# USER MANUAL

19.0 LCD

- The size and appearance of this monitor may be changed for improvement without notice.

- This user manual contains proprietary information that is protected by copyright.
  All rights are reserved. No part of this user manual may be reproduced, photocopied, transcribed, translated or transmitted in whatsoever from without the prior permission of the manufacturer.

- Damage caused by using the unauthorized components or disregard of the information and cautions in this user manual is not covered by the warranty service.

- If you have problem with your monitor, please check TroubleShooting in this user manual before asking for help service center.

- The information in this user manual is subject to change without notice.

- If you let display the static images on the LCD monitor for prolonged time, the LCD monitor may show you the screen images retention. It is not a continuous condition and will fade away in a period time. The Image retention is a condition that may occur on all LCD monitors.

- The LCD consists of about 5 million pixels. One pixel includes 3 dots and some of dots could be seen bright and dark compared to other dots. Please, note that it may occur on all LCD monitors and it is not a product inferiority.
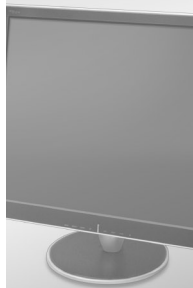
CE Conformity Notice

The Product herewith complies with requirements of the Low Voltage Directive 73/23/EEC and the EMC Directive 89/336/EEC and carries the 'CE' mark accordingly.

Confirms to the following hamonized European standards have been applied:

EMC : EN 55022 Class B : 1998
    EN 55024 : (EN 61000-4-2 : 1995, A1 : 1998, EN61000-4-3 : 1996, EN 61000-4-4:
    1995, EN61000-4-5 : 1995, EN61000-4-4 : 1996, EN61000-4-8 : 1993 and
    EN61000-4-11 : 1994)
    EN61000-3-3 : 1995, A1 : 98, A2 : 98
    EN61000-3-3 : 1995

FCC Compliance Statement

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.

INFORMATION TO THE USER

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 resonable 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 communication. 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 reception, 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 an receiver.

- Connect the equipment into an outlet in a circuit different from that to which the receiver is connected.

- consult the dealer or an experienced radio / TV technician for help.

WARNING

Changes or modifications not expressly approved by the manufacturer could void the use's authority to operate the equipment.

After opening the box, make sure the following items are provided with the monitor. If you find that any of these items is missing or appears damaged, contact your dealer immediately.

Monitor Driver
User Manual

Monitor

DC Adapter

Power Cord

VGA Signal Cable

Audio Cable

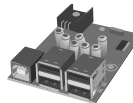Optional (Simultaneous Selection is not possible)

TV

Remote Control   Remote Control(TTX)   TV Tuner(included)

USB

USB 4 Port   USB Cable

Optional

DVI

DVI(Digital Video Interface) Cable

VIDEO

Audio(RCA) Cable

Unbundled

Video(RCA) Cable   S-Video Cable

*The actua/ monitor and accessories may appear differently from those shown on the above figure.

Instructions for Safety

▶ **Matters that demand special attention are divided into 'Warning' and 'Caution', and are detailed a follows.**

⚠ **Warning**   In case of the possibility that a serious injury or death may occur during a violation of the instructions.

⚠ **Caution**   In case of the possibility that a slight injury or product damage may occur during a violation of the instructions.

⚠ Warning

● **Don't plug the power adapter into a non-grounding power outlet.**

● **Never touch the power plug with wet hands.**
An electric shock accident may occur.

● **Don't plug with other electrical cords into one power outlet.**
An electric shock or fire accident may occur.

● **Only use the adapter provided with the monitor.**
An electric shock or fire accident may occur.

● **Don't use a power cord or plug that is frayed or damaged.**
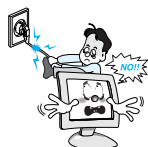An electric shock or ignition may be caused.

● **Insert the plug completely so that the power supply unit can be connected tightly.**
Unsafe power connection may cause a fire.

⚠ **Warning**

- **Keep the power cord from proximity to a heating instrument.**
  The covering material of the cord may melt, causing a fire or electric shock.

- **Grasp the power plug at the base to remove it from the wall, and pull firmly but gently.**
 If you yank at the cord, the wire may be broken, causing ignition or heat generation.

- **Pull the power cord out when the monitor is not used for a long time, or while you are away.**
  A dust covering may cause an electric shock, electric leakage, or fire by heat generation, ignition, and insulation degradation.

- **Select a cool, dry area and protect your monitor from extremes in temperature, humidity, dust and smoke.**
  Accidents of electric shock, fire or failure may occur.

- **Avoid direct sunlight or any other source of heat such as a fireplace.**
  A fire or electric shock accident may be caused.
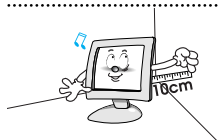
- **Place the monitor at a proper distance (over 10 cm) away from the wall for sufficient ventilation.**
  A fire may be caused due to an increase in internal temperature.

- **Place the monitor in a well-ventilated room.**
  A fire may be caused due to an increase in internal temperature.

- **Note that air-flow holes must not be blocked such as a table cloth or curtain.**
  A fire may be caused due to an increase in internal temperature.

⚠ Warning

● **Don't block or obstruct the air-flow holes of the monitor.**
A fire or damage of the monitor may be caused due to an increase in internal temperature.

● **Don't spill liquids such as chemicals, water on the monitor.**
A fire or electric shock accident may be caused.

● **Never disassemble and repair the monitor but trained repair engineers.**
A fire or electric shock accident may be caused. If you need the repair and adjustment, please contact the appropriate sales agency or customer counsel window for check-ups.

● **Don't insert metals (such as coins, hair pins or ironware) or flammable items (such as paper or matches) into the monitor.**
A fire or electric shock accident may be caused.

● **Stop using in case of smoke or abnormal odors. Immediately turn off the power and pull out the power cord from the wall and then contact the service center.**
Continuity of use in such a state may cause a fire or electric shock.

● **Don't spray any liquids directly onto the monitor.**
An electric shock or fire accident may occur.

● **Clean the LCD panel with a soft material such as cotton cloth after removing the power cord from the monitor.**
A fire or electric shock accident may be caused.

⚠ Caution

● **Place the monitor on a stable and secure surface.**
Fall or displacement of the monitor may cause an injury.

● **Turn off the monitor and disconnect all cables from the monitor before moving the monitor.**

● **Be careful with the shock when moving the monitor.**

● **Don't scratch or jolt the monitor surface.**
Damage or failure of the panel may be caused.

● **Take hold of the monitor with both hands setting the panel forward.**
If the monitor is dropped, contact the service center to check it for a susceptibility to fire or electric shock.

● **Often take a rest to protect your eyes when you work for a long time.**

● **Don't press upon the panel or scratch the surface with your hands or sharp item such as a nail, pens.**
Damage or failure of the panel may be caused.

● **The fluorescent light of the monitor contains a mercury which could be exploded. Don't discard or bury the monitor without permission of the law concerned.**

CONTENTS

◉ **Adopt the 19.0" TFT LCD Narrow Bezel Panel**

Adopt the 19.0" LCD(Liquid Crystal Display) narrow bezel panel which allows you efficient use in a small space due to the slim design with wide screen.

◉ **AUDIO**

It gives user an amplified stereo sound through internally installed speakers (2 W).

◉ **Support DVI (Digital Video Interface) (Optional)**

High quality screen through direct digital signal from the computer.

◉ **Support the USB Ports (Optional)**

It can be embedded to use the USB without an external Hub.

◉ **Enable to watch TV (Optional)**

Enable to watch TV after connecting antenna cable.

1.2 Installing the Support

Installing the Support

For safe use of the LCD monitor, it is necessary to fix the base. Install the base as shown in the figure below.
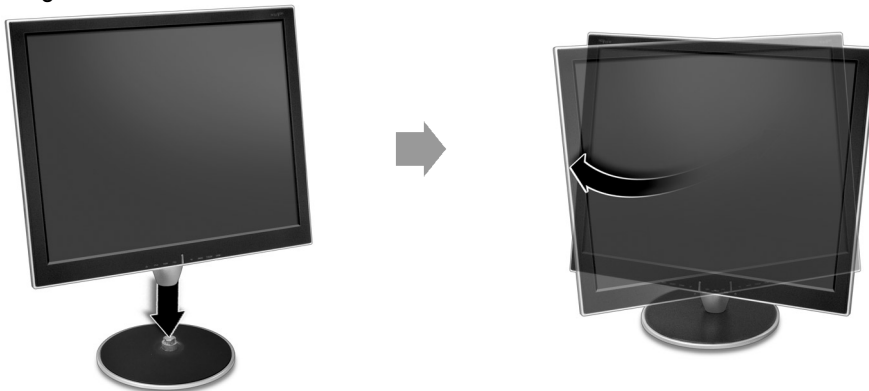
Caution

Be careful not to damage the LCD panel when installing the base.

1.3 Monitor Overview

This section identifies the name of each component of the monitor and briefly describes the function of each component.

Front Side

TFT LCD Display

Displays the current contents of the display.

SELECT Button

Selects the OSD menu item and the submenu item to be adjusted in the OSD menu window and save the modified value at any selected item. (If you press continuously every two times, the input source will be switched.)

MENU Button

Displays or Exits the OSD menu window.

DOWN Button

Moves to the down menu item in the OSD menu window.

UP Button

Moves to the up menu item in the OSD menu window.

LEFT Button

Decreases the value of the selected item. (Decreases the volume without pressing the **MENU** Button.)

RIGHT Button

Increases the value of the selected item. (Increases the volume without pressing the **MENU** Button.)

POWER Button

Turns the monitor on and off.

AUTO Button

When you press this button, it is automatically adjusted to the most appropriate condition to present mode. This does not function when DIGITAL VIDEO CARD(DVI Card) is used. (It is adjusted automatically)

Note

When watching the TV after connected TV tuner(Optional), use the **UP/DOWN** Button without pressing the **MENU** Button to select TV Channel.

DOWN   UP

Rear Side

ANALOG Connector

Connects the VGA signal cable to the VGA connector on the computer.

DC-IN

Connects the DC adapter to input the power.

AUDIO IN

Connects the audio cable to the LINE OUT jack on the computer or the stereo jack on the camcorder/VTR.

AUDIO OUT

Connects a set of headphones or external speakers.

DVI Connector (DIGITAL) (Optional)

Connects the DVI cable to the DVI connector on the computer.

TV Tuner (Optional)

Connects the TV antenna cable.

USB DOWN 4 Port (Optional)

Connects USB devices.

USB UP Port (Optional)

Connects the USB cable to the USB connector on the computer.

VIDEO Jack (Optional)

Connects the video cable to the VIDEO jack on the camcorder or VTR.

S-VIDEO Connector (Optional)

Connects the s-video cable to the S-VIDEO connector on the camcorder or VTR.

Note

▶ **Self Diagnostics (ANALOG)**
If the signal cable is improperly connected between the monitor and the computer, the Self Diagnostics **ANALOG NO SIGNAL** message appears on the monitor.

```
SELF DIAGNOSTICS
ANALOG
NO SIGNAL

CHECK SIGNAL CABLE
```
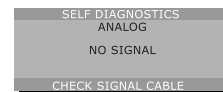
▶ **Self Diagnostics (DIGITAL)(Optional)**
If the signal cable is improperly connected between the monitor and the computer, the Self Diagnostics **DIGITAL NO SIGNAL** message appears on the monitor.

```
SELF DIAGNOSTICS
DIGITAL
NO SIGNAL

CHECK SIGNAL CABLE
```

▶ To enjoy the sound with your monitor, at first you must connect the audio cable to AUDIO IN jack on the monitor and LINE OUT jack on the computer, and then connect a set of headphones or external speakers.

1.4 Connecting the Peripheral Devices

Turn off the monitor, computer and other peripheral devices before connecting the monitor and peripheral devices.

1 Connecting the power

Plug into the power outlet at 220V or 110V. (The voltage is set utomatically.)

DC Adapter

Power Cord

DC-IN Jack
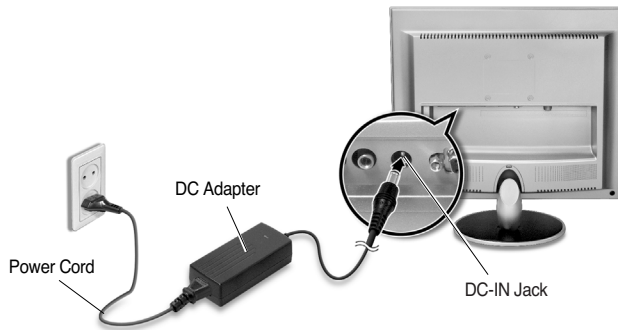
2 Connecting the computer

Connect the VGA cable to the Analog connector or the DVI cable to the DVI connector on the computer.

◉ Connecting the Analog Connector

Analog Connector

Analog Connector
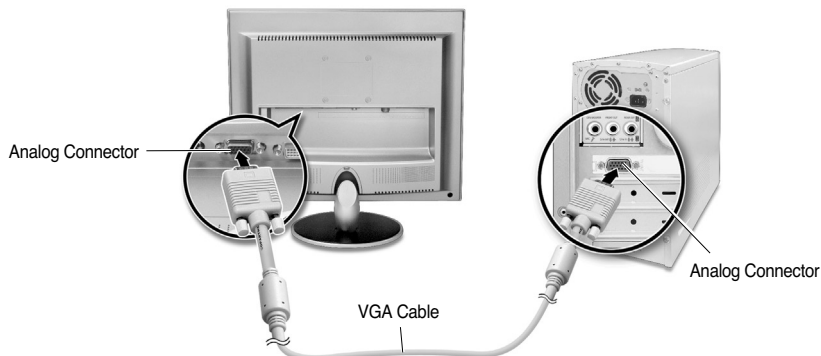
VGA Cable

◉ Connecting the DVI Connector(Optional)

DVI Connector

DVI Connector

DVI Cable
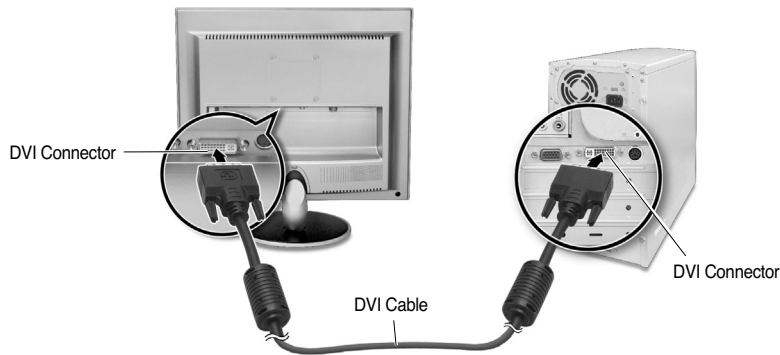
3 Connecting Audio Devices

Connect the audio cable to the AUDIO IN on the monitor and the LINE OUT on the computer or connect the audio cable (RCA) cable to the AUDIO IN on the monitor and the stereo on the camcorder/TV and connect a set of headphones or external speakers to the AUDIO OUT.

Set of headphones

AUDIO OUT

or

External Speakers

LINE OUT

AUDIO IN

Camcorder

Stereo

AUDIO(RCA) Cable

AUDIO Cable
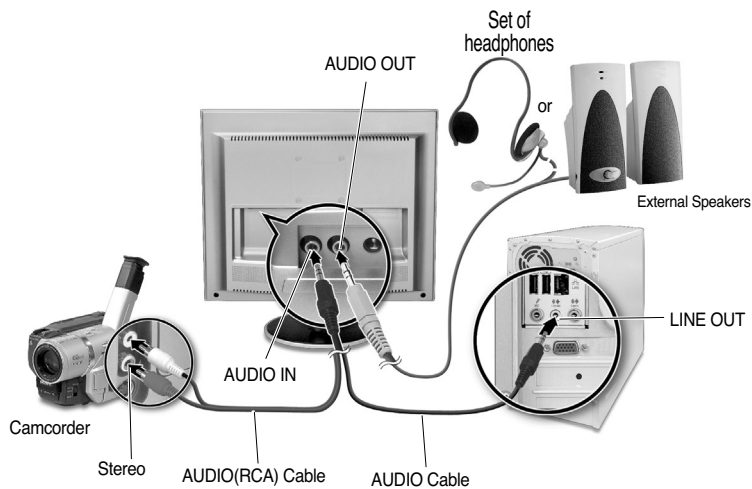
4 Connecting the Camcorder(Optional)

Connect the S-VIDEO connector or VIDEO connector.

⦿ **S-VIDEO Connector**

Camcorder

S-VIDEO
Connector

VTR
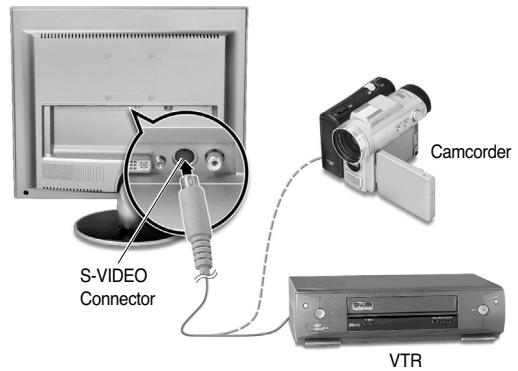
⦿ **VIDEO Connector (RCA Type)**

Camcorder

VIDEO
Connector

VTR
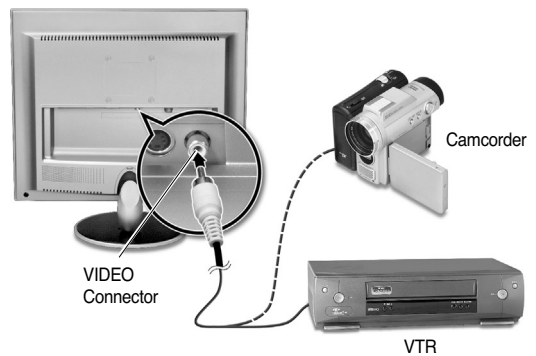
5 Connecting the TV Antenna(Optional)

TV Tuner (Optional)

TV Antenna Cable

1-7
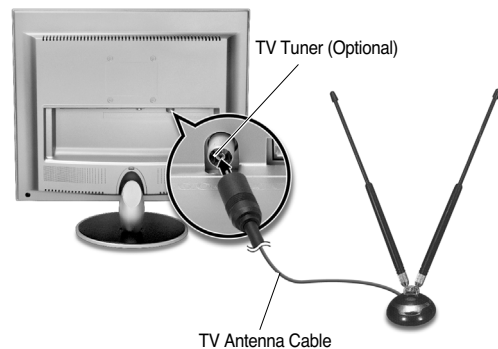
6 Connecting USB Devices (Optional)

At first, connect the USB cable to the USB UP port on the monitor and USB connector on the computer and then, connect USB devices to the USB DOWN port on the monitor.

USB DOWN Port

USB UP Port

USB Connector

USB Cable

USB Keyboard

USB Mouse

USB CCD Camera

or

or
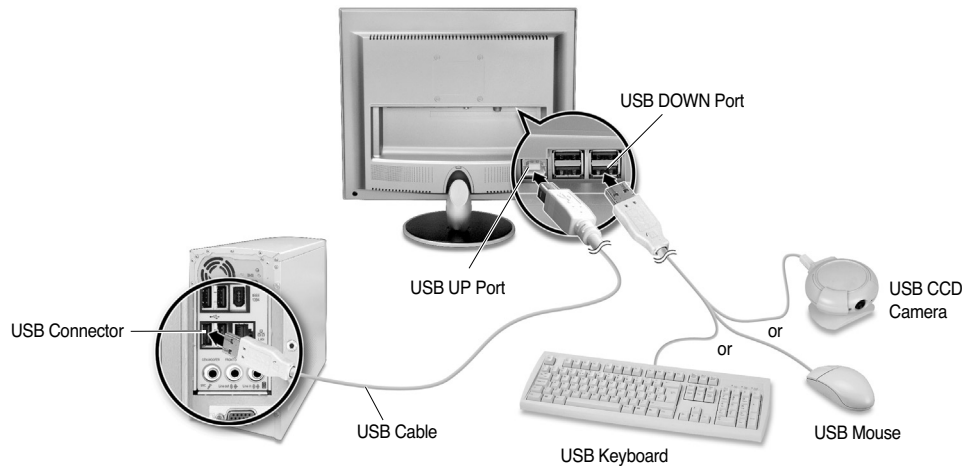
2.1 Installing the Monitor Driver Under Windows

1 Insert the monitor driver installation CD into the CD-ROM drive.

2 To install the driver, select the relevant model in the **Install the Driver** window, which is displayed automatically .

3 To use the monitor as a DVI, by connecting a computer that supports DVI, select **19.0 DIGITAL MONITOR**.

4 If the program doesn't run automatically, go to the drive containing the driver installation CD and run the setup.exe file.

Installing the Monitor Driver

2.2 Installing the Monitor Driver Under Linux

Linux

1 You'd make xf86config file to run X-Window. Your monitor is surely and easily configured with this file. This file will be made as running xf86config.

2 Press Enter in the first and second window after running xf86config file.

3 In third window, we come up with the mouse setting window.

4 Configure it as opt for user system.

5 Next will be the screen for selecting Keyboard.

6 Configure it as opt for user system.

7 First, configure a horizontal frequency. Please refer to the horizontal frequency in monitor manual. (User may directly input frequency.)

8 Next, configure a vertical frequency. Please refer to the horizontal frequency in monitor manual. (User may directly input frequency.)

9 Then, configure a monitor.

10 Type in the model name of monitor. The monitor's identification and description (typed in here) aren't directly related with the execution of X-Window.

11 After complete with other hardware settings, run X-Window.

12 As the configuration has been successfully finished, save a configuration file.

13 Now run X-Window. Theoretically, it is supposed to be executed. But in some cases, it won't even start. In this case, edit a xf86config file.

3.1 Selecting and Adjusting the OSD(On Screen Display) Menu

**You can select the OSD menu in the OSD window by using all the control buttons under the
display. To change the current settings or adjust it to what you prefer, please follow these steps.**

Selecting and Adjusting the OSD Menu

```
MENU  ➡  UP/DOWN  ➡  SELECT  ➡  UP/DOWN
                        (Select the main menu item)           ⬇

MENU  ⬅  SELECT  ⬅  LEFT/RIGHT  ⬅  SELECT
(Exit the OSD menu window)  (Save the modified value)          (Select the submenu item)
```
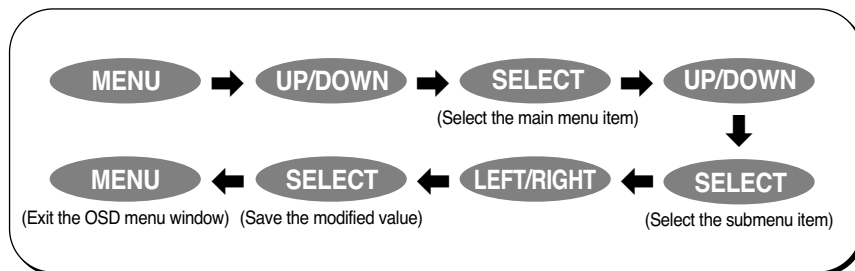
1 Press the **MENU** button to open the OSD menu window.

2 Press the **UP/DOWN** button to move the desired main menu item.

3 The main menu item you moved is highlighted, press the **SELECT** button.

4 Press the **UP/DOWN** button to move the desired submenu item.

5 The submenu item you moved is highlighted, press the **SELECT** button.

6 Press the **LEFT/RIGHT** button to modify the current value.

7 Press the **SELECT** button to save the modified value.

8 To close the OSD menu window. press the MENU button or select **Exit**' (in the submenu
window) in order.

Note

OSD window will be disappeared in a few seconds if there's no input on OSD windows.

OSD Main Menu

Software Version

```
    MAIN MENU    VER  1.A1
 ◑  BRIGHTNESS/CONTRAST
 �  COLOR
 ▦  POSITION
 ▩  SETUP
 ▨  EXIT
  1024×768    48.3kHz/  60Hz
```

Screen Resolution   Screen Frequency
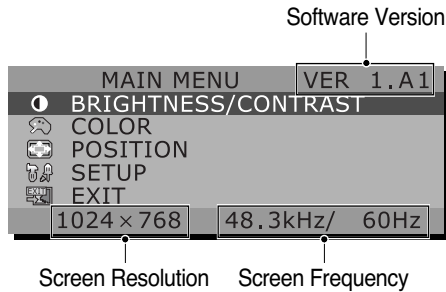
Note

If the INPUT SOURCE is DVI, you cannot select COLOR and POSITION Menu.

OSD Sub Menu

◉ ◑ BRIGHTNESS/CONTRAST

Controls the brightness and contrast of the display.

```
BRIGHTNESS ◀▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮···▶
CONTRAST   ◀▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮···▶
EXIT
```

BRIGHTNESS : Controls the brightness of the display.

CONTRAST : Adjusts the level of difference between light and dark areas of the display.

EXIT : Exits BRIGHTNESS/CONTRAST menu.

◉ � COLOR

Controls the color(Red, Green, Blue) of the display.

```
   PRESET1      PRESET2
RED        ◀▮▮▮▮▮▮▮▮▮▮▮·········▶
GREEN      ◀▮▮▮▮▮▮▮▮▮▮▮·········▶
BLUE       ◀▮▮▮▮▮▮▮▮▮▮▮·········▶
EXIT
```
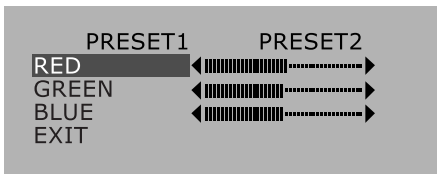
RED : Changes the value of red.

GREEN : Changes the value of green.

BLUE : Changes the value of blue.

EXIT : Exits COLOR menu.

◉ ▦ **POSITION**

Adjusts the position of the display.

```
HORIZONTAL ◀▓▓▓▓▓▓▓▓▓▓▓----▶
VERTICAL    ◀▓▓▓▓▓▓▓▓▓▓----▶
CLOCK       ◀▓▓▓▓▓▓▓------▶
PHASE       ◀▓▓▓▓▓▓▓▓▓----▶
EXIT
```
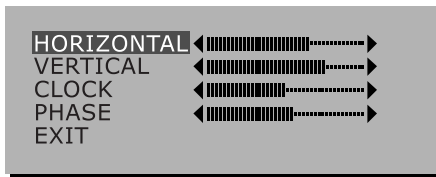
HORIZONTAL : Adjusts the horizontal position of the display.

VERTICAL : Adjusts the vertical position of the display.

CLOCK : Increases or decreases the number of pixel to adjust the horizontal size.

PHASE : Adjusts the focus and clarity of the display.

EXIT : Exits POSITION menu.

◉ ▦ **SETUP**

Controls and selects the OSD position, OSD time and OSD language of the display.

```
OSD POSITION  ▶ 3
OSD TIME      ▶ 21 SEC
LANGUAGE      ▶ ENGLISH
INPUT SOURCE  ▶ ANALOG
CAPTION       ▶ CC1
V-CHIP        ▶
EXIT
```
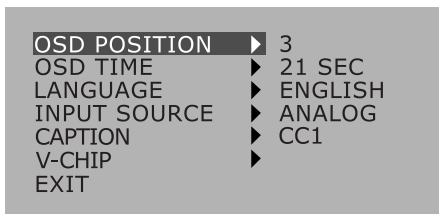
OSD POSITION : Adjusts the position of the OSD window.

OSD TIME : Adjusts the waiting time the OSD fades away. Can adjust the waiting time up to 60 seconds the OSD fades away if you do not input the OSD button.

LANGUAGE : Adjusts the language of the OSD window. (ENGLISH, DEUTSCH, FRANAIS, ESPAÑOL, ITALIANO)

INPUT SOURCE : Selects the input source according to the display device you connected.

- DIGITAL : Selects when connect the DVI cable to the DVI connector of the computer.
- ANALOG : Selects when connect the VGA cable to the VGA connector of the computer.
- S-VIDEO : Selects when connect the S-VIDEO cable to the S-VIDEO connector of the camcorder.

- COMPOSITE : Selects when connect the VIDEO cable to the VIDEO jack of the
camcorder.

- TUNER : Select when connected with TV. (Possible to use when TV Tuner is installed)

CAPTION : You can select four channels each for CAPTION and Text(Optional)

V-CHIP : Enters V-CHIP menu (Refer to pages 1-19)(Optional)

◎ 🖳 **EXIT**

Exits the OSD menu.

Caution(Depends on options)

When you press the **SELECT** button in Windows display, the current input source will be
appeared and it will be switched to ANALOG ▶ DIGITAL ▶ COMPOSITE ▶ S-VIDEO ▶
TUNER(Optional) by pressing the **SELECT** button every two times continuously.

Note

▶ **The OSD menu when connect the TV tuner(Optional)**
The OSD menu window appears with pressing **MENU**
button after connecting the TV tuner.

◎ 🎮 **COLOR**

```
MAIN MENU    VER 1.A1
① BRIGHTNESS/CONTRAST
   COLOR
   CHANNEL
   SETUP
   EXIT
   TUNER
```

```
SHARPNESS ◀▮▮▮▮▮▮▮▮▮▮----▶
COLOR     ◀▮▮▮▮▮▮▮▮▮----▶
TINT      ◀▮▮▮▮▮▮▮▮▮----▶
EXIT
```
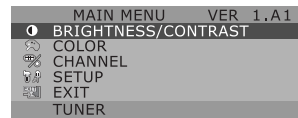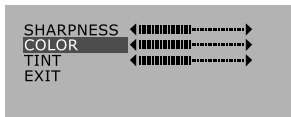
● **SHARPNESS** : Adjusts the level of display
sharpness.
● **COLOR** : Adjusts the amount of RGB(Red, Green,
Blue) color from white color in the display.
● **TINT** : Adjusts the tint of the display color.
● **EXIT** : Exits COLOR menu

◉ 🏸 **CHANNEL(NTSC)**

```
AIR/CATV          ▶   CATV
AUTO CHANNEL      ▶   STOP
MANUAL CHANNEL▶       C   9 ADD.
FINE                  O
EXIT
```

● **AIR/CATV**
- AIR : Selects when watching the air TV.
- CATV : Selects when watching the CATV.
● **AUTO CHANNEL** : Automatically memorize all the active TV or CABLE channels.
– START : Starts detecting the active channels. – STOP : Stops detecting the active channels.
● **MANUAL CHANNEL** : Manually memorize or erase the TV or CABLE channel.
● **FINE** : Adjust when the display color is blur or unfocused.
● **EXIT** : Exits CHANNEL Menu.

▶ **The OSD menu when connect S-VIDEO connector**

```
        MAIN MENU    VER  1.A1
  ❶  BRIGHTNESS/CONTRAST
  🎨  COLOR
      POSITION
  🛠️  SETUP
  🖼️  EXIT
      S-VIDEO
```
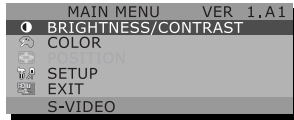
◉ For more details, please refer to '3.1 Selecting and Adjusting the OSD(On Screen Display) Menu' and '3.2 Combined ANALOG and DIGITL Monitor OSD Menu Function' in this chapter.
The COLOR submenu of the S-VIDEO and VIDEO OSD MENU is same as the COLOR submenu of the TV TUNER.

▶ **The OSD menu when connect VIDEO jack**

```
        MAIN MENU    VER  1.A1
  ❶  BRIGHTNESS/CONTRAST
  🎨  COLOR
      POSITION
  🛠️  SETUP
  🖼️  EXIT
      COMPOSITE
```

Adjusting the OSD Menu

CHANNEL MENU OSD (PAL/SECAM)

◉ CHANNEL MENU

```
A U T O   P R O G R A M      ▶▶
M A N U A L   P R O G R A M  ▶▶
P R O G R A M   E D I T      ▶▶
E X I T
```
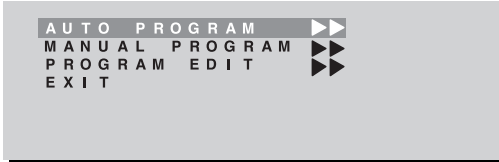
● **AUTO PROGRAM** : Automatically memorize all the active channels.
● **MANUAL PROGRAM** : Manually change the program number and name.
● **PROGRAM EDIT** : Edit the program number and name.

◉ CHANNEL OSD

```
P R     1       → Program Number
    C   2 3     → Program Name
```

```
P R     1       → ADD/DEL button
    S K I P      : ADD/SKIP toggle
```
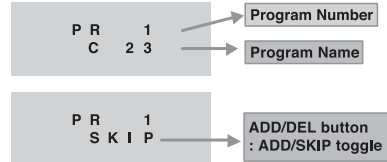
● CHANNEL OSD is displayed on the right-top position.

◉ AUTO PROGRAM

```
S Y S T E M                  ▶       B G
S T O R A G E   F R O M      ▶       P R   3 9
S T A R T
E X I T
```

● **SYSTEM** : Select the TV SYSTEM (Default : BG).
   - AUTO : BG (PAL/SECAM, BG/DK/I) & SECAM-L
   - BG : BG (PAL/SECAM, BG/DK/I) Only
   - L : SECAM-L Only
● **STORAGE FROM** : Save channel from the selected program number.
● After processing the AUTO PROGRAM, move to the PROGRAM EDIT menu.

◉ AUTO PROGRAM : START

```
A U T O   P R O G R A M          → Next program number
                  P R   4 1   B G →   SYSTI
IIIIIIIIIIIII . . . . . . . . . . . . . . . . .
                  2 4       →  processing (0~100%)
P R E S S   S E L E C T   T O   S T O P
```
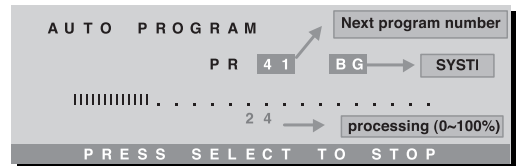
◉ MANUAL PROGRAM : SYSTEM

```
S Y S T E M                  ▶   B G
C H A N N E L                ▶   C - C H   1 3
F I N E                      ▶
S E A R C H                  ▶
N A M E                      ▶   - - - - -
S T O R E                    ▶   P R     1
E X I T                      ▶
```
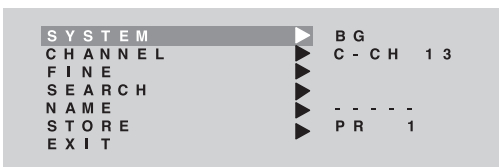
● **SYSTEM** : Select the TV SYSTEM.
   - BG(PAL/SECAM - BG/DK/I)
   - L(SECAM - L)
● **EXIT** : If you want to save in the MANUAL PROGRAM, please press the SELECT button on the EXIT.

◉ **MANUAL PROGRAM : CHANNEL**

```
S Y S T E M          ▶  A U T O
C H A N N E L        ▶  C - CH   1 3
F I N E              ▶
S E A R C H          ▶
N A M E              ▶  - - - - -
S T O R E            ▶  P R     1
E X I T
```

```
S Y S T E M          ▶  A U T O
C H A N N E L        ▶  C - CH   1 3
F I N E              ▶
S E A R C H          ▶
N A M E              ▶  - - - - -
S T O R E            ▶  P R     1
E X I T
```
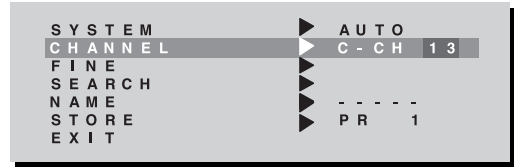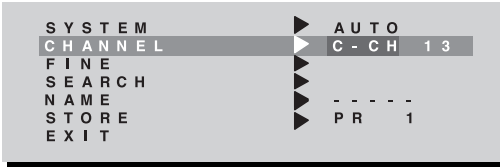
● **CHANNEL** : Select the AIR or the CATV.
  - C-CH : AIR TV
  - S-CH : CABLE TV
● **UP/DOWN KEY** : Select the C-CH or the S-CH. Select the channel number.
● **LEFT/RIGHT KEY** : Select the CHANNEL menu.

◉ **MANUAL PROGRAM : FINE**

```
S Y S T E M          ▶  A U T O
C H A N N E L        ▶  C - CH   1 3
F I N E              ▶       ⟨⟨⟨
S E A R C H          ▶
N A M E              ▶  - - - - -
S T O R E            ▶  P R     1
E X I T
```
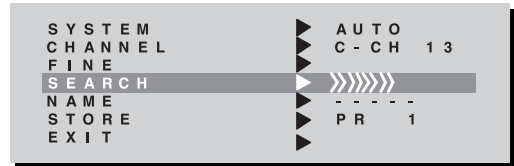
● **FINE** : Adjust when the display image is blurred or unfocused.

◉ **MANUAL PROGRAM : SEARCH**

```
S Y S T E M          ▶  A U T O
C H A N N E L        ▶  C - CH   1 3
F I N E              ▶
S E A R C H          ▶      ⟩⟩⟩⟩⟩⟩
N A M E              ▶  - - - - -
S T O R E            ▶  P R     1
E X I T              ▶
```

● **SEARCH** : Search the next channel signal (CHANNEL and NAME are updated after search).

◉ **MANUAL PROGRAM : NAME**

```
S Y S T E M          ▶  A U T O
C H A N N E L        ▶  C - CH   1 3
F I N E              ▶
S E A R C H          ▶
N A M E              ▶  - - - - -
S T O R E            ▶  P R     1
E X I T
```

```
S Y S T E M          ▶  A U T O
C H A N N E L        ▶  C - CH   1 3
F I N E              ▶
S E A R C H          ▶
N A M E              ▶  A B C - -
S T O R E            ▶  P R     1
E X I T
```
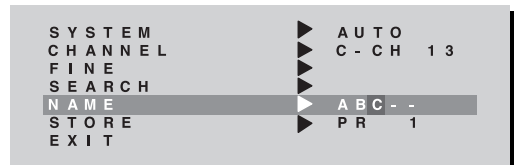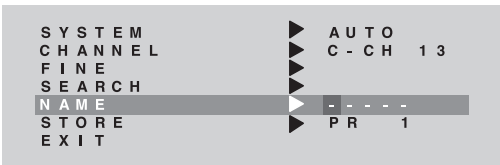
● **NAME** : Save the channel name.
● **UP/DOWN KEY** : 0 ▶ 1 ▶ ⋯ ▶ 9 ▶ A ▶ B ▶ ⋯ ▶ Y ▶ Z ▶ (Blank) ▶ . ▶ / ▶ + ▶ - ▶ 0
● **LEFT/RIGHT KEY** : Move the digit.

◉ MANUAL PROGRAM

```
S Y S T E M              ▶    A U T O
C H A N N E L            ▶    C - C H    1 3
F I N E                  ▶
S E A R C H              ▶
N A M E                  ▶       - - - - -
S T O R E                ▶    P R     1
E X I T
```

● **STORE** : Save the channel to the selected number (Default : the present number).

◉ PROGRAM EDIT

```
0  :     C  1 2          5  :     C      3
1  :     C    5          6  :     S    3 0
2  :   A B C D E         7  :   - - - - -
3  :       A B C         8  :   - - - - -
4  :     S   5 5         9  :   - - - - -

1 : D E L   2 : C O P Y   3 : M O V E   4 : S K I P
0 : E X I T
```

```
0  :   A B C D E    : ADDED PR (selected)

0  :   A B C D E    : ADDED PR (unselected)

0  :   A B C D E    : SKIPPED PR (unselected)

0  :   A B C D E    : SKIPPED PR (selected)
```

● **UP/DOWN KEY** : select the Program.
● **Function select** : "1", "2", "3", "4" (AUTO button is toggling ;
   1(DEL) ▶ 2(COPY) ▶ 3(MOVE) ▶ 4(SKIP) ▶ 0(EXIT) ▶ cancel)

◉ PROGRAM EDIT : DEL (ex. Delete PR 0)

```
0  :     C  1 2          5  :     C      3
1  :     C    5          6  :     S    3 0
2  :   A B C D E         7  :   - - - - -
3  :       A B C         8  :   - - - - -
4  :     S   5 5         9  :   - - - - -

1 : D E L   2 : C O P Y   3 : M O V E   4 : S K I P
0 : E X I T
```
→
```
0  :     C    5          5  :     S    3 0
1  :   A B C D E         6  :   - - - - -
2  :       A B C         7  :   - - - - -
3  :     S   5 5         8  :   - - - - -
4  :     C    3          9  :   - - - - -

1 : D E L   2 : C O P Y   3 : M O V E   4 : S K I P
0 : E X I T
```

● **DEL** : Delete the Program (select the program ▶ 1 ▶ SELECT).

◉ PROGRAM EDIT : COPY (ex. Copy PR6 from PR3)

```
0  :     C    5          5  :     S    3 0
1  :   A B C D E         6  :   - - - - -
2  :       A B C         7  :   - - - - -
3  :     S   5 5         8  :   - - - - -
4  :     C    3          9  :   - - - - -

1 : D E L   2 : C O P Y   3 : M O V E   4 : S K I P
0 : E X I T
```
→
```
0  :     C    5          5  :     S    3 0
1  :   A B C D E         6  :     S   5 5
2  :       A B C         7  :   - - - - -
3  :     S   5 5         8  :   - - - - -
4  :     C    3          9  :   - - - - -

1 : D E L   2 : C O P Y   3 : M O V E   4 : S K I P
0 : E X I T
```

● **COPY** : Copy the Program (select the source program ▶ 2 ▶ select the destination program ▶ SELECT).

⊚ PROGRAM EDIT : MOVE (ex. Move PR4 to PR8)

```
0  :    C    5        5  :      S   3 0          0  :    C    5        5  :      S   3 0
1  :  A B C D E        6  :      S   5 5          1  :  A B C D E        6  :      S   5 5
2  :      A B C        7  :    - - - - -          2  :      A B C        7  :    - - - - -
3  :    S   5 5        8  :    - - - - -          3  :    S   5 5        8  :    C    3
4  :    C    3         9  :    - - - - -          4  :    - - - - -      9  :    - - - - -

1 : D E L   2 : C O P Y   3 : M O V E   4 : S K I P     1 : D E L   2 : C O P Y   3 : M O V E   4 : S K I P
0 : E X I T                                            0 : E X I T
```

● **MOVE** : Move the Program (select the source program ▶ 3 ▶ select the destination program ▶ SELECT).

⊚ PROGRAM EDIT : SKIP (ex. Skip PR8)

```
0  :    C    5        5  :      S   3 0          0  :    C    5        5  :      S   3 0
1  :  A B C D E        6  :      S   5 5          1  :  A B C D E        6  :      S   5 5
2  :      A B C        7  :    - - - - -          2  :      A B C        7  :    - - - - -
3  :    S   5 5        8  :    C    3             3  :    S   5 5        8  :    C    3
4  :    C    3         9  :    - - - - -          4  :    C    3         9  :    - - - - -

1 : D E L   2 : C O P Y   3 : M O V E   4 : S K I P     1 : D E L   2 : C O P Y   3 : M O V E   4 : S K I P
0 : E X I T                                            0 : E X I T
```

● **SKIP** : Skip the Program (select the program ▶ 4 ▶ SELECT).
● When you use the SKIP function, the skipped channel is not selected during up and down.
● The SKIP function is toggling to the ADD.

V-CHIP OSD

◉ MAIN MENU

```
OSD   POSITION      ▶ 3
OFF   TIMER         ▶ 20SEC
LANGUAGE            ▶ ENGLISH
INPUT SOURCE        ▶ TUNER
CAPTION             ▶ OFF
V-CHIP              ▶
EXIT
```

◉ V-CHIP Selection

```
ENTER  PIN


              ■- - -
```

● Enter ENTER PIN.

Note

- The V-CHIP initial PIN is set at '0000.'

- If you press the MENU KEY for 5 seconds,
  V-CHIP items are initialized.

▶ **CAPTION**
  - OFF ↔CC1 ↔CC2 ↔CC3 ↔CC4 ↔
    TEXT ↔TEXT2 ↔TEXT3 ↔TEXT4 ↔
    OFF

```
            V - C H I P
V - C H I P   L O C K      ▶    Y E S
T V  G U I D E L I N E S   ▶
M P A A   R A T I N G      ▶
C H A N G E   P I N        ▶
E X I T
```
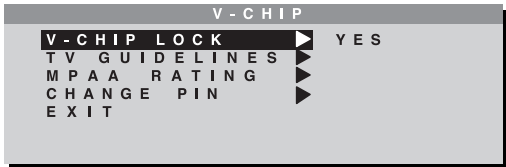
● If you select Yes in the V-CHIP LOCK, the LOCK
  function of the screen and voice is operated.

```
            V - C H I P
V - C H I P   L O C K      ▶    N O
T V  G U I D E L I N E S   ▶
M P A A   R A T I N G      ▶
C H A N G E   P I N        ▶
E X I T
```
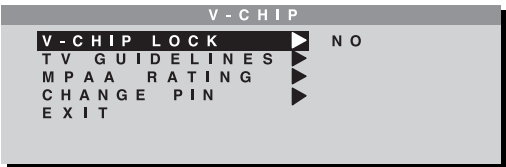
● If you select No in the V-CHIP LOCK, the LOCK
  function of the screen and voice is removed.

◉ TV GUDELINES

		FV	V	S	L	D
T V - Y	**U**					
T V - Y 7	U	U				
T V - G	U					
T V - P G	U			U	U	U
T V - 1 4	U			U	U	U	U
T V - M A	U			U	U	U	U
E X I T						

◉ MPAA RATING

G	**U N B L O C K**
P G	U N B L O C K
P G - 1 3	U N B L O C K
R	U N B L O C K
P N C - 1 7	U N B L O C K
X	U N B L O C K
N R	U N B L O C K
E X I T	

Note

▶ TV GUIDELINES	▶ CONTENT
TV-Y (All Children)	FV (Fantasy Violence)
TV-Y7 (Direct to Older Children)	V (Violence)
TV-G (General Audience)	S (Sexual Situation)
TV-PG (Parental Guidance Suggested)	L (Adult Language)
TV-14 (Parents Strongly Cautioned)	D (Sexually Suggestive Dialog)
TV-MA (Mature Audience Only)	

▶ MPAA RATING

G	GENERAL AUDIENCES All ages admitted
PG	PARENTAL GUIDANCE SUGGESTED Some material may not be suitable for children
PG-13	PARENTAL STRONGLY CAUTIONED Some material may be inappropriate for children under 13
R	RESTEICTED Under 17 requires accompanying parent or adult guardian
NC-17	NO ONE 17 AND UNDER ADMITTED
X	X is an older rating that is unified with NC-17 but may be encoded in the data of older movies

◉ CHANNEL PIN Selection

```
C H A N G E    P I N

N E W    P I N    :     ■ - - -
```

● To change the PIN number, select CHANGE PIN and enter NEW PIN.

```
C H A N G E    P I N

N E W    P I N    :    ● ● ● ●

C O N F I R M    :    ■ - - -
```

```
                    C H A N G E D   :   P I N


E X I T
```

Punction for Teletext

Channel +

Channel -

Converts into the Page linked to the TXT RED Key.

Converts into the Page linked to the TXT BLUE Key.

Converts into the Page linked to the TXT GREEN Key.

Converts into the Page linked to the TXT YELLOW Key.

⊜ Views Teletext Data up and down in Double Height.

⊜ Maintains the Page content as currently displayed, if it is changed.

⊜ Teletext On/Off

⊗ Informs the user when the currently displayed Page content is updated.

◔ Displays current information in TXT OFF, and selects Subpage Mode in TXT ON.

⊜ Displays the Page currently being displayed together with images.

Ⓜ Memorizes four desired pages by program in the current program.

ⓘ Converts from the current Page to the INDEX Page.

⊘ Functions to show letters that are concealed and are not displayed, though they are included in the currently displayed Page.

1-23

A.1 Troubleshooting

Please check the below particulars before you contact the service center to notify an abnormality of the monitor.

The window doesn't show anything	◉ **Is the monitor power cord inserted?** Please connect the power cord correctly to the concent. ◉ **Is the power turned off?** Please press the power button. ◉ **Is the power turned on and the power pilot lamp blinking amber?** The monitor is in the power saving mode. Please therefore move the mouse or press any key on the keyboard. ◉ **Is the message 'Out Of Range' shown?** As it passes over the frequency limit of horizon (31.5-80 kHz) and verticality (60-75 Hz) in computer (video card), you'd reconfigure it as referring to the specification of this manual. (when you install the monitor driver that we have provided, it won't come up with the message 'OUT OF RANGE'.) ◉ **Is the message 'No Input Signal' shown?** It shows up as computer changes to power-saving mode or the signal cable between computer and monitor isn't rightly connected. Move your mouse or press keyboard button. But it won't still show you a right screen, then recheck a signal cable connection.
The color of the window is not normal	◉ **Has a discoloration (into 16 colors) of the screen occurred?** Set the number of colors to more than 256 colors. On the Windows 95/98/XP, perform the following process [Control Panel] ▶ [Display] ▶ [Setting] ▶ [Color Table/Screen Resolution] ▶ [256 Colors] ▶ [OK] ◉ **Do you see a spot on the screen?** You may see a few spots (in red, green, white and black) on the screen during the operation. Occurrence of such a phenomenon is not a failure but a characteristic of the LCD panel, and therefore has no relation to the performance of the monitor.
The window is under a bias toward one side, or is not centrally positioned	◉ **Is the positional adjustment made correctly?** Press the **AUTO** button, then the screen will be adjusted automatically into the optimal state applicable to the current mode. If you are not satisfied with the auto adjustment, you can directly adjust the H Position (Horizontal Position), V Position (Vertical Position), and Clock (Horizontal Size) of the OSD menus. ◉ **Is the Phase adjustment made properly?** Press the **AUTO** button, then the screen will be adjusted automatically into the optimal state applicable to the current mode. If you are not satisfied with the auto adjustment, you may manually adjust the Phase (Focus) of the OSD menus.
A faint letter is shown, or the phase is out of focus. Noise is also generated horizontally	◉ **Is the screen set in the best state?** While you are using this product in the mode of 1280 x 1024 and 60Hz, the best condition of the screen is available. In the mode of VGA(640 x 480), SVGA(800 x 600) or XGA (1024 x 768), the outline of a letter may be seen dimly or unevenly.

A.2 Specification

The details of product specification can be changed without notice to improve the product.

LCD	Type	a-Si active matrix TFT-LCD
	Size	19.0 (481.84 mm)
	Pixel Pitch	0.294 mm x 0.294 mm
	Contrast Ratio	400 : 1(typical)
	Color depth	8 bit(16,777, 216 Color)
	Luminance, white	250 cd/m^2
Frequency	Maximum	SXGA 1280 x 1024
	Horizontal frequency	31.5~80 kHz
	Vertical frequency	60~75 Hz
	View Angle(H/V)	U/D : ±176°, R/L : ±176°
	input signal	Analog RGB
Audio	Output	Stereo 2 Watt x 2(Provided, TV is MONO)
Signal Input	input connector	DVI Connector(Analog or Digital)
	User's control	Auto Configuration, Brightness, Contrast, H-Position, V-Position, Color RGB, Phase, Frequency, Volume, Language, etc.
Dimension and Weight	Body Size(W x D x H)	448 x 241.3 x 441 mm
	Weight	7.5 kg(Unit), 10 kg(Packed)
Consumption	DPMS	VESA DPMS Standard
	On Working	50 Watts (Max.) AC 110~200 V, DC 12 V
Option	DVI	DVI-D
	VIDEO	RCA, S-VHS
	USB	UP Port 1EA, DOWN Port 4EA
	TV	NTSC, PAL, SECAM

Factory-specified Mode

	Factory-specified Mode		Horizontal Frequency(kHz)	Vertical Frequency(kHz)
1	VGA	640 x 350	31.47	70
2	VGA	640 x 480	31.47	60
3	VGA	640 x 480	37.86	72
4	VGA	640 x 480	37.50	75
5	VGA	720 x 400	31.47	70
6	SVGA	800 x 600	37.88	60
7	SVGA	800 x 600	48.68	72
8	SVGA	800 x 600	46.88	75
9	XGA	1024 x 768	48.36	60
10	XGA	1024 x 768	56.48	70
11	XGA	1024 x 768	60.02	75
12	SXGA	1280 x 1024	64.0	60
13	SXGA	1280 x 1024	79.98	75

Caution

The indication in above diagram and actual value shall not be always coincident. This product automatically adjusts for optimum condition by itself.

Specification