TVM-2700 / TVM-3200 / TVM-4200 Monitor User Manual

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Certification

N4131

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ACMA compliance

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Contact information

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Important safeguards

1. **Installation cautions**:
   - Do not block any ventilation openings.
   - Always ensure that the monitor is located in a well-ventilated area to prevent the unit from overheating.
   - Only use accessories specified by the manufacturer or those sold with the product.
   - Avoid operating or placing the monitor in the following environments: extremes of temperatures, both hot and cold; high humidity; direct sunlight; excessively dusty surroundings; avoid close proximity to other equipment that generates a strong magnetic field
2. **Water and moisture**: Do not use this appliance near water. To reduce the risk of fire or electric shock, do not expose this unit to rain or moisture.
3. **Power cord and power cord protection**: Power cords should be routed so that they not likely to be walked on or pinched. Pay particular attention to the location of cords and plugs, convenience receptacles, and the point of exit from the appliance.
4. **Product care**: Do not touch the screen directly with fingers. The oils from your skin may leave marks on the surface of the screen, which are difficult to be removed and may damage the screen permanently. Do not apply pressure to the screen.
5. **Cleaning**: Clean only with a dry cloth.
6. **Servicing**: Do not attempt to service this unit yourself. Opening or removing covers may expose you to dangerous voltage or other hazards. Refer all servicing to qualified service personnel.

7. **Lightning**: For added protection during a lighting storm or when this unit is left unattended and unused for long periods of time, unplug the unit from the wall outlet and disconnect the cable system. This will prevent damage to the unit due to lightning and power line surges.

8. **Mains plug (2 pin/3 pin):**

    - Do not remove the grounding or earth connection from the power supply / mains plug.
    - Always remember to unplug the monitor from the power supply under the following circumstances if the monitor will not be used for a long period of time, if the power supply cable or plug/connector is damaged or if the monitor housing is damaged or broken.

CAUTION: Do not attempt to dismantle this product. Any attempt to dismantle or remove the covers from this product will invalidate the warranty and may also result in serious injury.

Introduction

This manual explains how to correctly install, operate and get the best performance from your monitor. Please read this user manual carefully before installing your monitor then keep it near your monitor for quick reference.

First, please check that the contents of the box correspond with the following checklist:

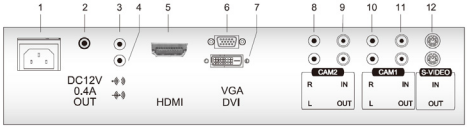
- LED monitor
- Power cord
- VGA cable
- AC adaptor
- User manual

If any item is missing or damaged, please contact your dealer. Please keep the box and packing materials so that you may properly store or transport your monitor.

Features

- The convenient and user-friendly on-screen display allows for easy and accurate adjustments of screen size, position, and screen color.
- The monitor complies with the VESA Display Data Channel (DDC) specification for Plug and Play compatibility. Advanced micro circuitry makes setup and configuration fast and effortless.
- The monitor features Advanced Color Controls for fine-tuning to meet your own personal tastes or application requirements. Use the on-screen controls to adjust the color temperature,
- Press the Menu button and activate the Self-Diagnosis menu to determine whether your monitor is functioning normally, not receiving a signal, or is receiving a signal that is out of scanning range.

Connections

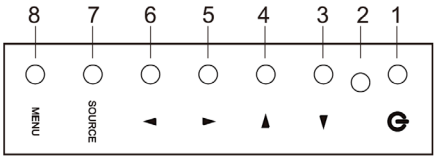


1. AC input
2. DC 12V 0.4 Out
3. Headphone Out
4. PC stereo input
5. HDMI
   HDMI signal input.
6. VGA
   RGB signal input. VIDEO IN
   Composite signal input.
7. DVI
   DVI-D signal input

8. CAM2 R/L
   Audio signal input left and right for CAM2
9. CAM2 In/OUT
   Composite signal input and output for CAM2
10. CAM1 R/L
    Audio signal input left and right for CAM1
11. CAM1 In/OUT
    Composite signal input and output for CAM1
12. S-VIDEO OUT Composite signal output

Front panel controls

Control panel



1. POWER

Switches the monitor on and off.

2. POWER indicator

3. ▶ Right Arrow (*)

Primary Function: Used to increase the volume.

Secondary Function: Moves the cursor to the right in the OSD (on-screen display) window and increases the value of any selected menu.

4. ◀ Left Arrow (*)

Primary Function: Used to decrease the volume.

Secondary Function: Moves cursor to the left in the OSD window and decreases the value of any selected menu.

5. ▲ Up Arrow (*)

Primary Function: Automatically adjusts the display to the most optimal setting possible. (VGA mode only)

Secondary Function: Allows for vertical scrolling in the OSD menu.

6. ▼ Down Arrow

Allows for vertical scrolling in the OSD menu.

7. SOURCE (*)

Used to select different input sources.

Press the UP or DOWN arrow to scroll through the available sources, and press the LEFT or RIGHT arrow to confirm selection.

8. MENU

Turns the OSD window on.

Turns the OSD window off and moves from sub menu to top menu in the OSD window.

*** Push the menu button for 5 seconds when you want to unlock the keypad lock.**

(*) = Hot key

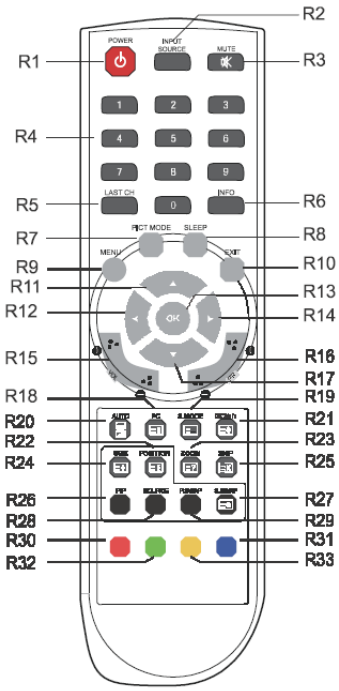
Changing a monitor parameter

1. Press the **MENU** button on the front panel to obtain the OSD menu screen.
2. Use the LEFT-RIGHT buttons to select the menu.
3. Use DOWN button to select the submenus.
4. Use UP-DOWN buttons to select a submenu function.
5. Press SOURCE button, then using LEFT-RIGHT buttons you can make adjustments as necessary.
6. To exit, press **MENU**.

Hot keys

SOURCE	Selects signal in order. VGA - HDMI - DVI – CAM1 – CAM2 - SVIDEO
▲ (UP/AUTO)	When there is no OSD, if you press this ▲ (UP/AUTO) button, you can use the best display performance fit for a current mode
◀ ▶ (VOLUME)	When there is no OSD, you can adjust the volume directly

Remote control



R1 POWER
Turn the monitor on from stand-by or off to stand-by mode.

R2 INPUT SOURCE
Select the signal source from the multiple input sources.

R3 MUTE
Turn the sound on and off.

R4 NUMBER Buttons
Press the number buttons in order of 7,8,9,0 to unlock the keypad lock.

R5 LAST CH
Not used.

R6 INFO
Information display.

R7 PICT MODE
Recall your preferred picture settings.

R8 SLEEP
Set the sleep timer.

R9 MENU
Display a main menu.

R10 EXIT
Turns the OSD window off and moves from sub Menu to top menu in the OSD window.

R11 / R17 UP/DOWN ▲ / ▼ Button
Press UP/DOWN button to enter the Function menu.

R12 / R14 LEFT/RIGHT ◀ / ▶ Button
Press LEFT/RIGHT Button to adjust the volume.

R13 OK
Select menu items.

R15 VOL +/-
Adjust the sound level.

R16 PR +/-
Not used.

R18 PC
Directly select VGA mode.

R19 S.MODE
Choose a different preset sound mode or your own customized sound.

R20 AUTO
Choose automatically the correct horizontal Position and vertical position as well as the size of the screen image. (VGA mode only)

R21 ⏻/◯/I/II
Not used.

R22 POSITION
Not used.

R23 ZOOM
Select the screen format (CAM/HDMI mode only).

R24 SIZE
Not used.

R25 SKIP
Not used.

R26 PIP
Not used.

R27 S. SWAP
Not used.

R28 SOURCE
Not used.

R29 P. SWAP
Not used.

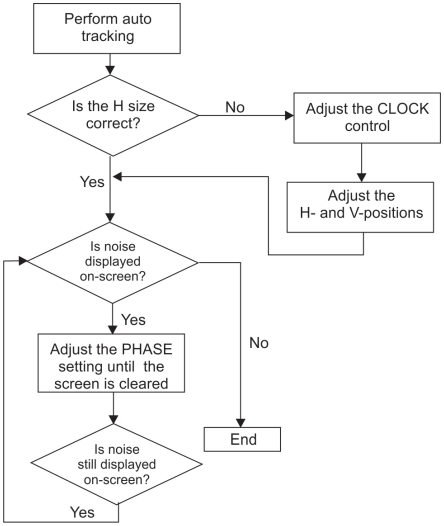
R30, R31, R32, R33
Not used.

Inserting batteries into the remote control unit

Open the battery compartment of the remote control. Insert the batteries (two 1.5 V type R03 or AAA). Make sure that the polarity matches with the (+) and (-) marks inside of the battery compartment.

Note: To avoid damage from possible battery leakage, remove the batteries if you do not plan to use the remote control handset for an extended period of time.

Adjustment procedure

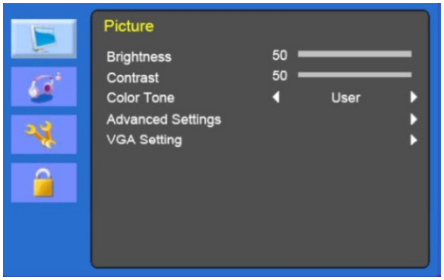


OSD function

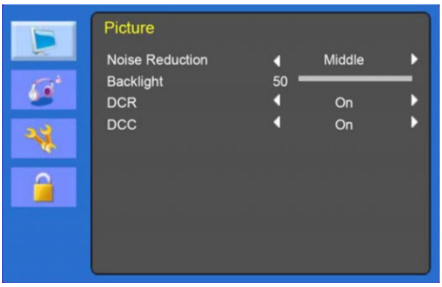
Configure the monitor using the on-screen display (OSD) menus and submenus. Changes are immediately saved and implemented.

VGA menu

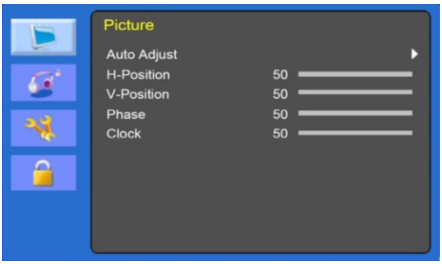
- **Picture**



(Advanced Settings)



(VGA setting)



1. Brightness

Adjust the brightness of the image.

2. Contrast

Adjust the contrast of the image, the difference between light and dark areas on the screen.

3. Color Tone

Choose a different preset color temperature or set your own customized color parameters (Normal/ Warm/ Cool/ User).

4. Advanced Setting

4-1 Noise Reduction.

Not used.

4-2 Back Light

Adjust the back light to be brighter or darker.

4-3 DCR (optional)

The dynamic contrast ratio (DCR) automatically adjusts the screen brightness. Turn DCR on or off.

4-4 DCC (optional)

The dynamic contrast control (DCC) automatically adjusts the screen contrast. Turns DCC on or off.

5. VGA Setting

5-1 Auto adjust

Automatically choose the correct horizontal position and vertical position, and size of the screen image.

5-2 H-Position

Adjust the position of the display horizontally (left or right).

5-3 V-Position

Adjust the position of the display vertically (up or down).

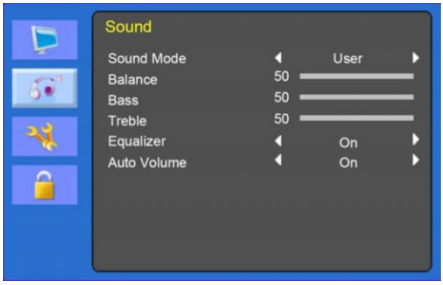
5-4 Phase

Remove any horizontal noise and clear or sharpen the image of the characters.

5-5 Clock

Adjust the width (horizontal size) of the screen image.

• Sound



1. Sound Mode

Choose a different preset sound mode or your own customized sound. (Standard/ Speech/ Music/ User)

2. **Balance**

   Adjust the sound balance of the left and right speakers.

3. **Bass (optional)**

   When you select **User** mode, adjust the bass sound.

4. **Treble (optional)**

   When you select the user mode, adjust the treble sound.

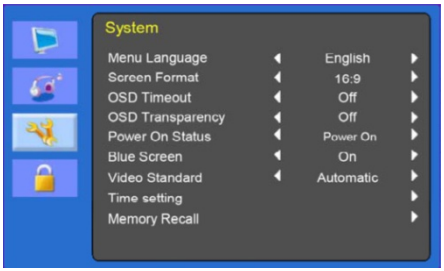
5. **Equalizer**

   Provides an enhanced listening experience.

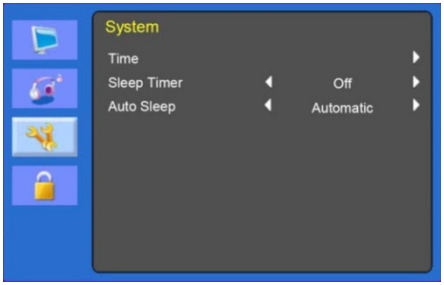
6. **Auto Volume**

   Automatically remains at the same volume level if you change the program.

• System



(Time setting)



1. **Menu Language**

   Select language for the OSD.

2. **Screen Format**

   Select the aspect ratio (16:9/4:3).

3. **OSD Time out**

   Adjust the display of the OSD menu (5 to 60 seconds).

4. **OSD Transparency**

   Adjust the OSD transparency.

5. **Power On Status**

   Not used.

6. **Blue Screen**

   Select the background color.

7. **Time Setting**

   7-1 Time

   Not used.

   7-2 Sleep Timer

   Set the sleep timer.

   7-3 Auto Sleep

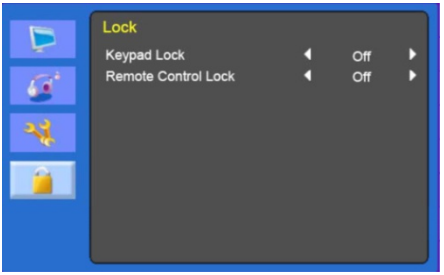
   The monitor turns off when it does not receive any signal from the remote control or any button within the time set up (Off/ 1 Hour/ 2 Hours/ 5 Hours).

   (A screen warning is displayed before the configured automatic shutdown time).

8. **Memory Recall**

   Reset the screen to the factory preset display settings.

• Lock



1. **Keypad Lock**

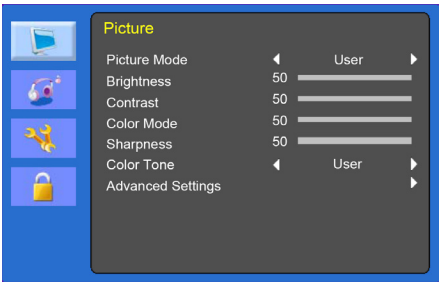
   Turn the keypad lock on or off.

2. **Remote Control Lock (optional)**

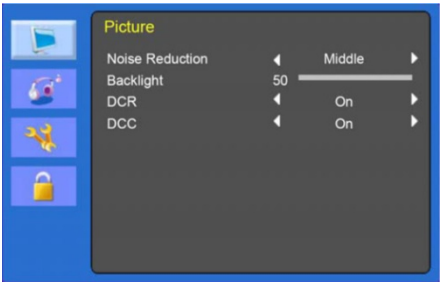
   Turn the remote control lock on or off.

Cam menu (DVI/ HDMICAM/ S-VIDEO)

• Picture



(Advanced Setting)



1. **Picture Mode**

   Select the picture mode. (Standard/ Movie/ Dynamic/ User/ Eco).

2. **Brightness**

   Adjust the brightness of the image.

3. **Contrast**

   Adjust the contrast of the image, the difference between light and dark areas on the screen.

4. **Color Mode**

   Adjust the color of the image.

5. **Sharpness**

   Adjust the image quality of the display.

   (DVI mode is not available).

6. **Tint (cam mode only)**

   Adjust the tint of the image.

7. **Color Tone**

   Choose a different preset color temperature or set your own customized color parameters (Normal/ Warm/ Cool/ User).

8. **Advanced Setting**

   8-1 Noise Reduction

   Reduce the noise in the picture due to poor reception or poor picture quality.

   (Off/ Low/ Middle/ High).

   (DVI mode is not available).

   8-2 Back Light

   Adjust the back light to be brighter or darker.

   8-3 DCR

   The dynamic contrast ratio (DCR) automatically adjusts the screen brightness.

   Turn DCR on or off.

   (DVI mode is not available).

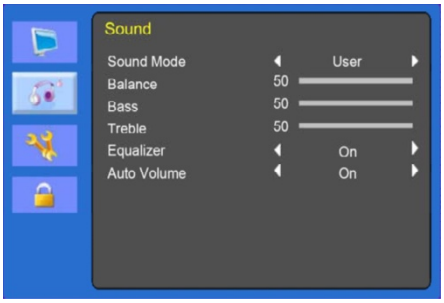
   8-4 DCC

   The dynamic contrast control (DCC) automatically adjusts the screen contrast.

   Turn DCC on or off.

   (DVI mode is not available).

• Sound



1. Sound Mode

Choose a different preset sound mode or your own customized sound. (Standard/ Movie/ Music/ User)

2. Balance

Adjust the sound balance of the left and right speakers.

3. Bass

When you select the user mode, adjust the bass sound.

4. **Treble**

When you select the user mode, adjust the treble sound.

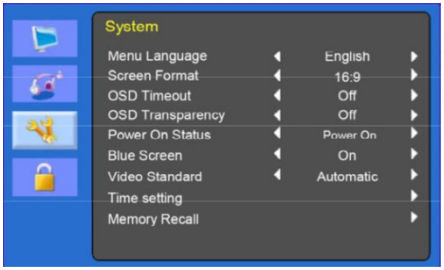
5. Equalizer

Provides an enhanced listening experience.

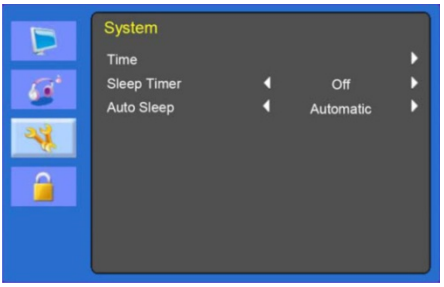
6. Auto Volume

Automatically remains at the same volume level if you change the program.

• System



(Time Setting)



1. Menu Language

Select the OSD language.

2. Screen Format

Select the aspect ratio (16:9/4:3/ ZOOM1/ ZOOM2/ FULL(HDMI mode only)).

3. OSD Time out

Adjust the display time of the OSD menu (10 to 60 seconds).

4. OSD Transparency

Adjust the OSD transparency.

5. Power On Status

Not used.

6. Blue Screen

Select the background color.

7. Time Setting

7-1 Time

Not used.

7-2 Sleep Timer

Set sleep timer.

7-3 Auto Sleep

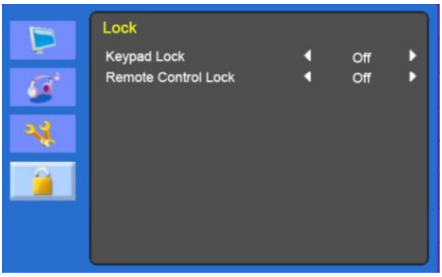
The monitor turns off when it does not receive any signal from the remote control or any button within the time set up (Off/ 1 Hour/ 2 Hours/ 5 Hours).

(The screen warning is displayed before the automatic shutdown time set up).

8. **Memory Recall**

   Reset the screen to the factory preset display settings.

• **Lock**



1. **Keypad Lock**

   Turn the keypad lock on or off.

2. **Remote Control Lock (optional)**

   Turn the remote control lock on or off.

Self-diagnosis

If there is no image, the Self-Diagnosis screen will be displayed. The self-diagnosis function checks if the status of the monitor screen is No Signal, Out of Range, or None Supported.

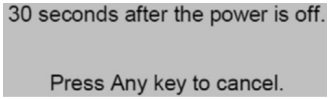
The **No Signal screen** is displayed when the D-Sub signal connector is connected but the status of the monitor is on DPMS mode.

The **Out of Range** screen is displayed when the applied frequency is under or over normal range.

Normal range (Non-interlaced mode only):

H: 30 to 80 kHz

V: 56 to 77 Hz

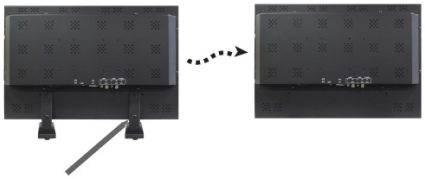


Press any key to cancel.

Monitor is turned off when it does not receive any signal from the remote control or any button within the time that set up.

Removing the monitor stand (All models)

1. Turn off the monitor and unplug the power cable.
2. Place a cushion or a soft cloth on the floor and put the monitor on it with the front of the monitor facing the floor.
3. Detach the rear cover of the monitor stand with a screwdriver.
4. Remove the four screws connecting the stand and monitor body.



Screws (x4)

Attaching the monitor stand

Tighten the screws of the monitor stand at the locations shown in the figure above.

To attach the stand, see the figure below:

Monitor stand attached here

Face of monitor stand arm

The monitor's installation surface is compatible with other types of VESA standard stands.

VESA mount specifications:

Model	Specifications
TVM-2700	**VESA standard**: 100 x 100 mm and 200 x 100 mm (3.94 x 3.94 in. and 7.87 x 3.94 in.) **Screw thread**: M4 screw **Length**: 8.0 mm
TVM-3200	**VESA standard**: 200 x 200 mm and 400 x 200 mm (7.87 x 7.87 in. and 15.75 x 7.87 in.) **Screw thread**: M5 screw **Length**: 8.0 mm
TVM-4200	**VESA standard**: 200 x 200 mm and 400 x 200 mm (7.87 x 7.87 in. and 15.75 x 7.87 in.) **Screw thread**: M5 screw **Length**: 8.0 mm

Troubleshooting

Symptom	Check
Picture is jittery	Adjust **Clock** to set the screen position and adjust the Clock value carefully until there is no noise displayed.
No picture	Check if the power switch and computer power switch are in the On position. Check if the signal cable is correctly connected to the video card. Check if the pins of the D sub-connector are not bent. Check if the computer is in the power- saving mode.
POWER LED is not lit	Check if the power switch is in the On position. Check if the power cord is correctly connected.
Image is unstable	Check if the signal cable is suitable to the video card.
Image is not centered, too small, or too large	Adjust **Clock** or **H&V Center** to get the proper image.
Picture bounces or a wave pattern is present in the picture	Keep the devices that may cause electrical interference away from the monitor. See the FCC information at the front cover of the manual.
Picture is blurred	Adjust **Contrast** and **Brightness.**
Low sound	Adjust the volume on the OSD menu.

Symptom	Check
	Adjust the volume of the sound card in the computer.
VIDEO screen cannot be seen	Check if PICTURE mode has been set.
	Check if the video terminal is properly connected.
No video	Check if the video cable is correctly connected to the computer and set to **Functions** on the OSD picture menu.
Poor color in the video	Adjust the **Color** or **Tint** values on the OSD Picture menu.
Grainy picture in the video	Adjust the **Sharpness** on the OSD Picture menu.

Specifications

TVM-2700 / TVM-3200 models

Items		TVM-2700	TVM-3200
Panel	Screen size	27 in. (68.6 cm)	32 in. (81.3 cm)
	Pixel pitch	0.31125 x 0.31125 mm	0.36375 x 0.36375 mm
	View angle (H/V)	178°/178°	178°/178°
	Contrast ratio	3000:1 (typ)	3000:1 (typ)
	Response time	12 ms (G-to-G)	8 ms (G-to-G)
	Brightness	300 cd/m² (typ)	350 cd/m² (typ)
	Recommended resolution	1920 x 1080 @ 60 Hz	1920 x 1080 @ 60 Hz
Audio	Speaker power	5 W x 2	5 W x 2
	Speakers	Built-in	Built-in
	Sound features	Stereo R/L	Stereo R/L
Interface	VGA in (15 Pin D-Sub)	1	1
	DVI in	1	1
	HDMI in	1	1
	CAM in/out	2/2	2/2
	Audio in (RCA type)	2	2
	S-Video in/out	1/1	1/1
	PC stereo in	Yes	Yes
	Head phone out	Yes	Yes
Transmitter	Remote control	Yes	Yes
Power	Consumption	< 50 W	< 55 W
	Source	90 to 260 VAC	90 to 260 VAC
Special feature	Filter type	3D comb filter, De-interlacing	3D comb filter, De-interlacing
Dimensions	W x H x D (without stand)	644 x 388 x 65 mm 25.35 x 15.28 x 2.56 in.	741 x 451 x 80 mm 29.17 x 17.76 x 3.15 in.
	W x H x D (with stand)	644 x 428 x 200 mm	741 x 491 x 200 mm

Items		TVM-2700	TVM-3200
		25.35 x 16.85 x 7.87 in.	29.17 x 19.33 x 7.87 in.
	W x H x D (box)	749 x 542 x 276 mm 29.49 x 21.34 x 10.87 in.	887 x 654 x 293 mm 34.92 x 25.74 x 11.54 in.
Weight	Net (without stand)	6.9 kg (15.2 lb.)	10.7 kg (23.59 lb.)
	Net (with stand)	8.5 kg (18.7 lb.)	12.3 kg (27.12 lb.)
	Gross (box)	11.7 kg (25.8 kg)	16.3 kg (35.94 lb.)
VESA mount Specifications Hole patterns	VESA standard	100 x 100 mm and 200 x 100 mm (3.94 x 3.94 in. and 7.87 x 3.94 in.)	200 x 200 mm and 400 x 200 mm (7.87 x 15.75 in. and 15.75 x 7.87 in.)
	Spacing screw size	M4 screw	M5 screw
	Length	8.00 mm	8.00 mm
Operating temperature	0 to 40 °C / 32 to 104 °F		

The specifications can change without any notice.

The panel may have some defective pixels (ex. slightly light or dark) due to a characteristic of the panel. But there is no defect in your panel product itself.

TVM-4200 model

Items		TVM-4200 model
Panel	Screen size	42 in. (106.7 cm)
	Pixel pitch	0.4845 x 0.4845 mm
	View angle (H/V)	178°/178°
	Contrast ratio	3000:1 (typ)
	Response time	6.5 ms
	Brightness	350 cd/m² (typ)
	Recommended resolution	1920 x 1080 @ 60 Hz
Audio	Speaker power	5 W x 2
	Speakers	Built-in
	Sound features	Stereo R/L

Items		TVM-4200 model
Interface	VGA in (15 Pin D-Sub)	1
	DVI in	1
	HDMI in	1
	CAM in/out	2/2
	Audio in (RCA type)	2
	S-Video in/out	1/1
	PC stereo in	Yes
	Head phone out	Yes
Transmitter	Remote control	Yes
Power	Consumption	< 90 W
	Source	90 to 260 VAC
Special feature	Filter type	3D comb filter, De-interlacing
Dimensions	W x H x D (without stand)	977 x 590 x 89 mm 38.47 x 23.23 x 3.50 in.
	W x H x D (with stand)	977 x 636 x 270 mm 38.47 x 25.04 x 10.63 in.
	W x H x D (box)	1095 x 765 x 330 mm 43.11 x 30.12 x 12.99 in.
Weight	Net (without stand)	20.3 kg (44.75 lb.)
	Net (with stand)	23.1 kg (50.93 lb.)
	Gross (box)	30.0 kg (66.14 kg)
VESA mount	VESA standard	200 x 200 mm and 400 x 200 mm (7.87 x 7.87 in. and 15.75 x 7.87 in.)
Specifications	Spacing screw size	M5 screw
Hole patterns	Length	8.000 mm
Operating temperature	0 to 40 °C / 32 to 104 °F	

The specifications can change without notice.

The panel may have some defective pixels (ex. slightly light or dark) due to a characteristic of the panel. But there is no defect in your panel product itself.

Factory preset timings

Pixel Format	Horizontal Freq.(KHz)	Vertical Freq.(Hz)	Remark
720 x 400	31.469	70.087	all models
640 x 480	31.469	59.940	all models
640 x 480	37.861	72.809	all models
640 x 480	37.500	75.000	all models
800 x 600	37.870	60.317	all models
800 x 600	48.077	72.188	all models
800 x 600	46.875	75.000	all models
1024 x 768	48.360	60.000	all models
1024 x 768	56.476	70.069	all models
1024 x 768	60.020	75.030	all models
1152 x 864	59.986	59.985	all models
1152 x 864	67.500	75.000	all models
1280 x 1024	63.981	60.020	all models
1280 x 1024	79.974	75.024	all models
1360 x 768	47.712	59.790	all models
1440 x 900	55.935	59.887	all models
1680 x 1050	65.290	59.954	all models
1920 x 1080	67.500	60.000	all models

The LED monitor has only non-interlaced modes without flicker.