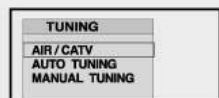
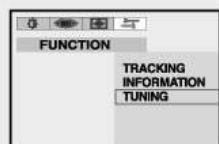


## Channel memory (NTSC model)

Your TV can memorize and store all of the channels available. Once the channels are memorized, you can use the **CH▼** or **CH▲** buttons to scan through the available channels.

### Selecting the broadcast source

Before memorizing available channels, you must select what broadcast source your TV is connected to either an antenna or a cable system.



- 1 Press the **MENU** button.  
**Result:** The **: PICTURE** menu is displayed.
- 2 Use the **VOL◀** or **VOL▶** buttons to select the **FUNCTION** menu.
- 3 Press the **CH▼** or **CH▲** button to select the **TUNING** then press the **SEL** button.  
**Result:** The **TUNING** menu is displayed.
- 4 Use the **CH▼** or **CH▲** buttons to select **AIR/CATV** then press the **SEL** button.
- 5 If antenna is connected, leave it as **AIR** displayed. If cable connected, press the **VOL◀** or **VOL▶** buttons to select **STD** or **HRC**.

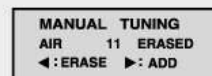
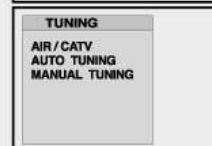
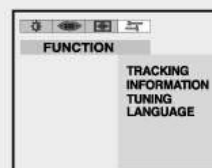
## Channel memory (NTSC model)

### Storing channels in memory automatically



- 1 First, select the broadcast source as described on the previous page. With the **TUNING** menu on screen, move the **CH▼** button down to select **AUTO TUNING**.
- 2 Press the **SEL** button. The TV will begin memorizing all of the available stations.

### Adding and erasing channels



- 1 Use the numeric buttons to select the channel you want to add or erase.
- 2 To add a channel or erase channel, press the **MENU** button.
- 3 Use the **VOL◀** or **VOL▶** buttons to select the **FUNCTION** menu.
- 4 Use the **CH▼** or **CH▲** buttons to select **TUNING** then press **SEL** button.  
**Result:** The **TUNING** menu is displayed.
- 5 Use the **CH▼** or **CH▲** buttons to select **MANUAL TUNING** then press the **SEL** button.
- 6 Use the **VOL◀** or **VOL▶** buttons to select. **VOL◀ : ERASE** , **VOL▶ : ADD**
- 7 Press the menu button repeatedly until the menus disappear.

## Teletext (Option)

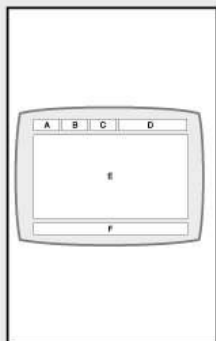
### Teletext Decoder

Most television channels carry "teletext", pages of written information that provide information such as :

- Television programme tables
- News bulletins
- Weather forecasts
- Sports results
- Subtitles for the hard of hearing

The teletext pages are organized according to six categories:

Part	contents
A	Selected page number.
B	Broadcasting station identity.
C	Current page number or search status.
D	Date and time.
E	Text.
F	Status information.



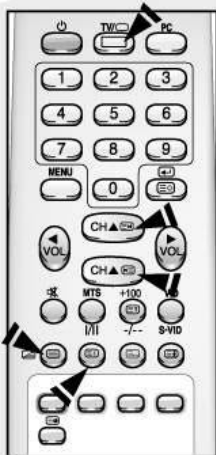
### Displaying Teletext Information

You can watch teletext information at any time, but signal reception must be good. Otherwise:

- Information may be missing.
- Some pages may not be displayed.

To activate the teletext mode and display the contents page :

- 1 Using the ▲ (CH+) or ▼ (CH-) button, select the channel providing the teletext service.
- 2 Press the TTX/MIX (TTX/MIX) button to activate the teletext mode.  
**Result:** The contents page is displayed. It can be redisplayed at any time by pressing the INDEX (INDEX) button.
- 3 To display the actual broadcast simultaneously with the teletext page, press the TTX/MIX (TTX/MIX) button.
- 4 To return to normal viewing, press the TV (TV) button.



## Teletext (Option)

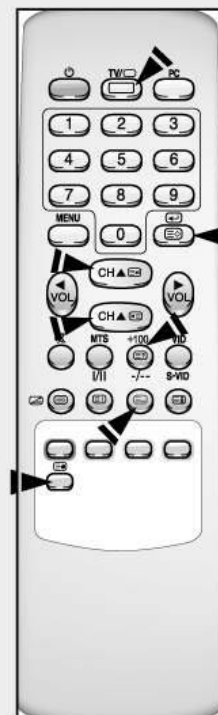
### Using the Teletext functions

Press the numeric buttons on the remote controller to enter the page number directly:

- 1 Enter the three-digit page number listed in the contents by pressing the corresponding numeric buttons.  
**Result:** The current page counter is incremented and the page is then displayed.
- 2 If the selected page is linked with several secondary pages, the secondary pages are displayed in sequence. To freeze the display on a given page, press the HOLD (HOLD) button. Press the HOLD (HOLD) button again to resume.

- 3 Using the various display options:

To display...	Press the ...
• Both teletext information and the normal broadcast	TTX / MIX (TTX/MIX)
• Hidden text (answers to quiz games, for example)	REVEAL (REVEAL)
• The normal screen	REVEAL (REVEAL) again
• A secondary page, by entering its 4-digit number	SUB-PAGE (SUB-PAGE)
• The next page	PAGE UP (PAGE UP)
• The previous page	PAGE DOWN (PAGE DOWN)
• FLOF / LIST select	FLOF / LIST (FLOF/LIST)
• Store	STORE (STORE)

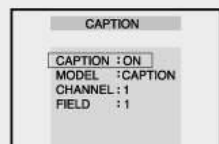
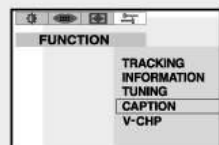


## Caption (Option)

### Viewig closed captions

Your TV decodes and displays the closed caption that are broadcast with certain TV shows. These captions are usually subtitles for the hearing impaired or foreign-language translations. All VCRs record the closed caption signal from television program, so home-recorded video tapes also provide closed captions. Most pre-recorded commercial video tapes provide closed captions as well. Check for the closed caption symbol in your television schedule and on the tape's packing : **CC**

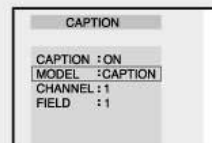
**Note !** : The Caption feature dose not work with PC signals.



- 1 Press the **MENU** button.  
**Result:** The **PICTURE** menu is displayed.
- 2 Use the **VOL ◀** or **VOL ▶** button to move the **FUNCTION** menu.
- 3 Use the **CH▼** button to move the **CAPTION** and then press the **SEL** button.  
**Result:** The **CAPTION** menu is displayed.
- 4 Use the **VOL ◀** or **VOL ▶** button to turn the **CAPTION ON/OFF**.

**Note !** : Misspellings and unusual characters sometimes occur during closed caption transmissions, especially those of live events. There may be a small delay before captions appear when you change channels. These are not malfunctions of the TV.

## Caption (Option)



- 5 Use the **CH▼** or **CH▲** button to move **MODE**. Use the **VOL ◀** or **VOL ▶** button to select **CAPTION** or **TEXT**.

**Note !** : In **CAPTION** mode, captions appear at the bottom of the screen, and they usually cover only a small portion of the picture. In **TEXT** mode, information is not related to the program, such as news or weather, is displayed. Text often covers a large portion of the screen.

- 6 Depending on the particular broadcast, it might be necessary to make changes to **CHANNEL** and **FIELD**.  
Use the **CH▼**, **CH▲**, **VOL ◀** and **VOL ▶** buttons to make the changes.  
(Follow the same procedure as in steps 4~5 above.)

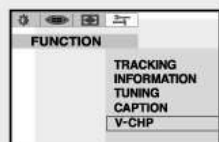
Press the **MENU** button to exit.

**Note !** : Different **CHANNEL** and **FIELD** display different information: **FIELD 2** carries additional information that supplements the information in **FIELD 1** (For example, **CHANNEL 1** may have subtitles in English, while **CHANNEL 2** has subtitles in Spanish.)

## V-CHIP (Option)

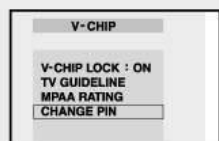
### Using the V-CHIP

The **V-CHIP** feature automatically locks out programming that is deemed inappropriate for children. The user must enter a PIN (personal ID number) before any of the **V-CHIP** restrictions can be up or changed.



- 1 Press the **MENU** button.  
Result: The **PICTURE** menu is displayed.
- 2 Use the **VOL◀** or **VOL▶** button to move the **FUNCTION** menu.
- 3 Press the **CH▼** to move **V-CHIP** and then press the **SEL** button.  
Result: The **ENTER PIN** screen is displayed.

ENTER PIN: ----



CHANGE PIN: ----



CONFIRM PIN: ----

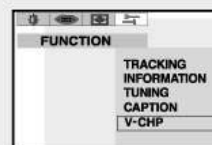
- 4 Enter 4-Digit PIN number  
**Note !** : The default PIN number for a new TV set is "0-0-0-0".
- 5 After entering a valid PIN number, the **V-CHIP** menu screen will appear.  
Press the **CH▼** button to move the **CHANGE PIN**.
- 6 Press the **SEL** button.  
Result: The **CHANGE PIN** screen will appear.  
Choose any 4-digits for your PIN and enter numbers. As soon as the 4-digits entered, the **CONFIRM PIN** screen will appear.  
Enter once again the same 4-digits.  
When the **CONFIRM PIN** screen disappears, your PIN has been memorized.

Press the **MENU** button to exit.

**Note !** : If you forgot the PIN, press the remote control keys in the following sequence, which resets the PIN to "0-0-0-0" :  
**POWER OFF→MUTE→4→5→8→2→POWER ON**

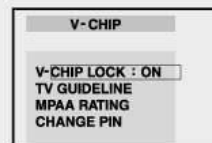
## V-CHIP (Option)

### How to enable/disable the V-CHIP



- 1 Press the **MENU** button.  
Result: The **PICTURE** menu is displayed.
- 2 Use the **VOL◀** or **VOL▶** button to move the **FUNCTION** menu.
- 3 Press the **CH▼** button to move **V-CHIP** and then press the **SEL** button.  
Result: The **ENTER PIN** screen is displayed.
- 4 Enter your 4-Digit PIN number
- 5 After entering a valid PIN number, the **V-CHIP** menu screen will appear and the **V-CHIP LOCK** will be highlighted.  
To enable or disable the **V-CHIP** feature, press the **VOL◀** or **VOL▶** buttons to turn **V-CHIP LOCK ON/OFF**.

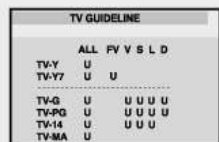
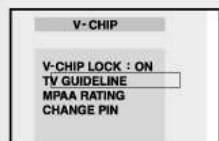
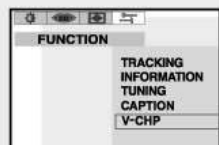
ENTER PIN: ----



## V-CHIP (Option)

### How to setup restriction using the “TV GUIDELINE”

First, set up a personal identification number(PIN), and enable the **V-CHIP**. (See previous section.) Parental restrictions can be set up using either of two methods : The **TV GUIDELINES** or **MPAA RATING**.



- 1 Press the **MENU** button.  
Result: The **PICTURE** menu is displayed.
- 2 Use the **VOL◀** or **VOL▶** buttons to move the **FUNCTION** menu.
- 3 Press the **CH▼** to move the **V-CHIP** and then Press the **SEL** button.  
Result: The **ENTER PIN** screen is displayed.
- 4 Enter your 4-Digit PIN number
- 5 After entering a valid PIN number, the **V-CHIP** menu screen will appear.  
Press the **CH▼** button to select the **TV GUIDELINE**.  
Press the **SEL** button.  
Result: The **TV GUIDELINE** screen is displayed.
- 6 Press the **CH▼** or **CH▲** button to select one of the six age-based categories :

**TV-Y** Young children  
**TV-Y7** Children 7 and Over  
 -----  
**TV-G** General audience  
**TV-PG** Parental guidance  
**TV-14** Viewers 14 and Over  
**TV-MA** Mature audience

## V-CHIP (Option)

**Note !** : These categories consist of two separate groups : **TV-Y** and **TV-Y7**(young children through age 7), and **TV-G** through **TV-MA** (everybody else).

The restrictions for these two groups work independently: If a household includes very young children as well as young adults, the TV guidelines must be set up separately for each age group. (See next step.)

- 7 At this point, one of the TV-Ratings is selected.  
Press the **VOL▼** button: Depending on your existing setup, a letter "**U**" or "**B**" will be highlighted. (**U** = Unblocked, **B** = Blocked)  
While the "**U**" or "**B**" is highlighted, Press the **CH▼** or **CH▲** button to block or unblock the category.

To select a different TV-Rating, press the **VOL◀** or **VOL▶** button not to be highlighted any of the letter "**U**" or "**B**" and repeat the process.

**Note 1** : The TV-Y7, TV-PG, TV-14 and TV-MA have additional options.  
See the next step to change.

**FV** : Fantasy Violence  
**V** : Violence  
**S** : Sexual Situation  
**L** : Adult Language  
**D** : Sexual Suggestive Dialog

## V-CHIP (Option)

**Note 2 :** The **V-CHIP** will automatically block certain categories that are "more restrictive". For example, if you block **TV-Y** category, then **TV-Y7** will be automatically blocked. Similarly, if you block the **TV-G** category, then all the categories in the "young adult" group will be blocked (**TV-G**, **TV-PG**, **TV-14** and **TV-MA**). The sub-ratings(**FV**, **D**, **L**, **S**, **V**) work together similarly.(See next Section.)

- 8** How to set the **FV**, **D**, **L**, **S** and **V** sub-ratings. First, select one of these TV-Ratings :**TV-Y7**, **TV-PG**, **TV-14** or **TV-MA**. (See step 6.) Next, while the TV-Rating is highlighted, repeatedly press the **VOL ▶** button. This will cycle through the available sub-ratings (**FV**, **L**, **S**, **D** or **V**). A highlighted letter ("**U**" or "**B**") will be displayed for each sub-rating. While the "**U**" or "**B**" is highlighted, Press the **CH ▼** or **CH ▲** button to change the sub-rating.

To select a different TV-Rating, press the **VOL ◀** or **VOL ▶** button not to be highlighted any of the letter "**U**" or "**B**" and repeat the process.

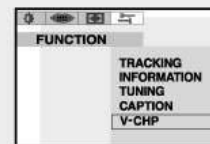
**Note ! :** The **V-CHIP** will automatically block certain categories that are "More restrictive". For example, if you block "**L**" sub-rating in **TV-PG**, then the "**L**" sub-rating in **TV-14** and **TV-MA** will be automatically blocked.

Press the **MENU** button to exit.

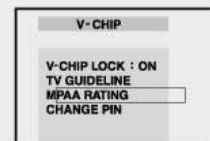
## V-CHIP (Option)

### How to setup restriction using the MPAA RATING

The **MPAA RATING** system uses the Motion Picture Association of America(MPAA) system, and its main application is for movies. (Eventually, movie videocassette will be encoded with **MPAA RATINGS**.) When the **V-CHIP LOCK** is on, the TV will automatically block any programs that are with objectionable ratings. (either **MPAA** or **TV-RATINGS**)



- 1** Press the **MENU** button.  
**Result:** The **PICTURE** menu is displayed.
- 2** Use the **VOL ◀** or **VOL ▶** button to move the **FUNCTION** menu.
- 3** Press the **CH ▼** button to move **V-CHIP** and then press the **SEL** button.  
**Result:** The **ENTER PIN** screen is displayed.
- 4** Enter your 4-Digit PIN number
- 5** After entering a valid PIN number, the **V-CHIP** menu screen will appear. Press **CH ▼** button to move the **MPAA RATING**. Press the **SEL** button.



**Result:** The **MPAA RATING** screen is displayed.

## V-CHIP (Option)

MPAA RATING	
G	U
PG	U
PG-13	U
R	U
NC-17	U
X	U
NR	U

- 6** Press the **CH▼** or **CH▲** button to select particular **MPAA** category.

The **CH▼** button will cycle through the MPAA categories.

- G** : General audience (no restrictions).  
**PG** : Parental guidance suggested.  
**PG-13** : Parents strongly cautioned.  
**R** : Restricted. Children under 17 should be accompanied by an adult.  
**NC-17** : No children under age 17.  
**X** : Adults only  
 -----  
**NR** : Not rated.

- 7** While a particular category is selected, press **VOL▶** button to active it.  
 A highlighted letter ("U" or "B") will be displayed.  
 Press the **CH▼** or **CH▲** button to change the "U" or "B".

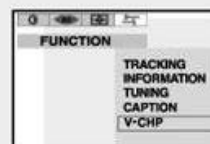
**Note !** : The **V-CHIP** will automatically block any category that is "more restrictive".  
 For example, if you block the **PG-13** category, then **R**, **NC-17**, and **X** will be automatically blocked also.

## V-CHIP (Option)

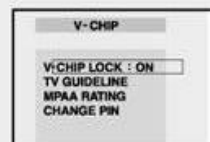
### How to reset the TV after the V-CHIP blocks a channel ("Emergency escape")

If the TV is turned to a restricted channel, the **V-CHIP** will block it.  
 The screen will go blank, the sound will be muted and following message will appear : **"EXCESSIVE RATING"**

To resume normal viewing, turn to a different channel by using the number buttons. Under certain conditions (depending on the rating of the local TV programs) the **V-CHIP** might lock out all the channels. In this case, you can turn **V-CHIP** feature off by following sequence.



- 1 Press the **MENU** button.  
**Result:** The **PICTURE** menu is displayed.
- 2 Use the **VOL◀** or **VOL▶** buttons to move the **FUNCTION** menu.
- 3 Press the **CH▼** button to move the **V-CHIP** and then press the **SEL** button.  
**Result:** The **ENTER PIN** screen is displayed.
- 4 Enter your 4-Digit PIN number



- 5 After entering a valid PIN number, the **V-CHIP** menu screen will appear and **V-CHIP LOCK** will be highlighted.  
 Press the **VOL◀** or **VOL▶** button to temporarily disable the **V-CHIP LOCK** feature.

## APPENDIX A : Power Saver

This monitor has a built-in power management system called Power saver. This system saves energy by switching your monitor into a low-power mode when it has not been used for a certain period of time. The available modes are "On", "Standby", "Sleep" and "Deep Sleep". Power Saver operates with a VESA DPMS compliant video card installed in your computer. You use a software utility installed on your computer to set up this feature. See below table for details.

State	Normal Operation	Power-Saving Function mode (EPA / ENERGY 2000)		
		Standby Mode	Sleep Mode Position A1	Deep Sleep Mode Position A2
Horizontal Sync	Active	Inactive	Active	inactive
Vertical Sync	Active	Active	Inactive	Inactive
Video	Active	Blanked	Blanked	Blanked
Power Indicator	Green	Amber	Amber Blinking (0.5 sec interval)	Amber Blinking (1 sec. interval)
Power Consumption	30W (Max.)	Less than 3W	Less than 3W	Less than 3W

**NOTE :** This monitor automatically returns to normal operation when horizontal and vertical sync return. This occurs when you move the computer's mouse or press a key on the keyboard.

## APPENDIX B : Troubleshooting

If you have a problem setting up or using your LCD monitor, you may be able to solve it yourself. Before contacting customer service, try the suggested actions that are appropriate to your problem.

What you see...	Suggested Actions	Reference
Screen is blank and power indicator is off	<ul style="list-style-type: none"> <li>● Ensure that the power cord is firmly connected and the LCD monitor is on.</li> </ul>	Connecting a PC, page 14.
"CHECK CABLE OR SIGNAL" message	<ul style="list-style-type: none"> <li>● Ensure that the signal cable is firmly connected to the PC or video sources.</li> <li>● Ensure that the PC or video sources are turned on.</li> </ul>	Connecting a PC, TV or VCR, Page 14, 20.
"INVALID MODE" message	<ul style="list-style-type: none"> <li>● Check the maximum resolution and the frequency of the video adaptor.</li> <li>● Compare these values with the data in the Display Modes Timing Chart.</li> </ul>	PC Stable Adjustment, page 19. APPENDIX D: Display Modes page 47.
The image is too light or too dark	<ul style="list-style-type: none"> <li>● Adjust the Brightness and Contrast.</li> </ul>	BRIGHTNESS, page 16, 21. CONTRAST, page 16, 21.
Horizontal bars appear to flicker, jitter or shimmer on the image	<ul style="list-style-type: none"> <li>● Adjust the Clock function.</li> <li>● Auto Tracking will clear it automatically.</li> </ul>	PC Stable Adjustment, page 19.
Vertical bars appear to flicker, jitter or shimmer on the image.	<ul style="list-style-type: none"> <li>● Adjust the Phase function and then adjust the Clock function.</li> <li>● Auto Tracking will clear it automatically.</li> </ul>	
Screen is blank and power indicator light is steady amber or blinks every 0.5 or 1 seconds	<ul style="list-style-type: none"> <li>● The monitor is using its power management system.</li> <li>● Move the computer's mouse or press a key on the keyboard</li> </ul>	APPENDIX A : Power Saver, page 43.
Image is not stable and may appear to vibrate	<ul style="list-style-type: none"> <li>● Auto tracking will clear it automatically</li> <li>● Check that the display resolution and frequency from your PC or video board is an available mode for your monitor.</li> </ul> <p>On your computer check : <b>Control Panel, Display, Settings</b></p>	PC Stable Adjustment, page 19.
	<ul style="list-style-type: none"> <li>● Horizontal frequency</li> <li>● Vertical frequency</li> <li>● Maximum refresh rate</li> </ul>	
Image is not centered on the screen.	<ul style="list-style-type: none"> <li>● Auto Position will set the best position automatically</li> <li>● Adjust the horizontal and vertical position.</li> </ul>	AUTO POSITION, page 18 H-POSITION, page 18 V-POSITION, page 18.



## APPENDIX B : Troubleshooting

Problem	Suggested Actions	Reference
No sound	<ul style="list-style-type: none"> <li>● Ensure that the audio cable is firmly connected to both the audio-in jack on your monitor and the audio-out jack on your sound card.</li> </ul>	Connecting a PC, TV or VCR, page 14, 20.
Sound level is too low	<ul style="list-style-type: none"> <li>● Check the volume level</li> <li>● If the volume is still too low after turning the control to its maximum, check the volume control on the computer sound card or software program.</li> </ul>	Adjusting the Sound settings, page 17, 22.
Sound is too high pitched or too low pitched	<ul style="list-style-type: none"> <li>● Adjust the Treble and Bass to appropriate level.</li> </ul>	Adjusting the Sound Settings, page 17, 22.
TV signal is not received	<ul style="list-style-type: none"> <li>● Ensure that the antenna cable is firmly connected to the VHF/UHF jack.</li> <li>● Check "Channel Memory" and make sure you choose the correct channel system.(PAL Model)</li> <li>● Select "Auto Tuning" to configure the channel system automatically.(PAL Model)</li> <li>● Check AIR/CATV is correctly selected on screen display menu. (NTSC Model)</li> </ul>	Connecting to watch TV or VCR, page 20. Channel Memory, page 23~24, or 30 Selecting Broadcast Source, page 29.

## APPENDIX C : Specification

FUNCTION		SPEC	
LCD Panel	Type	15.1" TFT AM LCD	
	Display Area	15.1 inches (307.2mm × 230.4mm) diagonal	
	Display Color	16,777,216	
	Pixel Pitch	0.3mm × 0.3mm	
	Recommended Resoution	1024 × 768 @85Hz	
	Contrast Ratio	300 : 1(Typical)	
	Brightness	250cd/m²	
	Viewing Angle(L/R, U/D)	75° / 75° , 55° / 60°	
	Horizontal Frequency	31 ~ 69KHz	
	Vertical Frequency	56 ~ 85Hz	
Outline Dimension	352.0(H) × 263.5(V) × 16.0(D)		
	Tilt Angle(up) 20 °		
Input / Output	Video Input	PC Analog RGB, 15Pin D-Sub	
		Composite Video	
		S-Video	
		SCART (PAL Model)	
	Audio Input	PC Audio	
		Audio(L, R)	
Audio Output	SCART (PAL Model)		
	Head Phone		
Speaker Output	1.5W × 2EA		
TV Signal	Antenna Input	75Ω Coaxial Cable	
	Color System	PAL/SECAM (EU)	
	Sound System	NTSC (USA, JAPAN, KOREA)	
		B/G, D/k, I, L/L' (EU)	
	Stereo Type	M (USA, JAPAN, KOREA)	
		NICAM, A2 (EU)	
	Text Option	SAP, MTS (USA)	
Others	Certification	UL, FCC, CE, VCCI, MIC	
	Power Supply	AC	100~240V, 50/60Hz
		DC	DC 12V, 3.3A
	Power consumption	Stand-by : 3Watt / Working : 30Watt	
	FUSE	125V, 10A	
	Plug & Play	DDC 1/2B	
	Screen Control	On Screen Display Menu	
	Weight	NET 4.6Kg / Gross 5.5Kg	
	Remote Controller	Yes	
	Size	With Stand	387mm(W) × 365mm(H) × 160mm(D)
Without Stand		387mm(W) × 331mm(H) × 66mm(D)	

- Specification can be changed without prior notice.

## APPENDIX D : Display Modes

If the signal from the system equals to the standard signal mode, the screen is adjusted automatically. If the signal from the system doesn't equal to the standard signal mode, adjust the mode with referring to the Videocard user guide because the screen might not display or only the power LED might be on. For the display modes listed below, the screen image has been optimized during manufacture.

Mode	Resolution	Horizontal Frequency (KHz)	Vertical Frequency (Hz)	Pixel Clock Frequency (MHz)	Sync Polarity (H/V)
VGA	720 * 400	31,469	70,087	28,322	- / +
	640 * 480	31,469	59,940	25,175	- / -
	640 * 480	37,500	75,000	31,500	- / -
	640 * 480	43,269	85,008	36,000	- / -
SVGA	800 * 600	46,875	75,000	49,500	+ / +
	800 * 600	53,674	85,061	56,250	+ / +
XGA	1024 * 768	48,363	60,004	65,000	- / -
	1024 * 768	60,023	75,029	78,750	+ / +
	1024 * 768	68,677	84,997	94,500	+ / +

