

# SHARP

Be Original.

PN-70TW3

PN-60TW3

TOUCHSCREEN LCD MONITOR

## Easy Wireless Functionality for Seamless and Lively Meetings



# BIG PAD

# The BIG PAD That Lets You BYO Device and Unleash the Creativity

PN-70TW3/60TW3 touchscreen LCD monitors boast wireless connectivity that enables a range of different devices to connect to them. Information from those devices can be displayed in a 2 x 2 split screen, allowing for highly productive interactions. Using SHARP Touch Viewing Software, you can manipulate various file types in the same work area. The pen digitizer function, meanwhile, distinguishes between pen and finger input and supports natural and seamless operation. These and other superb BIG PAD features are sure to boost creativity and participation levels in presentations and small-scale meetings, while fulfilling the growing demand for cable-free connection of BYO devices.



## Flexible Communications with a Variety of Devices

### Wireless Connectivity

Now there's no need to mess about with tangled wires or conversion adaptors when you want to share your ideas. The PN-70TW3/60TW3 has a built-in wireless controller that enables multiple devices—including Mac® or Windows® computers, smartphones, and tablets—to connect wirelessly via dedicated connection software. Mac and Windows users also have a handy option for quick, temporary connection: they can launch the wireless connection software on the bundled token without pre-installing anything. Thanks to wireless connectivity on the PN-70TW3/60TW3, meeting participants can bring their own devices (BYOD) and enjoy speedy and active communications.

Note: Connection software is downloadable from the AppStore (iOS) or Google Play (Android).

#### Wireless Connection System Requirements

Windows®	CPU	Intel® Core™ 2 Duo 2.8 GHz or higher (Intel® Core™ i5 or higher recommended)
Mac	OS	Windows® 7 (32 bit/64 bit), Windows® 8 (32 bit/64 bit) Windows® 8.1 (32 bit/64 bit), Windows® 10 (32 bit/64 bit) Mac OS X v10.9, Mac OS X v10.10
	Memory	2 GB or more (4 GB or more recommended)
	Hard disk	200 MB capacity or more
iOS		iPhone, iPad operating on Apple iOS 7.0 or later
Android™		Smartphone or tablet operating on Android™ 4.0 or later

### 2 x 2 Split-Screen Display

The PN-70TW3/60TW3 can connect wirelessly with multiple mobile devices and simultaneously display the onscreen contents of those devices in a 2 x 2 split screen. Alternatively, any one of the individual screens can be enlarged to full-screen size. The screen can be switched either from the BIG PAD or from a connected device.



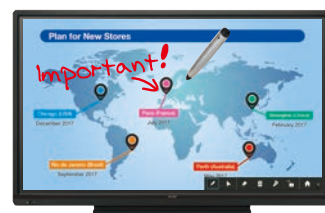
### Enhanced Security

Because data is not stored during wireless connection, there's no need to worry about any leakage of confidential information from a discussion or presentation.

### Overlay Function

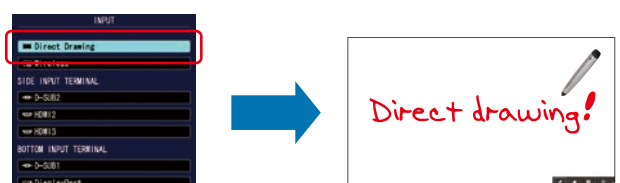
In overlay mode, you can write annotations on a transparent screen that overlays the visible onscreen content. Text and graphics written on the BIG PAD can be captured—along with the contents on the screen—and saved as JPEG files on a connected USB memory device or on a wirelessly connected Mac or Windows PC. The overlay function is a major boon when you want to share meeting notes with participants and others.

Note: Original files or content shown on the screen cannot be accessed directly during overlay mode.



### Direct Drawing Function

The PN-70TW3/60TW3 can be quickly switched to enable use of Direct Drawing, a user-friendly function that's just like using a whiteboard. Even for first-time users, this simple write-and-erase function is easy and intuitive to operate. Screen captures can be saved as JPEG files on a USB memory device.



Touch "Direct Drawing" on the onscreen menu

# Flexible, Natural Work Environment

## Revolutionise Discussions with SHARP Touch Viewing Software

SHARP Touch Viewing Software is a touch-operated onscreen user interface that lets you easily view, manipulate, and write annotations on different types of files, including Microsoft® Office applications, videos, and web pages. Being able to organise a variety of file types in one work area allows you to have more active discussions.

### View various types of file in one work area

Various kinds of file\*—including Microsoft Office files, PDFs, web pages, and image and video files—can be displayed on the screen as “sheets”. There’s no need to open the respective applications, and you can view all the different files simultaneously in the same work area.

\* Viewable files: Microsoft Office (Excel®, Word, PowerPoint®), PDF, JPEG/PNG/BMP/TIFF, and WMV/AVI/MP4/FLV.

### Edit original data

Original Microsoft Office files displayed as “sheets” can be opened easily with compatible applications and edited.

### Store onscreen layouts

Onscreen layouts of “sheets” can be stored for later retrieval, so you can easily restart a discussion where you left off.

Note: Download SHARP Touch Viewing Software from the bundled CD-ROM.



\* Drawers can be linked to PC folders or network folders.

## Pen Digitizer Functionality Boosts Communicative Potential

The PN-70TW3/60TW3 features a pen digitizer function\* that automatically distinguishes pen and finger input, allowing you to perform pen and touch operations without having to switch modes. The bundled touch pen employs a pressure sensor that faithfully renders your writing style. The pen digitizer function is compatible with Microsoft Office (Excel, Word, PowerPoint, OneNote®), Adobe Photoshop®, Adobe Illustrator®, and SHARP Touch Viewing Software.

\* Not certified by Microsoft.

# Smooth Operation and Comfortable Writing

## Simultaneous Writing for Up to 4 People

The PN-70TW3/60TW3 lets you capture ideas at the moment of creation. Recognising up to 10 touch points, they allow up to four people to write at the same time with a finger or touch pen.

## User-Friendly SHARP Pen Software Interface

The easy-to-launch SHARP Pen Software user interface incorporates a menu comprising smartly arranged icons that provide easy access to pen settings and functions. Settings such as colour and line thickness can be established for each touch pen. The menus for each pen can be displayed in a floating format that allows them to be moved to any convenient location on the screen.



## Touch-operated onscreen menu

Pressing the Touch Menu button on the PN-70TW3/60TW3 instantly displays an onscreen menu that lets you easily switch input sources, change volume level, or turn the touchscreen function on and off without using a remote controller.

## Handwriting Recognition

A handwriting recognition\* function converts selected onscreen handwriting into standard text. This convenient function allows you to utilise onscreen content to make neat and legible minutes of your meetings.

\* Works with languages supported by SHARP Pen Software.

## Minimise glare and fingerprints

Protecting the screen is an anti-glare film that works to reduce glare and reflections and minimise fingerprint soiling on the glass.

## Front-mounted speakers

Two speakers (10 W + 10 W) are mounted low on the front of the LCD monitor to deliver clearer sound.

## SHARP Display Connect

This software is especially effective for communications with large audiences. By allowing the BIG PAD to share its onscreen content with up to 50 devices\*, and by enabling the exchange of files between those devices, SHARP Display Connect facilitates lively discussions and paperless meetings in both business and educational settings.

\* The number of connectable mobile devices depends on the host OS and the accompanying Windows End-User License Agreement: Windows 7: Max. 20; Windows 8/8.1, Windows 10: Max. 50. OS requirements (as of November 2015): Host: Windows 7, Windows 8/8.1, Windows 10; Client: Windows 7, Windows 8/8.1, Windows 10, OS X v10.7–10.10, Android 2.3–5.0, iOS 6.0–8.0. Connecting 26 or more mobile devices requires at least two LAN access points.

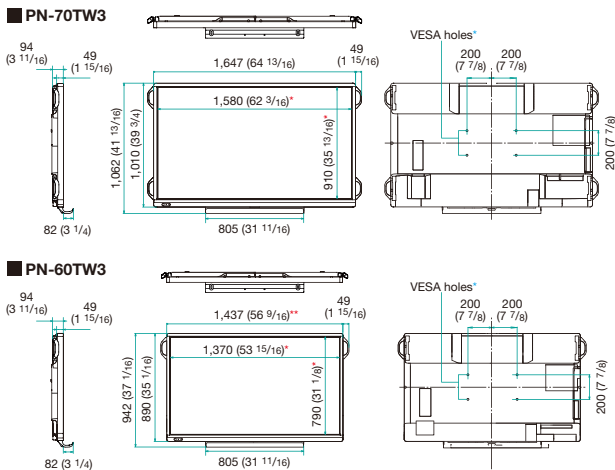


# Specifications

Model Name	PN-70TW3	PN-60TW3	
Installation	Landscape		
LCD Panel	70-inch-class (69 1/2-inch [176.6 cm] diagonal) UV <sup>2</sup> A*1 LCD		
	Max. Resolution	1,920 x 1,080 pixels	
	Max. Display Colours (approx.)	1.06 billion colours	
	Pixel Pitch (H x V)	0.802 x 0.802 mm	0.692 x 0.692 mm
	Max. Brightness (average) <sup>*2</sup>	300 cd/m <sup>2</sup>	
	Contrast Ratio	3,000 : 1	
	Viewing Angle (H/V)	160°/160° (CR ≥ 10)	
	Active Screen Area (W x H) (approx.)	1,538.9 x 865.6 mm (60 9/16" x 34 1/16")	1,329.1 x 747.6 mm (52 3/16" x 29 7/16")
	Response Time	6 ms (grey to grey, avg.)	
	Backlight	LED, edge lit	
Touchscreen	Touch Technology		
	IR (infrared blocking detection method)		
	PC Connection Port	USB (2.0 compliant) (Type B) x 2	
	Power Supply	Supplied from main unit	
	Multi Touch	10 points	
Protection Glass	Thickness: Approx. 3.4 mm <sup>*3</sup> Shock resistance: 130 cm <sup>*4</sup>		
	Thickness: Approx. 3.0 mm <sup>*3</sup> Shock resistance: 130 cm <sup>*4</sup>		
Touch Pen	Communication		
	Wireless communication method		
Function Button	Yes		
	Yes		
Wireless Controller	Wireless communication method (2.4 GHz, IEEE802.11 b/g/n) (5 GHz, IEEE802.11 a/n)		
	LAN Terminal	10Base-T/100Base-TX	
	USB Port	USB (2.0 compliant) (Type A) x 1	
	Wireless Adaptor Port	USB (2.0 compliant) (Type A) x 1	
Computer Input	Video		
	Analogue RGB (0.7 Vp-p) [75Ω], DisplayPort 1.1a		
	Synchronisation		
	Horizontal/vertical separation (TTL: positive/negative), Sync on green <sup>*5</sup> , Composite sync (TTL: positive/negative) <sup>*5</sup>		
Plug & Play	VESA DDC2B		
Power Management	VESA DPMS		
Video Colour System	NTSC (3.58 MHz, 4.43 MHz), PAL, PAL60, SECAM		
Input Terminals <sup>*6</sup>	PC analogue: Mini D-sub 15-pin x 2 <sup>*7</sup> , HDMI (HDCP and 1080p compatible, PC/AV signal compatible) x 3, 3.5 mm-diameter mini stereo jack x 2, Video x 1 <sup>*7</sup> , Component video x 1 <sup>*7</sup> , DisplayPort (HDCP compatible, PC signal compatible) x 1, RS-232C x 1 <sup>*8</sup>		
Output Terminals <sup>*5</sup>	3.5 mm-diameter mini stereo jack x 1, DisplayPort (HDCP compatible) x 1		
Input/Output Terminals <sup>*6</sup>	LAN port (10Base-T/100Base-TX) x 1		
Speaker Output	Built-in	10 W + 10 W	
	External	10 W + 10 W (6Ω)	
Mounting	VESA (4 points), 400 x 200 mm pitch, M6 screw		
Power Supply	100V – 240V AC, 50/60 Hz		
Power Consumption	235 W	190 W	
Environmental Conditions	Operating Temperature	5°C to 35°C	
	Operating Humidity	20% to 80% RH (no condensation)	
Dimensions (W x D x H) (approx.) (display only)	1,647 x 94 x 1,010 mm (64 13/16" x 3 11/16" x 39 3/4")		
Weight (approx.)	61 kg (134.5 lbs)	48 kg (105.9 lbs)	
Main Accessories	AC power cord, remote control unit, battery (AA size x 2), set-up manual, blank sticker, cable clamps x 5, camera mount, USB cable (3.0 m), eraser, pen tray, touch pen (with function button), pen adaptor, touch pen battery (AAA size), SHARP Display Connect software CD-ROM, wireless token, wireless adaptor, wireless adaptor cover, RS-232C conversion cable (3.5 mm-diameter mini stereo jack) x 1		

\*1 UV<sup>2</sup>A stands for Ultraviolet-induced Multi-domain Vertical Alignment, a photo-alignment technology that ensures uniform alignment of liquid crystal molecules. \*2 Brightness depends on input mode and other picture settings. Brightness level will decrease slightly over the lifetime of the product. Due to the physical limitations of the equipment, it is not possible to maintain a precisely constant level of brightness. \*3 Including AG film on the front and AR film on the back. \*4 Approximate distance at which the glass panel can withstand the impact of a 500-gram iron ball dropped on its center. \*5 D-sub input terminal only. \*6 Use a commercially available connection cable for PC and other video connections. \*7 Analogue PC, video, and component video are switchable (on bottom interface); use the menu to select. Video and component video connections require conversion cable via mini D-sub 15-pin jack. \*8 Requires the bundled RS-232C conversion cable. For command control only.

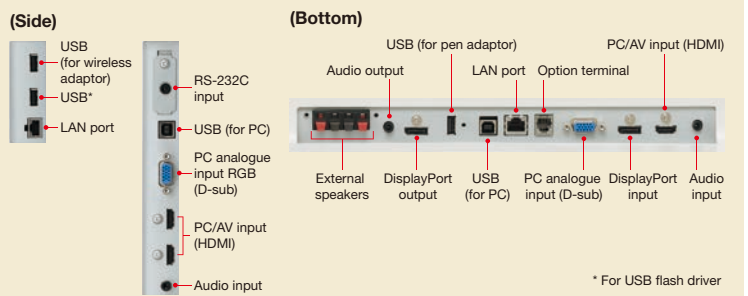
## Dimensions



Units: mm (inch)  
 \* Screen dimensions \*\* When inserted, the wireless adaptor protrudes slightly.  
 \* To use the VESA-standard mounting bracket, use M6 screws that are 8 to 10 mm plus the thickness of the bracket.

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## Input/Output Terminals



## Windows® PC System Requirements

PC	PC/AT compatible machine with USB 2.0 port and screen resolution of 1,920 x 1,080 (CD-ROM drive required for installation)
CPU	Intel® Celeron® 1.6 GHz, or AMD Sempron™ 1.6 GHz or higher (Intel® Core™ 2 Duo 2.8 GHz, or AMD Athlon™ II x 2 2.8 GHz or higher recommended)
OS	Windows® 7 (32-bit/64-bit), Windows® 8 (32-bit/64-bit), Windows® 8.1 (32-bit/64-bit), Windows® 10 (32-bit/64-bit)
Memory	2 GB or more
Hard disk	200 MB or more free space (additional space required for saving data)

## Option

- PN-ZL02 : Touch Pen



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