

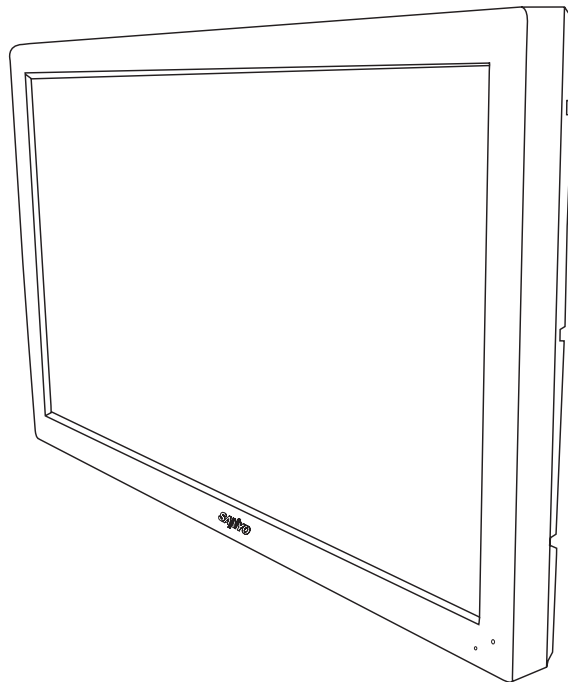


Instruction Manual
Manuel d'utilisation
Bedienungsanleitung
Gebruiksaanwijzing
Manuale d'Istruzioni
Manual de instrucciones

CE42LE1

LCD Monitor
Moniteur d'affichage à cristaux liquides
LCD-Display
LCD-Display
Monitor LCD
Monitor de LCD

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Please read this Instruction book before using your LCD monitor. We wish you many hours of pleasure from your new LCD monitor

Veillez lire attentivement ce mode d'emploi avant d'utiliser votre moniteur d'affichage à cristaux liquides. Nous espérons que votre nouveau dispositif d'affichage vous procurera de nombreux instants de bonheur.

Lesen Sie diese Anleitung bitte aufmerksam durch, bevor Sie Ihren LCD- Monitor in Betrieb nehmen. Wir wünschen Ihnen viel Freude mit Ihrem neuen Gerät.

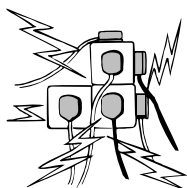
Lees deze handleiding voordat u uw LCD- monitor gaat gebruiken. We wensen u vele uren van plezier met uw nieuwe beeldscherm.

Leggere attentamente questo manuale d'istruzioni prima di utilizzare il monitor LCD. Vi ringraziamo per aver scelto un monitor LCD Sanyo che vi consentirà di trascorrere momenti piacevoli e divertenti.

Lea este manual de instrucciones antes de usar su nuevo monitor. Deseamos que disfrute de él muchas horas.

CAUTION: Please read and retain for your safety. This unit has been engineered and manufactured to assure your personal safety, but improper use can result in potential electric shock or fire hazards. In order not to defeat the safeguards incorporated in this monitor observe the following basic rules for its installation, use and servicing.

Installation



Do not allow anything to rest on the power cord. **Do not** locate this LCD monitor where the cord will be damaged by people walking on it.

Do not overload wall outlets and extension cords as this can result in fire or electric shock.

Do not place this LCD monitor near any heat sources such as radiators, heaters, stoves and other heat-generating products (including amplifiers).

Do not place this LCD monitor in direct sunlight.

Do not place your LCD monitor on an unstable stand, shelf or table. Serious injury to an individual, and damage to the LCD monitor may result if it should fall. Your sales person can recommend approved wall mounting kit. A special wall mounting kit is available for this model.

This LCD monitor should be operated only from the type of power source indicated on the monitor or as indicated in the Operating Instructions. If you are not sure of the type of power supply, consult your sales person or your local power company

For added protection it is strongly recommended that this LCD monitor is supplied via a RCCB. Safety unit.

WARNING: To prevent injury the LCD monitor must be securely attached to the wall in accordance with the manufacturers installation instructions.

Use

Never add accessories that have not been specifically designed for this monitor.

Do not place items such as vases containing liquid on top of the monitor. Some internal parts carry hazardous voltages and contact may result in an electric shock hazard. **Never** spill liquids of any kind on this LCD monitor.

Do not expose the LCD monitor to rain or use near water. For example, near a bathtub, kitchen sink, in a wet basement, etc.

Do not use immediately after moving the LCD monitor from a low temperature to a high temperature environment, as this causes condensation, which may result in fire, electric shock, or other hazards. Before cleaning, unplug the monitor from the wall socket.

Do not apply liquid cleaners or aerosol cleaners directly onto the LCD monitor. Use a damp cloth for cleaning.

This LCD monitor should have a minimum distance of 5cm away from the wall and the monitor should have 10cm distance around the top and sides

Do not mount near an open flame source. Open flames must never be used near this LCD monitor.

This LCD monitor should not be built in or enclosed in any way, heat build up will reduce the life of the monitor.

Always mount using recommended and substantial fixtures and fittings.

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Important:

THIS PRODUCT MUST BE EARTHED

This equipment is fitted with an approved mains lead and an approved non rewirable UK mains plug. To change a fuse in this type of plug proceed as follows:

1. Remove the fuse cover and fuse.
2. Fit a new fuse which should be a BS1362 5 Amp A.S.T.A. or BSI approved type.
3. Ensure that the fuse cover is correctly refitted.

If the fuse cover is lost or damaged the plug must **NOT** be used but replaced with a serviceable plug.

If the fitted plug is not suitable for your socket outlets, it should be cut off and an appropriate plug fitted in its place. If the mains plug contains a fuse, this should have a rating of 5 Amp, ensure the fuse cover is correctly fitted. If a plug without a fuse is used, the fuse at the distribution board should not be greater than 5 Amp.

Note: The severed plug must be destroyed to avoid a possible shock hazard should it be inserted into a 5 Amp socket elsewhere.

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

Blue -----> Neutral
Brown ----> Live
Green and Yellow ----> Earth

1. The Blue wire must be connected to the terminal which is marked with the letter "N" or coloured BLACK.
2. The Brown wire must be connected to the terminal with the letter "L" or coloured RED.
3. The Green and Yellow wire must be connected to the terminal which is marked with the letter "E" or coloured GREEN or GREEN and YELLOW.

Before replacing the plug cover, make certain that the cord grip is clamped over the sheath of the lead - not simply over the wires.

Do not attempt to bypass the safety purpose of the grounding type plug.

THIS UNIT IS NOT DISCONNECTED FROM THE MAINS UNLESS THE MAINS LEAD IS UNPLUGGED.

THE INSTALLER MUST MAKE SURE THE MAINS LEAD IS EASILY ACCESSIBLE.

Important recycling information.



Your SANYO product is designed and manufactured with high quality materials and components which can be recycled and reused.

This symbol means that electrical and electronic equipment, at their end-of-life, should be disposed of separately.

In the European Union there are separate collection systems for used electrical and electronic products.

Please help us to conserve the environment we live in!

Note: This symbol mark and recycle system are applied only to EU countries are not applied to other countries of the world.

Servicing

Your monitor is fully transistorised and does not contain any user serviceable components.

You must not remove the rear cover of the monitor by yourself. The apparatus is working with high voltages and could damage objects or even endanger people. Leave all required repair and service jobs to an authorised service technician. He will exclusively use such spare parts that are complying with the same safety standards as applicable to the original parts. The use of original spare parts can prevent fire, shock and other hazards.

Unplug the LCD monitor from the wall outlet and refer servicing to qualified service personnel under the following conditions:

- If the power cord or plug is damaged.
- If liquid has been spilt in to the LCD monitor.
- If the LCD monitor has been exposed to rain or water.
- If the LCD monitor has been dropped or the cabinet has been damaged.
- If the LCD monitor exhibits a distinct change in performance.
- If the LCD monitor does not operate normally by following the operating instructions.



Adjust only those controls that are covered in the operating instructions as improper adjustment of other controls may result in damage. This will often require extensive work by a qualified technician to restore the monitor to normal operation.

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Termination

This license is effective until terminated. This license will terminate automatically without notice if you fail to comply with any of its provisions.

Disclaimer

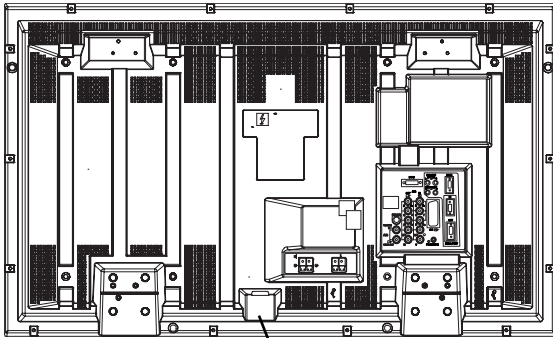
1. The Software is (to the extent permitted by law) supplied 'as is' and SANYO and its suppliers expressly exclude all warranties, express or implied, including (but not limited to) warranties of satisfactory quality, fitness for purpose and non-infringement (save to the extent that the same are not capable of exclusion at law).
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1. This End-User License will be governed by laws of England and the User may only bring claims in the English Courts and SANYO shall be entitled to bring a claim in the courts of any jurisdiction.
2. The above terms and conditions supersede any prior agreement, oral or written, between you and SANYO relating to the Software.

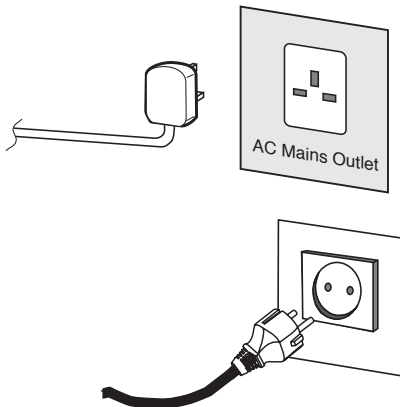
Step : 1 Mains Connection

- Connect the display unit to VGA, BNC and Scart connector as required.



AC connection

1. Connect the IEC power connector to the mains inlet at the rear of the display unit as shown above.
 2. Connect the power cord of the display unit to a wall outlet.
- ✎ As this product does not have a mains On/Off switch, please ensure your mains plug is easily accessible.
 - ✎ The display unit is prepared for a mains voltage AC220~240V, 50Hz. To completely switch off the mains, or when the display unit is not to be used for an extended period of time, it is advisable to disconnect the power cord from the power outlet.



- ✎ Please use the correct mains lead supplied with the set for your area
3. **Warning:** To prevent injury, the unit **must** be securely attached to the wall in accordance with the installation instructions.



WARNING! High voltages are used in the operation of this set. Refer service to qualified service personnel.

Step : 2 Connections

■ INPUT selection

To switch between AV1, RGB, AV2 (RGB H/V or Y, Pb, Pr) AV3, DVI or PC mode press the TV/ AV button on your remote control repeatedly or press and hold the TV/AV button for a few seconds and selection menu will appear on screen. Use the ▲ or ▼ buttons to select the correct input.

1. AV1

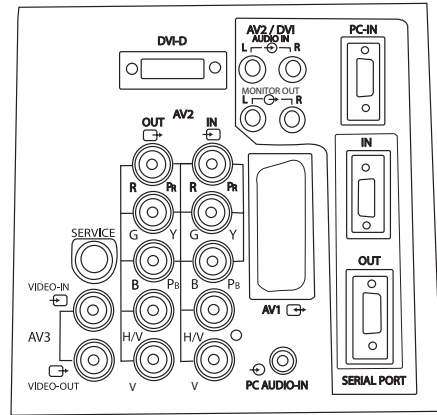
SCART connection

2. RGB

TTL input (5V RGB signals) from SCART terminal

3. Y,Pb,Pr/ RGBHV connection (AV2)

This LCD monitor has a choice of Y, Pb, Pr or RGB H/V connections. You can connect your DVD player to the Y, Pb, Pr terminals instead of using a scart lead. This can support high definition in analogue component form. RGB H/V can be used as a PC input via the BNC terminal. Both options support a large range of resolutions (page 11)



4. AV3

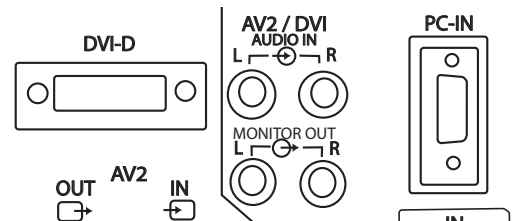
Composite (CVBS) signal input

AV3 OUT is to output the composite video signal from the VIDEO IN so that you can connect monitors with the use of loop through function.

5. **RS232C IN/OUT:** Is a input for external commands to control the monitor (see page 8)

5. DVI-D (Digital Video Interface)

This monitor has an DVI connector. This input will support a large range of resolutions as shown on page 11. See page 5 for details of menu operation. This is located at the back of the monitor next to the phono sockets.

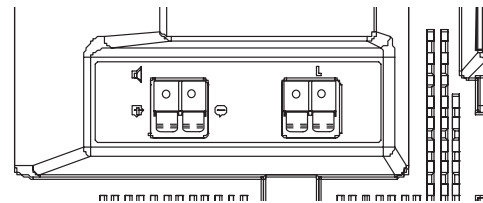


6. PC connection

This LCD monitor has a PC connector (PC-IN D-SUB). You can connect a PC to the LCD monitor and use it as a monitor display (see page 7). Audio can be connected via the 3.5mm PC audio in socket.

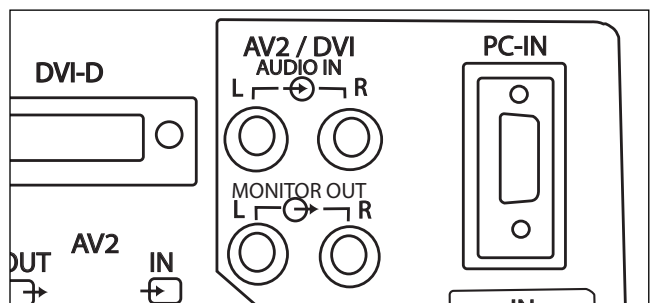
7. External Audio Output

To output the audio signal from AUDIO 1,2,3, PC and DVI. The speaker impedance should be 8 ohms.



■ Use of Monitor Audio Output Connections

The audio monitor out sockets on the rear of the set provide a fixed level audio output for reproducing sound via your audio equipment.



TV/AV button

To switch from AV1, RGB, AV2, AV3, PC or DVI mode press repeatedly. Press and hold in a few seconds, an AV selection bar appears. Select the mode you require using the ▲▼ keys

Screen mode selector

To select the screen mode, Natural, Full Zoom, Title-in or Normal. Refer to page 9.

Standby

To switch the monitor on and off. Also see page 8

Recall

To display the program information. You can also select colour systems in AV mode as follows
AUTO -> PAL -> SECAM -> NTSC3.58

MENU

To enter and exit sub menus.

Level up/down

To adjust the sound volume level, or enter sb menus

Picture mode selection

Press the →← button repeatedly to select the following picture modes.

Personal - Personal preference mode.

Dynamic - Suitable for brightly lit rooms.

Standard - Normal viewing mode.

Eco - Suitable for dimly lit rooms and gives a cinema - like effect.

Surround mode selector

To select the surround mode, OFF, MID, MAX

Up and down

To select the next item

Sound mute

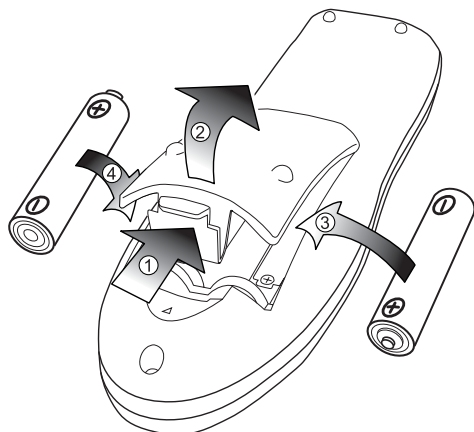
To mute the sound from the speakers. The sound changes as follows;
Normal volume -> Mute

Bass expander

To get an emphasised bass sound ON or OFF.

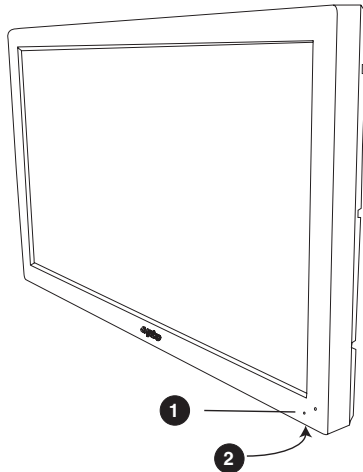


Remote control battery installation



Install two "AA" 1.5 volt batteries so that the "+" and "-" marks on the batteries match the "+" and "-" marks inside the unit into the remote control handset.

Controls and Menus



1. The LCD display has a Standby light to show there is power.

Switching into/from standby mode

The Standby mode is used for switching the LCD monitor off for short periods of time. In standby mode the monitor is switched off but is still receiving mains power.

- To turn the monitor into standby mode, press the **⏻ button**.
The blue power indicator illuminates more brightly.
- To turn the monitor ON from standby mode, press any of the following buttons: **⏻, P▲, P▼** or **0-9 buttons**.



If you find the power indicator flashing, disconnect power cord from the power outlet and contact our Service desk.



This warning is a sign to let you know that the power protection function of this TV set is now operating.

2. Control buttons (bottom edge of cabinet)

Menu/F button: rotate between volume, Brightness, contrast, colour, sharpness and OSD language.



Input/ OK button: switch between TV, AV1, RGB, AV2, AV3, DVI and PC mode.

▲ ▼ buttons: provide up and down adjustments

⏻ button: To switch from display to standby mode (to switch off completely disconnect the monitor from the power supply) Many of your monitors functions are controlled through the menu function.

Menu Operation

MENU

Picture	Brightness	
	Contrast	
	Color	
	Sharpness	
	Preset	Personal / Dynamic / Standard / Eco
	Noise Reduction	Min/ Mid / Max / Auto / OFF
	Dyn. Skin Tone	ON / OFF
	Text Brightness	Min/ Mid / Max
Sound	Volume	
	Balance	
	Bass	
	Treble	
	Preset	Personal / Talk/ Music/ Normal
	Surround	Mid / Max / OFF
Setting	OSD Language	
	Timer	Off Timer OFF/ 5-120 mins
	Text Language	Greek/ East/ West/ Cyrillic
	AV2 setting	RGB, H/V / Y Pb Pr

During menu operation the bottom of the on screen display will show which controls can be used.

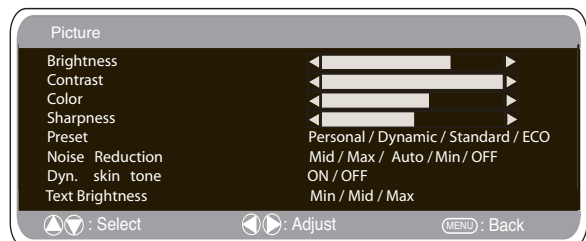
Press the **MENU** button to **enter** the main menu.

A sub menu is selected using the **▲** or **▼** button and pressing the **▶** button when the required sub menu is highlighted.

When you have finished you can press the **MENU** button to exit, then the **MENU** button again to exit the main menu.



Picture menu



1. Press the **MENU** button. Select **Picture** using the **▲** or **▼** button. Press the **▶** button to enter.

Set the picture settings for your **“personal”** preference.

2. Use the **▲** or **▼** button to select eg. Brightness and the **◀** or **▶** button to adjust levels.

3. **Preset** : You can select either your **“Personal”** settings, or Dynamic, Standard or Eco settings.

4. **Noise Reduction**: May be used to reduce any local picture ‘noise’ (granular appearance) being experienced by Using **◀** or **▶** to select between Mid / Max / Auto / OFF /Min.

5. **Dynamic skin tone**: May be used to enhance skin tone by Using **◀** or **▶** to select between On / Off.

Tint : is only available if NTSC equipment is connected.

6. **Text Brightness**: May be adjusted by Using **◀** or **▶** button to select between Min / Mid / Max.

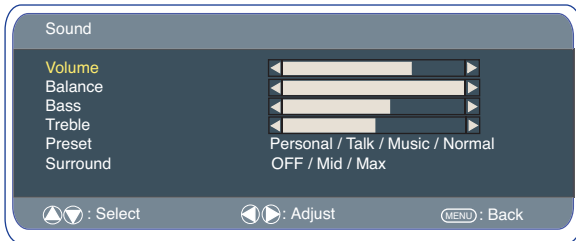
Press the **MENU** to return to **Main Menu**. These settings automatically store when you exit the menu.

Press the **MENU** button to exit menu.

☞ Your personal settings are automatically saved when you exit the menu.

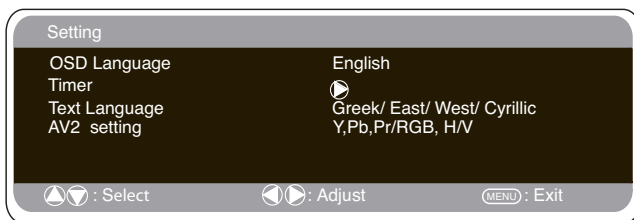
Sound menu

Press the **MENU** button and select **Sound** using the ▲ or ▼ buttons, press the ► button to enter.



Select and adjust to obtain the best sound settings for your environment using the ▲, ▼ and ◀ ▶ buttons. Press the **MENU** to return to **Main Menu**. These settings automatically store when you exit the menu. Press the **MENU** button to exit menu.

Setting menu



■ OSD Language

Use the ◀ or ▶ buttons to select the preferred OSD language (French, German, Italian, Spanish, Dutch). Press the **MENU** button to exit

■ AV2 setting

In setting menu, to select AV2 press the ▼ button and set to Y,Pb,Pr or RGB, H/V depending on your external equipment.

1. Press the **MENU** button. Select **Setting** using the ▲ or ▼ button press the ► button to enter.
2. Select **AV2 setting** using the ▲ or ▼ button.
3. Press the ◀ or ▶ button to select either Y,Pb,Pr or RGB H/V.
4. Press the **MENU** button to exit, this automatically stores your changes.
5. Press the **MENU** button to exit.

■ Off-timer setting

The Off timer will switch the monitor into the standby mode when the selected time has elapsed.



1. Press the **MENU** button. Select **Setting** using the ▲ or ▼ button press the ► button to enter.
2. Select **Timer** using the ▲ or ▼ button, press ► buttons to enter.



3. Press the ◀ or ▶ button to change time.

The time changes in 5 minute steps. The maximum time is 120 minutes.

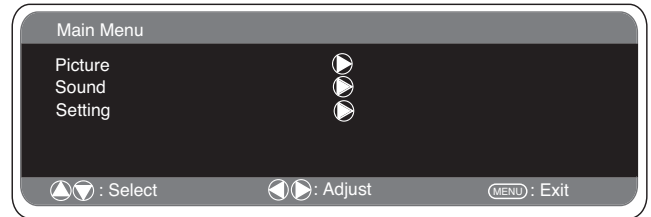
If you have set the off timer, a display appears in the corner of the screen when the recall button is pressed.

☞ If the monitor is switched off by the **standby** button  on the remote control or by the standby switch  on the bottom of the LCD monitor the timer settings will be cancelled.

PC menu settings

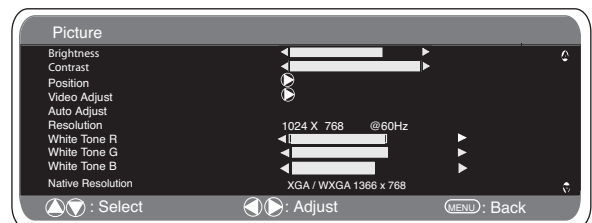
Connect your PC to either PC-IN or RGBHV on the rear of the set. Once connected select PC mode or AV2 (RGBHV, see page 4 for AV2 input settings) via the **TV/E** button on your remote control. The set will become a monitor for the PC.

By pressing the **MENU** button on the remote control a menu window will appear on screen, this allows the settings to be adjusted.




To adjust the Picture settings select picture using the ▲ or ▼ buttons on the remote then the ► button to enter the following picture settings menu.

Press the ◀ or ▶ buttons to adjusted the Picture brightness and the same to adjust the contrast of the picture. Press the ► button to enter sub menus



Picture position changes the picture horizontally or vertically, this is done by using the ◀ or ▶ buttons on the remote control.

Video adjust changes the Phase and the clock of the screen. If the picture is blurred or grainy this function will adjust it to a clearer picture by using the ◀ or ▶ buttons on the remote control.

Auto Adjust will automatically adjust the picture by using the ► button. This will change all the above settings automatically. Auto adjust can also be achieved by pressing the  /recall button on the remote control without having to select the menu

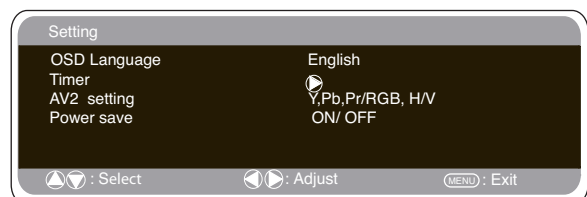
Resolution displays the current resolution of the picture. This is for information only and cannot be adjusted.

White tone: Using the ◀ or ▶ buttons it is possible to adjust the colour tone of the picture using the White tone **Red(R) / Green (G) / Blue(B)**. This will adjust the picture to show more or less of the chosen colour. For example if red is selected you can adjust the proportion of red in the picture to increase or decrease using the ◀ or ▶ buttons

Native Resolution is used when the PC can output WXGA 1366 x 768. The setting on your Monitor set can be changed to receive XGA/WXGA signal using the ◀ or ▶ buttons. Once the native resolution has been selected, save the settings by switching the monitor off then on using the standby button.

For Sound settings refer to previous menu

Setting: select the menu button on your remote and using the ▲ or ▼ buttons to select Settings. The ► button will enter the settings menu.



Timer and AV2 settings are the same as in all other input modes (pg 7)

Power save if turned ON will switch the monitor into Powersave mode after 1 minute if no signal is detected, the LED light will turn a brighter blue to indicate stand by. The monitor will automatically turn back on when a signal has been detected (PC input / RGBHV).

Use ◀ or ▶ buttons to select power save ON or OFF.

RS232C settings

This monitor can be controlled via the RS232C connector using a suitable computer/ control commands

Serial Interface Specification

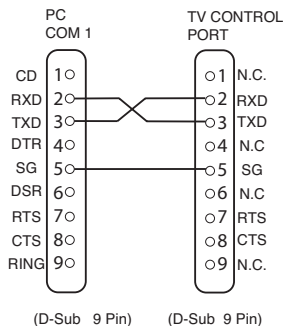
Transfer Specification

1. Transmission Speed: initial setting value is 19200
2. Transmission speed can be changed via Installation menu (see below)

ITEM	SPECIFICATION
Synchronous system	Asynchronous
Transmission Speed	9600 / 19200
Data Length	8 bit
Parity	None
Stop Bit	1
Flow Control	None

Connection

The Designated RS-232C serial cable must be used for a



connection to a computer and LCD monitor

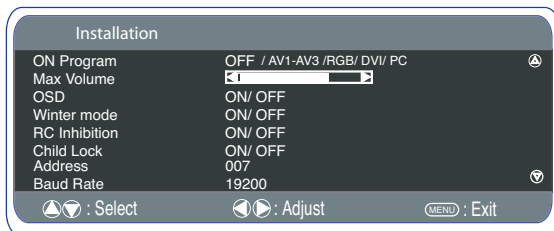
The TV command is defined by one command/ one line that starts with "C" and ends with carriage return (0x0D)

There are two types of commands:

- Functional Execution Command e.g Co5[CR] (table on page 63)
- Status Read Commands e.g "CR0 [CR] (see table on page 63)

Setting the monitor address in RS232 mode

To Access Installation mode press the **green button** on the remote



control and hold for 5 seconds. A new screen will appear. Each monitor can have a specific Address for example 007, which enables the monitor to be controlled individually and will not affect other monitors connected to a controlling PC

Address format command

The addressing format command is used for operating multiple monitor sets from a single PC via the RS232C command line. If you set your monitor address to '000', it will never respond to any addressing command from the PC.

If the address from the PC is 'FFF', all monitor sets will execute the command.

The Address format command is defined by one command, one line which starts with 'A' and ends with carriage return.(0 x0D)

The Monitor starts to decode when it receives a carriage return (0x0D)

An address is added at the top of a control command

Example:

Functional execution command:

"A001C05" [CR] means address is 001 and the control command is C05

Status read command

"A001CR0"[CR] means address is 001 and command is CR0

The monitor can set its own address in the Installation option menu (above) The address range is 000 - 999, the default address will be 000

The baud rate indicates the unit for transfer speed of data from the PC to the monitor sets

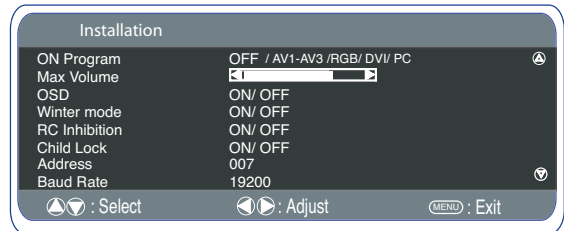
Installation Menu

This LCD monitor allows you to set up the following:-

■ Programme position at Start up

SETTING PROCEDURE

1. Press and hold the **green button** on the Remote control handset for 5 seconds.
2. Use the **P▲** or **P▼** button to highlight **each option**, use the **▲+** or **▼-** to switch between each option.



■ On Program

Select ON program using the **P▼** button, select the start up position using the **▲+** or **▼-** buttons.

(Off / AV1 / RGB/ AV2/ AV3/ DVI/ PC)

Press the **MENU** button to exit from the menu.

■ Max Volume

Select Max volume using the **P▼** button, use the **▲+** or **▼-** buttons to set the maximum volume required.

■ OSD (On screen display)

Select OSD using the **P▼** button, select ON / OFF using the **▲+** or **▼-** buttons. Selecting OFF will inhibit the OSD. To re-instate OSD, press and hold the green button on the remote control and select OSD ON.

■ Winter mode

This Function can be activated when the LCD monitor is used during cold temperature conditions, approximately 38°F/ 4°C or below to maintain picture performance.

Using the **▲** or **▼** button select winter mode once highlighted you can select ON or OFF by pressing the **▲+** or **▼-** button. **IMPORTANT:** The AC cord should not be disconnected during the operation of Winter mode function.

When in winter mode, power consumption is higher than normal standby consumption. This is entirely due to the operation of heating circuitry. We strongly recommend to turn off Winter mode when the ambient temperature is above 38F/4C.

■ RC Inhibition

You can prevent unwanted remote control operation by selecting RC Inhibition. When selected an inhibit symbol will appear on screen when a button is pressed on the remote control.

Select using the **▲** or **▼** button. Press the **▲+** or **▼-** button to select On or OFF.

Press and hold the green button to return to menu to select RC Inhibition

■ Child lock

You can prevent unwanted operation of the LCD monitor via the buttons on the bottom edge of the monitor.

Select using the **▲** or **▼** button. Press the **▶** button to select On or OFF.




Selecting of picture size

■ **Screen options**




Today there are various transmission formats with different size ratios, eg. 4:3 , 16:9 and video formats such as letterbox.

☞ When in High Resolution (720p / 1080i) YPbPr or DVI, the picture will remain fixed in 16:9 format 'Full size' and may not be changed.




■ **Natural**

4:3	16:9	Letterbox Video
		
Stretches the picture horizontally to fill the screen. The picture is more stretched at the edges.	The picture fills the screen and is proportionally correct.	The black bars top and bottom remain and the height is compressed to fit the picture area.




■ **Full**

4:3	16:9	Letterbox Video
		
The whole screen is filled stretching the width.	The whole screen is filled with the correct picture ratio.	The black bars top and bottom are present and the height is compressed.




■ **Normal**

4:3	16:9	Letterbox Video
		
The correct ratio is maintained with black bars on the left and right.	Black bars left and right, picture height is stretched.	Black bars left, right, top and bottom.

■ **Zoom**

4:3	16:9	Letterbox Video
		
The correct picture width is maintained but the top and bottom are cropped.	Zooms in slightly cropping the top and bottom.	The black bars top and bottom are smaller and the picture height is compressed slightly.

■ **Title - In**

4:3	16:9	Letterbox Video
		
As Zoom (16:9), but bottom is compressed even more to allow subtitles to be seen.	As Zoom (16:9), but bottom is compressed even more to allow subtitles to be seen.	As Zoom (16:9), but bottom is compressed even more to allow subtitles to be seen.

PC signal support timing

Resolution	Horizontal Frequency (kHz)	Vertical Frequency (Hz)	Remark
720_400	31.47	70.09	DOS(VGA)
640_480	31.50	60.00	DOS(VGA VESA 60Hz)
640_480	37.50	75.00	VGA VESA 75Hz
640_480	37.86	72.81	VGA VESA 70Hz
640_480	37.86	74.38	VGA
640_480	35.00	67.00	Mac.
640_480	34.97	66.60	Mac LC 13"
800_600	35.16	56.25	SVGA VESA 56Hz
800_600	37.90	60.32	SVGA VESA 60Hz
800_600	46.90	75.00	SVGA VESA 75Hz
800_600	32.70	51.09	SVGA
800_600	34.50	55.38	SVGA
800_600	37.90	61.03	SVGA
800_600	38.00	60.51	SVGA
800_600	38.60	60.31	SVGA
832_624	49.00	74.00	Mac.
1024_768	48.40	60.00	XGA VESA 60Hz
1024_768	56.50	70.00	XGA VESA 70Hz
1024_768	60.000	75.00	XGA VESA 75Hz
1024_768	44.00	54.58	XGA
1024_768	46.90	58.20	XGA
1024_768	47.00	58.30	XGA
1024_768	48.50	60.02	XGA
1024_768	58.03	72.00	XGA
1024_768	60.31	74.92	XGA
1024_768	61.00	75.70	XGA
1024_768	60.24	75.08	MAC_Normal 19"
1280_960	60.00	60.00	SXGA VESA 60Hz
1280_1024	79.976	75.025	SXGA VESA 75Hz
1280_1024	62.50	58.60	SXGA
1280_1024	63.370	60.01	SXGA
1280_1024	63.34	59.98	SXGA
1280_1024	63.74	60.01	SXGA
1280_1024	63.79	60.18	SXGA
1280_1024	63.90	60.00	SXGA
1280_1024	71.69	67.19	SXGA
1280_1024	76.97	72.00	SXGA
1280_1024	81.13	76.107	SXGA
1152_864	64.20	70.40	SXGA
1152_900	61.20	65.20	SXGA
1152_900	61.85	66.00	SXGA
1152_900	71.40	75.60	SXGA
1152_870	68.68	75.06	MAC_Normal 21"
1280_960	75.00	75.08	Mac.
1280_1024	80.00	75.00	Mac.
1600_1200	75.00	60.00	UXGA VESA 60Hz
1366_768	48.36	60.00	WXGA
1360_768	47.70	60.00	WXGA

Component signal support timing

Resolution	Horizontal frequency (KHz)	Vertical frequency (Hz)	Remark
720x480	15.735	60i	SDTV 480i
720x576	15.625	50i	SDTV 576i
720x480	31.25	60p	SDTV 480p
720x576	31.25	50p	SDTV 576p
1280x720	45.00	60p	HDTV 720p
1280x720	37.50	50p	HDTV 720p
1920x1080	33.75	60i	HDTV 1080i
1920x1080	28.13	50i	HDTV 1080i

DVI-D SIGNAL SUPPORT TIMING

Resolution	Horizontal Frequency (kHz)	Vertical Frequency (Hz)	Remark
640_480	31.43	59.88	VGA VESA 60Hz
640_480	37.86	72.81	VGA VESA 72Hz
640_480	37.5	75	VGA VESA 75Hz
640_480	34.97	66.6	MAC LC 13"
640_480	35	66.67	MAC_NORMAL 13"
800_600	35.16	56.25	SVGA VESA 56Hz
800_600	37.88	60.32	SVGA VESA 60Hz
800_600	46.875	75	SVGA VESA 75Hz
832_624	49.72	74.55	MAC_ NORMAL 16"
1024_768	48.36	60	XGA VESA 60Hz
1024_768	60.23	75.03	XGA VESA 75Hz
1024_768	56.47	70.07	XGA VESA 70Hz
1024_768	60.24	75.08	MAC_ NORMAL 19"
1152_870	68.68	75.06	MAC_ NORMAL 21"
1280_1024	63.98	60.02	SXGA VESA 60Hz
720_480	31.7	59.94	480p
768_575	31.25	50	575p
1280_720	37.5	50	720p-50Hz
1280_720	45	60	720p-60Hz
1366_768	48.36	60	WXGA
1360_768	47.7	60	WXGA
1920_1080	28.125	50	1080i-50Hz
1920_1080	33.75	60	1080i-60Hz

Depending on the condition of signals and the type and length of cables, these signals may not be properly viewed.

RS-232C COMMAND TABLES

Functional Execution Command Table

Command	Item	Comment
C00	Power ON	
C01	Power OFF	
C23	Wide "Auto" direct	
C24	Wide "Natural" direct	
C29	Wide "Full" direct	
C0F	Wide "Normal" direct	
C30	Picture	Toggle (Dynamic, Standard, Eco, Personal)
C70	AV1 direct	
C71	RGB direct	
C72	AV2 RGBHV direct	
C73	AV2 YPbPr direct	
C74	AV3 direct	
C75	DVI direct	
C76	PC direct	
C64	PC Auto adjust	
C92	Factory settings	
CF DPMS ON	Power save ON	
CF DPMS OFF	Power save OFF	
CF CLOK ON	Child Lock ON	
CF CLOK OFF	Child Lock OFF	
CF DEA RMCY	RC inhibition OFF	
CF DEA RMCN	RC inhibition ON	

"---" _means "No Function".

Status Read Command Table

Command	Item	Note
CR0	Power	On, Standby, power error,...
CR1	Input Mode	AV1, AV2,..., HDMI, PC
CR WIDE	Wide Mode	Auto, Normal, Full,...
CR PICTURE	Picture mode	Dynamic, Standard, ...
CR SIGNAL	Signal existence	Signal / No signal
CR CHILD	Child Lock	On / Off
CR DPMS	DPMS	On / Off
CR TM	Panel operating time	

"---" _means "No Function"