# User's Manual

# PenTouch

*Incorporating*
*EIZO EV2780*
*EIZO EV2785*

# General Notice

PenTouch is a touch screen overlay that is used in conjunction with an EIZO monitor. Take care to also study the user manual supplied with the EIZO monitor which will always be included in the same carton.

Take care when handing the PenTouch unit. The touch screen controller is mounted inside a cover mounted at the bottom of the unit, and care must be taken not to touch this when lifting the monitor. If this casing is broken, the warranty may be void.

When the monitor is cold and brought into a room or the room temperature goes up quickly, dew condensation may occur on the interior and exterior surfaces of the monitor. In that case, do not turn the monitor on. Instead wait until the dew condensation disappears, otherwise it may cause some damage to the monitor

# Cleaning

Stains on the cabinet and panel surface can be removed by moistening part of a soft cloth with water.

### Attention

- Chemicals such as alcohol and antiseptic solution may cause gloss variation, tarnishing, and fading of the cabinet or panel, and quality deterioration of the image.
- Never use thinner, benzine, wax, or abrasive cleaner as they may damage the cabinet or LCD panel surface.

# Correct Monitor Use

An excessively dark or bright screen may affect your eyes. Take care to understand how to adjust the brightness of the monitor described in this user manual and the EIZO use manual.

Staring at the monitor for a long time tires your eyes. Take a 10-minute rest every hour.

The monitor is easily adjustable for angle when using with the PenTouch adjustable stand. Take time to adjust the angle to the optimal position before you start to use it

# CONTENTS

# Chapter 1   Mounting the Monitor

## 1-1 Mounting Options

There are three mounting options.

- PenTouch ergonomic stand adjustable from 0 (horizontal)to 80 degrees.
- Original EIZO Stand.
- VESA Mount

### Attention

Take care when handing the PenTouch unit. The touch screen controller is mounted inside a cover mounted at the bottom of the unit, and care must be taken not to touch this when lifting the monitor. If this casing is broken, the warranty may be void.

## 1-2 Detaching/Attaching the PenTouch Stand

The monitor casing for the EIZO EV2780 and EIZO EV2785 are different.

EIZO EV2780 – Use the 4 x M4x16mm screws and washers only

EIZO EV2780 – Use the 4 x M4x20mm screws and washers plus the 6mm packers

Lay the monitor onto a flat clean surface and take care not to over-tighten the screws.

# Chapter 2   Connecting and Using the Monitor

## 2-1 Connecting the Touch Screen and Monitor

The PenTouch monitor has a USB connection that normally plugs into the EIZO EV monitor. The USB-C cable from the EV monitor is then used in the normal way, and the touch screen signal is sent via the USB-C cable. However, if there is a need to use a different signal cable the USB connection may be plugged directly into the computer.

Either way, the PenTouch controller is a plug-and-play setup.

# 2-2 Using the Touch Screen

The PenTouch monitor uses a modified capacitive touch method. Extra sensors are also used to give an enhanced touch resolution.

There are three touch options described below in section 2-3.

## Using the Stylus

There are two options of stylus (a) USB corded, and (b) battery powered cordless. The batteries are AAAA 1.5V. Both pen options have two side buttons, eraser and barrel. To get the most accurate stylus position it is recommended to have your thumb placed gently close to the buttons for the correct orientation.

## Adjusting the PenTouch Stand

To adjust the PenTouch stand, loosen the levers by turning anti-clockwise (pull one towards you and push the other one away). It is best to rock the monitor into an upright position and adjust the stand, tighten the levers and then place down again. Take care not to tighten the levers too much. The lever position can be changed by pushing in the button on the lever.



# 2-3 Touch Method Options

There are three touch options, and these can be modified after purchase by updating the controller firmware.

### Attention

It is recommended that the PenTouch touch screen is purchased with the touch option you require. It is also recommended changing the touch method as little as possible, as when doing this there is potential to permanently damage the controller if the update is interrupted.

The three touch options are:

Stylus-Only – There is no human body part input at all.

10-Point Multi-Touch – This operates like a normal capacitive touch screen

Stylus and Multi-Touch – This combines the above two options, although obviously there is human touch input when using the stylus.
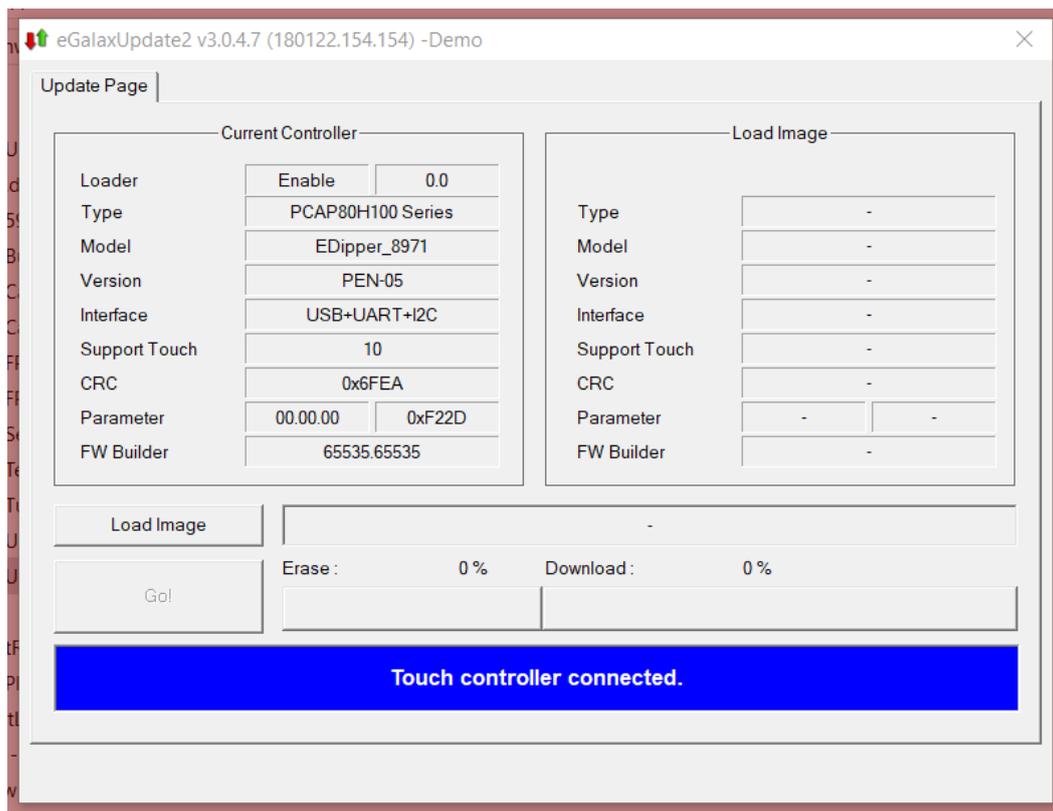
The method for modifying or updating the firmware is described in the following section 2-4.

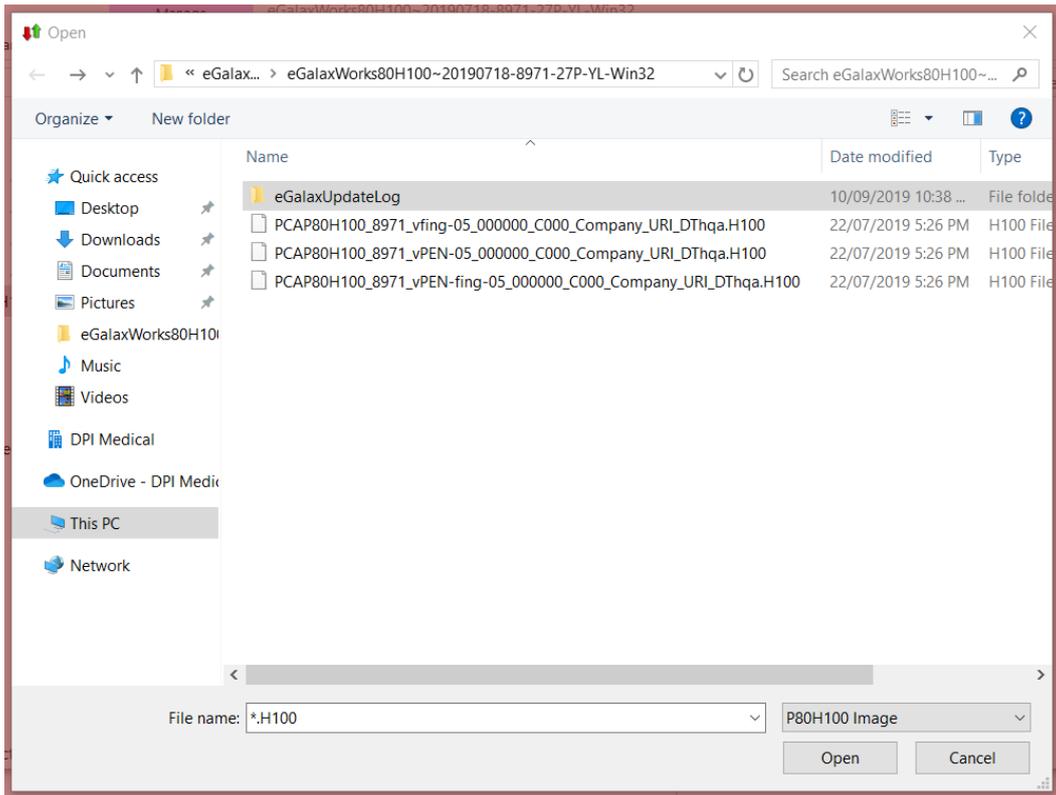## 2-4 Changing or Updating the Firmware

To change or update the firmware, go to www.dpiltd/products/pentouch

Download the PenTouch Firmware and Calibration Package and save it to your computer.

Open and run eGalaxUpdate2.exe



Select 'Load Image'

Select One of three options

PCAP80H100_8971_vfing-05_000000_C000_Company_URI_DThqa.H100
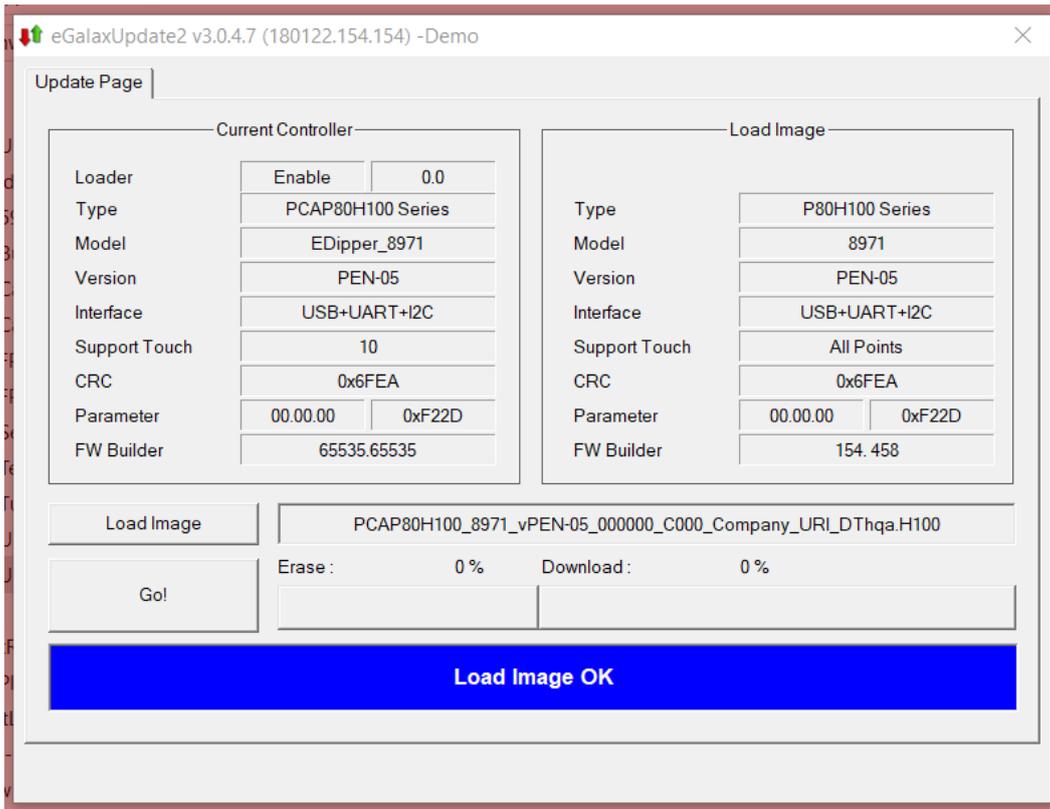
PCAP80H100_8971_vPEN-07_000000_C000_Company_URI_DThqa.H100

PCAP80H100_8971_vPEN-fing-05_000000_C000_Company_URI_DThqa.H100

'Vfing' is for 10-Point Capacitive Touch
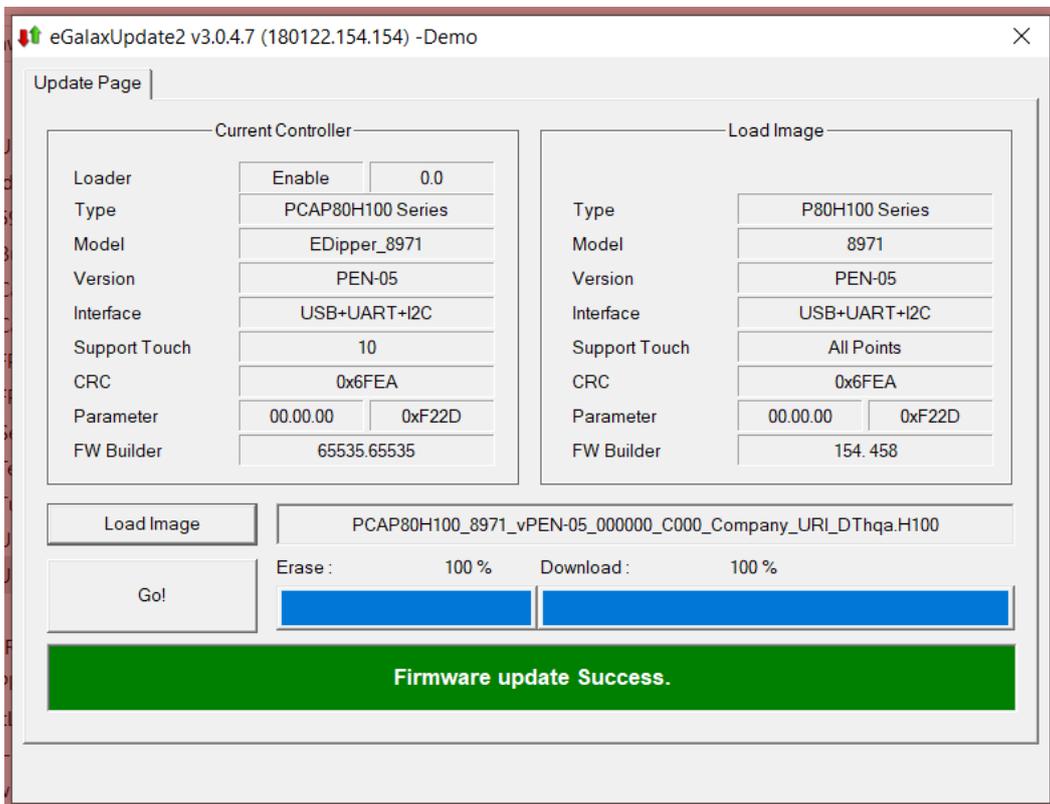
'vPEN' is for Stylus Only

'vPEN-fing' is for 10-Point Capacitive Touch and Stylus

Select 'Go!' and wait. The process may take several minutes.

### Attention

There is potential to permanently damage the controller if the update is interrupted.



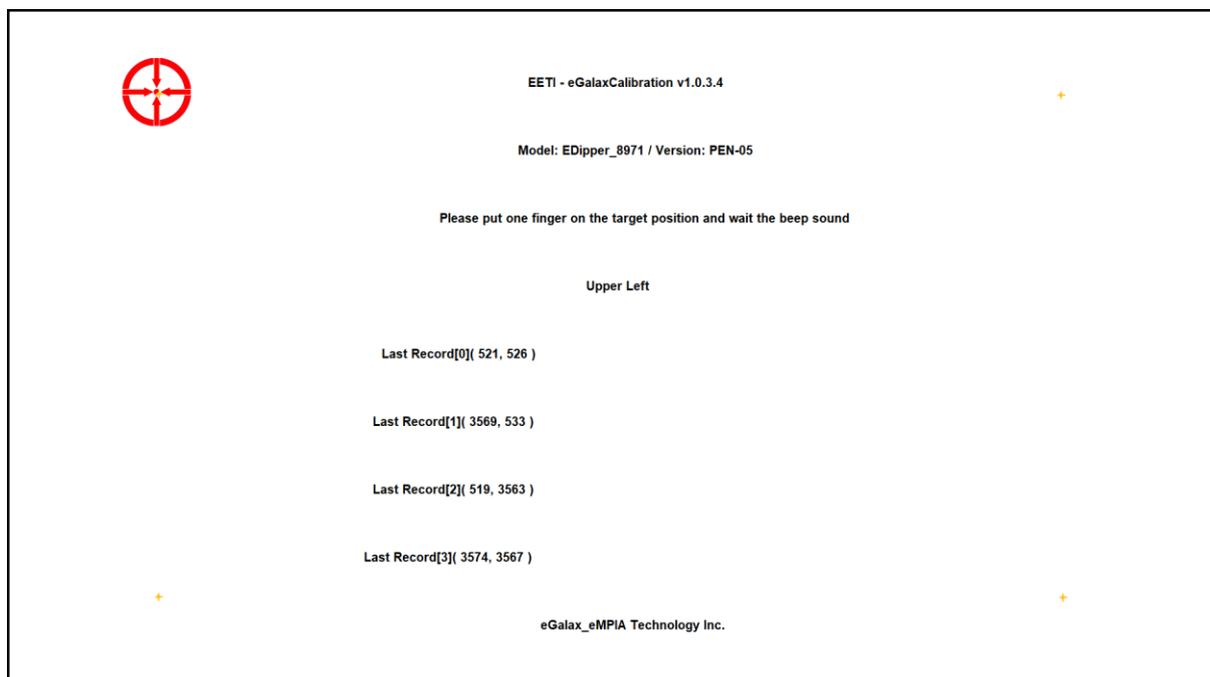Exit the update panel. The firmware upgrade is complete

## 2-5 Calibrating the Touch Panel

To calibrate the touch panel, go to www.dpiltd/products/pentouch

Download the PenTouch Firmware and Calibration Package and save it to your computer. (This is the same package as described in Chapter 2-4 for changing or updating the firmware)

If you have another screen connected to the PC, you may need to disable the other screen. In Windows10 this is done by Right Click/Display Settings/Multiple Displays/Show only on__

Double Click eGalaxCalibration



Hold the pen/finger the way you normally would and take care to have the screen adjusted to the angle you will be using it at.

Using the pen/finger, touch the dot in the center of the red arrows and hold it there until the blue circle is complete and the screens beeps. Repeat the same process on the remaining three touch points. The screen will exit when all 4 touch points are complete.

## Chapter 3   EIZO Monitor Settings

The On Screen Display (OSD) buttons, the ambient light sensor and the speakers on a EIZO EV monitor are covered when it is combined with a PenTouch overlay. Before the PenTouch unit and EIZO screen are assembled together as one unit, the brightness is turned up to 100% and the ambient light sensor is turned off. Therefore, the OSD features need to be accessed via other methods.

## 3-1 Adjust Brightness via the Computer Graphics Control

Many graphics drivers and boards have the ability to adjust the backlight brightness via the computer. You should be sure that this is a native adjustment of the EV monitor and not a virtual adjustment otherwise the backlight will burn out quicker because of running at 100% from day one.

### Attention

Take care to adjust the brightness, as looking at a monitor set too bright can be tiring and will also burn out the backlight faster

## 3-2 EIZO Screen InStyle for Settings

The best way to operate the monitor setting is via EIZO Screen InStyle. There are two types of Screen-In-Style:

- Screen InStyle
- Screen InStyle Server

The server edition offers the most comprehensive screen adjustments, including brightness control.

The access either type, go to [www.eizoglobal.com/products/flexscan/screen-instyle](www.eizoglobal.com/products/flexscan/screen-instyle) and select download.

### Note

If you want to use Screen InStyle Server, you also need to download and use Screen InStyle to register the computer to the server.

## Screen InStyle

Screen InStyle is only for the monitor(s) connected to the computer and will allow you to:

- Set up Auto Color mode according to the Application you are using.
- Adjust power settings.
- Syncronize monitor settings between two or more supported monitors on the same computer. This is useful for instance when using the Auto EcoView sensor on a side monitor, as the sensor is always covered on a PenTouch monitor.
- Enable Circadian Dimming
- Enable Signal Selection

Double-click "setup.exe" and follow the on-screen instructions to install the software. When the installation is complete, the Screen InStyle server icon appears on the desktop.

## Screen InStyle Server

Screen InStyle Server is for the monitor(s) connected to the computer and also all monitors connected to other computers (clients). Screen inStyle Server will allow you to:

- Observe all settings and information for every monitor.
- Change all settings for every monitor including brightness.

### Note
When using Screen InStyle Server, you must have the Screen In-Style client application closed for each workstation you want to make changes to.
If you are connecting to a computer without USB-C, you will require a USB-C to USB cable or adapter.

Double-click "setup.exe" and follow the on-screen instructions to install the software. When the installation is complete, the Screen InStyle server icon appears on the desktop.

The default password is 'password'.

Also install and open Screen InStyle on every computer (including your computer) that has EIZO monitors connected.

To connect a client to the Screen InStyle Server:

1. Open the "Client Settings" screen.
2. Copy the server address (http://*********/ScreenInStyle/) or click "Download Connection File" to download the connection file.
3. Open the "Server Settings" screen of the Screen InStyle client.
4. Enter the server address in the "Server Address" box or click "Read Connection File" to specify the connection file.
5. Click "OK"

## Note

Specify the following argument if you want to install the client in silent mode. This sets the server address for each client and establishes a connection to the server. setup.exe /SP-/VERYSILENT /SUPPRESSMSGBOXES /Server="(server address)" Reboot the computer after the silent installation is complete.

## *Screen InStyle Server Basic Operations*

Double-click on the Screen InStyle Server icon on the desktop. The default password is 'password'.

Overview of Functions:



## Collectively applying settings

You can apply a set of settings related to power, multi-monitor sync, and other functions of Screen InStyle as "policy" to multiple computers at the same time.

## Grouping computers

Store in the same folder to group computers that you want to apply the same policy to. By default, all computers are displayed in "Default Folder". Create a folder and move desired computers from "Default Folder" to the new folder.

1. In the left pane, select "New" from "Folders ▲" to create a folder.

2. Click "Default Folder".

3. Select the check boxes of the desired computers, then click "Move" in the bottommost line.

4. Select the folder you have created in Step 1, then click "OK".

### Applying policy

Apply policy to the folder.

1. In the left pane, click the desired folder.

2. Select "Set Policy" from "Folders ▲".

3. Select the "Enable Policy" check box to view settings. Change settings as necessary, then click "OK". For details about the function of each setting item, refer to the Screen InStyle Client Software Help Guide.

When the policy is applied, the icon appears to the left of the folder icon.

### Disabling policy

To disable policy with respect to all computers in a folder, delete the policy from the folder.

1. In the left pane, click the desired folder.

2. Select "Set Policy" from "Folders ▲".

3. Clear the "Enable Policy" check box.

You can also disable policy with respect to particular computers in a folder.

1. In the left pane, click the desired folder.

2. Select the check boxes of the computers with respect to those you want to disable the policy of, then click "Exclude from Policy" in the bottommost line.

In the list, these computers are indicated with "Excluded" in "Policy Status". To apply policy again, select the desired computers, then click "Apply Policy" in the bottommost line.

## *Screen InStyle Server Troubleshooting*

| Problem | Possible Cause and Remedy |
|---|---|
| 1. No client computers are displayed in the list view | • Check whether the correct server address has been specified in the "Server Settings" screen of the Screen InStyle client. Click the "Test" button to perform the connection test.<br>• Check whether the Screen InStyle client screen is still open. If so, close the screen. |
| 2. The status of a client computer displayed in the list view is "Disconnected" | • The status of a client computer is "Disconnected" in the following conditions even when the client computer is active.<br>- The computer is in a logged-off or sleep status.<br>- The Screen InStyle client screen is still open. |

# Chapter 4   Changing out the EIZO Monitor

It may be necessary to change out the EIZO monitor for instance if you want to transfer the PenTouch unit to another model number or if the EIZO monitor reaches end-of-life before the PenTouch unit. This can simply be done with a standard screwdriver.

1. Remove the monitor from the stand/arm and lay it on a clean, smooth and soft surface, face down.
2. Remove all the cables.
3. Remove the 16 screws from the perimeter of the screen.
4. Carefully remove the rear bezel, sliding it down away from the controller board panel that is sticking up.
5. Remove the monitor. You may need to tip the PenTouch unit up. If this is the case, two people are recommended for this procedure.
6. Before placing the new monitor into the unit, ensure both the inside surfaces are free of dust and moisture.
7. Note that the monitor needs to be mounted hard to the top of the PenTouch frame. The EV2785 is slightly shorter in height than the EV2780, so there should be a gap at the bottom.
8. Replace the rear bezel, taking care not to over-tighten the screws.

# *Chapter 5   Specifications*

| Touch Panel | Glass | Ultra-Clear with Gloss Surface |
|---|---|---|
| | Working Voltage | 5V |
| | Hardness | 6H |
| | Transmittance | ≥85% |
| | Touch Channels | 96 x 54 |
| Touch Stylus | Power - USB | 5V DC |
| | Power - Battery | 1.5V DC |
| | Power Consumption | Active: 0.7mA - 3mA<br>Sleep: 0.3mA average<br>Suspend: < 20uA |
| Physical Specifications | Dimensions | 649.8 x 79.8 x 387.8 mm |
| | Dimensions Without Stand | 649.8 x 53.7 x 387.8 mm |
| | Net Weight | 5.4 kg (excluding EIZO monitor) |
| | Net Weight Without Stand | 3.3 kg (excluding EIZO monitor) |
| | PenTouch Stand Tilt | 0 ° to 80 ° |
| Operating Environment Requirements | Temperature | 5 °C to 35 °C |
| | Humidity | 20 % to 80 % R.H. (no condensation) |
| | Air Pressure | 540 hPa to 1060 hPa |
| Transportation/Storage Environment Requirements | Temperature | 0 °C to 60 °C |
| | Humidity | 10 % to 90 % R.H. (no condensation) |
| | Air Pressure | 200 hPa to 1060 hPa |

# *5-1 OS Support*

The PenTouch screen, firmware and calibration package all support the following operating systems:

- Windows
- Linux
- Android
- MAC
- QNX

Please see the following tables for Screen InStyle operating system requirements:

| Server Operating Requirements | |
| --- | --- |
| Supported OS | · Windows Server 2016<br>· Windows Server 2012 R2 (64-bit)<br>· Windows 10 (64-bit)<br>· Windows 8.1 (64-bit)<br>· Windows 7 (64-bit) |
| Compatible Browsers | · Internet Explorer<br>· Chrome |
| PC Requirements | · PC meets OS requirements<br>· Resolution of 1280 x 1024 or above |

| Client PC Operating Requirements / Compatible Monitors | |
| --- | --- |
| Compatible Monitors | EV3285, EV3237, EV2785, EV2780, EV2457<br>EV2456, EV2455, EV2451, EV2450 |
| Supported OS | · Windows 10 (32-bit, 64-bit)<br>· Windows 8.1 (32-bit, 64-bit)<br>· Windows 7 (32-bit, 64-bit) |
| PC Requirements | · PC meets OS requirements<br>· USB Port |