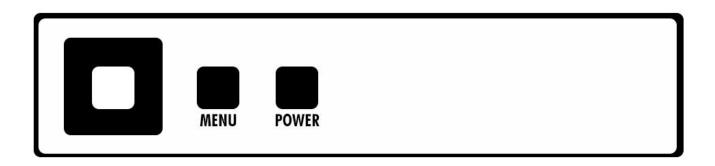
# **User Manual**

Thank you for choosing Mars 1500.



# Contents

Quick Start Guide	3
Connecting to a Television	3
Connecting to a Television and Recorder	
<b>G</b>	
Introduction	4
About This User Manual	4
What is Freeview?	4
Safety is Important	4
Safety Considerations	
Cleaning	
Ventilation	
Servicing	
Electrical Information	4
Environmental Markings	5
Getting Started	6
In the Box	6
Identification of Parts	6
Remote Control	6
Digital Set Top Box	7
Mains Adaptor	
The Remote Control	7
Using the Remote Control	7
Mains adaptor7	
Connecting Your Digital Set Top Box to	
other equipment 8	•
Connecting to a Television and DVD player	
Connecting to a TV and audio equipment	9
Switching on for the first time 10	

#### Set top Box Setup

To ensure your safety and the safety of others, please ensure you read the Safety Instructions before you operate this product.

Note: Keep this information in a safe place for future reference.

#### Safety Considerations

Position the cables so that they cannot be walked on or pinched by items placed on or against them.

- Do not use the set top box in humid or damp conditions.
- Do not allow the set top box to get wet.
- Do not expose the set top box to dripping or splashing.
- Do not place water filled objects such as vases on top of the set top box.
- Do not place naked flame sources, such as candles, on top of the set top box.

#### Cleaning

- ALWAYS unplug the set top box before you clean it.
- Do not use liquid or aerosol cleaners.
- Clean the set top box with a soft, damp (not wet) cloth.

#### Introduction

#### Ventilation

- The slots and openings on the set top box are for ventilation. Do not cover or block them as it may cause overheating.
- NEVER let children push anything into the holes or slots on the case.

#### Servicing

#### **Environmental Markings**



Your product has been designed and manufactured with high quality materials and components, which can be recycled and reused.

- There are no user serviceable parts in this set top box. -
  - When servicing, refer to qualified service

personnel.

 Consult your dealer if you are ever in doubt about the installation, operation or safety of this set top box.

### **Electrical Information**



Important information:
Must be read and understood.

#### Warning:

Read these electrical safety instructions carefully before connecting the adapter to the mains supply.

- This digital set top box is supplied with a mains adapter.
- This mains adapter is designed to operate on 230V AC 50Hz supply only. Connecting it to any other power sources may damage the set top box.
- The mains adapter is designed for indoor use only.
- The mains adapter are a sealed unit. There are no user serviceable parts inside and it does not require any electrical adjustments.
- Do not attempt to open the mains adapter.
- If the mains adapter is not suitable for your socket, or becomes damaged, it must be replaced and disposed of in a safe and environmentally protective way. Always refer to qualified personnel.
- Periodically inspect the mains adapter for damage. Do not use if faults or damage are found. Refer to qualified personnel.



This symbol indicates that the adapter is a Class II appliance and does not require an earth connection.



This symbol indicates that the adapter is for indoor use only.



This symbol indicates that the adapter conforms to CE regulations.

When this crossed-out wheeled bin symbol is attached to a product or his packaging, it means the product is covered by European Directive 2002/96/EC.

Please inform yourself about the local separate collection system for electronic products.

Please act according to your local rules and do not dispose of your old products with your normal household waste. The correct disposal of your old product will help prevent potential negative consequences for the environment and human health.

The "Material recyclability symbol " affixed on package cardboard and user manual means these parts are recyclable. So do not dispose of them with your normal household waste.

The "Material recyclability symbol " affixed on plastic packaging parts means these parts are recyclable. So do not dispose of them with your normal household waste.

The "Green Dot" affixed on cardboard means PHILIPS pays a financial duty to the "Avoidance and Recovery of Packaging Waste" organization.

# **Getting Started**

Remove your Digital Set Top Box carefully from the box, and remove the packaging from each part.

In the Box

You will find the following items:

- Digital Set Top Box
- Remote Control (AA batteries)
- Power supply 230 V AC/50 Hz to 12 V DC
- SCART-to-SCART cable (for Digital Set Top Box to SCART input connector on TV set)
- User Manual (This publication)

If any of these items are damaged or missing, please contact us at:

Mars 1500 CE, The Mars 1500 Centre, Surrey

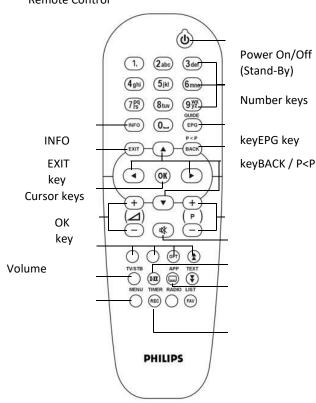
#### 0906 1010 016

(£ 0.15/min)

Please make sure that you have the model number of your set top box, before contacting us. The label showing the type and serial number is underneath your receiver.

# **Identification of Parts**

Remote Control



up/downChannel up/down

Colour keys Mute key

I-II key

TV/STB key(Audio selection)

APP key

MENU key(subtitle selection)

TIMER/REC key



Batteries are removable from the remote using common household tools (like a screwdriver...)

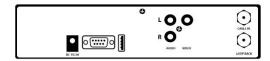
The batteries supplied do not contain hazardous substances such as Mercury, Cadmium, or Lead.

However, they must not be disposed of with your household waste but to a local separate collection system.

Digital Set Top Box Front view



Rear view



#### The Remote Control

Using the Remote Control

To use the remote control, point it towards the front of the set top box.

The remote control has a range of up to 7 meters from the set top box at an angle of up to 60 degrees.

The remote control will not operate if its path is blocked.

Warning:

Sunlight or very bright light will decrease the sensitivity of the remote control.

Plug the cable into the 12V DC connector on the rear

panel. Insert the adaptor body into a suitable mains outlet socket.

Note that the only recommended way to disconnect the Digital Set Top Box from the mains supply is to remove

the adaptor from the mains socket. If the mains socket is fitted with a switch, this could be used instead.



# Mains adaptor

A mains power adaptor has been supplied for powering this equipment. It has an integral cable terminated in a power connector to plug directly into the 12V connector on the back of the Digital Set Top Box. The adaptor is shown on the right.

Set Top Box rear panel

**GETTING STARTED** 

# Connecting Your Digital Set Top Box to other equipment

The following diagrams are of typical configurations only, and may differ slightly to your existing external equipment. If you are unsure on how to connect to your set top box, always consult your manufacturer's user guide supplied with your equipment. Connecting to a Television and DVD player

**GETTING STARTED** 

# Switching on for the first time

1 Connect your equipment according to the appropriate system diagram given on the previous pages and power up/turn on the equipment.

During initialisation the indicator on the front panel will flash red for a few seconds and then remain off. If the indicator is red (stand by) press the Power key on the remote control.

The front panel indicator will now be off.

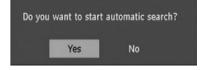
2 To switch off the set top box, press Power again.

With the Set Top Box on, the FIRST TIME INSTALLATION window displays. You are asked to enter the type of TV set you are using.



- 3 Use the ♠ keys to choose either NORMAL 4:3 or WIDESCREEN 16:9.
- 4 Press the key to start installation.

The following message displays.



5 Use the ♠ keys to highlight Yes and then press the key.

The system then starts to search all channels for available radio and TV stations. This may take a few minutes.

The stations found are listed in the centre panel. A progress bar below the listing panel shows the channels searched so far within the scan range (21 - 68).



When scanning has finished, the received stations are automatically arranged in numerical order.

#### **GETTING STARTED**

The TV set then plays the station at the top of this sorted list. The Info box for the TV station playing displays for a short time. The TV station continues to play the programme.

Note: Your receiver, as with any electronic equipment, consumes power. In order to reduce power consumption, please switch your receiver to standby when not in use. If you will not be using your receiver for a long period of time, we recommend unplugging it from the mains outlet.



# Using the Set Top Box

### **Channel List**

The Channel List presents a list of all channels found during the channel search described earlier. The list comprises radio and TV channels. They have been allocated a channel (reference) number and are listed in this numerical order.

The Channel List can be used to watch and listen to the selected channels. You may delete channels from the list, edit the name of the channel, set a password to access the channel, and to add the channel to your list of favourite channels.

1 Press the OK key to display the Channel List, see below for an example. This shows a TV channel selected. When a radio channel is selected the picture frame will be blank.



To Watch a channel

- 1 Use ▼▲ to navigate through the channel list until you reach the channel you want to watch.
- 2 Use to step along the options until you reach Watch.
- 3 Press to watch the selected channel in the picture window located at the top right corner.

press EXIT.

To Delete a Channel

- Use \( \bigvee \) to navigate through the channel list until you reach the channel you want to delete.
- 2 Use to step along the options until you reach Delete.
- 3 Press of to delete the selected channel in the picture window, top right corner.

A confirmation box opens up.



4 Answer Yes or No as required.

If you answer Yes the channel will be removed from the list and will no longer be available to watch/listen to.

To Edit a channel name

- 1 Use ▼▲ to navigate through the channel list until you reach the channel you want to edit.
- 2 Use The to step along the options until you reach Edit Name.
- 3 Press or to select the edit name function.

The selected channel name appears in a text box that opens below the picture window. The first character of the name is enclosed in square brackets.

10 USING THE SET TOP BOX

2 Use to step along the options until you reach Lock.

Remote key	1	2	3	4	5	6	7	8	9	0
Press once	1	А	D	G	J	М	Р	Т	W	SPACE
Press twice		В	E	Н	К	N	Q	U	Х	0
Press three times	,	С	F	I	L	0	R	V	Υ	+
Press four times	:	2	3	4	5	6	S	8	Z	-
Press five times	;	a	d	g	j	m	7	t	9	*
Press six times	!	b	е	h	k	n	р	u	w	/
Press seven times	?	С	f	i	ĺ	0	q	V	х	\$
Press eight times	@	А	D	G	J	М	r	Т	у	%
Press nine times	/	В	Е	Н	К	N	S	U	Z	&



- 4 Use the number keys (0 9) to modify this character using the table below.
- 5 Use to step along the characters of the name and modify each as required. The new name can be shorter or longer than the existing name.

Maximum length is 16 characters.

Press to confirm the new name.

To Lock a channel

This function allows you to set a password to gain access to selected channels.

Note: When locking individual channels also lock the menu.

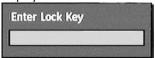
1 Use \(\bigwim\) to navigate through the channel list until you reach the channel you want to lock.

3 Press ok to set the lock.

The lock symbol appears alongside the selected channel in the list. Enter your Lock Key (0000 is the default setting. This may be changed in the Configuration menu - See page 13).

4 Press or again to remove the lock.

The next time you select to watch this channel you will be asked for a password - the Enter Lock Key window will be displayed for this.



You will only be able to watch this channel if you enter a valid number. If you enter a wrong number the Wrong Lock Key box will be displayed briefly.

When a valid number is entered the channel will be played.

To Add a channel to your Favourites list

- 1 Use to step along the options until you reach Favourites.
- 2 Use \(\bigsim \text{\text{\text{d}}}\) to navigate through the channel list until you reach the channel you want to add to your favourites list.
- 3 Use To select one of the available Favourites lists.



- 4 Press ok to set this channel as a favourite to the selected list.
- 5 A favourites symbol appears alongside the selected channel in the list. The symbol indicates the number of the favourites list.
- 6 Press again to remove from the favourites list. See page 16 on how to activate the favourites lists.

Note: A channel can be in more than one of the lists. Changing Channels

You can change channels by using any of the following methods:

Channel browse keys

Use the P+ and P- keys (channel up/down) to browse up and down the available channels.

Number keys (0-9)

The complete channel number must be entered within 3 seconds of the first digit entry.

1 For example, to watch channel 43, press key 4 and then key 3.

The entered channel number will be displayed in top left of the TV screen and the TV will show the entered channel.

Channel list

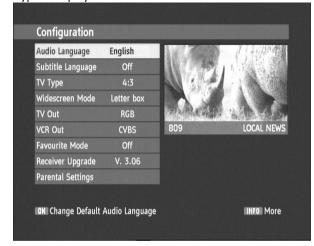
- 1 Press ok to view the list of available channels in the Channel List or Press MENU to display the Main Menu. There select Channel List and press ok.
- 2 Select the required channel using the **▼**▲ keys.
- 3 Press ox to view/listen to the channel in the window. Press EXIT to go to full screen.

### Configuration

The Configuration window allows you to customise various settings.

1 Press MENU to display the Main Menu. There select Configuration and press OK.

You can select from the available options for each of the items in the Configuration window. See below for a typical display.



The text along the lower banner changes according to the item selected.

- 2 Use the keys to display the options in turn.
- 3 Use ▼▲ to navigate through the configuration list until you reach the item you want to re-configure.

Audio You can choose the default played audio lan-

12 USING THE SET TOP BOX

Language: guage if a program is broadcasted in more than

one language.

Subtitle If subtitles are availbable, you may choose the Language language here.

TV-Type: Choose the type of TV you have

4:3 / 16:9.

Wide- Set your preferred mode for movies or shows

Screen that are broadcast in 16:9.

Mode: Note: If your TV type is set to Widescreen this

function is not available.

TV Out: Output can either be RGB, CVBS or

S-Video. Effect will be seen instantly on TV

VCR Out: Output can either be CVBS or S-Video.

Favourite Turn Favourites Mode on/off. mode: Select one of the Favourite Lists.

Receiver To download software upgrades from broadcast-

Upgrade: ers or the manufacturer to further enhance the

current service.

Parental Create viewing restrictions on all available chan-

Settings: nels. Once activated a lock key code must be

entered to view the TV channels.

4 Use to step through the options until you reach the new setting.

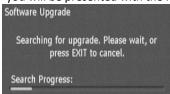
Some configurations require further information to be entered in subwindows which are displayed when these items are selected.

5 Press EXIT to close the configuration window and return to the previously displayed channel.

The configuration settings are stored automatically as they were set at the time you pressed the EXIT key.

#### Receiver Upgrade

When Receiver Upgrade is selected for re-configuring you will be presented with the following window:



1 The upgrade will be carried out automatically and the listed Receiver Upgrade version number will be changed accordingly.

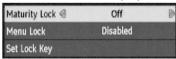
#### **Parental Settings**

The Parental Setting feature allows you to password protect groups of menus or allow access to all menus.

1 Use **▼**▲ to highlight Parental Settings.

2 Press and enter the Lock Key when asked for it (default is 0000).

The window below displays:



3 Use to step through and display the available options:

#### Maturity Lock

Select an age for children or a category for which viewing will be possible without entering the lock key.

#### Menu Lock

Select Main Menu or Installation to lock these menus.

- 4 Use **▼**▲ to highlight Set Lock Key.
- 5 Press OK

A second sub-window displays.

6 Enter the new Lock Key code in the code entry box using the number keys (0-9).

Input now switches to the Confirm code entry box.

7 Enter the same Lock Key code in this window using the number keys (0-9).

The second sub-window displays Key Lock Changed and then closes.

8 Press EXIT to Apply Setting and return to the Configuration menu.

# Audio Language

To check what is available:

- 1 Press the MENU key to display the Main menu.
- 2 Use ▼▲ to select Audio Menu.
- 3 Press OK
- 4 If alternatives are available use **V**▲ to select the desired language.
- 5 Press to apply these settings and exit this function.
  This change is only temporarily for the current program.

#### **Timers**

You can use the Timer function to turn your Set Top Box on and off in Stand-by and also to automatically switch channels when your Set Top Box is on.

Press the MENU key to display the Main menu.

- 1 Use ▼▲ to select Timers.
- 2 Press OK

The Programme Timers menu displays.

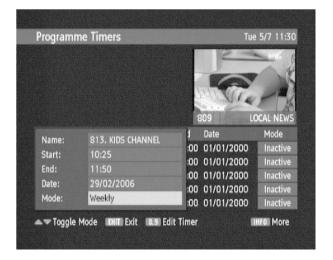


Note: To record on a VCR / DVD R you must also set the timer of the VCR / DVD R to record the desired program in the normal way. Make sure the timer program of the VCR / DVD R is set to the correct EXT socket for the set top box. To play back a recording from the VCR / DVD R, please make sure the Set Top Box is in standby.

Use **▼**▲ to select one of the five timer settings available.

3 Press OK

The Timer Menu displays showing the Name box for the channel highlighted for selection.



- 4 Use to step through the list of loaded channels until the channel to be set for timed turn on/off displays.
- 5 Use **▼**▲ to step to the Start time.
- 6 Use the number keys (0 9) to set the start time
- 7 Use ▼▲ to step to the End time. 8 Use the number keys (0 9) to set the end time
- 9 Use **▼**▲ to step to the Date.
- 10 Use the number keys (0 9) to set the date
- 11 Press or to apply changes and move the entered data to the main timing list, as shown below.



Note: When setting a Timer for a PIN-protected service, you are asked to enter the PIN-Code (Lock-key) to confirm the Timer

If you want to set a timer for a programme with a maturity rating or which is broadcast on a locked service, please refer to chapter "Timers" on page 14 of the User Guide and to the information below.

On activation of a timer set for a programme with a maturity rating exceeding your maturity rating setting or which is broadcast on a locked service, the receiver prompts for PIN code entry. If the PIN code is not entered, for instance because the receiver is in standby, recording fails.

To avoid such issue, you must disable the PIN code protection as described below.

When a maturity rating has been set:

- 1 Go to the Main Menu and select the Configuration submenu.
- 2 In the Configuration menu please select the Parental Settings sub-menu.
- 3 Deactivate Maturity Rating.
- 4 Now program your timer.

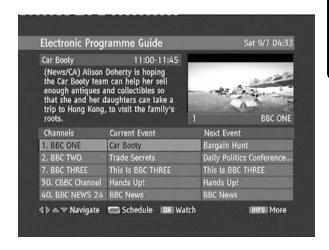
When the service has been locked:

- 1 Please enter your PIN code when setting the timer so that the receiver will not prompt for the PIN code when the timer becomes active.
- 2 If you want to set timers on this service more often please go to the Main Menu and select the Channel list submenu.
- 3 Choose the service on which you want to set timers.
- 4 Please unlock this service. 5 Now program your timer.

### Electronic Program Guide

The Electronic Program Guide provides the user with a brief description of the currently selected program in the list of channels. The five channels listed are a window on all stored channels.

1 To display the Electronic Program Guide, press the EPG key. An example of an EPG window is given below.



2 Use ▼▲ to navigate through Channels.

A brief description of the highlighted channel name appears in the upper left panel of the window with its name and broadcast time.

3 Use ▶ to step to the Next Event.

The upper left panel now contains the details of the Next Event.

Reminder: When Next Event has been selected, there is an opportunity to set a reminder for a particular program. Press OK on the selected program and a clock symbol is shown.

While viewing a channel, a reminder displays that the selected program is about to start.

- 4 Use ◀ to return to the Current Event.
- 5 Press the yellow key to view a schedule of all events.
- 6 Press ok to watch the currently selected event in the upper right panel in this window.
- 7 Press EXIT to view the current channel on full screen.

#### **Favourites**

When Favourites are enabled (see the Configuration window earlier), then only the channels that you selected as your favourite channels will be stepped through when you use the channel browse keys, P+ and P-.

Note: Even with Favourites enabled, you can still choose from all available channels by either entereing the channel number by using the Number keys or from the service list.

#### Additional Functions

Information / Help key

The INFO key has two functions according to the current status.

When a TV or Radio channel is playing:

- 1 press the INFO key to display program information:
  - Channel name and number.
  - Current program name, start and end play times.
  - Next program name and start and end play times.
  - Signal level for current channel.
  - Time of day.
  - TV or Radio icon.
- 2 Press the INFO key again while program information displays to get the EPG description of the programm playing.
- 3 Press the INFO key again to close the window.

When no channel is playing:

1 To get help about the current selection in a window, press the INFO key for relevant information.

#### Volume

To increase or decrease the volume of the channel playing, press the Volume up/down keys respectively. The maximum volume is set by the volume control setting on the TV.

A volume slider icon appears on the TV screen for visual feedback.

#### Mute

Press the Mute key to turn off the sound. Press again to restore the sound to the previous level.

#### Swap channels

Press the BACK/P<P key to switch between the current and the previously selected channel.

#### Text/MHEG

With the text key you can access certain Text and Multimedia contents. MHEG (Multimedia and Hypermedia Expert Group) is a standard that offers you information about various contents like life style, shopping or sports events and results.

- 1 Press the TEXT or RED key to bring up the text menu for the current channel.
- 2 Use the **▼**▲ keys to navigate through the menu.
- 3 Use ok to select an item.

Additionally you now have the four colour keys (Red, Green, Yellow and Blue) to navigate through the content of the page. How they will be used will vary for different stations; read their meaning from the bottom line (usually) or wherever they appear on the screen and use them as required.

4 Press the Text key again to leave the MHEG, or press the EXIT key.

TV/STB

1 Press the TV/STB key to switch between the set top box and the TV signal.

1-11

1 Press the I-II key for quick access to language selection.

APP

1 Press the APP key for quick access to subtitle selection.

**TIMER** 

1 Press the TIMER key for quick access to the Timers menu

LIST

 Press the LIST key for quick access to Favourite Lists menu

### **Expert settings**

Manual channel search

If the automatic search does not find all channels expected, you may search a channel manually.

- 1 Press the MENU key for the Main Menu, there select Installation.
- 2 Select Manual Search.

16 USING THE SET TOP BOX

- 3 In the upcoming window, enter the number of the broadcast channel you intend to search for digital TV or Radio signals. An indication of the signal level for the entered channel is shown at the bottom of the window.
- 4 Press ok to search for channels.

Channels found are automatically added to the channels list.

Clear all settings

First time installation can be initiated again, if neccessary.

- 1 Press the MENU key for the Main Menu, there select Installation.
- 2 Select First Time Installation.

The set top box will switch off for a moment. When the LED on the front panel switches off, you may start installation again.

# Troubleshooting

If you experience an operating problem with your Digital Set Top Box, please refer to the trouble-shooting table below and then the notes that follow.

Symptom	Possible cause	Remedy	
No picture and no sound	No channel list or wrong channel list	Do an automatic station scan	
	Short circuit in aerial lead	Turn off receiver, remove short	
		circuit and then turn on again	
	Defective or missing cable connection	Check all cables	
	Poorly adjusted aerial	Adjust aerial	
	Loose connectors or cable too long	Check connectors and shorten cab	
	No Freeview coverage in your area	Please call 08708 809980 or text your post code to 83331 (standard network charges apply)	
No picture or picture is blocky in	Aerial too small	Use a bigger aerial	
appearance	SCART connector not fully plugged in	Check SCART connector	
Sound but no picture	Aerial poorly adjusted or defective	Check aerial	
	Program is being broadcast with altered parameters	Do an automatic search (see Advanced Installation)	
	SCART connector not fully plugged in	Check SCART connector	
Cannot receive station that you could receive before	Program is no longer broadcast	None	
	Interference with "DECT" phones or wireless equipment	Move phone/wireless equipment away from the receiver to a location where interference ceases	
	Program is being broadcast with altered parameters	Do an automatic search (see Advanced Installation)	
Remote control is not working	Obstacle in between remote control and receiver	Remove obstacle	
	Transport stream defect	Unplug receiver and then plug in again	
	Flat battery	Replace battery	
Certain stations cannot be received from time to time	These services are not transmitted 24 hou vailable. This is not a fault.	s a day and can sometimes be una	
STB cannot be controlled	Obstacle in between remote control and receiver	Remove obstacle	
Poor image quality or no colours	Wrong TV SCART out signal	Try changing from RGB to CVBS or vice versa (see Configuration)	

	Inappropriate video type selected	Set video output according to TV set video requirements (see Configuration)
You have forgotten or lost your		Reset from the Parental Control
PIN code		Screen. To access the Parental
		Control Screen, use the following
		4-digit code: 8111. Keep this code secret to prevent others from using it.
		Refer to section "Parental Settings" on page 14 for more detailed information.

If none of the above suggestions seem to work, try switching your Set Top Box off and then on again. If this does not work, contact either your supplier or a qualified repair technician. Never attempt to repair your set top box yourself.

# Troubleshooting

# **Technical Data**

#### General

- DVB terrestrial Free-To-Air receiver compliant to EN 300 744
- MHEG5 and LCN support
- UHF frequency range support
- Video and Audio out via 2x SCART
- Digital audio out
- Fast channel search
- Reed-Solomon decoding support (EN 300 744)
- Automatic FEC selection (1/2, 2/3, 3/4, 5/6, 7/8)
- MPEG2 Transport Stream support: ISO/IEC 13818-1
- DVB-Video/-Audio support: ISO/IEC 13818-2, -3
- Update-Over-Air accordingly to BBC-SSU procedure
- slim line housing

#### Base specification

- QPSK / QAM16/64 demodulation compliant to DVB terrestrial standard EN 300 744
- COFDM 2k and 8k

- UHF support (474...862 MHz)
- 8 MHz channel bandwidth
- Guard Interval Modes: 1/32, 1/16, 1/8, 1/4 active symbol duration
- Fast PLL tuning speed: step size 62,5 kHz / 166,67 kHz

#### Input /Output

#### 2x SCART (VCR & TV) out

- TV SCART video out: CVBS, Y/C, RGB
- VCR SCART video out: CVBS, Y/C
- switching signal: 0 / 6 / 12V
- Audio out (left/right)

#### Digital audio out (S/PDIF)

#### RF input connector IEC60169-

#### 2 female

- termination 75 Ohm
- Return Loss: min. 6 dB (75 Ohm)

# Loop-Through of RF signals

- output termination 75 Ohm

# TECHNICAL DATA

#### **Power Supply**

- Power supply 230VAC/50Hz to 12VDC
- Operation power consumption less 12 W
- Maximum stand-by mode consumption: 6 W

#### Accessories

- Receiver ca. 250 x 140 x 32 mm
- Power Supply
- SCART/SCART cable
- Remote Control
- 2 Batteries (for remote control)
- Instruction manual

#### Temperature

- Temperature-Range +5 °C...+40°C

This product is in conformity with the requirements of the 95/47/EC and 2002/21/EC directives.

The product complies with the following European council Directives: 73/23/EEC, 93/68/EEC and 89/336/EEC.

