User Manual

PRO173-T
BROADCAST MONITOR

FORTINGE

CONTENTS

ABOUT US

Fortinge is a Publishing Technology Company that aims to be known for innovation and development in the industry and develops products in line with this goal.

We develop products within the framework of efficiency and accessibility by analyzing the needs of different customer segmentations. In this context, while we produce solutions for large TV Studios that use the most advanced infrastructures, we also market suitable products for smaller studios and individuals who broadcast by scaling these solutions.

In addition to our hardware solutions, we develop and present our software products that will work in the most compatible way with these products to our customers.

We continue to work with high motivation with our team members who are experts in their fields, our customers, and dealers in more than 60 countries to achieve our goals of continuous innovation and development, complete customer satisfaction, and is a leading company in the sector.

MANUFACTURER DETAILS

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1 Operating Conditions

Electrical working values for Fortinge PRO173-T are as follows;

- DC Input Voltage
- Ensure that the electrical components are correctly positioned during operation of the product.
- The working environment must be dust free.
- Ensure that there is no water and moisture in the work environment.

2 Safety Precautions

- Do not perform repairs or maintenance while the device is under electrical voltage.
- Do not apply pressure to electrical cables or devices.
- Do not remove the coverings of power or signal cables, and do not replace them with non-standard alternatives.
- Do not perform any work on the power cords without first disconnecting them.
- The Waste Electrical and Electronic Equipment (WEEE) Directive is a European Union regulation that outlines safe and responsible collection, recycling, and recovery procedures for all types of electronic waste.

3 General Introduction

3.1 Product Name

Fortinge PRO173-T

3.2 Model Numbers

PRO173-T / PRO173-T -HB

3.3 Technicial Specifications

Screen Size	17.3"
Screen Type	TFT-LCD
Touch Screen	Capacitice, 10 points touch
Resolution	1024 × 768
Viewing Angle	80°/80°(L/R) 60°/80°(U/D)
Aspect Ratio	16:9
Brightness	400cd/m²
Contrast Ratio	600:1
Backlight	LED

General	
Input Voltage	DC 9 - 24V
Power Consumption	≤ 26W
Working Temperature	-10°C - 50°C
Storage Temperature	-20°C - 60°C
Unit Size	426L × 297H × 35.1D mm (W/O Bracelet)
Unit Weight	2.75 kg

Input	
1 X BNC	3G-SDI
1 X HDMI	HDMI
3 X BNC	YPbPr
1 X DVI-I	DVI-I
1 X BNC	Video
2 X RCA	Audio(L/R)

Output	
1 X BNC	3G-SDI
1 X HDMI	HDMI
3 X BNC	YPbPr
1 X BNC	Video
Audio	
Audio Out	Stereo Headphone, Speaker

SDI Support Format
480i / 576i
720p (60 / 59.94 / 50 / 30 / 29 / 25 / 24 / 23.98)
1080p (60 / 59.94 / 50 / 30 / 29.97 / 25 / 24 / 23.98)
1080i (60 / 59.94 / 50)
HDMI Support Format
480i / 576i / 480p / 576p
1080i (60 / 59.94 / 50)
720p (60 / 59.94 / 50 / 30 / 29 / 25 / 24 / 23.98)
1080p (60 / 59.94 / 50 / 30 / 29.97 / 25 / 24 / 23.98)
4K UHD 3840 x 2160p (30 / 29.97 / 25 / 24 / 23.98)
4096 x 2160p (24Hz)

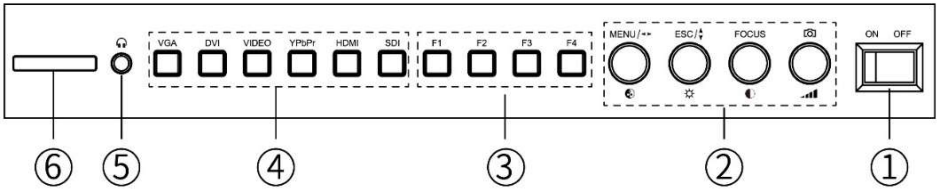
Advanced Features
• Peaking Focus Assist(Red highlight over parts of the monochrome image in focus) • Center Marker • Screen Marker (80%, 85%, 90%, 93%, 96%, 2.35:1) • Image Freeze • Image Flip (H, V, H/V) • Camera Mode • Pixel-to-Pixel • Check Field (Red, Green, Blue, Mono) • Built-in LED tally indicators

4 Product Description

4.1 Front Panel

4.2 Rear Panel

4.3 Panel Button Instruction



4.3.1 Power

It is used to turn the power on and off.

4.3.2 Multifunctional Knobs

Knobs	Function when OSD is not displayed	Function when OSD is displayed
MENU/	Rotate knob to adjust image Saturation. Press it to enter the OSD menu.	Rotate knob to select or adjust the selected menu item. Press it to exit (confirm) the current menu settings.
ESC/	Rotate knob to adjust image Brightness.	Rotate knob to select menu items up or down. Press it to exit the OSD menu.
FOCUS	Rotate knob to adjust image Contrast. Press it to enter “Focus Assist” function.	-
	Rotate knob to adjust Volume. Press it to enter “Camera Mode” Function.	-

4.3.3 User-Definable Function Buttons

Users can directly use four user-defined function buttons to operate or enter into F menu bar to set according to their own operating habits.

4.3.4 Input Selection Button

Use the VGA, DVI, VIDEO, YPbPr, HDMI and SDI buttons to select the corresponding analog or digital input.

4.3.5 Stereo Headphone Jack

Stereo headphone jack is an audio output interface that allows users to connect headphones for real-time audio monitoring.

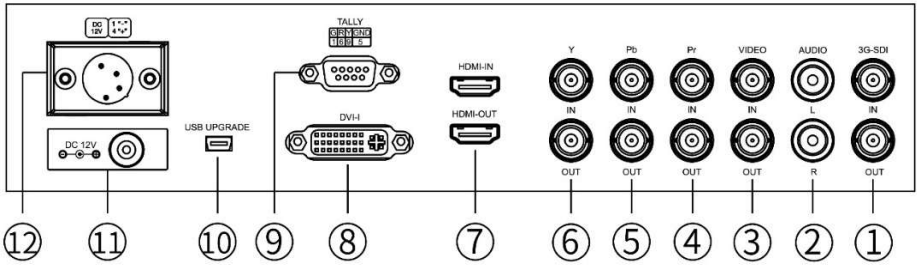
- It provides stereo sound for clear and accurate monitoring.
- Commonly used by operators to check audio quality during recording or broadcasting.
- Ensures that any background noise, distortion, or signal issues can be detected immediately.

4.3.6 Tally Indicator

Tally indicator provides a visual signal on the monitor depending on the camera or broadcast system connection.

- Red light: Indicates the camera is live on air.
- Green light: Indicates the camera is in preview mode.

4.4 Rear Interfaces Instruction



1. **3G-SDI IN/OUT**

- Supports professional broadcast-quality 3G-SDI signals for both input and loop-through output.
- Allows daisy-chaining with other devices without loss of signal quality.
- Widely used in studios and production environments.

2. **AUDIO L/R**

- Provides stereo analog audio input/output through left (L) and right (R) channels.
- Can be connected to mixers, speakers, or other audio equipment for monitoring and embedding.

3. **VIDEO IN/OUT**

- Standard composite video input/output (CVBS).
- Supports legacy video sources such as DVD players, older cameras, or monitoring systems.

4. **Pr IN/OUT**

- Part of component video input/output (the red channel signal).
- Works in conjunction with Pb and Y to provide high-quality analog video transmission.

5. **Pb IN/OUT**

- Component video (blue channel) input/output.
- Ensures color accuracy when combined with Pr and Y signals.

6. **Y IN/OUT**

- Component video (luminance channel) input/output.
- Carries the brightness (black-and-white) information for video, critical for image clarity.

7. **HDMI IN/OUT**

- Accepts HDMI digital video and audio input, with loop-through output available.
- Ensures compatibility with modern cameras, laptops, and media players.

8. **DVI-I Signals Input**

- Supports DVI-I digital/analog input.
- Can also accept VGA input via a signal conversion module.
- Useful for connecting to older computers and graphic sources.

9. **Tally (Indicator) Signal Input**

- Receives tally control signals from a switcher or production system.
- Displays visual indicators (red/green/amber lights) to show live, preview, or standby status.
- Essential for operators and presenters to identify active cameras.

10. **USB Upgrade Port**

- Dedicated port for firmware and software updates.
- Ensures the device can be kept up-to-date with the latest features and fixes.

11. **Direct DC Plug-in Power Input Port**

- Provides a direct current (DC) power connection via a standard plug.
- Allows external power adapters to be used for flexibility.

12. **4-Pin XLR DC Power Input**

- Industry-standard 4-pin XLR connector for secure DC power input.
- Commonly used in professional broadcast setups for stable and reliable power delivery.

4.5 Power Input Way

There are three ways of power supply to our monitor:

- Powered by the direct plug-in power input port supply.

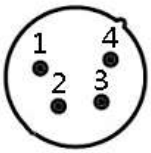
Please select DC power plug supply and the polarity is as image below:

- Via 4 pin XLR interface power supply, to share power with the

camera or via power adapter input.

Polarity of the 4-pin XLR power input as below image, please note the

polarity of the power input, otherwise it may damage monitor.

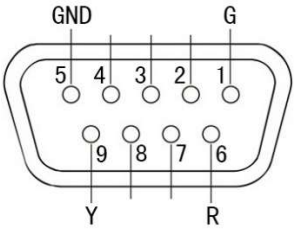


Pin number	Signal
1	GND
2	No connection
3	No connection
4	+12V

- Add battery to the monitor battery plate to supply the power.

The product back case including battery plate is available for two types of batteries. Customers can choose different battery plates according to their needs.

4.6 TALLY Indicator Connection



Indicator Colors	Pin Connection
Green	1-5
Red	6-5
Yellow	9-5

5 Battery Plates

Panasonic Anton Plate

Sony V-Mount Plate

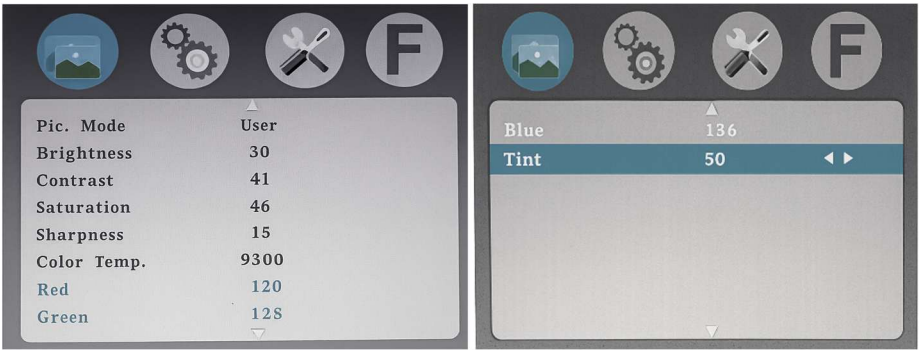
We assemble the suitable battery plate for the customers according to the different requirements of the batteries.

Remark: According to the different specification of the battery, the capability is different, and the working time for the monitor will be different. Higher capability (working time) will be longer.

Without the charging circuit design for the monitor, please remove the battery to charge with the battery charger.

Suggestion: Better to remove the battery if don't use this product in a long time.

6 Menu Function Instruction



- **Pic. Mode (Picture Mode)**

Selects the display mode.

Here it is set to User, which means the adjustments are done manually.

- **Brightness**

Controls the overall light intensity of the screen.

0 → very dark, 100 → maximum brightness.

- **Contrast**

Adjusts the difference between black and white.

Lower value → softer, faded image.

Higher value → sharper, stronger highlights.

- **Saturation**

Defines how vivid the colors appear.

Lower value → dull, pale colors.

Higher value → brighter, more vibrant colors.

- **Sharpness**

Controls how defined the edges of objects look.

Higher value → sharper edges, but may look artificial.

Lower value → smoother, softer image.

- **Color Temp. (Color Temperature)**

Adjusts the overall color tone of the screen.

9300K → cooler, bluish tone.

Lower values (e.g., 6500K) → warmer, yellowish tone.

- **Red**

Adjusts the intensity of the red color.

- **Green**

Adjusts the intensity of the green color.

- **Blue**

Adjusts the intensity of the blue color on the screen.

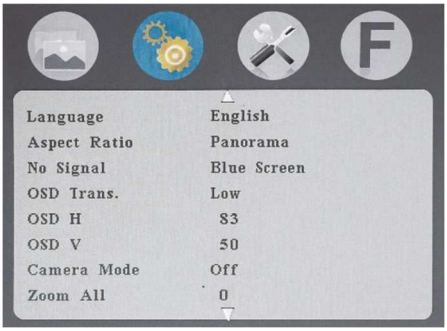
- **Tint**

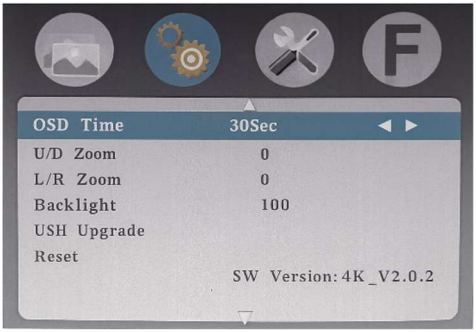
Adjusts the color balance (typically between red and green).

0 → Stronger red tones.

100 → Stronger green tones.

50 → Midpoint, standard for natural colors.





- **Language**

Selects the menu language.

- **Aspect Ratio**

Determines the display aspect ratio.

Panorama: Wide-screen format (usually 16:9).

- **No Signal**

Defines what the screen shows when there is no input signal.

Blue Screen: Displays a blue screen when no signal is detected.

- **OSD Trans**

Adjusts the transparency of the OSD (menu window).

Low: Less transparent.

- **OSD H**

Adjusts the horizontal (left/right) position of the OSD menu.

- **OSD V**

Adjusts the vertical (up/down) position of the OSD menu.

- **Camera Mode**

Enables or disables the camera mode function.

- **Zoom All**

Controls overall image zoom.

- **OSD Time**

Sets how long the OSD menu remains visible on the screen after the last operation.

- **U/D Zoom**

Adjusts zoom vertically (Up/Down). Value is at 0, meaning no zoom.

- **L/R Zoom**

Adjusts zoom horizontally (Left/Right). Value is at 0, meaning no zoom.

- **Backlight**

Controls the panel's backlight level. Set at maximum brightness.

- **USB Upgrade**

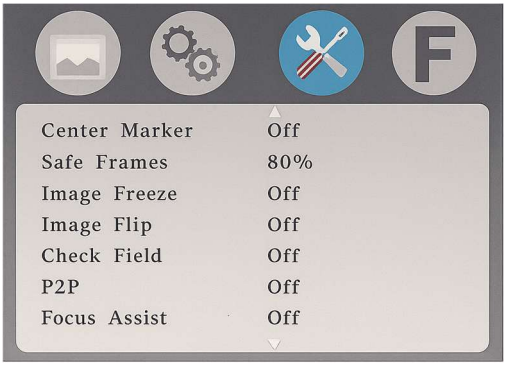
Allows firmware upgrade via USB port.

- **Reset**

Resets all settings back to factory defaults.

- **SW Version**

Indicates the current software/firmware version installed on the monitor.



- **Center Marker**

Displays a marker at the center of the screen for framing assistance.

- **Safe Frames**

Shows a guideline frame to ensure that critical content remains within the visible area of different display devices.

- **Image Freeze**

Freezes the current video frame on the screen.

- **Image Flip**

Flips the image horizontally or vertically for different shooting/monitoring needs.

- **Check Field**

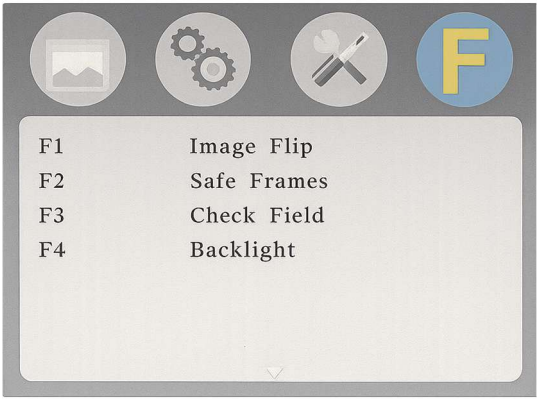
Displays the image in separate color channels (Red, Green, Blue, or Mono) to check focus and color accuracy.

- **P2P**

Point-to-Point mode allows pixel-to-pixel mapping (shows the image without scaling).

- **Focus Assist**

Highlights in-focus areas with a colored outline to assist manual focusing.



- **F1 – Image Flip**

Flips the image horizontally or vertically, useful for mirror setups or specific mounting requirements.

- **F2 – Safe Frames**

Displays safe frame guides (e.g., 80%, 90%) to ensure critical content fits within broadcast-safe areas.

- **F3 – Check Field**

Shows the image in monochrome (Red, Green, Blue, or Black & White) to check color balance and focus.

- **F4 – Backlight**

Adjusts the monitor's backlight brightness (not the same as image brightness, affects panel illumination).

7 Installation Of The Product

7.1 Placing On The Work Place

The installation of the product in the final working area will be carried out by the customer.

Care must be taken, lifting points must be taken into consideration. Otherwise, the buyer will be responsible for the problems that may occur.

7.2 Assembly

The product, which is sent as a box, is assembled by the person to be performed by the authorized personnel of the customer and / or under the supervision of the person.

8 Technical Service

In case of malfunction and maintenance, the spare parts required by the customer will be delivered by the company within the deadline.

Interventions by people not authorized by the vendor within the warranty period will void the warranty terms.

Following the delivery of the product, in case of any failure other than the warranty period, the customer shall provide the service and repair service at the request of the firm in return for the fee.

9 Warranty Certificate

- Product Brand : Fortinge
- Product Name : PRO173-T
- Warranty Period : 12 months after delivery

9.1 Warranty Conditions

- Faulty material used while production and any kind of malfunction due to faulty workmanship will be eliminated without any charge from the vendor.
- All kinds of breakage and defects that may occur during the transportation, loading and downloading of the products are not covered under the warranty.
- Failure, breakdown and loss of natural conditions and natural disasters where the products are placed by the customer are not covered under the warranty.
- Breakage and malfunctions resulting from improper use during operation of the products are not covered under the warranty.
- The manufacturer commits and guarantees to provide spare parts and/or service for 10 years.

10 User Manual Delivery Report

Date: ……./……. /20…...

The User Manual of Fortinge PRO173-T has been delivered to the customer.

Upon recieval of this manual, the customer shall be deemed to have accepted that all information about the use of the device has been provided in its entirety.

On behalf of manufacturer Deliverer	On behalf of buyer Receiver
Name, Surname, Date Signature	Name, Surname, Date Signature