital Audio Output	Coaxial
RS 232C (for service use only)	

## **Dimensions**

WxHxD (mm)	280 x 40 x 180 mm
Weight (kg)	700 gr

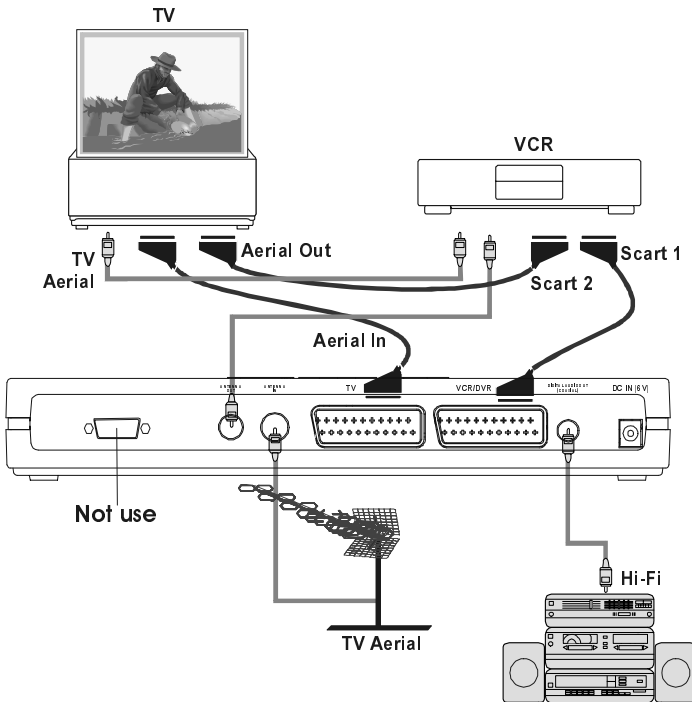
## CONNECTING THE EXTERNAL DEVICES

If your TV and VCR both have two scart sockets you can connect as follows. Unplug the aerial lead and connect this to the ANT IN socket on the rear of your receiver. Connect the aerial lead (supplied) from the LT OUT on the receiver to the ANT IN on the rear of the VCR. Then connect an aerial lead from the LT OUT on the VCR to the ANT IN socket on the rear of your TV.

If your VCR has only one scart socket, connect only Scart 1 to VCR.

Connect a scart lead from the TV SCART socket on the rear of the receiver to the SCART 1 socket on the rear of the TV.

Connect a scart lead from the VCR SCART to the SCART 1 on the VCR, and connect a scart lead from the SCART 2 on the VCR to the SCART 2 on the rear of the TV.

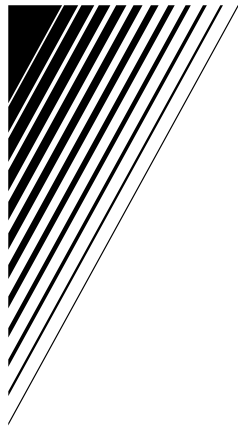


You can now record digital terrestrial television programmes by selecting SCART 1 on the VCR. The VCR will also be able to record analogue television channels in the usual way. Both live and recorded digital terrestrial television programmes can be viewed on the TV by selecting the TV's AV input.

## TROUBLESHOOTING GUIDE

If you experience problems with the receiver or its installation, in the first instance please read carefully the relevant sections of this User Guide and this Troubleshooting section.

<b>Problem</b>	<b>Possible cause</b>	<b>What to do</b>
Standby light not lit	Mains lead unplugged Mains fuse blown	Check mains lead Check fuse
No signal found	Aerial is disconnected Aerial is damaged/misaligned Out of digital signal area	Check aerial lead Check aerial Check with dealer
No picture or sound	Tuned to digital teletext channel	Retune to another channel
Scrambled channel message	Channel is scrambled	Select alternative channel
No response to remote control	Receiver off Remote control not aimed correctly Front panel obstructed Remote control batteries exhausted	Plug in and turn on receiver Aim remote control at front panel Check for obstructions Replace remote control batteries
Forgotten channel lock code		Re-install channels to cancel channel lock
The remote control will not operate your receiver	(1) The batteries in your remote control need replacing (2) There is an obstruction blocking the signal path between the remote control and the receiver	(1) Replace the batteries (2) Check that there is nothing in the way of the path between the remote control and the receiver
After moving the receiver to another room you find you are no longer able to receive the digital reception	The aerial feed former new point may come through a distribution system which may reduce the digital signal now Received by the receiver	Try a direct feed from the antenna



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