Contents

Unpacking ........................................... 2
Safety .................................................. 2
Preface .................................................. 2
Digital Satellite Services .............................. 2
Conditional Access ................................... 3
Smart Card ............................................ 3
Inserting the Smart Card ............................. 3
The Digital Satellite Decoder (DSD) .................... 4
Rear Panel Connections ................................ 4
Remote Control Unit .................................. 5
Replacing Batteries in the RCU ......................... 5
Getting Started ....................................... 6
Installation of the satellite dish and cabling to the decoder .. 6
Installation Indemnity .................................. 6
Setting-up the System ................................. 6
Switching on the decoder at the Mains .................... 6
Tuning Your TV ........................................ 6
Adding a Modern ....................................... 7
Standby and Normal Modes ............................ 7
Optional Decoder Connections ......................... 8
Introduction .......................................... 8
Hints to Quality TV System Configurations ............... 8
Decoder, TV (using SCART or RF Interfaces) ............ 8
Decoder, VCR, (SCART Interface), TV (SCART Interface), Hi-Fi .. 9
Decoder, VCR, TV, Hi-Fi (using RCA Connectors) ....... 11
Two Decoders, TV, (using AUX SCART and RF Interfaces) .. 12
RCU UHF Button Selection Functions ................... 12
Selecting Specific Services ............................ 13
Selecting Services Directly ............................ 13
Stepping through Services ............................ 13
Stepping using the RCU ................................ 13
Stepping using the Decoder Front Panel Keys ............ 13
Selecting Specific Services from the EPG ............... 13
Selecting Services from the Information Bar ............. 13
Controlling the Show ................................... 13
Volume Control using the RCU Keys ....................... 13
Volume Control using the Decoder Keys ................. 13
Mute .................................................... 14
Displaying Subtitles ................................... 14
Clock ................................................... 14
Selecting Soundtracks .................................. 14
Power Reset ........................................... 14
Signal Selection ....................................... 14
Open TV Electronic Programme Guide .................... 14
Using the EPG ........................................ 15
Open TV Information Bar ................................ 16
Reminders ............................................. 17
Parental Blocking ..................................... 17
Menu Navigation Route ................................ 18

Using Menus .......................................... 19
Soundtrack Options .................................... 19

Parental Guidance .................................... 20
Setting the Parental Level ............................ 20
Changing the Parental Pin Code ......................... 20
Information Box Display Period ......................... 20
Organising Service .................................... 20
Skip TV Services ..................................... 21
Sort TV Services ..................................... 21
Reset TV Services .................................... 21
Skip Audio Services ................................... 22
Sort Audio Services ................................... 22
Reset Audio Services ................................... 22
Full Rescan ............................................ 22
Mail Messages ........................................ 22
Advanced Options ..................................... 22
Change Dish Installation ............................... 22
Change LNB Settings ................................... 22
Set LNB Power ......................................... 22
Set LNB Frequency ..................................... 23
Change Manual Tuning Parameters ....................... 23
Tune DSD ............................................. 23
Reset to Factory Defaults .............................. 23
Signal Detection ....................................... 23
Information ............................................ 23
DSD Status ............................................ 23
CA Status ............................................. 24
TV Installation ........................................ 24
TV Type .............................................. 24
Aspect Ratio .......................................... 24
UHF Tuning ........................................... 24
Scart Source .......................................... 24
Scart Video Output ..................................... 24
Change Modern Settings (if fitted) ....................... 25
Local Time ............................................ 25
DSD Upgrade ........................................ 25
Troubleshooting ...................................... 26
Specification .......................................... 29
Multichoice DSTV Hotlines ............................. 30
Installation Settings ................................... 30
Notes .................................................. 31
UNPACKING

Ensure that the following items are included with the Digital Satellite Decoder (DSD):

1 x Remote Control Unit (RCU)
2 x AAA Batteries
1 x Flylead
1 x Mains Cable
1 x User Manual

SAFETY

This decoder exceeds International Safety Standards. Please read the following recommended safety precautions carefully.

MAINS SUPPLY: 210-250 V AC 50 Hz ONLY.

LIQUIDS: Keep liquids away from the decoder.

SMALL OBJECTS: Small objects, such as coins, must not be placed on the decoder as they could fall through the ventilation slots and cause serious damage.

CLEANING: Before cleaning, disconnect the decoder from the wall socket. Use a cloth lightly dampened with water (no solvents) to clean the exterior.

VENTILATION: Do not block the decoder ventilation slots. Ensure that free airflow is maintained around the decoder. NEVER stand the decoder on soft furnishings or carpets. Do not use or store the decoder where it is exposed to direct sunlight, or near a heater. Never stack other electronic equipment on top of the decoder.

ATTACHMENTS: Do not use any attachment that is not recommended by the manufacturer, as it may cause a hazard or damage the equipment.

CONNECTION TO THE SATELLITE DISH LOW NOISE BLOCK (LNB): The LNB connector cable has a voltage on its centre core. It is therefore recommended that the decoder is disconnected from the mains power before connecting or disconnecting this cable. FAILURE TO DO SO COULD DAMAGE THE LNB.

SERVICING: Do not attempt to service this product yourself. Any attempt to do so will make the warranty invalid. Refer all servicing to qualified service agents.

LIGHTNING: If the decoder is installed in an area subject to intense lightning activity, protection devices for the decoder mains connector and modem telephone line are essential. The individual manufacturer’s instructions for safeguarding other equipment, such as TV set, Hi-Fi, etc., connected to the decoder, must also be followed during lightning storms.

EARTHING: The earth of the LNB cable MUST BE DIRECTLY CONNECTED to the system earth for the satellite dish. The earthing system must comply with local regulations.

Refer to the Installation Indemnity on page 6.

PREFACE

The digital satellite decoder introduces exciting new technology. This manual provides full information on how to use the decoder and enjoy the benefits of all its features.

The decoder is easy to use, even for those users unfamiliar with, or intimidated by, modern technology. The more advanced and more complex features can be avoided until you become comfortable with the basic operation of the system.

The manual provides:

# Important safety precautions; please study them.
# Overview material; read only those parts that interest you. It is not necessary to study the manual from cover to cover before using the decoder.
# Step-by-step instructions on how to use the decoder and its advanced features.
# Step-by-step instructions on how to install the decoder and connect it to basic sound and TV systems. It is beyond the scope of this manual to include all of the possible configurations or installation procedures.
# Troubleshooting guide to assist you if you have difficulty with operating the decoder correctly, or if technical problems occur.

The operation of the decoder can be upgraded using over-the-air signals (typically in the morning). This manual and the menus downloaded in the decoder are therefore subject to change at any time.

This document and the information contained herein are the subject of copyright and intellectual property rights under international convention. All rights are reserved. No part of this document may be reproduced, stored in a retrieval system or transmitted in any form by any means, electronic, mechanical or optical, in a whole or in part, without the prior written permission of UEC Commercial (Pty) Ltd, the Manufacturer.

DIGITAL SATELLITE SERVICES

The decoder has been designed to receive and process digital signals from the PanAmSat 4, Astra and EutelSat satellites. The satellites act as mirrors in the transmission process, beaming the Service Provider’s signals back to your satellite dish. Compared to conventional TV (analogue), digital technology presents higher quality pictures, sound comparable to that of a CD, and many more services.

Satellite technology also enables excellent reception of satellite TV services in remote rural areas where good quality terrestrial reception has never before been possible.

The term “Services” is used instead of “Channels” because compressed digital TV and audio technology efficiently uses available bandwidth, allowing several services to use the bandwidth of one channel.

In addition to the digital TV and audio signals, satellite signals also contain data that the decoder extracts, processes and stores. This provides up-to-date text information on the content and status of the various services at the touch of a button. Convenient facilities are also provided to manipulate received data in order to customise viewing and listening preferences.

Due to the nature of compressed digital TV, many more features will become available in the near future.
CONDITIONAL ACCESS

Although some satellite TV and audio services are free to air, most TV and audio services are only available on a subscription basis and can only be enjoyed via the conditional access components. These are the removable Smart Card and a built in conditional access process already fitted into the system.

Smart Card

You should have purchased a Smart Card from the dealer when you purchased the decoder. The Smart Card looks similar to a credit card and is inserted into the slot behind the right-hand front flap of the decoder.

A valid Smart Card entitles you to view and listen to all the services you choose to subscribe to. Full details of subscription options are supplied with the card.

Your Personal Identification Number (PIN) and subscription details are stored in the Smart Card.

Inserting the Smart Card

The Smart Card is the key to unlocking the decoder. The decoder will not decode scrambled TV or audio services if the card is not inserted or is incorrectly inserted.

Inserting the Smart Card into the decoder allows instant access to all the services you subscribe to.

The Smart Card is not required for access to menus except for the Parental Guidance sub-menu, which requires the PIN code to be entered.

The Smart Card, which is supplied separately and forms part of your subscription, is updated over-the-air when your PIN code or subscription details change, for instance, each time you purchase additional products (details regarding these products will be announced in the future).

To insert the Smart Card, follow the instructions carefully.

1. Open the right hand flap on the front of the decoder (see figure) Swing the flap downwards to expose the card slot to the right of the row of keys.

2. Hold the Smart Card horizontally with the logo on top and the three arrows pointed towards the front of the card. Insert the card fully into the slot.

NOTE: Observe the buttons next to the smart card slot, as these can be used as an alternative interface to the decoder.
The Digital Satellite Decoder (DSD)

The DSD combines a high quality MPEG-2 and DVB compliant satellite receiver, integrated with a sophisticated decoder in one package. The DSD provides all that you need to exploit the exciting new satellite services that are now available.

---

<table>
<thead>
<tr>
<th>Key</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image" alt="Green Dot - DSD in standby mode" /></td>
<td>Service No 17 selected</td>
</tr>
<tr>
<td><img src="image" alt="Green light - Audio Services selected." /></td>
<td>Rotating signal, searching for service information</td>
</tr>
<tr>
<td><img src="image" alt="Service not found, or of inferior quality" /></td>
<td></td>
</tr>
<tr>
<td><img src="image" alt="Download in progress" /></td>
<td>Green Dot - flashes when RCU keys are pressed</td>
</tr>
<tr>
<td><img src="image" alt="Yellow light - Mail Messages waiting" /></td>
<td>Red light - Error indication</td>
</tr>
<tr>
<td><img src="image" alt="Menu selected" /></td>
<td></td>
</tr>
<tr>
<td><img src="image" alt="When pressed simultaneously, reset the operation of the decoder." /></td>
<td></td>
</tr>
</tbody>
</table>

---

REAR PANEL CONNECTIONS

---

DSD 642  OPERATING INSTRUCTIONS  5
Remote Control Unit (RCU)

Easy, quick and effortless use of the decoder is possible using the Remote Control Unit and the on-screen displays.

<table>
<thead>
<tr>
<th>RCU Keys</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="on" alt="Symbol" /></td>
<td>Switches the decoder between normal and standby modes.</td>
</tr>
<tr>
<td>ALT</td>
<td>Used to toggle between current and last services</td>
</tr>
<tr>
<td>UHF</td>
<td>Toggles between the various output sources when pressed once and released. When pressed, held for 5 seconds, then released, displays the UHF tuning channel. Press once to remove the tuning channel.</td>
</tr>
<tr>
<td><img src="clock" alt="Symbol" /></td>
<td>Displays the local time on the screen for 5 seconds or removes the local time display from the screen.</td>
</tr>
<tr>
<td><img src="i" alt="Symbol" /></td>
<td>Displays the programme information bar on the screen. When pressed twice displays the extended event information screen.</td>
</tr>
<tr>
<td>MENU</td>
<td>Displays the Main Menu options on the TV screen.</td>
</tr>
<tr>
<td>TV GUIDE</td>
<td>Displays a list of the EPGs available on the TV screen.</td>
</tr>
<tr>
<td><img src="arrow" alt="Symbol" /></td>
<td>Cursor keys - used to step through programmes, browse, move the highlight and move through values in menus.</td>
</tr>
<tr>
<td>EXIT</td>
<td>Press to go to the previous menu, exit the menu system when in the main menu, or exit the Electronic Programme Guide or Information Bar.</td>
</tr>
<tr>
<td>OK</td>
<td>Selects a programme when in the Electronic Programme Guide and selects highlighted options or values in menus.</td>
</tr>
<tr>
<td></td>
<td>Saves any changed settings in menus.</td>
</tr>
<tr>
<td>P+ P-</td>
<td>Cycles up or down through the available services.</td>
</tr>
<tr>
<td>V+ V-</td>
<td>Adjusts the volume up or down.</td>
</tr>
<tr>
<td>Keypad</td>
<td>Keys 0-9-select either a TV or audio service, or used to key in numbers in menus (e.g., parental and installation PIN codes).</td>
</tr>
<tr>
<td><img src="musical_note" alt="Symbol" /></td>
<td>Selects audio services.</td>
</tr>
<tr>
<td>TV</td>
<td>Displays Bouquet Selection menu on TV, or when in Audio Services, returns to TV services.</td>
</tr>
<tr>
<td><img src="soundbar" alt="Symbol" /></td>
<td>Displays the soundtrack information bar for 5 seconds.</td>
</tr>
<tr>
<td><img src="mute" alt="Symbol" /></td>
<td>Mute.</td>
</tr>
<tr>
<td></td>
<td>Switches the display of subtitles or teletext (where applicable).</td>
</tr>
</tbody>
</table>

Replacing Batteries in the RCU

The RCU is powered by two AAA size batteries. The life of the batteries is about one year. Replace the batteries as required.

Note the following:

a. Insert the new batteries with their polarities (+ and -) aligned correctly.

b. If you do not intend to use the RCU for long periods of time, remove the batteries and store them in a cool, dry place.

c. Remove and dispose of used batteries immediately.

d. Do not use used and new batteries together. Never use an alkaline battery with a manganese battery.

Load the batteries as follows:

1. Insert small screwdriver blade or fingernail into slot in battery compartment lid. Press lid downwards, then lift off.

2. Insert the batteries with their polarities aligned, as indicated inside the battery compartment.

3. Replace lid.
GETTING STARTED

NOTE: Unless absolutely necessary, do not change installation, connections or decoder setup, or carry out any retuning on a working system. If changes are made, note all changed settings in the table on page 30.

Installation of the satellite dish and cabling to the DSD

Installation procedures for satellite dishes and cabling to DSDs are outside the scope of this manual. Please refer to the manuals provided with your satellite dish and associated equipment if you decide to do the installation yourself.

Installation Indemnity

1. For the decoder to operate, it is required to correctly install and align a satellite dish and a Low Noise Block (LNB) converter.

2. Each and every INSTALLER acts as an independent contractor and is not a servant, sub-contractor or agent of the manufacturer. The manufacturer is, therefore, not liable for any loss or damage of any nature whatsoever caused by the conduct of the installer, including but not limited to:
   a. Any direct, indirect or consequential damages of any nature or any loss of profit or other special damages of any nature which the USER may suffer as a result of any breach by the INSTALLER of any of its obligations to the USER.
   b. Any loss or damage to any property of the user or any third party, situated on the USER’s premises even if loss or damage arises out of any part of the INSTALLER.

3. The manufacturer does not directly or indirectly warrant or guarantee or make any representations whatsoever with regard to any equipment, including, but not limited to any dish, LNB, or cabling, used by the INSTALLER.

4. Subject to any express warrant or guarantee given by the manufacturer, in writing, the manufacturer does not:
   a. Give any warranty or guarantee or make any representation whatever in respect of any work carried out by the INSTALLER.
   b. Accept any liability for any latent or other defect in any work carried out by the INSTALLER.

Setting-up the System

1. Install and align satellite dish (installer).

2. Connect the decoder to the TV set (either SCART to SCART or RF OUT on the decoder to RF IN on TV). (See Optional Decoder Connections).

Switching on the Decoder at the Mains

When you switch on the decoder at the mains, it goes through a power-up sequence, then attempts to find a signal at the specific factory-set frequency. During this process, various indications are displayed on the decoder display and TV, as shown in the following sequence of drawings:

NOTE: If the TV is not tuned to the channel chosen to view the satellite services, the sequence is still the same, but the TV will not display the scanning screen. To tune the TV to the decoder services, tune the TV as per Tuning Your TV.

If your TV has been tuned to accept the decoder services, but your smart card has not been inserted into the decoder, an error message will appear on your TV screen.

Tuning your TV

If your TV is not tuned correctly, you will not be able to view the satellite services. Your VCR, decoder and TV can also interfere with each other unless they are tuned in correctly. The output of the decoder can be tuned over the whole UHF band using the following recommended method (refer to the following figures):

1. Connect the satellite dish and terrestrial antenna (installer).

2. Connect the installation as shown (if VCR installed).

3. Switch on the TV and select an unused channel to use with your VCR.

4. Switch on your VCR, then set its test signal to ON (see VCR instruction manual).

5. Tune the TV to the test signal from the VCR. Switch off the VCR test signal.
6 On the TV, select any unused channel on which you wish to view your satellite programmes. Once selected, all your satellite services will be viewed on this channel, selection of the service being made using the RCU.

7 Press and hold UHF on the RCU for 5 seconds to display UHF on the decoder display. Tune your TV set to receive the decoder test signal display (see following figure).

![Decoder Display and RCU](image)

A Channel number (initially 46) will be displayed on the decoder front panel display.

Press UHF to remove the test signal.

Check that the decoder does not interfere with signals received on the VCR.

Check all tuned channels on the TV for interference.

8 If any interference is noticed, change the UHF channel number as follows:

Press and hold UHF on the RCU for 5 seconds to display UHF on the decoder display and the UHF test screen on the TV.

Change the channel number to 2 more or 2 less than the existing number by pressing < or > twice on the RCU. Press OK to save. The following will happen as soon as < or > is pressed:

a. The TV display is lost because the TV is not tuned to the new channel.

b. The new channel number is displayed on the front panel of the decoder.

On the TV, retune the channel allocated to the decoder until the decoder test pattern is clearly visible.

Repeat step 8 until interference on all channels is eliminated.

**NOTE:** After changes have been made, the decoder must not be switched off for at least 3 minutes to allow for the new setting to be saved.

If interference is still present, it is recommended that good quality screened cables (preferably double screened) are used for interconnecting all other equipments to the decoder.

**Adding a Modem**

Many exciting interactive features will be available in the future (Impulse Pay Per View, Video on Demand, etc.). The decoder is ready for these features as it can accommodate an optional built-in modem. A modem port for connection to your telephone line via an external (faster) modem is provided on the rear panel.

**Standby and Normal Modes**

The decoder does not have a power on/off switch and it is recommended that, for normal viewing, it remains connected to the mains after installation.

When the decoder is not in use, it should be switched to the standby mode using the symbol on the front panel or on the RCU.

The standby mode is indicated by a constant small green dot on the right of the decoder display panel. To use the decoder after the initial installation:

1. Switch on the TV and any other equipment included in the system.
2. Select the channel on the TV that you have allocated to the digital television channel.
3. If the decoder is in the standby mode, press the symbol on either the RCU or decoder front panel, to return to the normal viewing mode. A service number will be displayed on the front panel indicator.
4. Press TV on the RCU. A Bouquet selection box is then displayed on the TV screen. Select the bouquet you have subscribed to (e.g., DSTV), then press OK.
5. If you wish to select the Audio Services, press the key on the RCU, or on the decoder front panel. If subscribed to, an audio service will be heard, and the audio programme information box will be displayed on the TV. A green indicator on the left of the front panel display is illuminated while the decoder is in the Audio Services mode.

TV Services are restored by pressing TV on the RCU, or TV on the decoder front panel.

**NOTE:** When switching from normal to standby then back to normal, the decoder automatically returns to the previously selected service. If a SCART VCR is connected, it is not necessary to take the decoder out of standby to view VCR play back.

6 The decoder is set up to the local default settings by the manufacturer. If necessary, change the installation parameters in the decoder, as follows:

i. Press MENU on the RCU, then select Advanced Options menu (see Advanced Options).

ii. Select Change Dish Installation then enter Installation PIN code (9949).

iii. Select Change LNB Settings.

**NOTE:** LNB power is factory set to ON.

iv. The LNB power is set to ON for normal home installations and OFF for communal (SMATV) installations. Press OK to return to Change LNB Settings options. Select Set LNB Frequency.

v. Ensure that the decoder is set to the correct LNB frequency by following the Set LNB Frequency procedure. Press OK to save.

vi. Select the Change Manual Tuning Parameters option, then follow the Change Manual Tuning Parameters instructions. Press OK.

vii. Select Tune DSD. The decoder then goes through a scanning process and on completion returns to the last service viewed.

The decoder is now ready for normal use.
Optional Decoder Connections

Introduction

There are several ways of connecting the decoder to an existing audio/TV system.

The following more common examples enable you to view satellite services and terrestrial channels, record and playback from a VCR and listen to CD quality stereo sound.

Consult your local supplier for assistance in setting up an audio/video configuration best suited to your requirements.

Hints to Quality TV System Configurations

# Where possible, connect cables via audio/video outputs/inputs (SCART or RCA) instead of RF connectors.

# Use an appropriate, correctly installed satellite dish system.

# Ensure that the system is properly earthed and protected against lightning.

# Use high quality stereo TV and Hi-Fi equipment.

# Use high quality screened cables.

NOTE: When Video and Audio Inputs/Outputs are used, it may be necessary to select a Video mode on the VCR and TV in place of a TV mode.

Decoder, TV (using SCART or RF Interface)

1 As the LNB carries a small voltage on its centre connector, it is recommended that the mains supply to the LNB is switched off before connecting or disconnecting the LNB. Connect the terrestrial antenna connector to the RF IN socket on the decoder.

2 Using the supplied SCART-to-SCART cable, connect the TV SCART socket on the decoder to the SCART socket on the TV.

3 If the TV does not have a SCART connector, use the supplied flylead to connect the RF OUT socket on the decoder to the RF IN socket on the TV.

4 Connect the coaxial cable connector from the LNB on the satellite dish into the socket marked LNB IN on the decoder. The connector on the coaxial cable should be turned until it is finger tight.
Decoder, TV (SCART or RF Interfaces), Hi-Fi

1  Switch off the mains supply to the decoder before connecting or disconnecting the LNB. Connect the terrestrial antenna connector to the RF IN socket on the decoder.

2  Connect a flylead between the variable stereo sound outputs on the decoder and the audio inputs on the Hi-Fi.

3  Connect the coaxial cable connector from the LNB on the satellite dish into the socket marked LNB IN on the decoder. The connector on the coaxial cable to the decoder should be finger tight.

4  Using the supplied SCART-to-SCART cable, connect the TV SCART socket on the decoder to the SCART socket on the TV.

5  If the TV does not have a SCART socket, use the supplied flylead to connect the RF OUT socket of the decoder to the RF IN socket on the TV.
Decoder, VCR (SCART Interface), TV (SCART Interface), Hi-Fi

1. Switch off the mains supply to the decoder before connecting or disconnecting the LNB. Connect the terrestrial antenna connector to the RF IN socket on the decoder.

2. Using the supplied flylead, connect the RF OUT socket on the decoder to the RF IN socket on the VCR.

3. Using the flylead supplied with the VCR, connect the RF OUT socket on the VCR to the RF IN socket on the TV.

4. Connect the coaxial cable from the satellite dish to the LNB IN socket on the decoder. Tighten the connector finger tight.

5. Using the SCART-to-SCART supplied cable, connect the TV SCART socket on the decoder to the SCART socket on the TV.

6. Using another SCART cable, connect the VCR SCART socket on the decoder to the SCART socket on the VCR.

7. Connect the VARIABLE LEFT and RIGHT HI-FI AUDIO OUT sockets on the decoder to the LEFT and RIGHT AUDIO INPUT sockets on the Hi-Fi.

8. Switch the power on to the decoder.

9. Set TV and VCR Scart Source and Set TV and VCR Scart Video Output at the TV Installation menu. See page 23.
Decoder, VCR, TV, Hi-Fi (using RCA Connectors)

1. Switch off the mains supply to the decoder before connecting or disconnecting the LNB. Connect the terrestrial antenna connector to the RF IN socket on the decoder.

2. Using the supplied flylead, connect the RF OUT socket on the decoder to the RF IN socket on the VCR.

3. Using the flylead supplied with the VCR, connect the RF OUT socket on the VCR to the RF IN socket on the TV.

4. Connect the coaxial cable connector from the LNB on the satellite dish into the socket marked LNB IN on the decoder. Tighten the connector finger tight.

5. If the TV and VCR have AV connectors, connect as shown in the diagram.

6. Connect the VIDEO OUT socket on the decoder to the VIDEO IN socket on the VCR.

7. Connect the MONO AUDIO socket on the decoder to the AUDIO IN socket on the VCR.

NOTE: If your VCR has a stereo audio input, connect the FIXED stereo audio outputs from the decoder to the VCR stereo audio connector.

8. Switch the power on to the decoder.
Two Decoders, TV (using AUX SCART and RF Interfaces)

The AUX SCART connector has audio, video (RGB) and composite video input connections that can be used to connect a second analogue or digital decoder. If a second decoder is connected, signals from selected sources are automatically routed internally in the decoder to the TV SCART connector.

1 Switch off the mains supply to the decoder before connecting or disconnecting the LNB. Connect the terrestrial antenna connector to the RF IN socket on the decoder.

2 Using the supplied SCART-to-SCART cable, connect the TV SCART socket on the decoder to the SCART socket on the TV.

3 If the TV does not have a SCART connector, use the supplied flylead to connect the RF OUT socket of the decoder to the RF IN socket on the TV.

4 Connect the coaxial cable connector from the LNB on the satellite dish into the socket marked LNB IN on the decoder. The connector on the coaxial cable should be turned until it is finger tight.

5 On the first decoder, connect a second RF cable with F-type connectors (not supplied), from the LNB OUT connector to LNB IN connector on the second decoder.

6 Connect a second SCART to SCART connector (not supplied) between the AUX SCART connector on the decoder and the TV SCART on the second decoder.

RCU UHF Button Selection Functions

Pressing UHF on the RCU with the second decoder connected and operating, selects the TV viewing source in the sequence VCR, AU1, TV and IRD. If AU1 is selected, the satellite picture is routed to the TV and VCR from the second decoder.

If a second decoder is being used, the polarity of the LNB is controlled by the first decoder.
Selecting Specific Services

Specific TV or Audio Services can be selected, either:

- Directly
- By stepping through services
- By using the Open TV Electronic Programme Guide (EPG), or
- By using the Open TV Information Bar.

Selecting Services Directly

Services can only be selected directly using the RCU. To select a specific service, do the following:

1. To select an audio service, press \( + \) on the RCU. Press TV to restore TV services.
2. Press the number of the required service on the RCU's numerical keypad.

The specific service will be heard/displayed after a few moments accompanied by an information box at the bottom of the TV screen with details of the selected service.

NOTE: To select services requiring two-digit numbers, i.e., 10-99, press the first digit, then the second digit without pausing.

TIP: When the key for the first digit is pressed on the RCU, the corresponding number is displayed on the left of the front panel numerical display on the decoder. After a few moments, the number moves to the right. The second digit of two digit numbers must be keyed in before this move takes place.

Stepping through Services

Stepping through services is possible using either the RCU or decoder front panel keys.

Stepping using the RCU

To step through services using the RCU, do the following:

1. Select the type of service required, TV or audio.
2. Press \( + \) to step to the next service or \( - \) to step to the previous service in the list of available services.
   
   After pressing \( + \) or \( - \), an information box is displayed at the bottom of the TV screen with details of the service. After a few seconds, the relevant service is displayed/heard.
3. If required, continue stepping by pressing \( + \) or \( - \) until you find the service you prefer. It is not necessary to wait for services to be displayed/heard before stepping to the next or previous service.

To view/listen to any service you have stepped to, wait for the service to be displayed/heard. The information box will disappear after a short while.

NOTE: When you reach the last available service in the list and press \( + \), you are returned to the first service in the list. The \( + \) and \( - \) symbols have dual functions and cannot be used for stepping while the volume control box is displayed on the screen. This box is displayed when setting the volume, see page 12.

Stepping using the Decoder Front Panel Keys

To step and select a specific service using the decoder front panel keys, do the following:

1. Select the type of service required, by pressing TV \( + \) to switch between TV services and audio services. Selection of the audio service is indicated by a green indicator on the front panel display.
2. Press \( + \) (up) to step to the next service or \( - \) (down) to step to the previous service in the list of available services.

After pressing \( + \) or \( - \), an information box is displayed at the bottom of the TV screen with details of the service. After a few seconds the relevant service is displayed/heard.
3. Continue stepping, by pressing \( + \) or \( - \) until you find the service you prefer. It is not necessary to wait for services to be displayed/heard before stepping to the next or previous service.

To view/listen to any service you have stepped to, wait for the service to be displayed/heard. The information box will disappear after a short while.

NOTE: When you reach the last service in the list and press \( + \), you are returned to the first service in the list. The \( + \) and \( - \) symbols have dual functions and cannot be used for stepping while the volume control box is displayed on the screen. This box is displayed when setting the volume, see page 12.

Selecting Specific Services from the EPG


Selecting Services from the Information Bar

NOTE: A description of the Information Bar is on page 15.

Controlling the Show

Volume Control using the RCU Keys

NOTE: It is recommended that you first select a terrestrial channel, then set the volume on the TV to a comfortable listening level.

To change the volume level on the decoder, select your satellite service, then press V+ to increase the volume level or V- to reduce the volume level. The following is displayed on the TV screen when adjusting volume:

![Volume Control Window](image)

The volume level is depicted by the length of the highlight bar.

NOTE: The Fixed Stereo Sound Outputs (Left and Right) cannot be controlled with the volume control keys on the RCU.

Volume Control using the Decoder Keys

To change the volume level, press PV on the decoder. The following is displayed for a brief time:

![Volume Control Window](image)

While the volume control window is displayed, press and release + or - respectively to increase or reduce the volume level in separate steps. The change in volume level is depicted by the changing length of the highlight bar.
NOTE: The Variable Stereo Sound Outputs (Left and Right) can be controlled using the volume control keys on the RCU.

Mute
To mute the audio do the following:

1. Press on the RCU. The following window is displayed for 5 seconds and the audio muted:

2. To restore the audio press again. The audio is restored at the previous level and the volume control window displayed for 5 seconds.

3. Adjust the volume level using V+ and V-.

NOTE: The mute function is disabled when the FIXED STEREO audio outputs (Left and Right) on the decoder are used. This ensures a fixed volume level for recording purposes. The VARIABLE STEREO audio outputs (Left and Right) of the decoder can, however, be muted.

Displaying Subtitles or Teletext
If subtitles are available, display them on the screen as follows:

1. Press on the RCU. Subtitles, if available, are displayed.

NOTE: If subtitles are not available, a “No subtitles” window is displayed for 5 seconds.

2. To remove the subtitles from the screen, press again.

NOTE: Some services (e.g., CNN) have an additional teletext service. This can be selected by pressing on the RCU with the service selected, i.e., CNN.

If teletext is not available, a “No teletext” window is displayed for 5 seconds.

Clock
To view the time do the following:

1. Press on the RCU. The date and time are displayed for a few seconds.

Selecting Soundtracks
Available soundtracks, included with programmes, can be viewed and selected at any time while watching a programme.

NOTE: Preferred soundtrack languages for automatic selection can be set using the menu system. Refer to Soundtrack Options (page 19).

To view and select available soundtracks, do the following:

1. Press on the RCU. The current soundtrack language is displayed.

2. Press the symbol again. If there are additional soundtracks available, the next soundtrack option is listed in the window. Continue pressing to cycle through all the available soundtracks.

3. Press OK to select a soundtrack language. The soundtrack window is displayed and the new soundtrack is heard.

Power Reset
Should your TV picture freeze, it is possible to reset the decoder without unplugging it from the power supply. Simultaneously press then release the and - (down) buttons on the decoder front panel.

Signal Selection
Switching between signal source devices is automatic using the UHF button on the RCU. To select between the various sources, a single press-release of the UHF button in normal running mode (i.e., not in menu or EPG) switches to the next source. This is an override selection in that it will switch to VCR even if a VCR is not playing.

The available options are:
- Decoder (IRD): Satellite signal. Switches any other device (VCR, Analogue decoder) to Off or Standby.
- VCR: Press Play on the VCR to view.
- TV (tv): View terrestrial channels.

In these cases, the appropriate video and audio will be selected.

OPEN TV ELECTRONIC PROGRAMME GUIDE
The decoder stores up-to-date information, received over the air, of all the currently subscribed to TV Services and on-air Audio Services, as well as the next and extended programmes scheduled for each TV and Audio service. The information for each programme includes, where appropriate:

# The service number and name
# Title of the programme
# Censorship classification of the programme
# Brief information on the programme
# Start and finish times of the current programme
# Reminders
# Impulse Pay Per View symbol (when available)

The TV programmes are transmitted in subscribed packages called BOUQUETS, each bouquet containing a series of services. The decoder has provision for several bouquets, any of which can be selected by pressing TV on the RCU, then following the on-screen instructions. If a selected bouquet is not subscribed to, a message “E38 Service is not currently running” will appear on the TV screen.

When a subscribed to bouquet is selected, the services in that bouquet will be listed numerically in the Electronic Programme Guide, when selected.
Using the EPG

1 On the RCU, press TV GUIDE. An on-screen menu is displayed as follows:

```
<table>
<thead>
<tr>
<th>Services</th>
</tr>
</thead>
<tbody>
<tr>
<td>▲ Now/Next EPG</td>
</tr>
<tr>
<td>▼ Extended EPG</td>
</tr>
<tr>
<td>Theme Search</td>
</tr>
</tbody>
</table>

Press OK to select
Press EXIT to cancel
```

NOTE: When pressing any of the arrow controls on the RCU, the colour of the displayed arrow in the EPG screens darkens to indicate activity.

**Now/Next EPG**

Selecting Now/Next EPG displays a programme guide, as shown in the following diagram, that provides short text descriptions of the TV and audio programmes contained in the selected bouquet, as well as the next programmes scheduled for each TV and audio service.

```
NOTE: TV programmes are not displayed and audio not heard while the EPG screen is displayed.

2 Use the cursor keys ▲ or ▼ to scroll up or down the list, as only five events are shown on the screen. When the last event is highlighted and you press ▼, five new events are displayed and the highlight is put at the top of the list. This also works for scrolling up.

The list is continuous, so after the last service the Guide starts displaying service 1 again.

The current programmes are listed when NOW is selected and the programmes to follow are listed when NEXT is selected.

3 To move between the NOW or NEXT programmes, press ◄ or ► on the RCU.

4 Select the highlighted programme to view/hear by pressing OK. NEXT programmes cannot be viewed before their start time. When attempting to view them the following screen is displayed:

```
NOTE: When pressing any of the arrow controls on the RCU, the colour of the displayed arrow in the EPG screens darkens to indicate activity.

**Now/Next EPG**

Selecting Now/Next EPG displays a programme guide, as shown in the following diagram, that provides short text descriptions of the TV and audio programmes contained in the selected bouquet, as well as the next programmes scheduled for each TV and audio service.

```
NOTE: TV programmes are not displayed and audio not heard while the EPG screen is displayed.

2 Use the cursor keys ▲ or ▼ to scroll up or down the list, as only five events are shown on the screen. When the last event is highlighted and you press ▼, five new events are displayed and the highlight is put at the top of the list. This also works for scrolling up.

The list is continuous, so after the last service the Guide starts displaying service 1 again.

The current programmes are listed when NOW is selected and the programmes to follow are listed when NEXT is selected.

3 To move between the NOW or NEXT programmes, press ◄ or ► on the RCU.

Pressing OK sets a programme reminder and a clock symbol appears under the programme time, indicating a reminder. To remove the reminder press OK again; the clock symbol disappears.

5 Additional information on the programme is displayed when I on the RCU is pressed with a service on the EPG selected. Press EXIT to return to the EPG.

6 Press ♩ on the RCU to enter the Audio guide. The Audio guide behaves exactly the same as the TV guide. Pressing TV on the RCU takes you back to the TV guide.

7 Press OK to return to normal viewing/listening.

8 In all programme guides, additional information on the programmes is displayed when I on the RCU is pressed while the EPG is displayed and programme highlighted.
Extended EPG

Selecting Extended EPG provides a guide as to today’s programmes and the next 7 days, as per the following diagram:

Pressing \( \blacktriangleright \) on the RCU, selects the TV guide for tomorrow’s programmes. Pressing and holding the \( \blacktriangleright \) button pages through each day’s programme until the end of the 8 days.

Pressing and holding the \( \blacktriangleleft \) button, returns you to today’s programme guide.

Theme Search

Selecting Theme Search allows you to search for a particular type of programme, as shown in the following diagram:

Scrolling down using the \( \blacktriangledown \) button transfers the highlight and left and right arrows to the selected box. Pressing the arrows selects various options.

Making a selection in the sub-theme box, then pressing OK presents a display as per the following diagram:

OPEN TV INFORMATION BAR

At any time whilst watching TV services or listening to radio services, the viewer can obtain information about the current programme and select available programmes via the Information Bar.

1. Press \( i \) on the RCU. The following window is displayed:

2. Use the cursor keys \( \uparrow \) or \( \downarrow \) to scroll up or down through titles on other services, whilst simultaneously watching the current service. The current programmes are listed when NOW is selected and the programmes to follow are listed when NEXT is highlighted.

Pressing \( i \) with the Information Bar displayed, provides additional information on the programme.

The local time will also be displayed on the TV when the Information Bar is displayed.

3. Move between the NOW or NEXT programmes by pressing \( \blacktriangleright \) or \( \blacktriangleleft \) on the RCU.

4. With NEXT selected, an Information Bar appears that displays the next programme. Pressing OK sets the reminder and a clock symbol appears in the Information Box. Pressing OK again removes the reminder.

NEXT programmes cannot be viewed before their start time.

To exit the Information Box, press EXIT.

5. When viewing a programme, to tune to another programme press the numbered keys on the RCU. The Information Bar will be displayed for X seconds (see Information Box Display Period, page 20).
REMINDERS

The procedure for setting and removing a reminder has already been detailed.

Refer to Open TV Electronic Programme Guide page 14 or Open TV Information Bar page 16. At the right time a reminder message pops up. If you intend to watch the booked programme, press OK on the RCU which tunes the decoder to the new service. Otherwise press EXIT to remove the message, while remaining tuned to the original service.

PARENTAL BLOCKING

When the user has selected a service where there is a parentally blocked programme, a “key” symbol is displayed in the Information Bar (bottom right). The message above the Information Bar indicates that the user should press OK to unblock the programme.

1. Press OK. A screen requiring the Parental PIN code is displayed.

2. Enter your Parental PIN code using the keypad. Refer to Parental Guidance Options page 20. The programme is then unblocked.
NOTE: The menu structure is occasionally upgraded over the air by the Service Provider and may differ slightly from that shown in these instructions.

USING MENUS

To use the Menu system:

1. Ensure that the decoder is not in standby mode by pressing 1, if necessary.
2. Press TV on the RCU. The following window is displayed in the top right of the TV:

   ![Menu Screen](image)

   Highlight the selected option then press OK.

   This selection sets the services available in the subscribed bouquet, which can be viewed by pressing TV GUIDE.

3. Press MENU on the RCU. The following Main Menu is displayed, which provides access to all other menus as shown in the following figure:

   ![Main Menu](image)

   All the menus are navigated as follows:

   1. Use ‹ or › buttons to scroll the highlighted bar up or down in a (sub)menu or a vertical list box.
   2. Select a highlighted menu option and go one level lower within the menu hierarchy by pressing OK on the RCU. This applies to the Main Menu screen and all submenu screens.

      In screens where parameters can be set, OK is used to save the settings.

   3. Use EXIT to return to the preceding menu (go one level higher within the menu hierarchy).

      In screens where the parameters can be set, EXIT is used to cancel any settings that may have been entered without saving.

   4. Use ‹ and › buttons to change the value of an input field having preprogrammed values.

   5. Use MENU to exit all menus and return to the TV or audio programme.

   6. Use numbered buttons to enter numerical values.

Soundtrack Options

Soundtrack Options allows users to set the programme language of the decoder, where one is available.

To select the text language of your choice do the following:

1. Press MENU on the RCU.

   The Main Menu options list is displayed.

   NOTE: On initial selection of the Main Menu, the default setting is for Soundtrack Options.

2. Press OK to select Soundtrack Options. The following option list is displayed:

   ![Soundtrack Options](image)

   3. On the RCU, press ‹ or › arrows to highlight the preferred language that you wish to relocate from the list.

   4. Press › to move the highlighted language option into the relocation window.

   NOTE: Only two languages can be relocated into positions 1 and 2.

   5. Press OK to confirm your selection.

   NOTE: Pressing ‹ or › on the RCU displays the following window at the top of the TV screen:

   ![Language Selection](image)

   Pressing OK toggles between the two options. The programme automatically returns to the previous service.
**Parental Guidance**

The decoder includes a Parental Guidance facility to control viewing of age restricted programmes. Access to this facility is controlled via the Parental PIN code.

**TIP:** The PIN is set at the factory to 1 2 3 4. If you intend to use the Parental Guidance facility, please change the PIN as soon as possible. Remember to keep a note of your new PIN in a secure place.

Parental Guidance can only be applied to scrambled programmes.

**NOTE:** To use or change the Parental PIN code your smart card must be in the decoder.

**Setting the Parental Level**

1. Press MENU on the RCU.
   The Main Menu options list is displayed.

2. On the RCU, press ▼ to highlight Parental Guidance
   The Parental Guidance screen is then displayed with the Censorship Classification option highlighted

3. Press OK.
   A Security Check screen is displayed, in which the Parental PIN must be entered using the RCU.

4. On entering the correct PIN, a Parental Guidance submenu is displayed, which is organised as follows:

   **NOTE:** If the incorrect PIN is entered, the previous menu (Security Check) is again displayed.

<table>
<thead>
<tr>
<th>EXPLANATION</th>
<th>SELECT MENU OPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>All scrambled programmes are blocked</td>
<td>Total Block</td>
</tr>
<tr>
<td>Can be viewed by all the family</td>
<td>Family</td>
</tr>
<tr>
<td>Programmes classified as Family and 13 can be viewed</td>
<td>PG13/13</td>
</tr>
<tr>
<td>Programmes unsuitable for persons under 16</td>
<td>16</td>
</tr>
<tr>
<td>Programmes unsuitable for persons under 18</td>
<td>18</td>
</tr>
<tr>
<td>Programmes restricted. Unsuitable for persons under 18</td>
<td>R18</td>
</tr>
</tbody>
</table>

5. Press ▲ or ▼ to highlight the preferred control option.

6. Select your choice by pressing OK on the RCU.

7. Press EXIT to return to the Main Menu or MENU to return to the service.

**Changing the Parental PIN Code**

To change your existing PIN to a new number, carry out the following:

1. Press MENU on the RCU.
   The Main Menu options list is displayed.

2. Press ▼ to select the Parental Guidance option, then press OK.

3. On the Parental Guidance menu, press ▼ to highlight Change PIN, then press OK. The Change PIN screen is displayed.

4. Key in your old PIN code.
   This automatically highlights the new PIN code to be entered.

5. Change the PIN to its new value. Instead of digits, crosses are displayed for the PIN codes. When the new PIN code is entered, a second box is highlighted requesting you to re-enter the new code. This is a safeguard against an initial incorrect entry.

6. The Parental Guidance menu is displayed.

7. Press EXIT to return to the Main Menu or MENU to return to the service.

**Information Box Display Period**

If the period of time that the Information Bar is displayed is either too long or too short, change the Information Bar display time as follows:

1. Press MENU on the RCU.
   The Main Menu options list is displayed.

2. On the RCU, press ▼ to highlight Information Box Display Period.

3. Press OK.
   The Information Box Display Period screen is displayed.

4. Press ▲ or ▼ to change the info display period (in seconds).

5. Press OK to confirm the new time or EXIT to cancel the screen.
   The Main Menu is displayed.

6. Press EXIT or MENU to return to the service.

**Organising Services**

**NOTE:** Main Menu option “Organising Services” can only be selected after a successful installation and receipt of programming information over-the-air. Before this happens the “Organisation Services” option is not displayed.

When the decoder receives digital satellite signals, it also receives text information about the television and audio services that are being broadcast. The decoder automatically stores this continually updated information which you can view at any time.

The decoder also provides skip, sort and reset features to allow you to arrange the service lists according to your own personal preference.
Skip TV Services

You may prefer that the list of services should only contain your favourite services or should not list services you do not yet subscribe to. By marking a service to be skipped, it will not be selected when stepping through the programme list.

To skip TV services do the following:

1. Press MENU on the RCU. The Main Menu options list is displayed.
2. On the RCU, press \_\_ to highlight Organising Services.
3. Press OK. The Organising Services menu is displayed with Skip TV Services highlighted.
4. Press OK. The Skip TV Services screen is displayed. The list is composed of skipped and non-skipped services. Skipped services are indicated by a cross symbol on the right of the box, non-skipped services have a circle.
5. Choose the service to be skipped using \_\_ or \_\_ on the RCU.
6. Press \_\_ on the RCU to select the service to be skipped. A cross symbol will be displayed at the right of the box against the selected service name. Pressing \_\_ on the RCU will undo the selection and the cross symbol will be replaced with a circle symbol.
7. Select all the services you wish to skip.
8. Once your selections are complete, press OK to save your selections and return to the Organising Services menu or EXIT to cancel the selection.
9. Press EXIT to return to the previous menu or MENU to return to the service.

NOTE: All “skipped” services will be restored when the Reset TV Services function is used.

Sort TV Services

This feature allows you to sort your services into an order of your choice. The sorting process defines the TV service you want on any channel number. To sort the order, perform the following:

1. Press MENU on the RCU. The Main Menu options list is displayed.
2. On the RCU, press \_\_ to highlight Organising Services.
3. Press OK. To display Organising Services options list.
4. Press \_\_ to highlight Sort TV Services.
5. Press OK. The Sort TV Services screen is displayed as follows:

6. From the displayed list, choose the service that you wish to move using \_\_ or \_\_ on the RCU.
7. Press \_\_ to move this service into the service relocate box.
8. Press \_\_ or \_\_ to highlight the position where you want the service from the relocation box to be placed.
9. Using \_\_, move the service that is now in the relocation box into the new position in the current order list.
10. Repeat steps 6 to 9 until all services are set as you wish.
11. Press OK to confirm your selections. The Organising Services menu is displayed.
12. Press EXIT to return to the Main Menu or MENU to return to the service.

Reset TV Services

To reset the TV services to the order supplied by the Service Provider, do the following:

1. Press MENU on the RCU. The Main Menu options list is displayed.
2. On the RCU, press \_\_ to highlight Organising Services.
3. Press OK to display Organising Services options list.
4. Press \_\_ to highlight Reset TV Services.
5 Press OK to reset the services list to the list supplied by the Service Provider.

A message “Do you want to reset the TV services list?” is displayed.

6 Press OK.

An affirmation message “TV services have been reset to the original order” is displayed on the screen.

7 Press OK to return to the previous menu.

Skip Audio Services

Refer to “Skip TV Services” page 21. Select Skip Audio Services instead of TV Services.

Sort Audio Services

Refer to “Sort TV Services” page 21. Select Sort Audio Services instead of TV Services.

Reset Audio Services

Refer to “Reset TV Services” page 21. Select Reset Audio Services instead of TV Services.

Full Rescan

This facility is used when a new service provider becomes available. It is recommended that this facility is used on a weekly basis to upgrade the services available to you.

1 Press MENU on the RCU.

The Mains Menu options list is displayed.

2 On the RCU, press ? to highlight Organising Services.

3 Press OK to display Organising Services options list.

4 On the RCU, press ? to highlight Full Rescan.

5 Press OK.

A message “Do you want to start a Full Rescan” is displayed.

6 Press OK to confirm.

A scanning screen is displayed in which are listed the operators, services and transport streams. After a period of time, the previous service is automatically restored.

Mail Messages

The Service Provider can send global or individual messages over the air. When a message has been received, the yellow front panel indicator will be illuminated.

The icon will also be displayed on every menu screen.

To read the message do the following:

1 Press MENU on the RCU.

The Mains Menu options list is displayed.

2 On the RCU, press ? to highlight Organising Services.

3 Press OK to display Organising Services options list.


5 Press OK.

The Mail Messages screen is displayed.

6 Press OK to return to the Main Menu.

The front panel yellow indicator will be OFF and the mail icon will no longer be displayed.

Advanced Options

Selecting the Advanced Options on the Main Menu provides access to important technical settings for the decoder and satellite dish antenna.

Change Dish Installation

Important!

The installation settings should be set by a qualified person.

Do not change any installation settings before carefully noting the value of the setting you want to change and ensuring that the new and old values are written down on page 30. Incorrect settings will prevent the decoder from operating correctly.

An installation PIN code must first be entered before the Change Dish Installation and its submenus can be accessed. This measure helps to prevent accidental changes to the set up. The PIN code is 9949. This number cannot be changed.

Change LNB Settings

The Low Noise Block (LNB) downconverter amplifies the signal received by the satellite dish and lowers the frequency of the signal. The signal is then fed from the LNB at the dish via a cable to the decoder. Power is supplied to the LNB from the decoder via the coaxial cable.

Set LNB Power

In most installations the correct setting for the LNB Power is “On”. Certain special applications may require the setting to be “Off”.

To set the LNB Power “On” or “Off”, do the following:

1 Press MENU on the RCU.

The Main Menu options list is displayed.

2 On the RCU, press ? to highlight Advanced Options.

3 Press OK.

The Advanced Options Menu is displayed, in which the Change Dish Installation option is highlighted.

4 Press OK.

The PIN Code for Installation screen is displayed.

5 Type the PIN code 9949 using the keypad on the RCU. See Note. After successfully entering the installation PIN, the Change Dish Installation Menu is displayed, in which the Change LNB Settings is highlighted.

NOTE: 9949 is the installation PIN code. A different PIN code is required for the Parental Guidance PIN.

6 Press OK.

The Change LNB Settings Menu is displayed, in which Set LNB Power is highlighted.

7 Press OK.

The Set LNB Power screen is displayed.

8 Press OK to save ON setting, or press ? to set the LNB power to OFF.

9 Press OK to activate the setting.

The Change LNB Settings Menu is displayed.

10 Press EXIT to return to the previous menu or MENU to return to the service.
Set LNB Frequency

The LNB local oscillator frequency or frequencies must be appropriate for the LNB installed on the satellite dish. The information is supplied with the LNB.

To set the frequency:
1. Repeat steps 1 to 6 of Set LNB Power (page 22).
2. Press \textgreater\textless\ to highlight Set LNB Frequency.
3. Press OK.
   The Set LNB Frequency screen is displayed, in which LNB Mode is highlighted.
4. Press \textgreater\textless\ or \textgreater\textless\ to set the LNB mode (single or dual frequency).
5. Press \textgreater\textless\ or \textgreater\textless\ to highlight LNB Frequency or Switching.
6. Use \textgreater\textless\ as backspace to erase the numbers, then enter the correct values via the numbered buttons.
7. Press OK to activate the settings.
   The Change LNB Settings Menu is displayed.

NOTE: Factory default setting is for dual frequency.

Change Manual Tuning Parameters

The factory preset values will normally not require changing. If, however, it is necessary to change the values, do the following:
1. Repeat steps 1 to 5 of Set LNB power (page 22).
2. Press \textgreater\textless\ to highlight Change Manual Tuning Parameters.
3. Press OK.
   The Change Manual Tuning Parameters screen is displayed.
4. Press \textgreater\textless\ or \textgreater\textless\ to highlight any of the four entries; Frequency, Symbol Rate, Polarisation, Forward Error Correction.
5. Edit Frequency and Symbol Rate using \textgreater\textless\ as backspace and the numbered buttons. Edit Polarisation and FEC using \textgreater\textless\ and \textgreater\textless\.
   These buttons traverse through a continuous list of possible choices.
6. Press OK to save changes and leave the screen.
   The Change LNB Settings Menu is displayed.

Tune DSD

If the settings made in Change LNB Settings and Manual Tuning are satisfactory, retune the decoder with these settings as follows:
1. Press \textgreater\textless\ to highlight Tune DSD.
2. Press OK.
   A rotating segment on the decoder front panel indicates that it is searching for the default frequency. The decoder then returns to the current service, and the Information Bar and Clock are displayed for the preset period of time.

Signal Detection

This facility is used to help final alignment of the satellite dish and to confirm that a signal is being received from the satellite.

NOTE: For LNB adjustment refer to the LNB installer. The decoder signal detection facility is only useful for final alignment of a dish that is already aimed roughly at the satellite.

If there is no signal the bars will not be present.
1. Press MENU on the RCU.
   The Main Menu options list is displayed.
2. On the RCU, press \textgreater\textless\ to highlight Advanced Options.
3. Press OK.
   The Advanced Options Menu is displayed.
4. Press \textgreater\textless\ to highlight Signal Detection.
5. Press OK.
   The Signal Detection screen is displayed. The screen shows the service provider name and the strength of the signal.
6. Adjust the alignment of the dish to obtain the maximum signal strength as indicated by the bars on the screen. Press \textgreater\textless\ and \textgreater\textless\ to toggle between the coarse and fine tuning.
7. Physically lock the dish into position.
8. Press OK.
   The Advance Options Menu is displayed.
9. Press EXIT to return to the Main Menu or MENU to return to the service.

Information

The Information Menu has two submenus, DSD Status and CA Status which provide important diagnostic and version information to technical personnel. You may be asked to read some of this information to Helpline personnel.

The Decoder Status screen consists of a read only screen, in which several decoder parameters can be monitored. For example, the CA and the Smart Card versions are displayed.

The CA Status screen consists of a screen, in which several Conditional Access parameters can be monitored. For example, Smart Card (SC) version number, Smart Card Serial Number (SC - SN), Conditional Access Status, Channel number and name and latest received EMM and ECMs.

To view the information do the following:

DSD Status
1. Press MENU on the RCU.
   The Main Menu options list is displayed.
2. On the RCU, press \textgreater\textless\ to highlight Advanced Options.
3. Press OK.
   The Advanced Options Menu is displayed.
4. Press \textgreater\textless\ to highlight Information.
5. Press OK.
   The Information Menu is displayed, in which the DSD Status option is highlighted.

Reset to Factory Defaults

If difficulty is experienced in the functioning of the decoder, it may be advisable to reset the factory defaults. This is achieved by selecting the Reset Factory Defaults then pressing OK.
6 Press OK.
The DSD Status screen is displayed

7 To exit the DSD Status information screen, press EXIT to return to the previous menu or MENU to return to the service.

CA Status

1 Repeat steps 1 to 5 of the DSD Status screen (page 23).

2 Press ? to highlight CA Status.

3 Press OK.
The CA Status screen is displayed.

4 To exit the CA Status information screen, press EXIT to return to the previous menu or MENU to return to the service.

TV Installation

TV Type

Typical values are PAL I, PAL G, etc. The TV type is determined by the TV system used in the country of installation. To set the TV Type:

1 Press MENU on the RCU.
The Main Menu options list is displayed.

2 On the RCU, press ? to highlight Advanced Options.

3 Press OK.
The Advanced Options Menu is displayed.

4 Press ? to highlight TV Installation.

5 Press OK.
A security check screen is displayed, in which you must enter the installation PIN (9949)
The TV Type screen is automatically displayed when the correct PIN is entered.

6 Press OK.
A TV type list is displayed in which PAL I is highlighted. Press ? to highlight any other TV type.

7 Press OK to activate the setting and leave the screen, or EXIT to cancel the setting.

Aspect Ratio

The Aspect Ratio allows the user to select between a normal width TV and a wide-screen TV.

1 Repeat steps 1 to 5 for setting the TV Type (page 22).

2 Press ? to highlight Aspect Ratio.

3 Press OK.
The Aspect Ratio screen is displayed, in which the 4:3 aspect is highlighted.

4 Press ? to select the 16:9 aspect ratio (4:3 is for normal TV, 16:9 for wide-screen TV).

5 Store the setting by pressing OK on the RCU.

UHF Tuning

The UHF Tuning application allows the user to select a UHF channel for satellite viewing.

1 Repeat steps 1 to 5 for setting the TV Type (page 24).

2 Press ? to highlight UHF Tuning.

3 Press OK. The UHF Tuning screen is displayed and the decoder front panel display shows the current UHF channel number.

4 Press < or > to increase or decrease the channel number.
If the channel number is changed, the TV picture is lost because the TV is not tuned to the new channel. The changed channel number is displayed on the decoder front panel.

5 Store the setting by pressing OK on the RCU.

6 Press MENU to exit from the menu.

7 Retune the TV set to the new decoder UHF channel.

TIP: Pressing and holding down UHF for 5 seconds (not in menu, Information Bar or EPG mode) also causes the UHF Tuning screen to be displayed.

NOTE: Pressing EXIT at any time while this screen is displayed will return you to the service without saving any changes made.

Scart Source

This screen allows the user to set the sources for the various SCART connectors on the decoder.

1 Repeat steps 1 to 5 for setting the TV Type (page 24).

2 Press ? to highlight Set Scart Source.

3 Press OK. The Set Scart Source Menu is displayed.

4 Press > or ? to highlight the SCART source to be edited.

5 Press < or > to set the source of the selected SCART.

6 Store the setting by pressing OK on the RCU.

7 Press EXIT to return to the previous menu or MENU to return to the service.

Scart Video Output

This screen allows the user to set the video output type for the various SCART connectors on the decoder.

1 Repeat steps 1 to 5 for setting the TV Type (page 24).

2 Press ? to highlight Scart Video Output.

3 Press OK. The Scart Video Output Menu is displayed.

4 Press > or < to highlight the SCART to be edited.

5 Press < or > to set the video output type of the selected SCART.

6 Store the setting by pressing OK on the RCU.

7 Press EXIT to return to the previous menu or MENU to return to the service.
Change Modem Settings (if fitted)

If a modem is installed in the decoder, the Change Modem Settings screen allows the user to select Pulse or Dial Tone for the modem, and (if applicable) to define a prefix string for the modem.

1. Press MENU on the RCU. The Main Menu options list is displayed.
2. On the RCU, press ᵅ to highlight Advanced Options.
3. Press OK. The Advanced Options Menu is displayed.
4. Press ᵅ to highlight Change Modem Settings.
5. Press OK. The Change Modem Settings screen is displayed.
6. Press ᵃ or ᵇ to highlight the field to be edited.
7. Edit the Pulse/Tone setting using ᵅ and ᵇ.
8. Edit the Prefix digits using the numbered buttons and ᵅ as backspace.
9. Press OK to activate the setting and leave the screen.
10. Press EXIT to return to the previous menu or MENU to return to the service.

Local Time

Greenwich Mean Time is transmitted via the satellite signal and received by the decoder. If you live in a different time-zone you must set up the decoder to show the correct local time for your location during installation.

1. Press MENU on the RCU. The Main Menu options list is displayed.
2. On the RCU, press ᵅ to highlight Advanced Options.
3. Press OK. The Advanced Options Menu is displayed.
4. Press ᵅ to highlight Local Time.
5. Press OK. The Local Time screen is displayed.
6. Press ᵃ or ᵇ to add or subtract offsets of 30 minutes until the local time displayed shows the actual time for your location.
7. Press OK to save the setting and leave the screen.
8. Press EXIT to return to the previous menu or MENU to return to the service.

DSD Upgrade

Upgrades involve replacing the software (programs) in the decoder with improved software, adding more features and improving the existing operation of the decoder. This ensures that the decoder does not have to be replaced each time advances in technology occur. By replacing the software, you virtually get a new decoder.

Software upgrades normally take place automatically over-the-air. The decoder can be upgraded when it is in standby or while it is switched off to a service. The decoder software cannot be upgraded if it is switched off at the mains. It is strongly recommended that your decoder is left in the standby mode when you are not using it.

The Mail Menu will usually warn you that a software upgrade will take place. Software upgrades usually take place in the early morning and last approximately 9 minutes, during which time normal satellite viewing is not possible.

A facility is provided whereby you can check if new software is available and you can then start the upgrade yourself. This is necessary if the decoder has not been upgraded over-the-air due to, for instance, prolonged power failures.

To upgrade the decoder software or check whether an upgrade is available, carry out the following:

1. Press MENU on the RCU. The Main Menu options list is displayed.
2. On the RCU, press ᵅ to highlight Advanced Options.
3. Press OK. The Advanced Options Menu is displayed.
4. Press ᵅ to highlight DSD Upgrade.
5. Press OK. The Upgrade screen is displayed with the message “Checking for upgrade”. At this point, depending on whether an upgrade is available or not, one of the following two messages appears on your TV screen:
   “Failure: no download found.” or “The upgrade will take approximately X minutes. Press OK to continue or EXIT to cancel.”
   (A download was found and it takes the specified amount of time to do the download).
   If no upgrade is available, the decoder will automatically return to the service.
6. If an upgrade is available but you do not wish to upgrade, press EXIT to return to the previous menu.
7. If you wish to upgrade the decoder, press OK. A message is displayed:
   “The upgrade is active and will take approximately X minutes.”
   After the download is completed, the decoder will automatically return to the current service.

NOTES: Downloads may change installation settings to default values. If the decoder does not work after a download, refer to Advanced Options page 22 and the values that should have been written down on page 30, to restore the system.

Downloads may also change “skip” and “sort” preferences. Refer to page 21 for help in restoring your preferences.
If, during an over-the-air download, the decoder fails to accept the
download or freezes, a forced download can be performed as follows:

1. On the decoder front panel, open the right hand flap to expose the
front panel controls.

2. Carry out the following procedure:

   # Press (standby), + (up), - (down),  (standby)
in sequence.

   A rotating bar on the decoder display indicates that a download is
   taking place.

---

**TROUBLESHOOTING**

If any problems are encountered when operating the decoder, make use
of the following guidelines to assist in solving the problem. The decoder
will automatically detect and diagnose many decoder and transmission
related problems. Where possible, the errors will be communicated via
messages on the TV screen and/or the decoder display panel.

Locate either the corresponding error number and message or the
description of your problem in the troubleshooting table and follow the
advice provided.

If you have tried the appropriate remedy and still have difficulty in
operating your decoder, please call the appropriate helpline.

---

<table>
<thead>
<tr>
<th>Decoder Front Panel</th>
<th>Message or Display on TV Screen</th>
<th>Possible Cause</th>
<th>Remedies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Blank</td>
<td>Any menu is displayed</td>
<td>Normal operation. The decoder is in menu mode</td>
<td>Press the Menu button to return to normal viewing</td>
</tr>
<tr>
<td>Blank</td>
<td>Blank screen (TV is switched on)</td>
<td>No mains power to decoder</td>
<td>Ensure that the mains lead for the decoder is securely plugged into a mains supply outlet and that the mains switch is ON</td>
</tr>
<tr>
<td>Small Green Dot</td>
<td>Blank screen (TV is switched on)</td>
<td>Normal operation. The decoder is in standby mode</td>
<td>Press standby on the RCU to return to normal viewing</td>
</tr>
<tr>
<td>No small flashing Green Dot when a button on the RCU is pressed</td>
<td>Any</td>
<td>RCU does not work</td>
<td>Check if the RCU batteries are inserted correctly. Replace the batteries and test again</td>
</tr>
<tr>
<td>Any number</td>
<td>Terrestrial channel</td>
<td>No Audio / Noisy Audio</td>
<td>Check PAL I/BG setting</td>
</tr>
<tr>
<td>Any number</td>
<td>Incomplete video recording - a portion of a satellite service has not recorded</td>
<td>You have switched the decoder to standby mode or to a different service while you were recording</td>
<td>Do not make any adjustments or selections with the RCU while recording</td>
</tr>
<tr>
<td>Any number</td>
<td>Interrupted video recording - Menus or other text appear on a recorded satellite programme, or the sound level fluctuates</td>
<td>You have pressed a button on the RCU while recording</td>
<td>Do not make any adjustments or selections with the RCU while recording</td>
</tr>
<tr>
<td>Blank</td>
<td>Security Check screen followed by Parental Control Menu</td>
<td>You have not entered the correct parental PIN code</td>
<td>Refer to the section dealing with Parental Guidance in this manual. If you have forgotten your parental PIN code contact the Service Provider</td>
</tr>
<tr>
<td>Any number</td>
<td>Programme at incorrect Parental Guidance level</td>
<td>You have set your Parental Guidance function incorrectly</td>
<td>Refer to Parental Guidance menu</td>
</tr>
<tr>
<td>3 Flashing dashes and Error Dot (red)</td>
<td>TV picture breaks up and eventually &quot;NO SIGNAL&quot; banner is displayed</td>
<td>Heavy thunderstorm is in progress and the signal is affected</td>
<td>Wait until the storm subsides</td>
</tr>
<tr>
<td>Any number</td>
<td>Moving lines</td>
<td>Faulty installation</td>
<td>Check the UHF antenna installation and connections. Retune the TV to the decoder. Change the decoder output channel and retune the TV to the decoder</td>
</tr>
</tbody>
</table>
## Troubleshooting

<table>
<thead>
<tr>
<th>Decoder Front Panel</th>
<th>Message or Display on TV Screen</th>
<th>Possible Cause</th>
<th>Remedies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Three flashing dashes and Error Dot (red)</td>
<td>NO SIGNAL or SEARCHING FOR SIGNAL AT 12517 MHz</td>
<td>Faulty installation Signal problem Heavy rain (Normal operation will resume as soon as the rain subsides)</td>
<td>Check, repair or replace cables Check decoder installation settings Realign the dish Replace with an approved model dish Call the Service Provider</td>
</tr>
<tr>
<td>Error Dot (red) E03 CA Module Failure</td>
<td>The CAM is malfunctioning</td>
<td></td>
<td>Call the Service Provider</td>
</tr>
<tr>
<td>Error Dot (red) E04 Please insert Smart Card</td>
<td>The Smart Card is not inserted</td>
<td></td>
<td>Reinsert Smart Card Call the Service Provider</td>
</tr>
<tr>
<td>Error Dot (red) E05 Unknown Card</td>
<td>The Smart Card is not applicable to this system</td>
<td></td>
<td>Reinsert the Smart Card Call the Service Provider</td>
</tr>
<tr>
<td>Error Dot (red) E06 Smart Card Failure</td>
<td>The Smart Card is damaged.</td>
<td></td>
<td>Call the Service Provider</td>
</tr>
<tr>
<td>Error Dot (red) E07 Checking Smart Card</td>
<td>The decoder is briefly checking the Smart Card</td>
<td>If after 30 seconds the message is still displayed, reinsert the Smart Card</td>
<td>Call the Service Provider</td>
</tr>
<tr>
<td>Error Dot (red) E08 CA Module Failure</td>
<td>The CAM is malfunctioning</td>
<td></td>
<td>Call the Service Provider</td>
</tr>
<tr>
<td>Error Dot (red) E09 CAD EEPROM error</td>
<td>The Smart Card is malfunctioning</td>
<td></td>
<td>Reinsert the Smart Card Call the Service Provider</td>
</tr>
<tr>
<td>Error Dot (red) E11 Updating CAD EEPROM</td>
<td>The decoder is briefly checking the Smart Card</td>
<td>If after 60 seconds the message is still displayed, reinsert the Smart Card</td>
<td>Call the Service Provider</td>
</tr>
<tr>
<td>Error Dot (red) E12 CAM failure</td>
<td>The CAM is malfunctioning</td>
<td></td>
<td>Call the Service Provider</td>
</tr>
<tr>
<td>Error Dot (red) E13 CAM failure</td>
<td>The CAM is malfunctioning</td>
<td></td>
<td>Call the Service Provider</td>
</tr>
<tr>
<td>Error Dot (red) E14 Service is currently scrambled</td>
<td>There is a problem with the transmission</td>
<td></td>
<td>Wait for resumption of transmission</td>
</tr>
<tr>
<td>Error Dot (red) E15 Smart Card error</td>
<td>Smart Card damaged</td>
<td></td>
<td>Call the Service Provider</td>
</tr>
<tr>
<td>Error Dot (red) E16 Service is currently scrambled</td>
<td>Access to service denied</td>
<td></td>
<td>Call the Service Provider</td>
</tr>
<tr>
<td>Error Dot (red) E17 Service is currently scrambled</td>
<td>Access to service denied</td>
<td></td>
<td>Call the Service Provider</td>
</tr>
<tr>
<td>Error Dot (red) E18 Unknown card</td>
<td>The Smart card is not applicable to this system</td>
<td></td>
<td>Insert the correct Smart card Call the Service Provider</td>
</tr>
<tr>
<td>Error Dot (red) E19 Service is currently scrambled</td>
<td>Access to service denied</td>
<td></td>
<td>Call the Service Provider to renew subscription</td>
</tr>
<tr>
<td>Error Dot (red) E20 Service is currently scrambled</td>
<td>Access to service denied</td>
<td></td>
<td>Call the Service Provider</td>
</tr>
<tr>
<td>Error Dot (red) E21 Service is currently scrambled</td>
<td>Access to service denied</td>
<td></td>
<td>Call the Service Provider</td>
</tr>
<tr>
<td>Error Dot (red) Event purchased</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Error Dot (red) Preview period</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Error Dot (red) E24 Service is currently scrambled</td>
<td>Access to service denied</td>
<td></td>
<td>Call the Service Provider</td>
</tr>
<tr>
<td>Error Dot (red) E25 Event already purchased</td>
<td>Attempt to re-purchase an event</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Error Dot (red) E26 Event for sale - cheap</td>
<td>Special of the day</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Error Dot (red) E27 No further purchases possible</td>
<td>Event limit reached</td>
<td></td>
<td>Call the Service Provider</td>
</tr>
<tr>
<td>Error Dot (red) E28 Credit limit reached</td>
<td>Entitlement Credits in Smart Card exhausted</td>
<td></td>
<td>Contact the Service Provider to add extra credits</td>
</tr>
<tr>
<td>Error Dot (red) E30 Service is currently scrambled</td>
<td>Access to service denied</td>
<td></td>
<td>Call the Service Provider</td>
</tr>
<tr>
<td>Decoder Front Panel</td>
<td>Message or Display on TV Screen</td>
<td>Possible Cause</td>
<td>Remedies</td>
</tr>
<tr>
<td>---------------------</td>
<td>---------------------------------</td>
<td>---------------</td>
<td>----------</td>
</tr>
<tr>
<td>Error Dot (red)</td>
<td>E31 Service is currently scrambled</td>
<td>Access to service denied</td>
<td>Call the Service Provider</td>
</tr>
<tr>
<td>Error Dot (red)</td>
<td>E32 Service is currently scrambled</td>
<td>Access to service denied</td>
<td>Call the Service Provider</td>
</tr>
<tr>
<td>Error Dot (red)</td>
<td>E34 Service is currently scrambled</td>
<td>Access to service denied</td>
<td>Unplug and reinsert CAM Call the Service Provider</td>
</tr>
<tr>
<td>Error Dot (red)</td>
<td>E35 Service is currently scrambled</td>
<td>Access to service denied</td>
<td>Call the Service Provider</td>
</tr>
<tr>
<td>Error Dot (red)</td>
<td>E37 Service unknown</td>
<td>System error</td>
<td>Call the Service Provider</td>
</tr>
<tr>
<td>Error Dot (red)</td>
<td>E38 Service is not currently running</td>
<td>The service is being used for a special event</td>
<td>Consult the EPG</td>
</tr>
<tr>
<td>Error Dot (red)</td>
<td>E39 Locating service</td>
<td>The decoder is busy locating a service</td>
<td>Wait briefly while service is located</td>
</tr>
<tr>
<td>Error Dot (red)</td>
<td>E40 DSD memory full</td>
<td>System error</td>
<td>Call the Service Provider</td>
</tr>
<tr>
<td>Error Dot (red)</td>
<td>E41 Service is not currently available</td>
<td>The programme has been blocked by means of Parental Control</td>
<td>Reassign Parental level</td>
</tr>
<tr>
<td>Error Dot (red)</td>
<td>E42 Parental Control Lock</td>
<td>The service has been blocked by parental level</td>
<td>Reset Parental level if required</td>
</tr>
<tr>
<td>Error Dot (red)</td>
<td>E45 Service not allowed</td>
<td>The satellite dish is not receiving a signal</td>
<td>Check that the satellite frequency has been correctly set Check the installation Call the Service Provider</td>
</tr>
<tr>
<td>Error Dot (red)</td>
<td>E46 Reading satellite information</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Error Dot (red)</td>
<td>E47 No soundtrack available</td>
<td>An unavailable language has been selected</td>
<td>Select an available soundtrack</td>
</tr>
<tr>
<td>Error Dot (red)</td>
<td>E49 LNB Overload detected</td>
<td>Installation faulty</td>
<td>Check installation for short circuits Consult dish installer</td>
</tr>
<tr>
<td>Error Dot (red)</td>
<td>E50 No %s Services available</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Error Dot (red)</td>
<td>E53 Incorrect PIN</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Error Dot (red)</td>
<td>E54 IPPV OK</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Error Dot (red)</td>
<td>E55 No event information found</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Error Dot (red)</td>
<td>E56 CAM not compatible</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Error Dot (red)</td>
<td>E64 Invalid tuning parameters</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
**SPECIFICATION**

Due to continued product improvement, this specification is subject to change without prior notice.

### GENERAL

**Front Panel Control Buttons**
- On/Standby, TV/Audio, Programme/volume ± (Up/Down)
- Reset: On/Standby and - (minus) simultaneously

**RCU**
- Multi-button, infrared, battery operated RCU.
- Range: 7 m, ± 45° in horizontal plane, ± 20° in the vertical plane.
- Batteries: Type AAA

**User Interface**
- Full On-screen Display with point and select menus for setup, TV viewing, audio listening, teletext and future interactivity.

**Subscription service facilities**
- Smart Card, on-board CA software and over-the-air upgradeable software
- Built-in modem (optional)

**UHF Modulator**
- PAL BG or PAL I, Ch 21 to 69, preset to Ch 46

**Mains Voltage**
- 210 - 250 V AC 50 Hz

**Dimensions**
- 384 x 90 x 290 mm WxHxD

**Weight**
- 3.2 kg (unpacked)

**Operating Conditions:**
- Temperature: 5°C to 45°C
- Relative Humidity: 5% to 80% <38°C wet bulb temperature
- Altitude: 0 to 2000 m

### CONNECTORS

- LNB input: F-connector
- LNB output: F-connector
- Terrestrial antenna input: IEC 169 female
- TV RF output: IEC 169 male
- TV SCART: SCART
- VCR SCART: SCART
- AUX SCART: SCART
- Variable left channel audio output to TV/VCR: RCA
- Variable right channel audio output to TV/VCR: RCA
- Fixed left and right audio channels to Hi-Fi: RCA
- Mono audio to TV/VCR: RCA
- Internal modem (where fitted): RJ11
- External modem port: 9 pin D-type male
- Data service port: 9 pin D-type female

### SATELLITE RECEIVER TUNER

- Receiver Frequency Range: 950 to 2150 MHz
- Input Signal Level: -20 dBm to -65 dBm
- Polarisation Switching: 13.5 - 18 V DC 350 mA maximum, short circuit protection
- DiseqC: 22 kHz

### DEMODULATOR

- Type: QPSK
- Input Data Rate: 15 to 30 Mb/s
- Error Correction: DVB specified FEC code rates

### DSD AUDIO

- Decompression: MPEG-1, MPEG-2 Layer II, Musicam
- Channels: Single channel, joint stereo, stereo
- Sampling Frequencies: 32.0 kHz, 44.1 kHz and 48.0 kHz

### REMODULATOR RF SIGNAL

- Depth of Modulation: 80% PAL I
- 88% PAL B
- Output Channel Range: 21 to 69 (preset to channel 46)
- Vision-to-sound ratio: 14 dB
- Vision-to-sound frequency variance: ± 20 kHz from nominal
- Vision carrier frequency drift: ± 10 kHz
- RF output level: 73 dB, V
- Output spuri: <80 dB
- RF stray radiation: <20 dB
- Vision carrier frequency drift: ± 10 kHz
- RF bypass bandwidth: 47 MHz to 860 MHz
- RF bypass insertion gain: 2 dB
- RF bypass channel tilt: 1 dB

### MEMORY

- RAM: 4 Mbyte
- Flash - RAM: 2 Mbyte
- Non-volatile memory: 8 kbyte

### VIDEO SIGNAL

- Output: 1 V peak-to-peak, 75 Ω
- Format: PAL
- Bandwidth: 5 MHz

### AUDIO SIGNALS

- Output: 1 V r.m.s. into 10 kΩ
- Frequency range: 20 Hz to 20 kHz at 44.1 kHz sampling rate
- Dynamic range: 80 dB
- Distortion: ± 0.2% @ 1 kHz
- Noise: -80 dB
- L-R level difference: 0.5 dB
- Crosstalk: -60 dB

### EXTERNAL MODEM

- Maximum data rate: 19200 bits/s

### DSD FACTORY SETTINGS

- Installation pin: 9949
- Remod Channel: 46
- TV-Standard: PAL I
- TV Aspect Ratio: 4 x 3
- LNB Power: ON
- LNB mode: dual
- LNB Lo frequency: 9750 MHz
- LNB Hi frequency: 10700 MHz
- Switching frequency: 11700 MHz
- Homing Channel Frequency: 12517.5 MHz
- Homing Channel Polarisation: Horizontal
- Homing Channel Modulation: QPSK
- Homing Channel Symbol Rate: 21.85 MSym/s
- Homing Channel FEC Rate: 5/6
- Info Bar display time: 10 seconds
- Parental Level: Unlocked
- Parental code: 1234
- Language option: English, Afrikaans, German, Portuguese, French
## MULTICHOICE DSTV HOTLINES

<table>
<thead>
<tr>
<th>Region</th>
<th>Telephone Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>GAUTENG</td>
<td>(011) 289-2250</td>
</tr>
<tr>
<td>PRETORIA</td>
<td>(012) 442-2250</td>
</tr>
<tr>
<td>WESTERN CAPE</td>
<td>(021) 508-2250</td>
</tr>
<tr>
<td>KWAZULU NATAL</td>
<td>(031) 710-2250</td>
</tr>
<tr>
<td>FREE STATE</td>
<td>(051) 503-2250</td>
</tr>
<tr>
<td>EASTERN CAPE</td>
<td>(041) 395-2250</td>
</tr>
<tr>
<td>SWAZILAND</td>
<td>(268) 46254/41226/40158</td>
</tr>
<tr>
<td>ZIMBABWE</td>
<td>(263) 470 6637/8/9</td>
</tr>
</tbody>
</table>

WEBSITE:  http://www.dstv.co.za/

### Installation Settings  (to be filled in by Installer)

<table>
<thead>
<tr>
<th>Setting</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>DSD No</td>
<td></td>
</tr>
<tr>
<td>Date of Purchase</td>
<td></td>
</tr>
<tr>
<td>Smart Card Serial No</td>
<td></td>
</tr>
<tr>
<td>Work Order No</td>
<td></td>
</tr>
<tr>
<td>Installer Name</td>
<td></td>
</tr>
<tr>
<td>Installer Tel. No</td>
<td></td>
</tr>
<tr>
<td>UHF Channel Set</td>
<td></td>
</tr>
<tr>
<td>LNB Power</td>
<td></td>
</tr>
<tr>
<td>LNB Mode</td>
<td></td>
</tr>
<tr>
<td>LNB Frequency</td>
<td></td>
</tr>
<tr>
<td>Hi Freq:</td>
<td></td>
</tr>
<tr>
<td>Lo Freq</td>
<td></td>
</tr>
<tr>
<td>Switching</td>
<td></td>
</tr>
<tr>
<td>Manual Channel Tuning</td>
<td></td>
</tr>
<tr>
<td>- Frequency</td>
<td></td>
</tr>
<tr>
<td>- Symbol Rate</td>
<td></td>
</tr>
<tr>
<td>- Polarisation</td>
<td></td>
</tr>
<tr>
<td>- FEC</td>
<td></td>
</tr>
<tr>
<td>Date</td>
<td></td>
</tr>
</tbody>
</table>