TVM-1701 / TVM-1850 / TVM-1901 / TVM-2150 Monitor User Manual

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Certification

N4131

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ACMA compliance

Notice! This is a Class A product. In a domestic environment this product may cause radio interference in which case the user may be required to take adequate measures.

Canada

This Class A digital apparatus complies with Canadian ICES-003.

Cet appareil numérique de la classe A est conforme à la norme NMB-0330 du Canada.

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2002/96/EC (WEEE directive): Products marked with this symbol cannot be disposed of as unsorted municipal waste in the European Union. For proper recycling, return this product to your local supplier upon the purchase of equivalent new equipment, or dispose of it at designated collection points. For more information see: www.recyclethis.info.

Contact information

For contact information see: www.interlogix.com or www.utcfssecurityproducts.eu.

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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 monitor is designed for use in a small work area or for those who need more work space on the desk.
- 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 microcircuitry 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,
- RGB gain value for the best possible screen color and intensity.
- 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.
- Activate the higher refresh rates of the monitor to stabilize the screen and eliminate the annoying flicker that contributes to eye-strain and headaches.
- The monitor supports the optimal display performance with 1280x1024 @ 60 Hz (TVM-1701/TVM-1901 Model),1920x1080 @ 60 Hz (TVM-2150 Model) and 1366x768 @ 60 Hz (TVM-1850 Model).
- The monitor can be connected to various types of video devices with supporting video input signals such as Composite video (CVBS), and Separate video.
- The internal stereo speakers produce a good quality audio sound.

Assembling the monitor

The monitors are designed for use on a desktop.

The arm of the monitor stand is shipped pre-installed on the monitor.

To assemble the monitor:

1. Put a smooth pad or cloth on a level surface. Place the monitor on it facing downwards.
2. Insert the arm of the monitor stand of the monitor into the pedestal foot provided. See figures below.

TVM-1701/TVM-1 901 models

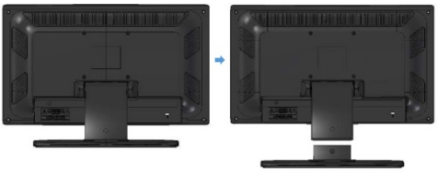
TVM-1850/TVM-2150 models

To disassemble the monitor:

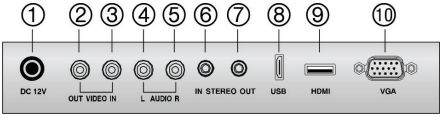
1. Put a smooth pad or cloth on a level surface. Place the monitor on it facing downwards.
2. Using a screwdriver or a similar object with a sharp end, carefully detach the supporting arm from the foot by pressing the groove on the back of the supporting arm. (Note that the fixation point can be broken if too much force is applied). See figures below.

TVM-1701/TVM1901 models

TVM-1850/TVM-2150 models



Connections

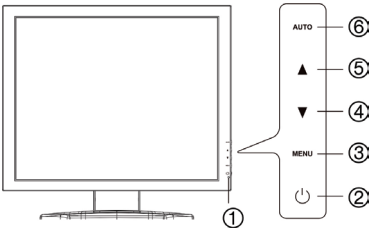


1. DC 12V Input
2. VIDEO OUT

   Composite signal output
3. VIDEO IN
   Composite signal input.
4. AUDIO L
   Audio signal input left.
5. AUDIO R
   Audio signal input right.
6. PC Stereo Input
7. Head Phone Out
8. USB
   Service port
9. HDMI
   HDMI signal input.
10. VGA
    RGB signal input.

Front panel controls

Control panel (TVM-1701 model)



1. **POWER indicator**

   Shows both normal operation and power management status with power LED

2. **POWER**

   Switches the monitor on and off.

3. **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 5seconds when you want to unlock the keypad lock.

4. **▼ Down Arrow (*)**

   Primary Function: Used to decrease the volume.

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

5. **▲ Up Arrow (*)**

   *Primary Functio*n: Used to select from different input sources.

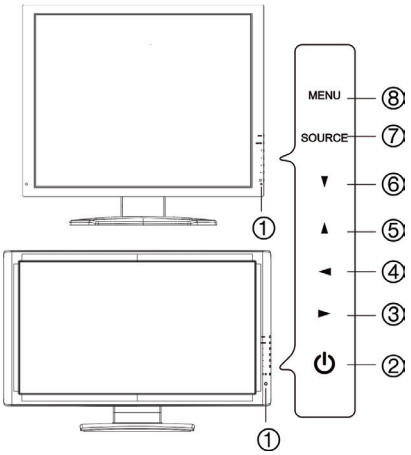
   Secondary Function: Moves cursor to the up in the OSD (On-Screen Display) window and increases the value of any selected menu.

6. **AUTO (*)**

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

   Secondary Function: Selects the sub menu

Control panel (TVM-1901/ TVM-1850/ TVM-2150 models)



1. **POWER indicator**

   Shows both normal operation and power management status with power LED.

2. **POWER**

   Switches the monitor on and off.

3. **▶ Right Arrow (*)**

   Primary Function: Used to increase the volume.

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

4. **◀ Left Arrow (*)**

   Primary Function: Used to decrease the volume.

   Secondary Function: 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 SOURCE 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.

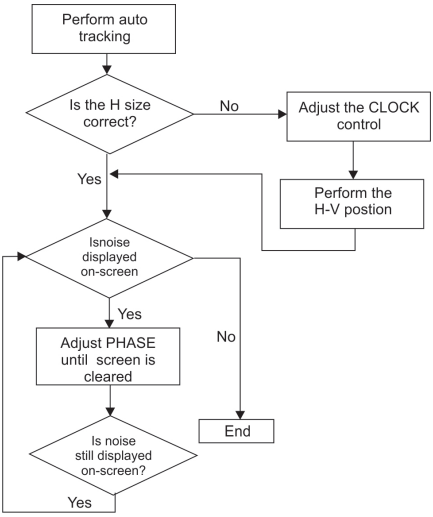
Changing a monitor parameter

1. Press the **MENU** button on the front panel to obtain the OSD menu screen.
2. Use UP-DOWN buttons to select the menu.
3. Use AUTO or SOURCE button to select the submenus.
4. Use Up-Down buttons to select a submenu function.
5. Press AUTO or 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 - CAM
▲ (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

Adjustment procedure

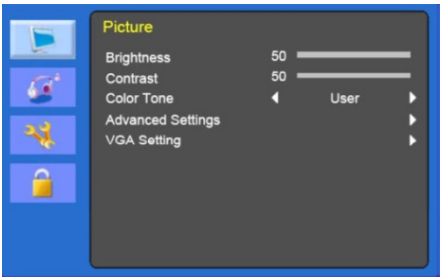


OSD function

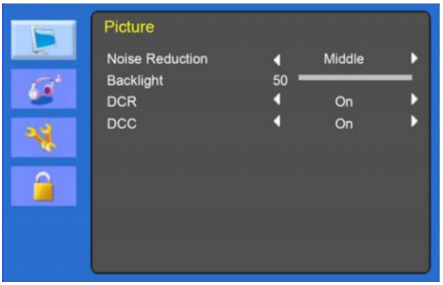
Configure the monitor using the on-screen display (OSD) menus and submenus. Changes are immediately saved and implemented.

VGA menu

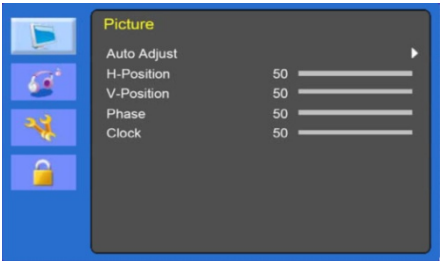
• Picture



(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

Not used.

4-4 DCC

Not used.

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).

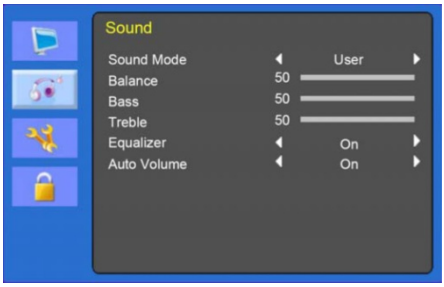
5-4 Phase

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**

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

4. **Treble**

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

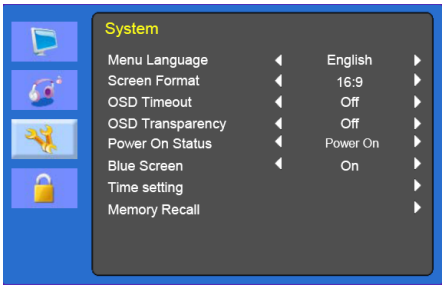
5. **Equalizer**

   Provides an enhanced listening experience.

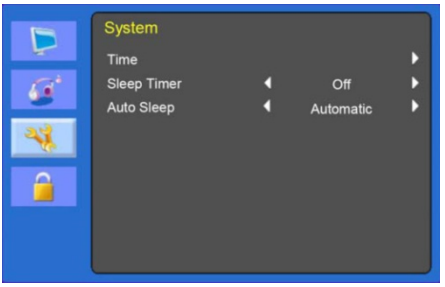
6. **Auto Volume**

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

• System



(Time setting)



1. **Menu Language**

   Select 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 (10 to 60 seconds).

4. **OSD Transparency**

   Adjust the OSD transparency.

   (off/Low/Middle/High)

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

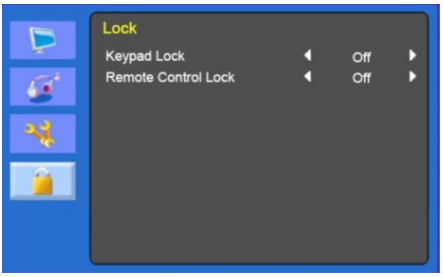
   The monitor turns off when it does not receive any signal from the remote control or any button within the time set up (Off/ 1 Hour/ 2 Hours/ 5 Hours).

   (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**

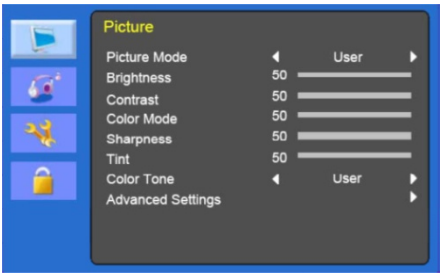
Turn the keypad lock on or off.

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

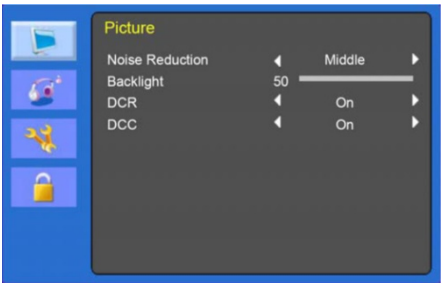
Turn the remote control lock on or off.

Cam menu (HDMI)

• **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.

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).

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.

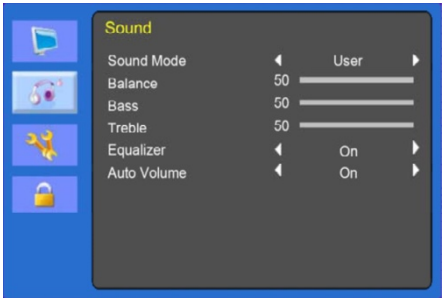
Turn DCR on or off.

8-4 DCC

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

Turn DCC on or off.

• 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 **User** mode, adjust the bass sound.

4. **Treble**

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

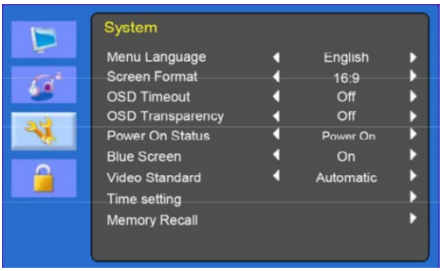
5. **Equalizer**

   Provides an enhanced listening experience.

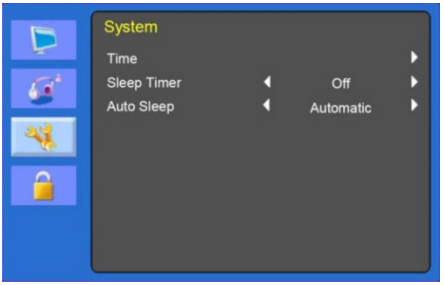
6. **Auto Volume**

   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. **Video Standard (cam mode only)**

   Select the picture mode

8. **Time Setting**

   8-1 Time

   Not used.

   8-2 Sleep Timer

   Set sleep timer.

   8-3 Auto Sleep

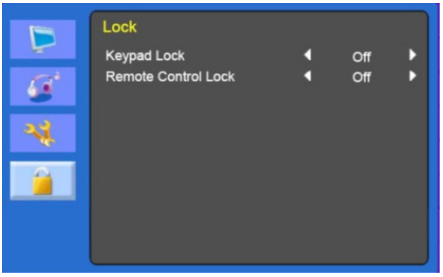
   The monitor turns off when it does not receive any signal from the remote control or any button within the time set up (Off/ 1 Hour/ 2 Hours/ 5 Hours).

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

9. **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.

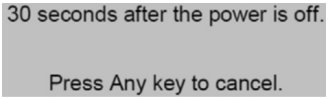
The **No Signal screen** is displayed when the D-Sub signal connector is connected but the status of the monitor is on DPMS mode.

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.

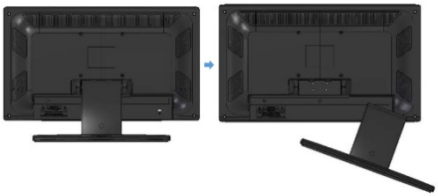
Monitor is turned off when it does not receive any signal from the remote control or any button within the time that set up.

Removing the monitor stand

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. See figures below.

TVM-1701/TVM-1901 models

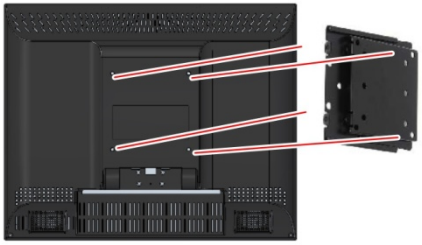
TVM-1850/TVM-2150 model



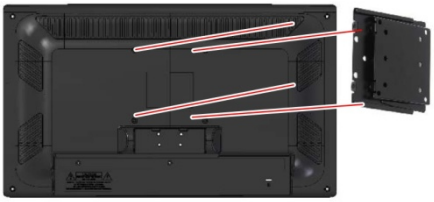
Attaching the monitor stand

Tighten the screws at the locations indicated by the arrows shown in the figures below.

TVM-1701/TVM-1901 models



TVM-1850/TVM-2150 models



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

Hole spacing: 100 x 100 mm

Screw length: 8 to12 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 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

Symptom	Check
	manual.
Picture is blurred	Adjust **Contrast** and **Brightness.**
No sound	Check the audio cables are correctly connected to the computer. Adjust the volume after checking the sound is muted. Check the audio system in the computer.
Low sound	Adjust the volume on the OSD menu. 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-1701/TVM-1901 models

Items		Model TVM-1701	Model TVM-1901
Panel	Screen size	17 in. (43.cm)	19 in. (48.3 cm)
	Pixel pitch	0.264 x 0.264 mm	0.294 x 0.294 mm
	View angle (H/V)	170°/160°	170°/160°
	Contrast ratio	1000:1 (typ)	1000:1 (typ)
	Response time	5 ms	5 ms
	Brightness	250 cd/m² (typ)	250 cd/m² (typ)
	Recommended resolution	1280 x 1024 @ 60 Hz	1280 x 1024 @ 60 Hz
Audio	Speaker power	2 W x 2	2 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
	HDMI in	1	1
	Audio (L/R)	1/1	1/1
	BNC (in/out)	1/1	1/1
	PC Audio in	Yes	Yes
	Head phone out	Yes	Yes
	Service (USB)	Yes	Yes
Power	Consumption	< 25 W	< 25 W
	Source	12 VDC, 3.33 A	12 VDC, 3.33 A
Special feature	Filter type	3D comb filter, deinterlacing	3D comb filter, deinterlacing
Dimensions	W x H x D (without stand)	384 x 310 x 63 mm 15.11 x 12.20 x 2.48 in	422 x 338 x 66 mm 16.61 x 13.30 x 2.59 in.
	W x H x D (with stand)	384 x 358 x 196 mm 15.11 x 14.09 x 7.71 in	422 x 388 x 196mm 16.81 x 15.27 x 7.71 in.
	W x H x D (box)	411 x 377 x 130 mm	470 x 389 x 132 mm

Items		Model TVM-1701	Model TVM-1901
		16.18 x 14.84 x 7.67 in	18.5 x 15.3 x 5.2 in.
Weight	Net (without stand)	3.1kg (6.8lb.)	4.0 kg (8.82 lb.)
	Net (with stand)	3.8kg (8.4lb.)	4.8 kg (10.58 lb.)
	Gross (box)	4.7kg (10.4lb.)	5.3 kg (11.7 lb.)
VESA mount Specifications Hole patterns	VESA standard	100 x 100 mm (3.94 x 3.94 in.)	100 x 100 mm (3.94 x 3.94 in.)
	Spacing screw size	M4 screw	M4 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-1850/TVM-2150 models

Items		Model TVM-1850	Model TVM-2150
Panel	Screen size	18.5 in. (46.9 cm)	21.5 in. (54.6 cm)
	Pixel pitch	0.3 (H) x 0.3(V)	0.248 (H) x 0.248(V)
	View angle (H/V)	170°/160°	170°/160°
	Contrast ratio	1000:1 (typ)	1000:1 (typ)
	Response time	3.5 ms	5 ms
	Brightness	250 cd/m² (typ)	250 cd/m² (typ)
	Recommended resolution	1366 x 768@60Hz	1920 x 1080@60Hz
Audio	Speaker power	2 W x 2	2 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
	HDMI in	1	1
	Audio (L/R)	1/1	1/1
	BNC (in/out)	1/1	1/1

Items		Model TVM-1850	Model TVM-2150
	PC Audio in	Yes	Yes
	Head phone out	Yes	Yes
	Service (USB)	Yes	Yes
Power	Consumption	< 30 W	< 30 W
	Source	12 VDC, 3.33 A	12 VDC, 3.33 A
Special feature	Filter type	3D comb filter, deinterlacing	3D comb filter, deinterlacing
Dimensions	W x H x D (without stand)	472 x 274 x 61 mm 18.58 x 10.78 x 2.40in.	542 x 318 x 62 mm 21.33 x 12.51 x 2.44 in.
	W x H x D (with stand)	472 x 317 x 207 mm 18.58 x 12.48 x 8.14in.	542 x 368 x 207 mm 21.337 x 14.48 x 8.14 in.
	W x H x D (box)	530 x 387 x 173 mm 20.87 x 15.24 x 6.8 in.	574 x 412 x 158 mm 22.6 x 16.2 x 6.2 in.
Weight	Net (without stand)	2.5 kg (5.5 lb.)	3.3 kg (7.2 lb.)
	Net (with stand)	3.2 kg (7.0 lb.)	4.0 kg (8.8 lb.)
	Gross (box)	5.0 kg (11 lb.)	6.3 kg (13.9 lb.)
VESA mount	VESA standard	100 x 100 mm (3.94 x 3.94 in.)	100 x 100 mm (3.94 x 3.94 in.)
Specifications	Spacing screw size	M4 screw	M4 screw
Hole patterns	Length	8.00 mm	8.00 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	TVM-1701/ TVM-1901/ TVM-2150
1152 x 864	67.500	75.000	TVM-1701/ TVM-1901/ TVM-2150
1280 x 1024	63.981	60.020	TVM-1701/ TVM-1901/ TVM-2150
1280 x 1024	79.974	75.024	TVM-1701/ TVM-1901/ TVM-2150
1360 x 768	47.712	59.790	TVM-1850
1440 x 900	55.935	59.887	TVM-2150
1680 x 1050	65.290	59.954	TVM-2150
1920 x 1080	67.500	60.000	TVM-2150

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