

HITAGHI

TV

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YOUR GUARANTEE

Having spent a great deal of thought and time in purchasing the latest state-of-the-art Hitachi television, we are pleased to advise you of the excellent service back up facilities that exist for your new purchase.

If a problem is suspected with your product, then please read this instruction book carefully to ensure you have a clear understanding of the products operation.

We recognise the importance of meeting our customers service requirements, and in the unlikely event of your product becoming faulty during the guarantee period we recommend that you contact your supplying dealer for service.

Should it not be practicable for your dealer to provide you with the necessary services, you may seek advice from our telephone helpline on 0345 124224, (calls charged at local rates, Monday to Friday 9.00am to 6.00pm).

Please note that you will be required to provide evidence of the date of purchase of your product before repairs are carried out free of charge under the terms of the guarantee.

YOUR GUARANTEE

We undertake to replace or repair any of the product which fails due to manufacturing defect within 12 months of the date of purchase provided that:

- The product has been installed and used only in accordance with the instructions supplied with the product.
- 2) The product has not been repaired, maintained, or modified by any person other than our authorised engineer.
- 3) The product serial number is not removed or altered.

This guarantee does not apply to product acquired second-hand, or for commercial or communal use.

This guarantee does not extend to user control adjustments, battery replacement and aerial adjustment.

Any parts replaced under guarantee shall become the property of Hitachi Sales (UK) Ltd

Please note that evidence of the date of purchase will be required before service under guarantee is carried out.

THIS GUARANTEE DOES NOT AFFECT YOUR STATUTORY RIGHTS.

IN ALL CASES OF DIFFICULTY CONSULT YOUR HITACHI DEALER.

HITACHI HOME ELECTRONICS (EUROPE)Ltd.

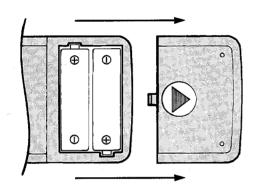
Hitachi House Station Road Hayes

Middlesex UB3 4DR Telephone: 0181 849 2000

Main Features

- * "AUTOTUNE" system
- * Front mounted Audio/Video phono and S-VHS inputs, for use with camcorders etc
- ON and OFF Timer functions
- Menu driven colour coded remote control
- Twin scart Sockets for direct connection of external equipment
- T.V. Installation

Inserting batteries into remote control



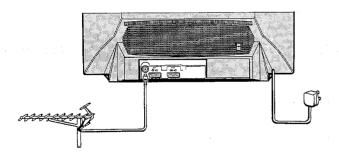
- NICAM digital stereo
- Colour co-ordinated ON-SCREEN display menus for customer control functions and teletext
- * Fastext for easy access to teletext
- * High quality picture tube

Completely remove battery cover from handset by pressing , then pulling in direction of arrows.

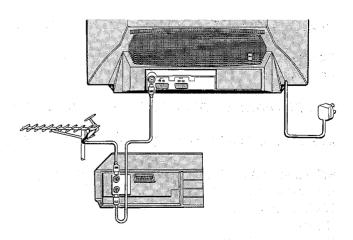
Insert batteries supplied and ensure that the ⊕ and ⊖ polarities match those indicated on handset. Replace cover.

AERIAL CONNECTION

Method 1 Direct aerial connection



Method 2 Aerial connected via VCR

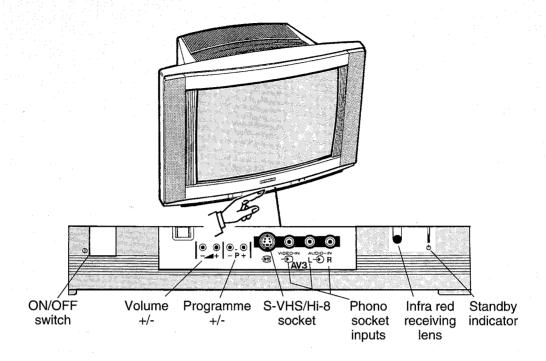


If you wish to playback your VCR through the T.V.s 21 pin scart sockets, please refer to page 14 of this operating guide. **Note:** Stereo VCRs must be connected to one of these scart sockets to assure stereo sound playback.

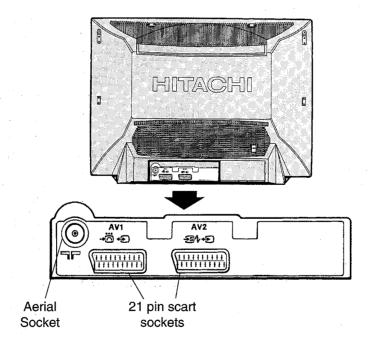
Controls and Connections of T.V.

FRONT CONNECTIONS

Push the door on the front of T.V. to reveal the controls.



REAR CONNECTIONS



SWITCHING ON

Before switching on, ensure that mains socket is in the "ON" position. Turn on the T.V. by pushing the ON/OFF switch to engage. To switch off, push ON/OFF once again.

Note: If the television fails to come on, but the red indicating light on the front of T.V. is lit, then it is probably in the standby mode. Should this happen, aim the remote control handset at the T.V., and press the button marked OI.

N.B: Normal operation can also be resumed from standby mode, by pressing the P + or - buttons on the front controls of this T.V.

Functions of Handset Buttons at a Glance

T.V. BUTTONS

STANDBY BUTTON ()

Press this button to put the T.V. into or out of standby. During this mode, the picture and sound is turned off, and the T.V. has a very low power consumption.

However, the T.V. should be turned off using the ON/OFF switch if it is to be left unattended for long periods.

Press to return to normal operation from all onscreen menus or teletext modes.

RECALL BUTTON

When pressed, the programme number, sound status, and other information relevant to the T.V. broadcast being viewed, is displayed on screen. This display will clear after a short time.

BUTTONS 0 - 9

Used to select programme numbers, and enter required times in the TIME ON/OFF menus. Can also be used to bring T.V. out of the standby mode.

C BUTTON

Press to display the "direct" tuning displays. These are mainly intended for engineers as the frequency or channel number of each broadcast needs to be known. If you enter by mistake, press TV button to

TENS AND UNITS BUTTON -/--

Press to display - or -- on screen. When single dash is displayed, programme numbers from1 - 9 can be entered. When the double dash is displayed. programmes 10 - 59 can be entered.

PROG BUTTONS P

Each press will increase or decrease programme number by one.

MUTE BUTTON W

Turns the sound off and on alternately.

Press to increase or decrease the volume level.

MENU BUTTON

Press to display the main menu on screen. From this display further menus can be selected.

TV/AV BUTTON €

Press to display the external input menu on screen. From this menu you can select inputs from a VCR etc. via one of the scart sockets at the rear of the T.V., or the phono sockets at the front.

I-II □ BUTTON

When receiving a NICAM/Stereo broadcast, this button will switch between mono (indicated on screen by ∇), and stereo (indicated on screen by NICAM). If a dual language broadcast exist, this button will switch between language I, language II and mono

SOUND EFFECTS BUTTON 💮

Press to obtain the various sound effects available for NICAM/Stereo or mono broadcasts.

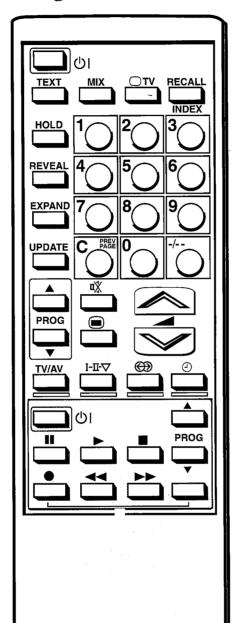
TIMER MODE BUTTON

Press to enter ON/OFF timer menus.

COLOUR CODED BUTTONS

When Fastext is broadcast, press to select the corresponding coloured topic from the bottom of displayed page. Also use to select stored favourite pages.

CLE 902A.



TELETEXT BUTTONS

TEXT BUTTON

Press to enter teletext mode:

MIX BUTTON

Press this button to display the teletext information and T.V. broadcast simultaneously.

OTV BUTTON

Press to return to normal T.V. operation.

INDEX BUTTON

When in teletext mode, press this button to display the index page of the magazine presently on view.

HOLD BUTTON

Press to keep teletext page permanently on display.

REVEAL BUTTON

Press to reveal the hidden information contained on some pages i.e. quiz pages etc.

EXPAND BUTTON

The first press will expand the top half of page to double its size. A second press will expand the bottom half, whilst a third press returns page to normal size:

UPDATE BUTTON

Press to return to normal T.V. operation whilst teletext page is being searched for or updated.

BUTTONS 0-9

Use these buttons to enter the required teletext page number.

PREV PAGE BUTTON

Use to return previously displayed page to the screen.

VCR BUTTONS

STANDBY BUTTON () Turns VCR OFF and ON alternately.

PROG BUTTONS POG



Press to increase or decrease programme number in VCR display.

PAUSE BUTTON II

Press to halt PLAY or RECORD modes temporarily.

PLAY BUTTON ▶

Press to begin playing VCR cassette.

STOP BUTTON

Press to hait PLAY or REWIND mode, etc.

RECORD BUTTON Q



Press in conjunction with blank button to begin recording.

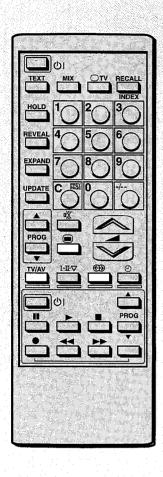
REWIND BUTTON ◀◀

Press to rewind cassette.

FAST FORWARD BUTTON ▶►

Press to wind cassette forward.

Tuning in your T.V. (Autotune Method)



The first time you switch this T.V. on,the "AUTOTUNE" menu shown will appear.

Once "AUTOTUNE" procedure is completed, it will not appear on-screen again (Unless re-selected).

GUIDE

If the "AUTOTUNE" menu does not appear the first time you switch on, proceed as follows:-

- i. Press button on handset to obtain the basic menu shown.
- ii. Press the yellow coloured button to select II in display. The menu shown appears.
- iii. Press the red coloured button to select → → .

 The "AUTOTUNE" menu will then appear.
- 1. Ensure aerial is connected as instructed, then press the button on handset. The T.V. will now search for the broadcasts available in your area.

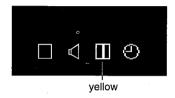
Once a broadcast is found the on-screen display will change as shown.

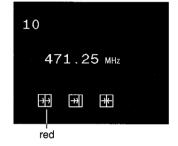
BBC1 or some similar identification will appear at the bottom of the screen after a few moments. If this programme identification does not appear, it is probably due to poor teletext reception, and may be the result of receiving a weak broadcast. In this case consult your T.V. magazine or newspaper to identify the broadcast.

If the first broadcast found is unsuitable, or of poor quality, press the button again to resume searching until a suitable broadcast is found.

AUTO TUNING
INSERT AERIAL
PRESS

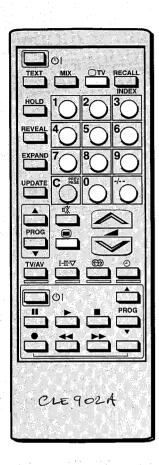
ON HANDSET







Tuning in your T.V. (Autotune Method)



2. Press a button from 1 - 9 on the handset to store this broadcast on the programme number you require.

As an example, to store the first broadcast found onto programme number 2, press button 2 on handset. This will then be confirmed on screen.

NOTE: To store a broadcast on a programme number from 10 - 59, first press the -/-- button. Two dashes will appear in the display. Enter the required two digit number using handset buttons 0 - 9.

- 3. Press the button to resume the "AUTOTUNE" procedure, until all the broadcasts in your area have been stored on the programme numbers you desire.
- 4. When all available broadcasts have been found, the on-screen display will change as shown.
- 5. If you wish to start "AUTOTUNE" procedure again, press the button to repeat. If not, press the TV button to end. Display disappears.

NOTE: You can exit the "AUTOTUNE" at any time during its operation by pressing the \bigcirc TV button on the handset.

2 IS STORED
PRESS

TO RESUME

☐ TO END

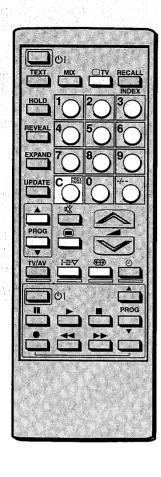
END OF SEARCH
PRESS

■ TO REPEAT

□ TO END

The accompanying Quick Guide describes how to use "AUTOTUNE" to tune your VCR to this T.V. (refer also to your VCR operating guide). We recommend you press button 0 to store the video channel on programme number 0, as indicated in the "AUTOTUNE" display, but any other programme number can be used if desired.

Tuning in your T.V. (Search Tuning)



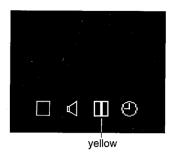
- 1. Press the button on handset. The basic menu shown appears on screen.
- 2. Press the yellow coloured button. The tuning menu display appears.
- Enter the programme number you wish to start with using buttons 0 - 9. To enter programme numbers from 10 - 59, press - / - - button to obtain two dashes in the display, then enter the two digit number required.
- Press the green coloured button to select search tuning symbol of display, → This symbol will then turn white.
- 5. Press the PROG ▲ or PROG ▼ button on the handset until search tuning begins. When a broadcast is found the search tuning stops.
- 6. If the first broadcast found is not the one desired for the selected programme number, repeat step 5.

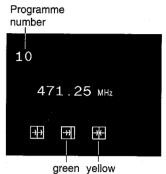


Should the desired broadcast require minor adjustment, press the yellow coloured button to select $\rightarrow \leftarrow$ in the display. This symbol then turns white.

Press the PROG ▲ or PROG ▼ button to achieve the best picture and sound.

- Enter the next programme number using buttons 0-9.
- 8. Repeat steps 5 7 until all the broadcasts in your area have been tuned in and allocated programme numbers.
- 9. Press OTV button to return to normal T.V. operation.





GUIDE FOR DIRECT CHANNEL ENTRY: If known, the channel number or frequency number of a broadcast can be entered directly on this T.V.

Follow steps 1 to 3 of the search tuning procedure above, then press the C button of handset to obtain either C-- (channel input), - - - • - MHZ (frequency input), or S- - (cable channel input) on screen.

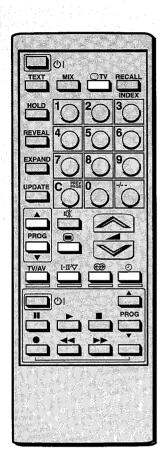
Using buttons 0 - 9, enter the desired frequency or channel number. That broadcast will then appear.

Enter new programme number, then the channel or frequency number of the next required broadcast. Repeat this procedure as desired, until all available broadcasts have been entered directly on the programme numbers required.

Press O TV button of handset to return to normal T.V. operation.

Picture and Sound Settings

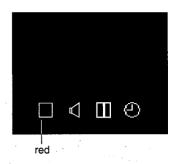
PICTURE SETTINGS

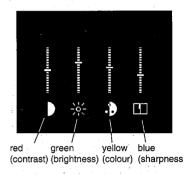


- 1. Press button to obtain the basic menu shown.
- 2. Press the red coloured button to obtain the picture adjustment display.

The cursor block in each vertical scale represents the present level of that function.

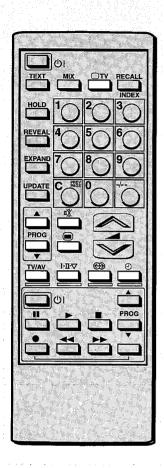
- 3. Should a function require adjustment, press the corresponding coloured button of the handset. That function will then turn white.
- Press the PROG ▲ or PROG ▼ button on handset until desired level is obtained.
- Once all functions are set to desired levels, press the
 TV button of handset to return to normal T.V. operation.





Picture and Sound Settings

SOUND SETTINGS



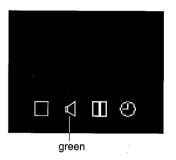
- 1. Press
 button to obtain the basic menu shown.
- Press the green coloured button to obtain the sound adjustment display.

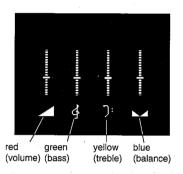
The cursor block in each vertical scale represents the present level of that function.

- 3. Should a function require adjustment, press the corresponding coloured button of the handset. That function will then turn white.
- Press the PROG ▲ or PROG ▼ button on handset until desired level is obtained.
- Once all functions are set to desired levels, press the
 TV button of handset to return to normal T.V. operation.

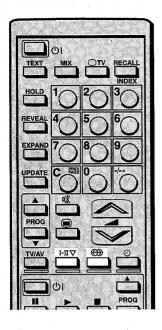
NOTE: Should you desire to mute the sound for any reason, press the 或 button.

Press once more when you wish to return sound.





Picture and Sound Settings



OTHER SOUND FACILITIES

STEREO-MONO BUTTON I - II - ∇

In areas receiving NICAM/stereo, this button switches between mono (indicated on screen by ∇ symbol) and NICAM/stereo, (indicated on screen by NICAM). If a dual language broadcast is available, press this button to alternate between the main and second language.

I or II will temporarily appear on-screen to indicate which language has been chosen.

SOUND EFFECTS PROCESSOR BUTTON 🕀

Depending on the type of broadcast being received, this button can produce various pleasing sound effects. To experience each effect, press this button whilst receiving mono or stereo signals.

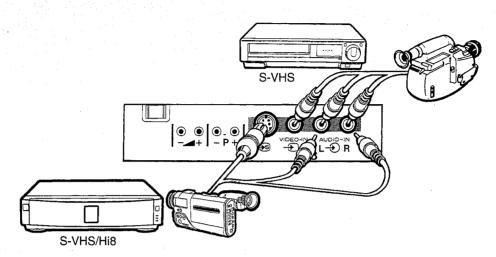
The table below describes each effect, and shows which symbol appears on-screen for identification purposes.

TYPE OF BROADCAST RECEIVED	ON-SCREEN DISPLAY	EFFECT
NICAM/STEREO	⊕ →	TRUE STEREO STEREO EXTRA WIDE PSEUDO STEREO
NICAM/STEREO FORCED TO MONO BY I-II-▽ BUTTON	~	TRUE MONO PSEUDO STEREO
MONO	NO DISPLAY ← →	TRUE MONO PSEUDO STEREO
DUAL LANGUAGE I	I ← I →	TRUE LANGUAGE PSEUDO STEREO LANGUAGE
DUAL LANGUAGE II	← II → II	TRUE LANGUAGE PSEUDO STEREO LANGUAGE

FRONT OF T.V.

Push the door on the front of this T.V. to gain access to the sockets.

Most Video/Audio equipment can be connected temporarily to these sockets as shown below.

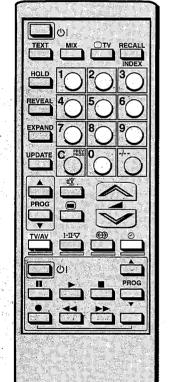


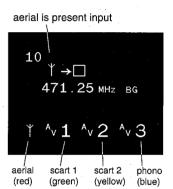
Should an S-VHS VCR or an S-VHS/Hi8 camcorder be connected to the 5 pin socket as shown, the T.V. picture will disappear, and the camcorder or VCR input will take its place.

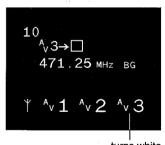
For other equipment connected to the phono sockets as shown above, follow this procedure:-

- Select a programme not already assigned to a T.V. broadcast.
- Press the TV/AV button on handset to obtain the AV menu shown.
- Press the blue coloured button to select Av3 from the bottom line of menu. A_v3 will then appear under the programme number in display. Keep holding down the blue button until the A_v3 in the bottom line of menu turns white. This indicates that your selection has been stored on the programme number chosen.
- Switch on external equipment, and operate as required to view.
- When desired, you can return to normal T.V. operation simply by pressing any programme number using handset buttons 0 - 9.

NOTE: Every time you wish to view inputs fed via the phono sockets, remember to first select the programme number chosen in step 1.







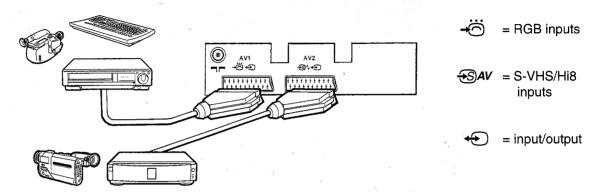
turns white

REAR OF T.V.

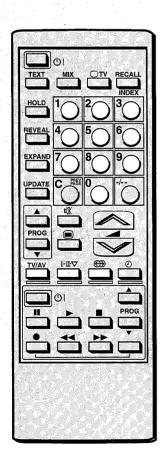
Many VCRs rely on connection to the T.V. via the aerial socket, as shown on page 4 of this quide. However, most VCRs also have a scart socket, which allows direct connection to one of the scart sockets of this T.V.

Other equipment such as computers can also be connected to the scart sockets of this T.V. as shown in the drawing below.

If your VCR is a VHS type, and has an equivalent connector, then to replace the T.V. broadcast with the VCR signal, simply connect the T.V. and VCR together using a scart connecting lead, then press the PLAY button on your VCR. The on-screen display will indicate which of the scart sockets you have connected to, by temporarily displaying A_V1 for AV1 scart or A_v2 for AV2 scart.



NOTE: Stereo VCRs must be connected to one of these scart sockets to assure stereo sound playback. Therefore, if your VCR etc., has alternative connections for audio/video, obtain a suitably adapted lead from your dealer and proceed as follows.



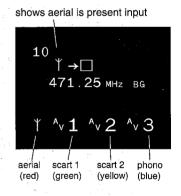
- Select a programme not already assigned to a T.V. broadcast.
- Connect your equipment to the appropriate scart socket of the T.V.

NOTE: If you intend to connect a computer with RGB colour outputs, and a VCR to these sockets, we recommend you use AV1 scart for the computer, as this has a dedicated RGB facility (see page 15).

- Press the TV/AV button on handset to obtain the AV menu shown.
- Press the green coloured button to select Av1 in display (for inputs to AV1 scart), or yellow button if you wish to select A_V2 (for inputs to AV2 scart). Your selection will then appear under the programme number in the on-screen display.

To store your selection, keep holding down the coloured button until Av1 or Av2 in the bottom line of menu turns white.

- To view the external inputs, switch on equipment, and if required press PLAY button.
- To return to normal T.V. operation, press any programme number using handset buttons 0 - 9.





A_v2 selected and stored

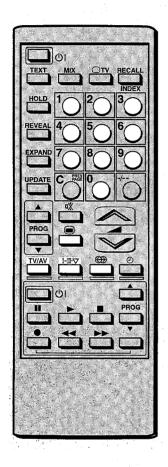
NOTE: Remember to select the programme number chosen in step 1 every time you wish to view inputs from your

If you wish to connect a second VCR etc, to the remaining scart socket, select a new programme number and repeat steps 2 - 6. Don't forget to select this new programme number when playback is required from the second VCR etc.

COMPUTERS AND S-VHS VIDEO RECORDERS

Ensure your equipment is connected to the correct scart socket, i.e. Av1 socket for computers, and Av2 socket for S-VHS video recorders.

Now proceed as follows:-



- 1. Press a programme number not already assigned to a T.V. broadcast.
- Press the TV/AV button on handset to display the AV menu shown.
- 3. Press button to display the second AV menu as shown.
- Press the green coloured button to select of display (computer inputs to AV1 socket), or yellow coloured button to select SA_V2 (S-VHS inputs to AV2 socket).

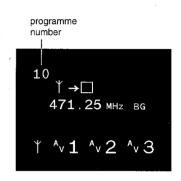
To store your selection, keep holding down the coloured button until \longrightarrow or SA_v2 in the bottom line of menu turns white.

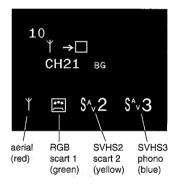
- 5. Switch on your external equipment, and operate as required to view.
- 6. To return to normal T.V. operation, press any programme number using handset buttons 0 9.

NOTE: If you have used the above procedure, and stored computer inputs fed via AV1 socket onto the programme number chosen in step 1, then to store S-VHS inputs fed via AV2 socket, repeat steps 1 - 6, using a different programme number.

Remember to select the correct programme number chosen in step 1 every time you wish to view inputs from your computer or S-VHS equipment.

IMPORTANT: When viewing normal T.V. broadcasts or teletext, we recommend that any RGB/COMPUTER equipment connected to the scart sockets should be switched OFF.





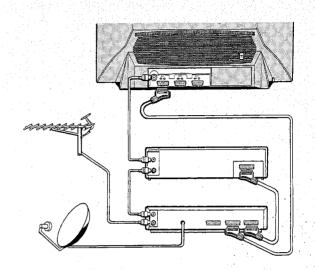
SATELLITE CONNECTION

Should you have a satellite receiver that you wish to connect to the T.V. for viewing, and to a VCR for recording, then we recommend you connect them to the scart sockets as shown.

Using this method, you can still record satellite programmes whilst the T.V. is switched OFF.

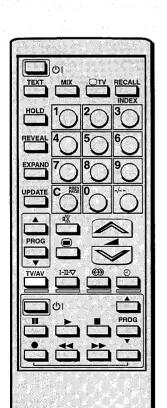
Please refer to your satellite and VCR operating guides in conjunction with this operating guide.

Don't forget, if your satellite receiver does not have an equivalent scart connector, then obtain a suitably adapted lead, and follow the procedure described on page 14 to store the satellite inputs onto the desired programme number.



GUIDE Sh

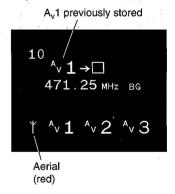
Should you wish, a programme number that is stored to accept external inputs, can be changed to accept T.V. broadcasts once more. You can do this as follows:-

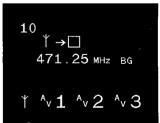


- Select the relevant programme number.
- Press the TV/AV button to display the AV menu as shown.
- Press and hold down the red coloured button on handset until the aerial symbol

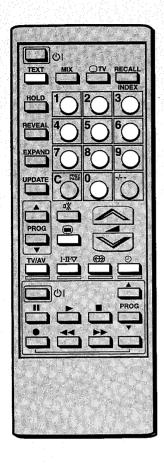
 in the bottom line of display becomes white.

 The aerial symbol will also appear under the programme number in display.
- 4. If that programme number is already tuned to a T.V. broadcast, it will now appear. If not, perform the tuning operation to obtain the desired broadcast.





Teletext and Fastext Operation



To enter Teletext mode, press the TEXT button. At the top of the displayed page will be the page header. It consists of the teletext page number presently on display, plus the date and time.

If FASTEXT is being transmitted by the broadcasting authorities, there will be 4 coloured topics at the bottom of the page.

However, if the T.V. was left in FAVOURITE PAGE mode when last switched OFF (described later), there will be 4 page numbers at the bottom of the screen, preceded by the letter L. Should this be the case, press the button on handset to return the FASTEXT topics.

To select one of these FASTEXT topics for viewing, press the corresponding colour coded button on the handset.

Once that page is on display, 4 new topics appear. You can keep selecting from these topics as long as desired.

If you do not wish to view the displayed topics, enter your own 3 digit page number using the buttons 0 -

If you make an error entering the page number, complete 3 digit number, then re-enter.

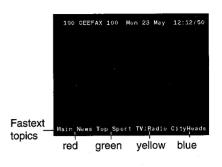
PAGE MENU

If for any reason FASTEXT is not broadcast, then the FASTEXT topics will be replaced by the PAGE menu, using the same colour coding at the bottom of the screen.

This menu consists of the present page number on view, which will be in red, the next numerical page number up from the displayed page, which will be green, and in yellow will be the page number two numerical positions up from the displayed page. Coloured blue will be the page number that is one numerical page down from the page number on view.

Should you desire to view one of these pages, simply press the corresponding coloured button on the handset.

Every time you select a page number using the handset buttons 0 - 9, the PAGE menu numbers will change accordingly.

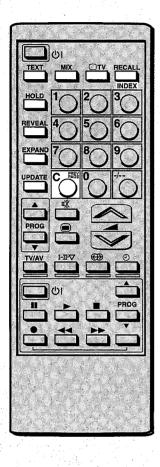




red green yellow blue

Teletext and Fastext Operation

TELETEXT FUNCTIONS



TEXT Button

Press this button to enter Teletext mode.

MIX Button

Press this button to view the T.V. broadcast and the teletext page simultaneously.

○ TV Button

Press when you wish to return to normal T.V. operation.

UPDATE Button

Press this button to return to the T.V. picture whilst the teletext page number you entered is being searched for. Once the selected page is captured, the page number appears at the top left of the screen. Press UPDATE button again to view.

REVEAL Button

Press this button to reveal the hidden information contained in quiz pages for example.

EXPAND Button

The first press will expand the top half of displayed page to double its size.

A second press will expand the bottom half, whilst a third press returns page to normal size.

PREV. PAGE Button

Press this button to return the previously displayed page to the screen.

You can recall up to the last 5 pages entered by pressing this button repeatedly.

HOLD Button

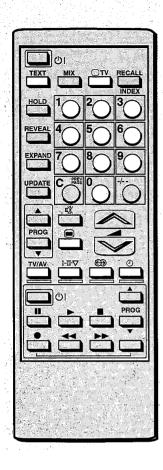
If the page on display contains more than one page of information, then press this button to keep the present page from changing.

Press once more to release the Hold condition.

INDEX Button

Pressing this button will display the index page of the teletext magazine being viewed.

Teletext and Fastext Operation



FAVOURITE PAGE MODE

This teletext system allows you to store up to 4 pages for instant viewing. These pages can be the ones you view most frequently, and are thus known as favourite pages. These can only be stored on programme numbers 0 - 9 in the following manner:-

- 1. Press TEXT button to enter teletext.
- 2. Press the (button.

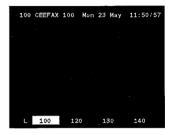
The FASTEXT topics at the bottom of the screen are then replaced by 4 page numbers, preceded by the letter L.

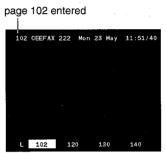
When FAVOURITE PAGE mode is initially selected, the page number shown boxed in the red position, is searched for and displayed.

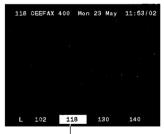
How to change and store pages:

- 1. Change the page number in the box to your first favourite page number using the buttons 0 9.
- Once that page is displayed, press the green coloured button on handset. The page number in green then becomes boxed.
 Enter your second favourite page number, and wait until that is displayed.
- Repeat this procedure for the yellow and blue coloured numbers, until your 4 favourite page numbers have been entered.
- 4. To store your favourite pages, press and hold down the TEXT button until all the coloured numbers turn white. This may take a short time. These page numbers will now appear whenever the FAVOURITE PAGE mode is entered.
- 5. To view the pages your have entered, simply press the corresponding coloured button on the handset.
- 6. To return to FASTEXT once more, press the
 button
- 7. When you wish to return to normal T.V. operation, press the

 TV button.







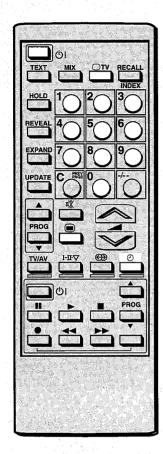
second favourite page entered

Timer Operations

ON TIMER

This function enables you to programme the T.V. to return to normal operation from the standby mode.

NOTE: In standby mode, all major functions of the T.V. will be OFF.



- Press the button on handset. The basic menu shown appears on screen.
- 2. Press the blue coloured button of handset to obtain the ON timer display. The first 0 in the display will be flashing.
- Decide the amount of time you wish the T.V. to remain OFF (in standby).

This can be from 1 minute, to a maximum of 23 hours 59 minutes.

Enter the desired time using the handset buttons 0 - 9.

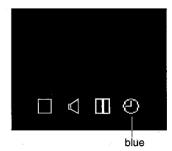
When entering times of less than 1 hour, enter two zeros first; i.e. for 30 minutes, press buttons 0, 0, 3, then 0.

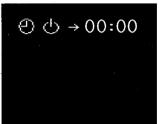
Should you make an error, complete the entry then reenter required time.

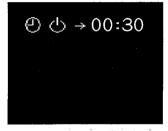
4. Press the OI button on handset. Picture and sound will disappear.

The red indicating light on the front of the T.V. will light to identify that the standby mode has been implemented.

When the entered time has elapsed, the T.V. will return to normal operation. If no button is pressed by the user within 3 minutes, the T.V. has been programmed to return to the standby mode as a safety precaution.







30 minutes entered

OFF TIMER

This facility allows you to programme the T.V. to go OFF (into Standby) at a predetermined time.

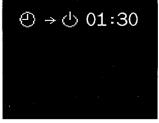
- Repeat steps 1 and 2 of "ON TIMER" procedure, then press the blue coloured handset button once more to obtain the OFF timer display shown.
- 2. Decide the amount of time to elapse before you wish the T.V. to go OFF. This can be from 1 minute, to a maximum of 23 hours 59 minutes.
- 3. Enter desired amount of time using the handset buttons 0 9, e.g. 1 hour 30 minutes, then press the

 TV button to return to normal T.V. operation.

When the entered time has elapsed, the T.V. will automatically go OFF (standby).

4. To return to normal operation, press the OI button on handset.





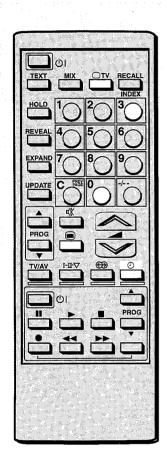
1 hour and 30 minutes entered

Timer Operations

TO COMBINE ON AND OFF TIMER

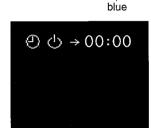
It is possible to combine the ON and OFF operations to programme the T.V. to turn itself OFF (standby), then return to normal operation at a pre-determined time.

When entering the timer settings for this combined operation, it is important that they are calculated from whatever the present time is. The example at the bottom of this page, shows how this relates to steps 3 and 6 in the procedure.



- Press the button to obtain the menu shown.
- 2. Press the blue coloured handset button. The ON timer display appears.
- Calculate the time to elapse before the T.V. is to come back ON from the standby mode. This must be done from the present time of day.

As an example, if it is now 14:00 hrs (2 p.m.), and you wish the T.V. to return to normal operation at 17:00 hrs (5 p.m.), then the total time = 3 hours.



4. Enter 0, 3, 0 and 0 using the handset buttons.



- 3 hours entered
- Press the blue coloured button once more. The OFF timer display appears.
- Using the same starting point as step 3, i.e. 14:00 hrs (2 p.m.), calculate the amount of time to elapse before standby is required.

As an example, for the T.V. to go OFF at 14:30 hrs (2:30 p.m.) this will be 30 minutes. Enter 0, 0, 3 and 0 using the handset buttons.

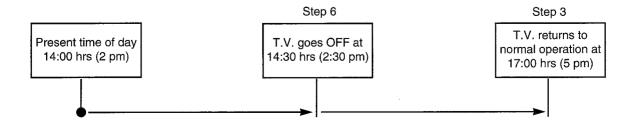
7. Press the O TV button to clear all displays from the screen.

The T.V. will then go OFF (standby) at 14:30 hrs (2:30 p.m.) and return to normal operation at 17:00 hrs (5 p.m.).





30 minutes entered



Problem Guide

Most problems can be solved by checking a few basic procedures.

Please try the following before calling your dealer.

NO PICTURE OR SOUND FROM SWITCH ON

1. If the red indicating light is on, then the T.V. could be in standby. Press the 也 button on handset, and the T.V. should begin to operate normally.

There will be a slight delay as the T.V. becomes operational, so take care not to press the \bigcirc 1 button again, or the standby condition will be returned.

- 2. If the red indicating light is not on, then the T.V. may have been previously switched off whilst in one of the stored AV modes. If this has happened, pressing a programme number known to be tuned to a T.V. broadcast will return normal operation.
- 3. If you used "AUTOTUNE" to tune in the T.V., did you remember to allocate a programme number to each broadcast found before proceeding. Try using conventional tuning method.

TO EXIT MENUS QUICKLY

Should you enter any menu by accident, and you are not sure of the exit procedures, pressing the handset button marked
TV will return you to normal T.V. operation immediately.
This also applies to teletext menus and DIRECT tuning displays.

NOISY PICTURE (Snow effect) Please carefully check the aerial connection to the T.V.

HANDSET DOES NOT WORK

- 1. Change batteries.
- 2. Ensure that the infra red receiving lens is not obstructed in any way.

Do's and Don'ts

SOME DO'S AND DON'TS ON THE SAFE USE OF EQUIPMENT

This equipment has been designed and manufactured to meet international safety standards but, like any electrical equipment, care must be taken if you are to obtain the best results and safety is to be assured.

DO read the operating instructions before you attempt to use the equipment.

DO ensure that all electrical connections (including the mains plug, extension leads and interconnections between pieces of equipment) are properly made and in accordance with the manufacturer's instructions. Switch off and withdraw the mains plug when making or changing connections.

DO consult your dealer if you are ever in doubt about the installation, operation or safety of your equipment.

DO be careful with glass panels or doors on equipment.

DON'T continue to operate the equipment if you are in any doubt about it working normally, or if it is damaged in any way - switch off, withdraw the mains plug and consult your dealer.

DON'T place water filled vessels on top of T.V. cabinets.

DON'T remove any fixed cover as this may expose dangerous voltages.

DON'T leave equipment switched on when it is unattended unless it is specifically stated that it is designed for unattended operation or has a standby mode. Switch off using the switch on the equipment and make sure that your family know how to do this. Special arrangements may need to be made for infirm or handicapped people.

DON'T use equipment such as personal stereos or radios so that you are distracted from the requirements of traffic safety. It is illegal to watch television whilst driving.

DON'T obstruct the ventilation of the equipment, for example with curtains or soft furnishings. Overheating will cause damage and shorten the life of the equipment.

DON'T use makeshift stands and NEVER fix legs with wood screws - to ensure complete safety always fix the manufacturer's approved stand or legs with the fixings provided according to the instructions.

DON'T allow electrical equipment to be exposed to rain or moisture.

ABOVE ALL

- NEVER let anyone especially children push anything into holes, slots or any other opening in the case this could result in a fatal electric shock;
- NEVER guess or take chances with electrical equipment of any kind it is better to be safe than sorry!

Battery Safety Guidelines

Used correctly, domestic batteries are a safe and dependable source of portable power. Problems can occur if they are misused or abused - resulting in leakage or, in extreme cases, fire or explosion. Here are some simple guidelines to safe battery use designed to eliminate any such problems.

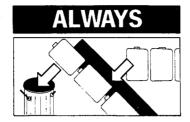


Take care to fit your batteries correctly, observing the plus + and minus - marks on the battery and applicance. Incorrect fitting can cause leakage or, in extreme cases, fire or explosion.



Remove dead batteries from equipment and all batteries from equipment you know you are not going to use for a long period of time.

Otherwise the batteries may leak and cause damage.



Replace the whole set of batteries at one time, taking care not to mix old and new batteries of different types, since this can result in leakage or, in extreme cases, fire or even an explosion.



Never dispose of batteries in fire as this can cause them to explode. Please put dead batteries in with the normal household waste.



Store unused batteries in their packaging and away from metal objects which may cause a short circuit resulting in leakage or, in extreme cases, fire or even an explosion.



Never attempt to recharge ordinary batteries, either in a charger or by applying heat to them. They may leak, cause fire or even explode. There are special rechargeable batteries which are clearly marked as such.

SOME USEFUL HINTS ON EQUIPMENT CARE

- Avoid places where dust is a problem, and do not place your receiver near radiators or other heat sources, as overheating could lead to faulty performance. Also, try to place your receiver where no light (artificial or sunlight) shines on the screen as this affects picture quality and could prevent the receiver from responding to commands from the remote control handset.
- 2. Keep all magnetic material away from the face of the TV tube, as magnetic fields may cause undesirable effects on the picture.
- 3. Never use thinners or chemical solvents to clean your cabinet.

- 4. Occasionally, you may receive a mild electric shock from the picture tube. This is only the same type of static electricity you sometimes experience when taking off items of clothing.
- 5. Avoid knocking or dropping the remote control unit to the floor, as this could damage precision parts assembled in this unit.
- When batteries are exhausted, the remote control unit does not work, or the operation becomes unstable - replace the old batteries.
- 7. When TV games, home computers etc. are used in conjunction with the receiver, avoid using excessive contrast and brightness, as this may damage the phosphor coating of the picture tube.

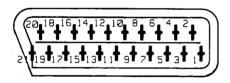
Specifications

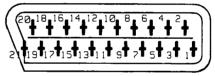
TV standard		625 lines standard
Channel coverage		UHF channels 21 - 68
Programme selectors		Programme UP/DOWN buttons with 0 - 59 programme remote control
Aerial impedance		75 Ohm unbalanced
Picture tubes C2146TN / C2166TN		51 cm type 59 cm type 66 cm type
Battery type		2 x 1.5v (AA type)
Power consumption	C2146TN / C2166TN	72 Watts 103 Watts 105 Watts
Mains voltage		220 - 240v AC 50 Hz
C2546T	N / C2166TN N / C2566TN N / C2866TN	20.00 Kgs 27.75 Kgs 33.25 Kgs
Dimensions W x H x	C2146TN	614 x 466 x 485 mm 700 x 520 x 466 mm 768 x 576 x 503 mm 612 x 465 x 465 mm 700 x 521 x 464 mm 765 x 572 x 520 mm

IMPORTANT SAFETY NOTE: The mains plug fitted to this T.V. has a built in fuse. Should this require replacement an ASTA or BSI approved BS 1362 fuse must be used of the same rating, marked thus a or c.

SCART CONNECTING SOCKETS AV1

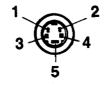
SCART CONNECTING SOCKETS AV2





PIN No.	FUNCTION	PIN No.	FUNCTION
1	AUDIO OUT (RIGHT) AUDIO INPUT (RIGHT)	1	AUDIO OUT (RIGHT) AUDIO INPUT (RIGHT)
2 3	AUDIO OUT (LEFT)	2 3	AUDIO OUT (LEFT)
	GROUND (AUDIO)		GROUND (AUDIO)
5	GROUND (BLUE)	5	NOT USED
4 5 6	AUDIO INPUT (LEFT)	4 5 6	AUDIO INPUT (LEFT)
7	BLUE INPUT	7	NOT USED ` ´
8	SWITCHING INPUT	8	SWITCHING INPUT
9	GROUND (GREEN)	9	NOT USED
10	NOT USED	10	NOT USED
11	GREEN INPUT	11	NOT USED
12	NOT USED	12	NOT USED
13	GROUND (RED)	13	CHROMINANCE GROUND
14	GROUND (BLANKING)	14	NOT USED
15	RED INPUT	15	CHROMINANCE INPUT S-VHS
16	STATUS (BLANKING) INPUT	16	NOT USED
17	GROUND (VIDEO)	17	GROUND (VIDEO) NOT USED
18 19	GROUND (VIDEO) COMPOSITE VIDEO OUTPUT	18 19	COMPOSITE VIDEO OUTPUT
20	COMPOSITE VIDEO OUTPUT	20	COMPOSITE VIDEO OR COMPOSITE
21	GROUND	20	LUMINANCE S-VHS
		21	GROUND

S-VHS SOCKET



PIN No.	FUNCTION
1 2 3 4 5	Chrominance input Luminance input Chrominance ground Luminance ground Frame ground

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