
Color TFT LCD Monitor



User Manual

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Important Safety Information

Read and understand all safety information before using this product. Follow all instructions marked on the product and described in this document. Pay close attention to the following installation warnings and safety precautions.

Intended Use

This monitor was designed for AV or BNC input and tested to replace an existing monitor. These monitors are intended for indoor use only and are not designed for use in hazardous locations.

Explanation of Signal Word Consequences

DANGER: To avoid the risk of fire and/or explosion which will result in serious injury or death: Do not install or use this product in a hazardous location.

WARNING: To avoid the risk of fire which could result in serious injury or death: Do not remove the cover or back of the monitor.

CAUTION: To avoid the risk of electric shock which could result in serious injury or death:

- This device must be operated with the original power supply,
- Do not use a damaged power supply.
- Do not use a power cord that is frayed or otherwise damaged.

CAUTION: To avoid the risk of electric shock which may result in minor or moderate injury:

- The socket-outlet should be installed near the equipment and should be easily accessible.
- Use a power cable that is properly grounded. Always use the appropriate AC cord certified for the individual country. Some examples are listed below:
- Do not service the monitor Do not remove the cover or back of the monitor. There are no user serviceable parts inside. Refer all servicing to qualified service personnel. The backlight inverter output is at high voltage.

- Do not use non-conforming replacement parts.
- Do not expose the monitor to rain or other sources of water,steam,or moisture.
- Do not place foreign objects on the monitor or its cables.

CAUTION: To avoid the risk of minor or moderate personal injury or damage to the monitor:

- Never wall-mount the monitor without the locking mechanism in place.
- Use an anchoring system appropriate for the weight of the product.
- Consult a construction professional before attempting to hang the unit on the wall.

To avoid the risk of glass breakage which may result in minor or moderate injury:

- Handle the monitor with care to avoid breaking the touch screen sensor. The display contains glass parts. Dropping the display may cause the glass parts to break.
- Do not place foreign objects on the monitor.

Important Notes:

- Plug powercord into appropriate power source & a grounded receptacle.
 - When unplugging power supply cord, pull on plug not cord.
 - Do not connect or disconnect this product during an electrical storm.
 - Install the display in a well-ventilated area. Always maintain adequate ventilation to protect the display from overheating and to ensure reliable and continued operation.
 - Do not expose this display to heat. Passive heat may cause damage to the case and other parts.
 - Do not install this display in areas where extreme vibrations may be generated. For example, nearby manufacturing equipment may produce strong vibrations. The vibrations may cause the display to exhibit picture discoloration or poor video quality.
 - Product weight varies from 10 to 24 pounds depending on the packaging, use caution when lifting.
 - Ensure that metal does not contact the touch screen.
- To avoid ergonomic concerns:

Do not install the monitor in a manner or location with awkward accessibility. Extended use may result in muscle, tendon, or fixed posture strains. It is recommended you take periodic breaks from continuous use.

CAUTION: To avoid the risk of electric shock which may result in minor or moderate injury:

Liquid is spilled into the product or the product is exposed to rain or water. The product does not operate properly when operating instructions are followed.

- The product has been dropped or the case has been damaged.
- The product shows a distinct change in performance, indicating a need for service.

Accessories

Please check the following listed accessories before installation:

Power cord	1 pcs
Power adapter	1 pcs
VGA cable	1 pcs
Audio cable	1 pcs
User manual	1 pcs

Installation

Identifying Your Monitor Connections



fig.1

- (1) VGA : Plug the D-type15 pin VGA interface into the VGA video Interface of the Application, and the other end into the LCD monitor's VGA connector. Fasten the screw.
- (2) S-Video : Plug the SV signals from DVR or other equipments to the monitor through s-video cable.

- (3) BNC IN: Connect a device that has composite video output with BNC connector, such as a DVR or Camera.
- (4) BNC OUT: Loop through of the BNC IN connector.
- (5) AUDIO IN: Input the audio signal from the application to monitor through audio cable under VGA or Video channel.
- (6) AUDIO OUT: Audio signal loop through.

Connecting the Monitor

When choosing your workspace, select a sturdy, level surface. Also, make sure you can easily access the back of the monitor. Easy access helps ensure a smooth setup of the monitor.

Note: Before setting up your monitor, refer to the Important Safety Information section at the beginning of this document.

1. Turn off your device. You should always turn off the device before connecting or disconnecting any device.
2. Connect one end of the VGA cable to the VGA connector on the monitor. Connect the other end to your application's VGA connector.
3. Connect one end of the audio cable to the monitor. Connect the other end to an available port on your application.
4. Connect one end of the coaxial cable to the monitor BNC in connector. Connect the other end to DVR or other equipment.
5. If you would like to connect your video source to another monitor or device, you can use the BNC out connector.

NOTE: the BNC out connector is auto terminated, Do not connect a cable to the BNC out unless it is connected to a terminated device because it will cause poor quality video

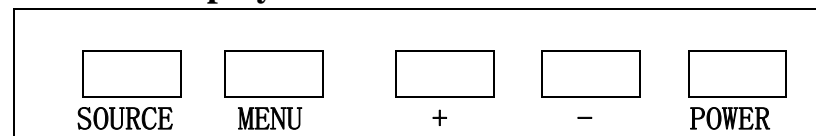
6. Plug the AC/DC power supply into the monitor. Be sure to use the original power adapter included with the monitor.

7. Connect the power cable to the adapter.

Note: the BNC out, S-video and VGA connectors can be connected to one single monitor for simultaneous operation

Controls & Functions

1. Video Display Controls



If you cannot locate your remote, you can use the side control buttons of your monitor to operate any of the monitor's functions.

POWER Turn the monitor on or off.

SOURCE: Accesses the available video input signals (VGA, AV, S-VIDEO)

MENU: Brings up the MONITOR Main menu. When in the menu system, displays sub-menus and selects highlighted items.

+: Increases the volume. In the MONITOR menu system, acts like the right arrow button on the remote control and adjusts menu controls.



-: Decreases the volume. In the MONITOR menu system, acts like the left arrow button on the remote control and adjusts menu controls.


General Specification

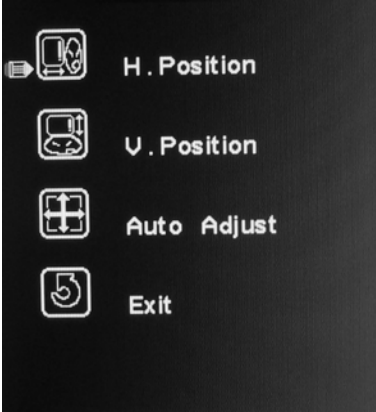

Model No.	DS15TFT	DS17TFT	Model No.	DS19TFT	DS22TFT
Panel Type	15" a-si TFT active matrix	17" a-si TFT active matrix	Panel Type	19" a-si TFT active matrix	22" a-si TFT active matrix
Display Area (H×V)	304.128×228.096	337.920 × 270.336	Display Area (H×V)	376.32×301.056	473.76×296.1
Aspect Ratio	4:3	4:3	Aspect Ratio	4:3	16:10
Pixel Pitch(mm)	0.297(H) × 0.297(V)	0.264(H) × 0.264(V)	Pixel Pitch(mm)	0.294(H) × 0.294(V)	0.282(H) × 0.282(V)
Color	16,2M	16,7M	Color	16,7M	16,7M
Best Resolution	1024 x 768	1280 x 1024	Best Resolution	1280 x 1024	1680×1050
Brightness(typ.)	270 cd/m ²	300 cd/m ²	Brightness(typ.)	300 cd/m ²	300 cd/m ²
Contrast Ratio(typ.)	500:1	800:1	Contrast Ratio(typ.)	800:1	1000:1
Viewing Angle(typ.)	75/75/70/60	80/80/80/80	Viewing Angle(typ.)	75/75/75/75	70/80/70/80
Response Time(optional)	8ms	6ms	Response Time(optional)	6ms	5ms
OSD Language(option)	English, French, German, Spanish. Chinese etc.	English, French, German, Spanish. Chinese etc.	OSD Language(option)	English, French, German, Spanish. Chinese etc.	English, French, German, Spanish. Chinese etc.
Work temperature	0-50℃	0-50℃	Work temperature	0-50℃	0-50℃
Work Humidity	20%-70%	20%-70%	Work Humidity	20%-70%	20%-70%
Interface	BNC(In/out) Audio(in/out) DC VGA ,S-VIDEO	BNC(In/out) Audio(in/out) DC VGA ,S-VIDEO	Input Terminal(optional)	BNC(In/out) Audio(in/out) DC VGA ,S-VIDEO	BNC(In/out) Audio(in/out) DC VGA ,S-VIDEO
Power consumption	<25W	<30W	Power consumption	<40W	<60W
Power Input	AC100-240V 50/60Hz	AC100-240V 50/60Hz	Power Input	AC100-240V 50/60Hz	AC100-240V 50/60Hz
Packing Dimension	410×142×410mm	450×150×450mm	Dimension	480×165×500mm	585×175×495mm

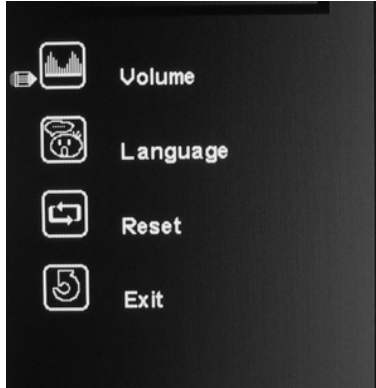
Basic OSD setup

1. OSD setup under VGA input mode



<p style="text-align: center;">Main Menu</p> 	<p>Pressing MENU will pull up the On Screen Display (OSD) menu</p> <ol style="list-style-type: none"> 1. Press + and - to select the different option, Press MENU again to enter sub menu 2. EXIT: Exits the OSD menu
<p style="text-align: center;">Color</p> 	<p>Enter "Color" setup interface in the main menu.</p> <ol style="list-style-type: none"> 1. CONTRAST、 BRIGHTNESS Selecting the Contrast option increases (+) or decreases (-) the strength (lightness or dimness) of the image. Adjust the contrast using the -/left and +/right arrow buttons, and press MENU to confirm the new setting. 2. Contrast and brightness: 0-100. Color adjust : Red. Green. Blue Color temp: 9300. 6500. 5800. sRGB.USER 3. Select "Exit" to exit

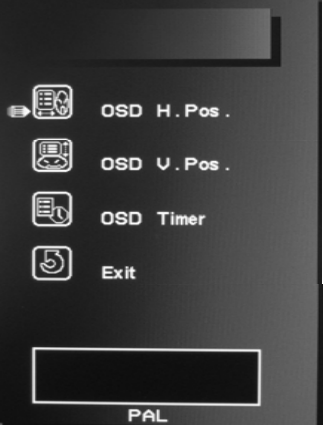
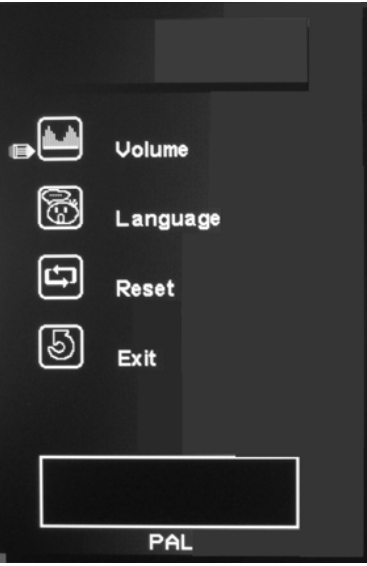
<p style="text-align: center;">Image Setting</p> 	<p>Enter "Image Setting" setup interface in the main menu.</p> <ol style="list-style-type: none"> 1. CLOCK: If the clock setting of your image is not fine-tuned, you may observe periodic vertical bars of video noise on your image. These bars of noise are usually adjusted out when an Auto Configuration is performed. If the bars of noise are still present, this setting can be adjusted manually. Adjust this setting so that either the vertical bars of noise are replaced by an even amount of noise across the whole screen, or the noise disappears completely. If you do an Auto setting, the monitor will try to find the best Clock/Phase setting. If you are not satisfied with the auto adjustment, fine-tune the clock manually as described above. 2. clock adjust from 0 to 100 phase : 0-63. 3. Select "Exit" to exit.
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<p style="text-align: center;">Position</p> 	<p>Enter "Position" setup interface in the main menu.</p> <ol style="list-style-type: none"> 1. Press + and -to select the desired option and then Press MENU to enter this item. 2.H position:Moves image horizontally on screen either left (−) or right (+). 3. V position : Moves images vertically on screen up (−) or down (+). 4.Auto adjust:automatically adjust image clock ,phase,H-position V-position settings 5.Select "Exit" to exit.
<p style="text-align: center;">OSD menu</p> 	<p>Enter "OSD Menu" setup interface in the main menu.</p> <ol style="list-style-type: none"> 1.Adjust the OSD image horizontally or vertically by pressing the Select button. H-position moves the OSD position left or right. V-position moves the OSD position up or down. 2.OSD H/V pos : 0-200 , OSD timer:0-27 3.Select "Exit" to exit.

<p style="text-align: center;">Misc</p> 	<p>Enter "Misc." setup interface in the main menu.</p> <ol style="list-style-type: none"> 1.Volume: turn up or turn down the volume by pressing either left (−) or right (+). 2. LANGUAGE Select a language among English, German, French, Spanish, Simplified Chinese and Traditional Chinese. 3.Reset Resets the control functions back to the original factory preset values. In order for the Recall function to work, the timing must fall under one of the factory preset timing modes.position. 2. EXIT: Exits the OSD menu
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2. OSD setup under BNC(AV) / SV input mode

<p style="text-align: center;">Color</p> 	<p>Pressing MENU will pull up the On Screen Display (OSD) menu</p> <ol style="list-style-type: none"> 1.Color setting 2.Osd menu 3.Misc 4.Exit
<p style="text-align: center;">Color setting</p> 	<p>Enter "Color setting" item</p> <ol style="list-style-type: none"> 1.contrast 、 brightness 、 saturation Selecting the Contrast option increases (+) or decreases (-) the strength (lightness or dimness) of the image. Adjust the contrast using the - / left and + / right arrow , press MENU to confirm the new setting. 2. Contrast , brightness ,saturation: 0-100. Sharpness:0-4 3. Select "Exit" to exit

	<p>Enter "OSD Menu" setup interface in the main menu.</p> <ol style="list-style-type: none"> 1. Adjust the OSD image horizontally or vertically by pressing the Select button. H-position moves the OSD position left or right. V-position moves the OSD position up or down. 2.OSD H/V pos : 0-200 OSD timer:0-27 3.Exit the osd menu
<p style="text-align: center;">MISC</p> 	<p>Enter "Misc." setup interface in the main menu.</p> <ol style="list-style-type: none"> 1. Volume: turn up or turn down the volume by pressing either left (-) or right (+). 2. LANGUAGE:Select a language among English, French, Spanish, German Simplified Chinese and Traditional Chinese. 3.Reset: Resets the control functions back to the original factory preset values. In order for the Recall function to work, the timing must fall under one of the factory preset timing modes. 4. EXIT:Exits the OSD menu