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## 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 (Operating Instructions)

## SAFETY

This decoder meets/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.

**CLEANING:** Use a dry cloth (no solvents) to clean the exterior.

**VENTILATION:** Do not block the decoder ventilation holes. 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 a qualified service agent.

**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 DSD 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.

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## DIGITAL SATELLITE SERVICES

The DSD has been designed to receive and process digital signals from the Pas 7, 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.

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## 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

The Smart Card looks similar to a credit card and is inserted into the slot behind the right-hand front flap of the DSD.

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.

### 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.

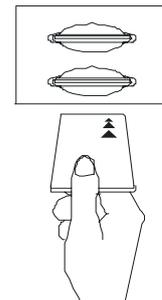
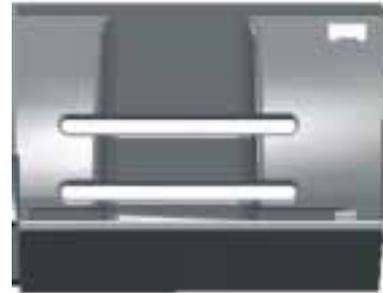
The Smart Card is not required for access to menus.

The Smart Card is not required for access to menus except for the Parental Control Options sub-menus, which requires your PIN to be entered first. The setting of the Advanced Options parameters does not require the Smart Card to be inserted.

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

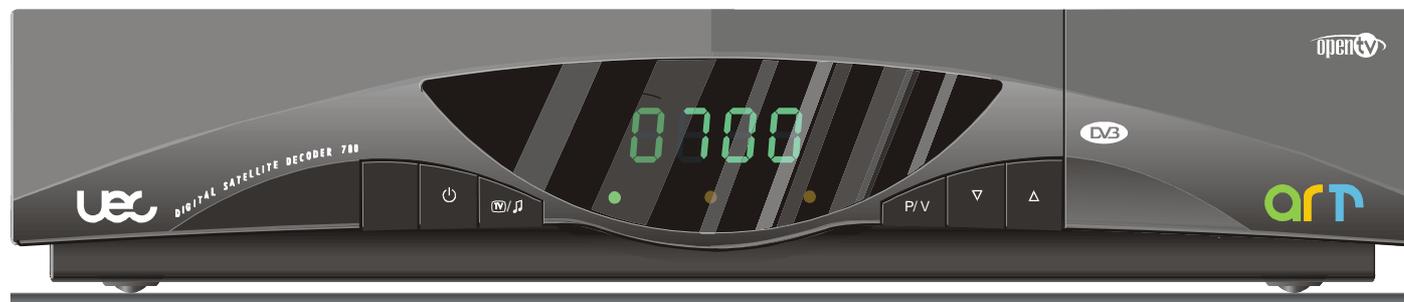
To insert the Smart Card, follow the instructions carefully.

- 1 Open the right hand flap on the front of the decoder (see figure) Swing the flap downwards to expose two card slots.
- 2 Hold the Smart Card horizontally with the logo on top and the arrows pointed towards the front of the card. Insert the card fully into the **open** (bottom) slot.



## THE DIGITAL SATELLITE DECODER (DSD)

The DSD combines a high quality MPEG-2 and DVB compliant satellite receiver, 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.



### DISPLAY

Green dot IRD in Standby mode	Service No. 17 selected	Green light - Audio services selected	Rotating bar. Searching for service information	Three flashing bars and red light. Service not found, or signal of inferior quality
Download in progress. Steady yellow light	Green dot flashes when RCU keys are pressed	Yellow light. Mail message waiting	Red light Error indication	Menu selected

### REAR PANEL CONNECTIONS

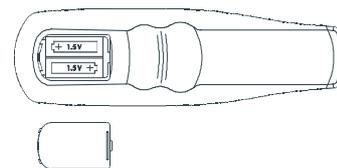
### FRONT PANEL KEYS

Key	Description
	Switches the decoder between normal and standby modes
	Switches between TV and Audio services
<b>P/V</b>	Switches between programme selection and volume control
	Selects the next service on the list, or increases volume level
	Selects the previous service on the list, decreases volume level
<b>V+</b> and 	When pressed simultaneously, reset the operation of the decoder Only to be used if the decoder has stopped reacting to the Remote Control

## Remote Control Unit (RCU)

When pressed once then released, toggles between the various INPUT sources (VCR, TV,DSD).  
When pressed, held for 5 seconds then released, displays the UHF tuning channel. Press once to remove the tuning channel.

Puts the decoder into standby or takes it out of standby



### Inserting/changing the batteries

- Never leave flat batteries in the remote control
- Only Insert AAA size batteries
- Make sure batteries are correctly positioned, or remote will not work

When pressed, displays the last viewed programme

Displays the local time and date on the TV

Displays the Main Menu, or, if a menu is displayed, returns to the last viewed programme

Displays a programme information bar on the screen for 5 seconds. When pressed again, displays extended event information

**▲ and ▼ arrow keys**  
Move the highlights up or down the screen when a menu or TV/Radio guide is displayed

Selects the Electronic programme guide (EPG) which displays all the available TV and Radio programmes

**◀ and ▶ arrow keys**  
Switches options in menus

Removes the TV/Radio guide or information from the screen and redispays the last programme you were watching  
If a menu is displayed, pressing EXIT returns you to the previous menu

Selects a programme in when In the EPG and selects highlighted options or values in menus. Saves any changed settings in menus

**P+ and P- keys**  
Steps through the channels one at a time (+ for next, - for previous)

**V+ and V- keys**  
Adjusts the volume up or down

**Number keys 0 to 9**  
Selects programmes, or keys in numbers, e.g. PIN number

Switches to a TV channel from a Radio channel. Displays available bouquets on screen

Switches to a Radio channel from a TV channel

Mutes the sound from the TV

Displays soundtrack information on the TV for 5 seconds. Where options are available, the display identifies the numbers

Displays subtitle options (if available) on the TV. When pressed again, displays teletext on channels where it is available



## 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 31.

### 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 the 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*.



*dL with yellow dot indicates software being down-loaded*



*Number 1 with rotating bar and yellow dot. Indicates decoding process is in progress*



*Display flashes briefly*



*Three flashing bars and red dot*



*Inf (information) appears at the same time as scanning screen on TV*



*Number of last used service appears*

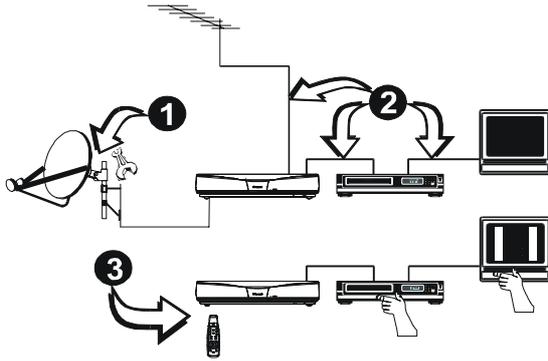
**If your TV has been tuned to accept the decoder services, but your smart card has not been inserted into the decoder, an error message will appear on your TV screen.**

**If your decoder was in standby mode at mains power switch off, the decoder will display a green dot when mains power is restored. Press On/Off symbol to restore signal.**

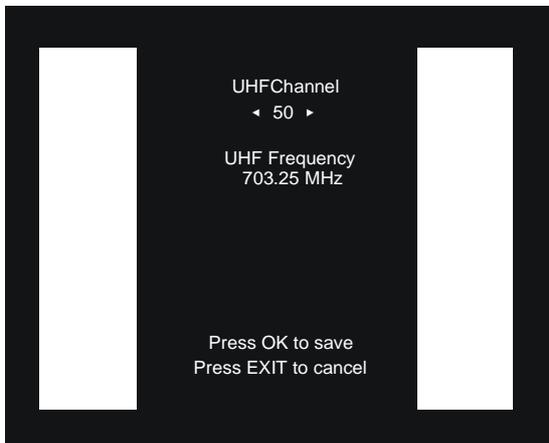
### Tuning your TV

If your TV is not tuned to the decoder viewing channel, 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 (only in case of a non-SCART or RCA connection). 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 approx. 5 seconds until UHF is displayed on the decoder display. Tune your TV set to receive the decoder test signal display (see following figure).



A Channel number (initially 50) will be displayed on the decoder front panel display.

Press UHF on the RCU to remove the test signal.

Check that any noise from 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 to display UHF on the decoder display and the UHF test screen on the TV.

Change the channel number by pressing ◀ and ▶ on the RCU.

Press OK to save. The following will happen as soon as ◀ and ▶ 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.*

## Standby and Normal Modes

The decoder does not have a mains 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 for viewing the satellite services (in case of a non-SCART / RCA connection) or select the appropriate scart source (in case of a SCART or RCA connection).
- 3 If the decoder is in the standby mode, press ⏻ on 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, 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 front panel display is illuminated while the decoder is in the Audio Services mode.

Some audio services are free-to-air and do not require a subscription. 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 it becomes necessary to change the installation parameters consult your local installer.

**The decoder is now ready for normal use.**

## Optional Decoder Connections

### Introduction

There are several ways of connecting the DSD to an existing entertainment 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 on a Hi-Fi.

Consult your local installer 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 the Video/ Audio mode on the VCR and TV in place of the TV mode.

### DSD, TV (most common connection)

- 1 Connect the terrestrial antenna connector to the RF IN socket on the DSD.

**NOTE:** It is recommended that you switch off the mains supply to the DSD before connecting or disconnecting the LNB connector to/from the decoder

- 2 Using a SCART-to-SCART cable, connect the TV SCART socket on the DSD to the SCART socket on the TV.

OR

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

OR

- 4 If using RCA connectors, connect between DSD audio and video connectors and respective RCA connectors on the TV.

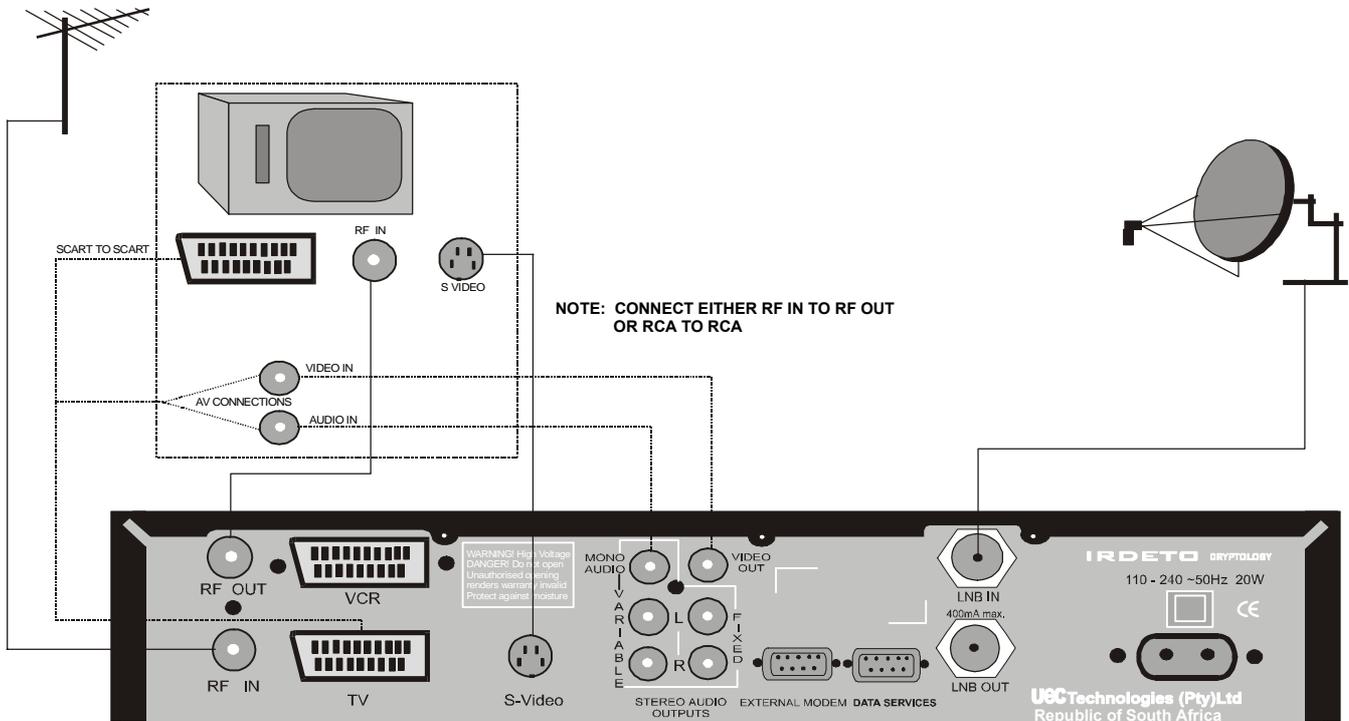
OR

- 5 If using SCART to RCA connector, connect between the DSD TV SCART output and RCA connectors on the TV.

OR

- 6 If your TV has a S Video connector, connect to S VHS connector on the decoder. Also, connect Mono Audio on decoder to Audio In on the TV.

- 7 Connect the coaxial cable connector from the LNB on the satellite dish into the socket marked LNB IN on the DSD. The connector on the coaxial cable should be turned until it is fingertight



REAR PANEL

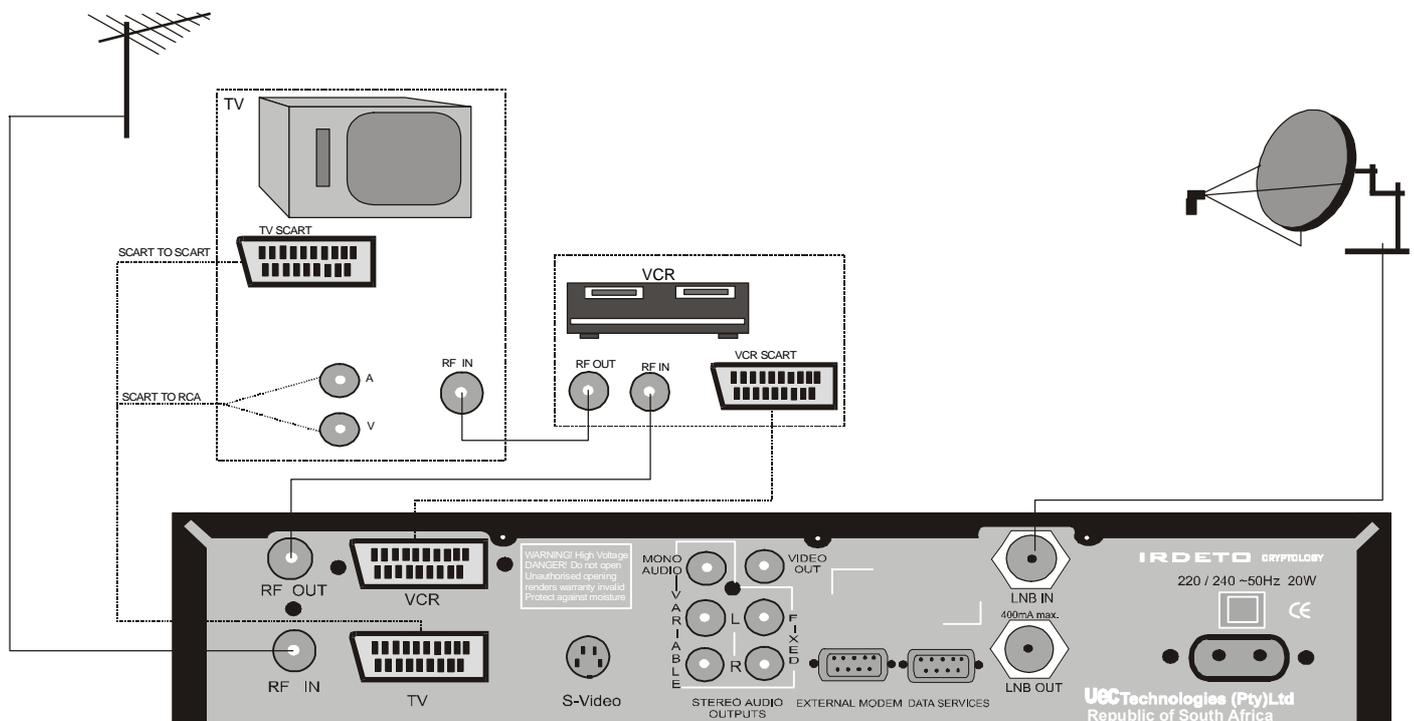
## DSD, VCR, TV (using SCART or RF Interface)

**NOTE:** As the LNB carries a small voltage from the IRD on its centre connector, it is recommended that the decoder is switched off at the mains before connecting or disconnecting the LNB connector.

- 1 Connect the coaxial cable from the LNB on the satellite dish to the socket marked LNB IN on the DSD. The connector on the coaxial cable should be turned until it is finger tight.
- 2 Connect the terrestrial antenna connector to the RF IN socket on the DSD.
- 3 Connect the RF OUT socket on the DSD to the RF IN socket on the VCR.
- 4 Connect the RF OUT socket on the VCR to the RF IN socket on the TV.

The following instructions applies if your TV and VCR have SCART or RCA connectors:

- 5 Using a SCART-to-SCART (or SCART to RCA) cable, connect the TV SCART socket on the DSD to the SCART (or RCA) socket on the TV.
- 6 Using a second SCART-to-SCART cable (not supplied), connect VCR SCART socket on the DSD to the TV SCART socket on the VCR.



REAR PANEL

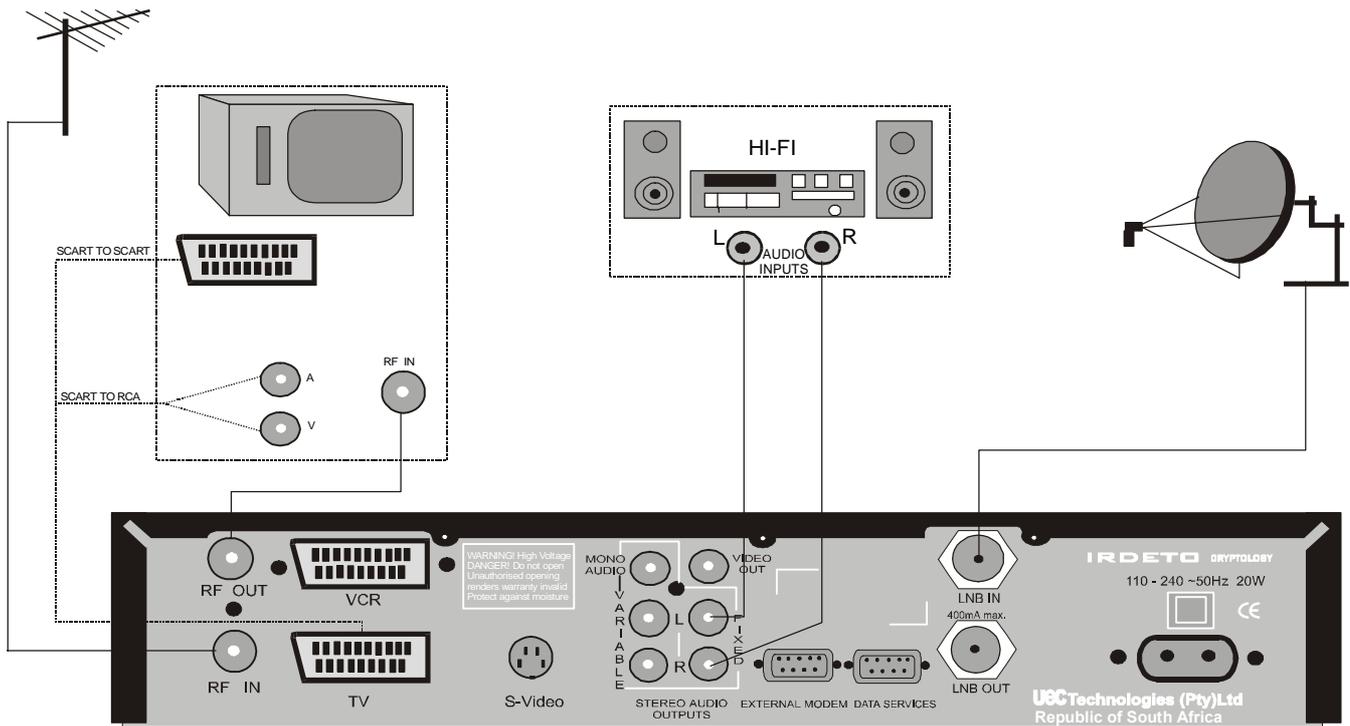
## DSD, TV (SCART or RF Interfaces), Hi-Fi

**NOTE:** It is recommended that you switch off the mains supply to the decoder before connecting or disconnecting the LNB connector.

- 1 Connect the terrestrial antenna connector to the RF IN socket on the decoder.
- 2 To use the stereo output facility on the DSD to connect to the amplifier on your Hi-Fi, connect an AUDIO flylead between the fixed stereo audio outputs on the DSD and the audio inputs on the Hi-Fi.

**NOTE:** If you want to control the volume level from the RCU, use the variable stereo audio outputs.

- 3 Connect the coaxial cable connector from the LNB on the satellite dish into the connector marked LNB IN on the decoder. The connector on the coaxial cable to the decoder should be finger tight.
- 4 Using a SCART-to-SCART (or SCART to RCA) cable (not supplied), connect the TV SCART socket on the decoder to the SCART (or RCA) socket on the TV.
- 5 If the TV does not have a SCART (or RCA) socket, use the supplied fly lead to connect the RF OUT connector on the decoder to the RF IN connector on the TV.



REAR PANEL

## DSD, VCR, TV, Hi-Fi

**NOTE:** It is recommended that you switch off the mains supply to the IRD before connecting or disconnecting the LNB connector.

- 1 Connect the terrestrial antenna connector to the RF IN socket on the DSD.

Follow Steps 2 to 4 if you are not using SCART connectors.

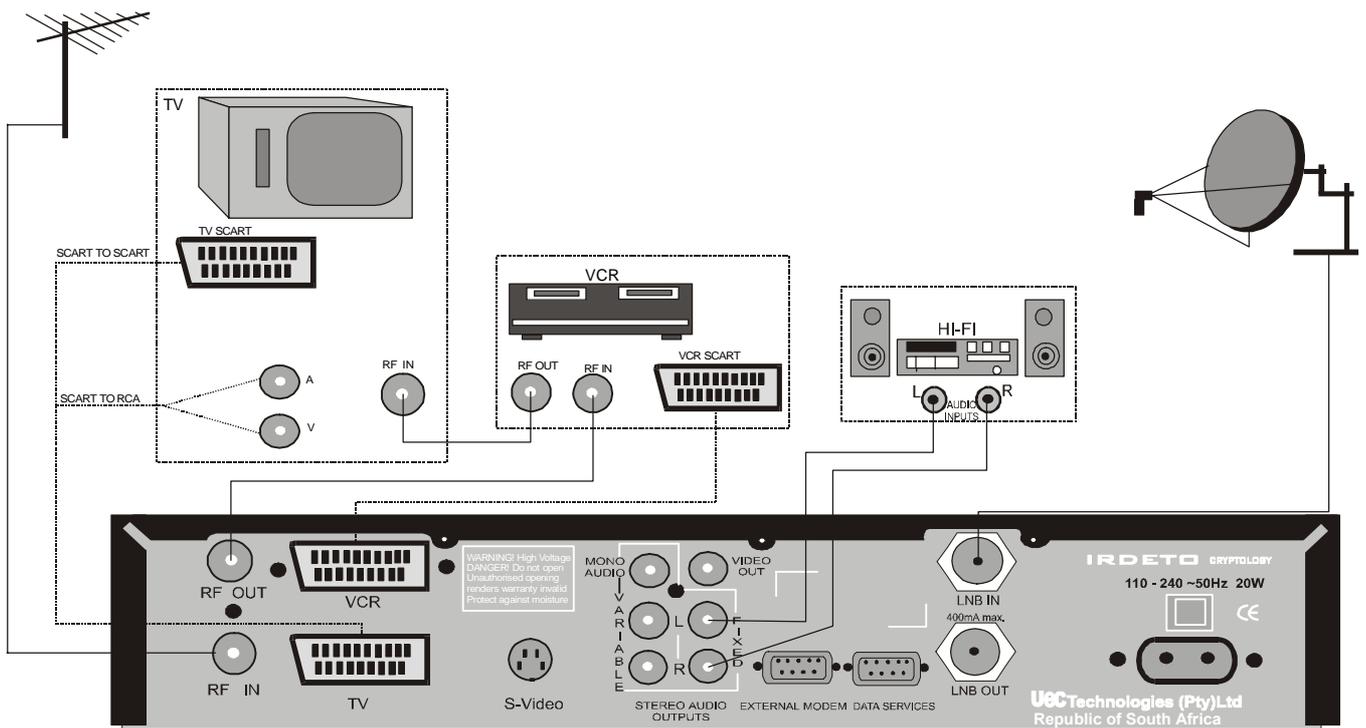
- 2 Using the supplied flylead, connect the RF OUT connector on the DSD to the RF IN connector on the VCR.
- 3 Using the flylead supplied with the VCR, connect RF OUT on the VCR to RF IN on the TV
- 4 Connect the coaxial cable from the satellite dish to the LNB IN connector on the DSD. Tighten the connector finger tight.

Follow steps 5 and 6 if you are using SCART connections

- 5 Using a SCART-to-SCART (or SCART to RCA) cable, connect the TV SCART connector on the IRD to the SCART (or RCA) socket on the TV.
- 6 Using a second SCART cable, connect the VCR SCART on the DSD to the SCART on the VCR.
- 7 Connect the FIXED STEREO AUDIO OUT connectors on the DSD to the AUDIO INPUT connectors on the Hi-Fi.

**NOTE:** If you want to control the volume level from the RCU, use the variable stereo AUDIO outputs.

- 8 Switch power on to the DSD



REAR PANEL

## DSD, VCR, TV, Hi-Fi (using RCA Connectors)

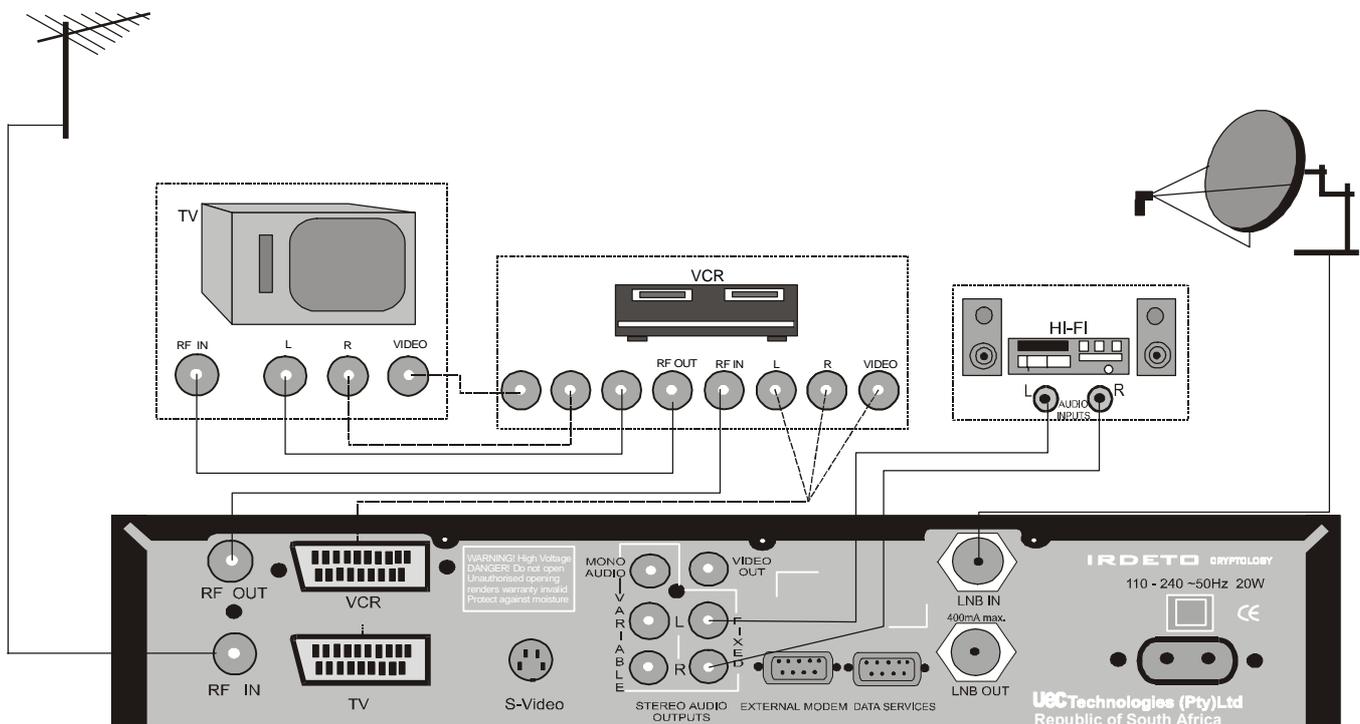
**NOTE:** It is recommended that you switch off the mains supply to the DSD before connecting or disconnecting the LNB connector.

- 1 Connect the terrestrial antenna to the RF IN socket on the DSD.
- 2 Using the supplied flylead, connect the RF OUT on the DSD to the RF IN on the VCR.
- 3 Using the flylead supplied with the VCR, connect the RF OUT on the VCR to the RF IN on the TV.
- 4 Connect the coaxial cable connector from the LNB on the satellite dish to the socket marked LNB IN on the DSD. Tighten the connector finger tight.
- 5 Using a SCART-to-RCA cable, connect the VCR SCART socket on the DSD to the LEFT and RIGHT AUDIO INPUT sockets and the Video input socket of the VCR.
- 6 Connect the AUDIO OUT sockets on the VCR to the AUDIO INPUT sockets on the TV.

- 7 Connect the VIDEO OUT socket on the VCR to the VIDEO INPUT socket on the TV using an RCA to RCA cable.
- 8 Connect the LEFT and RIGHT HI-FI FIXED AUDIO OUT sockets on the IRD to the LEFT and RIGHT AUDIO INPUT sockets on the Hi-Fi.

**NOTE:** If you want to control the volume level from the RCU, use the variable stereo AUDIO outputs.

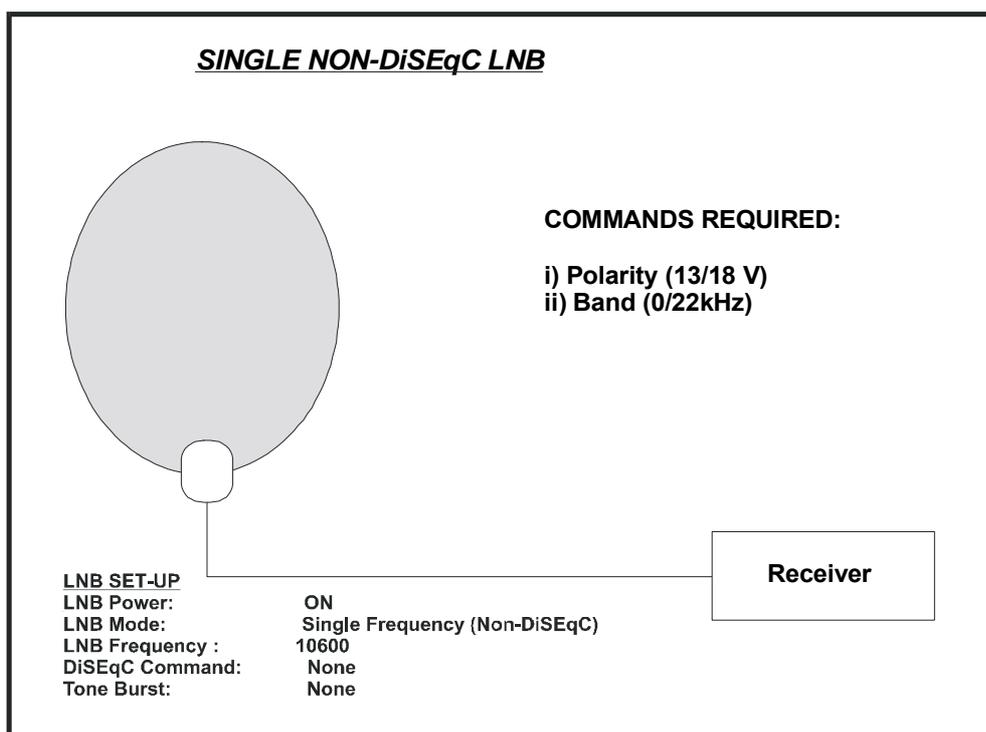
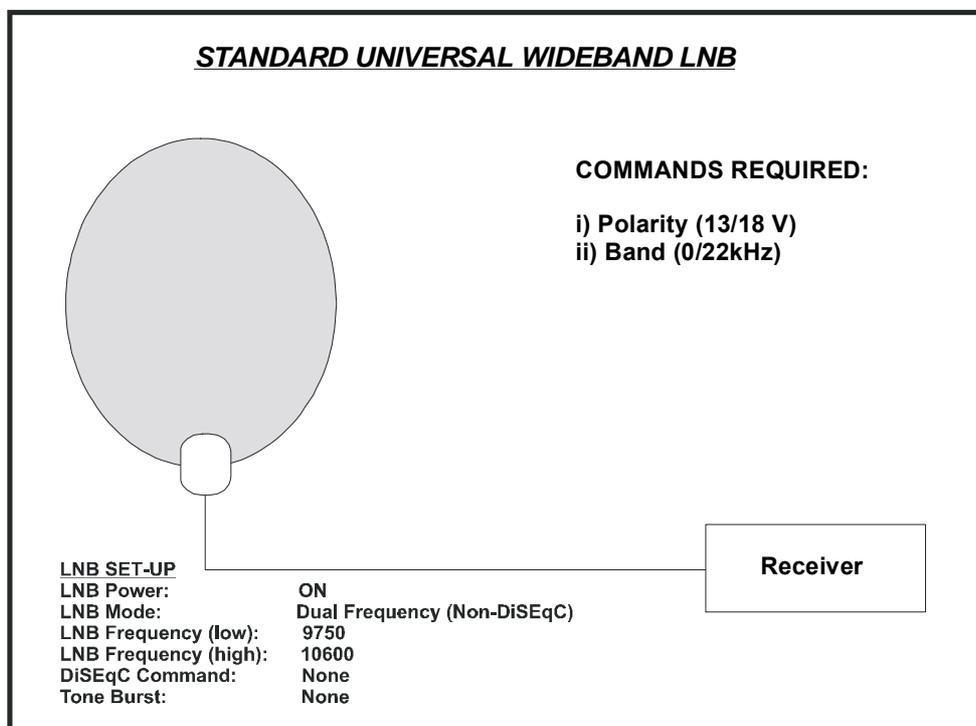
- 9 Connect the power plug of the DSD to the mains wall socket and switch the power on.
- 10 Select the Video Input of the VCR to record satellite.
- 11 Select a UHF channel on the TV to view the satellite service.
- 12 Select the video input of the TV for better quality (refer to TV manual).



REAR PANEL

## LNB Installation

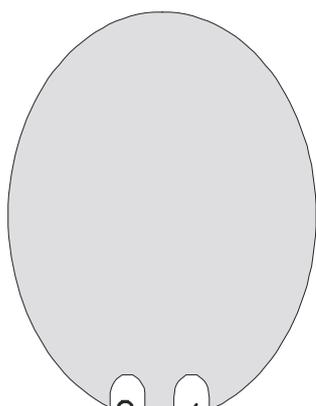
The following diagrams give installation options and set-up for various LNB installations.



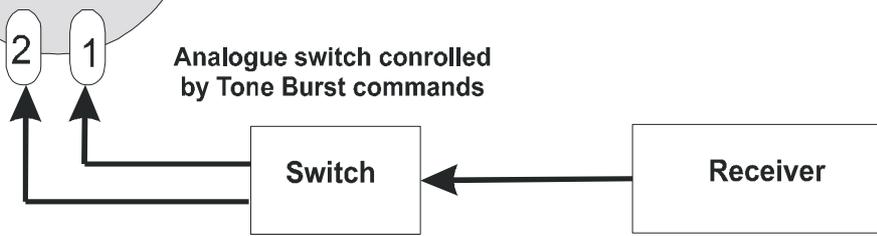
**DUAL - FEED WITH TWO STANDARD UNIVERSAL LNBS**

**COMMANDS REQUIRED:**

- i) Polarity (13/18V)
- ii) Band (0/22kHz)
- iii) Tone Burst



Analogue switch controlled by Tone Burst commands

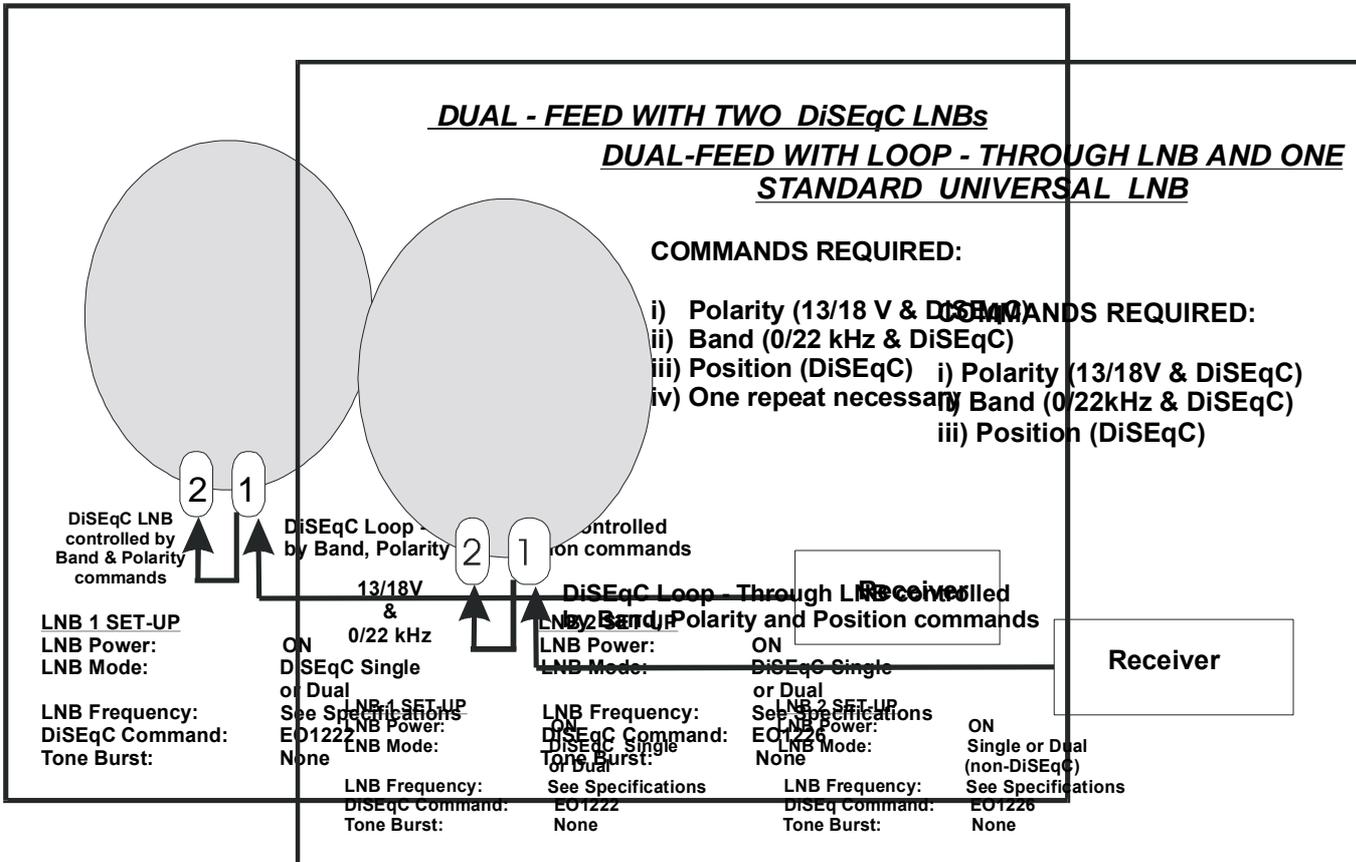


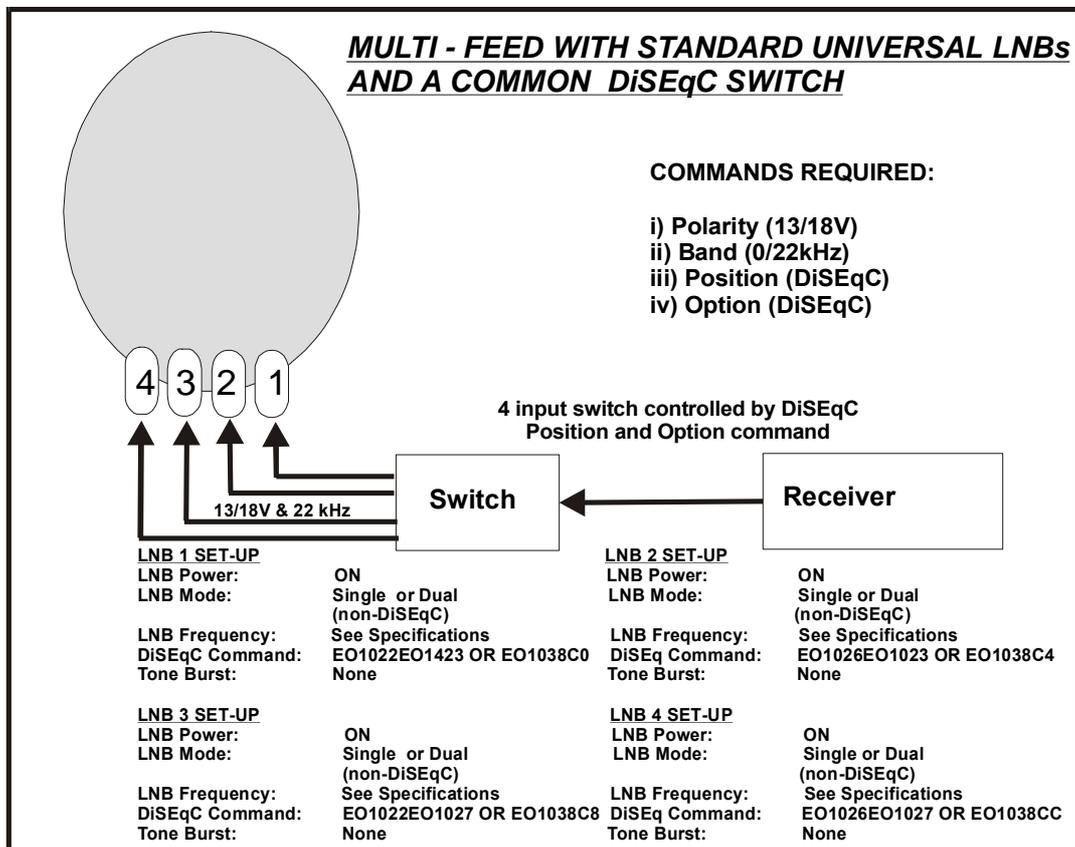
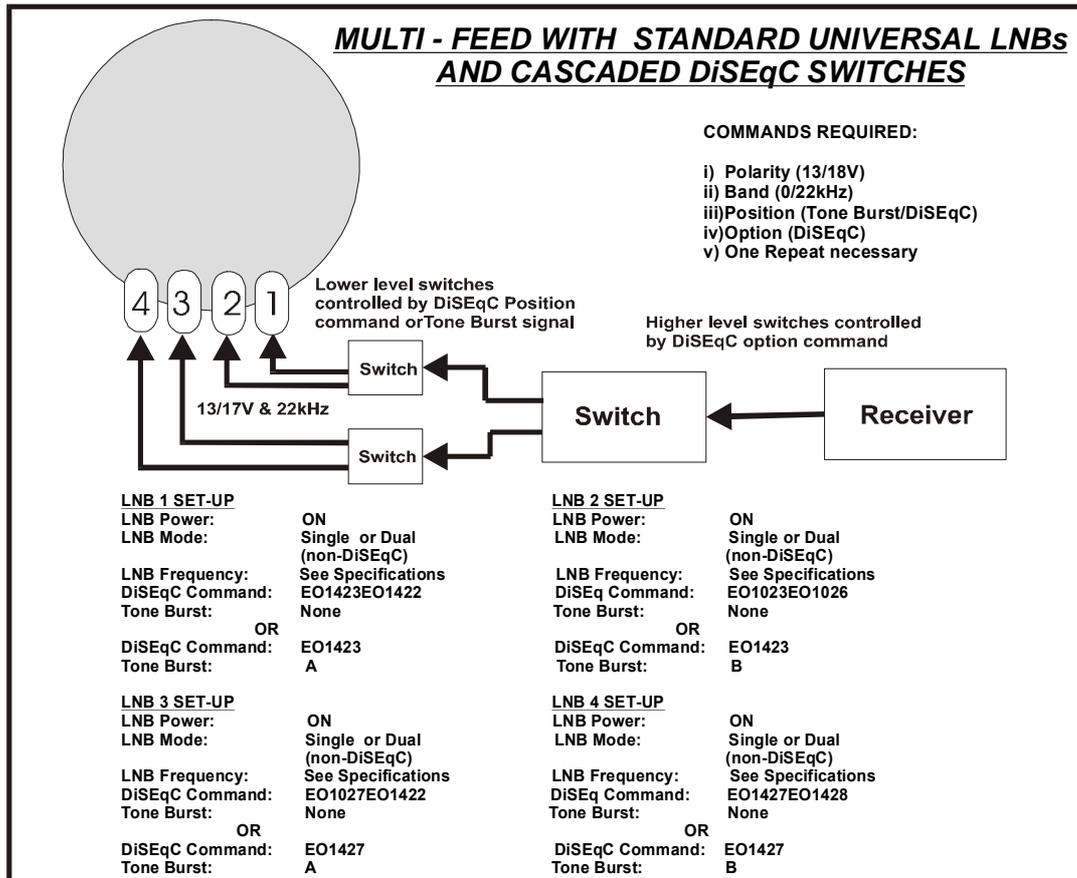
**LNB 1 SET-UP**

LNB Power: ON  
 LNB Mode: Single or Dual (Non-DiSEqC)  
 LNB Frequency: See Specifications  
 DiSEqC Command: None  
 Tone Burst: A

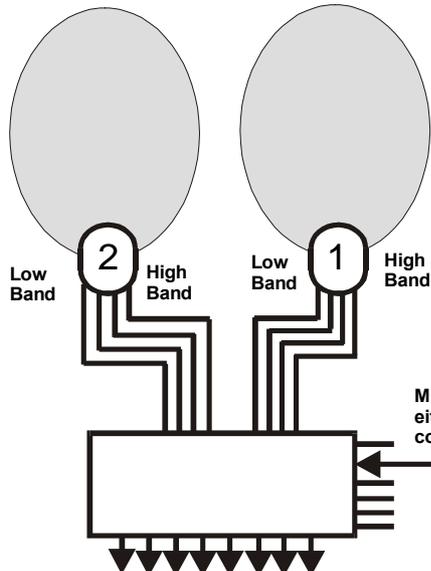
**LNB 2 SET-UP**

LNB Power: ON  
 LNB Mode: Single or Dual (Non-DiSEqC)  
 LNB Frequency: See Specifications  
 DiSEqC Command: None  
 Tone Burst: B





**COMMUNAL RECEPTION WITH 8 IF INPUTS  
USING 8 INPUT SWITCHES**



**COMMANDS REQUIRED:**

- i) Polarity (13/18V & DiSEqC)
- ii) Band (0/22kHz & DiSEqC)
- iii) Position (DiSEqC or Tone Burst)

Multi-switch controlled by either DiSEqC commands or conventional commands plus Tone Burst

**Receiver**

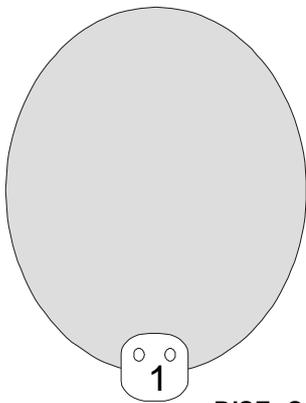
**LNB 1 SET-UP**

LNB Power: ON  
 LNB Mode: Single or Dual (Non DiSEqC)  
 LNB Frequency: See Specifications  
 DiSEqC Command: EO1022  
 Tone Burst: None

**LNB 2 SET-UP**

LNB Power: ON  
 LNB Mode: Single or Dual (Non DiSEqC)  
 LNB Frequency: See Specifications  
 DiSEqC Command: EO1026  
 Tone Burst: None

**Dual-Feed with Mono-Block DiSEqC LNB**



**COMMANDS REQUIRED:**

- i) Polarity (DiSEqC)
- ii) Band (DiSEqC)
- iii) Position (DiSEqC)

DiSEqC Mono - Block LNB controlled by Band, Polarity and Position commands

**Receiver**

**LNB SET-UP**

LNB Power: ON  
 LNB Mode: DiSEqC Dual  
 LNB Frequency: See Specifications  
 DiSEqC Command: None  
 Tone Burst: None

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## Bouquet Selection

The TV services are transmitted in subscribed packages called BOUQUETS, each bouquet containing a series of services. The DSD has provision for several bouquets, any of which can be selected by pressing TV on the RCU, highlighting the required bouquet using the up/down arrows 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.

## 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.

**NOTE:** By pressing  or TV a mini-menu will appear on screen. Using the ▼ or ▲ buttons, select the bouquet that you wish to view and press OK to confirm selection. Select other applications if available.

- 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/three-digit numbers, i.e. 10-999, it is necessary to press the second-third digit without pausing after pressing the first/second digit.

---

**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 DSD. 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.

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## Stepping through Services

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

## Selecting Specific Services from the EPG

**NOTE:** For a description of the Electronic Programme Guide (EPG) refer to the next section.

## Stepping using the RCU

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

- 1 Refer to step 1 of "Selecting Services Directly".
- 2 Press P+ to step to the next service or P - to step to the previous service in the list of available services.

After pressing P+ or P -, 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 P+ or P - 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.

If you decide to watch or listen to a service you have stepped to, wait for the service to be displayed/heard. The information box will disappear after a short while or can be removed immediately by pressing EXIT.

**NOTE:** When you reach the last available service in the list and press P+ you are returned to the first service in the list.

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**TIP:** Use the convenient selecting and sorting facilities to personalise the services list. After using these facilities, your favourite services will be in your order of preference.

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## 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.

**NOTE:** By pressing TV a mini- menu will appear on screen. Using the ▲ or ▼ buttons, select the bouquet that you wish to view then press OK to confirm the selection. Select other applications if available.

- 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, pressing ▼ returns you to the first service in the list. The ▲ or ▼ symbols have dual functions and cannot be used for stepping while the volume control box is played on the screen. This box is displayed when setting the volume.

## Selecting Services from the Information Bar

**NOTE:** For a description of the Information Bar refer to the next section .

## Controlling the Functions

### 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:



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 or on the front panel.

### Volume Control using the IRD Keys

To change the volume level, press V+ or V- on the IRD. The following is displayed for a brief time:



While the volume control window is displayed, press V+ or V- 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 3 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 3 seconds.



**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.

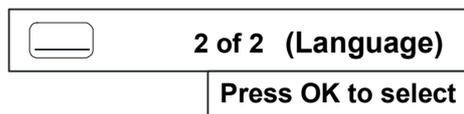
## Displaying Subtitles or Teletext

### Subtitles

If subtitles are available, they are normally displayed on the screen as part of the program.

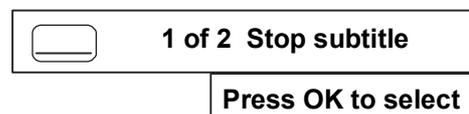
To select a subtitle do the following:

- 1 Press  symbol on the RCU. A box is displayed on the TV screen as follows:



**NOTE:** If subtitles are not available, a "No subtitling" window is displayed for 5 seconds. Press EXIT if required.

- 2 To stop the subtitles, press  again. The following box is displayed

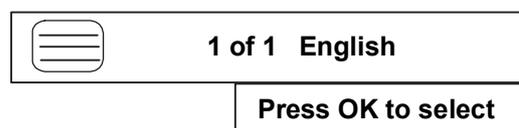


**NOTE:** If the Operator transmits subtitles already superimposed in the picture, it cannot be removed using the above method.

### Teletext

Some services (e.g., CNN) have a teletext service. This can be selected as follows:

- 1 With the service selected, i.e., CNN, press  symbol twice on the RCU. The following box is displayed:



If teletext is not available, a "No teletext" window is displayed for 5 seconds. If other languages are available keep pressing the  symbol until the language is selected.

- 2 To make the teletext transparent press the  symbol again.
- 3 To page up or down teletext pages, press P+ or P- on the RCU. To change to a distant page, select the page number on the RCU keypad, then press OK
- 4 To clear the teletext, press EXIT on the RCU.

## Clock

To view the time do the following:

- 1 Press  on the RCU. The date and time are displayed for a few seconds. If required press EXIT to clear.

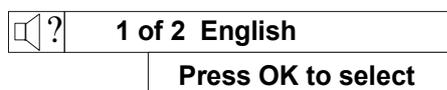
## Selecting Soundtracks

Available soundtracks, included with programmes, can be heard 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.**

To listen to and select available soundtracks, do the following:

- 1 Press  ? on the RCU. The current soundtrack language is displayed as follows:



Pressing OK selects the option listed.

- 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.

**NOTE: Soundtrack selection using the above procedure is temporary and will be lost when changing channel.**

## Power Reset

If your TV picture freezes for a prolonged period, it is possible to reset the decoder without unplugging it from the power supply. Simultaneously press then release the  and TV/ buttons on the decoder front panel.

## Signal Source Selection

Switching between signal source devices is automatic by using the UHF button on the RCU. To select between the available signal 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 signal source is indicated on the decoder front panel display. The available options are:

- VCR: This allows you to view a program on the VCR. Press Play on the VCR to view.
- TV (tv): If your TV and IRD are connected through SCART, this will allow you to view the normal terrestrial TV channels.
- Decoder (DSD): This allows you to use your satellite services. If your TV and decoder are connected through SCART, this will automatically switch your TV to AV and keep control of it.

# ELECTRONIC PROGRAMME GUIDE

The DSD 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

## Using the EPG

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

**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.**

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 , six 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.

TV Guide		18/5/99
◀ NOW ▶		11:10
△ 5	Jupiter Moon SciFi Space School	Fam 12:30 - 13:00
20	Striptease TMMC Drama	18 11:05 - 13:05
21	Blue River Hall Drama	Fam 11:30 - 13:00
22	The Picture of Dorian Gray TNT Drama	Fam 12:30 - 13:00
▽ 30	Motorsport Magazine SS Reports	Fam 13:00 - 14:00

Press the INFO button for more event information  
Press OK to tune to this programme

- To move between the NOW or NEXT programmes, press ◀ or ▶ on the RCU.
- 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:

TV Guide		17/5/99
◀ NEXT ▶		14:10
△ 20	The Bridge on the River Kwai TMMC Classical	PG 15:05 - 17:50
21	Bye Bye Birdie Hall Comedy	Fam 15:00 - 17:15
22	White Heat TNT Psychotic	Fam 14:20 - 16:15
30	Argus Tour SS Cycling	Fam 16:00 - 18:00
▽ 31	Spanish Soccer SS2 Highlights	Fam 17:30 - 18:00

Press the INFO button for more event information  
Press OK to set a reminder on this programme

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.

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

Audio Guide		18/5/99
◀ NOW ▶		15:00
△ 1	DMX - Symphonic Symph Classical	Fam 12:07 - 00:07
2	DMX - Chamber Music Chamb Classical	Fam 12:30 - 00:30
3	DMX - Opera Opera Classical	Fam 13:07 - 00:30
4	DMX - Light Classical LiteC Drama	Fam 13:37 - 01:37
▽ 5	DMX - Beautiful Instrumentals Beaut Instrumentals	Fam 14:07 - 02:07

Press the INFO button for more event information  
Press OK to tune to this programme

- Press OK to return to normal viewing/listening.
- In all programme guides, additional information on the programmes is displayed when *i* on the RCU is pressed while the EPG is displayed and the 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:

TV Guide		18/5/99
◀ (P-) (1) M Net (P+) ▶		15:30
Today		
△ 10:30	Egoli - Plek van Goud Daaglikse Reeke	Fam
11:02	The New Age Dramatic Comedy	18
13:00	The Warehouse Product Info	Fam
14:30	Teletubbies Series	Fam
▽ 14:58	Bananas in Pyjamas Adventure	Fam

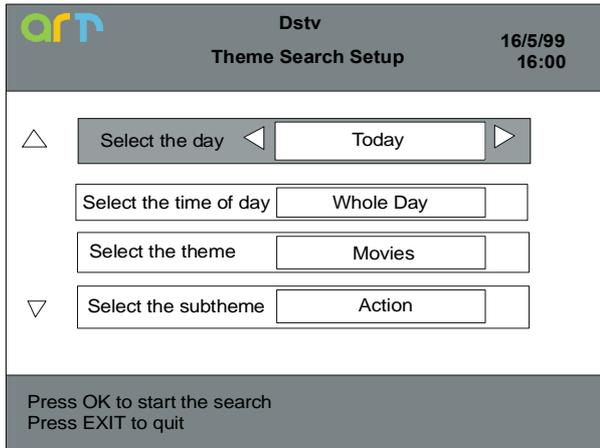
Press the INFO button for more event information  
Press OK to tune to (1) M Net  
Press EXIT to quit

Pressing ▶ on the RCU, selects the TV guide for tomorrow's programmes. Pressing and holding the ▶ button pages through each day's programme until the end of the 8 days.

Pressing and holding the ▶ button, returns you to today's programme guide.

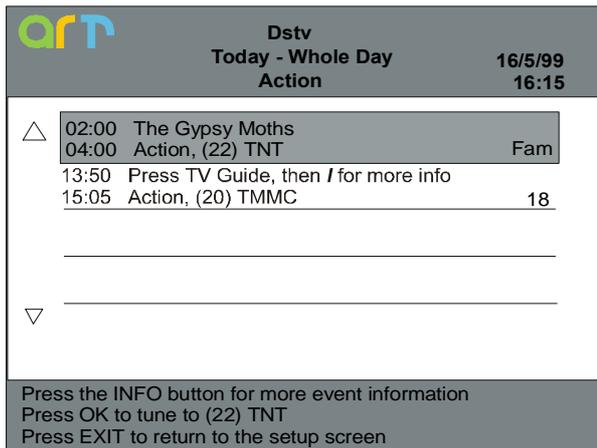
## Theme Search

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



Scrolling down using the ▼ 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:



## 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 ▲ or ▼ 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.
- 3 Move between the NOW or NEXT programmes by pressing ◀ or ▶ 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).

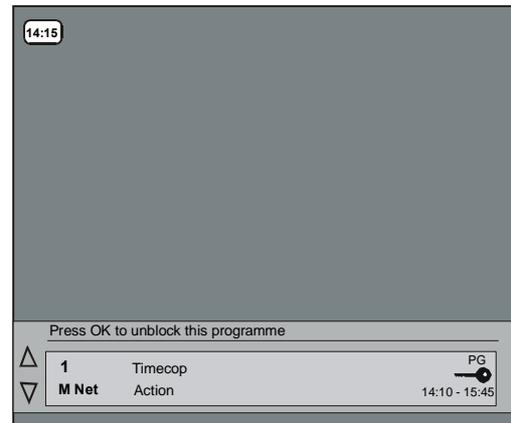
## REMINDERS

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

Refer to Open TV Electronic Programme Guide or Open TV Information Bar. 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

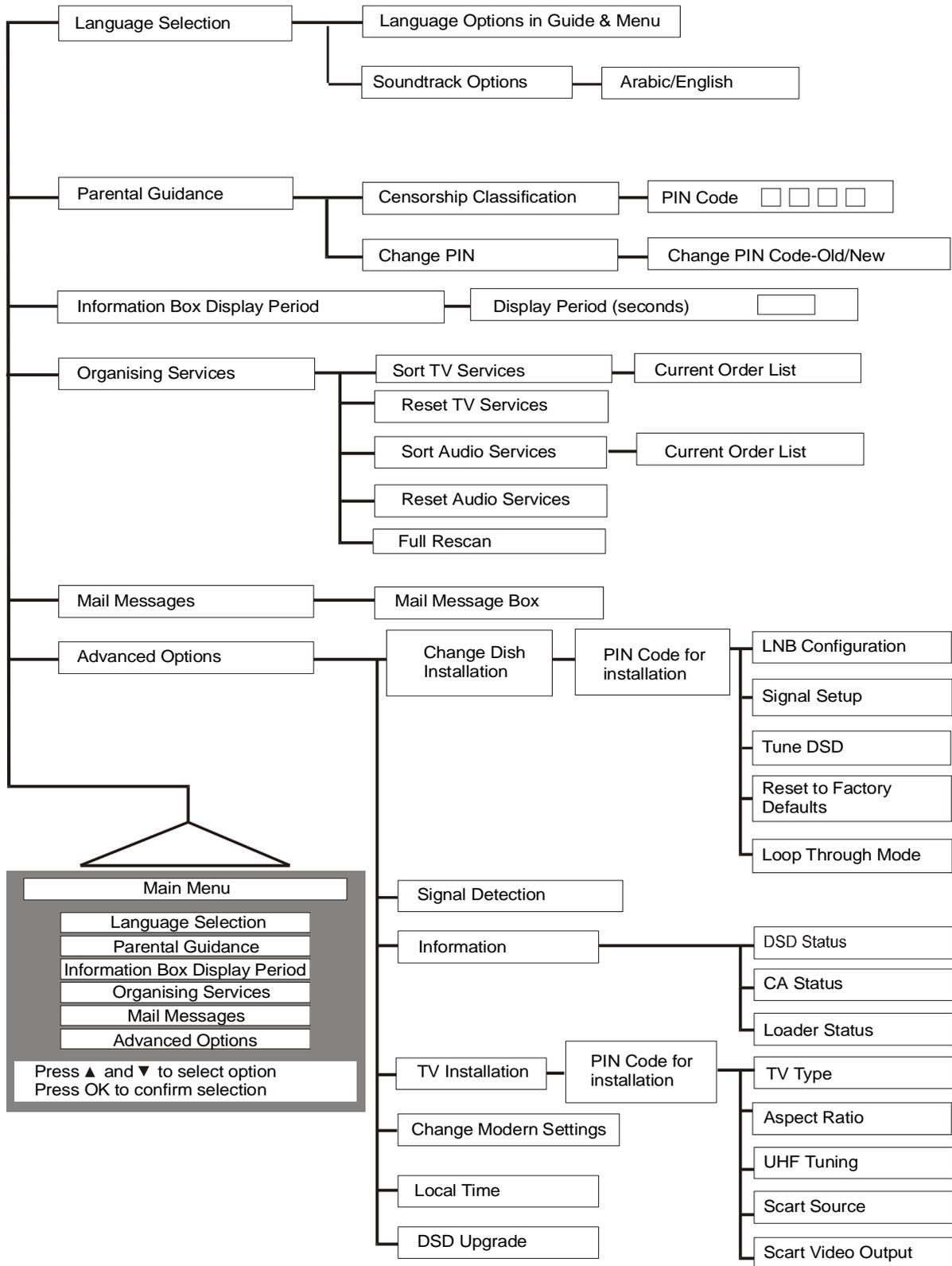
When the user has selected a service where there is a parentally blocked programme, a "key" symbol is displayed in the Information Bar (bottom right). The message above the Information Bar indicates that the user should press OK to unblock the programme.



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. The programme is then unblocked.

# MENU NAVIGATION ROUTE

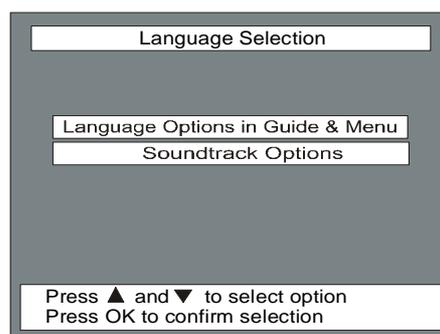


**NOTE:** The menu structure is occasionally upgraded over the air by the Service Provider and may differ slightly from that shown in these instructions.

## USING MENUS

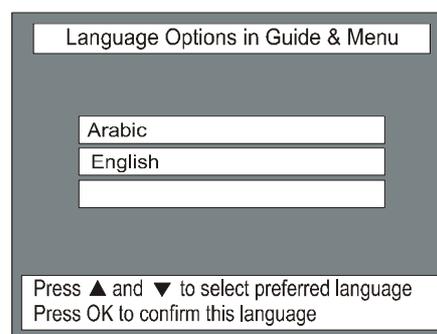
To use the Menu system:

- 1 Ensure that the decoder is not in standby mode by pressing  if necessary.
- 2 Press MENU on the RCU. The following Main Menu is displayed, which provides access to all other menus as shown in the following figure:



### Language Options in Guide and Menu

- 1 Press MENU on the RCU.  
The Main Menu screen is displayed.
- 2 Press ▲ or ▼ to highlight Language Selection and then OK.
- 3 Press ▲ or ▼ to highlight Language Options in Guide and Menu.
- 4 Press OK.  
The Language Menu containing a selection of languages is displayed, as follows:



- 5 Use ▲ or ▼ arrows to highlight preferred language.
- 6 Press OK to select the desired language.
- 7 Press EXIT to return to the Main Menu or MENU to return to the service.

### Soundtrack Options

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

- 1 Press MENU on the RCU.  
The Main Menu screen is displayed.
- 2 Press ▲ or ▼ to highlight Language Selection.
- 3 Press OK. The language selection menu is displayed.  
The Language Selection Menu is displayed.
- 4 Press ▲ or ▼ to highlight Soundtrack Options.
- 5 Press OK.  
The current order soundtrack language preferences is displayed, as follows:

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.

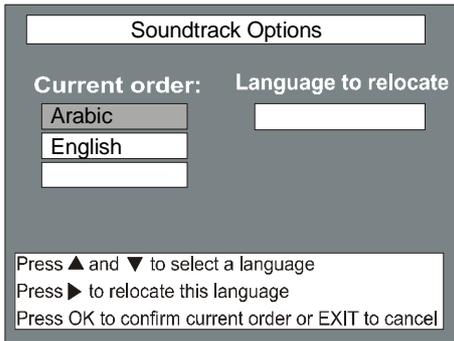
- 4 Use ▲ and ▼ buttons to change the value of an input field having preprogrammed values.
- 5 Use MENU to exit all menus and return to the TV or audio programme.
- 6 Use numbered buttons to enter numerical values.

### Language Selection

The Language Selection screen allows users to set the text language of the decoder, if options are available. The text language is set for the menus, EPG and Information Bar.

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

- 1 Press MENU on the RCU.  
The Main Menu screen is displayed with Language Selection highlighted.
- 2 Press OK. The following option list is displayed:



- 6 On the RCU, press ▲ or ▼ to highlight the language that you wish to relocate from the list.
- 7 Press ► to move the highlighted language option into the relocation window.
- 8 Press ▲ or ▼ to highlight the position where you want the language from the relocation box to be placed.
- 9 Press **OK** to confirm your selection. The Language Selection Menu is displayed.
- 10 Press **EXIT** to return to the Main Menu or **MENU** to return to the 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.

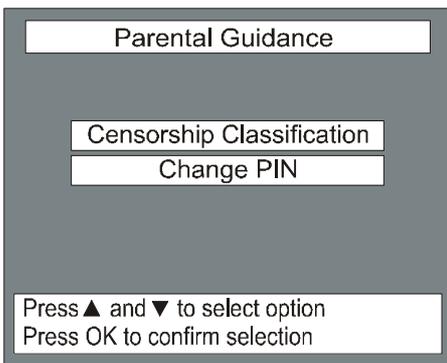
**TIP:** The Pin is set at the factory to 1 2 3 4. If you intend to use the Parental Control facility, please change the PIN as soon as possible. Remember to keep a note of your new PIN in a secure place. If you forget your Pin Code please contact the Customer Service Department.

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 DSD.

### Setting the Parental Level

- 1 Press **MENU** on the RCU. The Main Menu options list is displayed.
- 2 On the RCU, press ▲ or ▼ to highlight Parental Guidance then press **OK**. 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 Control submenu is displayed, which is organised as follows:

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

EXPLANATION	SELECT MENU OPTION
All Programmes will be blocked	Family
Programmes are blocked to children 13 and younger	Parental Guidance
Programmes are blocked to children 16 and younger	16
Programmes are blocked to persons 18 and younger	18
All programmes can be viewed	No Block

- 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 Control menu, press ▲ and ▼ 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, symbols 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 needs to be changed carry out the following:

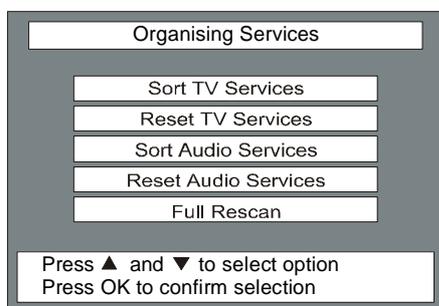
- 1 Press **MENU** on the RCU.  
The Main Menu options list is displayed.
- 2 On the RCU, press **▼** to highlight Information Box Display Period.
- 3 Press **OK**. The Information Box Display Period screen is displayed.
- 4 Press **◀** and **▶** to change the info display period (in seconds).
- 5 Press **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 Service” can only be selected after a successful installation and receipt of programming information over-the-air. Before this happens the “Organisation Service” option is dimmed and cannot be selected. The option can also become unavailable if, for instance, the cable to the dish is disconnected or if installation settings are incorrectly changed.

The DSD provides sort, re-order and reset features to allow you to arrange the service lists according to your own preference.

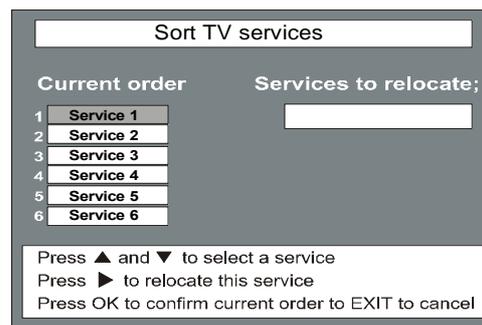
The Organising Service menu is as shown in the following diagram:



### Sort TV Services

This feature allows you to sort your services into an order you prefer. The sorting process defines which TV services are available on which channel numbers. To sort the order, perform the following:

- 1 Press **MENU** on the RCU.  
The Main Menu is displayed.
- 2 On the Main Menu, press **▲** or **▼** to highlight Organising Services.
- 3 Press **OK**.  
The Organising Services menu is displayed.
- 4 Press **▲** or **▼** 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 in the list using **▲** or **▼** on the RCU.
- 7 Press **▶** to move this service into the service to 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 is displayed.
- 2 Press **▲** or **▼** to highlight Organising Services.
- 3 Press **OK**.  
The Organising Services menu is displayed.
- 4 Press **▲** or **▼** 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.

### Sort Audio Services

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

### Reset Audio Services

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

## Full Rescan

This facility is used when a new service becomes available. It is recommended that this facility is used on a regular 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.

**NOTE: The personal sort list is lost after a full rescan has been performed.**

## 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 and the symbol 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 Mail Messages.
- 3 Press OK. The Mail Messages screen is displayed.
- 4 Press OK to return to the Main Menu.

The front panel yellow indicator will be OFF and the mail symbol 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 31. Incorrect settings will prevent the decoder from operating correctly.**

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

## LNB Configuration

Your decoder supports several LNB and network configuration options. If your satellite dish installation does not include a Universal (dual) LNB set up to the factory default settings, it is recommended that you consult your installer as to your particular setup requirements.

Information on these options for the installer can be found on the Manufacturer's website:

<http://www.uec.co.za>

### 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 LNB Configuration option is highlighted.

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

- 6 Press OK.  
The LNB Configuration Menu is displayed, in which LNB Setup 1 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.

### LNB Setup

The LNB mode and frequency or frequencies must be appropriate for the LNB installed on the satellite dish. The information is supplied with the LNB. (The default setting is for a Universal (Dual) LNB.)

To set the frequency:

- 1 Press EXIT to return to 6 of Set LNB Power (page 21).
- 2 Press ▲ to highlight LNB Mode. (Default is Dual frequency.)
- 3 Press OK to highlight LNB Lo frequency. (Default setting is
- 4 Press ▲ to highlight LNB Hi frequency. (Default setting is
- 5 Press OK. The LNB Configuration menu screen is displayed. Press EXIT.

- 6 The Change Dish Installation menu screen is now displayed.
- 7 Press ▼ to highlight Signal Setup, then press OK.
- 8 Signal Setup 1 (home) is now highlighted on the Signal Setup menu. Press OK.
- 9 The Signal setup screen displays the parameters for the particular signal source, and also shows the configuration of the selected LNB.

**NOTE: Factory default setting is for dual frequency.**

### **Signal Setup Alternatives**

The factory preset values will normally not require changing. If, however, it is necessary to insert values for other signal sources, it is recommended that you contact your local installer.

### **Tune DSD**

If the settings made in LNB Configuration and Signal Setup are satisfactory, retune the decoder with these settings as follows:

- 1 Press ▼ to highlight Tune IRD.
- 2 Press OK.

A rotating bar on the decoder front panel indicator 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.

### **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.

### **LoopThrough Mode**

The Loop through Mode is used when the installation is using DiSEqC control of LNBs. In a normal setup, it is not important whether this is Enabled or Disabled. If DiSEqC LNB is used, consult your installer.

### **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 ▼ to highlight Advanced Options.
- 3 Press OK. The Advanced Options Menu is displayed.
- 4 Press ▼ 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 ▼ and ▲ to toggle between the coarse and fine tuning.

- 7 Physically lock the dish into position, then re-check the signal detection.
- 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 three sub-menus, IRD Status, CA Status and Loader Status, which provide important diagnostic and version information to technical personnel. These status screen are read-only screens. You may be asked to read some of this information to Hot Line personnel.

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 ▼ to highlight Advanced Options.
- 3 Press OK.  
The Advanced Options Menu is displayed.
- 4 Press ▼ to highlight Information.
- 5 Press OK.  
The Information Menu is displayed, in which the IRD Status option is highlighted.
- 6 Press OK. The IRD Status screen is displayed
- 7 To exit the IRD 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 IRD Status screen.
- 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.

### **Loader Status**

- 1 Repeat steps 1 to 5 of the DSD Status screen.
- 2 Press ▼ to highlight Loader Status.
- 3 Press OK.  
The Loader Status screen is displayed.
- 4 To exit the Loader Status information screen, press EXIT to return to the previous menu or MENU to return to the service.

## TV Installation

The selection of this option from the Main Menu, allows the installer to select parameters relevant to the IRD / TV parameters and transmission type of the country.

### TV Type

Typical values are PAL I, PAL B, etc. The TV type is determined by the TV system used in the country of installation (PAL BG for Middle East). To set the TV Type:

- 1 Press MENU on the RCU.  
The Menu Options list is displayed.
- 2 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 screen is then displayed, in which you have to enter your installation PIN (9949).
- 6 The TV Installation Menu is displayed with TV Type highlighted.
- 7 Press OK.  
The TV Type screen is displayed.
- 8 Press ▲ or ▼ to highlight a TV type.
- 9 Press OK to activate the setting and leave the screen.

### Aspect Ratio

The Aspect Ratio display allows for selection between a normal width TV and a wide-screen TV.

- 1 Repeat steps 1 to 6 for setting the TV Type.
- 2 Press ▼ to highlight Aspect Ratio.
- 3 Press OK.  
The Aspect Ratio screen is displayed.
- 4 Press ▼ to highlight a different Aspect Ratio.
- 5 Press OK to activate the setting and leave the screen.

### UHF Tuning

The UHF Tuning application allows the user to select a UHF tuning channel (set the frequency of the remodulator of the IRD). The UHF Tuning display indicates the channel and frequency of the TV on which the satellite program is viewed.

- 1 Repeat steps 1 to 6 for setting the TV Type.
- 2 Press ▼ to highlight UHF Tuning.
- 3 Press OK. The UHF Tuning screen is displayed.  
The DSD front panel display shows the current UHF channel number.
- 4 Press ◀ and ▶ to decrease or increase the channel number.

The TV display is now lost because the TV is not tuned to the new channel. The changed channel number is displayed on the DSD front

Press OK to store the setting by pressing OK on the RCU.

- 6 Press MENU to exit from the menu.
- 7 Retune the TV to the new IRD UHF channel.

**Tip:** Pressing and holding down UHF on the RCU for approx 5 seconds (while 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.

The options available for each SCART source are:

- a. Satellite
- b. TV
- c. Video recorder

To change the settings of Scart Source screen, do the following:

- 1 Repeat steps 1 to 6 for setting the TV Type .
- 2 Press ▼ to highlight Scart Source.
- 3 Press OK.  
The TV Scart Source option is displayed.
- 5 Press ◀ or ▶ to set the input signal of the selected SCART Source.
- 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 type of SCART video output for the various SCART outputs of the decoder.

The options available for each SCART output are:

- a. TV SCART Output: Composite  
RGB  
S Video  
Not used

**NOTE:** When Not Used is selected the VCR SCART output is not displayed.

- b. VCR SCART Output: Composite  
S Video

To change the settings of the Scart Video Output screen, do the following:

- 1 Repeat steps 1 to 6 for setting the TV Type.
- 2 Press ▼ to highlight Scart Video Output.
- 3 Press OK.  
The Scart Video Output Menu is displayed.
- 4 Press ▼ to highlight the SCART to be edited.

- 5 Press ◀ and ▶ to set the output signal of the selected SCART Output.
- 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)

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 Menu Options list is displayed.
- 2 Press ▲ to highlight Advanced Options.
- 3 Press OK.  
The Advanced Options Menu is displayed.
- 4 Press ▼ to highlight Change Modem Settings.
- 5 Press OK.  
The Change Modem Settings screen is displayed.
- 6 Press ▲ or ▼ to highlight the field to be edited.
- 7 Edit the Pulse/Tone setting using ◀ and ▶.
- 8 Edit the Prefix digits using the numbered buttons and ◀ 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 IRD. If the user lives in a different time-zone, the IRD must be set up during installation to show the correct local time for the Local Time. In order to set the time do the following :

- 1 Press MENU on the RCU.  
The Menu Options list is displayed.
- 2 Press ▼ to highlight Advanced Options.
- 3 Press OK.  
The Advanced Options Menu is displayed.
- 4 Press ▼ to highlight Local Time.
- 5 Press OK.  
The Local Time screen is displayed.
- 6 Press ◀ and ▶ 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 DSD with improved software, adding more features and improving the existing operation of the DSD. This ensures that the DSD does not have to be replaced each time advances in technology occur.

DSD software upgrades normally take place automatically over-the-air. The DSD can be upgraded when it is in standby or while it is switched to a channel. The DSD cannot be upgraded if it is switched off at the mains. It is strongly recommended that your DSD is in standby when you are not using it (you do this by pressing ⏻ on the RCU).

The Mail Menu will usually warn you that a software upgrade will take place.

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 DSD has not been upgraded over-the-air due to, for instance, prolonged power failures.

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

- 1 Press the menu button on the RCU once. (the Main Menu will appear on the TV set.)
- 2 Highlight ORGANISING SERVICES using the up/down arrows of the RCU.
- 3 Press the OK button on the RCU.
- 4 Highlight the FULL RESCAN option.
- 5 Press the OK button on the RCU.
- 6 Press the OK button again to confirm the RESCAN.
- 7 Wait for the decoder to complete the rescan.
- 8 Press MENU on the RCU. The Main Menu is displayed.
- 9 Press ▼ to highlight Advanced Options.
- 10 Press OK.  
The Advanced Options Menu is displayed.
- 11 Press ▼ to highlight IRD Upgrade.
- 12 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.

If no upgrade is available, the decoder will return to the service.

If an upgrade is available but you do not wish to upgrade, press EXIT to return to the previous menu.

- 13 If you wish to upgrade press OK. A message is displayed:

**The upgrade is active and will take approximately X minutes**

After the download is completed, the decoder will return to the current service.

---

The process will take approximately 23 minutes. **DO NOT DISCONNECT THE DSD MAINS CONNECTION OR ANTENNA CABLE DURING THIS PERIOD.**

If, during an over-the air download, the DSD fails to accept the download or freezes, a forced download can be performed as follows

On the DSD front panel carry out the following procedure:

Press STANDBY, ▲, ▼, STANDBY in sequence. All button presses should be done in quick succession.

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

## TROUBLESHOOTING

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

## TROUBLESHOOTING

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

**TROUBLESHOOTING**

<b>DSD Front Panel</b>	<b>Message or Display on TV Screen</b>	<b>Possible Cause</b>	<b>Remedies</b>
Three flashing dashes and Error Dot	'NO SIGNAL' or SEARCHING FOR SIGNAL AT 11823 MHZ	Faulty installation Signal problem Heavy rain ( Normal operation will resume as soon as the rain subsides)	Check, repair or replace cables. Check IRD installation settings. Realign the dish. Replace with an approved model dish. Call the Service Provider.
Error Dot	E04 Please insert Smart Card	The Smart Card is not inserted	Reinsert Smart Card and wait 30 seconds. Call the Service Provider.
Error Dot	E05 Unknown Card	The Smart Card is not applicable to this system	Reinsert the Smart Card and wait 30 seconds Call the Service Provider
Error Dot	E06 Smart Card failure	The Smart Card is damaged.	Call the Service Provider
Error Dot	E07 Checking Smart Card	The IRD is briefly checking the Smart Card	If after 30 seconds the message is still displayed, reinsert the Smart Card Call the Service Provider
Error Dot	E14 Service is currently scrambled	There is a problem with the transmission	Wait for resumption of transmission
Error Dot	E15 Smart Card error	Smart Card damaged	Call the Service Provider
Error Dot	E16 Service is currently scrambled	Access to service denied	Call the Service Provider
Error Dot	E17 Service is currently scrambled	Access to service denied	Call the Service Provider
Error Dot	E18 Unknown card	The Smart card is not applicable to this system	Insert the correct Smart card Call the Service Provider
Error Dot	E19 Service is currently scrambled	Access to service denied	Call the Service Provider to renew subscription
Error Dot	E20 Service is currently scrambled	Access to service denied	Call the Service Provider
Error Dot	E21 Service is currently scrambled	Access to service denied	Call the Service Provider
Error Dot	E24 Service is currently scrambled	Access to service denied	Call the Service Provider
Error Dot	E30 Service is currently scrambled	Access to service denied	Call the Service Provider
Error Dot	E31 Service is currently scrambled	Access to service denied	Call the Service Provider

<b>TROUBLESHOOTING</b>			
<b>DSD Front Panel</b>	<b>Message or Display on TV Screen</b>	<b>Possible Cause</b>	<b>Remedies</b>
Error Dot	E32 Service is currently scrambled	Access to service denied	Call the Service Provider
Error Dot	E34 Service is currently scrambled	Access to service denied	Call the Service Provider
Error Dot	E35 Service is currently scrambled	Access to service denied	Call the Service Provider
Error Dot	E37 Service unknown	System error	Call the Service Provider
Error Dot	E38 Service is not currently running	The service is being used for a special event	Consult the EPG
Error Dot	E39 Locating service	The IRD is busy locating a service	Wait briefly while service is located
Error Dot	E40 IRD memory full	System error	Call the Service Provider
Error Dot	E41 Service is not currently available	The programme has been blocked by means of Parental Control	Reassign Parental level
Error Dot	E42 Parental Control Lock	The service has been blocked by parental level	Reset Parental level if required
Error Dot	E45 Searching for signal at NNN MHZ	The satellite dish is not receiving a signal	Check that the satellite frequency has been correctly set Check the installation Call the Service Provider
Error Dot	E47 No soundtrack available	An unavailable language has been selected	Select an available soundtrack
Error Dot	E49 LNB overload detected	Installation faulty	Check installation for short circuits Consult dish installer

# SPECIFICATIONS

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 TV/Audio simultaneously
RCU	Multi-button, infrared, battery operated Range 7 m, $\pm 45^\circ$ in horizontal plane, $\pm 20^\circ$ 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 upgradable software Built-in modem (optional) Data port
UHF Modulator	PAL I, B, G or BG, Ch 21 to 69, preset to Ch 50
Mains Voltage	210 - 250 V AC 50 Hz
Power Consumption	30 W Maximum
Dimensions	357 x 70 x 240 mm (W x H x D)
Weight	Approx. 2.5 kg (unpacked)
Operating Conditions:	Temperature $5^\circ\text{C}$ to $45^\circ\text{C}$
Relative Humidity	5% to 80% $<38^\circ\text{C}$ 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
S-VHS	MiniDIN
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	Modulated onto 22 kHz

## DEMODULATOR

Type	QPSK
Input Data Rate	2 to 45 Mb/s
Error Correction	DVB specified FEC code rates

## DSD VIDEO

MPEG-2

## 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	88%
Output Channel Range	21 to 69 (preset to channel 50)
Vision-to-sound ratio	14 dB
Vision-to-sound frequency variance	$\pm 20$ kHz from nominal
Vision carrier frequency drift	$\pm 10$ kHz
RF output level	73 dB $\mu$ V
Output spurious	$<-60$ dB
RF stray radiation	$<20$ dB $\mu$ V at antenna input
Intermodulation	-60 dBc
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 $\Omega$
Format	PAL
Bandwidth	5 MHz

## AUDIO SIGNALS

Output	1 V r.m.s. into 10 k $\Omega$
Frequency range	20 Hz to 20 kHz at 44.1 kHz sampling rate
Dynamic range	80 dB
Distortion	$\pm 0.2\%$ @ 1 kHz
Noise	-80 dB $\mu$ V
L-R level difference	0.5 dB
Crosstalk	-60 dB

## EXTERNAL MODEM

Maximum data rate	115200 bits/s
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## DSD FACTORY SETTINGS

■ Installation pin	9 9 4 9
■ Remod Channel	50
■ TV-Standard	PAL BG
■ TV Aspect Ratio	4 x 3
■ LNB Power	ON
■ LNB mode	Single
■ LNB frequency	10700
■ Homing Channel Frequency	12072
■ Homing Channel Polarisation	Horizontal
■ Homing Channel Modulation	QPSK
■ Homing Channel Symbol Rate	27500
■ Homing Channel FEC Rate	3/4
■ Info Bar display time	5 seconds
■ Parental Level	No Block
■ Parental code	1 2 3 4
■ Language option	Arabic, English

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## Installation Settings (to be filled in by the installer)

DSD Serial No.

Date of Purchase

Smart Card Serial No.

Work Order No.

Installer Name

Installer Tele No

UHF Channel Setting

<b>LNB IN</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>
LNB Power						
LNB Mode						
LNB Frequency						
Lo Freq						
Hi Freq						
DiSEqC Command						
Tone Burst						

<b>Signal Setup number</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>
Source Active						
Frequency						
Symbol Rate						
Polarisation						
FEC						
LNB Selection						

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## DiSEqC LNB settings

When in the “LNB Configuration “ menu follow the instructions that are displayed at the bottom of the Menu when the DiSEqC Command/Tone Burst options are highlighted. The instructions will guide the user through the setting up of the DiSEqC commands and Tone Burst settings.

Number of LNB's	Single LNB / DiSEqC Single LNB	Dual LNB / DiSEqC Dual LNB	DiSEqC Command	Tone Burst Command
Two				
Three				
Four				
Five				
Six				
Seven				

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## NOTES