

# **PN-TPC2W7A User Guide**

**Version – 1**

## Getting Started

### ***Introduction to PN-TPC2W7A***

---

The PN-TPC2W7A is a full-featured High Definition PC based upon Intel H67<sup>®</sup> architecture, and powered by an Intel<sup>®</sup> G620 Pentium<sup>®</sup> Dual-core CPU. Targeted for Commercial applications such as interactive digital signage, the PN-TPC2W7A has been optimized for reliable operation with Sharp<sup>®</sup> PN-L series touch-screen displays. The PN-TPC2W7A includes the Sharp Pen Software<sup>™</sup> application pre-installed on the hard disk. It also has the flexibility to run most third party software and custom applications. The PN-TPC2W7A supports true 1080P video with hardware assisted support for formats such as MPEG2, H.264 and WM9. The PN-TPC2W7A was designed with display integration in mind and features a full complement of video outputs including HDMI<sup>®</sup> and DVI. The unit also includes an RS232 port for display control and a custom mounting bracket specially designed to attach behind a Sharp PN-L series touch screen display. The PN-TPC2W7A's all metal chassis and small size make it ideal for commercial applications requiring a powerful yet compact PC.

### ***Package Contents***

---

The packing box should contain the following items:

- Technovare<sup>™</sup> PN-TPC2W7A
- AC Power Adapter
- Mounting Kit
- HDMI Cable
- Connection Diagram
- This Users Guide

## **Federal Communications Commission (FCC) Statement**

---

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with instructions contained in this manual, may cause harmful interference to radio and television communications.

However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna
- Increase the separation between the equipment and the receiver
- Connect the equipment into an outlet on a circuit different from that of the receiver
- Consult the dealer or an experienced audio/television technician

### **NOTES:**

Connecting this device to peripheral devices that do not comply with Class B requirements, or using an unshielded peripheral data cable, could also result in harmful interference to radio or television reception.

The user is cautioned that any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment. To ensure that the use of this product does not contribute to interference, it is necessary to use shielded I/O cables.

## Specifications

---

- **Chipset**
  - Intel® H67
- **Size**
  - Mini-ITX form factor
  - Case: 7.5" x 7.4" x 1.75"
- **Microprocessor support**
  - Intel® G620 2.6 GHz Pentium® Dual-Core CPU
- **Operating systems:**
  - Supports Windows® XP® 32bit/64bit, Windows Vista® 32bit/64bit, and Windows® 7® 32bit/64bit
  - Supports Linux®
  - Windows 7 Pro installed
- **Software Installed:**
  - Sharp® Pen Software™ Application
  - Microsoft® Internet Explorer®
  - Microsoft PowerPoint® Viewer
  - Windows Media® Player
  - QuickTime® Player
  - Adobe® Flash® Player Plug-in
- **System Memory support**
  - Supports DDR3 1333/1066
  - Supports up to 16GB (2 x 8GB)
  - 2GB installed – both slots occupied and need to remove the current memory modules to upgrade
- **USB 2.0 Ports**
  - Supports hot plug and play
  - Four USB 2.0 ports (rear panel ports)
  - Two onboard USB headers for four extra ports
  - Supports USB 2.0 protocol up to 480 Mbps transmission rate
- **Hard Disk Drive**
  - 2.5" 160GB SATA
- **Onboard Serial ATA II/III**
  - Supports 1x SATA II (300 MB/s transfer rate)
  - Supports 2x SATA III (600 MB/s transfer rate)
  - Rear panel e-SATA
  - Supports hot plug and Native Command Queuing
- **On board Realtek 8111E Gigabit LAN Chip**
  - Supports 10/100/1000Mbps operation
  - 1 x RJ45 LAN Port

## Specifications (con't)

---

- **Onboard Audio**
  - RealTek™ ALC888S High-Definition audio chip
  - Supports up to 8-channel (2/4/5.1/7.1-channel)
  - 8-Channel Audio Ports on Back Panel
  - Supports Jack-Sensing function (under Windows)
  - Support for S/PDIF Out Header (Internal)
- **Green Function**
  - Supports ACPI (Advanced Configuration and Power Interface)
  - Supports EuP Function
  - RTC timer to power-on the system
  - AC power failure recovery
  - Supports S0 (normal), S1 (power on suspend), S3 (suspend to RAM), S4 (suspend to disk), and S5 (soft - off)
- **Onboard Graphics support**
  - Integrated Intel® GMA HD graphics engine
  - DVI-I / HDMI® output support (Dual Header capable)
- **Integrated HDMI Interface with HDCP**
  - Supports DVI or HDMI 1.4 interfaces
  - Secure digital audio merged from integrated HDA codec with no external audio signals required
  - Support for HDCP 1.3 using soft or hard HDCP keys
  - HDCP encryption support when configured as DVI or HDMI link without the need for external HDCP key crypto ROM
- **Dual Head Display Controller**
  - Each controller can drive same or different display contents to different resolutions and refresh rates
- **Expansion Slots**
  - 1 x PCIe 2.0 x16 slot
  - 1 x COM1 Header
  - Low power consumption and power management features
- **Optional**
  - Watchdog timer
- **Environmental**
  - Operating Temperature: 0° to 40° C
  - Operating Humidity: 80% maximum relative humidity, non-condensing
- **Power**
  - Input Voltage: 12V 7A
  - Power Dissipation: 84 Watts

## Mounting PN-TPC2W7A on Sharp PN-L Series Displays

---

1. Before mounting, make sure to turn off the monitor and remove the AC power.

2. Items needed

- Sharp PN-L Series Touch-Screen Display
- PN-TPC2W7A
- Mounting Plate
- AC Power Adapter
- 4 x M4 (0.7x10mm) screws
- 2 x M3 (0.5x5 mm)
- Phillips® Screw Driver



Figure 1

3. Attach the mounting plate

There are 8 holes on the mounting plate, but only use 4 holes to match the monitor's mounting holes depending on the monitor model.

The mounting plate is attached to the Sharp "PN-L" series display as in Figure 2.

Secure the mounting plate to the monitor with four included M4 screws.

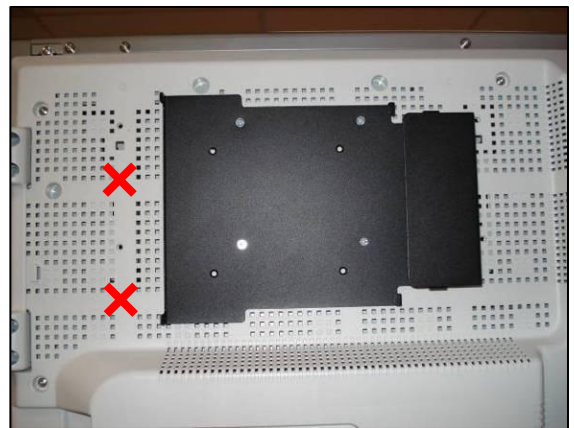


Figure 2

**\*NOTE- Do not use the holes marked with the red x**

4. Set the AC power adapter in place

Place the AC power adapter into the holder on the right side of the mounting plate as in Figure 3.

AC power cord faces downward and the DC power cord to the PN-TPC2W7A faces upward.

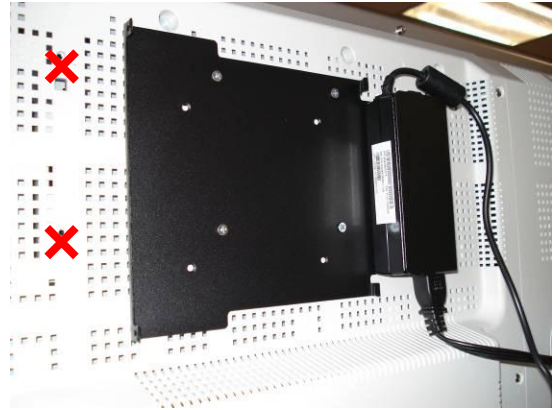


Figure 3

5. Install the PN-TPC2W7A

If you look at the right side of the PN-TPC2W7A before sliding it into the mounting plate as in Figure 4, there are two small slits near the edges on the PN-TPC2W7A and two small fingers on either side of AC power adapter holder on the mounting plate.

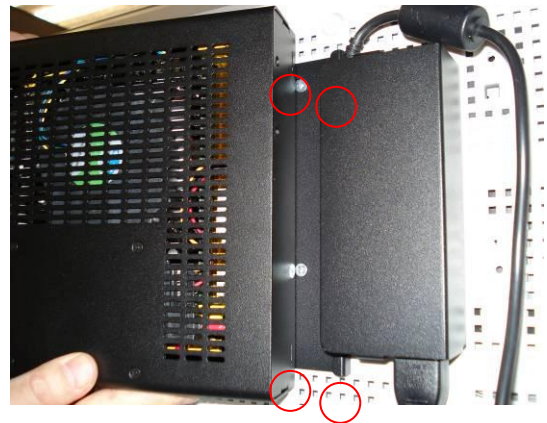


Figure 4

As you slide the PN-TPC2W7A into the mounting plate, insert the two fingers into these slits as in Figure 5.



Figure 5

## Installation

There are two fingers on the left side of the mounting plate to catch the PN-TPC2W7A in place as shown in Figure 6, and they need to be tightened with two include M3 screws.



Figure 6

6. Connect the HDMI video cable and the USB cable prior to turning on the PN-TPC2W7A.
7. Finish  
Plug in the DC power cord into the PN-TPC2W7A's power connector as in Figure 7.

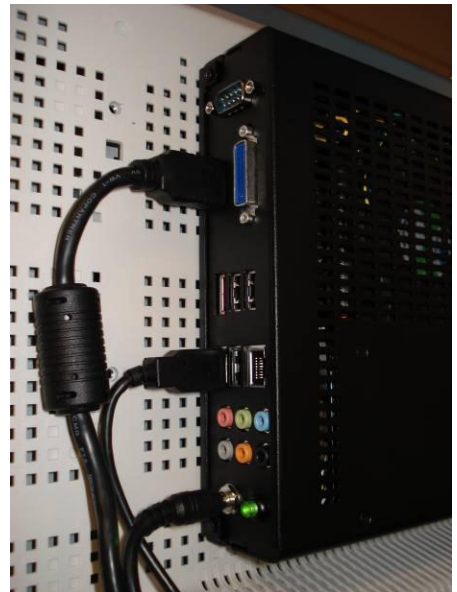
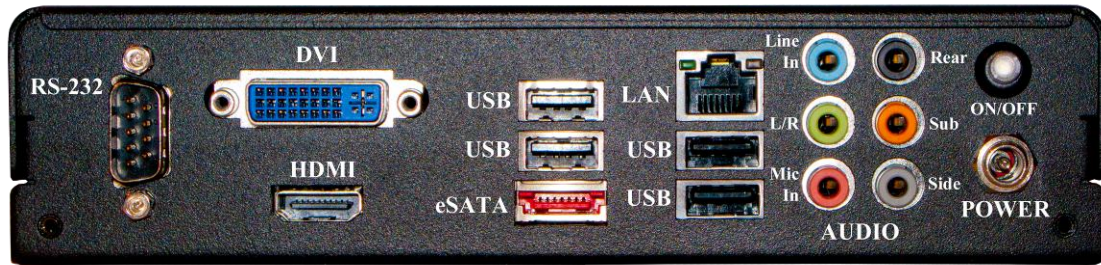


Figure 7



## Rear Connector Layout



Audio Port	2-Channel	4-Channel	5.1-Channel
Blue	Line-In	Line-In	Line-In
Green	Line-Out	Front Speaker Out	Front Speaker Out
Pink	Mic In	Mic In	Mic In
Orange	N/A	N/A	Center/Subwoofer Out
Black	N/A	Rear Speaker Out	Rear Speaker Out
Grey	N/A	N/A	N/A

Audio Port	7.1-Channel
Blue	Line-In
Green	Front Speaker Out
Pink	Mic In
Orange	Center/Subwoofer Out
Black	Rear Speaker Out
Grey	Side Speaker Out

### LAN Connector (with LED status indicator)

Green/Light Up/Blink = 10 Mbps/Link/Activity

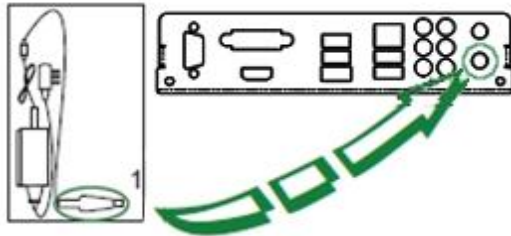
Green and Green/Light Up/Blink = 100 Mbps/Link/Activity

Green and Orange/Light Up/Blink = 1000 Mbps/Link/Activity

## Rear Connector Layout (con't)

---

1. Power Connection (refer to the Rear Connector Layout on pg. 8)  
Use only the AC power adapter supplied with the system.  
Input: 100~240V AC 1.3A  
Output: 12V DC 7A



Plug the 12V AC/DC adapter (as in the figure 1 above) to the PN-TPC2W7A's power input jack (as in the figure 2).

2. Power Button  
This button will stay lit if the PN-TPC2W7A is powered on. If the PN-TPC2W7A doesn't power up after the AC is connected, then press this button to power up. If normal Windows shutdown is not shutting down the PN-TPC2W7A, then press this button for more than 4 seconds will turn off the PN-TPC2W7A. In this case, run Disk Cleanup in Windows next time the PN-TPC2W7A is powered up.

## How to Recover to Factory Installed Condition

---

### **1. Before beginning**

Make sure that all the data including contents and programs you installed are backed up. If you are trying to recover from a bad HDD, please have a qualified technician runs diagnostics and replace defective components. If the unit is under warranty, please contact Sharp Customer Service.

### **2. Items needed**

- Recovery DVD (comes with the unit)
- USB DVD Drive

### **3. Windows® OS installation from Recovery DVD**

- Attach USB DVD Drive to one of the 4 available USB ports on the back of the unit.
- Insert the recovery DVD and reboot the PC.
- Follow instructions and install Windows OS.
- Remove the recovery DVD and reboot.

### **4. Install System Drivers from Recovery DVD**

Insert the recovery DVD.

Install Chipset, HD audio, HDMI audio and WiFi drivers.

### **5. Install 3<sup>rd</sup> Party Software from Recovery DVD**

- Microsoft® Internet Explorer® 8
- Windows Media® Player 11
- Microsoft PowerPoint® Viewer 2007
- Adobe® Flash® Player 10
- Apple® QuickTime® 7
- Media Player Codec Pack v.3.9.5

### **6. Install Sharp Pen Software™ & Optimize Windows**

Follow instructions from the included Sharp Pen Software operating manual.

## Support & RMA

---

Warranty service is available from a Sharp Authorized Service Center located in the United States.

To receive repair handling instructions and to find the location of the nearest Sharp Authorized Service Center, please call Sharp toll free at 1-800-BE-SHARP (1-800-237-4277).

If it is necessary to ship the Product for servicing, please be sure it is insured and packaged securely. Sharp shall not be responsible for lost, stolen or misdirected mail or for damage to the product incurred during shipping. Please have proof of purchase available when requesting warranty service.

To obtain product information or accessories, please call **1-888-GO-SHARP** or visit [www.SharpUSA.com](http://www.SharpUSA.com).

### Trademarks

- Sharp, Sharp Pen Software and related trademarks are trademarks or registered trademarks of Sharp Corporation and/or its affiliated entities.
- Intel and Pentium are trademarks or registered trademarks of Intel Corporation in the U.S. and other countries.
- Microsoft, Windows, Internet Explorer, PowerPoint, Windows Media, Windows Vista, Windows XP and Windows 7 are trademarks or registered trademarks of Microsoft Corporation in the United States and/or other countries.
- Adobe and Flash are registered trademarks or trademarks of Adobe Systems in the United States and/or other countries
- Apple and QuickTime are trademarks or registered trademarks of Apple Inc.
- Linux is a registered trademark of Linus Torvalds in the U.S. and other countries.
- HDMI is a registered trademark of HDMI Licensing LLC.
- Phillips is a registered trademark of The Phillips Screw Company, Inc.
- Realtek is a registered trademark and used for Integrated Circuits and is owned by Realtek Semiconductor Corp.
- Technovare is a trademark of Technovare Systems Inc.
- All other trademarks are the property of their respective owners.
- Product specifications and design are subject to change without notice.

