

EMB-CPU03

User Manual

Version 1.0



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1. EMB-CPU03 Introduction

EMB-CPU03 is a Single Board Computer (SBC) equipped with AMD Geode LX800 Processor that provides a solution suitable for the embedded market that wants low cost, low power and small size.

1-1 Features

- Low cost, Low power and fan-less Single Board Computer
- AMD Geode LX800 500MHz Processor
- 256M~1GB Memory
- IDE Hard disk interface, (option)CF Card
- VGA, (option) TFT LCD video output
- 4xUSB, 1xAudio/Mike/Speaker
- Ethernet 10/100/1000M
- Embedded model available(EMB-CPU03)
- Operating Systems : Windows 2000/XP

1-2 Specifications

H/W

- AMD Geode LX800 500MHz Processor
- 256MB, up to 1GB DDR SODIMM SDRAM
- 1.8inch IDE HDD, (option) Compact Flash Card (2G/4G/8G)
- 1920*1440 VGA output, (option) TFT LCD video output
- AC97 Codec Sound
- +12V Single Power

Physical Dimension

- 160 * 100 * 30mm
- Front I/O : Power switch, D-sub video connector, 2*USB,Ethernet,2xStatus LED
- Rear I/O : 2*USB, Audio/Mike/Speaker, +12V Power
- On-Board : LCD output, IDE

1-3 Applications

- Factory Automation
- Data acquisition
- Medical and Robotics
- Auto PC
- UMPC(Ultra Mobile PC)
- Instrument control PC

2. EMB-CPU03 Appearance

Front
Side



Both
Sides

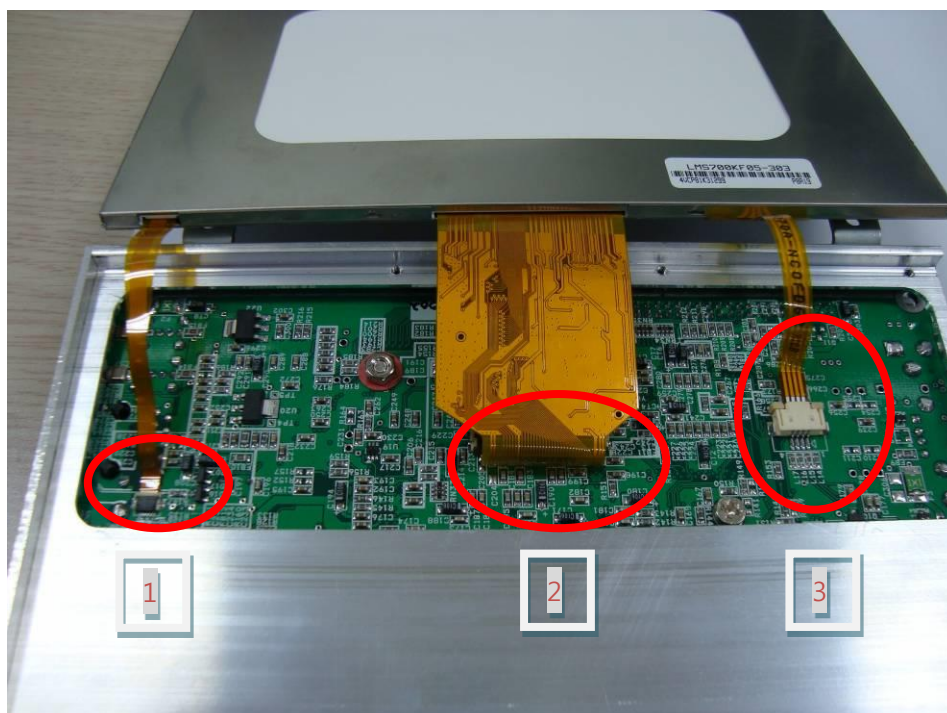


3. The order of disassembling the instrument (Assembly proceeds in the reverse order of disassembly)

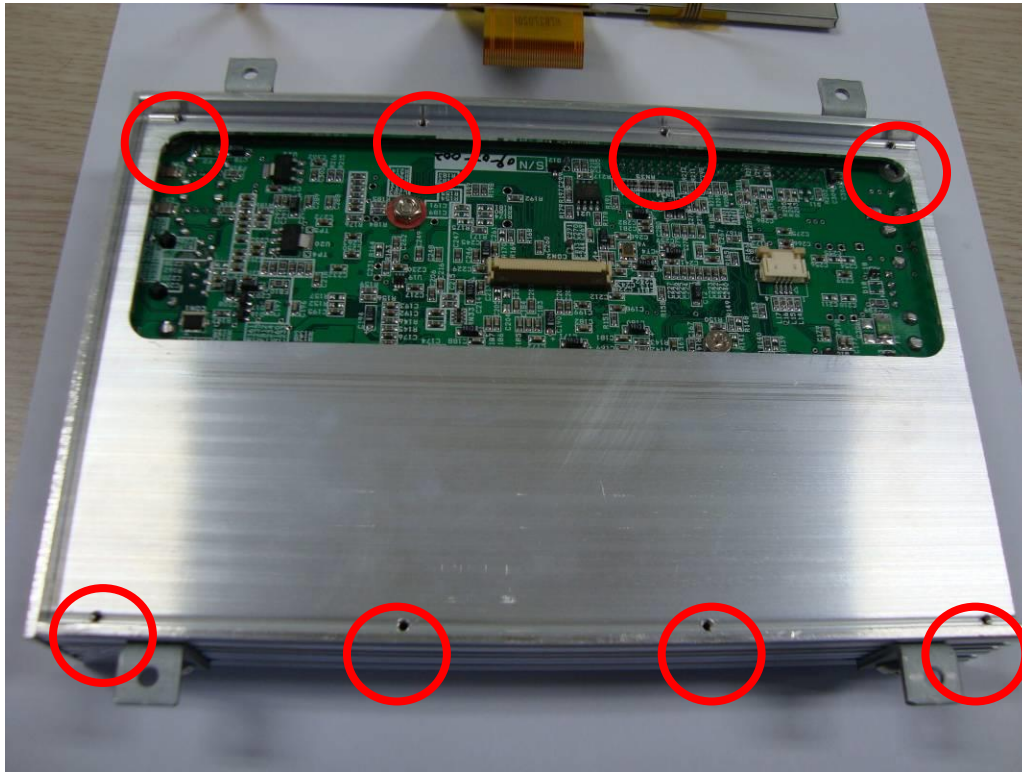
1. Right side removal – 2 "+" bolts



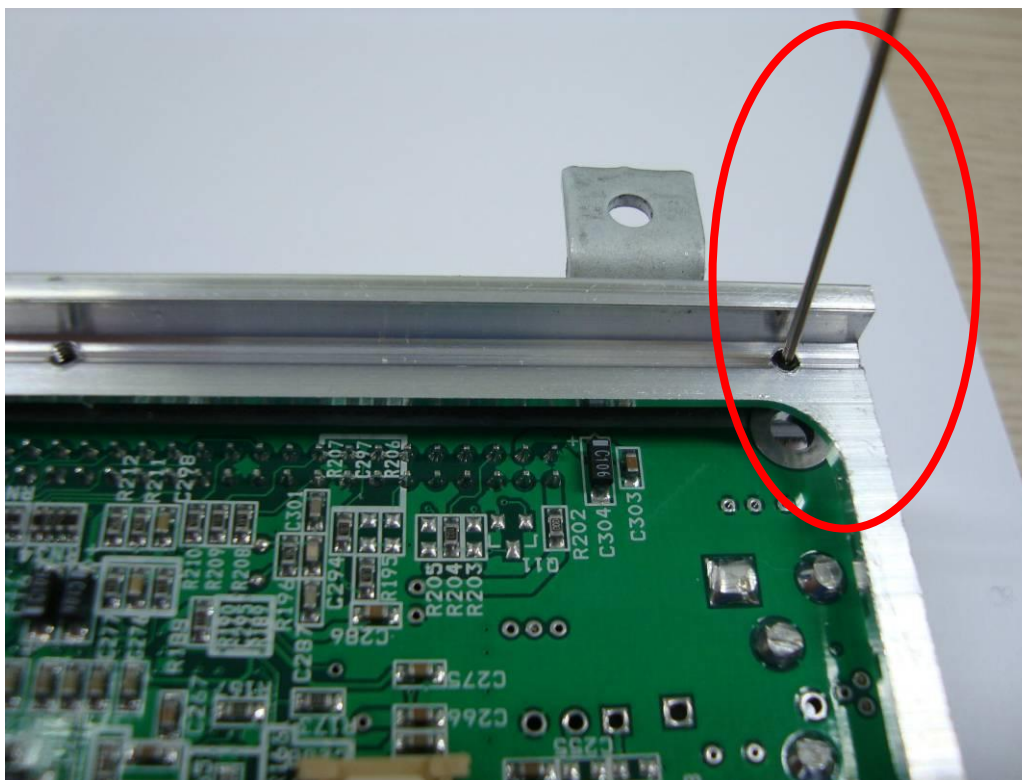
2. LCD Separation – LCD Connector Separation



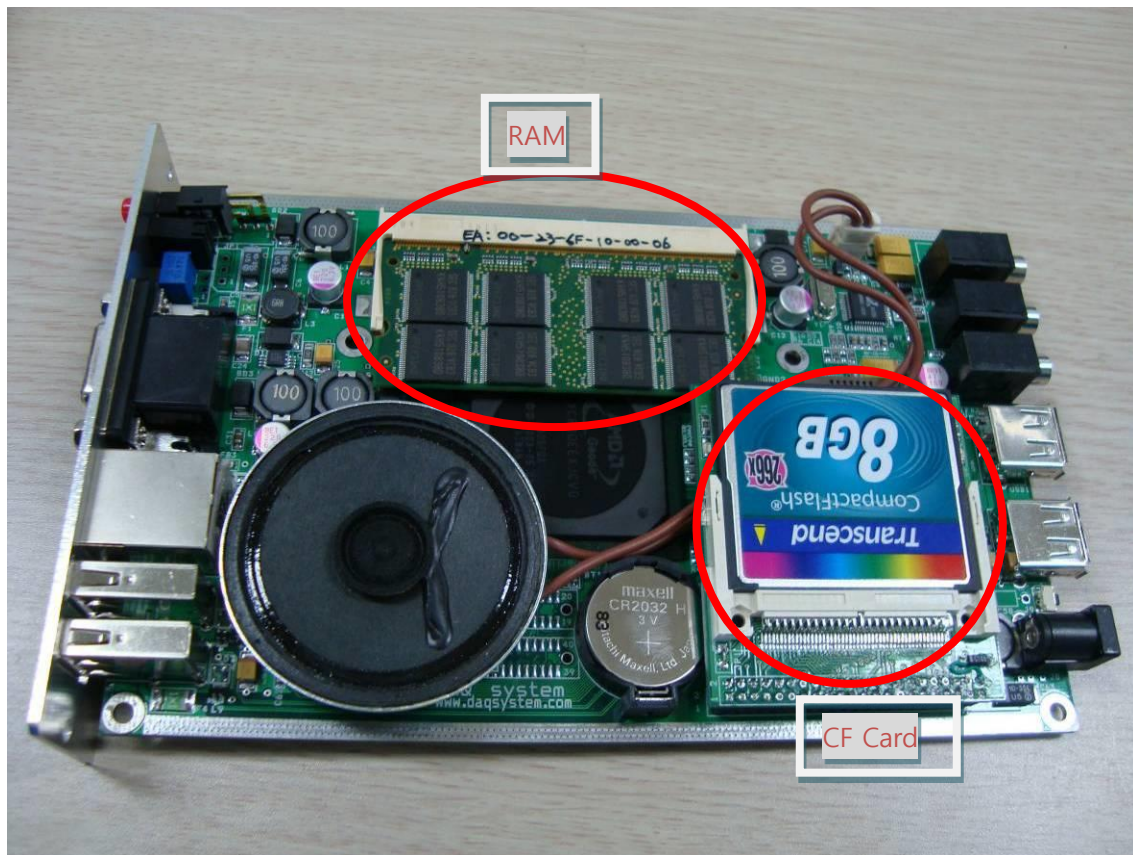
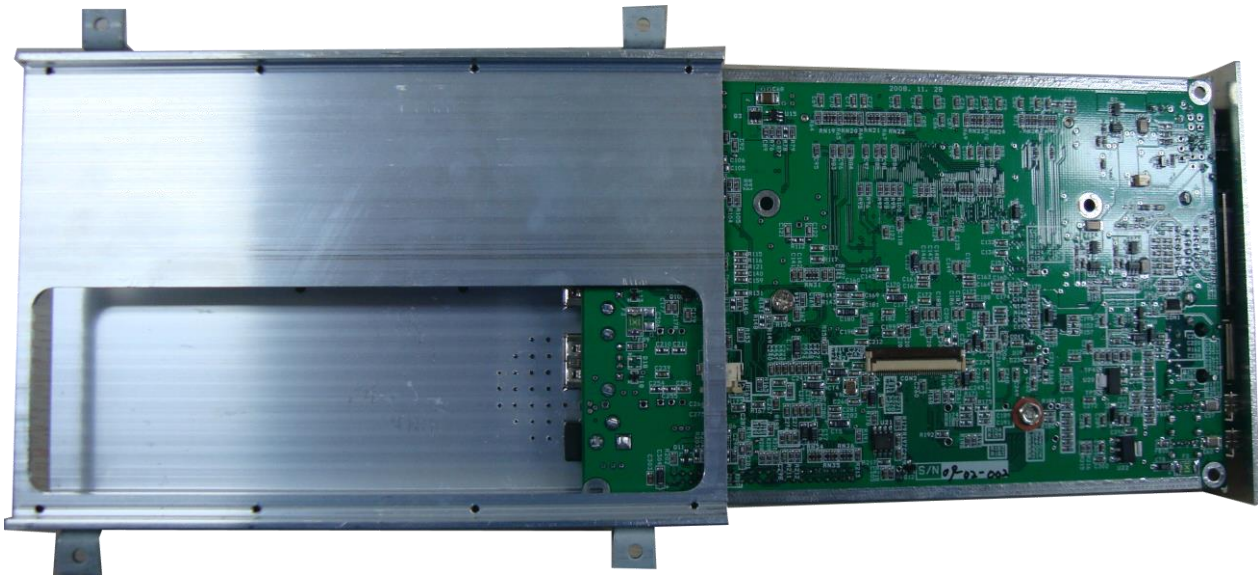
1-LCD Back Light / 2-Video data main / 3-Touch



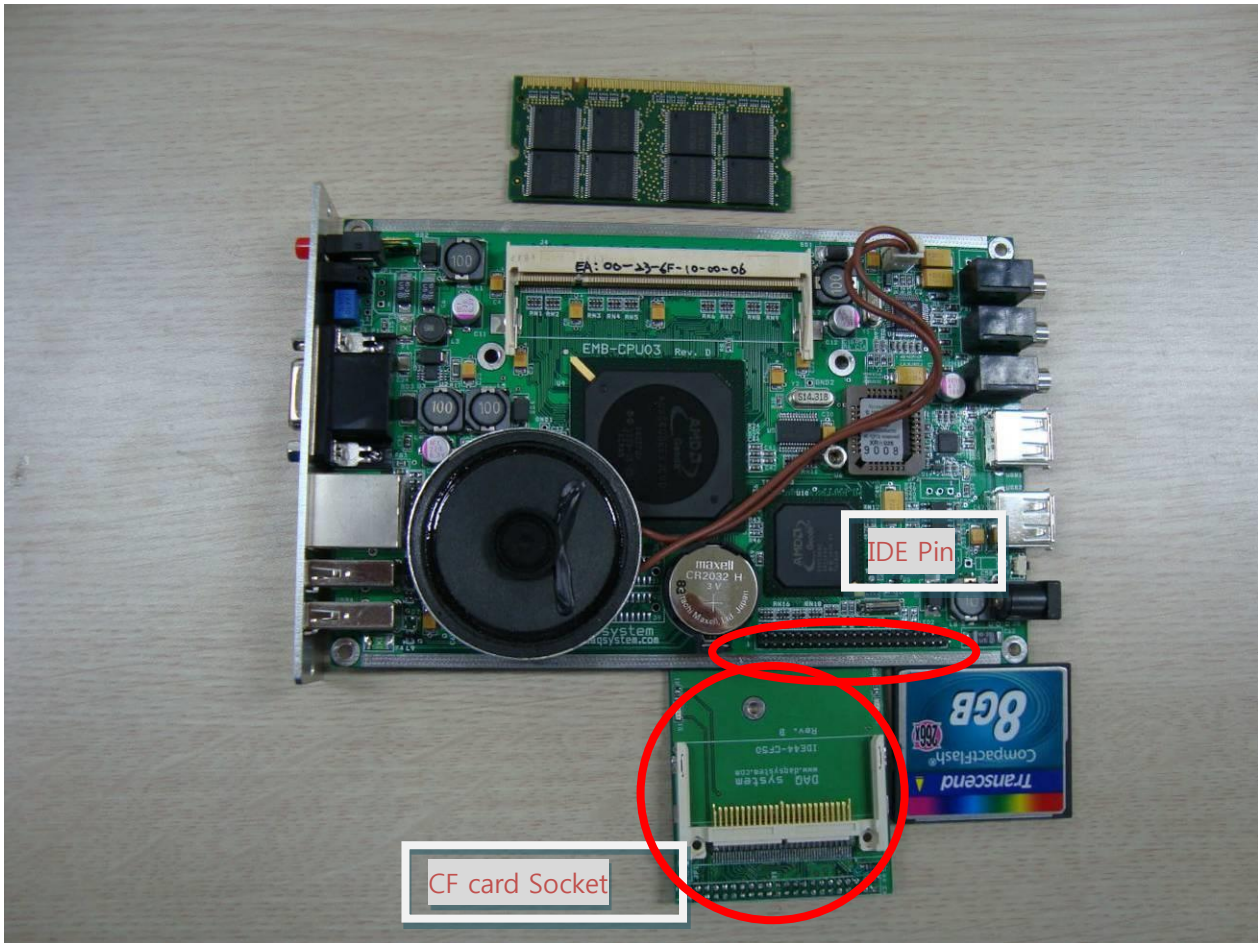
3. Remove the board fixing nude bolts – 8 pieces using a 0.9mm hexagon range



4. Separation of the instrument and the board – Slide to the right to separate the board



5. Removal of RAM / CF Card – RAM and HARD DISK can be installed and used according to the user



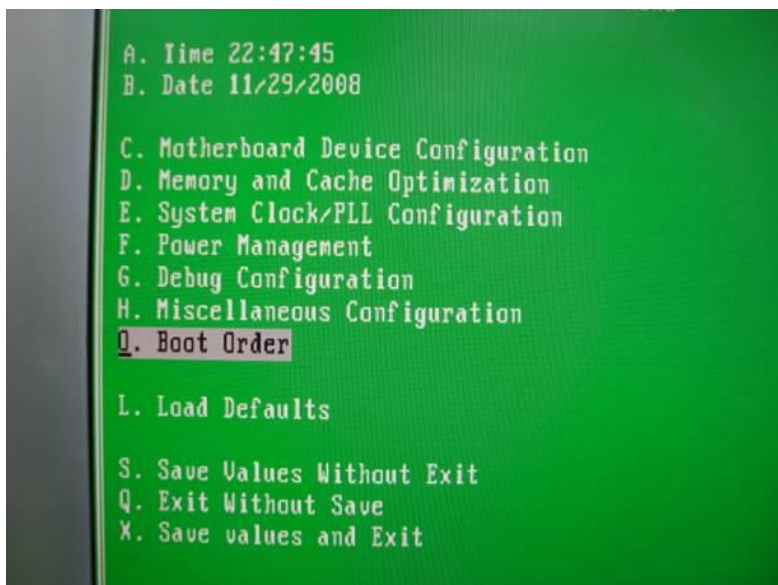
- Hard drives are available for CF CARD and IDE 1.8inch.
- CASE cannot be used when IDE 2.5inch is installed.

4. WINDOWS Installation

1. Connect USB KEYBOARD, USB MOUSE, and USB CD-ROM (WINDOSW CD) to EMB-CPU03 board. Also, after connecting the monitor to the DSUB 15 PIN VGA PORT, connect the power (12V, 1.5A ~ 3A) and turn on the S/W.
2. Press "F1" of KEYBOARD while booting the computer to enter the BIAS SET-UP screen.



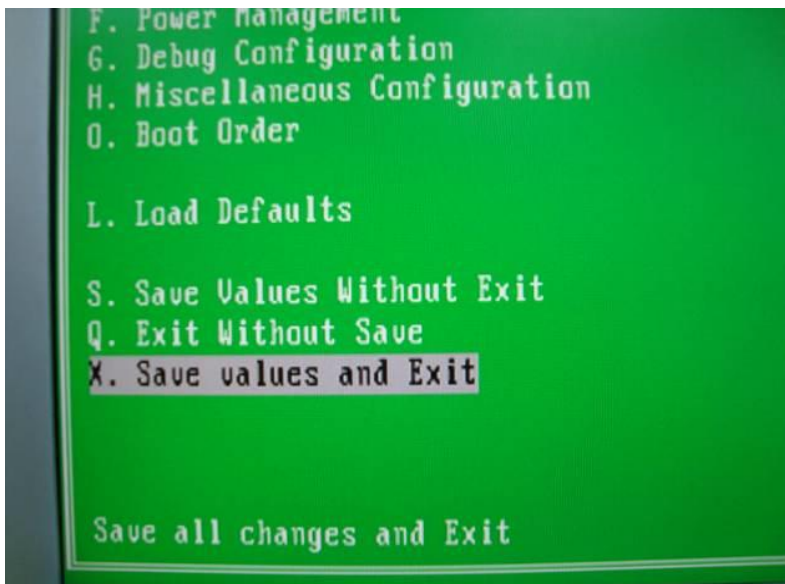
3. Select "Boot Order" and press "Enter".



4. "Select "USB CD-ROM Drive <- Conflict 4" in "1" and press Esc to exit.



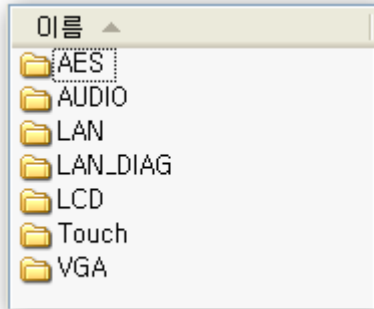
5. Select "Save values and Exit" (shortcut "X") and exit.



6. Booting from the USB CD-ROM is made, and you can proceed according to the Windows installation order.
7. After Windows installation is complete, install the Board driver.

5. Driver Installtion

- There is a driver in the CD ROM enclosed with the product..



- ⇒ After installing windows, you need to install the following drivers.

5-1 Audio Driver Installtion

- MyComputer => Property => Hardware => Device Manager
- Choose "Audio device".
- Click the right mouse, select the "driver update".
- Starting Hardware Update Wizard
- Choose the Driver in AUDIO folder in CD ROM.

5-2 LAN Driver Installtion

- Execute SET-UP file in LAN folder in CD-ROM.

5-3 LCD Driver (DISPLAY) Installtion

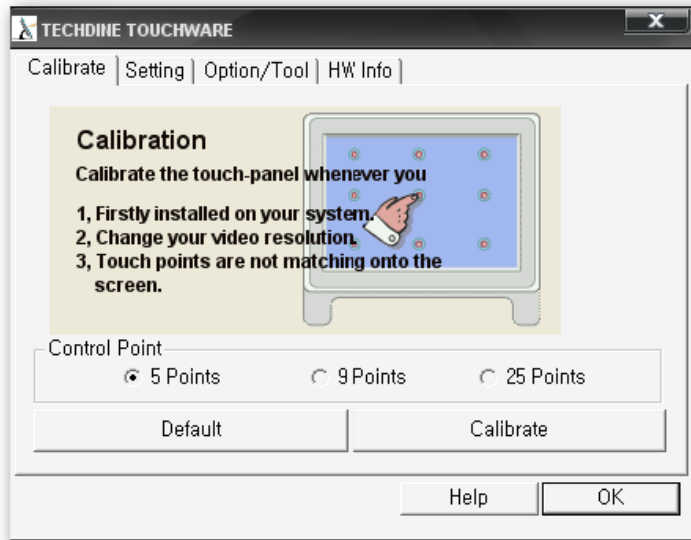
- Execute the SET-UP file in the LCD folder on the CD-ROM and install it.

5-4 Touch Driver Installtion (Installation when using 7" LCD)

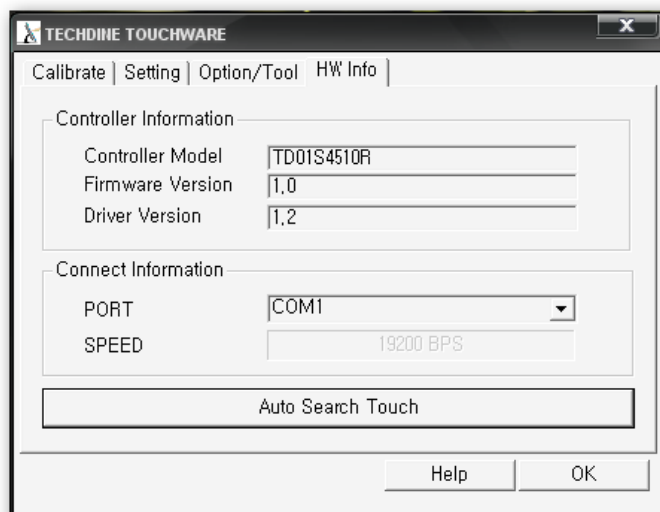
- After executing the Setup file in the Touch folder on the CD-ROM and installing it, the execution screen appears on the desktop.

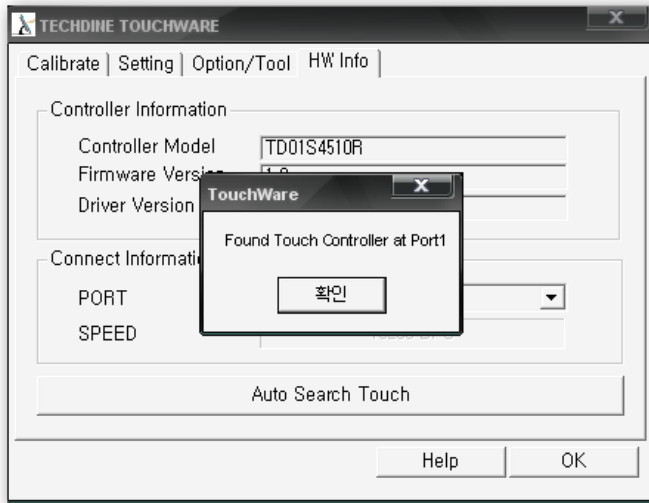


- If you double-click the execution screen, the following screen appears.
- Click "HW Info" in the picture below.

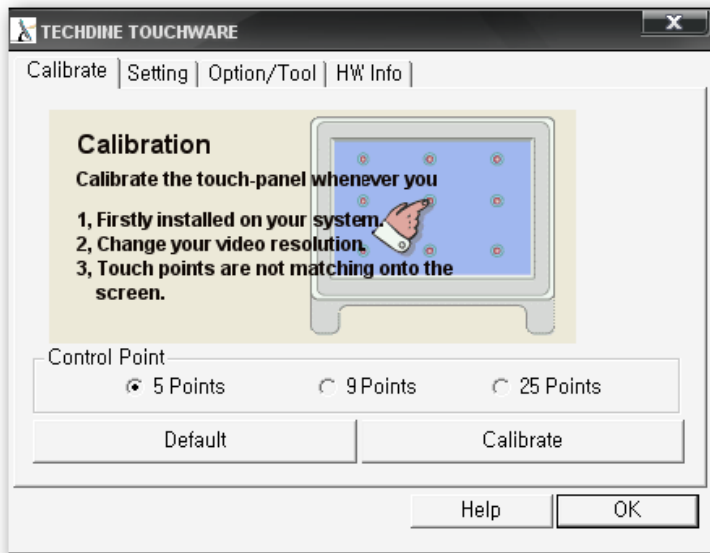


- Click the 'Auto Search Touch' button in "HW Info" to check the connection port.

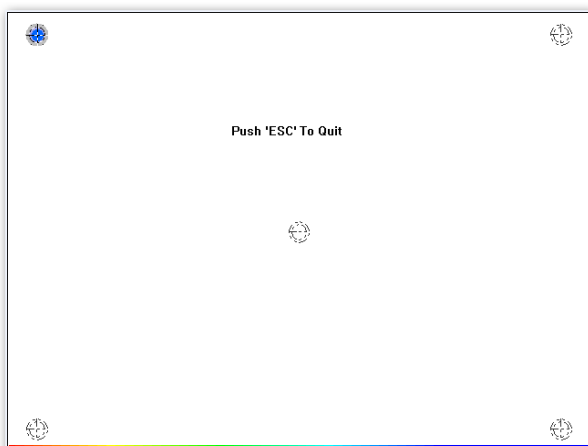
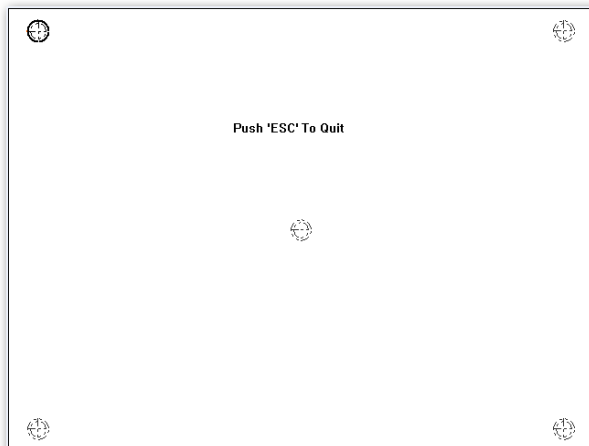


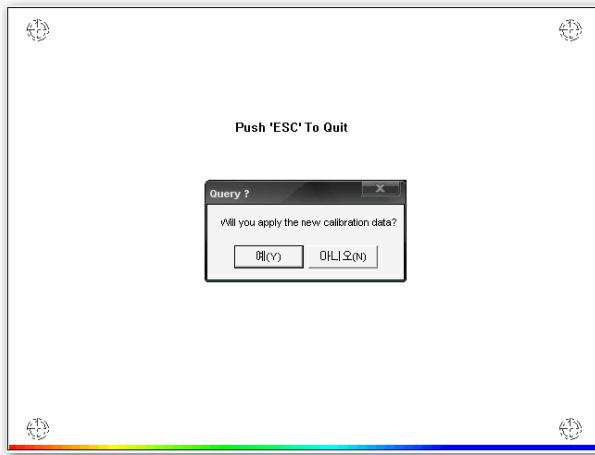


- After finding the port to which the Touch Controller is connected, press the OK button.
- Select "Calibrate" and press the 'Calibrate' button on the screen below.



- When the screen below appears, press and hold the blinking point.
(Make sure to keep holding down until the progress bar at the bottom completes.)





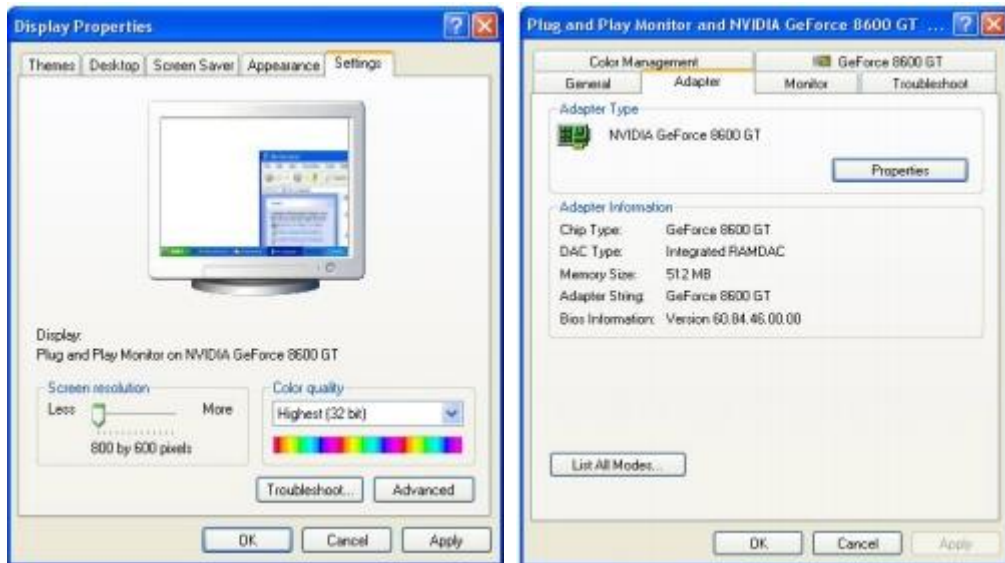
- If you press all the way down in the correct order, the above screen appears. Press "Yes" to exit and it is done.

5-5 Optimal Display Settings for LCD

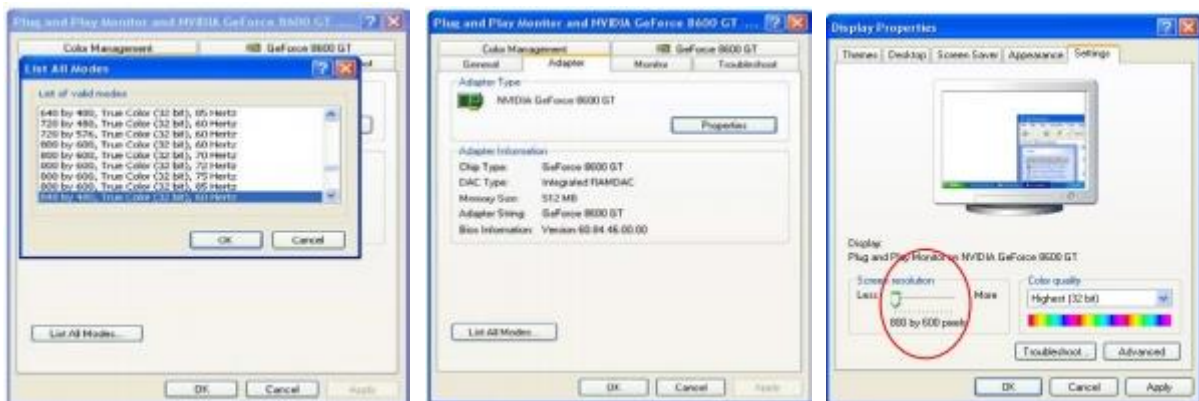
- Since 800 X 480 is optimal for LCD resolution, you need to change the resolution to 800 X 480.
- Right-click on the desktop and select Properties.



- When the display properties screen appears, click the Advanced button in Settings.



- After clicking the "Show All Modes" button in the adapter section, select 800 x 480 true color, click OK, and then click Apply.



- If the red circle is displayed in the display properties, the setting has been applied.

Appendix

A-1 Repair Regulations

Thank you for purchasing DAQ SYSTEM's product. Please refer to the following regarding Customer Service stipulated by DAQ SYSTEM.

- (1) Please read the user's manual and follow the instructions before using the DAQ SYSTEM product.
- (2) When returning the product to be repaired, please send it to the head office with the symptoms of the malfunction as well.
- (3) All DAQSYSTEM products have a one-year warranty.
 - The warranty period is counted from the date the product is shipped from DAQ SYSTEM.
 - Peripherals and third-party products not manufactured by DAQ SYSTEM are covered by the manufacturer's warranty.
 - If repair is required, please contact the contact points below.
- (4) Even during the free repair warranty period, paid repairs are made in the following cases.
 - ① Failure or damage caused by not following the user's manual
 - ② Failure or damage caused by customer negligence during product transportation after purchase
 - ③ Natural phenomena such as fire, earthquake, flood, lightning, pollution, etc. or power supply exceeding the recommended range malfunction or damage
 - ④ Failures caused by inappropriate storage environment (eg, high temperature, high humidity, volatile chemicals, etc.) damaged
 - ⑤ Failure or damage due to unreasonable repair or modification
 - ⑥ Products whose serial number has been changed or intentionally removed
 - ⑦ In the event that DAQ SYSTEM determines that it is the customer's negligence for other reasons
- (5) The customer must bear the shipping cost of returning the repaired product to DAQ SYSTEM.
- (6) The manufacturer is not responsible for any problems caused by incorrect use regardless of our warranty provisions.

MEMO

Contact Point

Web sit : <https://www.daqsystem.com>

Email : postmaster@daqsystem.com

