

# **21.5-INCH VALUE TFT-LED MONITOR**

## **SM-F212**



### **INSTRUCTION MANUAL**

Please read this manual thoroughly before use, and keep it handy for future reference.

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# 1. GENERAL INFORMATION

## Dear Customer,

Thank you for having purchased this product. This document describes how to install and use the LED backlit LCD color monitor. Read this manual which contains information for correct, safe use carefully. Keep this manual at hand so that you can refer to it when needed.

## 1.1 PRODUCT DESCRIPTION AND TYPE OF USE

The LED backlit LCD color monitor presents a very rugged structure. It is designed for continuous operation and can be used in closed circuit TV systems without risks of excessive fatigue. The Flat Panel Display has an active matrix, thin-film transistor (TFT), liquid crystal display (LCD).

### 1.1.1 GENERAL FEATURES

- DC 12V Power Input
- Display area
- Wall mounting VESA standard 100\*100mm (Not included bracket)
- Socket audio input for PC and BNC
- BNC Input
- VGA Input video input Interface
- HDMI Input video input Interface

Multilingual OSD menu for easy setting and optimization of the display

## 1.2 OPENING THE BOX

Check that the packing and the contents are not visibly damaged. Contact the retailer immediately if parts are either missing or damaged. Do not attempt to use the device in this case. Send the product back in its original packing if it is damaged.

### 1.2.1 CONTENTS OF THE BOX

- Monitor
- Remote Control
- Power Adapter
- Power cable
- HDMI cable
- User's manual

Important Note: Accessories may be changed without prior notice.

## 1.3 WARNINGS

### 1.3.1 POWER

- Only use the power unit provided to power the device. Check mains rating before plugging the power unit in.
- Do not pull the cable to unplug the device.

### 1.3.2 SAFETY PRECAUTIONS

- Keep the device away from rain and humidity to prevent risk of fire and electrocution. Do not introduce material (solid or liquid) inside. If this should accidentally occur, disconnect the device

from the mains and have it inspected by qualified personnel.

- Never open the device. In all cases, contact the qualified personnel or authorized service center for repairs.
- Keep the device away from children, to prevent accidental damage.
- Do not touch the device with wet hands to prevent electrical shock or mechanical damage.
- Do not use the device if it should fall or the external casing is damaged. Risk of electrocution if the device is used in such conditions. Contact the retailer or authorized installer.
- It is advisable to disconnect the power wire if the monitor is not used for a certain time.

### **1.3.3 INSTALLATION PRECAUTIONS**

- To prevent overheating the device, arrange it in a position allowing the flow of air through the slots in the casing. Ensure at least 5 cm of free space when installing inside a rack. For the same reason, do not install sources of heat, such as radiators or hot air ducts. Keep away from direct sunlight. Do not install in areas subject to excessive dust, mechanical vibrations or shocks.
- Do not arrange this device on an unstable surface, such as a tottering or slanted table. The device could fall causing injury or mechanical failures.
- Do not install the device in a place where it could be exposed to humidity or water. Do not direct a jet of water onto the device: risk of fire, electrocution or mechanical failure.
- Stop using the device if water or other material should penetrate inside: risk of fire and electrocution. Contact the retailer or authorized installer.
- Slots and openings in the cabinet are provided for ventilation. These openings must not be blocked or covered.
- Do not place heavy or heat generating objects on top of the device: this could damage the casing and/or increase internal temperature causing faults.
- Do not cover the device with a cloth while it is running to prevent deforming the external casing and overheating the internal parts: risk of fire, electrocution and mechanical failure.
- Keep magnets and magnetized objects away from the device to prevent faults.
- Do not use the device in presence of smoke, vapor, humidity, dust or intense vibrations.
- Wait for a while before operating a device immediately after transporting it from a cold place to a warm place and vice versa. Wait on average for three hours: this will allow the device to adapt to the new ambient (temperature, humidity, etc.).
- The monitor is provided with a plastic base and rubber feet. It can be positioned on a horizontal surface, such as a desk or a table. Make sure that the device is fastened firmly and that it is not resting on unstable supports or surfaces. Dropping could cause severe injury and damage the device.
- Remember to adjust the brightness and contrast to obtain a perfect image.
- The monitor can also be installed on the wall by means of a bracket (not provided).

### **1.3.4 CLEANING THE DEVICE**

- Rub delicately with a dry cloth to remove dust and dirt.
- Dip the cloth in neutral detergent if dirt cannot be eliminated with a dry cloth alone.
- Do not use volatile liquids (such a petrol, alcohol, solvents, etc.) or chemically treated clothes to clean the device to prevent deformation, deterioration or scratches to the paint finish.

### **1.3.5 PRIVACY AND COPYRIGHT**

- The monitor is a device for CCTV systems. Recording of images is subject to the laws in force in your country. Recording of images protected by copyright is forbidden.
- Product users shall be responsible for checking and respecting all local rules and regulations concerning monitoring and recording video signals. The manufacturing SHALL NOT BE LIABLE for use of this product not in compliance with the laws in force.

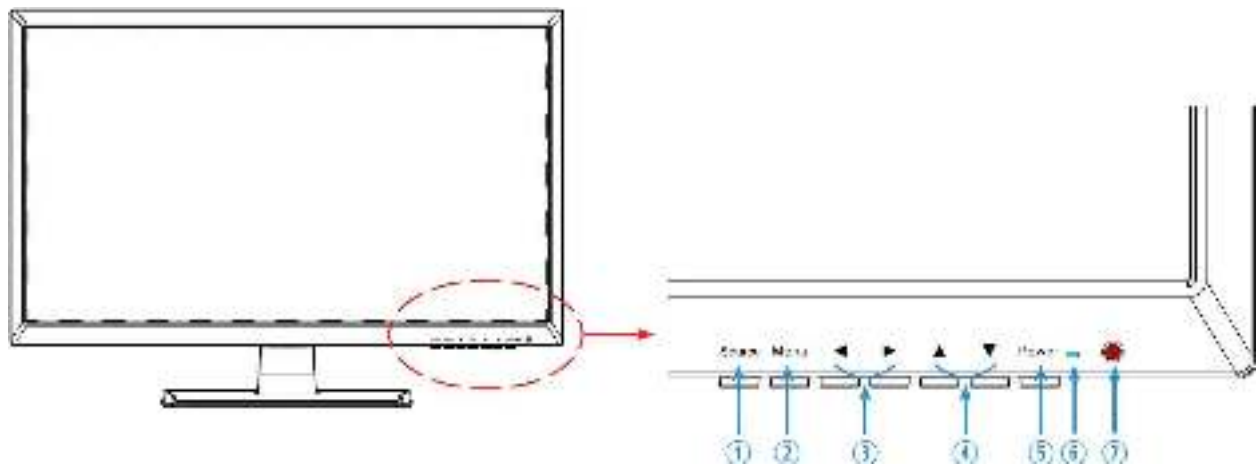
2.INTERFACES, CONTROLS & SETTINGS

Monitor Interfaces



| Interfaces instruction |                                        |
|------------------------|----------------------------------------|
| DC In                  | The main power input of monitor, DC12V |
| HDMI In                | The HDMI Input Source                  |
| VGA In                 | The VGA Input Source                   |
| Audio In               | The Audio Input Source                 |
| BNC In(CVBS)           | The BNC Input for CVBS Source          |
| BNC Out(CVBS)          | The BNC Looping output for CVBS Source |

## Monitor Control Buttons



### 1, Source

Select an input source

### 2. Menu

Enter the MENU, save the adjustment of sub-menu and exit the OSD

### 3. Left & Right ◀ (VOL) ▶

Change the value on selected menu

### 4. Up & Down ▲ ▼

Switch a menu on OSD

### 5. Power

Monitor power on / off

### 6. LED Indicator

Green color: monitor on

Red color : monitor off

### 7. IR Receiver

## Monitor Button Function

All picture, sound settings and setup can be adjusted in OSD (On Screen Display) menu.

To adjust the OSD screen:

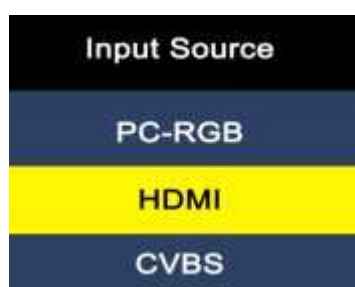
1. Press the **MENU** button to enter the **OSD MENU**.
2. Press the ◀ / ▶ buttons to select the desired **main-MENU**. The selected **Main-MENU** is highlighted.
3. Press the ▲ / ▼ buttons to select the desired **sub-MENU**. The selected **Sub-MENU** is highlighted.
4. Change the value you wish to adjust by using the ◀ / ▶ buttons.

5. Press the **MENU** button to confirm the adjustment on **sub-MENU**.
6. Press the **MENU** button to exit the **sub-MENU** and go back to the **main-MENU**.
7. Press the **MENU** button to exit the **OSD MENU**.

## No signal/Check Signal

No Signal Input, please check with the input Sources of the monitor.

### Select Input Source



Press 'SOURCE' button on monitor or 'INPUT' button on remote controller.

Press ▲ / ▼ button to change input source and then press ► button to select input source on monitor.

Press ▲ / ▼ button to change input source and then press 'INPUT' / ► buttons to select input source on remote controller.

### Volume



Press ◀ / ▶ buttons to adjust volume on monitor.

Press ◀ / ▶ buttons to adjust volume on remote controller.

## Detect Source Signal Message

If you connect any input source, monitor will display current input source resolution and frequency.

### 3.OSD MENU CONTROLS

#### A. PICTURE



| Option            | Function                          | Value                               |
|-------------------|-----------------------------------|-------------------------------------|
| Picture Mode      | Adjust the image color setting.   | See table below                     |
| Contrast          | Adjust the contrast               | 0 ~100                              |
| Brightness        | Adjust the brightness             | 0 ~100                              |
| Color             | Adjust the color saturation       | 0 ~100                              |
| Tint              | Adjust the tint                   | 0 ~100                              |
| Sharpness         | Adjust the sharpness              | 0 ~100                              |
| Aspect Ratio      | Adjust the video format           | 16:9, 4:3                           |
| Noise Reduction   | Reduce noise of the display image | LOW/MIDDLE /HIGH /<br>DEFAULT / OFF |
| Color Temperature | Adjust the color setting          | See table below                     |

| Picture Mode |                                                                  |
|--------------|------------------------------------------------------------------|
| Standard     | Provide standard contrast and sharpness                          |
| Soft         | Reduce contrast and sharpness                                    |
| User         | Apply user selected values - brightness, contrast, color and hue |
| Vivid        | Provide enhanced contrast and sharpness                          |



| Color Temperature  |                                     |
|--------------------|-------------------------------------|
| Medium             | Give the white color a neutral tint |
| Warm               | Give the white color a reddish tint |
| User <sup>1)</sup> | Set custom color temperature        |
| Cool               | Give the white color a blueish tint |

1) To set custom color temperature (R,G,B values), select "USER" to set color temperature. Keep pushing 'Down' button on the monitor or there mote controller, then you will see Red, Green and Blue option.

## B. PC (only on VGA input interface)



| Option          | Function                                           | Value  |
|-----------------|----------------------------------------------------|--------|
| Auto Adjust     | Fit the image setting automatically                |        |
| Horizontal Pos. | Adjust the horizontal position of picture          | 0 ~100 |
| Vertical Pos.   | Adjust the vertical position of picture            | 0 ~100 |
| Size            | Adjust the display size                            | 0 ~100 |
| Phase           | Reduce video distortion and instability components | 0 ~100 |

## C. SOUND



| Option         | Function                  | Value                                    |
|----------------|---------------------------|------------------------------------------|
| Sound Mode     | Select one of the presets | USER / SPORTS / MOVIE / MUSIC / STANDARD |
| Treble         | Adjust the treble level   | 0 ~100                                   |
| Bass           | Adjust the bass level     | 0 ~100                                   |
| Balance        | Adjust the balance        | -50 ~ +50                                |
| Surround Sound | Select sound effect       | Surround, Off, SRS True Surround XT      |

## D. SETTING



| Option               | Function                                          | Value            |
|----------------------|---------------------------------------------------|------------------|
| OSD Language         | Set the language of the OSD menu                  | English, Chinese |
| Restore User Default | Reset the monitor settings to the factory default |                  |
| No Signal Screen     | Show the color when there is 'No signal "         | Blue, Black      |
| No Signal Standby    | Standby power when there is 'No signal            | On, Off          |
| Prevent Burn-in      | Set periodic image retention                      | On, Off          |

\*Prevent-Burn-In Function is an innovative technology to prevent the After Image or Ghost Image on the LCD while the monitor is running 365/24/7 for CCTV industry.

## 4. SPECIFICATION

|                            |                                                |                                                                    |
|----------------------------|------------------------------------------------|--------------------------------------------------------------------|
| Size & Type                |                                                | 21.5"                                                              |
| LCD                        | Panel Type                                     | 21.5" LED Backlit Monitor                                          |
|                            | Pixel Pitch                                    | 0.24825 (H) x 0.24825(V) mm                                        |
|                            | Brightness (Max)                               | 220cd/m <sup>2</sup>                                               |
|                            | Contrast Ratio                                 | 1000:1 (Typ.)                                                      |
|                            | Display Color                                  | 16.7 Million Colors                                                |
|                            | Viewing Angle                                  | R/L: 85°/85° U/D: 80 /80°                                          |
|                            | Response Time                                  | 5ms                                                                |
| Resolution                 |                                                | 1920 (H) * 1080 (V)                                                |
| Case Type                  |                                                | Black Plastic                                                      |
| Active Display Area        |                                                | 476.64(H) x 268.11(V)                                              |
| Aspect Ratio               |                                                | 16:9                                                               |
| Frequency                  |                                                | 30-80KHz (H)/ 50-75Hz(V)                                           |
| Color Temperature          |                                                | Medium / Warm / Cool / User                                        |
| Speaker                    |                                                | 3W x 2                                                             |
| Operating Temp.            |                                                | 0~40°C                                                             |
| Weight                     | Net : 3.8 kg                                   |                                                                    |
|                            | Gross : 4.8 kg                                 |                                                                    |
| INTERFACE                  | CVBS BNC Input *1 / Output*1                   |                                                                    |
|                            | VGA*1, Audio Input*1                           |                                                                    |
|                            | HDMI (High Definition Multimedia Interface )*1 |                                                                    |
| Safety & EMC Certification |                                                | CE / FCC / RoHS                                                    |
| Electrical Ratings         |                                                | 12V DC, 3A( AC 100-240V, 50/ 60 Hz )                               |
| Power Consumption          |                                                | 27W                                                                |
| Accessories                |                                                | HDMI cable, Power Supply & Cable, User's Manual, Remote controller |

Important Note: The specification may be changed without prior notice.

## This image shows a full page of a worksheet designed for handwriting practice. It features 20 evenly spaced, horizontal dashed lines across the entire width of the page. The background is plain white, and there are no margins, text, or other markings present.

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## This image shows a full page of a handwriting practice worksheet. It consists of multiple sets of three horizontal dashed lines, providing a guide for letter height and placement. The lines are evenly spaced and extend across the entire width of the page. There is no text or other markings on the sheet.



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