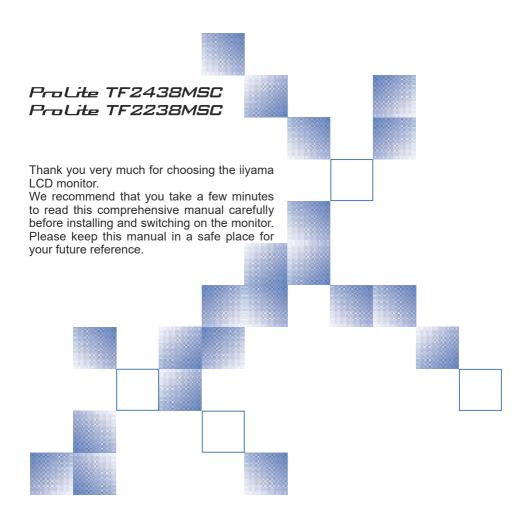


### Pro Lite

### **LCD Monitor**

ENGLISH



## iiyama | Servicecard





## Dear user, we congratulate you on the purchase of your iiyama LCD.

please check the iiyama website. For details on warranty and locally used pixel policies that apply directly after installation of your product

## your local support centre found at https://iiyama.com To report a fault, please contact

# Things to check before you call the iiyama information line

- If the power cable is connected securely and turned on?
- if the display has been turned on?
- If the signal cable is connected securely and the correct input selected?
- If the computer has been restarted with the display connected?
- If the graphics card is correctly installed with the latest drivers possible?
- If the correct native resolution has been selected via 'Display Properties'?
- If the R/G/B signal configuration is correct?
- if the displays On Screen Menu is shown?
- If the correct brightness and contrast settings have been set?
- If given display tolerances and compatibility have been considered?
- If via the On Screen Menu you have performed a Factory Reset/Recall?

# Before reporting the screen defect, please prepare the following information/evidence:

### | model number \*

- purchase receipt and serial number
- name and address for collection
- telephone/fax number, for availability during the day
- convenient collection date (date, time)
- short description of the defect

### Important Note:

If there is no fault found in the collected equipment after inspection, the transferring party shall incur charges for transport and administration.

If you have checked all of the above and there is still no picture, call our information line for assistance in your country.

<sup>\*</sup> see the identification plate on the back of the case.

### CE MARKING DECLARATION OF CONFORMITY

This LCD monitor complies with the requirements of the EC/EU Directive 2014/30/EU "EMC Directive", 2014/35/EU "Low Voltage Directive", 2009/125/EC "ErP Directive" and 2011/65/EU "RoHS Directive"

The electro-magnetic susceptibility has been chosen at a level that gives correct operation in residential areas, business and light industrial premises and small-scale enterprises, inside as well as outside of the buildings. All places of operation are characterised by their connection to the public low voltage power supply system.

IIYAMA CORPORATION: Wijkermeerstraat 8, 2131 HA Hoofddorp, The Netherlands

Model No.: PL2438M. PL2238M



We recommend recycling of used product. Please contact your dealer or iiyama service center. Recycle information is obtained via the Internet, using the address: https://iiyama.com

You can access the Web page of different countries from there.

- We reserve the right to change specifications without notice.
- All trademarks used in this user manual are the property of their respective owners.
- Eprel registration number TF2438MSC-B1: 1512520, TF2238MSC-B1: 1518603

### **TABLE OF CONTENTS**

FOR YOUR SAFETY	1
SAFETY PRECAUTIONS	1
SPECIAL NOTES ON LCD MONITORS	3
CUSTOMER SERVICE	3
CLEANING	3
BEFORE YOU OPERATE THE MONITOR	4
FEATURES	4
CHECKING THE CONTENTS OF THE PACKAGE	4
INSTALLATION	5
CONTROLS AND CONNECTORS	7
CONNECTING YOUR MONITOR: ProLite TF2438MSC	8
CONNECTING YOUR MONITOR: ProLite TF2238MSC	9
COMPUTER SETTING	11
OPERATING THE MONITOR	13
ADJUSTMENT MENU CONTENTS	14
STANDBY FEATURE	21
TROUBLE SHOOTING	22
RECYCLING INFORMATION	23
APPENDIX	24
SPECIFICATIONS: ProLite TF2438MSC-B1	24
SPECIFICATIONS: ProLite TF2238MSC-B1	25
DIMENSIONS : ProLite TF2438MSC	26
DIMENSIONS : ProLite TF2238MSC	26
COMPLIANT TIMING	27

### FOR YOUR SAFETY

### **SAFETY PRECAUTIONS**

### WARNING

### STOP OPERATING THE MONITOR IF YOU ARE AWARE OF ANY PROBLEMS

If you notice any abnormal phenomena such as smoke, strange sounds or fumes, unplug the monitor and contact your dealer or iiyama service center immediately. Further use may be dangerous and can cause fire or electric shock.

### **NEVER REMOVE THE CABINET**

High voltage circuits are inside the monitor. Removing the cabinet may expose you to the danger of fire or electric shock.

### DO NOT PUT ANY OBJECT INTO THE MONITOR

Do not put any solid objects or liquids such as water into the monitor. In case of an accident, unplug your monitor immediately and contact your dealer or iiyama service center. Using the monitor with any object inside may cause fire, electric shock or damage.

### INSTALL THE MONITOR ON A FLAT, STABLE SURFACE

The monitor may cause an injury if it falls or is dropped.

### DO NOT USE THE MONITOR NEAR WATER

Do not use where water may be splashed or spilt onto the monitor as it may cause fire or electric shock.

### OPERATE UNDER THE SPECIFIED POWER SUPPLY

Be sure to operate the monitor only with the specified power supply. Use of an incorrect voltage will cause malfunction and may cause fire or electric shock.

### PROTECT THE CABLES

Do not pull or bend the power cable and signal cable. Do not place the monitor or any other heavy objects on the cables. If damaged, the cables may cause fire or electric shock.

### **ADVERSE WEATHER CONDITIONS**

It is advisable not to operate the monitor during a heavy thunder storm as the continual breaks in power may cause malfunction. It is also advised not to touch the plug in these circumstances as it may cause electric shock.

### INSTALLATION LOCATION

Do not install the monitor where sudden temperature changes may occur, or in humid, dusty or smoky areas as it may cause fire, electric shock or damage. You should also avoid areas where the sun shines directly on the monitor.

### DO NOT PLACE THE MONITOR IN A HAZARDOUS POSITION

The monitor may topple and cause injury if not suitably located. Please also ensure that you do not place any heavy objects on the monitor, and that all cables are routed such that children may not pull the cables and possibly cause injury.

### **MAINTAIN GOOD VENTILATION**

Ventilation slots are provided to keep the monitor from overheating. Covering the slots may cause fire. To allow adequate air circulation, place the monitor at least 10cm (or 4 inches) from any walls.

In case the monitor will be installed inside a kiosk or any other equipment, please make sure enough ventilation is available to avoid overheating of the monitor. Contact the iiyama service center in case you need advice.

### DISCONNECT THE CABLES WHEN YOU MOVE THE MONITOR

When you move the monitor, turn off the power switch, unplug the monitor and be sure the signal cable is disconnected. If you do not disconnect them, it may cause fire or electric shock.

### **UNPLUG THE MONITOR**

If the monitor is not in use for a long period of time it is recommended that it is left unplugged to avoid accidents.

### HOLD THE PLUG WHEN DISCONNECTING

To disconnect the power cable or signal cable, always pull it by the plug. Never pull on the cable itself as this may cause fire or electric shock.

### DO NOT TOUCH THE PLUG WITH WET HANDS

Pulling or inserting the plug with wet hands may cause electric shock.

### WHEN YOU INSTALL THE MONITOR ON YOUR COMPUTER

Be sure the computer is strong enough to hold the weight of the monitor, otherwise, you may damage your computer.

### **REMARK FOR 24/7 USAGE**

This product is not specifically designed for 24/7 usage in all environments.

### **OTHERS**

### **ERGONOMIC RECOMMENDATIONS**

To eliminate eye fatigue, do not operate the monitor against a bright background or in a dark room. For optimal viewing comfort, the monitor should be just below eye level and 40-60 cm (16-24 inches) away from your eyes. When using the monitor over a prolonged time, a ten minute break every hour is recommended as looking at the screen continuously can cause eye strain.

### **SPECIAL NOTES ON LCD MONITORS**

The following symptoms are normal with LCD monitors and do not indicate a problem.

### NOTE

- When you first turn on the LCD monitor, the picture may not fit in the display area because of the type of computer that is used. In this case, adjust the picture position to the correct position.
- You may find slightly uneven brightness on the screen depending on the desktop pattern you use.
- Due to the nature of the LCD screen, an afterimage of the previous screen may remain after switching the image, when the same image is displayed for hours. In this case, the screen can be recovered slowly by changing the image or turning off the Power Switch for some hours.

### **CUSTOMER SERVICE**



If you have to return your unit for service and the original packaging has been discarded, please contact your dealer or iiyama service center for advice or replacement packaging.

### **CLEANING**

**WARNING** 

If you drop any materials or liquids such as water into the monitor when cleaning, unplug the power cable immediately and contact your dealer or iiyama service center.

**CAUTION** 

■ For safety reasons, turn off the power switch and unplug the monitor before you clean it.

NOTE

- To protect the LCD panel, do not scratch or rub the screen with a hard object.
- Never use any of the following strong solvents. These will damage the cabinet and the LCD screen.

Thinner Spray-type cleaner

Benzine Wax

Abrasive cleaner Acid or Alkaline solvent

Touching the cabinet with any product made from rubber or plastic for a long time may cause degeneration or loss of paint on the cabinet.

**CABINET** 

Stains can be removed with a cloth lightly moistened with a mild detergent solvent. Then wipe the cabinet with a soft dry cloth.

LCD

Periodic cleaning with a soft dry cloth is recommended.

**SCREEN** 

Don't use tissue paper etc. because these will damage the LCD screen.

### BEFORE YOU OPERATE THE MONITOR

### **FEATURES**

- ♦ Supports Resolutions up to 1920 × 1080
- High Contrast 1000:1 (Typical) / Brightness 600cd/m² (Typical), 525cd/m² (with Touch panel)
- Digital Character Smoothing
- ◆ Stereo Speakers2 × 2W Stereo Speakers
- Standby Feature
- ♦ VESA Mounting Standard (100mm×100mm) Compliant
- ◆ IPX1 Standard Compliant (Only front face)

### **CHECKING THE CONTENTS OF THE PACKAGE**

The following accessories are included in your package. Check to see if they are enclosed with the monitor. If anything is missing or damaged, please contact your local iiyama dealer or regional iiyama office.

■ Power Cable\*

■ HDMI Cable

■ USB Cable

■ Cable Cover

■ Safety Guide

Quick Start Guide

### **CAUTION**

\* TO USERS IN 120V AREA

The rating of the Power Cable enclosed in 120V area is 10A/125V. If you are using a power supply higher than this rating, then a power cable with a rating of 10A/250V must be used. However, all guarantees and warranties are void for any problems or damage caused by a power cable or AC adapter not supplied by iiyama.

An approved power cable greater or equal to H05VVF, 3G, 0.75mm<sup>2</sup> must be used.



CAUTION

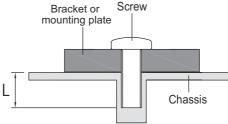
■ Before installing, please make sure the wall or built-in case is strong enough to hold the necessary weight of the display and the mount.

### < WALL MOUNTING OR BUILT-IN CASE >

### CAUTION

When you use with the wall mounting or built-in case, in consideration of thickness of the bracket or mounting plate, tighten the M4 Screws (4 pcs) which "L" length is 7 or 9mm\*(VESA mounting holes) to fasten the monitor. Using the screw longer than this may cause electric shock or damage because it may contact with the electrical parts inside the monitor.

\* L=7mm : ProLite TF2238MSC L=9mm : ProLite TF2438MSC



### < BUILT-IN EQUIPMENT >

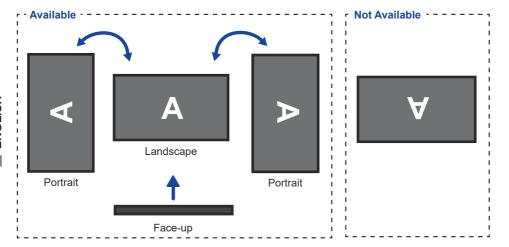
### **CAUTION**

This product is not designed for the purpose of being used in high temperature environment.

If the product is placed in an external cabinet, you need to design cooling fans and vents to keep the temperature low enough to fit in the product temperature specification.

### < ROTATING THE DISPLAY >

This monitor is designed to be compatible in landscape, portrait and face-up modes. Video card for portrait display will be required for rotating the image on the screen.



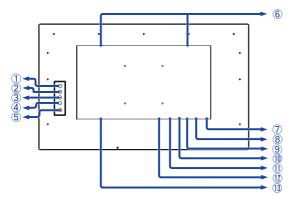
### **CONTROLS AND CONNECTORS**

<Front>



### ProLite TF2438MSC

<Back>



### • ProLite TF2238MSC

<Back>

- ① Menu Button (MENU)
- ② Scroll up / Eco Button (△)
- ③ Scroll Down / Volume Button ( ▽ )
- 4 Enter / Input Select (ENTER)
- ⑤ Power Switch (仂)
- 6 Speakers
- 7 Power Indicator

NOTE Blue: Normal operation

Orange: Standby mode

- (8) USB Downstream Connector (USB 5V, 900mA)
- USB Upstream Connector (PC USB)
- 1 Headphone Connector (EARPHONE)
- 1 HDMI Connector (HDMI)
- DisplayPort Connector (DP)
- ③ AC Connector( ~: Alternating current) (AC IN)

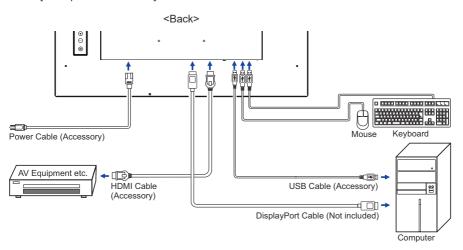
### **CONNECTING YOUR MONITOR: ProLite TF2438MSC**

- (1) Ensure that both the computer and the monitor are switched off.
- ② Connect the computer to the monitor with the signal cable.
- 3 Connect the computer to the monitor with the USB Cable.
- 4 Connect the Power Cable to the monitor first and then to the power source.
- 5 Turn on your monitor and computer.

### NOTE

- Make sure that the building installation has a circuit breaker of 120/240V, 20A (maximum).
- The signal cables used for connecting the computer and monitor may vary with the type of computer used. An incorrect connection may cause serious damage to both the monitor and the computer. The cable supplied with the monitor is for a standard connector. If a special cable is required please contact your local iiyama dealer or regional iiyama office.
- Make sure you tighten the finger screws at each end of the Signal Cable.
- The Class I pluggable equipment Type A must be connected to protective earth.
- The socket-outlet shall be installed near the equipment and shall be easily accessible.
- Excessive sound pressure from ear-/headphones can cause hearing damage/hearing loss.
- When turning on the power, do not turn on the power while touching the touch panel surface with your hand. The touch panel may malfunction.

### [Example of Connection]



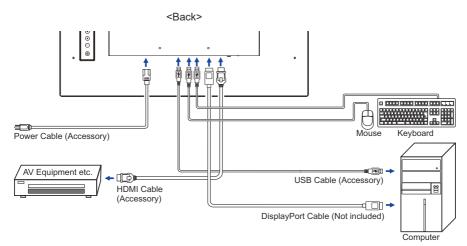
### **CONNECTING YOUR MONITOR: ProLite TF2238MSC**

- (1) Ensure that both the computer and the monitor are switched off.
- ② Connect the computer to the monitor with the signal cable.
- ③ Connect the computer to the monitor with the USB Cable.
- 4 Connect the Power Cable to the monitor first and then to the power source.
- (5) Turn on your monitor and computer.

### NOTE

- Make sure that the building installation has a circuit breaker of 120/240V, 20A (maximum).
- The signal cables used for connecting the computer and monitor may vary with the type of computer used. An incorrect connection may cause serious damage to both the monitor and the computer. The cable supplied with the monitor is for a standard connector. If a special cable is required please contact your local iiyama dealer or regional iiyama office.
- Make sure you tighten the finger screws at each end of the Signal Cable.
- The Class I pluggable equipment Type A must be connected to protective earth.
- The socket-outlet shall be installed near the equipment and shall be easily accessible.
- Excessive sound pressure from ear-/headphones can cause hearing damage/hearing loss.
- When turning on the power, do not turn on the power while touching the touch panel surface with your hand. The touch panel may malfunction.

### [Example of Connection]



### [Fitting and Removal of Cable Cover]

Put a piece of soft cloth on the table beforehand to prevent the monitor from being scratched. Lay the monitor flat on a table with front face down.

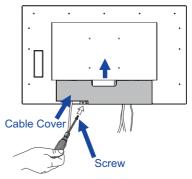
### < Fitting >

① Remove the screw from the monitor as shown in Step1.

② Connect the cables, as shown in Step2, place the cable cover and fix it firmly using a screw.

Step 1

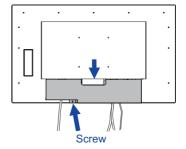
Step 2



### < Removal >

① Remove the screw and the cable cover as shown in Step3.





### **COMPUTER SETTING**

### ■ Signal Timing

Change to the desired signal timing listed on page 27: COMPLIANT TIMING.

### ■ TOUCH support operation system

	Mouse	Digitizer	Gestures*
Windows8/8.1/10/11	×	0	0
Windows7	×	0	0
Windows Vista	×	0	×
Windows XP	0	×	×
Mac OS/OS X	×	×	×
Linux	$\triangle$	×	×
Android	×	×	×
Functions	Click Drag Double-Click	Flick Visual feedback	Digitizer functions Press & Tap, Rotate, Zoom-in/out

The other OS Versions not listed are not supported.

 $<sup>\</sup>bigcirc$ : Supported  $\times$ : Not supported  $\triangle$ : Depend on which Linux support from OS version

<sup>\*</sup> Gestures can be supported by application programs.

- Touch Input Settings in Dual Screen Mode
- Connect the primary monitor to the computer first.
   Set Control Panel > Hardware and Sound > Tablet PC Settings > Display > Setup.



The following message will appear on the screen. Please follow the instructions.



② After setting ①, connect a second monitor and perform the setup as in ①.

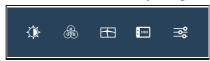
**NOTE** The monitors are recognized as dual-display, and touch operation cannot be performed on two monitors at the same time.

You can perform touch operation on only one of the monitors.

### OPERATING THE MONITOR

To create the best picture, your iiyama LCD monitor has been preset at the factory with the COMPLIANT TIMING shown on page 27. You are also able to adjust the picture by following the button operation shown below.

① Press the MENU Button to start the On Screen Display (OSD) feature. There are additional Menu items which can be switched by using the ▲ / ▼ Buttons.



- ② Select the Menu item which contains the adjustment icon relating to the adjustment you want to make. Press the ENTER Button. Then, use the ▲ / ▼ Buttons to highlight the desired adjustment icon.
- ③ Press the ENTER Button again. Use the ▲ / ▼ Buttons to make the appropriate adjustment or setting.
- Press the MENU Button to leave the menu, and the settings you just made would be automatically saved.

For example, to correct for OSD vertical position, select Menu item of OSD and then press the ENTER Button. Then, select OSD Vertical Position by using the  $\triangle$  /  $\nabla$  Buttons.

An adjustment page appears after you press the ENTER Button. Then, use the  $\blacktriangle$  /  $\blacktriangledown$  Buttons to change the OSD vertical position settings.

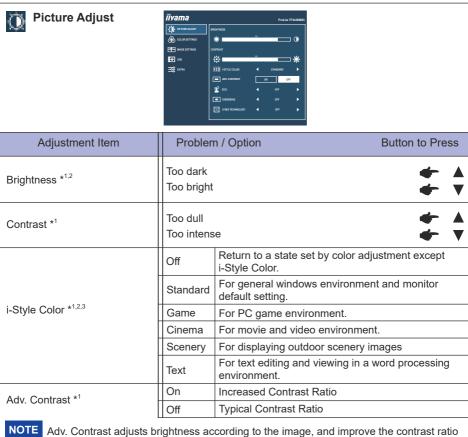


Press the MENU Button lastly, it ends, all changes are saved in the memory.

### NOTE

- When button operations are aborted during adjustment, On-Screen Display disappears when the time set for the OSD Time has passed. Also, the MENU button can be used to return previous menu and turn off the On-Screen Display.
- Any changes are automatically saved in the memory when the On Screen Display disappears. Turning off the power should be avoided while using the Menu.
- All adjustments have only one setting which applies to all signal timings.

### **ADJUSTMENT MENU CONTENTS**



during movie playing.

Contrast, Brightness, i-Style Color, Eco, Gamma and Color Temp, cannot be adjusted and selected while Adv. Contrast is active.

Eco *1 Direct	Off	Normal
	Mode1	Brightness of back-light is reduced.
	Mode2	Brightness of back-light is reduced more than Mode1.
	Mode3	Brightness of back-light is reduced more than Mode2.

### **Direct**

You can skip the Menu items and directly display an option setting screen by using the following button operations.

• Eco: Press the A Button when the Menu is not displayed.





Adjustment Item	Problem / Option		Button to Press
Overdrive *4	Off / 1 / 2 / 3 / 4 / 5 It will improve the gray level response time of the LCD panel. A higher level results in a faster response time.		
	Off	Normal	
	Soft	Enhance the picture edge.	
X-Res Technology	Middle	Enhance the picture edge more than the Soft option	
	Hard	Enhance the picture edge m Middle option.	ore than the

<sup>\*1</sup> The availability of each item depends on which item is activated. See page 20 Function Correlation Matrix for more details.

<sup>\*2</sup> Adjust the Brightness when you are using the monitor in a dark room and feel the screen is too bright.

<sup>\*3</sup> i-Style Color is disabled when Blue Light Reducer is activated.

<sup>\*4</sup> When Overdrive is activated, some level of image retention will be caused.





Adjustment Item	Problem / Option		Button to Press			
	Gamma 1	High contrast				
Gamma *2	Gamma 2	Normal	Normal			
	Gamma 3	Dark	Dark			
PCR Pango	Full	For full-range	For full-range color scale signalscale signal			
RGB Range	Limited	For limited color scale signal				
		Red	Too weak			
	User	Green	Too strong			
Color Temp. *2		Blue	100 strong			
G 0.0. 10p.	Cool	Cool color				
	Normal	Normal color				
	Warm	Warm color				

<sup>\*1</sup> Color Settings are disabled when Blue Light Reducer is activated.

<sup>\*2</sup> The availability of each item depends on which item is activated. See page 20 Function Correlation Matrix for more details.



Adjustment Item	Problen	n / Option Button to Press	
Video Mode Adjust *1	Full	Expansion display	
Video Mode Adjust	Aspect	Expansion display of Aspect	
	Off	Typical	
Blue Light Reducer *2	Mode 1	Blue light is reduced.	
Bide Light Neddeel	Mode 2	Blue light is reduced more than Mode 1.	
	Mode 3	Blue light is reduced more than Mode 2.	
	1/2/3/	4/5/6	
Sharp and Soft *1	You can change the picture quality from 1 to 6 (sharp to soft).  Press the ▲ Button to change the picture quality in numerical order. Press the ▼ Button to change the picture quality in reverse numerical order.		

<sup>\*1</sup> It can display in the center of the screen with a 4:3, 5:4 or 16:10 aspect ratio when input video resolution is 4:3, 5:4 or 16:10.

When display scaling is preserved or selected scaling mode or scaling option on GPU, it will enabled for this function.

<sup>\*2</sup> Blue Light Reducer cannot be enabled if i-Style Color, Adv.Contrast or Eco is enabled.



Adjustment Item	Problem / Option		Button to Press		
OSD Horizontal Position	OSD is too le			<b>◆</b> A <b>◆</b> ▼	
OSD Vertical Position	OSD is too low OSD is too high		<b>♣</b> A <b>♦</b>		
OSD Time		he OSD display dund 60 seconds.	uration time	<b>←</b> Å	
OSD Background	On The background of OSD is		of OSD is ma	nade transparent.	
OSD Background	Off	Return the background of OSD		D.	
	English	English	Česky	Czech	
	Français	French	Italiano	Italian	
Language	Deutsch	German	Русский	Russian	
	Nederlands	Dutch	日本語	Japanese	
	Polski	Polish			
Display Information	Displays information regarding the current input signal coming from the graphic card in your computer.				
Display Information	NOTE See your graphic card user guide for more information about changing the resolution and refresh.				





Adjustment Item	Problem	/ Option	Button to Press
Reset		Factory-preset data is restored.	
Reset	No	Return to Menu.	
DDC/CI	On	DDC/CI is On.	
BBC/CI	Off	DDC/CI is Off.	
	Auto	Select the signal input automat	ically.
Signal Select Direct	HDMI	Select the Digital (HDMI) input.	
	DisplayPort	Select the Digital (DisplayPort)	input.
		e available is selected automatic utomatically when HDMI and Dis	
Volume <b>Direct</b>	Too soft Too loud		<b>★</b> A <b>★</b> ▼
Mute Direct	On	Turn off the sound temporarily.	
Mute	Off	Return the sound volume to the	e previous level.
. ==	On	The Power Indicator is turned (	On.
LED	Off	The Power Indicator is turned 0	Off.
NOTE Turn Off the Power In	dicator when	you are bothered by the light.	
Opening Logo	On	Opening Logo is On.	
Opening Logo	Off	Opening Logo is Off.	
	Off	Normal touch (with bare hands	or stylus device)
Touch Switch *	Glove	Touch with gloved hand (Suppo	orts thickness +2mm)
	Waterproof	Touch operation is enabled even if water droplets adhere to the touch panel surface.	

<sup>\*</sup> Please turn on the power and set the Touch Switch after the monitor installation is completed. Turning on the power and setting the Touch Switch before the monitor installation may cause misalignment or malfunction of the touch calibration. Compatible gloves are conductive latex rubber gloves.



You can skip the Menu items and directly display an option setting screen or an adjustment scale by using the following button operations.

- Volume: Press the ▼ Button when the Menu is not displayed.
- Mute: Pressing and holding of the ▼ Button for about 2 seconds when the Menu is not displayed.
   Mute and Unmute are switched as follows by pressing the ▼ Button successively.
- Signal Select: Press the ENTER Button when the Menu is not displayed, it shows following Menu.



Lock Mode:

### <OSD>

Pressing and holding the MENU button for 5 seconds when Menu is not displayed, it will lock/unlock the OSD Lock function.

### <Power>

Pressing and holding the ENTER button for 5 seconds when Menu is not displayed, will lock/unlock the Power Lock function.

### **■** Function Correlation Matrix

Item to be selected		Picture Adjust					ettings
	Contrast	Brightness	i-Style Color	Adv.	Eco	Gamma	Color
Item activated	Contrast	Contrast Brightness		Contrast	ontrast		Temp.
i-Style Color	_	_		_	_	_	✓
Adv. Contrast	_	_	_		_	_	_
Eco	✓	_	✓	✓		✓	✓

✓ : Available

-: Not available

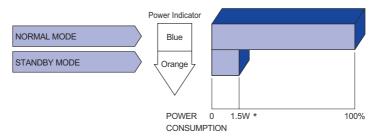
### **STANDBY FEATURE**

This product features the standby function. When activated, it automatically reduces unnecessary power consumption of the monitor when your computer is not in use.

There is a standby step the monitor takes as described below. The standby function, including any timer settings is configured by the operating system. Check your operating system manual for information on how this can be configured.

### ■ Standby Mode

When the video signal from the computer is off, the monitor enters into Standby Mode which reduces the power consumption to less than 1.5W\*. The screen becomes dark, and the power indicator turns to orange. From Standby Mode, the image reappears in several seconds when either the keyboard or the mouse are touched again.



<sup>\*</sup> When the USB devices are not connected.

### TROUBLE SHOOTING

**Problem** 

If the monitor fails to operate correctly, please follow the steps below for a possible solution.

- 1. Perform the adjustments described in OPERATING THE MONITOR, depending on the problem you have. If the monitor does not get a picture, skip to 2.
- Consult the following items if you cannot find an appropriate adjustment item in OPERATING THE MONITOR or if the problem persists.
- 3. If you are experiencing a problem which is not described below or you cannot correct the problem, discontinue using the monitor and contact your dealer or ijyama service center for further assistance.

Check

1	The picture does not appear.	
	(Power indicator does not light up.)	☐ The Power Cable is firmly seated in the socket.  ☐ The Power Switch is turned ON.  ☐ The AC socket is live. Please check with another piece of equipment.
	(Power indicator is blue.)	<ul> <li>☐ If the blank screen saver is in active mode, touch the keyboard or the mouse.</li> <li>☐ Increase the Contrast and/or Brightness.</li> <li>☐ The computer is ON.</li> <li>☐ The Signal Cable is properly connected.</li> <li>☐ The signal timing of the computer is within the specification of the monitor.</li> </ul>
	(Power indicator is orange.)	☐ If the monitor is in standby mode, touch the keyboard or the mouse. ☐ The computer is ON. ☐ The Signal Cable is properly connected. ☐ The signal timing of the computer is within the specification of the monitor.
2	The screen is not synchronized.	☐ The Signal Cable is properly connected. ☐ The signal timing of the computer is within the specification of the monitor.
3	The screen position is not in the center.	☐ The signal timing of the computer is within the specification of the monitor.
4	The screen is too bright or too dark.	$\hfill\square$ The video output level of the computer is within the specification of the monitor.
5	The screen is shaking.	☐ The power voltage is within the specification of the monitor. ☐ The signal timing of the computer is within the specification of the monitor.
6	No sound.	<ul> <li>□ The audio equipment (computer etc.) is ON.</li> <li>□ The Audio Cable is properly connected.</li> <li>□ The Volume is turned up.</li> <li>□ The Mute is OFF.</li> <li>□ The audio output level of the audio equipment is within the specification of the monitor.</li> </ul>
7	The sound is too loud or too quiet.	☐ The audio output level of the audio equipment is within the specification of the monitor.

8 A strange noise is heard.	☐ The Audio Cable is properly connected.
~	☐ The USB Cable is firmly seated in the socket ☐ Touch screen driver software is installed.
10 The touch position does not deviate.	☐ The calibration function set up correctly.

Check

### **RECYCLING INFORMATION**

**Problem** 

For better environment protection please don't dispose your monitor. Please visit our web site: https://iiyama.com for monitor recycling.

### **APPENDIX**

Design and specifications are subject to change without prior notice.

### **SPECIFICATIONS: ProLite TF2438MSC-B1**

	Technology	Projected capacitive 10pt touch			
	Light transmission	87%			
Touch Screen	Hardness	7H			
Ocicen	Total thickness	3.6mm			
	Communication system	USB serial transfer			
Size Cate	egory	24"			
	Panel technology	IPS			
	Size	Diagonal: 23.8" (60.47cm)			
	Pixel pitch	0.2745mm H × 0.2745mm V			
LCD Panel	Brightness	600cd/m² (Typical), 525cd/m² (with Touch panel), 285cd/m² (Default / Energy Saving)			
	Contrast ratio	1000 : 1 (Typical: with Touch panel)			
	Viewable angle	Right / Left : 89 degrees each, Up / Down: 89 degrees each (Typical)			
	Response time	14ms (Typical), 5ms (Gray to Gray)*3			
Display 0	Colors	Approx.16.7M			
Sync Frequency		HDMI: Horizontal: 30.0-83.0kHz, Vertical: 50-76Hz DisplayPort: Horizontal: 30.0-83.0kHz, Vertical: 55-76Hz			
Native Resolution		1920 × 1080, 2.1 MegaPixels			
Support max. resolution		1920 × 1080 60Hz			
Input Co	nnector	HDMI, DisplayPort			
Input Vid	eo Signal	HDMI, DisplayPort			
USB Sta	ndard	USB3.0 (DC5V, 900mA)			
Number of Connector	of USB Ports or shape	1 Upstream : Series B 2 Downstream : Series A			
Headpho	ne Connector	ø 3.5mm mini jack (Stereo)			
Speakers	3	2W × 2 (Stereo speakers)			
Maximun	n Screen Size	527.04mm W × 296.46mm H / 20.7" W × 11.7" H			
Power So	ource	100-240VAC, 50/60Hz 0.8A			
Power Consumption*1		22W typical, Standby mode: 1.5W maximum, Off mode: 0.3W maximum			
Dimensions / Net Weight		561.5 × 337.0 × 47.5mm / 22.1 × 13.3 × 1.9" (W×H×D) 6.5kg / 14.3lbs			
Environn	nental Considerations	Operating: Temperature 5 to 35°C / 41 to 95°F Humidity 10 to 80% (No condensation) Storage: Temperature -20 to 60°C / -4 to 140°F Humidity 10 to 90% (No condensation)			
Approval	s	CE, UKCA, TÜV-Bauart, EAC, IPX1*2			



<sup>\*1</sup> When the USB devices are not connected.

<sup>\*2</sup> IPX1 Standard Compliant : Only front face

<sup>\*3</sup> When set to Overdrive 5.

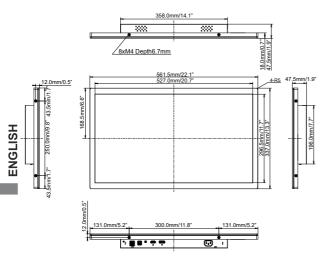
### **SPECIFICATIONS: ProLite TF2238MSC-B1**

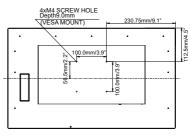
Touch Screen	Technology	Projected capacitive 10pt touch		
	Light transmission	87%		
	Hardness	7H		
	Total thickness	3.6mm		
	Communication system	USB serial transfer		
Size Category		22"		
LCD Panel	Panel technology	IPS		
	Size	Diagonal: 21.5" (54.48cm)		
	Pixel pitch	0.2493mm H × 0.241mm V		
	Brightness	600cd/m² (Typical), 525cd/m² (with Touch panel), 270cd/m² (Default / Energy Saving)		
	Contrast ratio	1000 : 1 (Typical: with Touch panel)		
	Viewable angle	Right / Left : 89 degrees each, Up / Down: 89 degrees each (Typical)		
	Response time	14ms (Typical), 5ms (Gray to Gray)*3		
Display Colors		Approx.16.7M		
Sync Frequency		HDMI: Horizontal: 30-83kHz, Vertical: 50-76Hz DisplayPort: Horizontal: 30-83kHz, Vertical: 55-76Hz		
Native Resolution		1920 × 1080, 2.1 MegaPixels		
Support max. resolution		1920 × 1080 60Hz		
Input Connector		HDMI, DisplayPort		
Input Video Signal		HDMI, DisplayPort		
USB Standard		USB3.0 (DC5V, 900mA)		
Number of USB Ports		1 Upstream : Series B		
Connector shape		2 Downstream : Series A		
Headphone Connector		ø 3.5mm mini jack (Stereo)		
Speakers		2W × 2 (Stereo speakers)		
Maximum Screen Size		478.66mm W × 260.28mm H / 18.8" W × 10.2" H		
Power Source		100-240VAC, 50/60Hz 0.7A		
Power Consumption*1		17W typical, Standby mode: 1.5W maximum, Off mode: 0.3W maximum		
Dimensions / Net Weight		512.5 × 300.0 × 47.0mm / 20.2 × 11.8 × 1.8" (W×H×D) 5.1kg / 11.2lbs		
Environmental Considerations		Operating: Temperature 5 to 35°C / 41 to 95°F Humidity 10 to 80% (No condensation) Storage: Temperature -20 to 60°C / -4 to 140°F Humidity 10 to 90% (No condensation)		
Approval	S	CE, UKCA, TÜV-Bauart, EAC, IPX1*2		

### NOTE

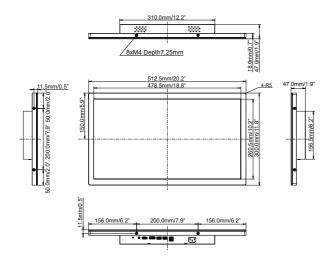
- \*1 When the USB devices are not connected.
- \*2 IPX1 Standard Compliant : Only front face
- \*3 When set to Overdrive 5.

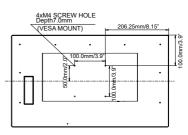
### **DIMENSIONS: ProLite TF2438MSC**





### **DIMENSIONS: ProLite TF2238MSC**





### **COMPLIANT TIMING**

Video Mode	Horizontal Frequency	Vertical Frequency	Dot Clock
	31.469kHz	59.940Hz	25.175MHz
640 × 480	37.500kHz	75.000Hz	31.500MHz
	37.861kHz	72.809Hz	31.500MHz
	35.156kHz	56.250Hz	36.000MHz
800 × 600	37.879kHz	60.317Hz	40.000MHz
000 × 000	46.875kHz	75.000Hz	49.500MHz
	48.077kHz	72.188Hz	50.000MHz
	48.363kHz	60.004Hz	65.000MHz
1024 × 768	56.476kHz	70.069Hz	75.000MHz
	60.023kHz	75.029Hz	78.750MHz
1280 × 1024	63.981kHz	60.020Hz	108.000MHz
1200 × 1024	79.976kHz	75.025Hz	135.000MHz
1440 × 900	55.935kHz	59.887Hz	106.500MHz
1680 × 1050	65.290kHz	60.000Hz	146.250MHz
1920 × 1080	66.590kHz	59.930Hz	138.500MHz