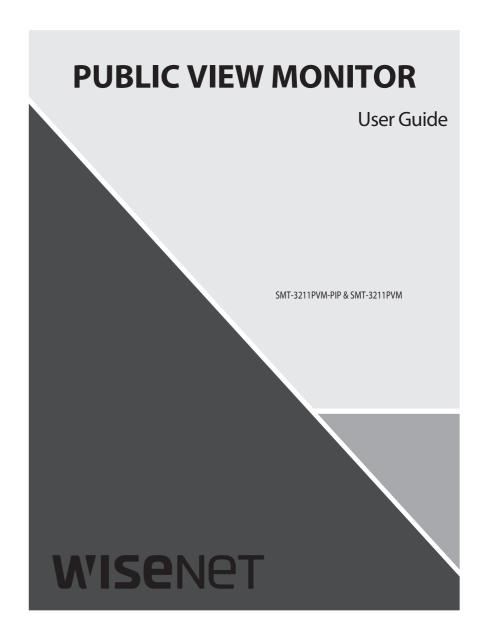
# Hanwha Techwin America

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# Public View Monitor User Guide Copyright ©2018 Harwha Techwin Co., Ltd. All rights reserved.

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# Disclaimer

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- Design and specifications are subject to change without prior notice.
- ca The initial administrator ID is "admin" and the password should be set when logging in for the first time.
- Please change your password every three months to safely protect personal information and to prevent the damage of the information theft
- Please, take note that it's a user's responsibility for the security and any other problems caused by mismanaging a password.

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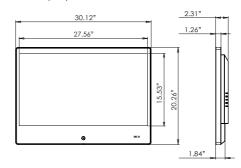
# mechanical

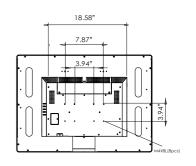
# **CABINET**

Material: Metal. Finish: Black

# **DIMENSIONS**

Unit: mm(inch)





Net Weight: 13.6Kg /30 lbs.

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Shipping Weight: 17.19Kg / 37.91lbs.

Packing Dimension (W x H x D): 896x666x214mm / 35.31 x 26.25 x 8.46 inch

# **VESA MOUNTING**

MTBF shall be 30,000 hours minimum at 90% confidence level and 100% duty cycle continuous operation at 25 C. The calculation does not include LCD panel.

VESA Spec. of screw hole

100x100 mm M4 x 8mm 200x100 mm

- Use appropriate screws to mount VESA bracket (Screw hole: M4 x 5mm), failure to do so may cause serious injury.
- Ensure that the VESA bracket has an adequate size mounting plate, screws and/or fixings to support
  the weight of the monitor and bracket to the surface to which it is being attached. Failure to do so may
  cause serious injury.
- If there is any doubt of the suitability of a mount or fixing method, a qualified technician should be consulted.



#### Caution

This 21.5" / 27" PVM is intended to be fixed to a surface during use. Use a bracket rated for the weight of the unit. Follow the bracket instructions for fixing to a surface.

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# regulatory agency

# **SAFETY APPROVALS**

This series design shall meet the standards of the following domestic and foreign agencies: UL: UL 60950-1

# **EMI/EMS EMISSION APPROVALS**

This series design shall meet following EMI/EMS specifications: FCC Compliance: FCC Rules and Regulations, Part 15, subpart B, Class A.

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# OSD menu

# SCOPE

This document is used to define the performance of the LCD Public View Monitor (PVM) series. The system supports HDMI and PC inputs, as well as from the built-in camera. The On Screen Display (OSD) menu makes the system easy to operate.

# **SAFETY PRECAUTIONS**

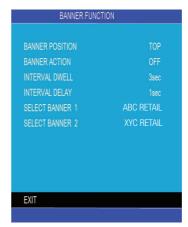
- 1. Do not modify the three-prong grounding type monitor power plug in any way.
- 2. Operate this unit only from the type of power source indicated on the label.
- 3. Do not block or cover ventilation openings on the back or bottom of the monitor cabinet.
- 4. Do not place this monitor near a radiator or heating vent.
- 5. Do not push objects of any kind through cabinet openings. This may result in fire or electrical shock.
- Before adding attachments always ask a service technician to perform routine safety tests to determine that equipment is in safe operating condition. Ground potential tests should be part of the routine safety check made by the service technician.
- 7. Do not place monitor on an unstable cart, stand, or shelf where it may fall and injure personnel or damage equipment.
- Route power cords so that they cannot be walked upon or tripped over. Do not allow anything to rest on the power cord.
- Do not install monitor in wet areas, or where it may be exposed to rain or water. Do not spill liquid of any kind on the unit.
- 10. Unplug the power cord from the unit before cleaning the display. Use only a damp cloth. Do not use alcohol, spirits, or ammonia to clean the display. DO NOT ATTEMPT TO CLEAN THE INTERIOR OF THIS UNIT- THIS ACTION MUST BE PERFORMED BY THE SERVICE TECHNICIAN AS REQUIRED DURING NORMAL MAINTENANCE.
- Refer all servicing to qualified service personnel. REMOVAL OF BACK COVER BY UNAUTHORIZED PERSONNEL MAY EXPOSE THE USER TO DANGEROUS VOLTAGES OR OTHER HAZARDS.
- 12. Unplug the unit immediately and notify the service technician.
  - A. If liquid has been spilled into the display or the display has been exposed to rain or water.
  - B. If the unit has been dropped or the cabinet damaged.
  - C. If fuses continue to blow.
  - D. If the power cord is damaged or frayed.
  - E. If a distinct change from normal operation is apparent.

When replacement parts are required, be sure that the service technician uses components specified by the manufacturer which have the same characteristics as the original parts. **UNAUTHORIZED SUBSTITUTIONS MAY RESULT IN FIRE, ELECTRICAL SHOCK OR OTHER HAZARDS.** 

Upon completion of any service or repairs, ask the technician to perform safety checks to determine that the equipment is in safe operating condition.

WARNING: SERIOUS SHOCK HAZARDS EXIST WITHIN THE COVERS OF THIS MONITOR. DO NOT OPEN THE COVERS UNDER ANY CIRCUMSTANCES, THERE ARE NO USER SERVICEABLE COMPONENTS INSIDE

# BANNER FUNCTION



- Press ▼ / ▲ KEY to select an icon
- 2. Press ◀ / ▶ KEY to selection and adjust the value
- 3. Press EXIT KEY button to return

**BANNER POSITION** – Select Banner Position TOP / BOTTOM

**BANNER ACTION** – Select Banner Action OFF/Blinking/Switching

INTERVAL DWELL - Set Banner on Dwell Timer 1~5 sec.

INTERVAL DELAY – Set Banner off Time 1~5 sec.

SELECT BANNER 1 – Select Banner 1 Type SELECT BANNER 2 – Select Banner 2 Type

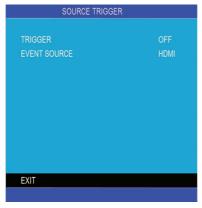
EXIT - Press OK KEY to return to the main menu

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# OSD menu

# SOURCE TRIGGER

Press OK KEY to enter the sub-menu



- Press ▼ / ▲ KEY to select an icon
- 3. Press ◀ / ▶ KEY to selection and adjust the
- 4. Press EXIT KEY to return

TRIGGER – Select trigger OFF/MOTION EVENT SOURCE – Select Motion event source HDMI/VGA

**EXIT** – Press OK KEY to return to the main menu

**FW. UPDATE (USB)** – Plug USB with update FW then select this icon to update PVM FW

# **FACTORY RESET**

Press OK KEY to reset PVM Monitor to factory default setting.

# **AUDIO CONTROL**

Press OK KEY to enter the sub-menu



- 1. Press ▼ / ▲ KEY to select an icon
- 2. Press ◀ / ▶ KEY to selection and adjust the value
- 3. Press EXIT KEY to return

VOLUME – Adjust the PVM Monitor volume. MUTE – Select Audio MUTE ON/OFF. EXIT – Press OK KEY to return to the main menu.

# **BEFORE YOU BEGIN**

Read these instructions before installing or operating this product.

Note: This installation should be made by a qualified service person and should conform to local codes.

This manual provides installation and operation information. To use this document, you must have the following minimum qualifications:

- A basic knowledge of CCTV systems and components
- A basic knowledge of electrical wiring and low-voltage electrical connections

#### Intended use

Only use this product for its designated purpose; refer to the product specification and user documentation.

#### **Customer Support**

For assistance in installing, operating, maintaining and troubleshooting this product refer to this document and any other documentation provided.

#### Conventions Used in this Manual

**Boldface** or button icons highlight command entries. The following **WARNING, CAUTION** and **Note** statements identify potential hazards that can occur if the equipment is not handled properly:



# \* WARNING:

Improper use of this equipment can cause severe bodily injury or equipment damage.



# \*\* Caution:

Improper use of this equipment can cause equipment damage.

Note: Notes contain important information about a product or procedure.



All lead-free products offered by the company comply with the requirements of the European law on the Restriction of Hazardous Substances (RoHS) directive: 2011/65/EU, which means our manufacture processes and products are strictly "lead-free" and without the hazardous substances cited in the directive.

The crossed-out wheeled bin mark symbolizes that within the European Union the product must be collected separately at the product end-of-life. This applies to your product and any peripherals marked with this symbol. Do not dispose of these products as unsorted municipal waste.

- \* This symbol indicates electrical warnings and cautions.
- \*\* This symbol indicates general warnings and cautions.

# WARNINGS AND CAUTIONS:

To reduce the risk of fire or electric shock, do not insert any metallic objects through the ventilation grills or other openings on the equipment.

#### WARNING:

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

# general

#### WARNINGS AND CAUTIONS:

To reduce the risk of fire or electric shock, do not insert any metallic objects through the ventilation grills or other openings on the equipment.

#### WARNING

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



# OSD menu

# LANGUAGE

Press OK KEY to enter the sub-menu



- 1. Press ▼ / ▲ button to select an icon
- **2.** Press **OK KEY** to confirm the selection and return.

# **SETUP MENU**

Press OK KEY to enter the sub-menu



- 1. Press ▼ / ▲ KEY to select an icon
- **2.** Press ◀ / ▶ KEY to selection and adjust the value
- 3. Press EXIT KEY to return

**OSD TIMEOUT** – Adjust the OSD timeout 5~60 sec/OFF.

OSD BLENDING – Select OSD blending LOW/MIDDLE/HIGH/OFF

BACKLIGHT CONTROL – Select backlight control TIMER/SENSOR/OFF

BACKLIGHT TIMER – Set backlight timer 10min~120min, 10min increment/click

POWER INDICATOR LED – Select Power Indicator LED ON/FLASH

**POWER LED COLOR** – Set LED color BLUE or RED or RED+BLUE

**SOURCE TRIGGER** – Press OK KEY to enter the sub-menu

# **IMAGE ADJUST (VGA ONLY)**

Press OK KEY to enter the sub-menu



- 1. Press ▼ / ▲ KEY to select an icon
- 3. Press ◀ / ► KEY to selection and adjust the
- 4. Press EXITY KEY to return

AUTO ADJUST – Press OK KEY to auto adjust Image Settings

H. POSITION – Adjust the horizontal position value manually

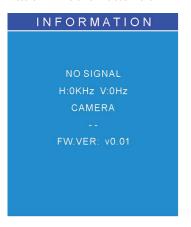
V. POSITION – Adjust the vertical position value manually

PHASE – Adjust the phase value manually CLOCK – Adjust the clock value manually

EXIT – Press OK KEY to return to the main menu

# **INFORMATION**

Press OK KEY to enter the sub-menu



# functional specifications

# Power Supply

**PVM Monitor Power Requirements:** 

Voltage: DC 24V Current: 1.8A max

Use only a PSU rated at 24Vdc with a minimum current rating of 1.8A

# D-SUB Input

Analog RGB: 0.707Vrms Support VESA Standard Timing

# **HDMI Input - HDMI Compatible Interface**

480i / 480p / 576i / 576p 720p / 1080i / 1080p

# **Audio Input**

Signal Level: 1.0Vrms

#### **Environmental**

Temperature:

- Operating: 0°C to +40°C
- Storage: -20°C to +60°C

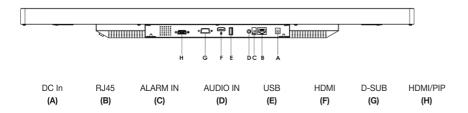
#### Humidity:

- Operating: 10% to 85% (non-condensing)
- Storage: 10% to 95% (non-condensing)

#### **EDID**

This series of displays support EDID (HDMI & VGA input)

# **CONNECTORS**



A. DC IN: 2.5.mm x 5.5mm

DC power connector (DC 24V Input)

- B. RJ45: Ethernet (from Hanwa camera)
- C. ALARM IN: Alarm input from Hanwha Camera
- D. AUDIO IN: Firmware update
- E. USB: FW Update
- F. HDMI: HDMI input
- G. D-SUB 15pin: VGA input
- F. HDMI/PIP: PIP HDMI input.(PIP Model only)

# OSD menu

# **COLOR ADJUST**

Press OK KEY to enter the sub-menu

COLOR AD	JUST
COLOR TEMP.	USER
RED	128
GREEN	128
BLUE	128
	0~255
EXIT	

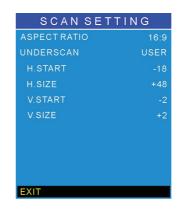
- 1. Press ▼ / ▲ KEY to select an icon
- 2. Press ◀/▶ KEY to selection and adjust the value
- 3. Press EXIT KEY to return

COLOR TEMP – Select the color temperature USER/ 6500K / 7500K / 9300K

RED – Adjust the RED value under USER setting
GREEN – Adjust the GREEN value under USER setting
BLUE – Adjust the BLUE value under USER setting
COLOR RANGE – Select the color range 16~235/0~255
EXIT – Press MENU button to return to the main menu

# SCAN SETTING

Press OK KEY to enter the sub-menu



- Press ▼ / ▲ KEY to select an icon
- 2. Press ◀ / ▶ KEY to selection and adjust the value
- 3. Press EXIT KEY button to return

ASPECT RATIO – Select aspect ratio Normal/16:9/4:3
UNDERSCAN – Select underscan ON/OFF/USER
H.START – Adjust horizontal start value under USER setting
H.SIZE – Adjust horizontal size value under USER setting
V.START – Adjust vertical start value under USER setting
V.SIZE – Adjust vertical size value under USER setting
UPSIDE DOWN – Select the image upside down ON/OFF
EXIT – Press OK KEY to return to the main menu

# **HOT KEY**



adjust the volume.



MUTE VOLUME: Press ◀ / ▶ KEY to **KEY LOCK: Press** 

function.

remote control KEY LOCK to enable this

**KEY UN-LOCK: Press** remote control KEY LOCK again to disable this function.

# **MAIN MENU**

Press MENU KEY to enter the sub-menu



- Main Adjust
- Color Adjust
- Scan Setting
- Image Adjust
- Information
- Language
- Setup Menu
- Factory Reset
- Audio Control
- Exit

Press ▼/▲ KEY to select an icon, then press OK KEY to confirm the selection.

# **MAIN ADJUST**

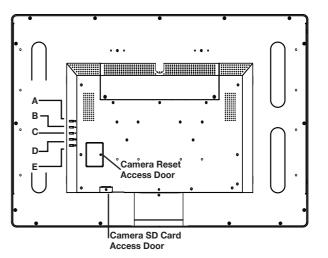
Press OK KEY to enter the sub-menu



- Press ▼ / ▲ KEY to select an icon
- 2. Press ◀/▶ KEY to selection and adjust the value
- 3. Press EXIT KEY button to return

VIVID MODE - Select Vivid mode BRIGHTNESS - Adjust the brightness value CONTRAST - Adjust the contrast value SHARPNESS - Adjust the sharpness SATURATION - Adjust the saturation NR - Set Noise Reduction level OFF/LOW/MIDDLE/HIGH DLC - Set Dynamic Luminance Control ON/OFF EXIT - Press OK KEY to return to the main menu

# **CONTROL BUTTON (ON THE BACK)**



# (A) " → " Source button

• Press the button to show source menu. Select VGA, HDMI, and CAMERA input.

# (B) " A " Up button

- Press the buttons to scrolling the cursor to desired function.
- Press the buttons to increase the value of selected function in sub OSD menu.

# (C) " ▼ " Down button

- Press the buttons to scrolling the cursor to desired function.
- Press the buttons to decrease the value of selected function in sub OSD menu.

# (D) "口" Menu button

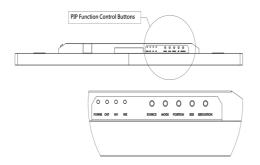
- Press the button to show the OSD main menu.
- As a confirmation key during the OSD operation.

# (E) " 也 " Power button

Press the button to turn ON or turn OFF the monitor.

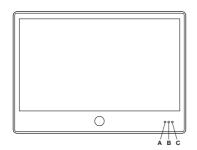
# CONTROLS & INDICATORS

# **BOTTOM PANEL VIEW (PIP MODEL ONLY)**



- 1. POWER LED: This red LED illuminates when power on
- 2. OUTPUT LED: This red LED illuminates when the PIP HDMI output
- ${\bf 3.}\,$  N1 LED : This red LED illuminates when the Camera video is selected as main image
- 4. N2 LED : This red LED illuminates when the HDMI/PIP is selected as main image
- 5. SOURCE: Press the button to select the input source as main
- 6. MODE: Press the button to select display mode
- 7. POSITION: Press the button to select the position of sub image when in PIP mode
- 8. SIZE: Press the button to select the size of sub image when in PIP mode
- 7. RESOLUTION: Press the button to select the output resolution

# **LED INDICATION**



- (A) Light sensor: (measures ambient light for auto adjust settings)
- (B) IR Receiver: (for remote control)
- (C) LED: ON GREEN/FLASH GREEN / FLASH RED. (Programmable from OSD menu);

OFF - RED

# REMOTE CONTROL



POWER KEY: Monitor Power On/Off.

MUTE KEY: Mute the Audio.

SOURCE KEY: Select input signal.

▼ ▲ KEY: OSD scrolling the cursor to desired function.

**OK KEY:** Confirmation key during the OSD operation

EXIT KEY: Exit the OSD menu
MENU KEY: Monitor OSD control
CAMERA KEY: Select camera mode
KEY LOCK: Monitor KEY LOCK

VGA: Select VGA input
HDMI: Select HDMI input

SWAP: Swap camera video & HDMI/PIP input source, (PIP

Model only)

: Select PIP size & PIP position and Sequential Display Dwell

time setting.(PIP Model only)

MODE: Select MODE 1 (One view mode), MODE 2 (PIP mode), MODE 3 (POP mode A), MODE 4 (POP mode B) & Sequential

Display. (PIP Model only).

#### Notes:

- The remote control requires 2xAAA batteries. Ensure batteries are inserted in the correct polarity according to the + and - symbols in the battery compartment.
- To avoid damage from possible battery leakage, remove the batteries if you do not plan to use the remote control handset for an extended period of time.
- Batteries should last more than 2 years with normal use.

# **ACCESSORIES**

All of the accessories listed below are included with the PVM.

- 1. Remote Control x 1
- 2. DC Terminal x 1
- 3. AAA batterv x 2
- 4. User's Manual x 1
- 5. M4 x10mm Bolts x 5
- 6. Self-adhesive wire tiedown x 1
- 7. Screw M3 x 6mm x 1