

VIDEO CASSETTE RECORDER SV-645B SV-643B SV-640B

Instruction Manual





www.samsungvcr.com

Safety Precautions



CAUTION. TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE REAR COVER. NO USER SERVICEABLE PARTS INSIDE. REFER TO QUALIFIED SERVICE PERSONNEL.

IMPORTANT NOTE

The mains lead on this equipment is supplied with a moulded plug incorporating a fuse. The value of the fuse is indicated on the pin face of the plug. If it requires replacing, a fuse approved to BS1362 of the same rating must be used.

Never use the plug with the fuse cover omitted if the cover is detachable. If a replacement fuse cover is required, it must be of the same colour as the pin face of the plug. Replacement covers are available from your dealer.

If the fitted plug is not suitable for the power points in your house or the cable is not long enough to reach a power point, you should obtain a suitable safety approved extension lead or consult your dealer for assistance.

However, if there is no alternative to cutting off the plug, remove the fuse and then safely dispose of the plug. Do not connect the plug to a mains socket, as there is a risk of shock hazard from the bared flexible cord.

IMPORTANT

The wires in the mains lead are coloured in accordance with the following code: -

> BLUE = NEUTRAL BROWN = LIVE

As these colours may not correspond with the coloured markings identifying the terminals in your plug, proceed as follows: -

The wire coloured BLUE must be connected to the terminal marked with the letter N or coloured BLUE or BLACK. The wire coloured BROWN must be connected to the terminal marked with the letter L or coloured BROWN or RED.

WARNING: DO NOT CONNECT EITHER WIRE TO THE EARTH TERMINAL WHICH IS MARKED WITH THE LETTER E OR BY THE EARTH SYMBOL \pm , OR COLOURED GREEN OR GREEN AND YELLOW.





This symbol is intended to alert you to the presence of dangerous voltage within the product.



This symbol is intended to alert you to the presence of important instructions accompanying the product.

Thank you for purchasing a Samsung Video Cassette Recorder (VCR). Your Owner's Instructions contain much valuable information on setting up and using your VCR. Please take the time to read them as they will help you take full advantage of your VCR's features.

The instructions in this manual are for models, SV-645B, SV-643B and SV-640B. Before you start reading this manual please check your model number. It is displayed on the rear of the VCR.

- \star (SV-645B): Exceptions only for a certain model, for example SV-645B.

- Gray shaded areas marked with a star indicate instructions that are only relevant to one model.

Features Chart

About this manual

Feature	SV-645B	SV-643B	SV-640B
VIDEOPLUS+ Recording	•	•	
AV2 IN socket	•	•	•
Format 16:9	٠	•	•
Child Door Lock		٠	•
IPC (Intelligent Picture Control)	•	•	•
Timer Programming	٠	•	•
Auto Clock Setting	•	•	•
PDC (Programme Delivery Control)	٠	•	•
Changing recording speed (SP/LP)	٠	•	•
Hi-Fi & NICAM	٠	•	•
Connecting an RCA Audio/Video cable	•		



Contents

Contents (cont.)

 FOREWORD Safety Instructions 	6
 VCR OVERVIEWS Front View of the VCR Rear View of the VCR Infrared Remote Control Display Indicators 	7 8 9
Accessories	9
CONNECTING YOUR VIDEO CASSETTE RECORDER	
 Deciding How to Connect Your VCR. Connecting Your VCR to the TV using the Coaxial Cable and SCART cable Connecting Your VCR to the Satellite receiver or Other Equipment. Connecting the Audio Output Cable. Plug & Auto Set Up. Tuning Your Television for the VCR. 	11 12 13 13
◆ Setting Up Your Video Cassette Recorder	
Inserting Batteries in the Remote Control Setting the Date and Time Displaying/Hiding On-Screen Information Setting the VCR Output Channel Presetting the Stations Automatically Presetting the Stations Manually. Clearing a Preset Station. Changing the Preset Station Table	15 16 16 17 18 19
◆ RECORDING TELEVISION BROADCASTS	
Selecting the Cassette Type Selecting the Recording Speed NICAM Protecting a Recorded Cassette Recording a Programme Immediately Recording a Programme with Automatic Stop Using the VIDEOPLUS+ Feature (SV-645B/SV-643B Only) Modifying VIDEOPLUS+ Programming (SV-645B/SV-643B Only) Using the Timer Programming Feature Checking a Preset Recording Cancelling a Preset Recording	21 22 23 23 23 24 25 26 27 28
◆ PLAYING BACK	
 Playing a Cassette Adjusting Picture Alignment Automatically Adjusting Picture Alignment Manually Intelligent Picture Control Format 16:9 (Wide Screen) Selecting the Colour Mode Selecting the Audio Output Mode 	29 29 30 31 31

•	SEARCHING FOR A SEQUENCE	
	 Playing a Cassette in Slow Motion 	33
	 Playing a Sequence Frame by Frame 	34
	 Picture Search, Fast Forward/Rewind 	34
	 Searching for a Specific Sequence 	35
	 Auto Repeat Play 	36
	 Interval Repeat Play 	36
٠	EASY OPERATION	
	VPS/PDC Default	37
	VIDEOPLUS+ EXTEND (SV-645B/SV-643B Only)	38
	 Using the Tape Counter 	38
٠	Advanced Recording Features	
	 Connecting an RCA Audio/Video Input cable (SV-645B Only) 	39
	Using the Assemble Edit Function	40
	 Recording from Another VCR or Camcorder 	40
٠	OTHER FUNCTIONS AND USEFUL RECOMMENDATIONS	
	Auto Power Off	41
	 Child Door Lock System (SV-643B/SV-640B Only) 	41
	ECO Mode-Reducing Standby power consumption	41
	Technical Specifications	42
٠	SOLVING PROBLEMS	
	Problems and Solutions	43
	Service Centers List	44



1 = Step number

Safety Instructions

Front View of the VCR

The following illustrations represent precautions.



The lightning bolt is a warning sign alerting you to dangerous voltage inside the product. DO NOT OPEN THE VCR. Refer to service personnel.



Do NOT expose the VCR to

extreme temperature condi-

tions (below 5°C and above 40°C) or to extreme humidity conditions (less than 10% and

more than 75%).



Do NOT expose the VCR to direct sunlight.

Do NOT expose the VCR to any liquids.



Do NOT place any objects on the VCR or remote control.



During a storm and/or light-ning, unplug the VCR from the If the remote control is not used for a long period of time, remove the batteries and store it in a cool, dry place.

THIS DEVICE IS NOT FOR USE IN INDUSTRIAL ENVIRONMENTS

mains socket and aerial.



(SV-643B/SV-640B)



Rear View of the VCR



7



8

You have just purchased a SAMSUNG Video Cassette Recorder (VCR). Together with your VCR, you will find the following accessories in the box.



Deciding How to Connect Your VCR

You must take into account various factors when connecting audio or video systems:

- Types of connectors available on your systems
- Systems connected permanently to the VCR (satellite receiver for example) or temporarily (camcorder for example)

Your VCR is equipped with the following connectors.

Connector	Location	Туре	Direction	Recommended Use
AV1 (EURO AV)	Rear	SCART	In/Out ₊€	 Television Satellite receiver Other VCR
AV2 (DEC./EXT.)	Rear	SCART	ln ⊕	Satellite receiverOther VCR
Audio output	Rear	Audio RCA	Out ⊡+	♦ Audio Hi-Fi system
OUT TO TV	Rear ©	75 Ω coaxial	Out ⊡+	 Television
IN FROM ANT.	Rear	75 Ω	In	♦ Aerial
	ō	coaxial	Ð	Cable television networkSatellite receiver
		Audio/Video RCA	∖ In ⊕	 Audio Hi-Fi system Camcorder
★(SV-645B Only)			

Whenever you connect an audio or video system to your VCR, ensure that \underline{all} elements are switched $\underline{off}.$

Refer to the documentation supplied with your equipment for detailed connection instructions and associated safety precautions.

Connecting Your VCR to the TV using the Coaxial Cable and SCART cable

To receive television programmes a signal must be received from one of the following sources:

- An outdoor aerial
- An indoor aerial
- A cable television network
- A satellite receiver
- Make sure that both the television and the VCR are switched <u>off</u> before connecting the cables.

1 Remove the aerial or network input cable from the television.

- 2 Connect this cable to the 75Ω coaxial socket marked \neg \Box on the rear of your VCR.
- 3 Plug the coaxial cable supplied into the 🕅 socket on your VCR.
- 4 Plug the other end of the coaxial cable into the connector previously used for the aerial on the television.
- 5 Connect one end of the scart cable to the AV1 (EURO AV) socket on the rear of the VCR. You must connect your VCR to the television via the scart cable.
- 6 Plug the other end into the appropriate connector on the television.







Connecting Your VCR to the Satellite receiver or Other Equipment

Connecting the Audio Output Cable

You can connect your VCR to a Satellite receiver or other VCR using the SCART cable if the appropriate outputs are available on the equipment chosen. The following illustrations give a few examples of the connection possibilities.

1. AV2(DEC./EXT.): By means of 21-pin Scart Cable

Plug the SCART Cable with satellite receiver or other equipment into the AV2(DEC./EXT.) socket on the rear of the VCR.

After making this connection, select the source by pressing the INPUT button for the AV2 input sources. 2. By means of RF Coaxial Cable

After making this connection, you must preset the station received through the satellite tuner.

RF output channel of the satellite receiver should be adjusted away from channel 60, which is used by the VCR, e.g. re-adjust to channel 65.



You can connect your VCR to a Hi-Fi system.

Plug & Auto Set Up

Plug the VCR into the mains. Result: A message appears.

Check the date and time.

incorrect, see page 15.

Set Up" menu. (see page 17)

if it is :

for use.

>

- († 1

- 25

1

2

3

4

- Example: You wish to take advantage of the quality of your Hi-Fi stereo system when watching a programme or recording via your VCR.
 - Regardless of the type of connection chosen, you must always connect the coaxial cable supplied. Otherwise, no picture will be visible on the screen when the VCR is switched off.
 - Make sure that both the television and the VCR are switched off before connecting the cables.
- Connect the coaxial cable or SCART as indicated on page 11. 1
- 2 Plug the audio output cable into the audio connectors on the rear of your VCR.
 - Respect the colour coding of the left and right channels.
- Plug the other end of the audio cable into the appropriate input 3 connectors on your Hi-Fi stereo system.

Your VCR will automatically set itself up when it is plugged into the

 The number of stations automatically stored by the VCR depends on the number of stations that it has found. The process will finish after a few minutes.

The current time and date are displayed automatically.

Correct, Press MENU button twice to exit the menu.

Now, you only have to switch the VCR on and it is ready

So if you want to change this fixed one, you can change it by Presetting the Stations Automatically in OSD " Auto

Function for "Plug & Auto Set Up" is fixed already.

process takes a few minutes. Your VCR will then be ready for use.

Connect the coaxial cable as indicated on page 11. (Connecting Your VCR to the TV Using the Coaxial Cable)

Press OK button to start the auto scanning











Tuning Your Television for the VCR



(~) (**v**)

 $\mathbf{\Theta} \mathbf{C}$

REC



To view pictures from your VCR when a Scart cable is used, the television must be set to the audio/video mode (AV).

1 Switch on the television.

- 2 Switch on the VCR by pressing STANDBY/ON on the front of the VCR or STANDBY/ON on the remote control.
- 3 Select a programme position on the television to be reserved for use with your VCR.
- 4 Insert the video cassette in the VCR. Check that the VCR starts reading the cassette; if not, press ►|| button.
- 5 Start a scan on your television or set the television to UHF channel 60.
- 6 Fine tune the television until the pictures and sound are obtained clearly.
- 7 If you cannot find the pictures and sound, or there is interference from nearby channels, it may be necessary to change the setting of the VCR output channel (see Setting the VCR Output Channel on page 16 and Problems and Solutions on page 43).
- 8 When the picture and sound are perfectly clear, store this channel at the desired programme position on the television.
 - Result: That programme is now reserved for use with your VCR.

Inserting Batteries in the Remote Control

You must insert or replace the batteries in the remote control when you:

- Purchase the video cassette recorder
- Find that the remote control is no longer working correctly
- Push the tab in the direction of the arrow to release the battery compartment cover on the rear of the remote control.
- 2 Insert two AA, R6 or equivalent batteries, taking care to respect the polarities:
 - + on the battery with + on the remote control
 - on the battery with on the remote control
- **3** Replace the cover by aligning it with the base of the remote control and pushing it back into place.

Do not mix different battery types (manganese and alkaline for example).

Setting the Date and Time

Your VCR contains a 24-hour clock and calendar used to:

- Automatically stop programme recording
- Preset your VCR to record a programme automatically

You must set the date and time when:

- 65

- You purchase the video cassette recorder
- The time and date are set automatically from the broadcast signal. If the signal is weak or ghosting occurs, the time and date may not be set automatically. In this case, they should be set manually.
 - Do not forget to reset the time when you change clocks from winter to summer time and vice versa.
- 1 Press MENU on the remote control. <u>Result</u>: The programming menu is displayed.
- 2 Press the corresponding ▲, ▼ or ◀, ▶ buttons to select the CLOCK SET option.
- 3 Press the OK button to select this option. <u>Result</u>: The CLOCK SET menu is displayed.
- 4 Press ◀ or ► to select the hour, minutes, day, month and year. <u>Result</u>: The option selected flashes.
- - > You can hold the \blacktriangle or \checkmark buttons down to scroll more quickly through the values.
- 6 On completion, press MENU twice to exit the menu.















Displaying/Hiding On-Screen Information

Your VCR displays most information both on the VCR and the television.

You can choose to display or hide this information on the television screen (except for the Index, Programming MENU and VIDEOPLUS+ functions * (SV-645B/SV-643B only), which cannot be hidden).

- 1 Press MENU on the remote control. <u>Result</u>: The programming menu is displayed.
- 2 Press the corresponding ▲, ▼ or ◀, ► buttons to select the USER SET option.
- 3 Press the OK button to select this option. <u>Result</u>: The USER SET menu is displayed.
- 4 Press the corresponding ▲ or ▼ buttons, until the OSD option is selected.
 - To... Press ◀ or ▶, until...
 - Display on-screen information **ON** is displayed.
 - Hide on-screen information **OFF** is displayed.
- 6 On completion, press MENU twice to exit the menu.

Setting the VCR Output Channel

5

Your VCR output channel may need to be changed if the pictures suffer from interference or if your TV cannot find the pictures. Also, you can change the VCR output channel to adjust the frequency in which information is displayed on the screen.

- 1 Press MENU on the remote control. Result: The programming menu is displayed.
- 2 Press the corresponding ▲, ▼ or ◄, ▶ buttons to select the INSTALLATION option.
- **3** Press the OK button to select this option. <u>Result</u>: The **INSTALLATION** menu is displayed.
 - 4 Press the corresponding ▲ or ▼ buttons, until the VCR OUTPUT CH option is selected.

 - 6 On completion, press MENU twice to exit the menu. Then tune your television again (see page 14).

- Presetting the Stations Automatically
- You do not need to preset the stations if you have already set them automatically (see Plug & Auto Set Up on page 13).

Your VCR contains a built-in tuner used to receive television broadcasts.

You must preset the stations received through the tuner. This can be done:

- Plug & Auto Set up (see page 13)
- Automatically
- Manually (see page 18)

You can store up to 80 stations.

- 1 Press the MENU button on the remote control. <u>Result</u>: The programming menu is displayed.
- 2 Press the corresponding ▲, ▼ or ◄, ► buttons to select the INSTALLATION option.
- **3** Press the OK button to select this option. <u>Result</u>: The **INSTALLATION** menu is displayed.
- 4 Press the corresponding ▲ or ▼ buttons, until the AUTO SET UP option is selected. And then press the ► button to select this option.
 - Result: A message appears, indicating that any channels already preset on your VCR will be deleted.
 - Press OK to start the auto scanning.

5

 \triangleright

- Result: The PLEASE WAIT indication flashes on the television screen. • The first frequency band is scanned and the first
 - station found is displayed and stored.
 - The VCR then searches for the second station and so on.
 - When the automatic scanning procedure has finished, the VCR switches automatically to programme 1.
- The number of stations automatically stored by the VCR depends on the number of stations that it has found.
- 6 If you wish to cancel the auto scanning before the end, press the MENU button three times to exit the menu.
 - The time and date are set automatically from the broadcast signal. If the signal is weak or ghosting occurs, the time and date may not be set automatically. In this case, they should be set manually (see page 15).
 - Once the auto scanning procedure has finished, some stations may have been stored more than once; select the stations with the best reception and delete the ones no longer required (see page 19).









END: MONU

: ON

:E180

:AUTO

: AUTO

ON

: ON

OFF

END: MINNU

END: MONU

END: MONU

H <u>U</u>

USER SET

AV 4> 0K

Q

TAPE SELECT

COLOUR SYSTEM

🖾 🔍 🛅

INSTALLATION

H <u>U</u>

AV 4> 0K

AT 1

AUTO SET UP

MANUAL SET UF

VCR OUTPUT CH :CH60

FORMAT 16:9

ECO. MODE

OSD

NTCAM

AV >

IPC

Presetting the Stations Manually

Clearing a Preset Station







PR	CH	NAME
1	027	CAEB
2		
3		
4		
5		
AT)	•	SWAPPING:
DELE	TE:CLR/R	ST MENU

PR	: 1
CH	:
MFT	: -
NAME	:
	MEMORY: END: MD

- You do not need to preset the stations manually if you have already set them automatically.
- Press the MENU button on the remote control. 1 Result: The programming menu is displayed.
- 2 Press the corresponding \blacktriangle , \checkmark or \triangleleft , \triangleright buttons to select the INSTALLATION option.
- 3 Press the OK button to select this option. Result: The INSTALLATION menu is displayed.
- Press the corresponding A or V buttons, until the MANUAL SET 4 UP option is selected.
- 5 Press the ▶ button to select a MANUAL SET UP option. The TV STATION TABLE menu is displayed. Result:
- 6 Press the \blacktriangle or \checkmark buttons to select a programme number as required.
- 7 Press the ▶ button to preset the station. The MANUAL TUNING menu is displayed. Result:
- 8 Press the ◀ or ► buttons to start scanning. Result: The frequency band is scanned and the first station found is displayed.
- 9 Press the ▲ or ▼ buttons until the cursor is placed in front of the NAME.
- The station name is set automatically from the broadcast signal. 10 To change the programme's name, press the ▶ button.
- The first letter of the name flashes. Result: 11 To.

12	lf you	Then
	Move to the next or previous character	Press the \blacktriangleright or \blacktriangleleft buttons respectively.
	Select a character in the name	Press the ▲ or ▼ button until the required character is displayed (letters, numbers or "-" character).
11	То	Then

- ♦ Press the corresponding ▲ or ▼ buttons, Wish to store the station displayed until the MFT is selected. ◆ Press the ◀ or ► buttons to adjust the
 - picture, if necessary. Press OK to store the station
- Do not wish to ♦ Press the corresponding ▲ or ▼ buttons, store the station until the CH is selected. ♦ Press the ◀ or ► buttons to go on displayed scanning the frequency band and display
 - the next station Go back to the beginning of Step 12
- 13 Repeat this procedure from Step 6 onwards, until all the required stations have been stored.
- 14 On completion, press the MENU button three times to exit the menu.

If you have stored a TV station:

- That you do not require
- At the wrong programme position
- you can cancel it.
- Press the MENU button on the remote control. 1
- 2 Press the corresponding \blacktriangle . \checkmark or \blacktriangleleft . \blacktriangleright buttons to select the INSTALLATION option.
- 3 Press the OK button to select this option. Result: The INSTALLATION menu is displayed.
- 4 Press the corresponding A or V buttons, until the MANUAL SET UP option is selected.
- 5 Press the ► button to select this option. Result: The TV STATION TABLE menu is displayed.
- 6 Press the corresponding ▲ or ▼ buttons, until the required preset TV station (PR) is selected.
- 7 Press the CLR/RST button.
- Repeat the same procedure from Step 6 onwards until all the 8 required stations have been cleared.
- 9 On completion, press the MENU button three times to exit the menu.



GB



		ON TABLE *	
PR	CH	NAME	
1	027	CAEB	
2			
3			
4			
5			
			_
		SWAPPING:	NK.

Changing the Preset Station Table



AUTO SET U MANUAL SET VCR OUTPU		
Þ	END: MENU	J

** 1	V STATI	ON TABLE **
PR	CH	NAME
1	027	CAEB
2 3		
3		
4		
5		
▲▼		SWAPPING:OK
		MISINU



You can rearrange the Station Table and give different programme numbers to the stations listed according to your own preferences.

- Press the MENU button on the remote control. 1
- 2 Press the corresponding \blacktriangle , \blacktriangledown or \blacktriangleleft , \blacktriangleright buttons to select the INSTALLATION option.
- 3 Press the OK button to select this option. Result: The INSTALLATION menu is displayed.
- 4 Press the ▲ or ▼ buttons to select MANUAL SET UP option. And then press the ► button to select this option. The TV STATION TABLE menu is displayed. Result:
- 5 Press the corresponding ▲ or ▼ buttons, until the required preset TV programme is selected. Result: The selected station is displayed at the same time on the television screen.
- 6 To change the programme number assigned to a station press the OK button on the remote control. (For example, To move a TV station in programme 1 to programme 3)
- 7 Press the A or V buttons to select required position. And then press OK again to swap the position.
- You can modify this station by repeating the same procedure from 8 Step 5 onwards.
- 9 On completion, press the MENU button three times to exit the menu.

Selecting the Cassette Type

If you wish to use the tape counter to display the time remaining on a cassette, you must indicate the type of cassette inserted.

- 1 Press MENU on the remote control. Result: The programming menu is displayed.
- 2 Press the corresponding \blacktriangle , \checkmark or \blacktriangleleft , \blacktriangleright buttons to select the USER SET option.
- 3 Press the OK button to select this option.
- 4 Press the corresponding **A** or **v** buttons, until the **TAPE** SELECT option is selected.
- 5 Press the ◀ or ► buttons as many times as required, until the correct cassette length is displayed.



6 Press MENU twice to exit the menu





Selecting the Recording Speed

You can record a cassette at two different speeds:

- SP (Standard Play)
- LP (Long Play)
- In Long Play modes:
 - Each cassette lasts twice as long
 - The recording is of a slightly lower quality

To record a cassette	Press the SPEED button on the remote control, until
In standard play mode	SP is displayed.
In long play mode	LP is displayed.

Туре	Recording Time (in SP)
E-180	180 mins. or 3 hours
E-240	240 mins. or 4 hours
E-260	260 mins. or 4 hours and 20 mins.
E-300	300 mins. or 5 hours



NICAM



OSD	: ON
TAPE SELECT	:E180
COLOUR SYSTEM	:AUTO
FORMAT 16:9	: AUTO
NICAM	: ON
ECO. MODE	:OFF
IPC	: ON
AV >	END: MENU

NICAM programmes are divided into 3 types. NICAM Stereo. NICAM Mono and Bilingual (transmission in another language). NICAM programmes are always accompanied by a standard mono sound broadcast and you can select the desired sound. Please refer to page 32.

- Press MENU on the remote control. 1 Result: The programming menu is displayed.
- 2 Press the corresponding \blacktriangle , \checkmark or \blacktriangleleft , \blacktriangleright buttons to select the USER SET option.
- Press the OK button to select this option. 3 Result: The USER SET menu is displayed.
- 4 Press the corresponding ▲ or ▼ buttons, until the NICAM option is selected.
- 5 То... Press ◀ or ▶, until...

Mono mode	OFF is displayed. OFF: Only set at this position to record the standard mono sound during a NICAM broadcast if the stereo sound is distorted due to inferior reception conditions.
NICAM mode	ON is displayed.
	ON: Normally set at this position.

On completion, press MENU twice to exit the menu. 6

Protecting a Recorded Cassette

Video cassettes have a safety tab to prevent accidental erasure. When this tab has been removed, you cannot record on the tape.

- 1 If you wish to protect a cassette, break off the tab using a small screwdriver.
- 2 To re-record over a protected cassette (safety tab broken), cover the hole with adhesive tape.

Recording a Programme Immediately

Before recording a programme, you must have preset the corresponding station (unless you are recording via an external video source). If you have not done so, refer to pages 17 and 18.

- 1 Switch on the television.
- 2 To monitor the programme being recorded, select the television channel reserved for use with your VCR (or the AV input if used).
- 3 Insert the cassette on which the programme is to be recorded, with the window visible and the safety tab intact or the opening covered with adhesive tape.
 - Result: The VCR is switched on automatically.
- 4 Select:
 - The station to be recorded using the PROG (▲ or ▼) buttons or
 - The AV1, AV2 or AUX *(SV-645B only) source using the INPUT button for a satellite tuner or external video source <u>Result</u>: The station number is displayed and the programme can be seen on the television.
- 5 Select the recording speed by pressing the SPEED button as many times as required (see page 21).
- 6 Hold REC down for a while to start recording. The record indicator appears on the television and VCR Result: display. An index is recorded on the tape (see page 35).
- 7 To stop recording, press once.
- \succ • If your VCR ejects the cassette when you start recording, check to make sure that the cassette's safety tab is intact or that the opening (created by a broken safety tab) is covered with adhesive tape.
 - If you reach the end of the tape while recording, the cassette rewinds automatically.









Recording a Programme with Automatic Stop











This function enables you to record up to nine hours (LP) of programmes.

Your VCR stops automatically after the requested length of time.

- 1 Switch on the television.
- 2 To monitor the programme being recorded, select the television channel reserved for use with your VCR (or the AV input if used).
- 3 Insert the cassette on which the programme is to be recorded, with the window visible and the safety tab intact or the opening covered with adhesive tape. Result: The VCR is switched on automatically.

4 Select:

- The station to be recorded using the PROG (\blacktriangle or \blacktriangledown) buttons or
- The AV1, AV2 or AUX *(SV-645B only) source using the INPUT button for a satellite tuner or external video source
- Result: The channel number is displayed and the programme can be seen on the television.
- 5 Select the recording speed by pressing the SPEED button as many times as required (see page 21).
- 6 Hold the REC button down for a while to start recording. <u>Result</u>: The record indicator appears on the television screen and VCR display. An index is recorded on the tape (see page 35).
- 7 Press the REC button several times to increase the recording time
 - in:
 30-minute intervals up to four hours
 - 1-hour intervals up to nine hours (LP)
 - Result: The length is displayed on the television displays. The selected programme is recorded for the length of time requested. At the end of that time, the VCR stops recording automatically.
- 8 If you wish to cancel the recording before the end, press STANDBY/ON.
- If the end of the tape is reached while recording:
 - The recording stops
 - The VCR automatically turns off

Using the VIDEOPLUS+ Feature *(SV-645B/SV-643B Only)

Before presetting your VCR:

- Switch on both the television and your VCR
- Check that the date and time are correct
- Insert the cassette on which the programme is to be recorded (safety tab intact)

Up to six programmes can be preset.

1 Press the TIMER button. <u>Result</u>: The **TIMER METHOD** is displayed.

- 2 Press the corresponding ▲ or ▼ buttons, until the VIDEOPLUS option is selected.
- 3 Press the ▶ button to select VIDEOPLUS. <u>Result</u>: A message is displayed to allow you to enter the VIDEOPLUS+ code.
 - If all six programmes have been set, the message TIMER IS FULL is displayed. Refer to page 28 if you wish to cancel a preset recording.
- 4 Press the numeric buttons to enter the code opposite the programme that you wish to record in your television magazine.
 - If you wish to correct the VIDEOPLUS+ code that you are entering:
 - ◆ Press the ◀ button until the digit to be corrected is cleared
 - Enter the correct digit
- 5 Press the MENU button. <u>Result</u>: The information concerning the programme is displayed.
 - ✓ When using the VIDEOPLUS+ function for the first time with stored stations, the programme number flashes. This one time, you must enter the station number manually by pressing the ▲ or ♥ buttons. Refer to the following page if:
 - The programme number or times flash
 - You wish to modify the programme

6 If the programme and times are correct, press the MENU button.

- 7 Press the STANDBY/ON button to activate the timer.
- 8 Refer to page 28 if you wish to:
 - Check that your VCR has been programmed correctly
 Cancel a preset recording
- The numbers next to each TV programme listing are VIDEOPLUS+ code numbers, which allow you to programme your videorecorder instantly with the remote control. Tap in the VIDEOPLUS+ code for the programme you wish to record.

WIDEOPLUS+ is a trademark of Gemstar Development Corporation. The VIDEOPLUS+ system is manufactured under licence from Gemstar Development Corporation.











Modifying VIDEOPLUS+ Programming *(SV-645B/SV-643B Only)

If you wish to correct the programme displayed or modify certain elements, such as the recording speed, you can do so before you press MENU a second time to confirm.

If you wish to	Then
Select an input source other than the tuner (AV1, AV2 or AUX ★(SV-645B only))	 Press the ∢ or ► buttons, until the PR selection flashes. Press the INPUT button one or more times to change the input source selection. <u>Result</u>: The programme number is replaced by: The AV1, AV2 or AUX ★(SV-645B only) source using the INPUT button for a satellite tuner or external video source The input source must be selected before changing any
	other value.
Record a programme every day (Monday to Sunday) at the same time	 Press the <i>d</i> or <i>b</i> buttons, until the DAY selection flashes. Press the <i>d</i> or <i>d</i> buttons, until the DLY (Daily) value is displayed.
Record a programme every week on the same day and at the same time	 Press the ◀ or ► buttons, until the DAY selection flashes. Press the ▲ or ▼ buttons, until the ₩- (Week) value is displayed, followed by the required day. Example: ₩-SA (Weekly Saturday)
Extend the recording time	 ♦ Press the ◀ or ► buttons, until the STOP selection flashes. ♦ Press the ▲ or ▼ buttons to increase or decrease the stop time.
Select the recording speed	 ♦ Press the ◄ or ► buttons, until the recording speed selection flashes. ♦ Press the ▲ or ▼ buttons until the correct indication is displayed: • AUTO (Auto Tape Speed Select) : see page 27 • SP (Standard Play) • LP (Long Play)
Select the PDC recording	 Press the ◄ or ➤ buttons, until the V/P selection flashes. Press the ▲ or ▼ buttons until the "ON" indication is displayed Do not select PDC unless you are sure the programme you wish to record is broadcast with PDC. If you do set PDC ON (by selecting "ON" in the right - hand column on the screen) then you must set up the start-time EXACTLY according to the published TV schedule. Otherwise the timer recording won't take place.

Using the Timer Programming Feature

The Timer Programming feature allows you to preset the VCR to record a programme up to one month before that programme is to be broadcast. Up to six programmes can be preset.

- Before presetting a recording, check that the date and time are correct.
- 1 Insert the cassette. Press the TIMER button. Press the ▲ or ▼ buttons to select the **STANDARD** option and then press the ▶ button or,
 - Press MENU on the remote control.
 - <u>Result</u>: The programming menu is displayed. ♦ Press the OK button to select **TIMER PROGRAMMING** option. <u>Result</u>: The **TIMER PROGRAMMING** menu is displayed.
- 2 Press ► to select the input source.
- 3 Select the required station by pressing the ▲, ▼ buttons or INPUT to select the AV1, AV2 or AUX ★(SV-645B only) input sources.
- 4 Press ► to select the recording day.
- 5 Select the required day by pressing the \blacktriangle or \checkmark buttons.
- 6 Press ► to select the recording start time.
- 7 Select the required hour value by pressing the \blacktriangle or \checkmark buttons.
- 8 Press ► to select the minutes.
- 9 Select the required minute value by pressing the \blacktriangle or \checkmark buttons.
- 10 Press ► to select the recording end time.
- 11 Select the required recording end time by pressing the ▲ or ▼ buttons, following the same procedure as when selecting the recording start time.
- 12 Press ► to select the recording speed.
- 13 Press the ▲ or ▼ buttons to select the SP (Standard Play), LP (Long Play), AUTO (Auto Tape Speed Select) recording speeds.
- 14 Press ► to select the PDC recording mode.
- 15 Press the ▲ or ▼ buttons to toggle between the PDC mode (marked **ON**) and the non-PDC mode (marked –).
- 16 When you have finished, press the MENU button.
- 17 Press the STANDBY/ON button to activate the timer. <u>Result:</u> Before starting recording, the VCR compares the timer duration with the remaining time on the cassette.
 - Auto Tape Speed Select. The VCR's "Auto Tape Speed Select" function compares the duration of the timer recording to the actual recording time remaining on the tape loaded. If there is insufficient tape to complete a timer recording in AUTO mode, the VCR automatically switches to LP mode to record the whole programme.









Checking a Preset Recording

2

3

4

Cancelling a Preset Recording

1

2

3

4

buttons.

Press the ▲ or ▼ buttons to select the required programme.

On completion, press MENU twice.

You can cancel any programmes that are:

then press the ► button or,

Press MENU on the remote control.

- Insert the cassette. Press the TIMER button.

Result: The programming menu is displayed. ◆ Press the OK button to select **TIMER PROGRAMMING** option.

cast will not be recorded.

On completion, press MENU twice.

Press the ▲ or ▼ buttons to select the STANDARD option and

Result: The TIMER PROGRAMMING menu is displayed.

Press the CLR/RST button to cancel the selected programme. Result: All the recording information is deleted and the broad-

Select the programme to be cancelled by pressing the **A** or **V**

No longer required

♦ Incorrect

Press the < or > buttons to select and change any values as required. For more details, refer to the previous page.



Playing a Cassette

This function allows you to play back any pre-recorded cassette.

- 1 Switch on both the television and your VCR.
- 2 Insert the video cassette to be played. If the safety tab on the cassette is intact, press ►II.

Otherwise, the cassette is played automatically.

> When a cassette is loaded, the tape position is optimized automatically to reduce disturbance (Digital Auto Tracking). When playing a cassette, if the end of the tape is reached, the cassette is rewound automatically. NTSC tapes can be played back but cannot be recorded with this VCR.

3	То	Then press	
	Stop the playback	■ (STOP).	
	Eject the cassette	▲ (EJECT).	



GB

Adjusting Picture Alignment Automatically

When noise bars or streaks appear during playback, adjust picture alignment by pressing the A.TRK button.

- Result:

 The tracking bar appears.
 - The picture is automatically adjusted.
 - The tracking bar disappears when digital auto tracking has been completed.

Adjusting Picture Alignment Manually

The Picture Adjustment feature allows you to adjust the alignment manually to obtain the best possible picture.

When noise bars or streaks appear during playback, adjust alignment manually by pressing the TRK (~ or ~) buttons until the picture is clear and stable.

- Result:

 The tracking bar appears.
 - The image is adjusted.
 - The tracking bar disappears when you release the button.



REPEAT PROG \odot





PR DAY START→STOP V/P 1 MO 1 12:00→12:50SP ON

1/.TAN MON 21:28





The Picture Alignment feature enables you to optimize the tape position automatically to obtain the best possible picture.

Intelligent Picture Control



I	
OPTIONS	
OSD	: ON
TAPE SELECT	:E180
COLOUR SYSTEM	:AUTO
FORMAT 16:9	:AUTO
NICAM	: ON
ECO. MODE	:OFF
IPC	: ON
AV >	END: MINU

The Intelligent Picture Control Feature allows you to adjust the sharpness of the image automatically, according to your own preferences.

- During playback, press the MENU button on the remote control. 1 Result: The programming menu is displayed.
- 2 Press the corresponding \blacktriangle , \checkmark or \blacktriangleleft , \triangleright buttons to select the USER SET option.
- 3 Press the OK button to select this option. Result: The USER SET menu is displayed.
- 4 Press the corresponding A or V buttons, until the IPC option is selected
- 5 Press the button to select the IPC (intelligent picture control) option.
 - ≻ When intelligent picture control mode is ON, the sharpness of the image is adjusted automatically.
- 6 To adjust the sharpness manually, press the v button to turn the IPC mode OFF.
- 7 Press the ◀ or ► buttons until the picture is displayed according to your preferences.
 - ≻ If you do not press a button within ten seconds, the PICTURE menu disappears automatically.
- On completion, press the MENU button again. 8



** PI	Ciput	DF ++
** 11	CIU	RE **
IPC	:	OFF
SOFTEN		SHARPEN
	'	*
•		ON/OFF:▼

- During playback, press the IPC button. 1 Result: The **PICTURE** menu is displayed.
- 2 Press the v button to turn the IPC (Intelligent Picture Control) option ON and OFF.
 - \succ When Intelligent Picture Control mode is ON, the sharpness of the image is adjusted automatically.
- 3 To adjust the sharpness manually, select Intelligent Picture Control mode OFF.
 - The horizontal picture adjusting appears.
- 4 Press the ◀ or ► buttons until the picture is displayed according to your preferences.

If you do not press a button within ten seconds, the

- PICTURE menu disappears automatically. 5
- On completion, press the IPC button again.

 \succ

Format 16:9 (Wide Screen)

Your VCR can automatically play Wide Screen format prerecorded tapes. It can also record Wide Screen format programmes received from sources such as a satellite receiver.

- 8 Connect equipment compatible with Wide Screen to the VCR using the 21 pin SCART cable.
- 1 Press MENU on the remote control. Result: The programming menu is displayed.
- 2 Press the corresponding \blacktriangle , \checkmark or \blacktriangleleft , \blacktriangleright buttons to select the USER SET option.
- 3 Press the OK button to select this option. Result: The USER SET menu is displayed.
- 4 Press the corresponding \blacktriangle or \checkmark buttons, until the FORMAT 16:9 option is selected.
- 5 Press the \blacktriangleright button to select AUTO \rightarrow ON \rightarrow OFF.
 - AUTO Set when you use a wide TV. The VCR automatically detects if programmes being played back or recorded are in normal or Wide Screen format. ON The VCR always plays back and records in 16:9 Wide Screen format. Set if the VCR cannot detect Wide Screen TV programmes with "AUTO" set.

Set if you do not use a Wide Screen TV.



📖 💽 🖆



Selecting the Colour Mode

On completion, press MENU twice to exit the menu.

Before recording or playing back a cassette, you can select the required system standard.

Otherwise, the system automatically selects the reception standard

- make a setting on the colour system according to your TV. If your TV is a PAL system only TV, set NTPB If your TV is Multi System TV (NTSC 4.43 compatible), set NT4.43 and you can record NT4.43.
- 1 Press MENU on the remote control. Result: The programming menu is displayed.
- 2 Press the corresponding \blacktriangle . \checkmark or \blacktriangleleft . \blacktriangleright buttons to select the USER SET option.
- 3 Press the OK button to select this option. Result: The USER SET menu is displayed.
- 4 Press the corresponding \blacktriangle or \checkmark buttons, until the COLOUR SYSTEM option is selected.
- 5 Press the \blacktriangleright button to select AUTO \rightarrow PAL \rightarrow B/W. AUTO When playing back a cassette, the system standard is automatically selected by the VCR. B/W Black and White
- 6 On completion, press MENU twice to exit the menu.





(GB)

when you select AUTO.

OFF

- ➤ ♦ When playing back a cassette, the standard is automatically selected by the VCR.
 - When you playback an NTSC-recorded tape on this VCR

Selecting the Audio Output Mode

Playing a Cassette in Slow Motion



When monitoring a TV programme or playing back a Hi-Fi recorded video tape, press the AUDIO button to select a desired sound output. As the AUDIO button is pressed, the sound output and the indicator change as below:

Sound type OSD display	Stereo sound	Bilingual sound	Standard sound broadcast
	Heard in stereo. (left channel and right channel)	Channel I (MAIN) heard from the left speaker, channel II (SUB) heard from the right speaker.	Heard in monaural.
	Left channel heard from both the left and right speakers.	Channel I (MAIN) heard from both the left and the right speakers.	Heard in monaural.
	Right channel heard from both the left and right speakers.	Channel II-(SUB) heard from both the left and the right speakers.	Heard in monaural.
МІХ	Sound mixed the le normal audio track.	ft and right channels	s, and the
MONO	Heard in monaural.	Channel I (MAIN) heard from both the left and the right speakers.	Heard in monaural.

You can play a cassette in slow motion.

- No sound is heard when playing back a cassette in slow motion.
- 1 Press:
 - II to start playing the cassette
 - SLOW (\$\circ\$ \$\
 - ◆ To return to the normal speed, press the ►II button twice.
- 2 When playing back in slow motion, picture interference may occur. Press the TRK (∧ or ∨) buttons to minimize this effect.
 - When you have been using the Slow Motion function for more than about five minutes, the VCR will automatically play to protect the:
 - ♦ Cassette
 - Video heads





Playing a Sequence Frame by Frame

Searching for a Specific Sequence

You can:

- Stop the cassette at a given frame (image)
- Advance one frame at a time
- No sound is heard when playing back frame by frame.

1 Press:

- II to start playing the cassette
- II to stop the tape at a given frame
- ♦ F.ADV ([™]_O) to advance frame by frame
- 2 To return to normal playback, press ►II.
- When you have been using the Frame-by-Frame function for more than about five minutes, the VCR will automatically play to protect the cassette and video heads.
- Vertical stability: When playing back frame by frame, interference may be seen on the screen. Press the V-LOCK (^{wwww}) buttons to minimize this effect.

Picture Search, Fast Forward/Rewind

Picture Search enables you to Fast Forward or Rewind and look for a particular part of a tape.

- Press PLAY, the VCR will enter normal play mode. While in play, press and release the
 → (or
 <) button. The VCR will search at 5 times the normal playback speed.</p>
- 2 To return to normal playback mode, press the **I** button.
- 3 If you press and HOLD down the ➤ (or ◄) button the VCR will search at 9 times the normal speed. Releasing the ➤ button will return the VCR to search at 5 times the normal speed. To return to normal playback mode, press the ➤ II button.
- 4 Whilst in Picture Search mode, if you press the ➤ button again, the VCR will enter normal Fast Forward mode.
- 6 If, when Redwing (◀) or Fast Forwarding (►), you press the ◀ (or ►) button, the VCR will enter the Picture Search mode.

Each time you record a cassette on this VCR, an "index" is automatically marked on the tape when recording starts.

The Search function allows you to fast-forward or rewind to a specific index and start playback from that point. Depending on the direction selected, the indexes are numbered as follows:

		+		
	Prev	Seq. being	Next	
etc.	Seq.	played	Seq.	etc.
2	2 1	1 1	1 2	2

This VCR uses a standard indexing system (VISS). As a result, it will recognize any indexes marked by other VCRs using the <u>same</u> system and vice versa.

INTRO SCAN

- To search for a specific index, press INDEX.
- 2 Press the ← or ➤ buttons depending on the direction where your desired programme is located.
- 3 When an Index mark is found the VCR will playback the tape for 5 seconds, after which it will continue searching for the next Index mark.
- 4 If you want to watch the tape from a particular Index, simply press ►II.

Index Skip Search:

This feature will enable you to fast forward/rewind to a specific point on a tape: E.g. if you have recorded 3 different programmes on a tape and you have rewound the tape to the beginning, by using this feature you can go directly to the start of programme 2 simply by pressing the INDEX button.

Press the INDEX to start the Index search.

- 3 These Index searches can be made forwards: (press ►) or backwards: (press ◄).
- 4 To cancel an Index search simply press the ►II or button.







34

Auto Repeat Play

1

1

2

3

4

5 То...

6 7



You can set repeat play to repeat the tape continuously from	1
beginning to end.	

- Press MENU on the remote control. Result: The programming menu is displayed.
- 2 Press the corresponding ▲, ▼ or ◄, ► buttons to select the EASY OPERATION option.
- 3 Press the OK button to select this option. Result: The EASY OPERATION menu is displayed.
- 4 Press the corresponding ▲ or ▼ buttons, until the **REPEAT PLAY** option is selected.

5	То	Press ◀ or ▶, until
	Repeat play	ON is displayed.
	Do not wish to repeat play	OFF is displayed.
6	On completion, press MENU tw	ice to exit the menu.

You can set Interval Repeat Play so that the cassette is repeated a number of times according to a specified set interval.

Press the corresponding \blacktriangle , \checkmark or \blacktriangleleft , \blacktriangleright buttons to select the

 Result:
 The EASY
 OPERATION menu is displayed.

 Press the corresponding ▲ or ▼ buttons, until the

Press ▶. until...

5. 10 or 15 times)

OFF is displayed.

5, 10, 15 is displayed.

(choose an interval repeat of

NO. OF INTERVAL REPEAT option is selected.

On completion, press MENU twice to exit the menu.

INPUT/REPEAT button at the desired start point.

To select Interval Repeat Play during playback, press the

Result: "INTERVAL REPEAT SETTING" is displayed. Press the INPUT/REPEAT button one more time at the desired

"INTERVAL REPEAT" is displayed.

The tape is automatically rewound to the start point.

Result: The programming menu is displayed.

Press MENU on the remote control.

Press the OK button to select this option.

EASY OPERATION option.

Interval Repeat Play

end point.

Result:

Cancel Interval Repeat Play

Interval Repeat Play

PROS OFTICAS (12) COCK BONNS EASY OPER	OF NETALL
AT 40 DE	END: MISNU
*(SV-645B/SV-643B))





36

VPS/PDC Default

Programme VPS/PDC is a system of telling the VCR when a programme actually starts. Typically, when you want to record a programme you will tell the VCR to start recording, probably, five minutes before the advertised starting time of the programme and to finish ten minutes or so after the programme is due to finish. So even if the programme starts early or finishes late you will normally still get to see what you wanted to record. However when live programmes over-run or the day's television schedule is changed from that advertised, you may miss the desired programme which may have been delayed or even cancelled. With VPS/PDC the VCR will wait until the signal is sent to confirm the programme is starting and the VCR will record the programme even if it is two or more, hours late.

- 1 Press the MENU button on the remote control.
- 2 Press the corresponding ▲, ▼ or ◄, ► buttons to select the EASY OPERATION option.
- 3 Press the OK button to select this option. <u>Result:</u> The EASY OPERATION menu is displayed.
- 4 Press the corresponding ▲ or ▼ buttons, until the PDC/VPS DEFAULT option is selected.
- 5 Press ▶ button to select ON in PDC/VPS DEFAULT option.
- 6 On completion, press MENU twice to exit the menu.



END: MONU



AV 41 03



VIDEOPLUS+ EXTEND *(SV-645B/SV-643B Only)



BONUS	
PDC/VPS DEFAULT	OFF
VIDEOPLUS EXTEND	
AUTO POWER OFF	:OFF
REPEAT PLAY	:OFF
NO. OF	
INTERVAL REPEA	т:5

To prevent delays or over-runs the VCR has a function called Videoplus EXTEND allowing you to extend the recording time by up to 60 minutes.

- > Only use if PDC is not available or set to OFF.
- 1 Press the MENU button on the remote control.
- 2 Press the corresponding ▲, ▼ or ◀, ► buttons to select the EASY OPERATION option.
- 3 Press the OK button to select this option. <u>Result</u>: The EASY OPERATION menu is displayed.
 - Press the corresponding ▲ or ▼ buttons, until the VIDEOPLUS EXTEND option is selected.
- 5 Press ◀ or ► buttons to set the Videoplus EXTEND time by increments of 10 minutes.
- 6 To turn off, press ◀ or ► buttons repeatedly until OFF shows.

Using the Tape Counter

0:00:00

The tape counter:

4

- Indicates the elapsed time in the play and record modes (hours, minutes and seconds)
- Is reset when a cassette is inserted in the VCR
- Allows you to find the beginning of a sequence easily
- If the remaining time is to be calculated correctly, you must indicate the type of cassette being used.

1 Insert a cassette in your VCR.

- 2 To set the tape counter to zero at the beginning of a sequence:
 - Press DISPLAY twice to display the counter
 - Press CLR/RST when you want to set the tape counter to zero

3 When you are ready,

- Start playback or Recording.
- Press the button.
- Some VCR information, such as the counter, can be displayed on the television screen (unless you have deactivated the OSD mode; refer to page 16).

Press DISPLAY:

- Once to display the current function, programme number, recording speed, date, time and counter
- Twice to display the counter only
- Three times to display the time remaining on the cassette
- Four times to clear the display

Connecting an RCA Audio/Video Input Cable *(SV-645B Only)

You can connect other audio/video equipment to your VCR using audio/video cables if the appropriate outputs are available on the equipment chosen.

- Examples: You wish to copy a video cassette with the help of a second VCR (see page 40).
 - You wish to play back and/or copy pictures taken with a camcorder (see page 40).
 - Regardless of the type of connection chosen, you must always connect the coaxial cable supplied. Otherwise, no picture will be visible on the screen when the VCR is switched off.
 - Make sure that both the television and the VCR are switched <u>off</u> before connecting the cables.
- 1 Connect one end of the RCA audio/video cable into the VIDEO INPUT socket on the front of the VCR.
- 2 Plug the other end of the audio/video cable into the appropriate output connector on the other system (VCR or camcorder).
- 3 Connect one end of the RCA audio cable supplied into the AUDIO INPUT sockets on the front of the VCR.
 - Take care to respect the colour coding of the left and right channels.
- 4 Plug the other end of the audio cable into the appropriate output connectors on the other system (VCR, camcorder or Hi-Fi sound system).







Using the Assemble Edit Function

This function allows you to start a new recording at a specific position on the cassette while maintaining a very smooth scene change.

- Insert the cassette to be edited in your VCR.
- 2 Press the ►II button to start playback.
- 3 When you reach the position from which you wish to start the new recording, press the ►II button.
- 4 Press the F.ADV () button again as often as necessary to advance frame by frame, until the exact recording position is located.
- 5 While the VCR is in still mode, hold the REC button down for a while to activate the Assemble Edit function. Result: Record symbol flashes in the display.
- 6 Select the source from which you wish to record by pressing:
 - ◆ The PROG (▲ or ▼) buttons for television channels
 - The INPUT button for the AV1, AV2 or AUX* (SV-645Bonly) input sources
- 7 Press the ►II button to start recording.
- 8 When you have finished recording, press ■

Recording from Another VCR or Camcorder

You can copy a cassette to your VCR from another video source, such as another VCR or a camcorder.





- It is an infringement of copyright laws to copy prerecorded cassettes or to re-record them in any form without the permission of the owners of the corresponding copyright.
- 1 Connect the VCR, <u>from</u> which the cassette is to be copied, to the appropriate SCART audio and video input connectors on the rear of your VCR. You can also use a RCA audio and video cable to connect the

AUX input on the front of your VCR. *(SV-645B only)

- 2 Insert a blank cassette in your VCR.
- 3 Insert the pre-recorded cassette in the other video source (VCR or camcorder).
- 4 Press the INPUT button to select the appropriate input on your VCR:
 - AV1 or AV2 for the SCART input
 - AUX for the RCA input *(SV-645B only)
- 5 Start playing back the cassette to be copied.
- 6 Hold REC down for a while to start recording on your VCR
- 7 When you have finished recording, press on both VCRs.
 - > If you wish to view the cassette being copied:
 - Your VCR must be connected as usual to the television (see page 11 for further details)

Auto Power Off

The Auto Power Off feature automatically turns off your VCR if no signal is received and you do not press any button for the selected time.

- 1 Press MENU on the remote control. Result: The programming menu is displayed.
- 2 Press the corresponding ▲, ▼ or ◄, ► buttons to select the EASY OPERATION option.
- 3 Press the OK button to select this option. Result: The EASY OPERATION menu is displayed.
- 4 Press the corresponding ▲ or ▼ buttons, until the AUTO POWER OFF option is selected.
- 5 Press the ► button, until you select the time of Auto Power off interval.

→ OFF → 2HOUR → 3HOUR-

6 On completion, press MENU twice to exit the menu.



(GB)

Child Door Lock System *(SV-643B/SV-640B Only)

With this mechanism you can prevent children from harming themselves or the VCR. It stops fingers and small articles from entering your VCR.



ECO Mode-Reducing Standby power consumption

Low Power Mode reduces the Standby power consumption of the VCR when in Standby mode.

Useful, for example, when you are away from the house on holiday. It saves actually turning the VCR off.

- 1 Press MENU on the remote control. Result: The programming menu is displayed.
- 2 Press the corresponding ▲, ▼ or ◄, ► buttons to select the USER SET option.
- 3 Press the OK button to select this option. <u>Result</u>: The **USER SET** menu is displayed.
- 4 Press the corresponding ▲ or ▼ buttons, until the ECO. MODE is selected.
- 5 Press the ▶ button to turn LOW(3Watts) mode on. Now, when the VCR is standby mode the front display panel will shut off. Even the clock disappears. By pressing the STANDBY/ON button again the display panel will reappear.
- 6 On completion, press MENU twice to exit the menu.





Technical Specifications

Problems and Solutions

Design and specifications are subject to change without notice.

Format	VHS PAL standard		
Heads	Video: 4 rotary heads		
	Hi-Fi audio: 2 rotary heads		
	Audio/Control: 1 stationary head		
	Erase: 1 full track erase head		
Television system	STANDARD I-NICAM STEREO		
Luminance	FM azimuth recording		
Colour system	PAL: Down converted subcarrier phase shifted direct recording		
	NTSC PB on PAL TV		
Tape speed	SP 23.39 mm/sec		
Tape speed	LP 11.69 mm/sec		
Recording/playback time	SP 3 hours (E-180 Tape)		
1 Coording, picybaok unic	LP 6 hours (E-180 Tape)		
REW time	About 60 sec in REW with E-180		
1/1050			
VIDEO	0 E to 2.0 \/n n; 7E abm unbalanced		
Input	0.5 to 2.0 Vp-p; 75 ohm unbalanced		
Output	1.0 ± 0.2 Vp-p; 75 ohm unbalanced		
Signal-to-noise ratio Better than 43 dB (SP) Horizontal resolution More than 240 lines			
Horizontal resolution	More than 240 lines		
AUDIO			
Input	-8 dBm, 47 Kohm unbalanced		
Output	-8 ± 3 dBm, 1 Kohm unbalanced		
Wow and flutter (WTD) 0.4% max (SP)			
Signal-to-noise ratio	68 dB min (IHF A filter)		
Frequency response	20Hz - 20kHz		
Power requirement	230V (AC 50-60 Hz)		
Power consumption	Approx. 17 watts		
Operation temperature	41°F-104°F (5°C-40°C)		
Operation humidity	10%-75%		
Weight	2.8 Kg (net)		
Dimensions (WxHxD) 360 x 94 x 240 mm			

Before contacting the Samsung after-sales service, perform the following simple checks.

Problem	Explanation/Solution	
No power	 Check that the power plug is connected to a wall outlet. Have you pressed the STANDBY/ON button? 	
You cannot insert a video cassette	 A video cassette can only be inserted with the window side up and the safety tab facing you. 	
The television programme was not recorded	 Check the VCR aerial connections. Is the VCR tuner properly set? Check if the safety tab is intact on the cassette. 	
Timer recording was unsuccessful	 Was the STANDBY/ON button pressed to activate the timer? Re-check the recording start/stop time settings. If there was a power failure or interruption during timer recording, the recording will have been cancelled. 	
No playback picture or the picture is distorted	• Check to see if you are using a prerecorded tape.	
You cannot see normal broadcasts	 Check the TUNER/EXTERNAL setting. It should be on TUNER. Check the TV/VCR aerial connections. 	
Noise bars or streaks on playback	• Press the TRK (\checkmark or \checkmark) buttons to minimize this effect.	
When the I button is pressed during playback, the still picture has severe "noise bars" streaks	 A still picture may have "noise bars", depending on the condition of the tape. Press the TRK (∧ or ∨) buttons during SLOW motion to minimize this effect. 	
Video Head Cleaning	 If poor pictures appear on a variety of cassettes, the video heads may need cleaning. This is not a common problem and unless it appears, the heads should not be cleaned. When cleaning the video heads, read all instructions provided with the head cleaning cassette. Incorrect head cleaning can permanently damage the video heads. 	
If when tuning in your TV to the VCR test pattern your TV does not find the test pattern or the pattern when found suffers from interference, it may be due to the VCR output channel clashing with the normal TV transmissions in your area. To prevent this you will need to change the VCR output channel in the following way	 Remove the aerial input plug from the socket marked (aerial symbol) on the rear of the VCR. Carry out the instructions "Tuning Your Television for the VCR (see page 14). Carry out the instructions "Setting the VCR output Channel" (see page 16), move the channel number several channels down from the original setting. (example: from 60 to 57). Replace the aerial plug into the socket marked (aerial symbol) on the rear of the VCR. Re-tune your TV to the VCR again by following instructions "Tuning Your Television for the VCR" (page 14). If the problem still exists repeat steps 1 to 5 moving several more channels away from the original setting. 	

If you are unable to solve the problem after reading the above instructions, note:

- The model and serial number on the rear of your VCR
- The warranty information
- A clear description of the problem

Then contact your nearest SAMSUNG after-sales service.

SAMSUNG ELECTRONICS (UK) LTD AUTHORISED SERVICE CENTERS

In the event of warranty service being required, please contact your retailer first. If they cannot provide service, please contact your nearest service centre listed below. Service facilities are return to base, however some agents may provide an in-home service (there may be a cost for call out). Please refer to your warranty card or retailer for terms and conditions of the warranty.

	BRISTOL GOGGLEBOX TV	ESSEX WICKFORD CENTRAL SERVICE	LONDON WILLESDEN ATLANTIC ELECTRIC	WEST MIDLAN DUDL JSST
	TEL: 01275 838083	TEL: 01268 766333	TEL: 0181 451 6155	TEL: 0
				WALS
BERKS	HIRE	MID GLAMORGAN BRIDGEND	MANCHESTER ASHTON UNDER LYNE	BEAV
	READING A & W SOUND & VISION	BRIDGEND SERVICE	VIDEOTECH UK	TEL: 0
	TEL: 01734 872000	TEL: 01656 663463	TEL: 0161 308 4092	WARL
	MAIDENHEAD		NORTHENDEN	MERR
		GLOUCESTERSHIRE	G H SUMNER LTD	TEL: 0
	J F ASSOCIATES TEL: 01628 25709	GLOUCESTERSHIRE TEWKESBURY	TEL: 0161 998 2705	WILTSHIRE
	WARGRAVE	SWITCH ELECTRONICS		SWIN
	J F ASSOCIATES	TEL: 01684 850063	MERSEYSIDE	COLO
	TEL: 01734 401525	WESTON-SUB-EDGE PROFESSIONAL ELECTRONIC	ELLESMERE PORT	TEL: 0
	122.01104401020	TEL: 01386 841773	H & H VIDEO & TV	IEL.U
CAMBR	RIDGESHIRE	TEL: 01386 841773	TEL: 0151 357 1011	WORCESTERS
	DRY DRAYTON DRAYTON ELECTRONICS		LIVERPOOL	WORG
	DRAYTON ELECTRONICS	HAMPSHIRE FAREHAM	P & A AUDIO VIDEO LTD	THE H
	TEL: 01954 211330	SOUND & VISION	TEL: 0151 924 7287	TEL: 0
	PETERBOROUGH	TEL: 01329 286551		
	DEEPING TV SVCS	FARNBOROUGH	MIDDLESEX HAYES	SOUTH YORK SHEF
	TEL: 01778 343831	ICTV	A & A REPAIRS	SHEF
		TEL: 01252 510118	TEL: 0181 561 2900/4104	GRAP
CHESH	IRE	PORTSMOUTH		TEL: (
	CHESTER	ICTV	NORFOLK	BARN
	H & H VIDEO & TV	TEL: 01705 653654	AYLESHAM	ALTR/
	TEL: 01244 379579	SOUTHAMPTON	CORTONS ELECTRICAL	TEL: 0
	WARRINGTON	OLYMPIC TV & AUDIO	TEL: 01263 733391	
	W L ELECTRONICS	TEL: 01703 703401	WATTON	NORTH YORK
	TEL: 01925 764387	HEREFORD	JULIAN HORN	YORK
		HEREFORD HEREFORD	TEL: 01953 881440	DBS S
CORNW	VALL	J P MICRO SVCS	1	TEL: 0
	BUDE	TEL: 01432 356353	NORTHAMPTONSHIRE KETTERING	
	H B H WOOLACOTTS	ILL. 01402 000000	KETTERING	WEST YORKS
	TEL: 01288 352269	HERTFORDSHIRE	INTEGRATED SVCS	BRAD
	LAUNCESTON	BAI DOCK	TEL: 01536 516475	GRAP
	H B H WOOLACOTTS	TECHNICAL REPAIR SVC		TEL: 0
	TEL: 01566 772096	TEL: 01462 491144	OXFORDSHIRE BANBURY	HUDD
	NEWQUAY	MARKYATE	BANBURY	GRAP
	GREENBANK ELECTRONICS	TELETECH SVCS	HITECH	TEL: 0
	TEL: 01637 880576	TEL: 01582 841862	TEL: 01295 267415	ILKLE
	WADEBRIDGE		BOTLEY	R BEA
	H B H WOOLACOTTS	NORTH HUMBERISDE	SPECTRUM ELECTRON TEL: 01865 250199	TEL: 0
	TEL: 01208 816155	GOOLE	TEL. 01003 200199	1
		HEADLAND ELECTRCS	SHPOPSHIPE	CHANNEL ISL
CUMBR	<u>llA</u>	TEL: 01977 661223	SHROPSHIRE TELFORD	GUER
	BARROW IN FURNESS	SOUTH HUMBERSIDE	WOWEN	TELES
	KENNETH GARDNER	GRIMSBY	TEL: 01952 613818	TEL:
	TEL: 01229 821202	RAYNERS SUPERSTORE	122.01002.010010	JERS
	SEARLE AUDIO	TEL: 01472 358766	SOMERSET	ALTER
	TEL: 01229 839692	TEL. 01472 338700	TAUNTON	TEL: 0
	PENRITH	KENT	ARMTECH ELECTRONICS	ISLE O AUDIO
	CANNAN & BROWN	CANTERBURY	TEL: 01823 279401	AUDIO
	TEL: 01768 864829	BARRETTS OF CANTERBURY	YEOVIL	TEL: 0
		CANTERBURY BARRETTS OF CANTERBURY TEL: 01227 766582	M J THOMAS	
DEVON		DARTFORD	TEL: 01935 477255	NORTHERN IR
	HOLSWORTHY	BUDGET REPAIR CENTRE		
		TEL: 01322 227668		CO AI
	H B H WOOLACOTTS		STAFFORDSHIRE	CRAI
	TEL: 01409 253280	MAIDSTONE	STOKE ON TRENT	CRAI
	TEL: 01409 253280 NEWTON ABBOT	MAIDSTONE	STOKE ON TRENT TELEFAULTS (S.O.T.) LTD	CRAIC TEL: 0
	TEL: 01409 253280 NEWTON ABBOT TELLI-SCOPE ELECTRONICS		STOKE ON TRENT	CRAIO TEL: (
	TEL: 01409 253280 NEWTON ABBOT TELLI-SCOPE ELECTRONICS TEL: 01626 63907	MAIDSTONE AVERY ELECTRONICS TEL: 01622 682138	STOKE ON TRENT TELEFAULTS (S.O.T.) LTD TEL: 01782 813757	CRAIG TEL: (EIRE CO CO
	TEL: 01409 253280 NEWTON ABBOT TELLI-SCOPE ELECTRONICS TEL: 01626 63907 PLYMOUTH	MAIDSTONE AVERY ELECTRONICS TEL: 01622 682138	STOKE ON TRENT TELEFAULTS (S.O.T.) LTD TEL: 01782 813757 SUFFOLK	CRAIO TEL: (EIRE CO CO TVAE
	TEL: 01409 253280 NEWTON ABBOT TELL: SCOPE ELECTRONICS TEL: 01626 63907 PLYMOUTH ARGYLE TV & VIDEO	MAIDSTONE AVERY ELECTRONICS TEL: 01622 682138	STOKE ON TRENT TELEFAULTS (S.O.T.) LTD TEL: 01782 813757 SUFFOLK IPSWICH	CRAIO TEL: (EIRE CO CO TVAE
	TEL: 01409 253280 NEWTON ABBOT TELL: SCOPE ELECTRONICS TEL: 01626 63907 PLYMOUTH ARGYLE TV & VIDEO	MAIDSTONE AVERY ELECTRONICS TEL: 01622 662138 LACKPOOL KENNETH GARDNER	STOKE ON TRENT TELEFAULTS (S.O.T.) LTD TEL: 01782 813757 SUFFOLK IPSWICH GGN LTD	CRAIO TEL: (EIRE CO CO TVAE TEL: (
	TEL: 01409 253280 NEWTON ABBOT TELLI-SCOPE ELECTRONICS TEL: 01626 63907 PLYMOUTH ARGYLE TV & VIDEO TEL: 01752 779933 CTV ELECTRONICS	MAIDSTONE AVERY ELECTRONICS TEL: 01622 682138 LANCASHIRE BLACKPOOL KENNETH GARDNER TEL: 01253 824047	STOKE ON TRENT TELEFAULTS (S.O.T.) LTD TEL: 01782 813757 SUFFOLK IPSWICH GGN LTD TEL: 01473 744300	CRAIO TEL: (EIRE CO CO TVAE TEL: (GRAMPIANS
	TEL: 01409 253280 NEWTON ABBOT TELL: SCOPE ELECTRONICS TEL: 01626 63907 PLYMOUTH ARGYLE TV & VIDEO	MAIDSTONE AVERY ELECTRONICS TEL: 01622 682138 LANCASHIRE BLACKPOOL KENNETH GARDNER TEL: 01253 824047 LANCASTER	STOKE ON TRENT TELEFAULTS (S.O.T.) LTD TEL: 01782 813757 SUFFOLK IPSWICH GGN LTD TEL: 01473 744300	CRAIO TEL: (EIRE CO CI TVAE TEL: (GRAMPIANS FRAS
	TEL: 01499 253280 NEWTON ABBOT TEL: SCOPE ELECTRONICS TEL: 01626 63907 PLYMOUTH ARGYLE TV & VIDEO TEL: 01752 77933 CTV ELECTRONICS TEL: 01752 350950	MAIDSTONE AVERY ELECTRONICS TEL: 01622 682138 LANCASHIRE BLACKPOOL KENNETH GARONER TEL: 01253 824047 LANCASTER KENNETH GARONER	STOKE ON TRENT TELEFAULTS (S.O.T.) LTD TEL: 01782 813757 SUFFOLK IPSWICH GGN LTD TEL: 01473 744300	CRAIG TEL: (EIRE CO C TVAE TEL: (GRAMPIANS FRAS RODG
DORSE	TEL: 01409 253280 NEWTON ABBOT TELL-SCOPE ELECTRONICS TEL: 01626 63907 PLYMOUTH ARGYLE TV & VIDEO TEL: 01752 79933 CTV ELECTRONICS TEL: 01752 350950 I	MAIDSTONE AVERY ELECTRONICS TEL: 01622 682138 LANCASHIRE BLACKPOQL KEINETH GARDNER LANCASTER KEINETH GARDNER TEL: 10524 64408	STOKE ON TRENT TELEFAULTS (S.O.T.) LTD TEL: 01782 813757 SUFFOLK PROMICH GGN LTD TEL: 01473 744300 SURREY WALLINGTON	CRAIG TEL: (EIRE CO C TVAE TEL: (GRAMPIANS FRAS RODG
DORSE	TEL: 01409 253280 NEWTON ABBOT TELL-SCOPE ELECTRONICS TEL: 01626 63907 PLYMOUTH ARGYLE TV & VIDEO TEL: 01752 779933 CTV ELECTRONICS TEL: 01752 350950 I BOURNEMOUTH	MAIDSTONE AVERY ELECTRONICS TEL: 01622 682138 LANCAPOOL KENNETH GARONER TEL: 01538 824047 LANCASTER KENNETH GARONER TEL: 01524 64408 ROCHOALE	STOKE ON TRENT TELEFAULTS (S.O.T.) LTD TEL: 01782 813757 SUFEOLK GGN LTD TEL: 01473 744300 SURREY WALLINGTON SERVICECARE	CRAIG TEL: (EIRE CO CC TVAE TEL: (GRAMPIANS FRAS RODG TEL: (
DORSE	TEL: 01409 253280 NEWTON ABBOT TELL-SCOPE ELECTRONICS TEL: 01626 63907 PLYMOUTH ARGYLE TV & VIDEO TEL: 01752 779833 GTV ELECTRONICS TEL: 01752 350850 TEL: 01752 350850 J BOURDEMOUTH M & G ELECTRONICS	MAIDSTONE AVERY ELECTRONICS TEL: 01622 682138 LANCASHIRE BLACKPOOL REINETH GARDNER TEL: 01253 824047 LENNETH TEL: 01253 824047 TEL: 01253 824047 CTU SERVICES	STOKE ON TRENT TELEFAULTS (S.O.T.) LTD TEL: 01782 813757 SUFFOLK GGN LTD GGN LTD TEL: 01473 744300 SURREY WALLINGTON SERVICECARE TEL: 0181 669 1145	CRAIG TEL: C EIRE CO CC TVAE TEL: C GRAMPIANS FRAS RODG TEL: C HIGHLANDS
DORSE	TEL: 01409 253280 NEWTON ABBOT TELL-SCOPE ELECTRONICS TEL: 01626 63907 PLYMOUTH ARGYLE TV & VIDEO TEL: 01752 779933 CTV ELECTRONICS TEL: 01752 350950 I BOURNEMOUTH	MAIDSTONE AVERY ELECTRONICS TEL: 01622 682138 LANCAPOOL KENNETH GARONER TEL: 01538 824047 LANCASTER KENNETH GARONER TEL: 01524 64408 ROCHOALE	STOKE ON TRENT TELEFAULTS (S.O.T.) LTD TEL: 01782 813757 SUFEDLK GNUTD TEL: 01473 744300 SURREY SERVICECARE TEL: 0181 689 1145 HORLEY	CRAIG TEL: (EIRE CO CC TVAE TEL: (GRAMPIANS FRAS RODO TEL: (HIGHLANDS ULLA
	TEL: 01409 253280 NEWTON ABBOT TELL:SCOPE ELECTRONICS TEL: 0126 6307 PLYMOUTH ARSYLE TV & VIDEO TEL: 01752 73933 CTV ELECTRONICS TEL: 01752 350950 DU BOURDEMOUTH M & G ELECTRONICS TEL: 01202 523771	MAIDSTONE AVERY ELECTRONICS TEL: 01622 682138 ELACKPOOL RENNETH GARDNER TEL: 01253 824047 LANCASTER KEINUTS3 824047 CONCASTER CONCASTER CONCASTER CONCASTER CONCASTER CONCASTER CONCASTER CONCASTER CONCASTER CONCASTER CONCASTER CONCASTER CONCASTER CONCASTER CONCASTER CONCASTER CONCASTER CONCASTER CONCASTER CONCASTER CONCASTER CONCASTER CONCASTER CONCASTER CONCASTER CONCASTER CONCASTER CONCASTER CONCASTER CONCASTER CONCASTER CONCASTER CONCASTER CONCASTER CONCASTER CONCASTER CONCASTER CONCASTER CONCASTER CONCASTER CONCASTER CONCASTER CONCASTER CONCASTER CONCASTER CONCASTER CONCASTER CONCASTER CONCASTER CONCASTER CONCASTER CONCASTER CONCASTER CONCASTER CONCASTER CONCASTER CONCASTER CONCASTER CONCASTER CONCASTER CONCASTER CONCASTER CONCASTER CONCASTER CONCASTER CONCASTER CONCASTER CONCASTER CONCASTER CONCASTER CONCASTER CONCASTER CONCASTER CONCASTER CONCASTER CONCASTER CONCASTER CONCASTER CONCASTER CONCASTER CONCASTER CONCASTER CONCASTER CONCASTER CONCASTER CONCASTER CONCASTER CONCASTER CONCASTER CONCASTER CONCASTER CONCASTER CONCASTER CONCASTER CONCASTER CONCASTER CONCASTER CONCASTER CONCASTER CONCASTER CONCASTER CONCASTER CONCASTER CONCASTER CONCASTER CONCASTER CONCASTER CONCASTER CONCASTER CONCASTER CONCASTER CONCASTER CONCASTER CONCASTER CONCASTER CONCASTER CONCASTER CONCASTER CONCASTER CONCASTER CONCASTER CONCASTER CONCASTER CONCASTER CONCASTER CONCASTER CONCASTER CONCASTER CONCASTER CONCASTER CONCASTER CONCASTER CONCASTER CONCASTER CONCASTER CONCASTER CONCASTER CONCASTER CONCASTER CONCASTER CONCASTER CONCASTER CONCASTER CONCASTER CONCASTER CONCASTER CONCASTER CONCASTER CONCASTER CONCASTER CONCASTER CONCASTER CONCASTER CONCASTER CONCASTER CONCASTER CONCASTER CONCASTER CONCASTER CONCASTER CONCASTER CONCASTER CONCASTER CONCASTER CONCASTER CONCASTER CONCASTER CONCASTER CONCASTER CONCASTER CONCASTER CONCASTER CONCASTER CONCASTER CONCASTER CONCASTER CONCASTER CONCASTER CONCASTER CONCASTER CONCASTER CONCASTER CONCASTER CONCASTER CONCASTER CONCASTER CONCASTER CONCASTER CONCASTER CONCASTER CONCASTER CONCASTER CONCASTER	STOKE ON TRENT TELEFAULTS (S.O.T.) LTD TEL: 01782 813757 SUFFOLK GGN LTD TEL: 01473 744300 SURREY WALLINGTON SERVICECARE TEL: 0181 669 1145 HORLEY D K AUDIO VISUAL SVCS	CRAIC TEL: (EIRE CO CI TVAE TEL: (GRAMPIANS RODC TEL: (HIGHLANDS ULLA R & R
	TEL: 01409 253280 MEWTON ABBOT TELL:SCOPE ELECTRONICS TEL: 0126 6300 PLYMOUTH ARCYLE TV & VIDEO TEL: 01752 759933 CTV ELECTRONICS TEL: 01752 350950 I BOURNEMOUTH M & G ELECTRONICS TEL: 01202 523771 M	MAIDSTONE AVERY FLECTRONICS TE::01622 682138 ELACASHEE BILACKOPOL KENKETH GARDNER TE::01238 324047 LANCASTER KENNETH GARDNER TE::01236 44488 ROCHDALE CTV SERVICES TE::01706 554983 LEICESTERSHIEE	STOKE ON TRENT TELEFAULTS (S.O.T.) LTD TEL: 01782 813757 SUFEDLK GNUTD TEL: 01473 744300 SURREY SERVICECARE TEL: 0181 689 1145 HORLEY	CRAIC TEL: C EIRE CO CC TVAE TEL: C GRAMPIANS RODG TEL: C HIGHLANDS ULLA R & R
	TEL: 01409 253280 NEWTON ABBOT TELL:SCOPE ELECTRONICS TEL: 0126 6300 PLYMOUTH ARXYLE TV & VIDEO TEL: 01752 73933 TEL: 01752 350950 EOURNEMOUTH M & G ELECTRONICS TEL: 01202 523771 M DURHAM	MAIDSTONE AVERY FLECTRONICS TEL: 01622 682138 LANCASHIRE REACKPOOL KENNETH GARDNER TEL: 01524 824047 LANCASTER KEINNETH GARDNER TEL: 01524 64468 ROOMALES TEL: 01524 64468 ROOMALES TEL: 01526 654983 LEICESTERSHIRE LEICESTER	STOKE ON TRENT TELEFAULTS (S.O.T.) LTD TEL: 01782 813757 SUFEDLK GGN LTD TEL: 01473 744300 SURREY WALLINGTON SERVICECARE TEL: 0181 689 1145 HORLEY D K AUDIO VISUAL SVCS TEL: 01293 786459	CRAIC TEL: C EIRE CO CC TVAE TEL: C GRAMPIANS FRAS RODC TEL: C HIGHLANDS ULLA R & R TEL: C
	TEL: 01402 253280 TEL: 158COPE ELECTRONICS TEL: SCOPE ELECTRONICS TEL: 0128C 69307 PLYMOUTH PLYMOUTH TEL: 01752 25907 TEL: 01752 250950 TEL: 01752 250950 TEL: 01702 253771 M DURHAM DURHAM LEF TECH SVCS	MAIDSTONE AVERY FLECTRONICS TEL: 01622 682138 LANCASHIRE BLANETH GARDNER TEL: 01253 830407 LANCASTER KENNETH GARDNER TEL: 01254 64468 ROCHDALE CTV 58RVICES TEL: 01706 654903 TEL: 01706 654903 LEICESTER SOUNT & VISION CENTRE	STOKE ON TRENT TELEFAULTS (S.O.T.) LTD TEL: 01782 813757 SUFFOLK IPSWICH GGN LTD TEL: 01473 744300 SURREY WALLINGTON SERV/CECARE TEL: 0181 669 1145 HORLEY D K AUDIO VISUAL SVCS TEL: 01230 786459 EAST SUSSEX	CRAIC TEL: C EIRE CO CC TVAE TEL: C GRAMPIANS ROBO TEL: C HIGHLANDS ULLAI R & R TEL: C LOTHIAN
	TEL: 01409 253280 NEWTON ABBOT TELL:SCOPE ELECTRONICS TEL: 0126 6300 PLYMOUTH ARSYLE TV & VIDEO TEL: 01752 73933 CTV ELECTRONICS TEL: 01722 350950 TEL: 01722 350950 TEL: 01202 523771 M DURHAM LEE TECH SYCS TEL: 01371 1300	MAIDSTONE AVERY FLECTRONICS TEL: 01622 682138 LANCASHIRE BLACKPOOL KEINATH GARDNER KEINATH GARDNER KEINATH GARDNER KEINATH GARDNER CTU SEVACASTER CTU SEVACASTER CTU SEVACAST TEL: 01706 654983 TEL: 01706 654983 LEICESTER SOURT & VISION CENTRE TEL: 01162 730444	STOKE ON TRENT TELEFAULTS (S.O.T.) LTD TEL: 01782 813757 SUFEDLK IPSWICH GGN LTD TEL: 01473 744300 SURREY WALLINGTON SERVICECARE TEL: 0181 689 1145 HORLEY D K AUDIO VISUAL SVCS TEL: 01293 786459 EAST SUSSEX SEAFORD	CRAIC TEL: C EIRE CO CC TVAE TEL: C GRAMPIANS FRAS RODG TEL: C HIGHLANDS UILIA R&R TEL: C LOTHAN EDINE
	TEL: 01402 253280 TEL: 0520 5907 TEL: SCOPE ELECTRONICS TEL: 01226 5907 PLYBOUTH ARGNLET N7010E0 TTY ELECTRONICS TEL: 01752 350950 TEL: 01752 350950 TEL: 01752 350950 TEL: 01202 553771 DURHAM LET FECH SVCS TEL: 0191 371 1300 DARLINGTON	MAIDSTONE AVERY FLECTRONICS TEL: 01622682138 LAICAEPOOL RENORTH GARONER TEL: 01253824047 LAICASTER KENNETH GARONER TEL: 01252 64468 ROY DEALE CONSTRUCTIONE 654983 LEICESTER SOUNT & VISION CENTRE TEL: 01766 654983	STOKE ON TRENT TELEFAULTS (S.O.T.) LTD TEL: 01782 813757 SUFFOLK IPSWICH GGN LTD TEL: 01473 744300 SURREY WALLINGTON SERVICECARE TEL: 0181 669 1145 HORLEY D K ADDIO VISUAL SVCS TEL: 0123 786459 EAST SUSSEX SEAFORD CLEARVIEW RENTAL & RELAY	CRAIC TEL: C TVAE COC TTAE: C GRAMPIANS FRAS RODG TEL: C HIGHLANDS ULLA R & R TEL: C LOTHIAN RETE:
	TEL: 01402 253280 NEWTON ABBOT TELL:SCOPE ELECTRONICS TEL: 0126 6302 PLYMOUTH ARGYLE TV & I/DEO TEL: 01752 73983 CTV ELECTRONICS TEL: 01752 350950 TEL: 01752 350950 TEL: 01752 350950 DURHAM LEE TECH SVCS TEL: 01913 71 1300 DARLINGTON GAZE ELECTRONICS	MAIDSTONE AVERY FLECTRONICS TEL: 01622 682138 LANCASHIRE BLACKPOOL KEINETH GARDNER TEL: 01572 KEINETH GARDNER TEL: 01576 634047 CONSTR KEINETH GARDNER TEL: 01706 654083 LEICESTERSHIRE SOUNT & VISION CENTRE TEL: 01706 730444 LEICCLUSHIRE BRANSTON	STOKE ON TRENT TELEFAULTS (S.O.T.) LTD TEL: 01782 813757 SUFEDLK IPSWICH GGN LTD TEL: 01473 744300 SURREY WALLINGTON SERVICECARE TEL: 0181 689 1145 HORLEY D K AUDIO VISUAL SVCS TEL: 01293 786459 EAST SUSSEX SEAFORD	CRAIC TEL: C TVAE COC TTAE: C GRAMPIANS FRAS RODG TEL: C HIGHLANDS ULLA R & R TEL: C LOTHIAN RETE:
	TEL: 01402 253280 TEL: 0520 5907 TEL: SCOPE ELECTRONICS TEL: 01226 5907 PLYBOUTH ARGNLET N7010E0 TTY ELECTRONICS TEL: 01752 350950 TEL: 01752 350950 TEL: 01752 350950 TEL: 01202 553771 DURHAM LET FECH SVCS TEL: 0191 371 1300 DARLINGTON	MAIDSTONE AVERY FLECTRONICS TEL: 01622 682138 LAICABOR BLACKPOOL KENNETH GARONER TEL: 01253 824047 LAICASTER KENNETH GARONER TEL: 01254 64468 ROCHDALE CTV SERVICE CTV SERVICE CTV SERVICE CTV SERVICE CTV SERVICE CTV SERVICE CTV SERVICE CTV SERVICE CTV SERVICE SUBJECT SUBJECT SUBJECT SUBJECT SUBJECT SUBJECT SUBJECT SUBJECT SUBJECT SUBJECT SUBJECT SUBJECT SUBJECT SUBJECT SUBJECT SUBJECT SUBJECT SUBJECT SUBJECT SUBJECT SUBJECT SUBJECT SUBJECT SUBJECT SUBJECT SUBJECT SUBJECT SUBJECT SUBJECT SUBJECT SUBJECT SUBJECT SUBJECT SUBJECT SUBJECT SUBJECT SUBJECT SUBJECT SUBJECT SUBJECT SUBJECT SUBJECT SUBJECT SUBJECT SUBJECT SUBJECT SUBJECT SUBJECT SUBJECT SUBJECT SUBJECT SUBJECT SUBJECT SUBJECT SUBJECT SUBJECT SUBJECT SUBJECT SUBJECT SUBJECT SUBJECT SUBJECT SUBJECT SUBJECT SUBJECT SUBJECT SUBJECT SUBJECT SUBJECT SUBJECT SUBJECT SUBJECT SUBJECT SUBJECT SUBJECT SUBJECT SUBJECT SUBJECT SUBJECT SUBJECT SUBJECT SUBJECT SUBJECT SUBJECT SUBJECT SUBJECT SUBJECT SUBJECT SUBJECT SUBJECT SUBJECT SUBJECT SUBJECT SUBJECT SUBJECT SUBJECT SUBJECT SUBJECT SUBJECT SUBJECT SUBJECT SUBJECT SUBJECT SUBJECT SUBJECT SUBJECT SUBJECT SUBJECT SUBJECT SUBJECT SUBJECT SUBJECT SUBJECT SUBJECT SUBJECT SUBJECT SUBJECT SUBJECT SUBJECT SUBJECT SUBJECT SUBJECT SUBJECT SUBJECT SUBJECT SUBJECT SUBJECT SUBJECT SUBJECT SUBJECT SUBJECT SUBJECT SUBJECT SUBJECT SUBJECT SUBJECT SUBJECT SUBJECT SUBJECT SUBJECT SUBJECT SUBJECT SUBJECT SUBJECT SUBJECT SUBJECT SUBJECT SUBJECT SUBJECT SUBJECT SUBJECT SUBJECT SUBJECT SUBJECT SUBJECT SUBJECT SUBJECT SUBJECT SUBJECT SUBJECT SUBJECT SUBJECT SUBJECT SUBJECT SUBJECT SUBJECT SUBJECT SUBJECT SUBJECT SUBJECT SUBJECT SUBJECT SUBJECT SUBJECT SUBJECT SUBJECT SUBJECT SUBJECT SUBJECT SUBJECT SUBJECT SUBJECT SUBJECT SUBJECT SUBJECT SUBJECT SUBJECT SUBJECT SUBJECT SUBJECT SUBJECT SUBJECT SUBJECT SUBJECT SUBJECT SUBJECT SUBJECT SUBJECT SUBJECT SUBJECT SUBJECT SUBJECT SUBJECT SUBJECT SUBJECT SUBJECT SUBJECT SUBJECT SUBJECT SUBJECT SUBJECT SUBJECT SUBJECT SUBJECT SUBJECT SUBJECT SUBJECT SUBJECT SUBJECT SUBJECT SUBJECT SUBJECT SUBJECT SUB	STOKE ON TRENT TELEFAULTS (S.O.T.) LTD TEL: 01782 813757 SUFFOLK GEN LTD GEN LTD TEL: 01473 744300 SURREY WALLINGTON SERVICECARE TEL: 0181 669 1145 HORLEY D K AUDIO VISUAL SVCS TEL: 0182 786459 EAST SUSSEX SEAFORD CLEARVIEW RENTAL & RELAY TEL: 01323 889699 EASTBOURNE	CRAIC TEL: C TALE COC TALE FRAS RODG TEL: C HIGHLANDS ULLA R&R TEL: C LOTHIAN EDINE RETE: TEL: C
DURHA	TEL: 01409 253280 NEWTON ABBOT TELL:SCOPE ELECTRONICS TEL: 0126 6307 PLYMOUTH ARGYLE TV & VIDEO TEL: 01752 73933 CTV ELECTRONICS TEL: 01752 350950 TEL: 01752 350950 DURHAM M & G ELECTRONICS TEL: 01912 523771 M DURHAM LEE TECH SVCS TEL: 01913 71 1300 DARLINGTON GAZE ELECTRONICS TEL: 01325 482344	MAIDSTONE AVERY FLECTRONICS TEL: 01622 682138 LANCASHIRE BLACKPOOL KEINETH GARDNER TEL: 01572 KEINETH GARDNER TEL: 01576 A4047 CONSTR KEINETH GARDNER TEL: 01706 654983 LEICESTERSHIRE SOUNT & VISION CENTRE TEL: 01706 504983 LEICESTERSHIRE BRANSTON	STOKE ON TRENT TELEFAULTS (S.O.T.) LTD TEL: 01782 813757 SUFEDLK GN LTD TEL: 01473 744300 SURVICE CARE WELLOW TO AUGION SERVICE CARE HEL: 0181 669 1145 HORLEY D K AUDIO VISUAL SVCS TEL: 01233 786459 SEAFOND CEL: 01233 786459 EAST SUSSEX SEAFOND CEL: 01233 786459 EAST SUSSEX SEAFOND RENTAL & RELAY EASTBOURNE STARTEC SVCS	CRAIC TEL: C EIRE COCU TYAE TEL: C GRAMPIANS RODG TEL: C HIGHLANDS ULLA R&R TEL: C LOTHIAN RETRE TEL: C STRATHCLYD
DURHA	TEL: 01402 253280 TELL:052CPE ELECTRONICS TELL:052CPE ELECTRONICS TEL:01226 5907 PLYMOUTH ARSVLE TV & VIDEO TEL: 01752 75983 CTV ELECTRONICS TEL:01752 350850 TEL:01752 350850 TEL:01752 350850 TEL:01202 523771 M DURHAM LEE TECH SVCS TEL:0191371 1300 DARLAGTON CALIFORMICS TEL:01325 482344	MAIDSTONE AVERY FLECTRONICS TEL: 01622 682138 LANCASHIRE BLACKETH GARONER TEL: 01253 830407 LANCASTER KENNETH GARONER TEL: 01254 64468 ROCHDALE CTV 354 64468 ROCHDALE CTV 354 64468 ROCHDALE CTV 354 64468 ROCHDALE CTV 3540448 LEICESTER SUUNT & VISION CENTRE TEL: 01702 63044 LEICESTER BRANSTON STUART WALLACE TEL: 01522 791496	STOKE ON TRENT TELEFAULTS (S.O.T.) LTD TEL: 01782 813757 SUFFOLK GEN LTD GEN LTD TEL: 01473 744300 SURREY WALLINGTON SERVICECARE TEL: 0181 669 1145 HORLEY D K AUDIO VISUAL SVCS TEL: 0182 786459 EAST SUSSEX SEAFORD CLEARVIEW RENTAL & RELAY TEL: 01323 889699 EASTBOURNE	CRAIC TEL: C EIRE CO CT TVAE TEL: C GRAMPIANS RODG TEL: C HIGHLANDS NULLAR R & R R & R TEL: C LOTHIA EIRE TEL: C STRATHCLYD GLAS
DURHA	TEL: 01402 253280 TEL: 135COPE ELECTRONICS TEL: SCOPE ELECTRONICS TEL: 0126 63907 PLYMOUTH PLYMOUTH TEL: 01722 25907 TEL: 01722 250950 TEL: 01722 250950 TEL: 01722 25371 M DURNAM LEC TECH SVCS TEL: 0128 253771 M DURNAM LEC TECH SVCS TEL: 0132 452344 CARMARTHEN	MAIDSTONE AVERY FLECTRONICS TEL: 01622682138 LANCASHDE BLACKPOOL BLACKPOOL AKENNETH GARONER TEL: 0125324047 LANCASTER KENNETH GARONER TEL: 012524 CTV SERVICES CTV SERVICES TEL: 01706 654983 LEICESTERSHIRE TEL: 01706 254044 LINCOLASHIRE BRANSTON STUART WALLACE TEL: 01522 751496	STOKE ON TRENT TELEFAULTS (S.O.T.) LTD TEL: 01782 813757 SUFFOLK GRNLTD TEL: 01473 744300 SURREY WALLINGTON SERVICECARE TEL: 01473 744300 SURREY WALLINGTON SERVICECARE TEL: 01473 784459 EAST SUSSEX SEAFORD CLEARVIEW RENTAL & RELAY TEL: 01323 412012	CRAIK TEL: C EIRE CO CC TVAE TEL: C GRAMPIANDS RODG RODG RODG RODG RODG RODG RODG RODG
DURHA	TEL: 01402 253260 TELL: 552CPE ELECTRONICS TELL: 552CPE ELECTRONICS TEL: 01262 63907 PLYMOUTH ARSVLE TV & VIDEO TEL: 01752 75983 CTV ELECTRONICS TEL: 01752 350950 TEL: 01752 350950 TEL: 01752 350950 TEL: 0122 523771 M DURHAM LEE TEC/ SVCS TEL: 01325 48234 CARMARTHEN ADVANCE CONSUMER	MAIDSTONE AVERY FLECTRONICS TEL: 01622 682138 LANCASHIRE BLACKPOOL KEINGTH GARDNER KEINGTH GARDNER KEINGTH GARDNER KEINGTH GARDNER KEINGTH GARDNER KEINGTH GARDNER KEINGTH GARDNER KEINGTH GARDNER KEINGTH GARDNER KEINGTH GARDNER TEL: 01706 654983 LEICESTER SOURT WALLACE TEL: 01162 730444 LINCOLSSHIRE BRAWSTON STUART WALLACE TEL: 01522 731496 LONDON	STOKE ON TRENT TELEFAULTS (S.O.T.) LTD TEL: 01782 813757 SUFFOLK GGN LTD GGN LTD TEL: 01473 744300 SURREY WALLINGTON SERVICECARE TEL: 0181 669 1145 HORLEY D K AUDIO VISUAL SVCS TEL: 0183 786459 EAST SUSSEX SEAFORD CEL: RIVIEW RENTAL & RELAY CEL: RIVIEW RENTAL & RELAY CEL: RIVIEW RENTAL & RELAY TEL: 01323 412012	CRAIK TEL: C EIRE CO CC TVAE TEL: C GRAMPIANDS RODG RODG RODG RODG RODG RODG RODG RODG
DURHA	TEL: 01402 253280 TEL: 0520 5907 TEL: SCOPE ELECTRONICS TEL: 01220 5907 PLYMOUTH PLYMOUTH TEL: 01722 05907 TEL: 01722 350950 TEL: 01722 350950 TEL: 01722 350950 TEL: 01722 35371 M DURHAM LEF TECH SVCS TEL: 01291 371 1300 DARLINGTON GAZE ELECTRONICS TEL: 01291 371 1300 DARLINGTON GAZE ELECTRONICS TEL: 01291 371 1300 DARLINGTON GAZE ELECTRONICS TEL: 01292 328143	MAIDSTONE AVERY FLECTRONICS TEL: 01622 682138 LAICASHEE BLACKNETH CANNETH GARDNER TEL: 01253 824047 LAICASTER KENNETH GARDNER TEL: 01254 64488 ROCHDALE CTV_3ENKES CTV_3ENKES LEICESTER SOUNT & VISION CENTRE TEL: 01766 654983 LEICESTER SOUNT & VISION CENTRE TEL: 01766 253444 LEICESTER SOUNT & VISION CENTRE TEL: 01762 791496 LINCOLNSHERE BRANSTON STUART WALLACE TEL: 01522 791496 LONDON HIGH HOLBORN BEREYS OF HID BORN	STOKE ON TRENT TELEFAULTS (S.O.T.) LTD TEL: 01782 813757 SUFFOLK OPENICH GENICH GENICH GENICH TEL: 01473 744300 SURREY WALLINGTON SERVICECARE TEL: 0181 669 1145 HORLEY DIA: 0181 669 1145 HORLEY DIA: 0181 669 1145 HORLEY DIA: 0182 378459 EAST SUSSEX SEAFORD CLEARVIEW RENTAL & RELAY TEL: 01323 412012 TEL: 01323 412012 TEL: 01323 412012	CRAIK TEL: C EIRE CO CC TVAE TEL: C GRAMPIANDS RODG RODG RODG RODG RODG RODG RODG RODG
DURHA	TEL: 01402 253260 TELL: 0520 FE LECTRONICS TELL: 0520 63907 PLYMOUTH ARSVLE TV & VIDEO TEL: 01752 73933 CTV ELCTRONICS TEL: 01752 350950 TEL: 01752 350950 TEL: 01752 350950 TEL: 01752 350950 TEL: 01722 350950 TEL: 01252 25371 M DURHAM LEE TECH SVCS TEL: 01325 48234 CARMARTHEN ADVANCE CONSUMER TEL: 01287 236143 ST CLEARS	MAIDSTONE AVERY FLECTRONICS TEL: 01622 682138 LANCASHIRE BLACKPOOL KEINGTH GARDNER KEINGTH GARDNER KEINGTH GARDNER KEINGTH GARDNER KEINGTH GARDNER KEINGTH GARDNER KEINGTH GARDNER KEINGTH GARDNER KEINGTH GARDNER KEINGTH GARDNER TEL: 01706 654983 LEICESTER SOURT WALLACE TEL: 01162 730444 LINCOLSSHIRE BRAWSTON STUART WALLACE TEL: 01522 731496 LONDON	STOKE ON TRENT TELEFAULTS (S.O.T.) LTD TEL: 01782 813757 SUFEDLK GN LTD TEL: 01782 813757 SUFEDLK GN LTD TEL: 01473 744300 SURREY MOREON SURVICECARE TEL: 0181 689 1145 HORLEY D K AUDIO VISUAL SVCS TEL: 01233 786459 EAST SUSSEY SCIEARVIEW RENTAL & RELAY TEL: 01323 80969 EASTBOURNE STARTEC SVCS TEL: 01323 412012 TYNE & WEAR NEWCASTLE UPON TYNE	CRAIGHTEL: C TEL: C TO AC TO AC TEL: C TO AC TEL: C GRAMPIANS RODC HIGHLANDS ULLA R & R TEL: C STRATHCLYD GLAS DSC L S STRATHCLYD TEL: C TAYSIDE
DURHA	TEL: 01402 253280 TEL: 0426 25907 TEL: SCOPE ELECTRONICS TEL: 0426 25907 PLYBOUTH ARCNLET: 0710EG TTY ELECTRONICS TEL: 0127 250950 TTY ELECTRONICS TEL: 0127 250950 TEL: 0122 523771 MA G ELECTRONICS TEL: 0122 523771 DURHAM LEF TECH SVCS TEL: 0137 11300 DARLINGTON GAZE ELECTRONICS TEL: 0132 482344 CABMARTHEN ADVANGE CONSUMER TEL: 0122 531433 ST CLEARS BEN EVANS & SON	MAIDSTONE AVERY FLECTRONICS TE::01622682138 LANCASHE BLACKPOOL REACKPOOL ACTIONER ACCOMPANENT GARONER TE::01253824047 LANCASTER KENNETH GARONER TE::01253464468 ROCHDALE CTV SERVICES TE::0178659483 LEICESTERSHEE LOTOS 569403 LEICESTER SOUNT & VISION CENTRE TE::0162730444 LINCOLSENIRE BRANSTON STUART WALLACE TE::01522791496 LONDON HIGH HOLBORN BERN'S OF PUCKBON DECRIVES OF PUCKBON TE::0174051157	STOKE ON TRENT TELEFAULTS (S.O.T.) LTD TEL: 01782 813757 SUFFOLK IPSWICH GGN LTD TEL: 01473 744300 SURREY WALLINGTON SERVICECARE TEL: 0181 669 1145 HORLEY D K ADDIO VISUAL SVCS TEL: 0123 978459 EAST SUSSEX SEAFORD CLEARVIEW RENTAL & RELAY TEL: 01323 412012 TYNE & WEAR NEWCASTLE UPON TYNE M SINGH RADIO & TV	CRAIGHTEL: C TEL: C TO AC TO AC TEL: C TO AC TEL: C GRAMPIANS RODC HIGHLANDS ULLA R & R TEL: C STRATHCLYD GLAS DSC L S STRATHCLYD TEL: C TAYSIDE
DURHA	TEL: 01402 253280 TEL: 0520 5907 TEL: SCOPE ELECTRONICS TEL: 01220 5907 PLYMOUTH PLYMOUTH TEL: 01722 05907 TEL: 01722 350950 TEL: 01722 350950 TEL: 01722 350950 TEL: 01722 35371 M DURHAM LEF TECH SVCS TEL: 01291 371 1300 DARLINGTON GAZE ELECTRONICS TEL: 01291 371 1300 DARLINGTON GAZE ELECTRONICS TEL: 01291 371 1300 DARLINGTON GAZE ELECTRONICS TEL: 01292 328143	MAIDSTONE AVERY FLECTRONICS TEL: 01622682138 LANCASHDE BLACKPOOL BLACKPOOL AKENNETH GARDNER TEL: 01253824047 LANCASTER KENNETH GARDNER TEL: 0125824047 CTV SERVICES CTV SERVICES TEL: 01706 654983 LEICESTERSHIRE DECENT & VISION CENTRE TEL: 01706 2530444 LINCOLNSHIRE BRANSTON STUART WALLACE TEL: 01522791496 TEL: 01522791496 TEL: 01522791496 DECENT	STOKE ON TRENT TELEFAULTS (S.O.T.) LTD TEL: 01782 813757 SUFEDLK GN LTD TEL: 01782 813757 SUFEDLK GN LTD TEL: 01473 744300 SURREY MOREON SURVICECARE TEL: 0181 689 1145 HORLEY D K AUDIO VISUAL SVCS TEL: 01233 786459 EAST SUSSEY SCIEARVIEW RENTAL & RELAY TEL: 01323 80969 EASTBOURNE STARTEC SVCS TEL: 01323 412012 TYNE & WEAR NEWCASTLE UPON TYNE	CO CI TVAE TEL: (GRAMPIANS RRAS RODG ITEL: (HIGHLANDS UILLA R & R TEL: (LOTHIAN EDINE RETE: TEL: (STRATHCLYD GLAS DOG D GLAS DOG D UND
DURHA	TEL: 01402 253280 TEL: 0426 25907 TEL: SCOPE ELECTRONICS TEL: 0426 25907 PLYBOUTH ARCNLET: 0710EG TTY ELECTRONICS TEL: 0127 250950 TTY ELECTRONICS TEL: 0127 250950 TEL: 0122 523771 MA G ELECTRONICS TEL: 0122 523771 DURHAM LEF TECH SVCS TEL: 0137 11300 DARLINGTON GAZE ELECTRONICS TEL: 0132 482344 CABMARTHEN ADVANGE CONSUMER TEL: 0122 531433 ST CLEARS BEN EVANS & SON	MAIDSTONE AVERY FLECTRONICS TEL: 01622 682138 LANCASHIRE BLACKPOLI BLACKPOLI CHARTH GARDNER TEL: 01253 824047 LANCASTER KENNETH GARDNER TEL: 01254 64468 RCCHDALE CTV SERVICES TEL: 01705 65463 LEICESTER SOUNT & VISION CENTRE TEL: 01705 65463 LEICESTER SOUNT & VISION CENTRE TEL: 01762 730444 LEICESTER BRANTON STEL: 01522 731496 LONDON HIGH HOLBORN BERRYS OF HOLBORN TEL: 011 405 1157 LONDON	STOKE ON TRENT TELEFAULTS (S.O.T.) LTD TEL: 01782 813757 SUFFOLK MICH GGN LTD TEL: 01473 744300 SURREY WALLINGTON SERVICECARE TEL: 0181 669 1145 HORLEY D K AUDIO VISUAL SVCS TEL: 0123 078459 EAST SUSSEX SEAFORD CLEARVIEW RENTAL & RELAY TEL: 01323 412012 TYNE & WEAR NEW COSTLE UPON TYNE MISGR RADIO & TV TEL: 0191 226 0446	CRAIGHTEL: C TEL: C TVAE GRAMPLANS RODCA HIGHLANA HIGHLANA R & R TEL: C LOTHAN EXTERNA SC STRATHCLYD GLAS DSC E STRATHCLYD TEL: C TAYSIDE DUND ANCR
DURHA	TEL: 01402 253280 TEL: 0320 253280 TEL: 0320 25907 TEL: 0320 25907 TEL: 0120 25907 TEL: 0120 25907 TEL: 01722 279833 CTV ELECTRONICS TEL: 01722 25907 TEL: 01722 25971 M DURHAM LEE TECH SVCS TEL: 01202 52371 M DURHAM LEE TECH SVCS TEL: 0191 371 1300 DARLINGTON GAZE ELECTRONICS TEL: 01204 262344 CARMARTHEN ADVANCE CONSUMER TEL: 01262 328143 ST CLEARS BEN EVANS A SON TEL: 01594 231015	MAIDSTONE AVERY FLECTRONICS TEL: 01622 682138 LAICASHOE BLACKPOOL BLACKPOOL BLACKPOOL LAICASTER KEINETH GARDNER TEL: 01253 243407 LAICASTER KEINETH GARDNER REINGEAGABAR CTV SERVICES TEL: 01252 434408 LEICESTERSHIRE LEICESTERSHIRE SOUNT & VISION CENTRE TEL: 01786 554983 LEICESTERSHIRE SOUNT & VISION CENTRE TEL: 01786 5519456 TEL: 01522 791496 UNDON BERRYS OF HOLBORN BERRYS OF HOLBORN TEL: 0171 430 1157 LONDON ARMSTRONG SERVICES TEL: 0116 123 00230051	STOKE ON TRENT TELEFAULTS (S.O.T.) LTD TEL: 01782 813757 SUFFOLK GRNLTD TEL: 01473 744300 SUREY WALLINGTON SERV/CECARE THOREY D K AUDIO VISUAL SVCS TEL: 01293 786459 EAST SUSSEX SEAFORD CLEARVIEW RENTAL & RELAY TEL: 01293 786459 EAST SUSSEX STARTEC SVCS TEL: 01323 412012 TYNE & WEAR NEWCASTLE UPON TYNE NEWCASTLE UPON TYNE MEND HRADIO & TV TEL: 0191 228 0446	CRAIGHT TEL: C TVAE GRAMPIANS RFRAS RFRAS RFRAS RFRAS RFRAS RFRAS RFRAS RFRAS RFRAS RFRAS RFRAS RFRAS RFRAS CONTRACTOR CONTRACTOR RFTEL: C STRATLCTY GLAS DSC E DSC E TATELCTOR STRATLCTOR STRATLCTOR STRATLCTOR STRATLCTOR STRATLCTOR STRATLCTOR STRATLCTOR STRATLCTOR STRATLCTOR STRATLCTOR STRATLCTOR STRATLCTOR STRATLCTOR STRATLCTOR STRATLCTOR STRATLCTOR STRATLCTOR STRATLCTOR STRATLCTOR STRATLCTOR STRATLCTOR STRATLCTOR STRATLCTOR STRATLCTOR STRATLCTOR STRATLCTOR STRATLCTOR STRATLCTOR STRATLCTOR STRATLCTOR STRATLCTOR STRATLCTOR STRATLCTOR STRATLCTOR STRATLCTOR STRATLCTOR STRATLCTOR STRATLCTOR STRATLCTOR STRATLCTOR STRATLCTOR STRATLCTOR STRATLCTOR STRATLCTOR STRATLCTOR STRATLCTOR STRATLCTOR STRATLCTOR STRATLCTOR STRATLCTOR STRATLCTOR STRATLCTOR STRATLCTOR STRATLCTOR STRATLCTOR STRATLCTOR STRATLCTOR STRATLCTOR STRATLCTOR STRATLCTOR STRATLCTOR STRATLCTOR STRATLCTOR STRATLCTOR STRATLCTOR STRATLCTOR STRATLCTOR STRATLCTOR STRATLCTOR STRATLCTOR STRATLCTOR STRATLCTOR STRATLCTOR STRATLCTOR STRATLCTOR STRATLCTOR STRATLCTOR STRATLCTOR STRATLCTOR STRATLCTOR STRATLCTOR STRATLCTOR STRATLCTOR STRATLCTOR STRATLCTOR STRATLCTOR STRATLCTOR STRATLCTOR STRATLCTOR STRATLCTOR STRATLCTOR STRATLCTOR STRATLCTOR STRATLCTOR STRATLCTOR STRATLCTOR STRATLCTOR STRATLCTOR STRATLCTOR STRATLCTOR STRATLCTOR STRATLCTOR STRATLCTOR STRATLCTOR STRATLCTOR STRATLCTOR STRATLCTOR STRATLCTOR STRATLCTOR STRATLCTOR STRATLCTOR STRATLCTOR STRATLCTOR STRATLCTOR STRATLCTOR STRATLCTOR STRATLCTOR STRATLCTOR STRATLCTOR STRATLCTOR STRATLCTOR STRATLCTOR STRATLCTOR STRATLCTOR STRATLCTOR STRATLCTOR STRATLCTOR STRATLCTOR STRATLCTOR STRATLCTOR STRATLCTOR STRATLCTOR STRATLCTOR STRATLCTOR STRATLCTOR STRATLCTOR STRATLCTOR STRATLCTOR STRATLCTOR STRATLCTOR STRATLCTOR STRATLCTOR STRATLCTOR STRATLCTOR STRATLCTOR STRATLCTOR STRATLCTOR STRATLCTOR STRATLCTOR STRATLCTOR STRATLCTOR STRATLCTOR STRATLCTOR STRATLCTOR STRATLCTOR STRATLCTOR STRATLCTOR STRATLCTOR STRATLCTOR STRATLCTOR STRATLCTOR STRATLCTOR STRATLCTOR STRATLCTOR STRATLCTOR STRATLCTOR STRATLCTOR STRATLCTOR STRATLCTOR STRATLCTOR
<u>DURHA</u>	TEL: 01402 253280 TEL: 0426 25907 TEL: SCOPE ELECTRONICS TEL: 0126 25907 PLYMOUTH ARGVLE TV AUDEO TEC: 01752 350950 TEL: 01752 350950 TEL: 01752 350950 TEL: 01752 350950 TEL: 01752 350950 TEL: 01752 350950 TEL: 01202 523711 MURHAM MA G ELECTRONICS TEL: 0120 523711 MURHAM DALINGTON GAZE ELECTRONICS TEL: 0129 23015 BEN EVANS & SON TEL: 0192 231015 BRAINTEE	MAIDSTONE AVERY FLECTRONICS TEL: 01622 682138 LANCASHIRE BLANGTOL RELAVETOL ALANGTOL RELAVETOL ARANGTOL RELAVETOL ARANDET CTV 5824 64468 RCCHDALE CTV 5847 SULAT WALLACE TEL: 01706 54468 COLOSHIRE BRANSTON STUART WALLACE TEL: 0174 405 1157 LONDON MERITY 1405 1157 LONDON	STOKE ON TRENT TELEFAULTS (S.O.T.) LTD TEL: 01782 813757 SUFECIA GRNLTD TEL: 01473 744300 SURREY WALLINGTON SURREY WALLINGTON SURREY D K AUDIO VISUAL SVCS TEL: 01293 768459 EAST SUSSEX SEAFORD CLEARVIEW RENTAL & RELAY TEL: 01232 808995 EASTBOURNE STARTEC SVCS TEL: 01323 80995 EASTBOURNE STARTEC SVCS TEL: 01323 412012 TYNE A NEWCASTLE UPON TYNE M SINGH RADIO & TV TEL: 0131 226 04466	CRAIGHTEL: C TEL: C TVAE GRAMPLANS RODCA HIGHLANA HIGHLANA R & R TEL: C LOTHAN EXTERNA SC STRATHCLYD GLAS DSC E STRATHCLYD TEL: C TAYSIDE DUND ANCR
DORSE DURHA DYFED ESSEX	TEL: 01402 253280 TEL: 0320 253280 TEL: 0320 25907 TEL: 0320 25907 TEL: 0120 25907 TEL: 0120 25907 TEL: 01722 279833 CTV ELECTRONICS TEL: 01722 25907 TEL: 01722 25971 M DURHAM LEE TECH SVCS TEL: 01202 52371 M DURHAM LEE TECH SVCS TEL: 0191 371 1300 DARLINGTON GAZE ELECTRONICS TEL: 01204 262344 CARMARTHEN ADVANCE CONSUMER TEL: 01262 328143 ST CLEARS BEN EVANS A SON TEL: 01594 231015	MAIDSTONE AVERY FLECTRONICS TEL: 01622 682138 LAICASHOE BLACKPOOL BLACKPOOL BLACKPOOL LAICASTER KEINETH GARDNER TEL: 01253 243407 LAICASTER KEINETH GARDNER REINGEAGABAR CTV SERVICES TEL: 01252 434408 LEICESTERSHIRE LEICESTERSHIRE SOUNT & VISION CENTRE TEL: 01786 554983 LEICESTERSHIRE SOUNT & VISION CENTRE TEL: 01786 5519456 TEL: 01522 791496 UNDON BERRYS OF HOLBORN BERRYS OF HOLBORN TEL: 0171 430 1157 LONDON ARMSTRONG SERVICES TEL: 0116 123 00230051	STOKE ON TRENT TELEFAULTS (S.O.T.) LTD TEL: 01782 813757 SUFFOLK GRNLTD TEL: 01473 744300 SUREY WALLINGTON SERV/CECARE THOREY D K AUDIO VISUAL SVCS TEL: 01293 786459 EAST SUSSEX SEAFORD CLEARVIEW RENTAL & RELAY TEL: 01293 786459 EAST SUSSEX STARTEC SVCS TEL: 01323 412012 TYNE & WEAR NEWCASTLE UPON TYNE NEWCASTLE UPON TYNE MEND HRADIO & TV TEL: 0191 228 0446	CRAIGHTEL: C TEL: C TVAE GRAMPLANS RODCA HIGHLANA HIGHLANA R & R TEL: C LOTHAN EXTERNA SC STRATHCLYD GLAS DSC E STRATHCLYD TEL: C TAYSIDE DUND ANCR

WEST	MIDLANDS DUDLEY
	J S STOREY ELECTRICAL
	TEL: 01384 455608 WALSALL
	BEAVER ELECTRONICS
	TEL: 01922 725554
	WARLEY MERRIVALE TV SVCS
	MERRIVALE TV SVCS TEL: 0121 544 6273/6350
WILTS	HIRE SWINDON
	SWINDON
	COLORITE TV LTD TEL: 01793 641038
WORC	ESTERSHIRE WORCESTER
	THE HI FI CAR RADIO REPAIR TEL: 01905 26623
	TEL: 01905 26623
SOUTH	VORKSHIRE
00011	YORKSHIRE SHEFFIELD
	GRAPHIC ELECTRONIC SVCS
	TEL: 0114 256 2791 BARNSLEY
	ALTRA
	TEL: 01226 207434
NORTH	VORKSHIRE
	YORK
	DBS SERVICE CENTRE TEL: 01904 789789
WEST	YORKSHIRE
	BRADFORD GRAPHICK ELECTRON
	TEL: 01274 862267
	HUDDERSFIELD GRAPHIC ELECTRONICS
	GRAPHIC ELECTRONICS TEL: 01484 451045
	ILKLEY
	R BEAUMONT
	TEL: 01943 607021
CHANN	IEL ISLANDS
	GUERNSEY TELESKILL LTD
	TEL: 01481 56508
	JERSEY
	ALTERNATIVE ELECT
	TEL: 01534 68277
	AUDIO VISION SVCS TEL: 01983 752023
NORTH	IERN IRELAND CO ARMAGH
	CRAIGAVON TV SVCS
	CRAIGAVON TV SVCS TEL: 0762 326119/322505
EIRE	CO CORK
	CO CORK TVAE REPAIRS TEL: 00353 21 273457
GRAM	PIANS
	PIANS FRASERBURGH
	RODGERS ELECTRICAL TEL: 01346 518540
1	
HIGHL/	ANDS
1	ULLAPOOL R & R ELECTRONICS
	TEL: 01854 612608
1.071	N .
LOTHIA	EDINBURGH
1	RETEC AUDIO & VISUAL
1	TEL: 0131 478 7779
STRAT	HCLYDE GLASGOW DSC ELECTRONICS TEL: 0141 941 3711
1	GLASGOW
	TEL: 01/1 0/1 3711
TAYSIC)E
	DE DUNDEE ANCRUM ELECTRONICS
	DE DUNDEE
	DE DUNDEE ANCRUM ELECTRONICS
	DE DUNDEE ANCRUM ELECTRONICS

SAMSUNG EUROPEAN BLOC WARRANTY contrandier, Nombre de negociante, Nombre del vendedor, Nome de vendedor, Name des Händlers, ar, Nom du marchand, il nome del commerciante, Onoma tou katas thinaton, Jalleen myyjan, Forhandier No. de Tel. de negociante, No. de Tel. del vendedor, Landlers, Telefoon nummer van handelaar, Numéro tél phone du nov thief-woou tou katas thwator , Myyjän osoite, Forhandlerens Curdessant, Kurdensan, Instante de derine, Nombre del ciente, Nome de clerite, Name des Kurden, Curdessant, Kurdensan, Russe de ciente, Nombre del ciente, Nome de clerite, Name des Kurden, Nam an Nath, Nou du cient, il nome del ciente, Nombre del ciente, Name des Kurden, Rundessants, Kurdenseinnumer, No. de Tei de cient, No. de Tei del ciente, Namero de teleforo de Kurdessants, Kurdenseinnumer, No. de Tei de cient, No. de Tei del ciente, Namero de teleforo de Arritoris vitante Rusten. Teleforo nummer van Kant. Numéro de tielebro del Arritoris Vitantense Structen. Teleforo nummer van Kant. Numéro de tielebro del Arritoris Vitantense Derección de cient. Discogna del ciente, Endereco de ciente, Artessa des Kurden. Arritoris Vitantense Derección de cient. Discogna del ciente, Endereco de ciente, Artessa des Kurden. Kurdesartess. Kurdesartess. Dirección de cient. Discogna del ciente, Endereco de ciente, Artessa des Kurden. ción de negociante, Dirección del vendedor. Endereco de vende Adresse du marchand, Dieuqunsh tou kata sthma toi, Asiakkaan CUSTOMER'S SIGNATURE ATE OF DURCHASE cóbetid. Kabsadao, Fecha de compra, Data de compra, Kaufdatum, Datum van aankoop, Date d'achat a ráta d'acoustao, Himerominita agorav agoras thyAsiakkaan osoite, Sargsdato, Inköpsdatumv Please ensure the form above is completed at the time of purchase and present it to the dealer to quality for guarantee service, otherwise your guarantee may be affected. MODEL NAME Wodensvv, Nombre de modelo, Nombre del modelo, Nome de modelo, Modelhazatichnung, Model Nom du modele, II nome di modelo, Monteto prolatiori, Asiakiaan puh.no, Modelhaven, Modell WARRANTY CARD er, Numéro de série, Serie nummer imer., Serienr errent. SERAL NO. Serienurmer, No. de serie, Número serial, Seriennurm Serienurmer, No. de serie, Número serial, Serie nnummer, mmer des H ante, Arign Direc DEALER'S ADDRESS Handlendesadress, Forhandleradresse, Adresse des Händlers, Adres van hande Forhandlerens adresse, Handlarens adr diendestelesonnummer, Forhand tero de telefone de vendedor, Tel chand, il numero di telefono del ci r, Handlarens telefonnr. DEALER'S TEL. NO. Handlendestelesonnun Número de telefone de marchand, il numero di tel.nr., Handlarens tele DEALER'S NAME Handlendesnavn, Fo Naam van handelaar Aterforsaljare DEALER'S STAMP & SIGNATURE CAUTION **GUARANTEE** ELECTRONICS GARANTIA GARANZIA GARANTÍA GARANTIE GARANTI ELTYHZH SAMSUNG TAKUU



This Samsung product is warranted for the period of twelve (12) months from the original date of purchase, against defective materials and workmanship. In the event that warranty service is required, you should return the product to the retailer from whom it was purchased. However, Samsung Authorised Dealers and Authorised Service Centres in other EC Countries will compty with the warranty on the terms issued to purchasers in the country concerned. In case of filterulty, details of our Authorised Service Centres are available from:

Samsung Electronics (U.K.) Ltd., Euro Service Centre, Stafford Park 12, TELFORD, Shropshire TF3 3BJ, Tel: 01952) 292262, Fax: 01952) 292033

- WARRANTY CONDITIONS
- ÷.
 - ц ы.
- The warranty is only valid if, when warranty service is required, the warranty card is fully and properly completed and is presented with the original invoice or sales slip or confirmation, and the serial number on the product has not been defaced.
 Samsung's obligations are limited to the repair or, at its discretion, replacement of the product or the defacities part.
 Warranty repairs must be carried out by Authorised Samsung Dealers or Authorised Service Centres. No re-imbursement will be made for repairs carried out by hothorised Samsung bard any such repairs work and damage to the products caused by such repair work will not be covered by this warranty.



- This product is not considered to be defective in materials nor workmanship by reason that it requires adaptation in order to conform to national or local technical or safety standards in force in any Country other than the one for which the product was originally designed and manufactured. This warranty will not cover, and no re-imbursement will be made for such adaptation nor any damage which may result.
 This warranty covers none of the following: a Periodic check ups, maintenance and repair or replacement of parts due to normal wear and tear.
 Dost relating to transport, removal or installation of the product.
 Misuse including the failure to use this product for its normal product.
 Damage caused by Lighthing, Water, Fire, Acts of God, War, Public Disturbances, incorrect mains voltage, improper ventiation or any other cause beyond the control of anonon.
 -
- - Samsung.
- This warranty is valid for any person who legally acquired possession of the product during the warranty period.
 The consumers statutory rights in any applicable national legislation whether against the retailer arising from the upuchase contract or otherwise are not affected by this warranty. Unless there is national legislation to the contract, the rights under this warranty are the consumers shall not be liable for indirect or consequential loss or any damage to records, compact discs, videos or audio taper or any other related equipment or material.

SAMSUNG ELECTRONICS (U.K.) LTD.





THIS APPLIANCE IS DISTRIBUTED BY