



THE DISPLAY CHOICE OF PROFESSIONALS

SC-Series Security LED-Backlit Display

**User Manual** 

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#### **FCC INFORMATION**

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 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 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.

Shielded interface cables and A.C. power cord, if any, must be used in order to comply with emission limits.

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

#### **CE INFORMATION**

The product must be installed according to the currently valid installation regulations for EMC to guarantee the designed use and to prevent EMC problems.

The device supplied with this manual is according to the EC, EMC Directive, 2004/108/EC & LVD 2006/95/EC

#### SAFETY PRECAUTIONS

- 1. Do not modify the three-prong grounding type monitor power plug in any way.
- 2. Operate this unit only from the type of power source indicated on the label.
- 3. Do not block or cover ventilation openings on the back or bottom of the monitor cabinet.
- 4. Do not place this monitor near a radiator or heating vent.
- 5. Do not push objects of any kind through cabinet openings. This may result in fire or electrical shock.
- 6. Before adding attachments always ask a service technician to perform routine safety tests to determine that equipment is in safe operating condition. Ground potential tests should be part of the routine safety check made by the service technician.
- 7. Do not place monitor on an unstable cart, stand, or shelf where it may fall and injure personnel or damage equipment.

- 8. Route power cords so that they cannot be walked upon or tripped over. Do not allow anything to rest on the power cord.
- 9. Do not install monitor in wet areas, or where it may be exposed to rain or water. Do not spill liquid of any kind on the unit.
- 10. Unplug the power cord from the unit before cleaning the display. Use only a damp cloth. Do not use alcohol, spirits, or ammonia to clean the display. **DO NOT ATTEMPT TO CLEAN THE INTERIOR OF THIS UNIT- THIS ACTION MUST BE PERFORMED BY THE SERVICE TECHNICIAN AS REQUIRED DURING NORMAL MAINTENANCE.**
- 11. Refer all servicing to qualified service personnel. REMOVAL OF BACK COVER BY UNAUTHORIZED PERSONNEL MAY EXPOSE THE USER TO DANGEROUS VOLTAGES OR OTHER HAZARDS.
- 12. Unplug the unit immediately and notify the service technician.
  - A. If liquid has been spilled into the display or the display has been exposed to rain or water.
  - B. If the unit has been dropped or the cabinet damaged.
  - C. If fuses continue to blow.
  - D. If the power cord is damaged or frayed.
  - E. If a distinct change from normal operation is apparent.

When replacement parts are required, be sure that the service technician uses components specified by the manufacturer which have the same characteristics as the original parts.

UNAUTHORIZED SUBSTITUTIONS MAY RESULT IN FIRE, ELECTRICAL SHOCK OR OTHER HAZARDS.

Upon completion of any service or repairs, ask the technician to perform safety checks to determine that the equipment is in safe operating condition.

WARNING: SERIOUS SHOCK HAZARDS EXIST WITHIN THE COVERS OF THIS MONITOR. DO NOT OPEN THE COVERS UNDER ANY CIRCUMSTANCES, THERE ARE NO USER SERVICEABLE COMPONENTS INSIDE

# 1. Scope

This specification is used to define the performance of SC-17P, 19P & SC-22 series color TFT LCD monitor. This system also supports both video input and PC input. In video input mode, the system can automatically detect the NTSC signal and PAL signal. In PC mode, this system can support up to 1920 x 1080 VESA standard.

The user friendly OSD menu is also provided to make this system easy to operate.

# **2 Functional Specifications**

#### 2.1 Power Supply

The power supply spec is listed below,

**AC INPUT** 

AC power input range: Rated voltage 100 – 240 Vac +/- 10%, 47~63Hz,

2 Amps max.

\* Power consumption: 35W max.

\* Power efficiency: 80% typical at normal line input and full load

#### 2.2 Video Characteristics

Composite Video (CVBS): 1.0 Vp-p (0.5 – 1.5Vpp), Automatic switching from 75  $\Omega$  unbalanced termination to Hi-Z with loop-through operation.

Y/C (S-video): 1.0 Vp-p (0.5 – 1.5 Vpp), Automatic switching from 75  $\Omega$  unbalanced termination to Hi-Z with loop-through operation.

## 2.3 PC Input

## VGA Input

Analog RGB: 0.707 Vp-p.

Support VESA Standard Timing

#### HDMI Input

**HDMI** Compatible Interface

Digital Signal: TMDS.

HDCP: HDCP 1.1

#### 2.4 Audio Input

Signal Level: 1.0 Vrms

#### 2.5 Environmental

#### Temperature

Operating:  $0^{\circ}$ C to  $+40^{\circ}$ C Storage:  $-20^{\circ}$ C to  $+60^{\circ}$ C

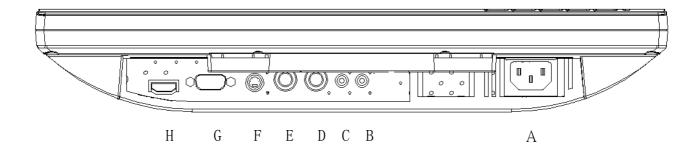
## Humidity

Operating: 10% to 85% (non-condensing) Storage: 10% to 95% (non-condensing)

#### **2.6 EDID**

This series of displays support EDID, but does not support DDC2B function.

#### 2.7 Connectors



A. AC INPUT: AC SOCKET

B. AUDIO OUTPUT: Phone Jack, StereoC. AUDIO INPUT: Phone Jack, StereoD. CVBS OUTPUT: BNC ConnectorE. CVBS INPUT: BNC Connector

F. S-VIDEO (Y/C) INPUT: Mini-DIN 4 pins Connector

G. VGA INPUT: D-SUB 15 pins Connector

H. HDMI INPUT: HDMI Connector

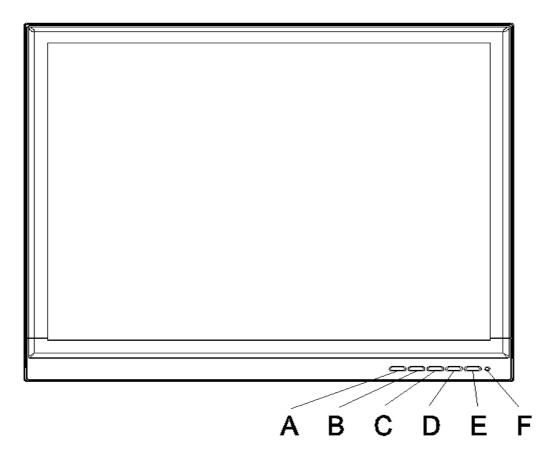
## Set up sequence

- 1. Make sure the power of PC and/or Video source were turned off.
- 2. Plug the Video signal and VGA cable to monitor.
- 3. Turns the PC and/or Video source power on.
- 4. Plug the AC power cord onto AC Socket.

(Use reverse sequence to teardown the monitor)

## 3. Controls and indicators

## SC-17P/SC-19P MONITOR



# A. " Source button

• Press the button to show source menu. Select DHMI, S-Video, VGA and VIDEO input signal

## B. " ▼ "Down buttons

- Press the buttons to scrolling the cursor to desired function.
- Press the buttons to decrease the value of selected function in sub OSD menu.

# C. " ▲ "Up button

- Press the buttons to scrolling the cursor to desired function.
- Press the buttons to increase the value of selected function in sub OSD menu.

# D. " To "Menu button

- Press the button to show the OSD main menu.
- As a confirmation key during the OSD operation.

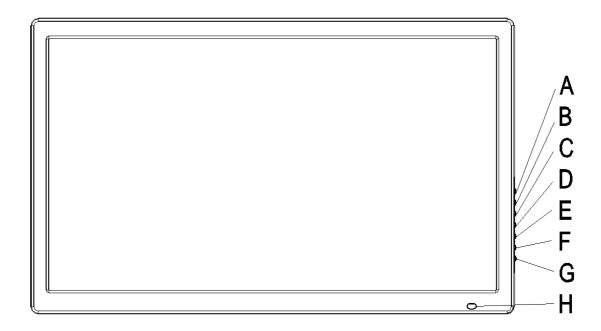
# E. " O" Power button

Press the button to turn ON or turn OFF the monitor

#### F. POWER LED Indication

- Green Power on
- LED light off Power off
- Flash Green Sleep mode (PC mode only)

# **SC-22 MONITOR**



# A. " Tource button

• Press the button to show source menu. Select DHMI, S-Video,VGA and VIDEO input signal

# B. " A " UP buttons

• Press the buttons to scrolling the cursor to desired function.

# C. " ▼ "Down button

• Press the buttons to scrolling the cursor to desired function.

# D. " ► "Volume+ buttons

- Press the buttons to increase volume
- Press the buttons to increase the value of selected function in sub OSD menu.

# E. " Volume- button

- Press the buttons to decrease volume
- Press the buttons to decrease the value of selected function in sub OSD menu.

# F. "Menu button

- Press the button to show the OSD main menu.
- As a confirmation key during the OSD operation.

# G. " O " Power button

Press the button to turn ON or turn OFF the monitor

#### **H. POWER LED Indication**

- Green Power on
- LED light off Power off
- Flash Green Sleep mode (PC mode only)

#### 4. OSD Menu

## Hot key:

Quick adjust keys from front panel hot keys:



**VOLUME**:

SC-17P & SC-19P: Press ▲ or ▼ button to select the function and press ▲ / ▼ buttons to adjust the volume, then press to exit OSD menu.

SC-22: Press ◀ or ▶ button to select the function and press ◀ / ▶ buttons to adjust the volume, then press to exit OSD menu.

KEY LOCK : Push for 6 sec to enable this function.



KEY UN-LOCK : Push for 6 sec to disable this function.



#### **RUNNING HOURS:**

SC-17P & SC-19P:

Remove AC power-> Push " U " & " T key and Plug in AC power -> Display Running Hours information.

SC-22:

Remove AC power-> Push " U " & " A " key and Plug in AC power -> Display Running Hours information



#### **VGA & HDMI mode:**

#### **OSD Menu structure:**

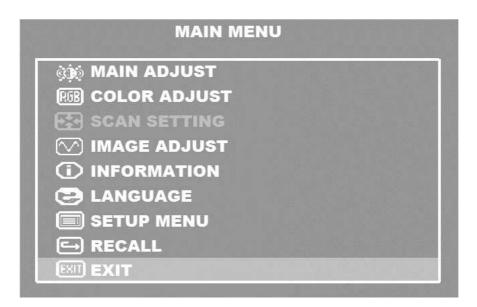
Use to select the VGA, HDMI, CVBS, or S-VIDEO, the menu structure within each varies, refer to sections below on how to set-up each option.

#### **VGA / HDMI mode:**

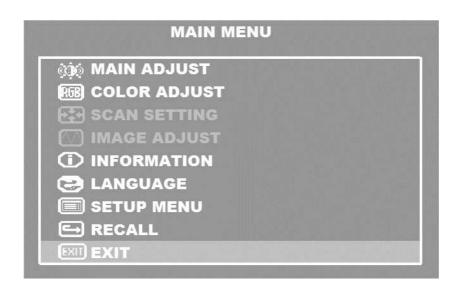
Press to bring up the MAIN MENU Page. The following page will appear

Press ▲ / ▼ to select an icon, then Press to change the values in the sub menu.

#### **VGA MAIN MENU**

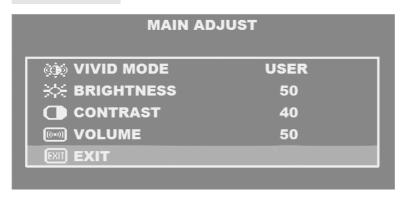


#### **HDMI MAIN MENU**





## **MAIN ADJUST:**



- 1. Press ▲ / ▼ to select an icon.
- 2. Press to select item,
- 3. SC-17P & SC-19P: Press ▲ / ▼ to adjust the value

SC-22: Press / b to adjust the value

4. Press to return



VIVID MODE: Select the VIVID MODE (0~3 and USER) USER, 0: TEXT, 1: PHOTO, 2: MOVIE, 3: GAME



**BRIGHTNESS**: Adjust the brightness value

CONTRAST: Adjust the contrast value

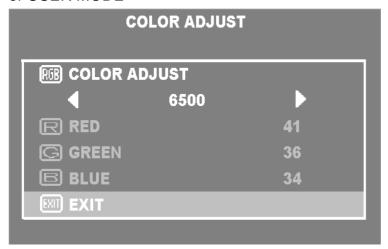
VOLUME: Adjust the volume

EXIT: Press 🗖 to return to the main menu



#### **COLOR ADJUST:**

Set the color temperature of the LCD monitor for the CIE coordinate 9300°k or 6500°k or USER MODE

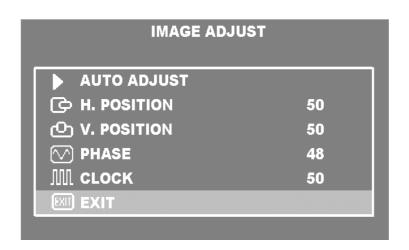


- 1. Press ▲ / ▼ to select an icon
- 2. Press to select adjust item,
- 3. SC-17P & SC-19P: Press ▲ / ▼ to adjust the value
  - SC-22: Press / to adjust the value
- 4. Press to return

USER COLOR: Adjust the color temperature.

- RED: Adjust the RED value for user mode.
- GREEN: Adjust the GREEN value for user mode.
- BLUE: Adjust the BLUE value for user mode.
- EXIT: Press to return to the main menu

# IMAGE ADJUST (VGA ONLY) :



- 1. Press ▲ / ▼ to select an icon
- 2. Press to select adjust item
- 3. SC-17P & SC-19P: Press ▲ / ▼ to adjust the value SC-22: Press ◀ / ▶ to adjust the value
- 4. Press to return
- AUTO ADJUST: Press to auto adjust the H. Position,

V. Position, Phase, Clock

- H. POSITION: Adjust the horizontal position value
- V. POSITION: Adjust the vertical position value
- PHASE: Adjust the phase value
- CLOCK : Adjust the clock value
- EXIT: Press 🗖 to return to the main menu

# INFORMATION:

Press to get the VGA timing information

# INFORMATION H. FREQUENCY 64KHZ V. FREQUENCY 60HZ RESOLUTION 1280X 1024



LANGUAGE: Press to enter the sub-menu



- 1. Press ▲ / ▼ to select language
- 2. Press to enter



## **SETUP MENU:**



- 1. Press ▲ / ▼ to select an icon
- 2. Press to select adjust item
- 3. SC-17P & SC-19P: Press ▲ / ▼ to adjust the value SC-22: Press ◀ / ▶ to adjust the value
- 4. Press to return



OSD TIMEOUT: Adjust the OSD Show time (5 ~120 sec)



GREEN MODE: Off or On (5 min~10 min)

OFF - No function

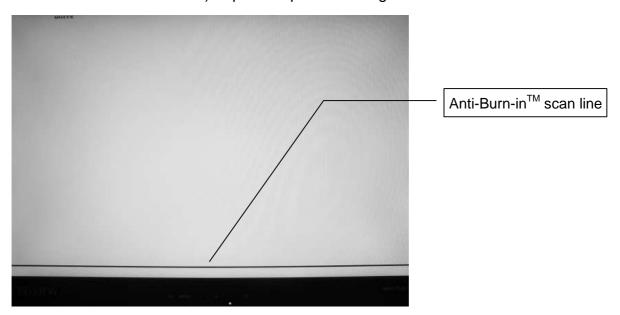
ON – Screen will reduce back light to 80% within (5 min to 10 min) Screen will back to normal when any button is being touched.



AUTO SHIFT: Adjust AUTO SHIFT ON/OFF

OFF - No Function

ON - Every one hour there will one scan line from top to bottom ( Every 1 second down one scan line) to prevent panel sticking.





EXIT : Press to return to the main menu



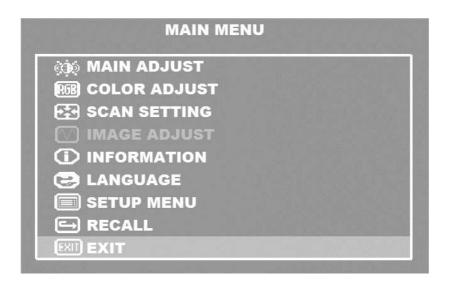
# RECALL:

Brightness, Contrast, Volume, Vivid Mode, OSD Timeout, Green Mode, Auto Shift return to default Value.

# Video mode:

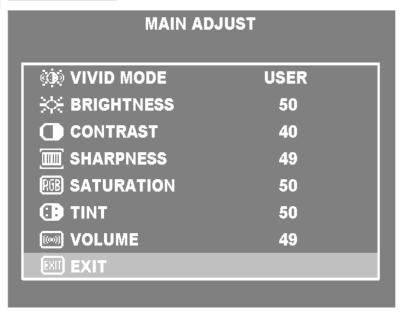
Press to bring up the MAIN MENU Page. The following page will appear

Press ▲ / ▼ to select an icon, then Press to change the values in the sub menu.

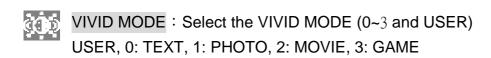




# **MAIN ADJUST:**



- 1. Press ▲ / ▼ to select an icon
- 2. Press to select item
- 3. SC-17P & SC-19P: Press ▲ / ▼ to adjust the value SC-22: Press ◀ / ▶ to adjust the value
- 4. Press to return



BRIGHTNESS: Adjust the brightness value.

CONTRAST: Adjust the contrast value.

SHARPNESS : Adjust Image sharp.

SATURATION : Adjust Image saturation.

TINT: Adjust Image tint. (NTSC only).

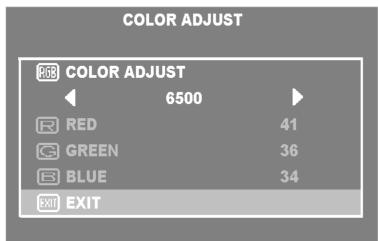
[[]] VOLUME : Adjust the volume .

EXIT : Press to return to the main menu.

# RGB

## **COLOR ADJUST:**

Set the color temperature of the LCD monitor for the CIE coordinate 9300°k or 6500°k or USER MODE



- 1. Press ▲ / ▼ to select an icon
- 2. Press to select adjust item,
- 3. SC-17P & SC-19P: Press ▲ / ▼ to adjust the value

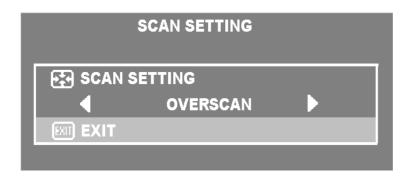
SC-22: Press / b to adjust the value

4. Press to return

USER COLOR: Adjust the color temperature.

- RED : Adjust the RED value for user mode.
- GREEN: Adjust the GREEN value for user mode.
- BLUE: Adjust the BLUE value for user mode.
- EXIT: Press to return to the main menu

# **SCAN SETTING:**



- 1. Press to select the sub-menu
- 2. SC-17P & SC-19P: Press ▲ / ▼ to select Scan Setting state.

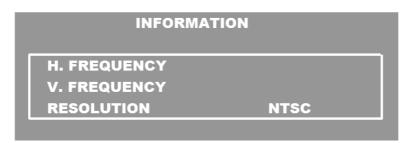
SC-22: Press ◀ / ▶ to select Scan Setting state.

3. Press to return



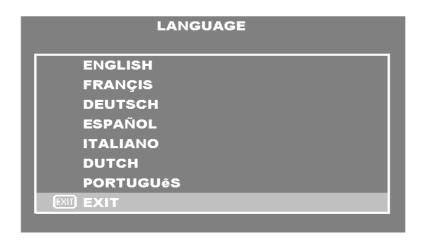
# INFORMATION:

Press to get the timing information





LANGUAGE: Press to enter the sub-menu

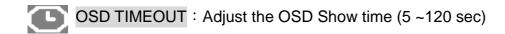


- 1. Press ▲ / ▼ to select language
- 2. Press to enter

# SETUP MENU:



- 1. Press ▲ / ▼ to select an icon
- 2. Press to select adjust item
- 3. SC-17P & SC-19P: Press ▲ / ▼ to adjust the value SC-22: Press ◀ / ▶ to adjust the value
- 4. Press to return

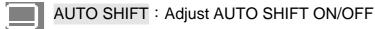




GREEN MODE: Off or On (5 min~10 min)

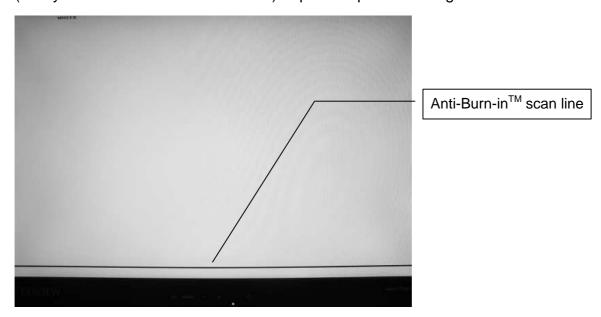
OFF - No function

ON – Screen will reduce back light to within (5 min to 10 min) Screen will back to normal when any button is being touched.



OFF - No Function

ON – Every one hour there will one scan line from top to bottom (Every 1 second down one scan line) to prevent panel sticking.



EXIT: Press to return to the main menu.



Brightness, Contrast, Sharpness, Saturation, Tint, Volume, Vivid Mode, OSD Timeout, Green Mode, Auto Shift return to default Value.

# 5. Regulatory Agency

# **5.1 Safety Approvals**

This series design shall meet the standards of the following domestic and foreign agencies:

CE LVD : EN60950

# **5.2 EMI/EMS Emission Approvals**

This series design shall meet following EMI/EMS specifications:

FCC Compliance: FCC Rules and Regulations, Part 15, subpart B, Class B.

CE COMPLIANCE: EN55022 class B, EN55024, EN50130-4

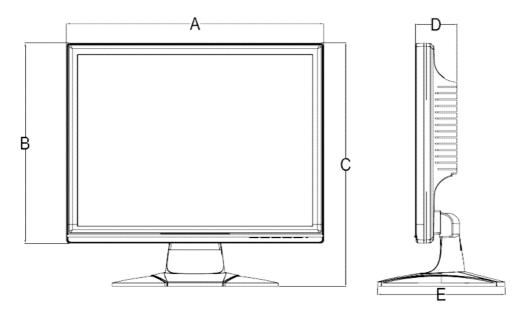
# 6. Mechanical

## 6.1 Cabinet

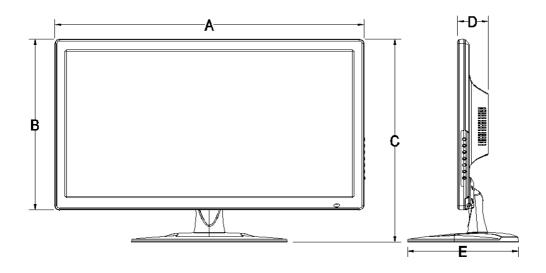
Material: Plastic Finish: Black

## **6.2 Dimensions**

# SC-17P & SC-19P Monitor



## **SC-22 Monitor**



Model	Α	В	C	D	Е
SC-17P	372	317	384	60	184
SC-19P	418	365	412	61	184
SC-22	517	317	376	51	185

Unit: mm

# 6.3 Packaging Dimensions WxHxD mm

SC-17P: 450x467x138mm SC-19P: 464x585x121mm SC-22: 565x420x114mm

Company Address: 5F-1, No. 3-1, Park Street, Nangang District, Taipei, 11503, Taiwan.