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TVM-2403 / TVM-2413 / TVM-2713  
/ TVM-3213 / TVM-4313 / TVM-  
2733 Monitor User Manual

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Kelvinstraat 7, 6003 DH Weert, Netherlands

## Certification



### FCC compliance

Class A: This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

### FCC conditions

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

- (1) This device may not cause harmful interference.
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Cet appareil numérique de la classe A est conforme à la norme CAN ICES-003 (A)/NMB-3 (A).

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### Contact information and manuals

EMEA: [tiresecurityproducts.com](http://tiresecurityproducts.com)

Australian/New Zealand: [tiresecurityproducts.com.au/](http://tiresecurityproducts.com.au/)

### Product documentation

Please consult the following web link to retrieve the electronic version of the product documentation. The manuals are available in several languages.



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# Important safeguards

The LCD unit is produced with high-precision manufacturing techniques. Nevertheless, some pixels may occasionally misfire or appear as dark or bright dots. This has no effect on the recorded image and does not constitute a malfunction.

- 1. Installation cautions:**
  - Do not block any ventilation openings.
  - Always ensure that the monitor is 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:** Always unplug the monitor

before cleaning. Clean with a clean dry cloth. Wet a soft and dry cloth in water and wring thoroughly to clean the exterior of the monitor. Do not apply a cleaning agent that contains alcohol, solvent, or surfactant to the monitor. Connect the power cord to the monitor when cleaning is finished.

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. **Children:** Do not install the monitor within reach of children. The monitor may fall and injure children.
9. **Mains plug (2 pin/3 pin):**
  - Only use the power chord provided with the monitor.
  - 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.

---

## Screen maintenance

Before using the monitor, please read and understand all the instructions. Damage resulting from nonobservance of the instructions is not covered by the warranty.

- Avoid leaving the screen fixed on a stationary image for more than two hours as this may cause afterimage burn-in or defective pixels. To avoid this problem, reduce the screen brightness and contrast of the stationary image.
- Disconnect the power cord from the power socket if you do not plan on using the product for an extended period of time (vacation, etc).
- When you watch 4:3 programs for a long time, you leave different marks on the left and right sides of the screen and the edges of the image. Avoid using this mode for an extended time.

## Unpacking

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.

Check that the contents of the box correspond with the following checklist:

- LED monitor
- Power cord
- User manual
- HDMI cable (TVM-2403/ TVM2413/ TVM-2733/ TVM-4313 only)
- Remote control (TVM-3213/ TVM-4313 only)
- Battery (x1) (TVM-3213/ TVM-4313 only)
- Pedestal (x1) (TVM-2733/ TVM-3213/ TVM-4313 only)

If any item is missing or damaged, please contact your dealer. Keep the box and packing materials so that the monitor can be properly stored or transported.

## Assemble/disassemble the monitor

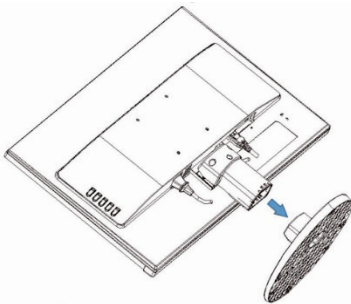
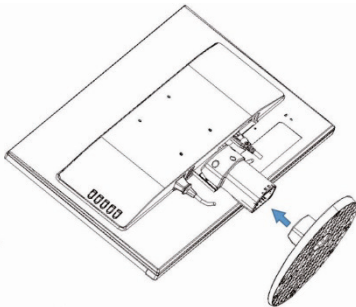
These instructions apply to the TVM-2733, TVM-3213 and TVM-4313 monitors only.

The monitors are designed for use on a desktop or on a wall.

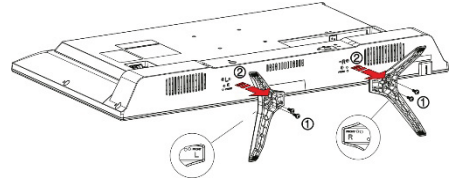
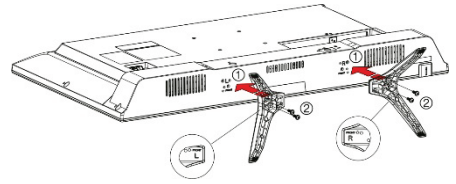
When inserting or removing the legs or stand of a monitor, put a cloth on a stable surface to avoid scratching the screen. Place the monitor on the surface facing downwards.

When disassembling the monitors, turn off the monitor and unplug the power cable.

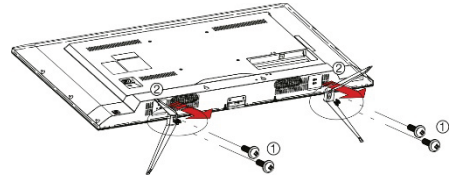
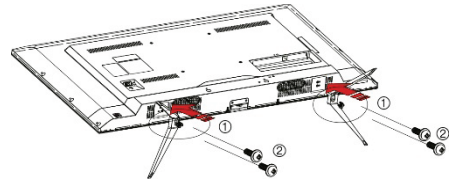
### TVM-2733 model



### TVM-3213 model



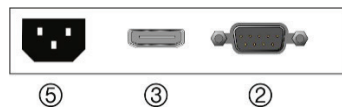
### TVM-4313 model



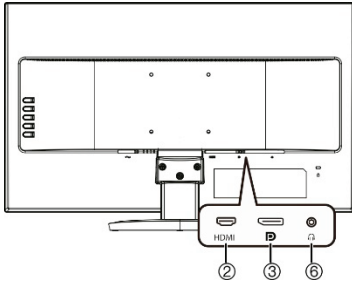
## Connections

This monitor has a universal power supply that allows operation in either 100/120 VAC or 220/240 VAC voltage area. No user-adjustment is required.

### TVM-2403 / TVM-2413 / TVM-2713 models



### TVM-2733 model



connect the computer to the RS-232 port of the camera.

5. AC input
6. Audio output

## Turn on/off the monitor

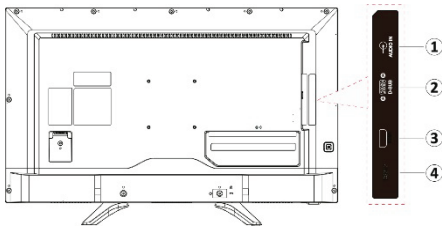
### TVM-2403 / TVM-2413 / TVM-2713 models

Press the Power button on the bottom right of the front of the monitor. Press again to turn off.

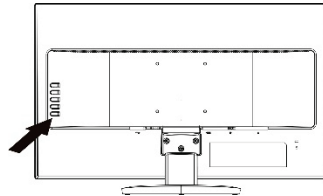
### TVM-3213 model and TVM-4313 models

To turn off the monitor, press the On/Off button on the back of the monitor as shown below. To turn off the monitor, press the button for a few seconds.

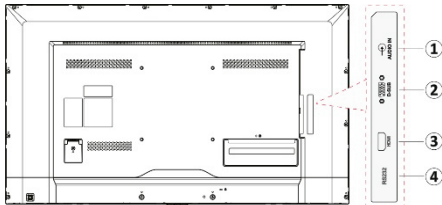
### TVM-3213 model



### TVM-2733:

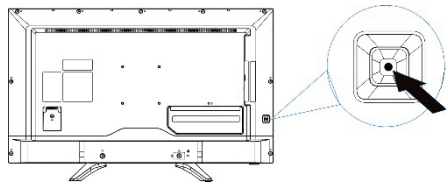


### TVM-3213 model

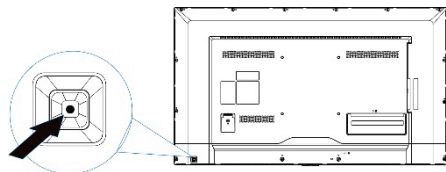


1. Audio input connector  
Connect to an audio input device such as a microphone.
2. HDMI connector  
Connect to your computer using a HDMI cable.
3. D-SUB connector  
Connect to your computer using a VGA cable.
4. RS-232 port  
If using the RS-232 port for remote control, use a network cable to connect the monitor to the RS-232 port of the computer and use a network cable to

### TVM-3213 model:



### TVM-4313 model:



# Select the signal input

## TVM-2403 / TVM-2413 / TVM-2713 models

After turning on the monitor, press the ◀ button on the front of the monitor to get the Input Source screen.



Press a direction button on the front panel to select the desired input source and press **MENU** to confirm. The signal input can also be selected via the OSD menu.

## TVM-2733 model

After turning on the monitor, press the top button on the left side of the back of the monitor to select the input source, HDMI/DP.

## TVM-3213 / TVM-4313 models

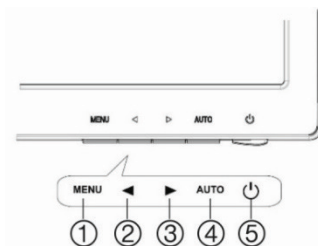
After turning on the monitor, press the power button to select VGA or HTML. The signal input can also be selected via the OSD menu.

# Adjust the TVM-2403 / TVM-2413 / TVM-2713 settings

Use the control panel on the front of the monitor to configure the on-screen display (OSD) menus and submenus. Different menus appear depending on if a device is connected to the monitor's VGA or HDMI. Changes are immediately saved and implemented.

## Control buttons

Use the control buttons on the front or back of the monitor (depending on the model) to quickly access some setting functions as well to adjust settings via the OSD.



### 1. MENU

Press **MENU** to open the OSD main menu screen. Press **MENU** again to select the selected submenu.

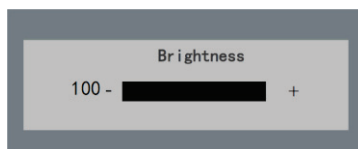
### 2. ◀ Left/right Arrows

*Primary Function:* When not using the OSD menu screen, press ◀ to select the input signal. See "Select the signal input" above.

*Secondary Function:* When in an OSD submenu, press it to decrease the value of the selected menu item.

### 3. ▶ Right Arrow

*Primary Function:* When not using the OSD menu screen, press ▶ to control the brightness level (see screen below). Then press ◀ or ▶ to adjust the level.



*Secondary Function:* When in an OSD submenu, press it to increase the value of the selected menu item.

### 4. AUTO

*Primary Function:* When not using the OSD menu screen, press **AUTO** to automatically adjust the display to the most optimal setting possible (see screen below). (VGA mode only).



*Secondary Function TVM-2413 / TVM-2713:* When in the OSD submenu screen, press AUTO to exit a submenu and return to the main menu.

*Secondary Function TVM-2403:* When in the OSD main menu screen, press AUTO to enter a submenu and press again to enable values to be changed.

### 5. Power On/Off

Press the button to turn the monitor on and off.

## Adjust the OSD settings: TVM-2413 / TVM-2713

1. Press the **MENU** button on the front panel to obtain the OSD main menu screen.
2. Use the **◀/▶** buttons to scroll up and down the list of submenus.
3. Press the **MENU** button to enter the selected submenu.
4. Use the **◀/▶** buttons to adjust a submenu value.
5. Press the **AUTO** button to confirm the change and continue pressing to return to the main menu.

## Adjust the OSD settings: TVM-2403

1. Press the **MENU** button on the front panel to obtain the OSD main menu screen.
2. Use the **◀** button to scroll down the list of submenus.

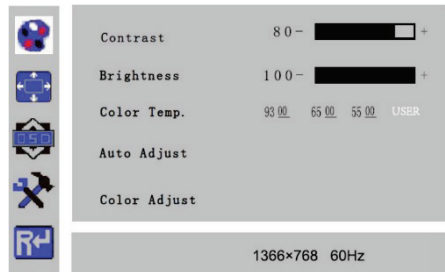
3. Press the **AUTO** button to enter the selected submenu and press it again to enable the submenu.
4. Use the **◀/▶** buttons to adjust a submenu value.
5. Press the **MENU** button to confirm the change and continue pressing the button to return to the main menu.

## Description of the OSD menus

Configure the monitor using the on-screen display (OSD) menus and submenus. Different menus appear depending on if a device is connected to the monitor's VGA or HDMI. Changes are immediately saved and implemented.

### Image settings

This menu lets you optimize the picture quality.



#### • Brightness

Adjust the brightness of the picture. Range is 0 to 100. The higher the value, the brighter the picture.

#### • Contrast

Adjust the difference between light and dark areas in the picture. Range is 0 to 100. The higher the value, the greater the contrast.

#### • Color Temp.

Choose a different preset color temperature or set customized color parameters. Grayed-out values cannot be selected under the



current mode or input source. Yellow value can be modified.

- **Auto Adjust**

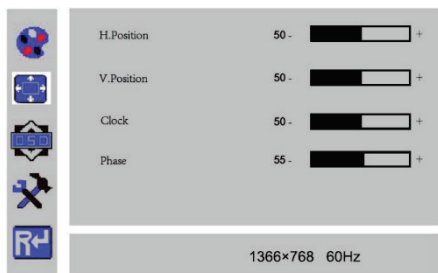
Automatically adjust the brightness, contrast, and color temperature.

- **Color Adjust**

Adjust the color of the picture automatically.

## Image adjustment

When the input source is VGA, this menu lets you adjust the picture position, clock and phase.



- **H.Position**

Adjust the horizontal position from 0 to 100.

- **V.Position**

Adjust the vertical position from 0 to 100.

- **Clock**

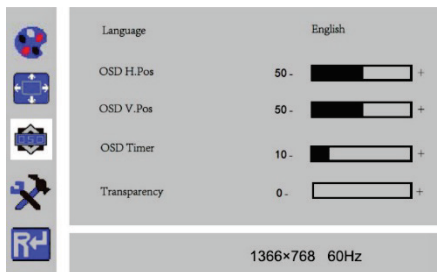
Adjust the clock to reduce vertical line noise.

- **Phase**

Adjust the phase to reduce horizontal line noise.

## OSD settings

This menu lets you set the language, the OSD window transparency and OSD timeout.



- **Language**

Select the language of the OSD. Default is English.

- **OSD H.Pos**

Adjust the OSD horizontal position from 0 to 100.

- **OSD V.Pos**

Adjust the OSD vertical position from 0 to 100.

- **OSD Timer**

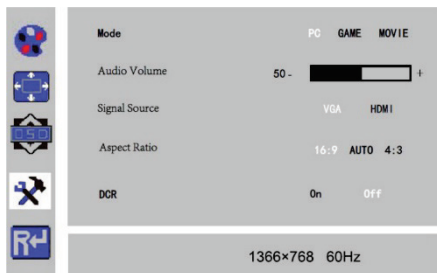
Set the OSD menu to automatically disappear if the menu is not used for a specific period of time. Adjust the time out from 5 to 80 seconds.

- **Transparency**

Adjust the OSD window transparency.

## Other settings

This menu lets you set the mode, audio volume, signal source, aspect ratio and DCR.



- **Mode**

Select **PC**, **GAME** or **MOVIE** as mode.

### • Audio Volume

Adjust the volume from 0 to 100.

### • Signal Source

Select **VGA** or **HDMI**.

### • Aspect Ratio

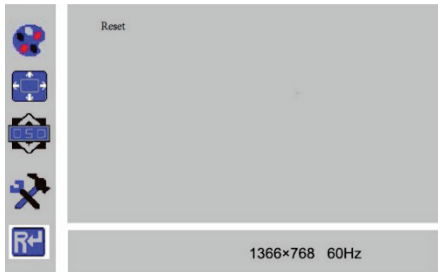
Select the aspect ratio **16:9**, **AUTO** or **4:3**.

### • DCR

Turn the dynamic contrast ratio (DCR) **On** or **Off**.

### Reset

This menu lets you reset the settings to factory default.



## Adjust the TVM-2733, TVM-3213 and TVM-4313 settings

Use the remote control to configure the monitor by the on-screen display (OSD) menus and submenus.

There is also a control panel on the back of the TVM-2733 monitor that can also be used to modify the settings.

Changes are immediately saved and implemented.

## Remote control

The TVM-3213 and TVM-4313 monitors are shipped with a remote control to configure the monitor.



- 1. Power**  
Turns the monitor on from stand-by or off to stand-by mode.
- 2. Signal source**  
Selects the signal source from multiple input devices.
- 3. Up/Down/Left/Right/OK buttons**  
Press / / / buttons navigate a menu. Press button to adjust the Function menu. Press OK to confirm.
- 4. Return**
  1. Return to the previous menu or exit from the current application.
  2. If there is image offset or noise, press to automatically readjust.
- 5. Menu home page button**  
Press to enter the home page menu.
- 6. Mute**  
Turns the sound on and off.
- 7/8. Volume**  
Press to adjust the volume.

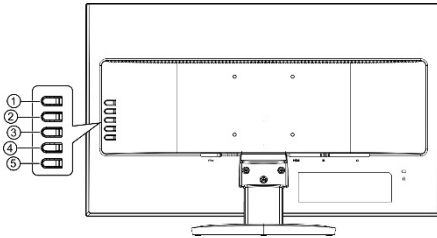
## Inserting batteries into the remote control

Open the battery compartment of the remote control. Insert the batteries (two 1.5 V type 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 when not using the remote-control handset for an extended period of time.

## Control buttons (TVM-2733 only)

Use the control buttons on the back of the monitor to turn on/off the monitor, quickly access some setting functions as well to adjust settings via the OSD. The remote control provides more



### 1. Exit/Source

**Primary Function:** Press to select the input signal, HDMI/DP.

**Secondary Function:** Press to exit the OSD menu.

### 2. Up/Right/Volume

**Primary Function:** When not using the OSD menu screen, press to increase the volume.

**Secondary Function:** When using the OSD menu screen, press Up/Right to navigate through the functions.

### 3. Down/Left/ECO

**Primary Function:** When not using the OSD menu screen, press to access ECO mode.

**Secondary Function:** When using the OSD menu screen, press Down/Left to navigate through the functions.

### 4. Menu/Enter


**Primary Function:** When not using the OSD menu screen, press to display the OSD.

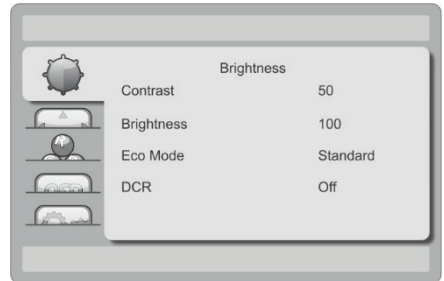
**Secondary Function:** When using the OSD menu screen, press to confirm selection.








### 5. Power


Press to turn on/off the monitor.

## Adjust the OSD settings

1. On the remote control, press the home button  to display the OSD home page.



2. Press  or  to scroll the menu items. Press  to select the desired submenu.
3. Press  or  again to scroll the submenu. Press the button  to enter the submenu item and make the changes.
4. Press the **OK** button to save the changes.
5. Press the return button  to exit the submenu.
6. To make further changes, repeat steps 2 to 5.

7. To exit OSD, press the return  again.

## Description of the OSD menus



### Brightness

#### Contrast

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

#### Brightness

Adjust the brightness of the image.

#### Eco Mode

Select the desired mode best suited to the type of picture you will be watching.

*Standard*: Standard mode

*Text*: Text mode

*Internet*: Internet mode

*Game*: Game mode

*Movie*: Movie

*Sports*: Sports mode.

#### DCR

Turn the dynamic contrast ratio (DCR) On or Off.



### Image Setup

#### Clock

Only available in D-sub/VGA mode.

Adjust the clock to reduce vertical line noise. Not available in the TVM-2733.

#### Phase

Only available in D-sub/VGA mode.

Adjust the phase to reduce horizontal line noise. Not available in the TVM-2733.

#### H. Position

Only available in D-sub/VGA mode.

Adjust the horizontal position from 0 to 100. Not available in the TVM-2733.

#### V. Position

Only available in D-sub/VGA mode.

Adjust the vertical position from 0 to 100. Not available in the TVM-2733.

#### Image ratio

Select the image ratio **Wide** or **4:3**.



### Color Temperature

#### Warm

Set the color temperature to be warmer than Normal.

#### Normal

Display the standard color tone.

#### Cold

Set the color temperature to be colder than Normal.

#### User

Select a color tone that best suits your viewing needs. Adjust the red, blue and green saturation levels.



### OSD Setup

#### H. Position

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

#### V. Position

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

#### Timeout

Set the OSD menu to automatically disappear if the menu is not used for a specific period of time. Adjust the time out from 5 to 100 seconds.

#### Language

Select the language of the OSD. Default is English.



## Extra

### Input Select

Select **Auto**, **D-SUB** or **HDMI**.

### DDC-CI

Turn on or off the Plug and Play DDC/CI.

### Reset

Reset the settings to factory default.

### Information

Display the information about the main picture signal source.

## Plug and Play

The Plug and Play feature allows the automatic exchange of information between a monitor and PC to produce an optimum display environment.

The monitor uses VESA DDC2B (international standard) to execute Plug and Play. The DDC2B is a double data channel based on the IC communication protocol.

The monitor must have a video input signal for this feature to operate normally.

## Troubleshooting

Problem	Solutions
Plug and Play function is not functioning	<p>Check if the computer is compatible with the Plug and Play function.</p> <p>Check if the display adapter is compatible with the Plug and Play function.</p>
Picture is blurred	Adjust <b>Contrast</b> and <b>Brightness</b> .
Picture is jittery	Adjust <b>Clock</b> to set the screen position and adjust the Clock value carefully until there is no noise displayed.

Problem	Solutions
Picture bounces or a wave pattern is present in the picture	<p>Keep the devices that may cause electrical interference away from the monitor.</p> <p>See the FCC information in the of the manual.</p>
Poor color in the picture	Adjust the RGB color or select the color temperature.
Picture is not centered, too small, or too large	Adjust to the horizontal or vertical position
No picture	<p>Check if the power switch and computer power switch are in the On position.</p> <p>Check if the signal cable is correctly connected to the video card.</p> <p>Check if the pins of D sub-connector are not bent.</p> <p>Check if the computer is in power- saving mode.</p>
POWER LED is not lit	<p>Check if the power switch is in the On position.</p> <p>Check if the power cord is correctly connected.</p>
Poor brightness or contrast	If the picture brightness fades and affects the display function over time, please contact a qualified repair center for repair.
Grainy picture in the video	Adjust the <b>Sharpness</b> on the OSD Picture menu.

The Clock and Phase controls are used to fine-tune the picture. Use the Clock control to

minimize any vertical-line noise seen on the screen background. Use the Phase control to minimize any horizontal-line noise seen on the screen background.

# Specifications

## TVM-2403 and TVM-2413 models

	<b>TVM-2403</b>	<b>TVM-2413</b>
<b>Screen size</b>	23.6"	24"
<b>Screen type</b>	TFT-LED backlight	TFT-LED backlight
<b>Aspect ratio</b>	16:9	16:9
<b>Viewing angle (H/V)</b>	170°/160°	170°/160°
<b>Contrast ratio</b>	1000 : 1	1000 : 1
<b>Response time</b>	5 ms	14 ms
<b>Brightness</b>	250 cd/m <sup>2</sup>	250 cd/m <sup>2</sup>
<b>Native resolution</b>	1920 × 1080 @ 60 Hz	1920 × 1080 @ 60 Hz
<b>Supported input resolution</b>	720×400; 640×480; 800×600; 1024×768; 1280×1024; 1680×1050; 1360×768; 1920×1080	720×400; 640×480; 800×600; 1024×768; 1280×1024; 1680×1050; 1360×768; 1920×1080
<b>Refresh rate (vertical frequency)</b>	60, 70, 75 Hz depending on resolution	60, 70, 75 Hz depending on resolution
<b>Color depth</b>	6 bits + Hi-FRC; 16.7 million colors	6 bits + Hi-FRC; 16.7 million colors
<b>Video compatibility</b>	NTSC / PAL Auto Detect	NTSC / PAL Auto Detect
<b>Audio speaker power</b>	N/A	N/A
<b>Display port IN</b>	N/A	N/A
<b>Audio in (RCA)</b>	N/A	N/A
<b>VGA In (15 Pin D-Sub)</b>	1	1
<b>HDMI (and version)</b>	1	1

	<b>TVM-2403</b>	<b>TVM-2413</b>
<b>DVI</b>	N/A	N/A
<b>Stereo Audio In (3.5 mm jack)</b>	N/A	N/A
<b>Stereo Audio Out (3.5mm jack)</b>	N/A	N/A
<b>USB (for service/upgrade)</b>	N/A	N/A
<b>Operations Control</b>	Power, Up / Down, Left / Right, Source, OSD Menu	Power, Up / Down, Left / Right, Source, OSD Menu
<b>OSD Language</b>	English, Spanish, Dutch, French, German, Simplified Chinese, Russian, Traditional Chinese, Arabic.	English, Spanish, Dutch, French, German, Chinese, Russian, Korean, Portuguese, Vietnamese, Italian, Traditional Chinese
<b>Remote control</b>	No	No
<b>Power Consumption</b>	< 30 W	< 30 W
<b>Input Voltage</b>	100 to 240 VAC	100 to 240 VAC
<b>Filter Type</b>	3D Comb filter, 3D De- interlace, 3D noise reduction	Not supported
<b>Dimension W x H x D (with stand)</b>	560 × 399 × 220 mm	540 × 418 × 227 mm
<b>Weight (with stand)</b>	4.5 kg	3.43 kg
<b>Weight (Gross with box)</b>	5.4 kg	4.44 kg
<b>Indicators</b>	Green when power on, Green flashing when in standby	Green when power on, Green flash when in standby
<b>Operating Temperature</b>	0 to 40°C	0 to 40°C
<b>Storage Temperature</b>	-20 to +55°C 10 to 90% RH (non- condensing)	-20 to +60°C 10 to 90% RH (non- condensing)
<b>Housing</b>	Plastic	Plastic
<b>VESA Mount</b>	100 x 100 mm	100 x 100 mm
<b>Included power supply</b>	External PSU	External PSU



The specifications can change without any notice.

The panel may have some defective pixels (pixels that are slightly lighter or darker, for example) due to a characteristic of the panel, but there is no defect in the product itself.

## TVM-2713 and TVM-2733 models

	<b>TVM-2713</b>	<b>TVM-2733</b>
<b>Screen size</b>	27"	27"
<b>Screen type</b>	TFT-LED backlight	LED backlight
<b>Aspect Ratio</b>	16:9	16:9
<b>Viewing Angle (H/V)</b>	178°/178°	178°/178°
<b>Contrast Ratio</b>	1000:1	1000 : 1
<b>Response Time</b>	14 ms	14 ms
<b>Brightness</b>	250 cd/m <sup>2</sup>	350 cd/m <sup>2</sup>
<b>Native Resolution</b>	1920 × 1080 @ 60 Hz	3840 x 2160 @ 60 Hz
<b>Supported Input Resolution</b>	640×480; 800×600; 1024×768; 1280×1024; 1680×1050; 1360×768; 1920×1080	720×400; 640×480; 800×600; 1024×768; 1280×1024; 1680×1050; 1360×768; 1920×1080 3840×2160
<b>Refresh Rate (vertical frequency)</b>	60, 70, 75 Hz depending on resolution	60, 70, 75 Hz depending on resolution
<b>Color Depth</b>	6 bits + Hi-FRC; 16.7 million colors	8 bits; 1.07 Million colors
<b>Video Compatibility</b>	NTSC / PAL Auto Detect	NTSC / PAL Auto Detect
<b>Audio Speaker Power</b>	N/A	2 W x 2
<b>Display port IN</b>	N/A	1
<b>Audio in (RCA)</b>	N/A	N/A

	<b>TVM-2713</b>	<b>TVM-2733</b>
<b>VGA In (15 Pin D-Sub)</b>	1	N/A
<b>HDMI</b>	1	1
<b>DVI</b>	N/A	N/A
<b>Stereo Audio In (3.5 mm jack)</b>	N/A	N/A
<b>Stereo Audio Out (3.5mm jack)</b>	N/A	1
<b>USB (for service/upgrade)</b>	N/A	N/A
<b>Operations Control</b>	Power, Up / Down, Left / Right, Source, OSD Menu	Power, Up / Down, Left / Right, Source, OSD Menu
<b>OSD Language</b>	English, Spanish, Dutch, French, German, Simplified Chinese, Russian, Korean, Portuguese, Vietnamese, Italian, Traditional Chinese	English, Simplified Chinese
<b>Remote control</b>	No	No
<b>Power Consumption</b>	≤ 40 W	≤ 56 W
<b>Input Voltage</b>	100 to 240 VAC, 50/60 Hz	100 to 240 VAC, 50/60 Hz
<b>Filter Type</b>	Not supported	Not supported
<b>Dimension W x H x D (without pedestal)</b>	N/A	614 × 400 × 250 mm
<b>Dimension W x H x D (with pedestal)</b>	614 × 454 × 226 mm	614 × 400 × 250 mm
<b>Weight (without stand)</b>	3.86 kg	4.87 kg
<b>Weight (with stand)</b>	4.06 kg	5.07 kg
<b>Weight (Gross with box)</b>	5.62 kg	6.55 kg
<b>Indicators</b>	Green when power on, Green flashing when in standby	White when power on, red when in standby
<b>Operating Temperature</b>	0 to 40°C	0 to 40°C
<b>Storage Temperature</b>	-20 to +60°C	-20 to +60°C

	<b>TVM-2713</b>	<b>TVM-2733</b>
	5 to 95% RH (non-condensing)	10 to 80% RH (non-condensing)
<b>Housing</b>	Plastic	Plastic
<b>VESA Mount</b>	100 x 100 mm	100 x 100 mm, 4-M4 x 10 mm
<b>Included power supply</b>	Built-in power supply	Built-in power supply

The specifications can change without any notice.

The panel may have some defective pixels (pixels that are slightly lighter or darker, for example) due to a characteristic of the panel, but there is no defect in the product itself.

### **TVM-3213 and TVM-4313 models**

	<b>TVM-3213</b>	<b>TVM-4313</b>
<b>Description</b>	32"	43"
<b>BNC Input</b>	No	No
<b>Backlight</b>	LED backlight	TFT-LED backlight
<b>Aspect ratio</b>	16:9	16:9
<b>Viewing Angle (H/V)</b>	178°/178°	178°/178°
<b>Contrast Ratio</b>	1400 : 1	1200:1
<b>Response Time</b>	8 ms	8 ms
<b>Brightness</b>	300 cd/m <sup>2</sup>	360 cd/m <sup>2</sup>
<b>Native Resolution</b>	1920 x 1080 @ 60 Hz	1920 x 1080 @ 60 Hz
<b>Supported Input Resolution</b>	720×576P; 720×480P; 640×480; 800×600; 1024×768; 1280×1024; 1440×900; 1680×1050; 1360×768; 1920×1080	720×400; 640×480; 800×600; 1024×768; 1280×1024; 1440×900; 1680×1050; 1360×768; 1920×1080

	<b>TVM-3213</b>	<b>TVM-4313</b>
<b>Refresh Rate (vertical frequency)</b>	60, 70, 75 Hz depending on resolution	60, 70, 75 Hz depending on resolution
<b>Color Depth</b>	8 bits; 16.7 Million colors	8 bits; 16.7 Million colors
<b>Video Compatibility</b>	NTSC / PAL Auto Detect	NTSC / PAL Auto Detect
<b>Audio Speaker Power</b>	5 W x 2	5 W x 2
<b>Video In/Out (BNC)</b>	N/A	N/A
<b>Display port IN</b>	N/A	N/A
<b>Audio in (RCA)</b>	1	1
<b>VGA In (15 Pin D-Sub)</b>	1	1
<b>HDMI (and version)</b>	1	1
<b>DVI</b>	N/A	N/A
<b>Stereo Audio Out (3.5 mm jack)</b>	N/A	N/A
<b>USB (for service/upgrade)</b>	N/A	N/A
<b>Operations Control</b>	Power, Up / Down, Left / Right, Source, OSD Menu	Power, Up / Down, Left / Right, Source, OSD Menu
<b>OSD Language</b>	Simplified Chinese, Traditional Chinese, Korean, English, Spanish, French, Portuguese, Russian	Simplified Chinese, Traditional Chinese, Korean, English, Spanish, French, Portuguese, Russian
<b>Remote control</b>	Yes	Yes
<b>Power Consumption</b>	≤ 55 W	≤ 75 W
<b>Input Voltage</b>	100 to 240 VAC, 50/60 Hz	100 to 240 VAC, 50/60 Hz
<b>Filter Type</b>	Not supported	Not supported
<b>Dimension W x H x D (without pedestal)</b>	727 × 424 × 64 mm	969 × 560 × 79 mm
<b>Dimension W x H x D (with pedestal)</b>	729 × 474 × 177 mm	969 × 605 × 270 mm
<b>Dimension W x H x D (box)</b>	729 × 474 × 64 mm	1065 × 678 × 163 mm

	<b>TVM-3213</b>	<b>TVM-4313</b>
<b>Weight (without stand)</b>	4.89 kg	8 kg
<b>Weight (with stand)</b>	5.09 kg	8.2 kg
<b>Weight (gross with box)</b>	6.76 kg	11.1 kg
<b>Indicators</b>	Green when power on, red when in standby	Green when power on, red when in standby
<b>Operating Temperature</b>	5 to 40°C	5 to 40°C
<b>Storage Temperature</b>	-20 to +60°C	-20 to +60°C
<b>Housing</b>	Plastic	Plastic
<b>VESA Mount</b>	100 x 100 mm	200 x 200 mm
<b>Included Accessories</b>	User manual*1, Power cord*1, Remote control*1, Pedestal*1	User manual*1, Power cord*1, Remote control*1, Pedestal*1, HDMI cable*1
<b>Included power supply</b>	Built-in power supply	Built-in power supply

The specifications can change without notice.

The panel may have some defective pixels (pixels that are slightly lighter or darker, for example) due to a characteristic of the panel. But there is no defect in the product itself.

# Important information

## Limitation of liability

To the maximum extent permitted by applicable law, in no event will Carrier be liable for any lost profits or business opportunities, loss of use, business interruption, loss of data, or any other indirect, special, incidental, or consequential damages under any theory of liability, whether based in contract, tort, negligence, product liability, or otherwise. Because some jurisdictions do not allow the exclusion or limitation of liability for consequential or incidental damages the preceding limitation may not apply to you. In any event the total liability of Carrier shall not exceed the purchase price of the product. The foregoing limitation will apply to the maximum extent permitted by applicable law, regardless of whether Carrier has been advised of the possibility of such damages and regardless of whether any remedy fails of its essential purpose.

Installation in accordance with this manual, applicable codes, and the instructions of the authority having jurisdiction is mandatory.

While every precaution has been taken during the preparation of this manual to ensure the accuracy of its contents, Carrier assumes no responsibility for errors or omissions.

## Product Warnings

YOU UNDERSTAND THAT A PROPERLY INSTALLED AND MAINTAINED ALARM/SECURITY SYSTEM MAY ONLY REDUCE THE RISK OF EVENTS SUCH AS BURGLARY, ROBBERY, FIRE, OR SIMILAR EVENTS WITHOUT WARNING, BUT IT IS NOT INSURANCE OR A GUARANTEE THAT SUCH EVENTS WILL NOT OCCUR OR THAT THERE WILL BE NO DEATH, PERSONAL INJURY, AND/OR PROPERTY DAMAGE AS A RESULT.

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THE EQUIPMENT SHOULD ONLY BE OPERATED WITH AN APPROVED POWER ADAPTER WITH INSULATED LIVE PINS.

DO NOT CONNECT TO A RECEPTACLE CONTROLLED BY A SWITCH.

THIS UNIT INCLUDES AN ALARM VERIFICATION FEATURE THAT WILL RESULT IN A DELAY OF THE SYSTEM ALARM SIGNAL FROM THE INDICATED

CIRCUITS. THE TOTAL DELAY (CONTROL UNIT PLUS SMOKE DETECTORS) SHALL NOT EXCEED 60 SECONDS. NO OTHER SMOKE DETECTOR SHALL BE CONNECTED TO THESE CIRCUITS UNLESS APPROVED BY THE LOCAL AUTHORITY HAVING JURISDICTION.

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WARNING! The equipment should only be operated with an approved power adapter with insulated live pins.

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**Caution:** Risk of explosion if battery is replaced by an incorrect type. Dispose of batteries according to the instructions. Contact your supplier for replacement batteries.

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### Warranty Disclaimers

CARRIER HEREBY DISCLAIMS ALL WARRANTIES AND REPRESENTATIONS, WHETHER EXPRESS, IMPLIED, STATUTORY OR OTHERWISE, INCLUDING ANY IMPLIED WARRANTIES, THE WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.

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CARRIER DOES NOT PROVIDE MONITORING SERVICES FOR YOUR ALARM/SECURITY SYSTEM ("MONITORING SERVICES"). IF YOU ELECT TO HAVE MONITORING SERVICES YOU MUST OBTAIN SUCH SERVICE FROM A THIRD PARTY AND CARRIER MAKES NO REPRESENTATION OR WARRANTY WITH RESPECT TO SUCH SERVICES INCLUDING WHETHER OR NOT THEY WILL BE COMPATIBLE WITH THE PRODUCTS, SOFTWARE OR SERVICES MANUFACTURED, SOLD OR LICENSED BY CARRIER.

### Intended Use

Use this product only for the purpose it was designed for; refer to the data sheet and user documentation. For the latest product information, contact your local supplier or visit us online at [firesecurityproducts.com](http://firesecurityproducts.com).

The system should be checked by a qualified technician at least every 3 years and the backup battery replaced as required.

## Advisory messages

Advisory messages alert you to conditions or practices that can cause unwanted results. The advisory messages used in this document are shown and described below.

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**WARNING:** Warning messages advise you of hazards that could result in injury or loss of life. They tell you which actions to take or to avoid in order to prevent the injury or loss of life.

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**Caution:** Caution messages advise you of possible equipment damage. They tell you which actions to take or to avoid in order to prevent the damage.

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**Note:** Note messages advise you of the possible loss of time or effort. They describe how to avoid the loss. Notes are also used to point out important information that you should read.



