# MS-9Z08

## HMI-C170H3CS4

## Waterproof Panel PC

# User Manual

# Index of Contents

# <u>Attention</u>

1. This manual contains important information for the proper setup and maintenance of the product(s). Before setup and usage of the product(s), please read through this manual thoroughly.
2. The specifications shall apply only to the product(s) in this manual.
3. The specifications may be modified without any notice in advance. Please inquire with your supplier for latest specifications, drivers or manuals.

# Battery Information

**European Union:**

Batteries, battery packs, and accumulators should not be disposed of as unsorted household waste. Please use the public collection system to return, recycle, or treat them in compliance with the local regulations.。

**Taiwan:**

For better environmental protection, waste batteries should be collected separately for recycling or special disposal.

廢電池請回收

**California, USA:**

The button cell battery may contain perchlorate material and requires special handling when recycled or disposed of in California.

For further information please visit:

https://www.dtsc.ca.gov/hazardouswaste/perchlorate/

Danger of explosion if battery is incorrectly replaced. Replace only with the same or equivalent type recommended by the manufacturer.

# 0. Before Installation

When unpacking please check if you have the following items:

◆ MS-9Z08(HMI-C170H3CS4) Machine

◆ Accessory Package

◇ Driver CD

◇ Power Supply Kit (choose one of below)

DC IN (Power cord+M12 Adapter) x1
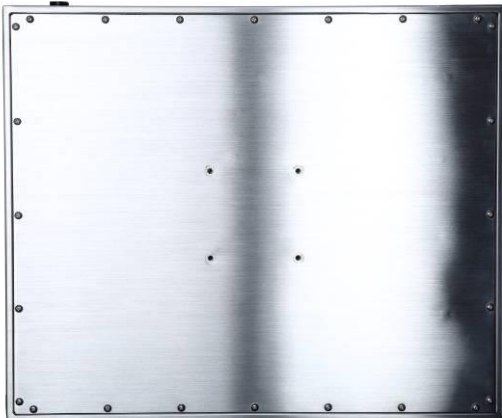
AC IN (M12 Power cord) x1

◇ M12 LAN1 x1

◇ M12 USB2.0 x2

◇ M12 RS-232 x1 (COM1)

\* If any items are missing or damaged, please contact us immediately.

\* The contents of your package may vary depending on the model purchased.

# 1. Appearance

| Front View | Back View |
|:---:|:---:|
|  |  |
| **Side View (L)** | **Side View (R)** |
|  |  |
| **M12 Connector Type** | **Stand-alone Circular Type** |
|  |  |

**Manual Version: 1.0**

# 2. System Installation

## 2.1 Dimensions
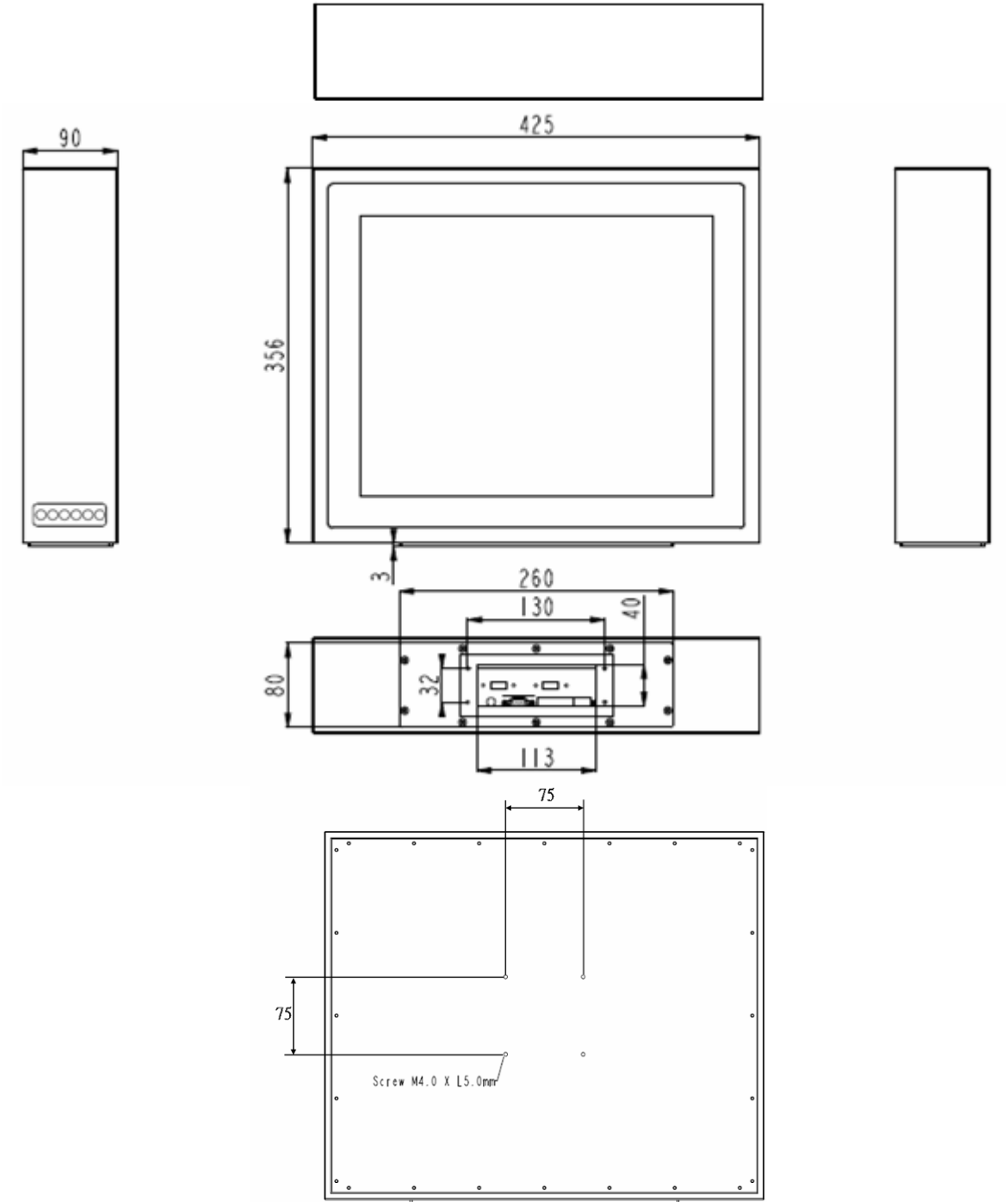
## 2.2 Power Control Button





Reset                    Power on/off

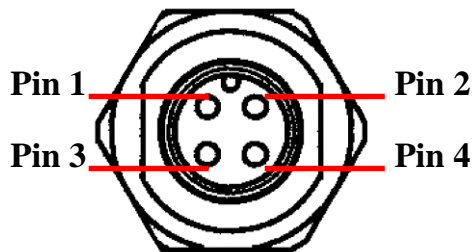| Button | Function |
|--------|----------|
|  | Power on/off |
|  | HDD LED |
|  | Power LED |
|  | Reset |

# 3. I/O Definition

## 3.1. Power Connector

3.1.1 DC IN M/B Pin
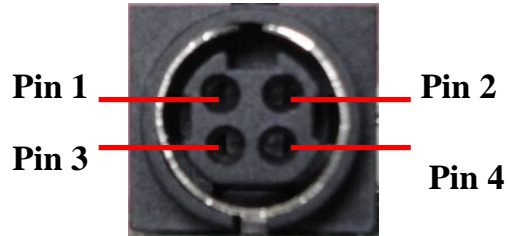


3.1.2 DC IN M12 Pin



Pin Assign and Definition

| M/B Pin No. | M12 Pin No | Description |
|---|---|---|
| 1 | 1 | +12V DC |
| 2 | 2 | +12V DC |
| 3 | 3 | GND |
| 4 | 4 | GND |

## 3.1.3 AC IN Adapter Pin (90°)
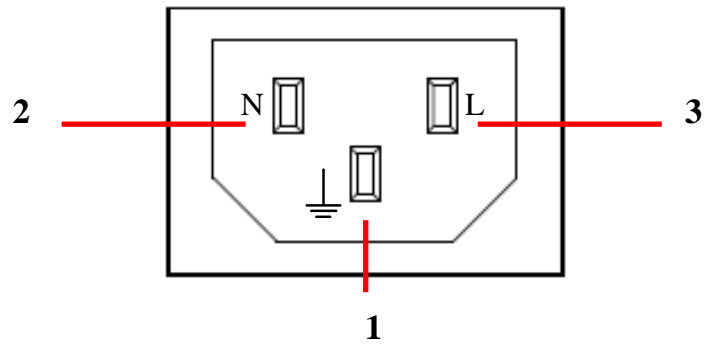


## 3.1.4 AC IN M12 Pin
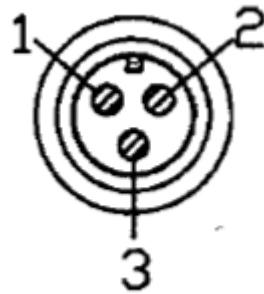


Pin Assign and Definition

| M/B Pin No. | M12 Pin No | Description |
|---|---|---|
| 1 | 1 | E |
| 2 | 2 | N |
| 3 | 3 | L |

## 3.2. LAN RJ45 Connector

### 3.2.1 LAN M/B Pin
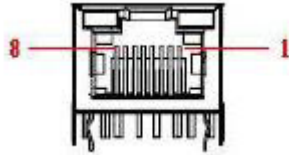


### 3.2.2 LAN M12 Pin
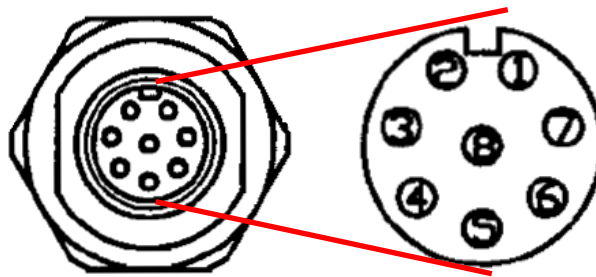


Pin Assign and Definition

| M/B Pin No.. | M12 Pin No | Description |
|:---:|:---:|:---:|
| 1 | 6 | TX1+ |
| 2 | 4 | TX1- |
| 3 | 5 | TX2+ |
| 4 | 1 | TX3+ |
| 5 | 8 | TX3- |
| 6 | 7 | TX2- |
| 7 | 2 | TX4+ |
| 8 | 3 | TX4- |

## 3.3. USB 2.0 Connector

### 3.3.1 USB 2.0 M/B Pin
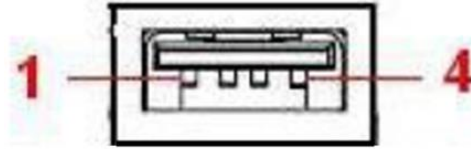


### 3.3.2 USB 2.0 M12 Pin
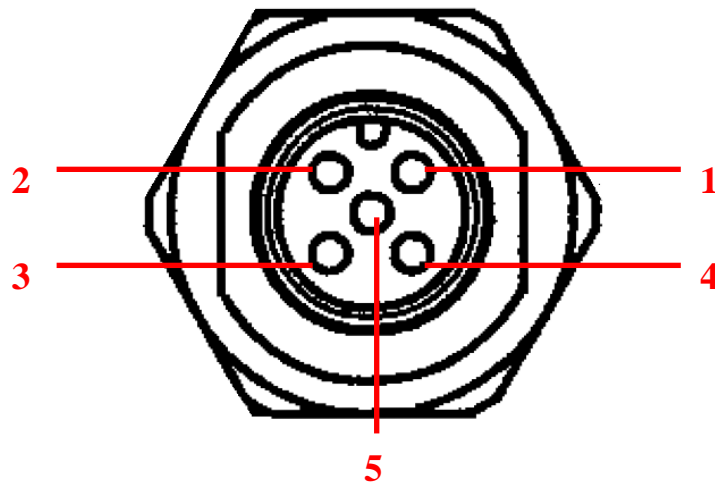


Pin Assign and Definition

| M/B<br>Pin No. | M12<br>Pin No. | Description |
|---|---|---|
| 1 | 1 | VCC |
| 2 | 2 | USB D- |
| 3 | 3 | USB D+ |
| 4 | 4 | GND |
| SHELL | 5 | BRAID |

## 3.4. Serial Port

### 3.4.1 Serial M/B Pin

Pin 1

Pin 5

Pin 6

Pin 9
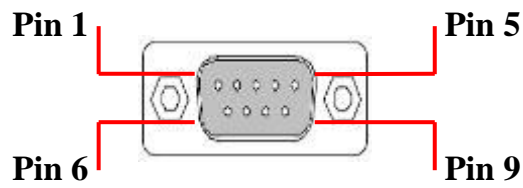
### 3.4.2 Serial M12 Pin
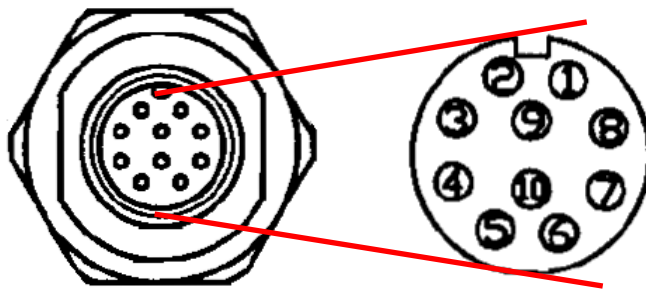
Pin Assign and Definition

| M/B Pin No.. | M12 Pin No | Description |
|---|---|---|
|  |  | RS-232 |
| 1 | 1 | DCD |
| 2 | 2 | RXD |
| 3 | 3 | TXD |
| 4 | 4 | DTR |
| 5 | 5 | GND |
| 6 | 6 | DSR |
| 7 | 7 | RTS |
| 8 | 8 | CTS |
| 9 | 9 | N/A |
| N/A | 10 | N/A |

# 4. Troubleshooting

◎ **My system does not start.**

1. Check if the system is connected to an electrical outlet and it is turned on.

2. Check if the power cord and all cables are connected firmly.

3. Press the "Power On" button to turn it on again.


◎ **When I turn on my computer, the message "Operating System not found" appears or Windows does not start.**

1. Check if the OS has been properly installed.

2. Check Boot Device Priority settings in the BIOS Setup.


◎ **The image is distorted, flashes or flickers.**

1. Select the correct resolution, refresh rate and make adjustment.


◎ **The image is blurred.**

1. Change the resolution, refresh rate and make adjustment.


◎ **The system cannot be shut down.**

It is best to shut down your computer using the Shut Down icon in the operating system. Using other methods, including those listed below, may result in data failure. If the Shut Down procedure does not work, choose one of the following steps:

1. Press Ctrl+Alt+Del keys, then choose Shut Down.

2. Press and hold the power button till the system is off.

3. Unplug the power cable from the system.


◎ **The Internet connection has problems.**

1. If you are having a problem connecting to your Internet Service Provider (ISP), check if the ISP is experiencing technical problems.

2. Check the Network settings and connection and make sure the system is properly configured to Internet access.

3. The wireless LAN data transfer speed is affected by distance and obstructions between devices and access points. To maximize the data transfer speed, choose the access point closest to your system.

◎ **System monitor shows no display.**

1. Check if the system is connected to an electrical outlet and is turned on.

2. The system may be in Standby mode. Press any key to activate the Display.

# 5. Specifications

| | | |
|---|---|---|
| **Display** | LCD Size | 17" |
| | Resolution | 1280x1024 |
| | Brightness (cd/m$^2$) | 250 |
| | Contrast Ratio | 1000:1 |
| | Support Colors | 16.7M |
| | Pixel Pitch (H/Vmm) | 0.264 x 0.264 |
| | Viewing Angle | H: 170 degree |
| | | V: 160 degree |
| **Touch Panel** | | Projective Capacitive touch panel |
| **System Processor** | CPU | 7th Gen Intel® Embedded Mobile Kaby Lake-U Core™ i3-7100U Processor, DC, 15W |
| | Frequency | 2.40 GHz |
| | L2 Cache | 3 MB |
| | Chipset | SoC |
| **Memory** | Technology | Single-channel DDR4 2133MHz |
| | Max. Capacity | Up to 16 GB (Default 4GB) |
| | Socket | 1 x 260-pin SO-DIMM |
| **Ethernet** | Controller | 1 x Intel® I210-AT GbE LAN |
| **Expansion Slot** | Mini-PCIe | 2 x Full-size (Mini-PCIe1 Slot w/ NANO SIM-Holder) (Mini-PCIe2 Slot w/ mSATA) |
| **Storage** | SATA | 1 x 2.5" HDD/SSD (Default 128GB SSD) |
| | mSATA | 1 (Shared with Mini-PCIe2) |
| **I/O Interface** | RJ-45 | 1 |
| | USB | 2 x USB 2.0 |
| | Serial | 1 x COM COM1: RS-232, w/o power |
| **Power Supply** | DC Input | DC-in 12V |
| **Environment** | IP Rating | Full IP65 |
| | Operating Temperature | 0° ~ 50°C |
| | Operating Humidity | 10% ~ 90% non-condensing |
| | Storage Temperature | -20° ~ 60°C |
| | Storage Humidity | 10% ~ 90% non-condensing |
| **Physical Characteristics** | Housing | Stainless-Steel 304 |
| | Dimensions (L x W x D) | 425mm x 356mm x 90mm |
| | Weight | 9.0 kg |
| | Mounting | VESA 75 |
| **Certification** | EMC | FCC, CE Class B |
| **Software Platform** | OS Support | Windows 10 (64-bit) |

# 6. Driver Installation

## 6.1 Install CD with 2 eGalaxTouch Driver instructions

1. HID_Install_Package : Refer to Section 6.2 for resistive type drivers that simulate projected capacitive cursors.

2. eGalaxTouch: Refer to Section 6.3 for the original standard resistive Touch Driver.
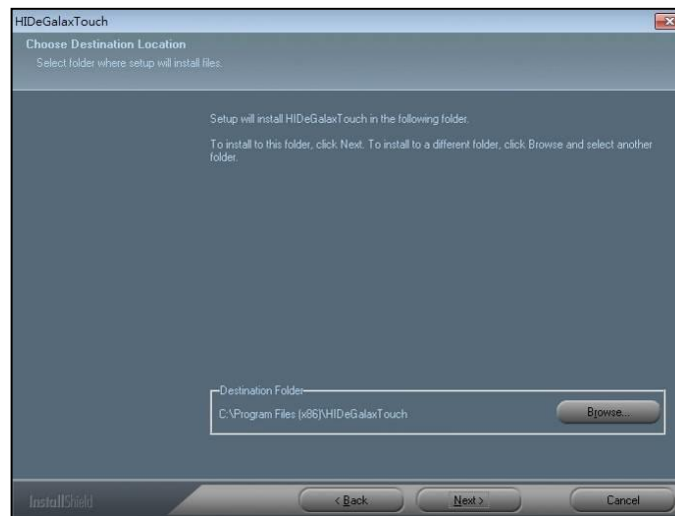


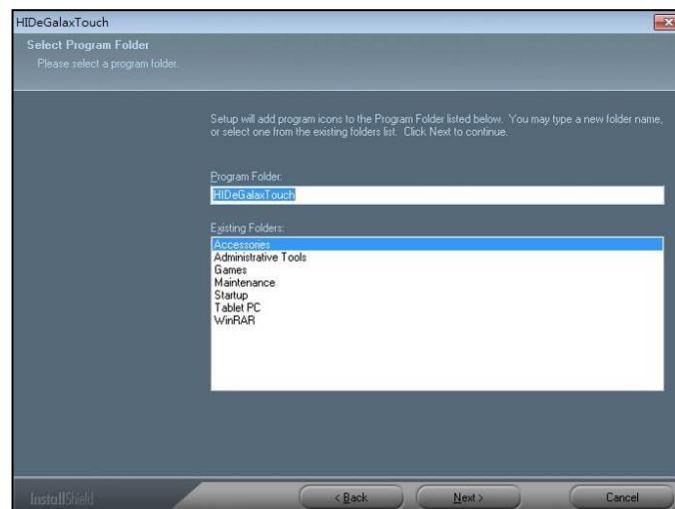## 6.2 Installing Touch Screen Controller (Option) (HID_Install_Package)

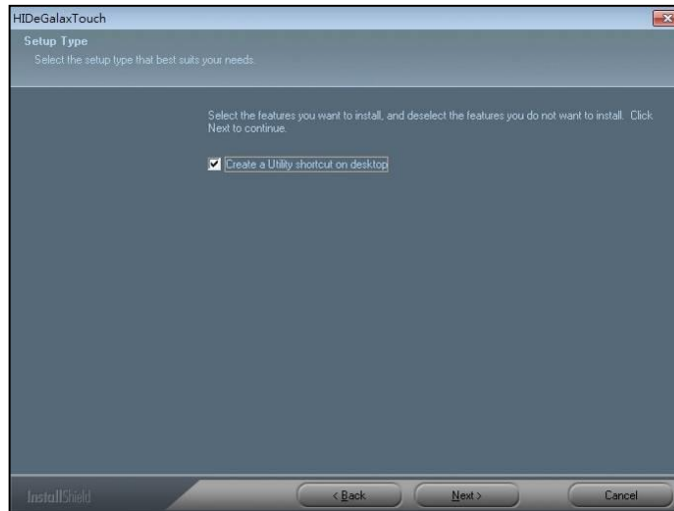1. Double click on "setup.exe" in driver folder, then click "Next" to start driver installation.
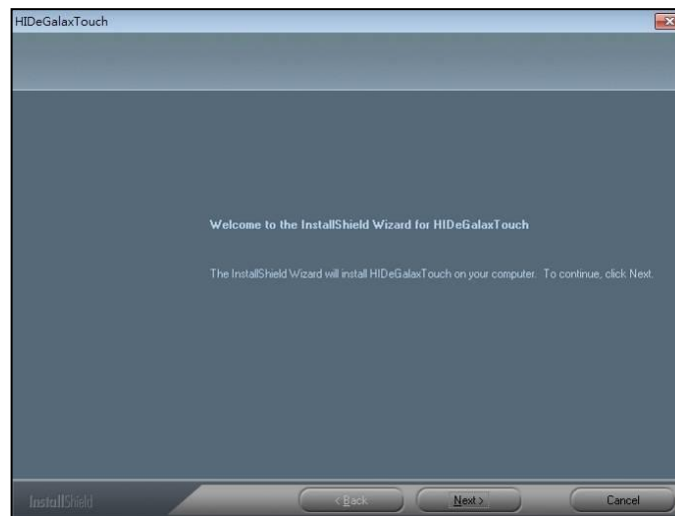
2. Click Browse and Select another folder and Click "Next".



3. Click "Next" to continue.

4. Click "Next" to continue.



5. Wait for the setup program to complete copying files. This includes USB/COM interface drivers.
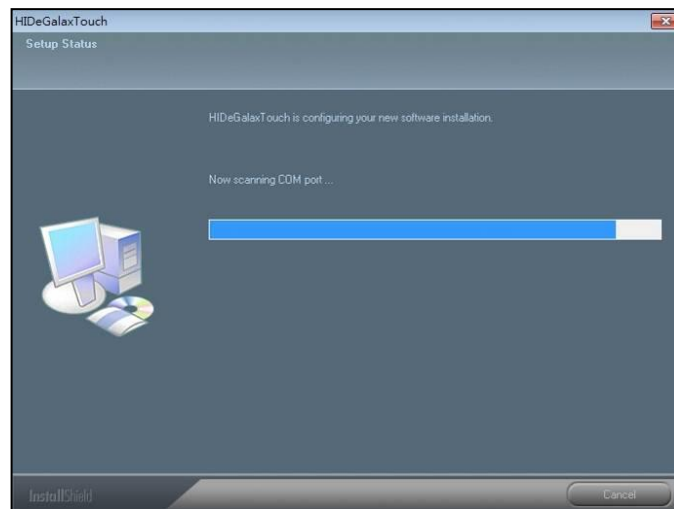
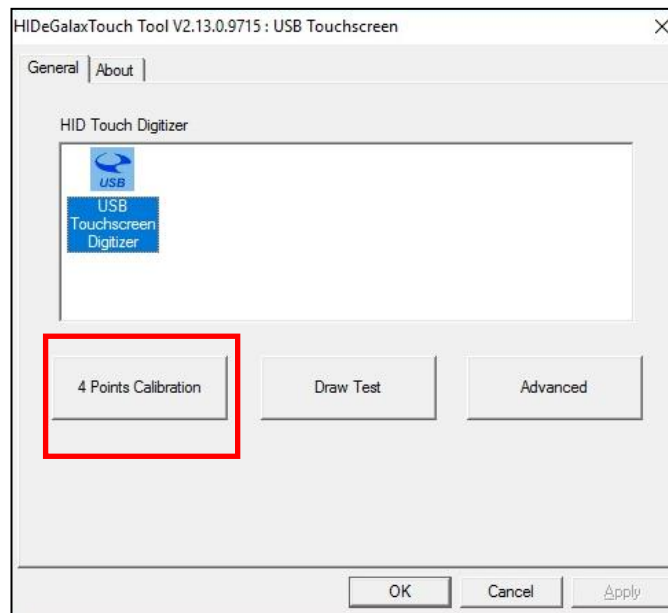6. Click Finish to continue (Prior to re-starting computer, save any software or files).
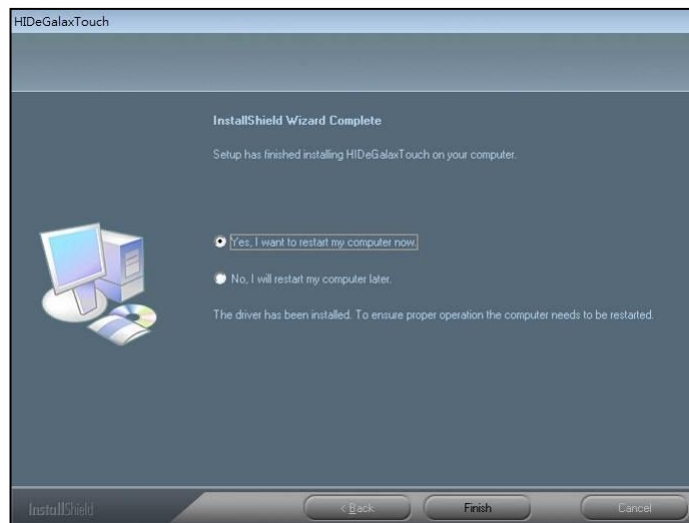


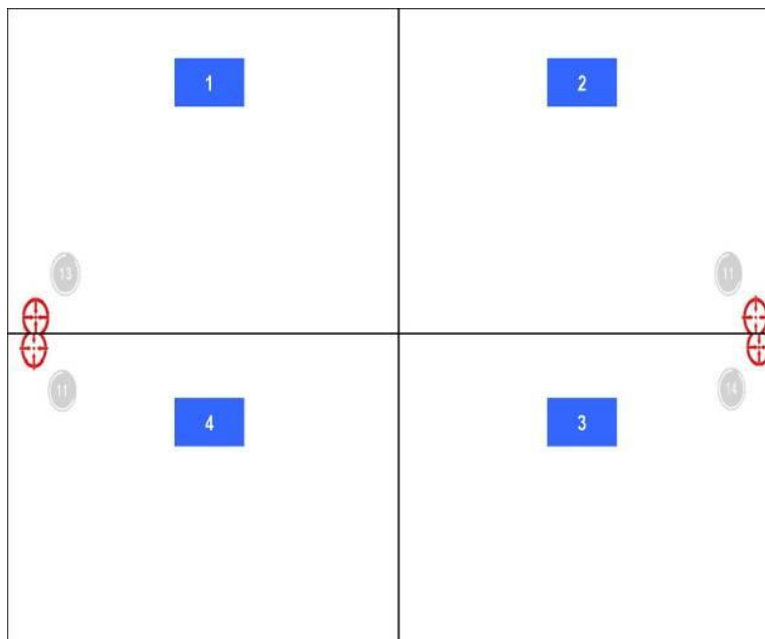7. After rebooting, please click on the desktop HIDeGalaxTouch.



8. Check if the interface detected in the figure matches (USB or RS-232).
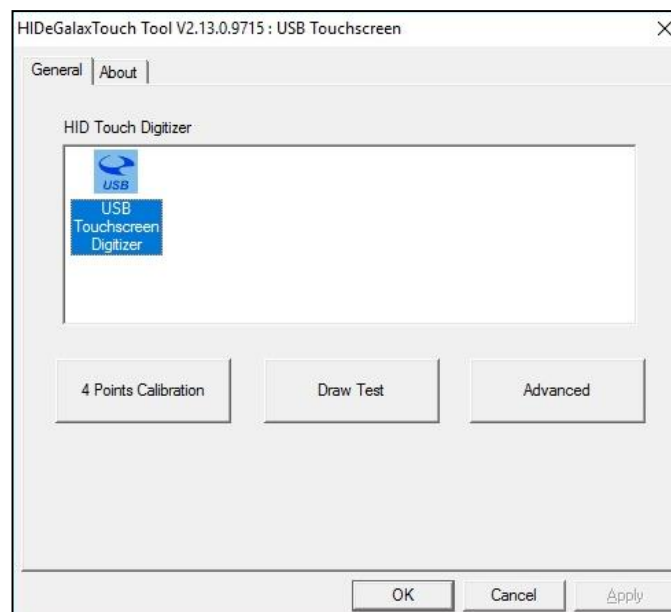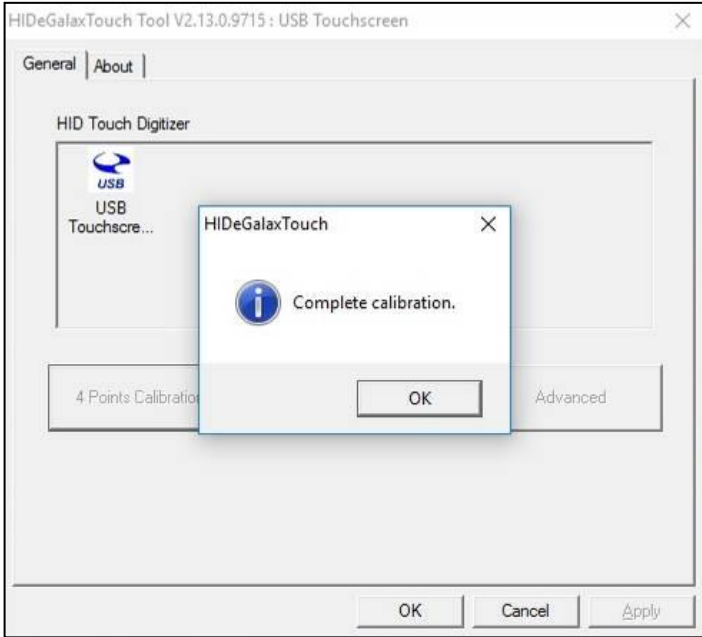
9. Click 4-point calibration.



The calibration screens will appear as follows:



User should follow the guide to touch and hold the blinking symbol in the calibration window until it shows "OK" to make sure that the utility can gather enough data for computation.
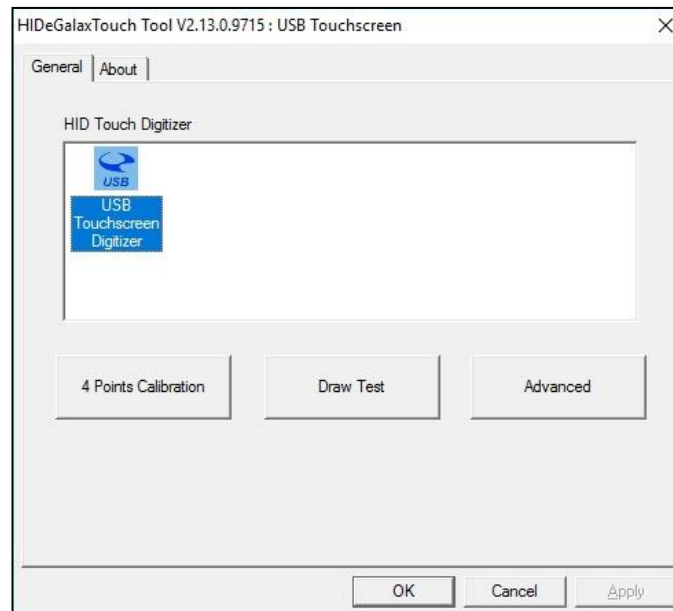
## 10. Calibration is complete.

HIDeGalaxTouch Tool V2.13.0.9715 : USB Touchscreen

General | About |

HID Touch Digitizer

USB
Touchscre...

HIDeGalaxTouch

Complete calibration.

OK

4 Points Calibratio      Advanced

OK      Cancel      Apply

## 6.2.1 eGalax Touch Utility

1. General tools properties page
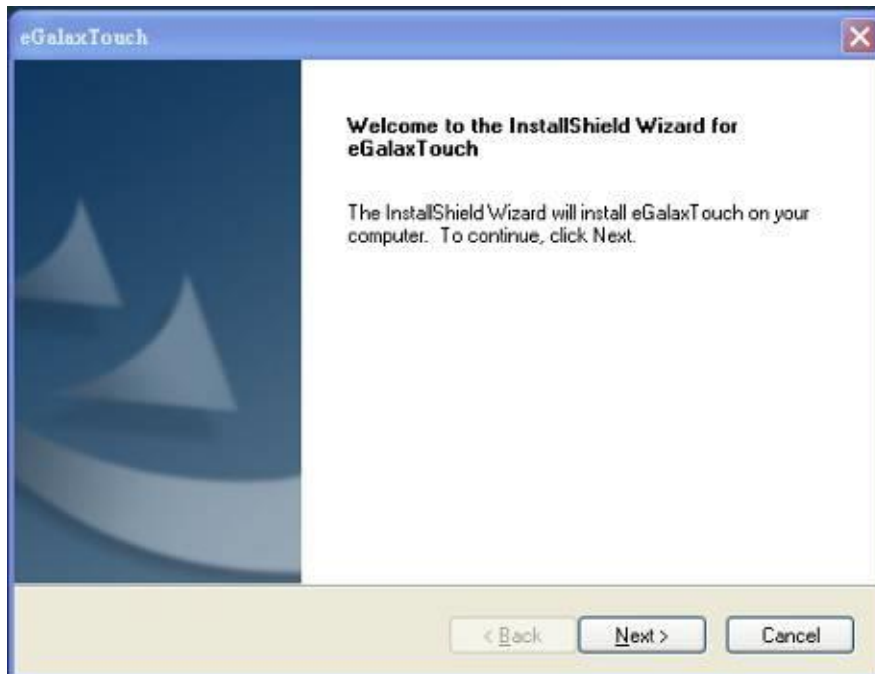   This page includes 4-point testing, Draw test, and advanced tools.



2. Advanced tools properties page
   This page can clear calibration records and perform 9-point calibration & 25-point Calibration.
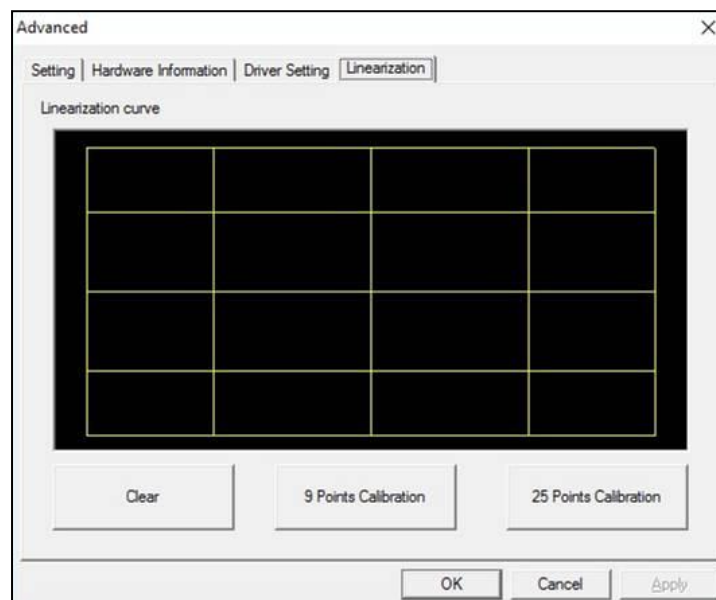
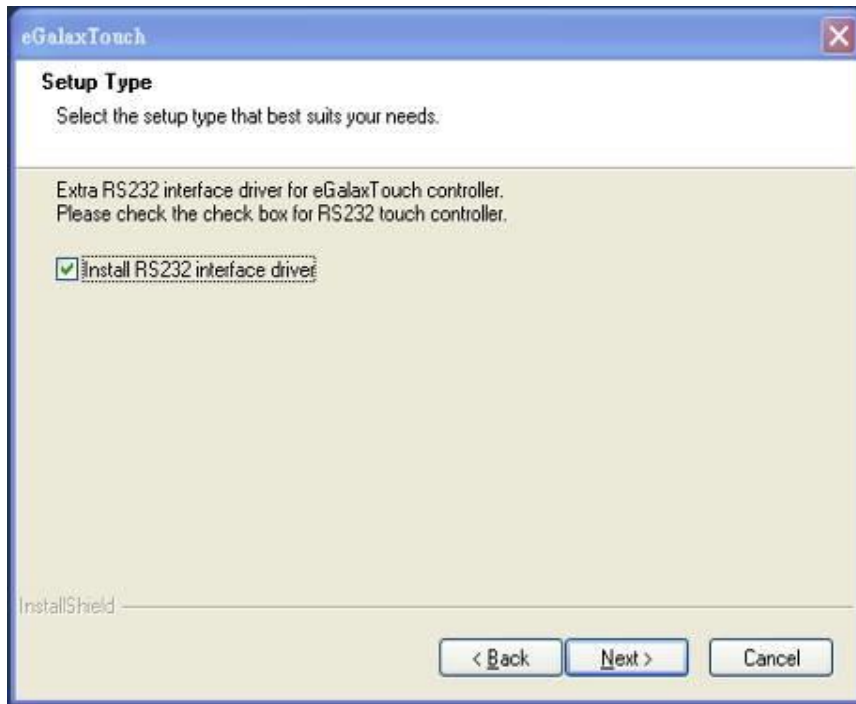## 6.3 Installing Touch Screen Controller (Option) (eGalaxTouch)

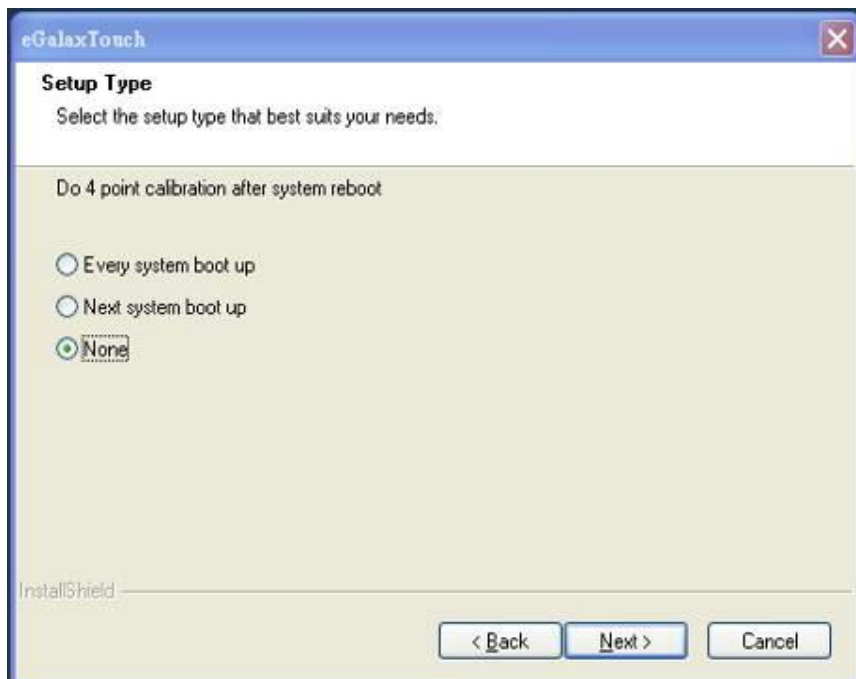1. Double click on "setup.exe" in driver folder then click "Next" to start driver installation.



2. Click "Next" to continue. Select an interface device to install.
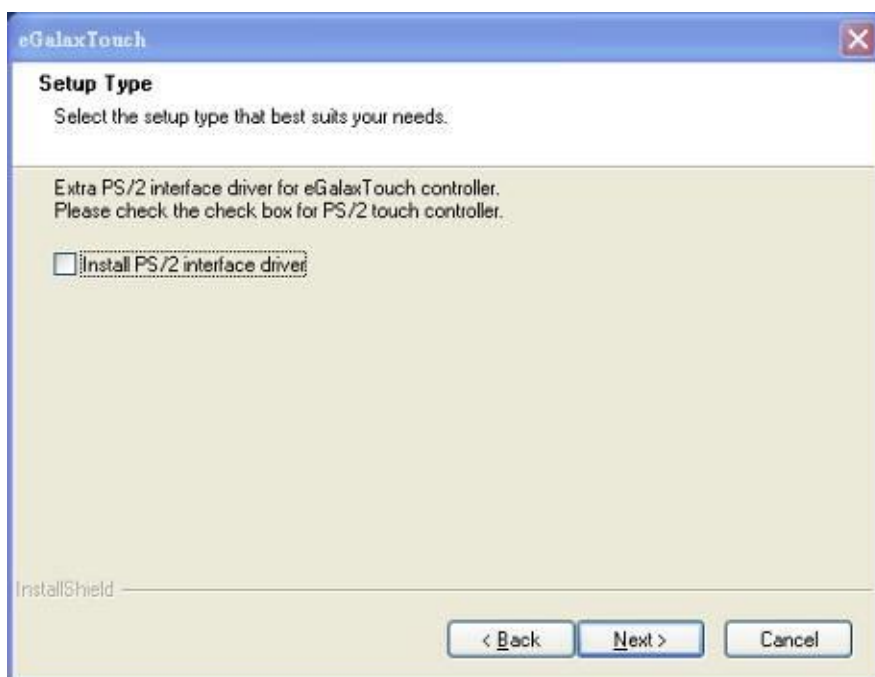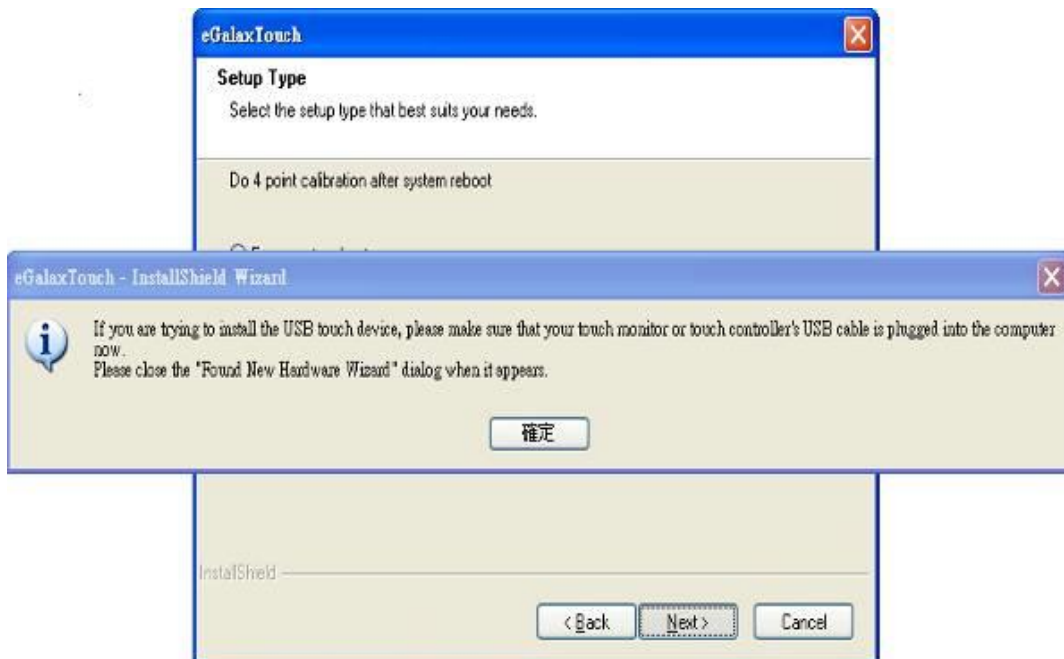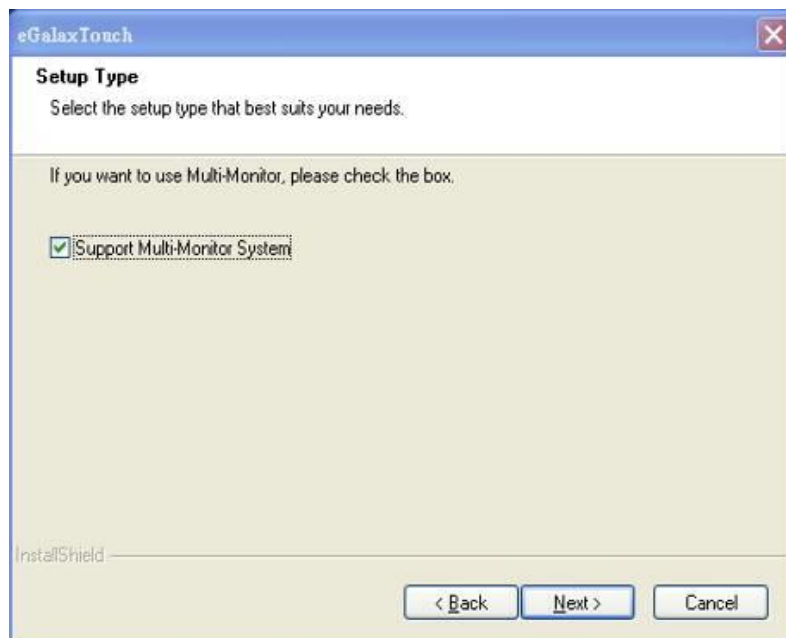
3. Click "Next" to continue.
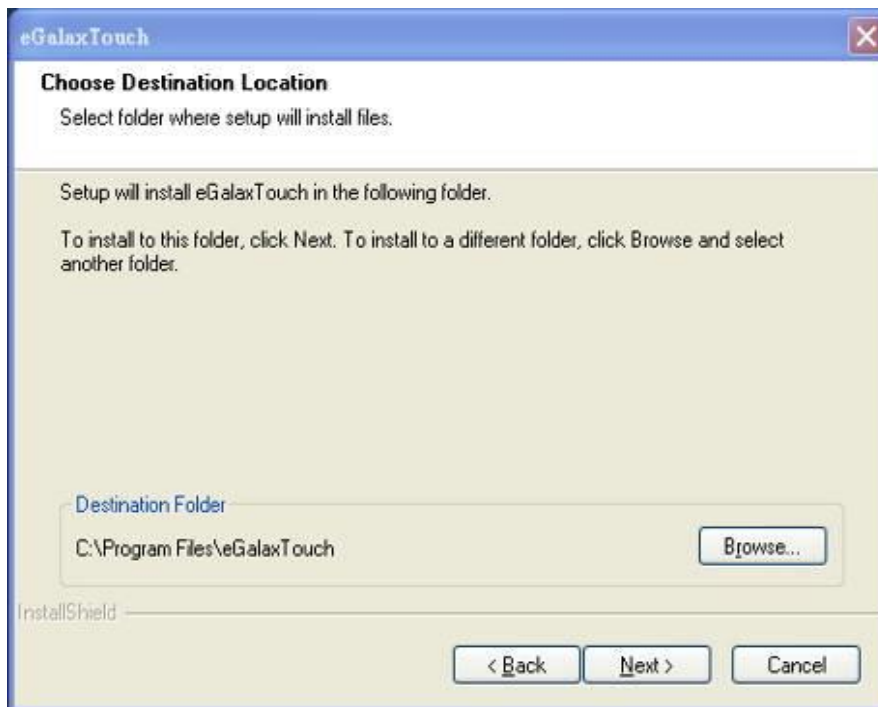


4. Click "Next" to continue.

5. Click "OK" to continue.
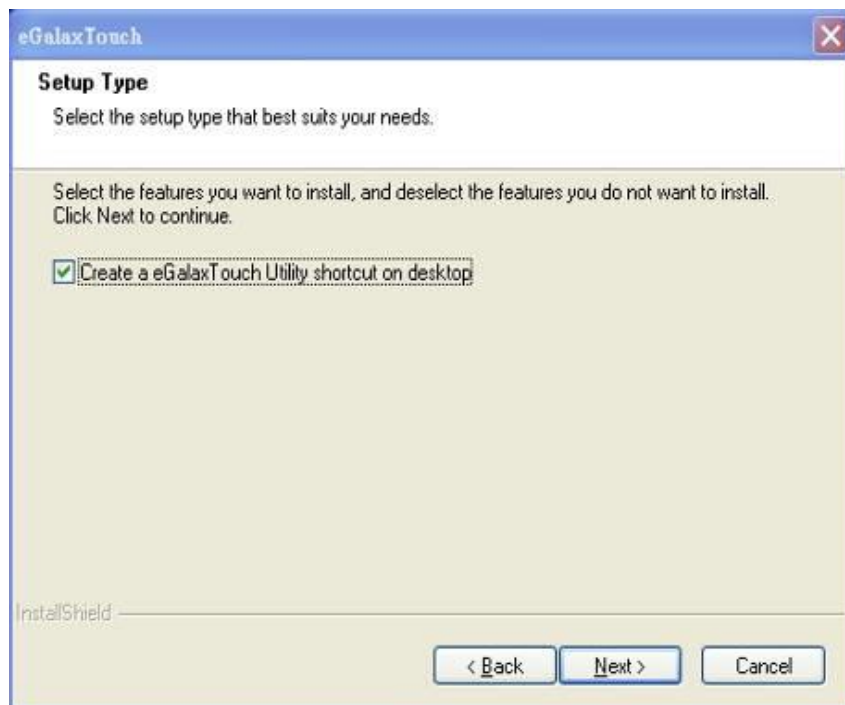


6. Click "Next" to continue.

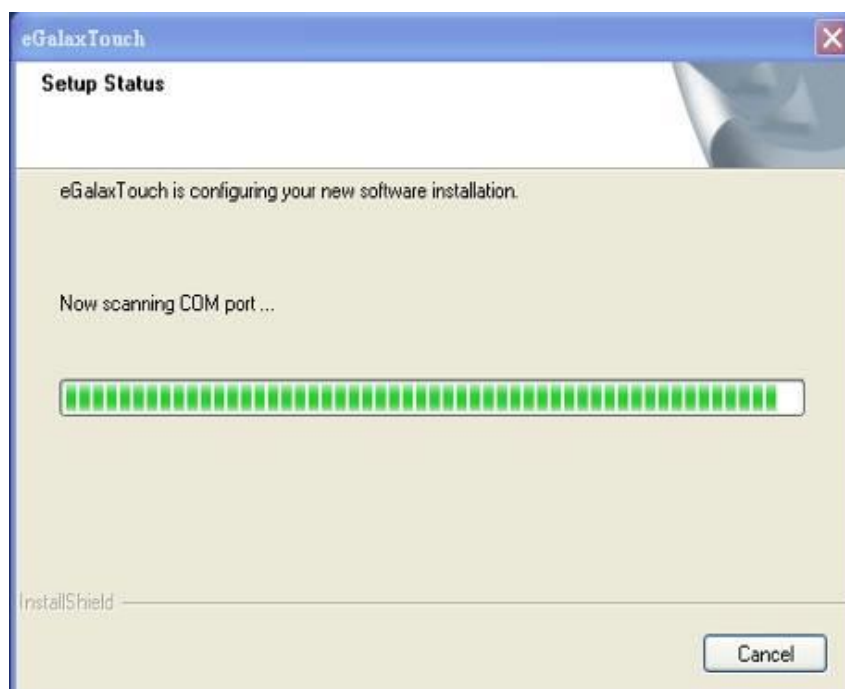7. Click Browse and Select another folder and Click "Next".



8. Click "Next" to continue.
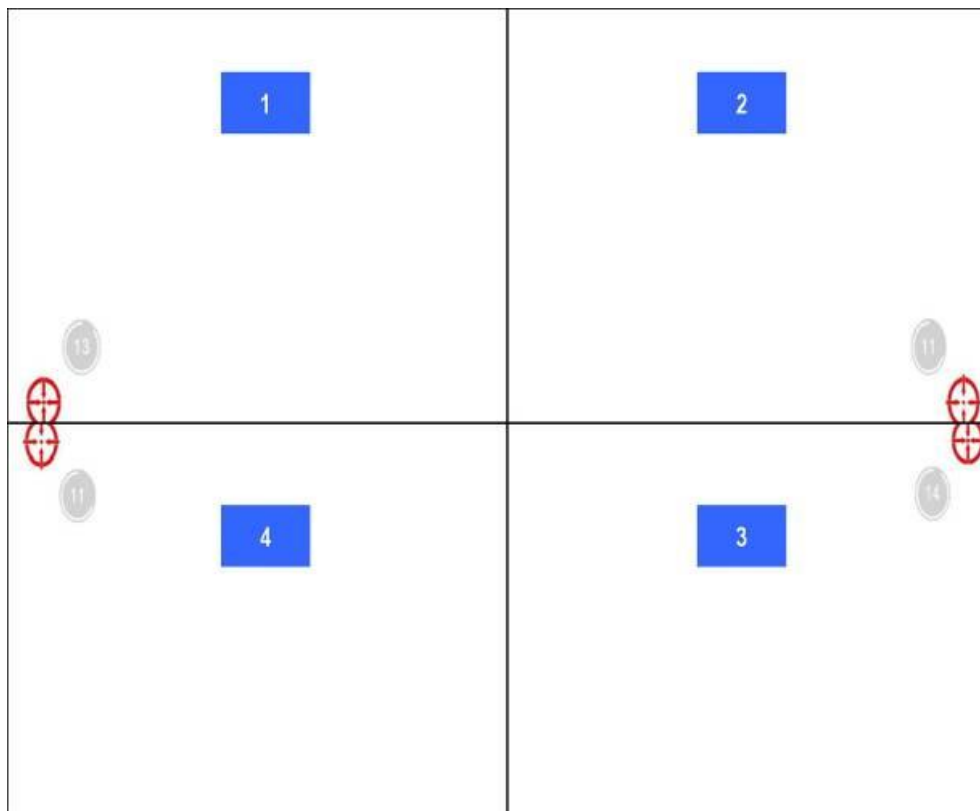
9. Click "Next" to continue.



10. Wait for the setup program to complete copying files - also includes USB/COM interface.

11. Click "Yes" or "No" to confirm driver installation for this new-found device.



The calibration screens will appear as follows:



User should follow the guide to touch and hold the blinking symbol in the calibration window until it shows "OK" to make sure that the utility can gather enough data for computation.

### 6.3.1 eGalax Touch Utility

1.  **General Property Page**

    The general property page in eGalax Touch utility shows all eGalax Touch screen controllers installed as shown below, including USB or RS-232.
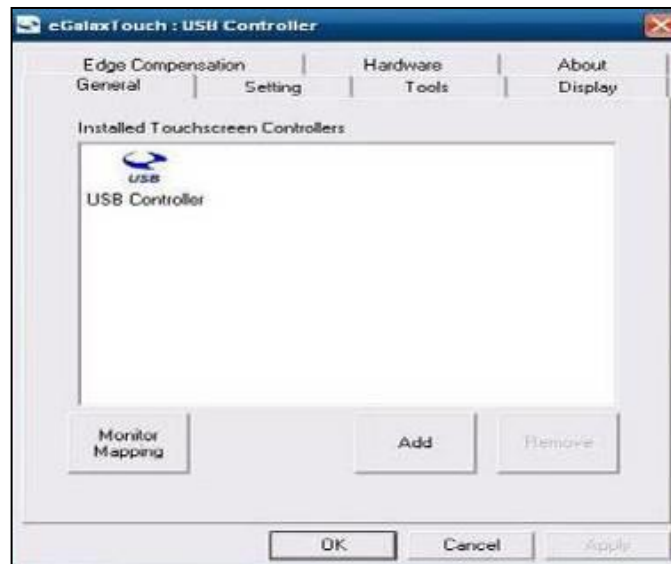


2.  **Tools Property Page**

    Calibration draw test tools and the linearity curve of the touch screen were listed in this property page shown below for user to perform touch screen calibration and touch position test.