# SAMSUNG

# LTM1555
# LTM1755

## (For NTSC systems)

## TFT-LCD TV/Monitor

**User's
Manual**

# For Better Display

1. Adjust computer resolution and screen injection rate (refresh rate) in the control panel of your computer as described below to enjoy the picture quality.

   - Resolution: 15″ 1024 x 768
     17″ 1280 x 1024
   - Vertical frequency (refresh rate): 60 Hz

2. This TFT LCD panel was manufactured by using advanced precision semiconductor technology. Still, different color pixels may be seen. This is normal and not a defect.

   - For example, the number of TFT LCD pixels that is contained in this product are 2,359,296 (15″), 3,932,160 (17″).

3. When you clean the outside of the monitor and panel, use a soft cloth with a small amount of cleaner. Do not use excessive force as it can cause stains.

4. If you are not satisfied with the picture quality,
   execute the "auto adjustment function" in the display screen that appears when window termination button is pressed. If there's still picture noise after performing automatic adjustment, u COARSE adjustment function.

V I R T U A L
DOLBY
S U R R O U N D

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# Table of Contents

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# Safety Instructions

**1**    Before connecting the AC power cord to the DC adapter outlet, make sure the voltage designation of the DC adapter corresponds to the local electrical supply.

**2**    Never insert anything metallic into the cabinet openings of the liquid crystal display (LCD) TV/Monitor; doing so may create the danger of electric shock.

**3**    To avoid electric shock, never touch the inside of the LCD TV/Monitor. Only a qualified technician should open the case of the LCD TV/Monitor.

**4**    Never use your LCD TV/Monitor if the power cord has been damaged. Do not allow anything to rest on the power cord, and keep the cord away from areas where people can trip over it.

**5**    Be sure to hold the plug, not the cord, when disconnecting the LCD TV/Monitor from an electric socket.

**6**    Openings in the LCD TV/Monitor cabinet are provided for ventilation. To prevent overheating, these openings should not be blocked or covered. Also, avoid using the LCD TV/Monitor on a bed, sofa, rug, or other soft surface. Doing so may block the ventilation openings in the bottom of the cabinet. If you put the LCD TV/Monitor in a bookcase or some other enclosed space, be sure to provide adequate ventilation.

**7**    Put your LCD TV/Monitor in a location with low humidity and a minimum of dust.

**8**    Do not expose the LCD TV/Monitor to rain or use it near water (in kitchens, near swimming pools, etc.). If the LCD TV/Monitor accidentally gets wet, unplug it and contact an authorized dealer immediately. You can clean the LCD TV/Monitor with a damp cloth when necessary, but be sure to unplug the LCD TV/Monitor first.

**9**    Place the LCD TV/Monitor on a solid surface and treat it carefully. The screen is made of thin glass with a plastic front surface and can be damaged if dropped, hit or scratched. Do not clean the front panel with keton-type materials (e.g., acetone), ethyl alcohol, toluene, ethyl acid, methyl, or chloride – these may damage the panel.

**10**    Locate your LCD TV/Monitor near an easily accessible AC outlet.

**11**    If your LCD TV/Monitor does not operate normally – in particular, if there are any unusual sounds or smells coming from it – unplug it immediately and contact an authorized dealer or service center.

**12**    High temperature can cause problems. Don't use your LCD TV/Monitor in direct sunlight, and keep it away from heaters, stoves, fireplaces, and other sources of heat.

**13**    Unplug the LCD TV/Monitor when it is going to be left unused for an extended period of time.

**14**    Unplug your LCD TV/Monitor from the AC outlet before any service.

| ⚠ | **CAUTION** <br> RISK OF ELECTRIC SHOCK <br> DO NOT OPEN | ⚡ |
|:---:|:---:|:---:|
| | CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER (OR BACK). <br> NO USER-SERVICEABLE PARTS INSIDE. <br> REFER SERVICING TO QUALIFIED SERVICE PERSONNEL. | |

# Unpacking Your TV/Monitor

Please make sure the following items are included with your TV/Monitor. If any items are missing, contact your dealer.

Installation CD
(Not available in all locations)

Power Cord

Warranty Card
(Not available in all locations)

TV/Monitor

DC Adapter

Manual
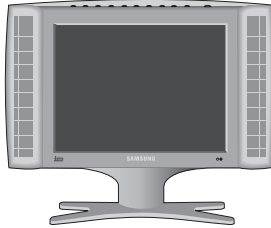
15-pin D-Sub Signal Cable

Remote Control
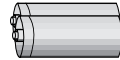
Batteries
(AAA x 2)

## Setting up an Ergonomic Workstation

Consider the advice given below before you install your TV/Monitor.

### TV/Monitor location

Choose a position that exposes your TV/Monitor to the least reflection from lights or windows, usually at a right angle to any window.

### Workstation height

Place your LCD TV/Monitor so that the top of the screen is slightly below your eye level when you are comfortably seated.

### Viewing angle

Tilt the screen until you feel comfortable working with your TV/Monitor.



Figure 1. Tilt the screen

## Connecting Your LCD TV/Monitor



Figure 2. Cable connections

**1. Connecting a Computer ① ② ③ )**
   A. Connect the power cord to the DC Adaptor and connect the adaptor jack to the DC 14V power connector on the back of the TV/Monitor.
   B. Connect the 15-pin D-SUB of the video signal cable to the PC video connector on the back of the TV/Monitor.
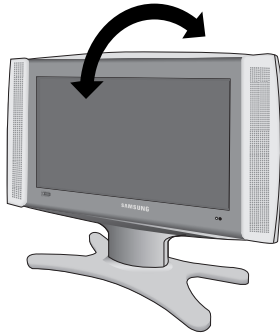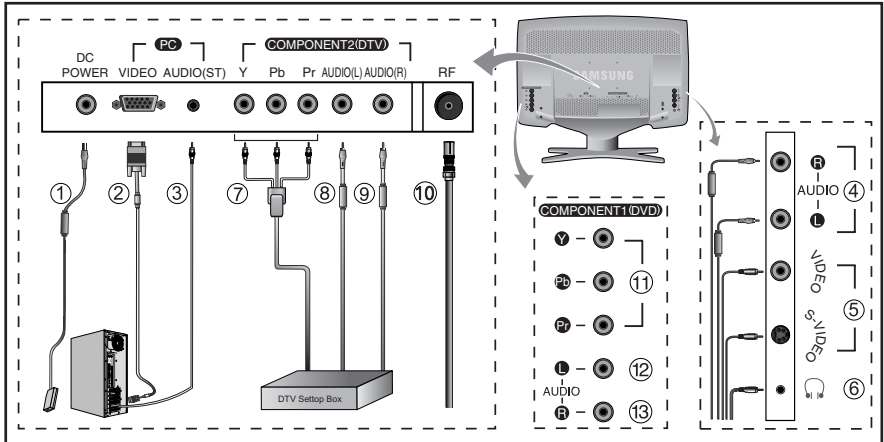   C. Connect the stereo audio cable to "Audio (ST)" on the back of the TV/Monitor and the other end to " Audio Out" terminal of the sound card on your computer.
   D. If necessary, install TV/Monitor driver contained on the supplied CD. For driver installation, please refer "Installing Video Driver" section on page 6.

**2. Connecting External A/V Devices ( ④ ⑤ )**
   A. Connect RCA audio cables to "Audio (R)" and "Audio (L)" terminals and the other ends to corresponding audio out terminals on the A/V device.
      (Stereo-RCA Cable not included)
   B. Connect RCA (Yellow) or S-VHS cable to an appropriate external A/V device such as a VCR, DVD or camcorder. (RCA cable and S-VHS cable not included)
   C. Headphones may be connected to the headphone output on the right-hand side of the TV/Monitor ( ⑥ ). *While the headphones are connected, the sound from the built-in speakers will be disabled.*

**3. Connecting a DTV Set-Top Box ⑦ ⑧ ⑨ ) - Component 2**
   A. Connect the YPbPr DTV Cable to the YPbPr Component 2(DTV) jacks on the TV/Monitor.
   Connect the RCA Cable to "Audio (L)" and "Audio (R)" Component 2(DTV) Audio jacks on the back of the TV/Monitor and the other end to "Audio out" terminal of the Set-Top Box.

**4. Connecting TV/CATV ( ⑩ )**
   A. Connect an antenna or CATV Cable to the antenna terminal on the back of the TV/Monitor.

**5. Connecting a DVD ⑪ ⑫ ⑬ ) - Component 1**
   A. Connect YPbPr and Audio R/L Cables from the DVD Player to the Component 1(DVD) jacks on the TV/Monitor.

**English   5**

## Plug and Play

The adoption of the new **VESA®** Plug and Play solution eliminates complicated and time consuming setup. It allows you to install your TV/Monitor in a Plug and Play compatible system without the usual hassles and confusion. Your PC system can easily identify and configure itself for use with your display. This TV/Monitor automatically tells the PC system its Extended Display Identification Data (EDID) using Display Data Channel (DDC) protocols. This way the PC system can automatically configure itself to use the LCD. If your PC system needs a video driver, follow the instructions given below according to the operating system your computer uses.

## Installing the Video Driver

The CD that accompanies this product contains the necessary drivers for installing your TV/Monitor. Please refer to the driver installation instructions included with your CD package for more information.

## Self-Test Feature Check (STFC)

Your TV/Monitor provides a self-test feature that allows you to check whether your TV/Monitor is functioning properly. Make sure that PC is selected as a primary source by checking if the source indicator LED labeled "PC" is on. If your TV/Monitor and computer are properly connected but the TV/Monitor screen remains dark and the power indicator is blinking, run the TV/Monitor self-test by following the steps given below:

Power Indicator ⎯⎯⎯⎯⎯→ ◉ ⊗

Figure 3.  Power Indicator

**1**  Turn off both your computer and the TV/Monitor.

**2**  Unplug the video cable from the back of the computer.

**3**  Turn on the TV/Monitor.

If the TV/Monitor is functioning properly, you will see a white box with a large blue oval Samsung logo and an error message "Check Signal Cable." in red color.
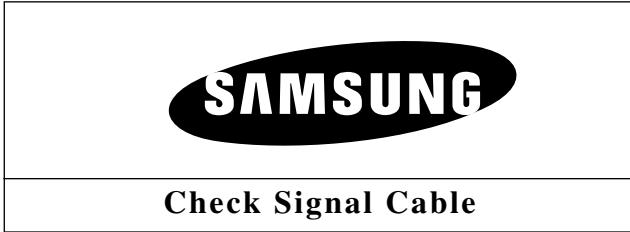


Figure 4.  TV/Monitor self-test screen

This box also appears during normal operation if the video cable becomes disconnected or damaged.

**4**  Turn off your TV/Monitor and reconnect the video cable; then turn on both your computer and the TV/Monitor.

If your TV/Monitor screen remains blank after following the previous procedure, check your video controller and computer system; your TV/Monitor is functioning properly.

## Getting Help

If your TV/Monitor does not display an image, check your cable connections and refer to "Troubleshooting" on page 28. If you experience difficulties with the quality of the displayed image, push Auto Button (see page 9) and refer to "Adjusting Your LCD TV/Monitor" on page 8 or "Troubleshooting" on page 28.

## Warm-up Time

All LCD TV/Monitors need time to become thermally stable whenever you turn them on. Therefore, to
achieve more accurate adjustments for parameters, allow the LCD TV/Monitor to warm (be on) for at least 20 minutes before making any screen adjustments.

## User Controls

Your LCD TV/Monitor allows you to easily adjust the characteristics of the image being displayed. All of these adjustments are made using the control buttons on the top of the TV/Monitor. While you use these buttons to adjust the controls, an OSD shows you their numeric values as they change.
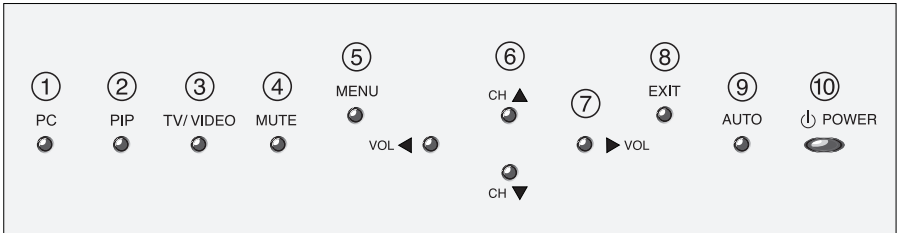


Figure 5.  User control locations

| No. | Name | Description |
|:---:|:---:|:---|
| 1 | **PC** | ■  Selects PC source.<br>■  PIP window off. |
| 2 | **PIP** | ■  Activates PIP(Picture-in-Picture) window directly in PC mode only.<br>■  Selects video sources in PIP.<br>(TV/DTV/DVD/VIDEO/S-VIDEO) |
| 3 | **TV/VIDEO** | ■  Activates full screen TV/Video window.<br>■  Selects TV/Video sources.<br>(TV/DTV/DVD/VIDEO/S-VIDEO) |
| 4 | **MUTE** | ■  Selects sound mute. |
| 5 | **MENU** | ■  Opens the OSD and selects the highlighted function. |
| 6 | **▲ CH ▼** | ■  Moves the selector up or down on the OSD.<br>■  Increases or decreases the channel number. |

| No. | Name | Description |
|---|---|---|
| 7 | ◀ VOL ▶ | ■ Moves the selector left or right on the OSD. <br> ■ Increases or decreases the values of the selected function. <br> ■ Increases or decreases the audio volume. |
| 8 | EXIT | ■ Exits from menus and sub-menus. <br> ■ Exits from the OSD system. |
| 9 | AUTO | ■ "Auto" allows the TV/Monitor to self-adjust to the incoming video signal. The values of fine, coarse and position are adjusted automatically. |
| 10 | POWER | ■ Turns the TV/Monitor ON/OFF. <br> ■ Indicates the status of the TV/Monitor. <br>    - Green: Normal operation. <br>    - Green, Blinking: Power saving Mode or <br>                   Disconnected Signal Cable |

## Automatic Save

Whenever you open the OSD and allow an adjustment window to remain active for about 3 seconds without pressing other buttons, the TV/Monitor automatically saves any adjustment you have made. These changes are saved into a user area in the TV/Monitor.
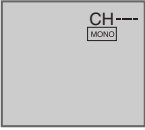
The TV/Monitor can save adjustments for up to 5 user modes. It has 9 for LTM1555 (11 for LTM1755) factory preset or preload modes, one for each signal frequency as listed in table 10 on page 34.

If you have made no adjustments, the OSD disappears and the TV/Monitor does not save anything.

## Direct-Access Features

**While you are watching full screen TV or in PIP mode**

| | | |
|---|---|---|
| **Program** | CH ---- <br> MONO | Valid only after performing "Channel search program". (See pa<br>When OSD is not on the screen, push the " ▼ " or<br>" ▲ " button to select program channel number.<br><br>**1** Push the " ▼ " button to decrease channel number.<br><br>**2** Push the " ▲ " button to increase the channel number. |
| **Volume** | ‖‖‖‖ ·············· 20 | When OSD is not on the screen, push the " ◀ " or<br>" ▶ " button to adjust volume.<br><br>**1** Push the " ◀ " button to decrease the volume.<br><br>**2** Push the " ▶ " button to increase the volume. |

**Initial OSD icons**
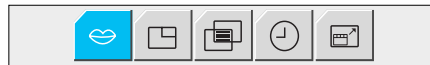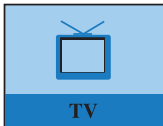
| PC | TV | DTV/DVD | OSD |
|---|---|---|---|
| 💻 | 📺 | 0101 DTV | ▦ |
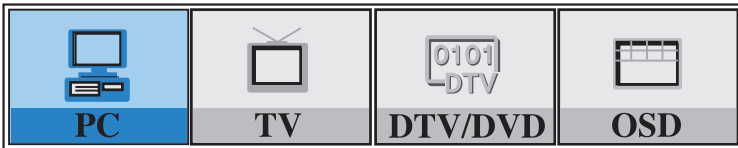
⇨ Certain OSD menus are disabled (gray color) when they are not available in a certain mode of operation. Those menus are enabled when corresponding OSD menus are activated.

## On Screen Display (OSD)



### Accessing the menu system

**1** With the OSD off, push the **MENU** button to display the main OSD menu.

**2** Use the " ▼ ▲ ◄ ► " buttons to move from one function to another. Press MENU to access the function sub-menu.
See Table 1 starting on the next page to view a
complete list of all of the functions available for the TV/Monitor.

**3**

**4** Use " ▲ " and " ▼" to select desired item.

**5** After selecting item, use the "        ◄ " and " ► " buttons to make necessary adjustments. The setting bar moves and the numeric value indicator changes to refect your adjustments.

**6** Push the **EXIT** button a couple of times to return to the main menu to select another function or to exit from the OSD.

## PC functions and adjustments

Function icons

Function name

Setting bar

**Contrast**

− ☐ + 50

PC | TV | DTV/DVD | OSD

**Main menu**     **Tool Tip**

Press MENU Key

Table 1.  Screen controls

| Main Menu | Icon | Menus and Sub-menus | Function Descriptions ◀ | ▶ |
|---|---|---|---|---|
| PC | ◖ | **Contrast** |  |  |
| | ☀ | **Brightness** |  |  |
| | 🎨 | **Color Control** | The tone of color can be changed from reddish white to bluish white. The individual color components are also user customizable. | |
| | | ■ Mode1 | Reddish white. | |
| | | ■ Mode2 | Plain white. | |
| | | ■ Mode3 | Bluish white. | |
| | | ■ User Mode | User customizable. | |
| | | ■ Reset | Color parameters are replaced with the factory default values. | |

**English    12**

Table 1.  Screen controls (Continued)

| Main Menu | Icon | Menus and Sub-menus | Function Descriptions ◀ ▶ | |
|-----------|------|---------------------|---------------------------|--|
| PC | ◁◁ | **Image** | • Image Lock<br>• Image Size<br>• Image Effect | |
| | | **Image Lock** | Image Lock is used to fine tune the image by removing picture jitter. | |
| | | ■ Coarse<br>■ Fine | The Coarse and Fine adjustments allow you to fine tune the image quality of your TV/Monitor to your preference.<br>Use the " ◀ " and " ▶ " buttons to remove any noise.<br>If satisfactory results are not obtained using the Fine adjustment, use the Coarse adjustment and then use Fine again.<br>This function may change the width of the image. Use the H-Position menu to center the image on the screen. | |
| | | | When Coarse value is wrong. | When Fine value is wrong. |
| | | |  |  |
| | | ■ Information | Displays current display mode. | |
| | | ■ Reset | Image lock and position parameters are replaced with the factory default values. | |
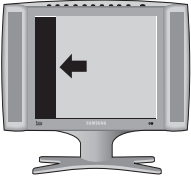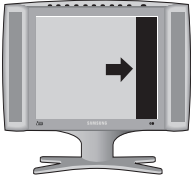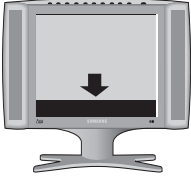
# Adjusting Your LCD TV/Monitor

Table 1.  Screen controls (Continued)

| Main Menu | Icon | Menus and Sub-menus | Function Descriptions ◀ ▶ |
|-----------|------|---------------------|---------------------------|
| 🖥️ PC | ⧉ | **Image Size** | The size of the image being displayed can be set in several different ways. |
| | | ■ Expand1 | Resize the image to fill the whole screen. (applicable to PC RGB only) |
| | | ■ Expand2 | Expand images keeping the original aspect ratio. (applicable to PC RGB only) |
| | | ■ Normal | Display the incoming image as it is. (applicable to PC RGB only) |
| | | ■ Zoom | The image can be magnified up to 64 times larger than the original image. The enlarged image can also be panned. |
| | | ■ Pan | Move the zoomed image horizontally and vertically. |
| | | **Image Effect** | Image being displayed can be made softer or sharper. <br> • Sharpen More <br> • Sharpen <br> • Medium <br> • Soften <br> • Soften More |

Table 1.  Screen controls (Continued)

| Main Menu | Icon | Menus and Sub-menus | Function Descriptions | |
|---|---|---|---|---|
| | | | ◄ | ► |
| PC | ⬒ | **H-position** ◄ ▶ |  |  |
| | | **V-position** ▲ ▼ |  |  |
| | 🔊 | **Sound** | The TV/Monitor has a built-in high fidelity stereo audio amplifier. The audio circuit processes audio signals from various external input sources such as DVD, VCR, TV, PC or DTV. | |
| | | ■ Bass | Emphasizes low frequency audio. | |
| | | ■ Treble | Emphasizes high frequency audio. | |
| | | ■ Virtual Dolby (Surround) | On, Off | |
| | ⬓ | **PIP (Picture- in- Picture)** | When external A/V devices such as VCR, Component1 (DVD), Component2 (DTV) or RF(TV) cable are connected to the TV/Monitor, PIP allows you to watch video from such devices in a small window super-imposed on the PC video signal. *NOTE: Applicated to PIP mode in activity.* | |
| | | ■ Size | Resizes PIP window. | |
| | | ■ Position | Changes PIP window position. | |

# Adjusting Your LCD TV/Monitor

## TV/Video functions and adjustments

Function icons

Function name

Setting bar

**Picture**

| Mode | Standard |
|------|----------|
| Contrast | 47 |
| Brightness | 62 |
| Sharpness | 43 |
| Color | 40 |
| Tint | 58 |

Main menu     Tool Tip

Press MENU Key

PC     TV     DTV/DVD     OSD

Table 2.  Screen controls

| Main Menu | Icon | Menus and Sub-menus | Function Descriptions ◀                                          ▶ |
|-----------|------|---------------------|--------------------------------------------------------------------|
| TV | ▄ | **Picture** | This function is active if you select an input source other than PC. (TV/DTV/DVD/VIDEO/S-VIDEO) |
| | | ■ Mode | Displays available picture modes. (Standard, Natural, Mild, Custom) |
| | | ■ Contrast | Adjusts the contrast of video or TV without affecting PC RGB's contrast. (Applicable to Custom mode only) |
| | | ■ Brightness | Adjusts the brightness of video or TV without affecting PC RGB's brightness. (Applicable to Custom mode only) |
| | | ■ Sharpness | Adjusts the sharpness of video or TV image. (Applicable to Custom mode only) |
| | | ■ Color | Changes the richness of color. (Applicable to Custom mode only) |
| | | ■ Tint | Changes the tone of color. (Applicable to Custom mode only) |

Table 2.  Screen controls  (Continued)

| Main Menu | Icon | Menus and Sub-menus | Function Descriptions ◀ ▶ |
|---|---|---|---|
| TV | 🔇 | **Sound** | The TV/Monitor has a built-in high fidelity stereo audio amplifier. The audio circuit processes audio signals from various external input sources such as DVD, VCR, TV, DTV, or PC. |
| | | ■ Mode | Displays available sound modes. (Standard, Music, Movie, Speech, Custom) |
| | | ■ Bass | Emphasizes low frequency audio. (Applicable to Custom mode only) |
| | | ■ Treble | Emphasizes high frequency audio. (Applicable to Custom mode only) |
| | | ■ Virtual Dolby (Surround) | On, Off |
| | ✎ | **Setup** | The channel system can be set in several different ways. |
| | | ■ Channel System | Select a channel system that is being used in your region. (See "NTSC broadcasting systems" on page 34) • US-Air • US-Cable  Select "US-Air" or "US-Cable" to perform the "Channel search program".  (See page 20 for "Channel search program".) |

Table 2.  Screen controls  (Continued)

| Main Menu | Icon | Menus and Sub-menus | Function Descriptions ◀                                                    ▶ |
|-----------|------|---------------------|------------------------------------------------------------------------------|
| TV | ✍ | ■ Channel Edit | In rare cases, "Channel search program" may miss a couple of channels that you want to add due to weak signals, or you may simply want to remove a channel. To add or remove a channel, please follow the steps described below.<br>• Push **MENU** button and then select "Channel Edit" under "Setup" menu, then press MENU button again<br>• Select "Add" to add the channel or select "Erase" to remove the channel. |
| | | ■ Fine Tune | Due to weak signals, some of the channels may not be tuned correctly. Select "Fine Tune" under "Setup" menu to make the video image as clear as possible.<br>• Use " ◀ ▶ " to fine tune the image quality. When you are satisfied with the setting, press " ▼ " to highlight "Save" or "Cancel" menu.<br>• Select "Save" to save or "Cancel" to cancel the setting. |
| | | ■ LNA | This function is provided to amplify signals automatically in case of bad reception.<br><br>If mis-operation occurs due to interference with the received signal, shut down the LNA(Low Noise Amplifier). |

Table 2.  Screen controls  (Continued)

| Main Menu | Icon | Menus and Sub-menus | Function Descriptions ◀                                    ▶ |
|-----------|------|---------------------|-----------------------------------------------------------|
| | | **Active Area** | ■ Normal |
| | | | ■ Wide |
| | | **Timer** | The TV/Monitor system will turn off automatically if one of three time intervals is selected.<br>• Off<br>• 30 min<br>• 60 min<br>• 120 min |
| | | **Closed Caption (US only)** | Enable or disable closed caption feature and set the appearance of closed caption text.<br>• Caption      Off/On<br>• Mode          Caption/Text<br>• Channel      1 / 2<br>• Field          1 / 2<br>• Display      Box / Shadow |
| | | **V-Chip** | See "V-Chip" on pages 23~24.<br>NOTE: If you forgot the V-Chip Password:<br>• Press and hold the Exit button on the top of the TV/Monitor for 5 seconds in TV mode.<br>The screen will blink once as the password is reset to the original state (0000).<br>• The initial V-chip password is '0000'. |

**English    19**

* Channel search program usually takes around 5
minutes to scan 125 channels. The scanning can be longer or shorter depending on the
number of channels and the video source (whether the video source is from cable or air).

* Upon completion of "Channel search program", channels are stored in
the internal memory.

# Adjusting Your LCD TV/Monitor

## DTV/DVD functions and adjustments

Function icons

Function name

Setting bar

**Contrast**

– [████████████] + 77

| PC | TV | DTV/DVD | OSD |

Main menu    Tool Tip

Press MENU Key
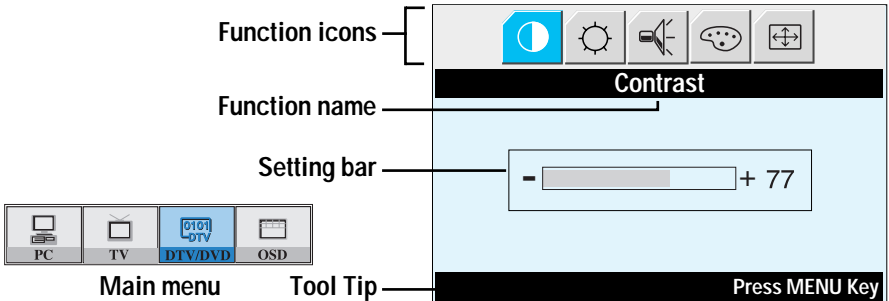
Table 3.  Screen controls

| Main Menu | Icon | Menus and Sub-menus | Function Descriptions ◀                          ▶ |
|-----------|------|---------------------|------------------------------------------------------|
| DTV/DVD | ◐ | **Contrast** | Adjusts the contrast of video or TV without affecting PC RGB's contrast. |
| | ☼ | **Brightness** | Adjusts the brightness of video or TV without affecting PC RGB's brightness. |
| | ◁ | **Sound** | The TV/Monitor has a built-in high fidelity stereo audio amplifier. The audio circuit processes audio signals from various external input sources such as DVD, VCR, TV, PC or DTV. <br> • Bass : Emphasizes low frequency audio. <br> • Treble : Emphasizes high frequency audio. <br> • Virtual Dolby (Surround) : On, Off |
| | ☺ | **Color** | The color can be changed with  the  ◀ ▶ button. The color components are user customizable. |
| | ⊕ | **Image Size** | Select DTV/DVD size. <br> • Wide <br> • Full |

*NOTE: When a 480i signal is being used through the Component inputs, the TV menu will be used for setups.*

**English    21**

# Adjusting Your LCD TV/Monitor

## OSD functions and adjustments

Function icons —

Function name —

Setting bar —

**Language**

English
Español
Français
Português

| PC | TV | DTV/DVD | OSD |

Main menu — Tool Tip — Press MENU Key
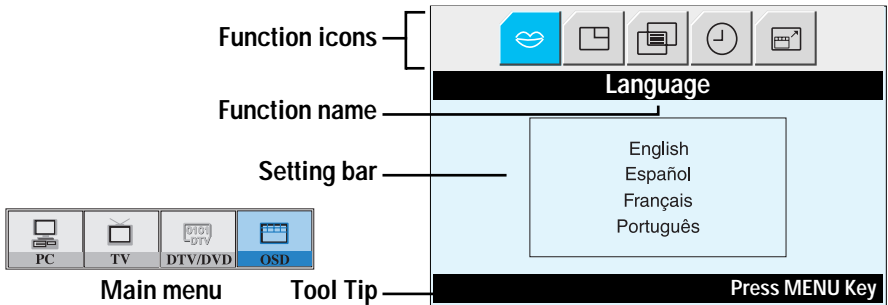
Table 4. Screen controls

| Main Menu | Icon | Menus and Sub-menus | Function Descriptions ◄                                              ► | | |
|-----------|------|---------------------|------------------------------------------------------------------------|---|---|
| OSD | ◡ | **Language** | OSD language can be changed. | | |
| | | | English | | Français |
| | | | Español | | Português |
| | ⊡ | **Position** | Moves the OSD Window to the vertical and horizontal direction. | | |
| | ⊞ | **Halftone** | Changes the opaqueness of the background of the OSD. | | |
| | ⊕ | **Duration** | The number of seconds that the OSD will remain visible before disappearing. | | |
| | ⊡ | **Size/ Melody** | Resize the OSD Window. Turns on a Melody sound that can be heard when the unit is powered on/off. | | |

**English    22**

## V - Chip

The Telecommunications Act of 1996 in USA requires that every television made, starting in 1998, be equipped with a technological device called the V - Chip. The V - Chip can block certain rated television shows so children cannot watch.
With this device, program-rating information will be
transmitted along with the television signal, and be decoded by the chip.
The chip will then compare the rating codes to values preset by the viewer.
If the rating codes are higher than the preset values, the television signal will
be blocked, and a blank screen will be displayed.

LTM1555/1755 have this feature. The V - Chip setting can be adjusted via the OSD. Use the arrow buttons on the remote control or control buttons on the front cabinet of the monitor to change the setting.

1. Select V - Chip in the TV menu, then press MENU. Enter 4 digit pin number.
    - Initial pin number is "0000"
    - If you enter an incorrect pin number "Incorrect" message will be displayed for 3 seconds.

2. V-chip lock is highlighted. Press + - to switch between On/Off

3. Setting up **TV Guidelines**
    - Use Up/Down/Left/Right arrow buttons to move around the matrix and press **MENU** button to change the value from "U" to "B" or "B" to "U"
    - **U** : Unblock     **B** : Block

|  | **All** | **FV** | **V** | **S** | **L** | **D** |
|---|---|---|---|---|---|---|
| **TV-Y** | B |  |  |  |  |  |
| **TV-Y7** | B | B |  |  |  |  |
| **TV-G** | U |  |  |  |  |  |
| **TV-PG** | U |  | U | U | U | U |
| **TV-14** | U |  | U | U | U |  |
| **TV-MA** | U |  | U | U | U |  |

| | |
|---|---|
| TV-Y : Young Children<br>TV-Y7 : Children 7 and over<br>TV-G : General Audience<br>TV-PG : Parent Guidance<br>TV-14 : Viewers 14 and over<br>TV-MA : Mature audience | FV : Fantasy Violence<br>V : Violence<br>S : Sexual Situation<br>L : Coarse Language<br>D : Suggestive Dialog |

4. Setting up MPAA rating Mode
   - Use Up/Down/Left/Right arrow buttons to move around the matrix and press **MENU** button to change the value from "U" to "B" or "B" to "U"
   - MPAA : Motion Picture Association (of) America [movie rating organization]

| | | |
|---|---|---|
| **G** | U | General Guidance |
| **PG** | U | Parental Guidance Suggested |
| **PG-13** | U | Parents Strongly Cautioned |
| **R** | U | Restricted Under 17 Requires |
| **NC-17** | U | No Children Under 17 Admitted |
| **X** | U | Adult Only |
| **NR** | U | Not Rated |

5. Entering a new pin number
   - Use number buttons to enter a new pin number. Pin number confirm menu appears.
   - Use the number buttons again to enter the pin number you entered in the previous step. If the two pin numbers do not match, "Incorrect" message will be displayed for 3 seconds.

6. Blocking Screen
   - If the incoming signal's rating is higher than the one specified, the screen will be blanked and "Excessive rating" message will be appeared.

*NOTE: When the screen is blocked by the V-Chip, and you forgot the V-Chip password , press the       EXIT button within 5 seconds on the front cabinet of the monitor and it will return to the '0000' default value.*
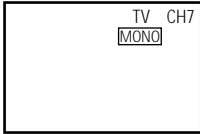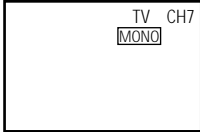
# Appendix

## Remote Control

Power On/Off ←

TV/Video mode on ←
& Source Change

Picture Settings ←

Turn on the OSD ←
Select a function

Sound mute ←

Ex) CH 125 ←
    :(+100) + 2 + 5

Timer ←

Adjustment Screen ←
Aspect ratio

Setting the Audio mode ←

Enable or disable ←
closed Caption

Setting up TV Guidelines ←
(V-Chip enable)

POWER
TV/VIDEO   PC   DISPLAY   STILL
P.STD                      S.STD
CH ▲
— VOL   MENU   VOL +
CH ▼
MUTE                       EXIT
1      2      3
4      5      6
7      8      9
+100   0      PRE-CH
SLEEP              AUTO
ASPECT   MTS   ADD/ERASE   CH SCAN
CAPTION  LOCATE   SIZE   PIP
V.CHIP                    ON

SAMSUNG

→ PC mode On

→ Display setup
information

→ Screen pause

→ Sound Settings

→ Channel Up/Down

→ Volume Up/Down

→ Turn the OSD/PIP off

→ Numeric keypads for
direct channel access

→ Previous channel

→ The values of fine,
coarse and position are
adjusted automatically

→ Add or Erase
the channel

→ Channel search

→ PIP On &
PIP source change

→ Resize PIP window

→ Change PIP window
position

**English    25**

■ **Features that can only be accessed via remote control**

| | |
|---|---|
| Display | Shows a selected video source, audio source, current channel number, sound mode and mute on the upper right corner of the screen.<br><br>TV  CH7<br>MONO |
| MTS | You can set the audio mode by using this button. When you press this button, current sound mode is displayed on the upper right corner of the screen<br><br>TV  CH7<br>MONO<br><br>*NOTE: LTM1555/1755 have an automatic stereo detection feature. Thus, depending on the audio type, the TV/Monitor automatically changes the audio mode from Mono to Stereo or vice versa.* |

## PowerSaver

This TV/Monitor has a built-in power management system called PowerSaver. This system saves energy by switching your TV/Monitor into a low-power mode when it has not been used for a certain period of time.

PowerSaver 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 Table 5 below for details.

Table 5.  Power-saving modes

| State | Normal Operation | Power-off Mode EPA/ENERGY2000 |
|---|---|---|
| Power Indicator | Green | Green, Blinking (1 sec interval) |
| Power Consumption | **LTM1555:** 38W (Max.)<br>**LTM1755:** 58W (Max.) | Less than 2W |

*NOTE:  This TV/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.*

This TV/Monitor is EPA ENERGY STAR® compliant and ENERGY2000 compliant when used with a computer equipped with VESA DPMS functionality.

For energy conservation, turn your TV/Monitor OFF when you are not using it or when leaving it unattended for long periods.

## Troubleshooting

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

Table 6. Troubleshooting – Image

| What you see... | Suggested Actions | Reference |
|---|---|---|
| Screen is black and power indicator is off. | ■ Ensure that the power cord is firmly connected and the LCD TV/Monitor is on. | Connecting your LCD TV/Monitor, page 5. |
| " Check Signal Cable" message. | ■ Ensure that the signal cable is firmly connected to the PC or video sources.<br>■ Ensure that the PC or video sources are turned on. | Connecting your LCD TV/Monitor, page 5. |
| "Sync. Out of Range" message. | ■ Check the maximum resolution and the frequency of the video adaptor.<br>■ Compare these values with the data in the Display Modes Timing Chart. | Display Modes, page 34. |
| The image is too light or too dark. | ■ Adjust the Brightness and Contrast. | Brightness, page 12.<br>Contrast, page 12. |
| Horizontal bars appear to flicker, jitter or shimmer on the image. | ■ Adjust the Fine function. | Image Lock, Fine, page 13. |
| Vertical bars appear to flicker, jitter or shimmer on the image. | ■ Adjust the Coarse function and then adjust the Fine function. | Image Lock, Coarse, page 13.<br>Image Lock, Fine, page 13. |

# Appendix

Table 6.  Troubleshooting – Image (Continued)

| What you see... | Suggested Actions | Reference |
|---|---|---|
| Blinks every second as long as the power-safe mode indicator light is on. | ■ The TV/Monitor is using its power management system.<br>■ Move the computer's mouse or press a key on the keyboard. | Power Saver, page 27. |
| Image is not stable and may appear to vibrate. | ■ Check that the display resolution and frequency from your PC or video board is an available mode for your TV/Monitor. On your computer check: Control Panel, Display, Settings. | Display Modes, page 34. |
| | ■ If the setting is not correct, use your computer utility program to change the display settings. | Installing the Video Driver, page 6. |
| | *NOTE: Your TV/Monitor supports multiscan display functions within the following frequency domain:* | |
| | ■ Horizontal frequency: | **LTM1555 :** 30 kHz ~ 69 kHz<br>**LTM1755 :** 30 kHz ~ 81kHz |
| | ■ Vertical frequency: | 56 Hz ~ 85 Hz |
| | ■ Maximum refresh rate: | **LTM1555 :** 1024 x 768 @ 85 Hz<br>**LTM1755 :** 1280 x 1024 @ 76Hz |
| Image is not centered on the screen. | ■ Adjust the horizontal and vertical position. | H-Position, page 15.<br>V-Position, page 15. |

# Appendix

Table 7.  Troubleshooting – Audio and TV

| Problem | Suggested Actions | Reference |
|---|---|---|
| No sound. | ■ Ensure that the audio cable is firmly connected to both the audio-in port on your TV/Monitor and the audio–out port on your sound card. | Connecting your LCD TV/Monitor, page 5. |
| | ■ Check the volume level. | Sound Controls. |
| Sound level is too low. | ■ Check the volume level. | Sound Controls. |
| | ■ 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. | Refer to your computer, sound card or software documentation. |
| Sound is too high pitched or too low pitched. | ■ Adjust the Treble and Bass to appropriate level. | Sound Controls, page 17. |

# Appendix

## Specifications

Table 8.  Technical and environmental specifications

| | | LTM1555 | LTM1755 |
|---|---|---|---|
| Panel | Size<br>Display Size<br>Type<br>Pixel pitch<br>Viewing Angle | 15.0" Diagonal<br>304.1 (H) x 228.1 (V) mm<br>a-si TFT active matrix<br>0.297 (H) x 0.297 (V) mm<br>70/70/60/60 (L/R/U/D)<br>(Depending on the panel manufacturer, the viewing angle may be different from this spec.) | 17.0" Diagonal<br>338 (H) x 270 (V) mm<br>a-si TFT active matrix<br>0.264 (H) x 0.264 (V) mm<br>80/80/80/80 (L/R/U/D)<br>(Depending on the panel manufacturer, the viewing angle may be different from this spec.) |
| * Frequency | Horizontal<br>Vertical<br><br>Display color | 30 ~ 69 kHz<br>56 ~ 85 Hz<br><br>16,777,216 colors | 30 ~ 81 kHz<br>56 ~ 85 Hz (~XGA)<br>60 ~ 76 Hz (SXGA)<br>16,777,216 colors |
| Display Resolution | Optimum Mode<br>Maximum Mode | 1024 x 768 @ 60 Hz<br><br>1024 x 768 @ 85 Hz | 1280 x 1024 @ 60 Hz<br><br>1280 x 1024 @ 76 Hz |
| Input Signal | Sync.<br><br>Video signal | H/V Separate, TTL, P. or N.<br>H/V Composite, TTL, P. or N.<br>Sync-on-green 0.3 Vp-p, N.<br>0.7 Vp-p @ 75 ohm | |
| TV | Color system<br>Sound system | NTSC<br>M/N | |
| Video | Color system<br>Video format | NTSC<br>SVHS, CVBS, Y Pb Pr | |
| Power Supply | Input | AC 90 ~ 264 V, 1.0 ~ 0.5A (50Hz / 60Hz) | |
| | Output | DC 14V/3A | DC 14V/3.5A |

* Referring to Preset timing modes, page 34.

Table 8.  Technical and environmental specifications (Continued)

|  |  | LTM1555 | LTM1755 |
|---|---|---|---|
| Power Consumption | Maximum Power Saving | 38W<br>< 2 W | 58 W<br>< 2 W |
| Dimensions/ Weight | Unit (WxHxD) :<br>TV/Monitor body | 18.6 x 12.4 x 2.0 inch/7.2 lbs<br>(474 x 317 x 51 mm/3.27kg) | 20.8 x 14.4 x 2.2 inch/9.3 lbs<br>(530 x 367 x 57 mm/4.25 kg) |
|  | With stand | 18.6 x 15.6 x 8.0 inch/ 8.75 lbs<br>(474 x 397 x 204mm/3.97 kg) | 20.8 x 17.6 x 8.0inch/10.9 lbs<br>(530 x 447 x 204 mm/4.95 kg) |
| Environmental Considerations | Operating Temperature<br>Operating Humidity<br>Storage Temperature<br>Storage Humidity | 50 ˚F to 104 ˚F (10 ˚C to 40 ˚C)<br><br>10% to 80%<br><br>-13 ˚F to 113 ˚F (-25 ˚C to 45 ˚C)<br><br>5% to 95% | |
| Audio Characteristics | Audio Input 1<br>Audio Input 2<br>DTV<br>DVD<br>Headphone out<br>Frequency Response | RCA Jack Red(R) White(L), 0.5Vrms (-9dB)<br>3.5ø Stereo Jack, 0.5Vrms (-9dB)<br>RCA Jack Red(R) White(L), 0.5Vrms (-9dB)<br>RCA Jack Red(R) White(L), 0.5Vrms (-9dB)<br>Max. 10mW Output (3.5ø Stereo Jack 32Ω)<br><br>RF: 80Hz ~ 15kHz (at- 3dB)<br>A/V: 80Hz ~ 20kHz (at - 3dB) | |

# Appendix

## Pin Assignments

Table 9.  15 pin D-sub connector

| Pin | Separate H/V | Composite H/V | Sync-on-green |
|-----|--------------|---------------|---------------|
| 1 | Red | Red | Red |
| 2 | Green | Green | Green + H/V Sync |
| 3 | Blue | Blue | Blue |
| 4 | GND | GND | GND |
| 5 | GND (DDC Return) | GND (DDC Return) | GND (DDC Return) |
| 6 | GND-Red | GND-Red | GND-Red |
| 7 | GND-Green | GND-Green | GND-Green |
| 8 | GND-Blue | GND-Blue | GND-Blue |
| 9 | No Connection | No Connection | Not used |
| 10 | GND-Sync/Self Test | GND-Sync/Self Test | GND-Sync/Self Test |
| 11 | GND | GND | GND |
| 12 | DDC _SDA | DDC _SDA | DDC _SDA |
| 13 | H_Sync | H/V Sync | Not used |
| 14 | V_ Sync | Not used | Not used |
| 15 | DDC _SCL | DDC _SCL | DDC _SCL |

# Appendix

## Display Modes

If the signal from the system equals the standard signal mode(1024 x768), the screen is adjusted automatically. If the signal from the system doesn't equal the standard signal mode, adjust the mode by refering to your Videocard user guide otherwise there may be no video. For the display modes listed below, the screen image has been optimized during manufacture.

Table 10.  Preset timing modes

| Mode | Resolution | Horizontal Frequency (kHz) | Vertical Frequency (Hz) | Pixel Clock Frequency (MHz) | Sync Polarity (H/V) |
|---|---|---|---|---|---|
| VGA | 720 x 400 | 31.469 | 70.087 | 28.322 | –/+ |
| | 640 x 480 | 31.469 | 59.940 | 25.175 | –/– |
| | 640 x 480 | 37.500 | 75.000 | 31.500 | –/– |
| | 640 x 480 | 43.269 | 85.008 | 36.000 | –/– |
| SVGA | 800 x 600 | 46.875 | 75.000 | 49.500 | +/+ |
| | 800 x 600 | 53.674 | 85.061 | 56.250 | +/+ |
| XGA | 1024 x 768 | 48.363 | 60.004 | 65.000 | –/– |
| | 1024 x 768 | 60.023 | 75.029 | 78.750 | +/+ |
| | 1024 x 768 | 68.677 | 84.997 | 94.500 | +/+ |
| SXGA (LTM1755 only) | 1280 x 1024 | 63.981 | 60.020 | 108.000 | +,–/+,– |
| | 1280 x 1024 | 79.976 | 75.025 | 135.000 | +/+ |

Table 11.  NTSC Broadcasting Systems

| Color System | Sound System | Stereo System | Channel System | Countries |
|---|---|---|---|---|
| NTSC | M | A2 | US | Korea |
| | | *BTSC (SAP) | US | USA,Canada,Chile, Venezuela, Cuba, Colombia, Jamaica, Mexico, Panama, Peru, Philippines, Puerto-Rico, Taiwan |
| | | EIAJ | Japan | Japan |

*NOTE: This Model is set up for BTSC(SAP).

## Attaching a wall or Arm mounting device

The TV/Monitor supports VESA mounting standard for use with various VESA mounting devices.  To install any VESA mounting device, please follow the instructions given.
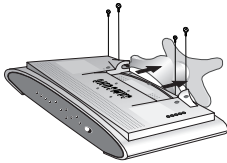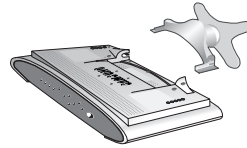


A                                              B

**1**     Lay the LCD TV/Monitor face-down on a flat surface with a cushion or other soft materials to protect the screen.

**2**     Remove all cables connected on the TV/Monitor.

**3**     Remove the four screws and then remove the Stand from the LCD TV/Monitor. (refer to the pictures A&B)

**4**     Re-connect all cables you removed in step 2.

**5**     Now you are ready to install Wall/Arm mounting device.

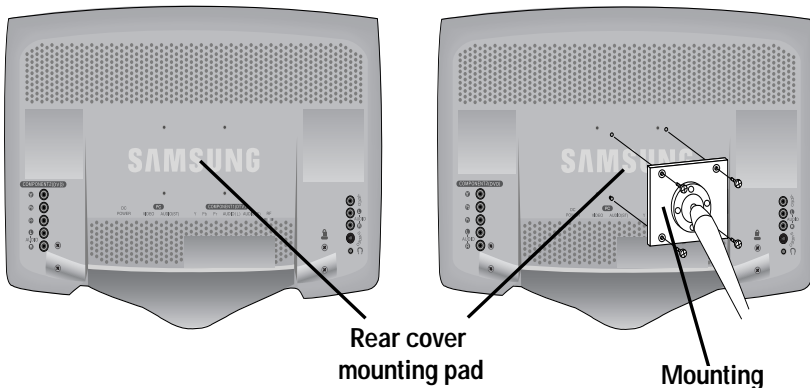## Installing VESA compliant mounting devices

Refer to page 35 to fold the base.



**Rear cover
mounting pad**

**Mounting**

Align the mounting interface pad with the holes in the rear cover mounting pad and secure it with the four screws that come with the arm-type base, wall mount hanger or other bases.

### Wall Mount Instructions

The following instructions apply to a hollow sheet-rock wall only. Tools/Hardware needed - Philips screwdriver, four toggle bolts, 5/8in dia. Drill bit and drill. Contact Ergotron at (800) 888-8458 to purchase the triple pivot direct mount adapter and wall mount bracket kit.

- **LTM1555 (15")** : No. 47 - 007 - 099 (Pivot direct mount adapter)
  No. 97 - 101 - 003 (Wall mount bracket kit)
- **LTM1755 (17")** : No. 47 - 007 - 099 - 02 (Pivot direct mount adapter)
  No. 97 - 101 - 003 - 00 (Wall mount bracket kit)

Align the wall mount bracket on the wall at the desired height, making sure that the bracket will be mounted between the wall studs. Mark the four corner openings and drill four 5/8-dia. holes.
Assemble the wall mount kit according to the instructions provided with it.
Securely attach Ergotron's flat panel, triple pivot direct mount adapter to the back of the TV/Monitor using the four 4mm, .7 pitch x 10mm screws provided with the arm.
Secure the assembly to the wall using four 3/16 by 3-inch long toggle bolts.

## Retractable Stand
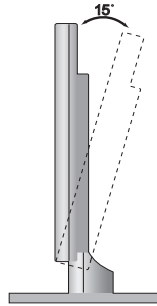


*NOTE: The maximum tilt angle is 15 degrees in the backward direction. Please do not tilt the TV/Monitor outside the specified range. **Using excessive force to tilt the TV/Monitor may cause permanent damage to the mechanical part of the stand.***

## Maintenance of Your LCD TV/Monitor

**WARNING:** To avoid risk of electric shock, do not disassemble the TV/Monitor cabinet (except for gaining access to the cable connectors as described on page 5). Users cannot service the TV/Monitor. User maintenance is restricted to cleaning as explained below:

Unplug the TV/Monitor from the power outlet before cleaning.

■ To clean your LCD screen, lightly dampen a soft, clean cloth with water or mild detergent. If possible, use a special screen cleaning tissue or solution suitable for the antistatic coating.

■ To clean the TV/Monitor cabinet, use a cloth lightly dampened with a mild detergent.

Never use flammable cleaning material to clean your LCD TV/Monitor or any other electrical apparatus.

# Index

## FCC Information

### User Instructions

The Federal Communications Commission Radio Frequency Interference Statement includes the following warning:

**Note:** This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation.

If this equipment does cause harmful interference to radio or television receptions, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

■ Reorient or relocate the receiving antenna.
■ Increase the separation between the equipment and receiver.
■ Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
■ Consult the dealer or an experienced radio/TV technician for help.

### User Information

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

If necessary, consult your dealer or an experienced radio/television technician for additional suggestions. You may find the booklet called How to Identify and Resolve Radio/TV Interference Problems helpful. This booklet was prepared by the Federal Communications Commission. It is available from the U.S. Government Printing Office, Washington, DC 20402, Stock Number 004-000-00345-4.

### Warning

User must use shielded signal interface cables to maintain FCC compliance for the product.

### Declaration of conformity for products Marked with FCC Logo

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

The party responsible for product compliance:
SAMSUNG ELECTRONICS CO., LTD
America QA Lab of Samsung
85 West Tasman Drive
San Jose, CA 95134 USA
Tel) 408-544-5124
Fax) 408-544-5191

Provided with this monitor is a detachable power supply cord with IEC320 style terminations. It may be suitable for connection to any UL Listed personal computer with similar configuration. Before making the connection, make sure the voltage rating of the computer convenience outlet is the same as the monitor and that the ampere rating of the computer convenience outlet is equal to or exceeds the monitor voltage rating.

For 120 Volt applications, use only UL Listed detachable power cord with NEMA configuration 5-15P type (parallel blades) plug cap. For 240 Volt applications use only UL Listed Detachable power supply cord with NEMA configuration 6-15P type (tandem blades) plug cap.

## IC Compliance Notice

This Class B digital apparatus meets all requirements of the Canadian Interference-Causing Equipment Regulations of ICES-003.

Cet appareil Numérique de classe B respecte toutes les exigences du Règlemont ICES-003 sur les équipements produisant des interférences au Canada.

## MPR II Compliance

This monitor complies with SWEDAC(MPR II) recommendations for reduced electric and magnetic fields.

## European Notice

Products with the CE Marking comply with both the EMC Directive (89/336/EEC), (92/31/EEC), (93/68/EEC) and the Low Voltage Directive (73/23/EEC) issued by the Commission of the European Community.
Compliance with these directives implies conformity to the following European Norms:

■ EN55022:1998 – Radio Frequency Interference
■ EN55024:1998 – Electromagnetic Immunity
■ EN61000-3-2:1995 + A1 + A2 – Power Line Harmonics
■ EN61000-3-3:1995 – Voltage Fluctuations
■ EN60950 – Product Safety.

**U.S.A.:**
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Stafford Park 12 Telford, Shropshire, TF3 3BJ
Tel. : (0870) 242 0303
Fax. : (01952) 292 033
http://samsungservice.co.uk/

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BANGKOK 10500
TEL : 0-2635-2567
FAX : 0-2635-2556

**SOUTH AFRICA:**
Samsung Electronics,5 Libertas Road, Somerset Office Park,
Bryanston Ext 16. Po Box 70006, Bryanston,2021, South Africa
Tel : 0027-11-549-1621
Fax : 0027-11-549-1629
http://www.samsung.co.za

**BRASIL:**
Samsung Eletrônica da Amazonia Ltda.
R. Prof. Manoelito de Ornellas, 303, Terro B
Chácara Sto. Antônio, CEP : 04719-040 São Paulo, SP
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