BPC-6671

17" Industrial Panel PC
with MainBoard, Touch Screen,
180W ATX P/S

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Declaration of Conformity -- CE Mark

BOSER Technology hereby acknowledges that compliance testing in accordance with applicable standards of the EU's EMC Directive, 89/336/EEC, was successfully completed on a sample of the equipment identified below:

Equipment Class:	*Information Technology Equipment*
Product Model Series:	***BPC-6671***
This Product Complies With:	*EN55022: Class A for Radiated emissions*
	EN50082-2: Heavy Industrial EMC Immunity

We, the undersigned, hereby declare that the equipment specified above conforms to the above directives and standards.

Manufacturer:
BOSER TECHNOLOGY CO., LTD.

Safety Instructions

The safety recommendations outlined in this section are to be read, understood and followed before operating the product. Keep this information in a safe place for future reference. Failure to comply with any of the following safety procedures could result in serious hazard.

- Do not operate product for any purposes other than its intended use
- This product is intended for indoor use only
- Do not operate product if power cord is damaged in anyway
- Do not insert objects into openings
- Do not immerse product in water or permit liquids to spill inside
- Turn off power when unattended or not in use. Unplug product before moving it or when it is not in use for an extended period of time. The socket-outlet shall be installed near the equipment and shall be easily accessible
- Do not alter or extend electric plug. Plug is configured for appropriate electrical supply
- Do not overload electrical outlets beyond their capacity as this can result in a fire

NOTE: *DO NOT TOUCH THE PRODUCT OR ANY OTHER SENSITIVE COMPONENTS WITHOUT ALL NECESSARY ANTI-STATIC PROTECTIONS.*

Life Expectancy of Constituent Parts

This section describes the life expectancy of constituent parts (backlight, power supply, internal cooling fan and touch screen) which make up to BPC-6671.

- **TFT Display Backlight**
  Display brightness decreases over time with use. The expected operating lifetime of the backlight time to reach 50% initial brightness) is 30,000 hours (assuming continuous lit state at 25 degrees C). Actual lifetime before replacement is about 30,000 hours, although this depends on operating conditions.

- **Touch Screen**
  The operating lifetime of the touch screen is approximately 1 million operations (as tested by mechanical manipulation under 100g of force at a rate of two presses per second)

Chapter 1

General Description

The BPC-6671 is a 17" industrial grade Panel PC which comes with a TFT color panel display. The rear design of the BPC-6671 enhances the disassembly process when required. It also supports various mounting solutions like wallmount, or desktop for different application.

The BPC-6671 has a 17" display and touch screen that operate under all types of working environments. It offers OSD (On Screen Display) on the left side for user's operation.

● The BPC-6671 is IBM PC/AT compatible and can draw from a large body of hardware and software resources worldwide.

● The BPC-6671 features an all-in-one flat display.

● Keyboard less operations are possible through the use of a touch screen. In addition to a watchdog timer indispensable in FA applications.

You can select from a broad range of variations to arrive at the optimum configuration for your application and budget.

1

1.1 Major Features

The BPC-6671 series comes with the following features:
- ➢ Aluminum chassis
- ➢ 17" TFT color panel display
- ➢ Built-in touch screen, OSD key, mainboard, wireless LAN module, 180W ATX P/S
- ➢ Provides Intel® Core™ 2 Duo/Pentium® D/Pentium® 4/Celeron® D/Celeron® processor
- ➢ Onboard graphics, Ethernet, audio controller
- ➢ Parallel, COM, 6 USB
- ➢ 2.5" SATA HDD space x 2, slim CD-ROM space x 1
- ➢ 6cm ball bearing cooling fan x 2

1.2 Specifications

- ■ **CPU:** Intel® Core™ 2 Duo/Pentium® D/Pentium® 4/Celeron® D/Celeron® processor
- ■ **Memory:** Two DDRII sockets supports up to 2GB
- ■ **OSD:** Provides OSD function
- ■ **Touch Screen:** 17" touch screen
- ■ **Display:** Onboard graphics controller
- ■ **Ethernet:** Onboard 10/100 Based LAN controller
- ■ **Wireless LAN:** Provides wireless LAN module
- ■ **Audio:** Onboard 8CH High Definition Audio controller
- ■ **Storage:**
  2.5" SATA HDD space x 2
  Slim CD-ROM space x 1
- ■ **Parallel:** Standard parallel port x 1
- ■ **Serial Port:** 1 port
- ■ **USB:** USB port x 6
- ■ **Keyboard:** PS/2 6-pin Mini DIN
- ■ **Mouse:** PS/2 6-pin Mini DIN
- ■ **BIOS:** Award PnP Flash BIOS
- ■ **Power In:** 180W ATX power supply
- ■ **Thermal System:** 6cm ball bearing cooling fan x 2
- ■ **EMC:** CE, FCC
- ■ **Front Panel Protection:** IP65
- ■ **Temperature:** 0~45°C (operating); -20~+70°C (storage)
- ■ **Dimensions:** 47.0(L) x 37.1(H) x 9.68(W) cm

1.3 Panel Specifications

- **Screen Size:** 17 inches
- **Display Format:** 1280 x 1024 pixels
- **Pixel Pitch:** 0.264(H) x 0.264(V) m/m
- **Color:** 16.2M color (RGB 6-bit + FRC data)
- **Brightness:** 300 cd/m^2
- **Contrast Ratio:** 500:1
- **Response Timer:** 8ms

1.4 Power Supply Specifications

- **Input Voltage:** 100~240VAC full range
- **Input Frequency:** 47~63Hz
- **Input Current:** 4A max. 115vrms at 60Hz; 2A max. 230Vrms at 50Hz
- **Inrush Current:** 50A cold, 80A ware at 132VAC
- **Hold Up Time:** 17ms min. at full load & nominal input voltage
- **Output Power:** +3.3V and +5V total output should not exceed 61W
- **Power Good Signal:** Turn on delay 100~500ms
- **Thermal System:** 4cm ball bearing cooling fan x 1

1.5 Control Keys

● **OSD Control Keys Define**

- **Menu:** Menu/Item select
- **Down:** Cursor down control
- **Up:** Cursor up control
- **Return:** Return to menu

1.6 Dimensions
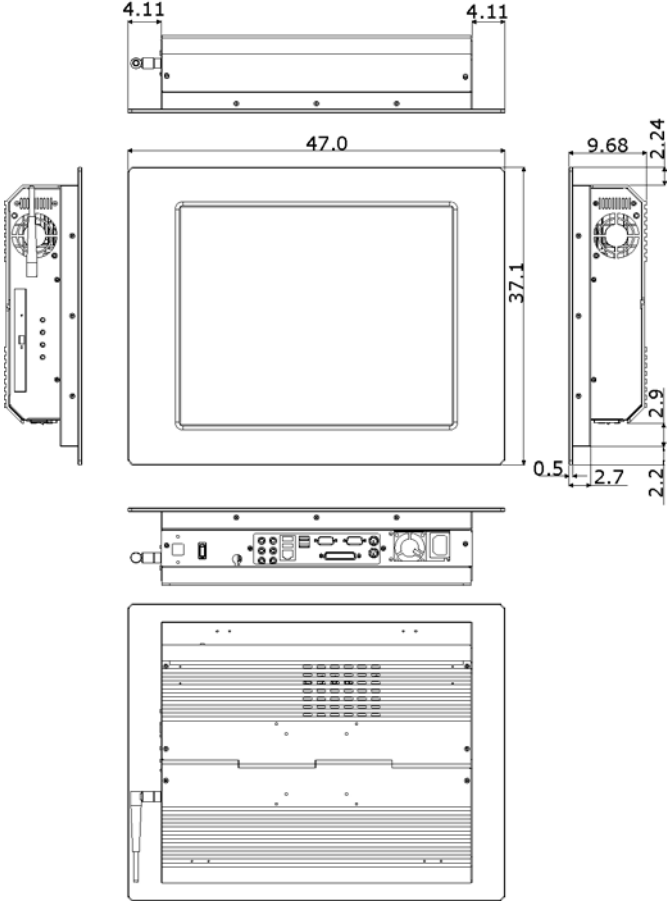
Chapter 2

Unpacking

2.1   Opening the Delivery Package

The BPC-6671 is packed in an anti-static bag. The board has components that are easily damaged by static electricity. Do not remove the anti-static wrapping until proper precautions have been taken. Safety instructions in front of this manual describe anti-static precautions and procedures.

2.2   Inspection

After unpacking the Panel PC, place it on a raised surface and carefully inspect the board for any damage that might have occurred during shipment. Ground the board and exercise extreme care to prevent damage to the board from static electricity.

Integrated circuits will sometimes come out of their sockets during shipment. Examine all integrated circuits, particularly the BIOS, processor, memory modules, ROM-Disk, and keyboard controller chip to ensure that they are firmly seated. The BPC-6671 delivery package contains the following items:

- **BPC-6671 x 1**
- **Power Cable x 1**
- **Drive CD Disk x 1**
- **System Board User's Manual x 1**
- **BPC-6671 User's Manual x 1**
- **Touch Screen Drive Diskette x 1**

It is recommended that you keep all the parts of the delivery package intact and store them in a safe/dry place for any unforeseen event requiring the return shipment of the product. In case you discover any missing and/or damaged items from the list of items, please contact your dealer immediately.
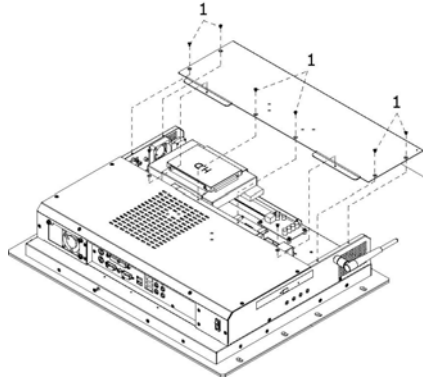
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Chapter 3
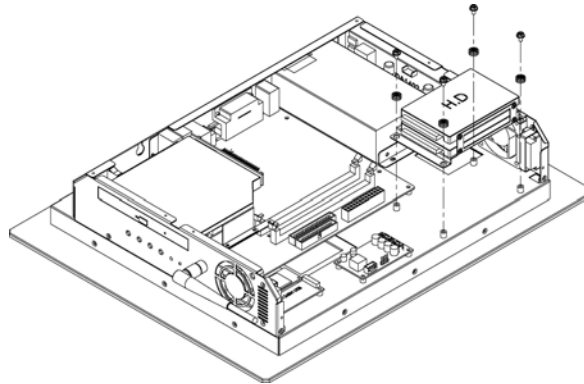
Hardware Installation

This chapter tells how to install components into the Panel PC system. External interface please refers to system board's manual.
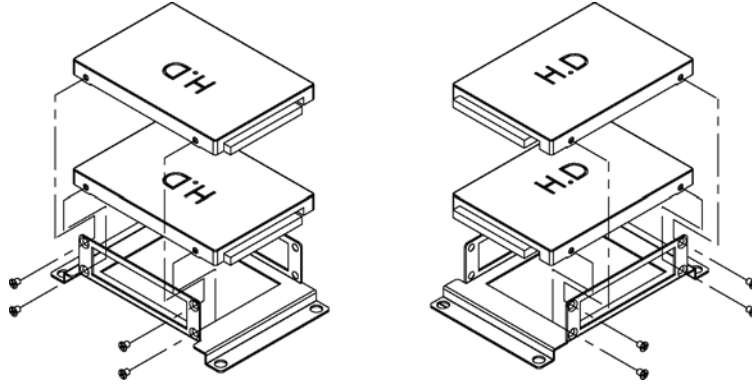
3.1   Install Hard Disk Drive

1.   Please loose screws and detach the HDD module from main chassis.

2.   Remove the HDD form rear cover.

3. Please attach the HDD to rear cover and fasten screws.

4. Install the HDD module onto main chassis.

Touch Screen Driver Installation

This chapter contains the detailed information of touch screen driver installation procedures. The utility disk that came with the delivery package contains an auto-run program that invokes the installation programs for the touch screen driver. The following sections describe the installation procedures of driver based on WIN2000 operating systems. It is recommended that you install the drivers matching the sections listed in this chapter.

4.1　Touch Screen Driver Installation

4.1.1　Installing Touch Screen Driver in WIN95/98

1.　Insert Utility CD disk to your CD-ROM drive. The main menu will pop up as shown below.

2.　The screen displays copying "Installation Wizard" and "PenMount Utilities Installation" screen plus "welcome" message appear, click on **Next>**.
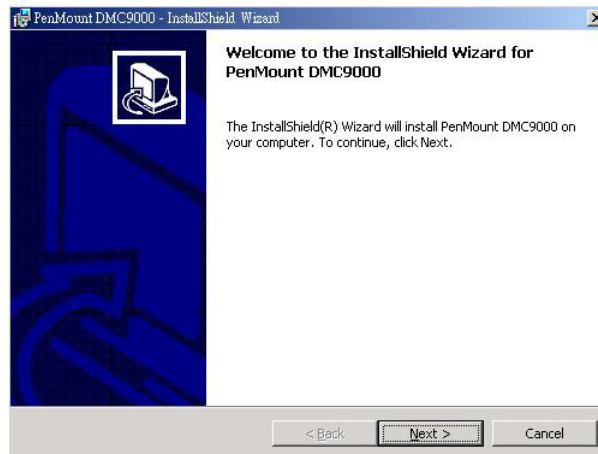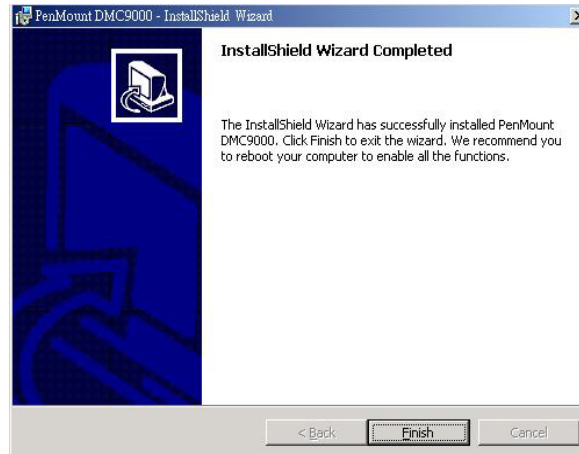
3. The next screen is "Software License Agreement", select "I accept" and click on **Next>**.
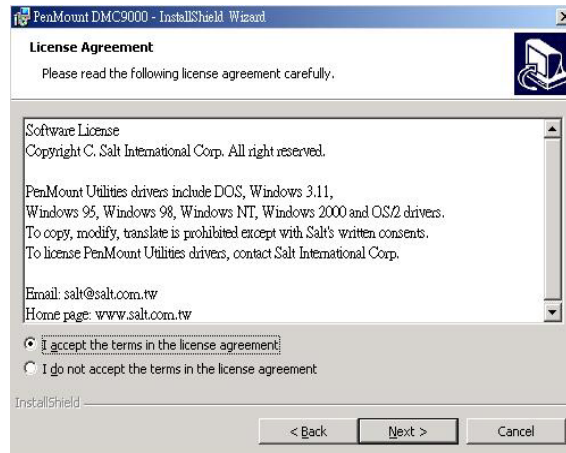
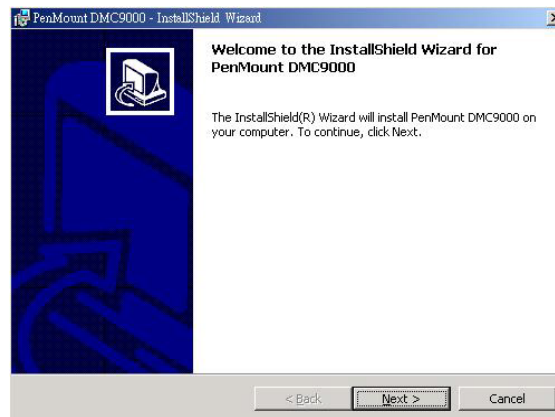4. The next screen is Ready to Install the Program, click on **Install**.
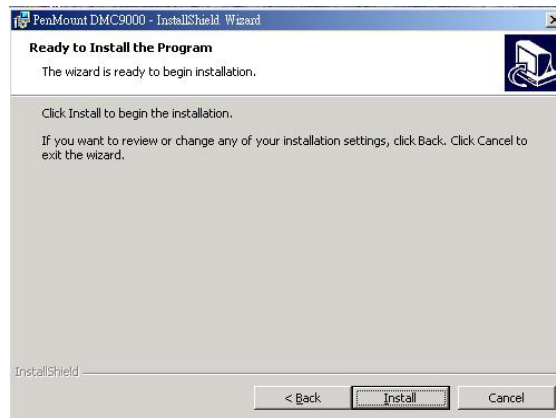
5. Once the Install Shield Wizard finishes updating your system, it will prompt you to restart the computer. Click on **Finish** to exit the wizard.
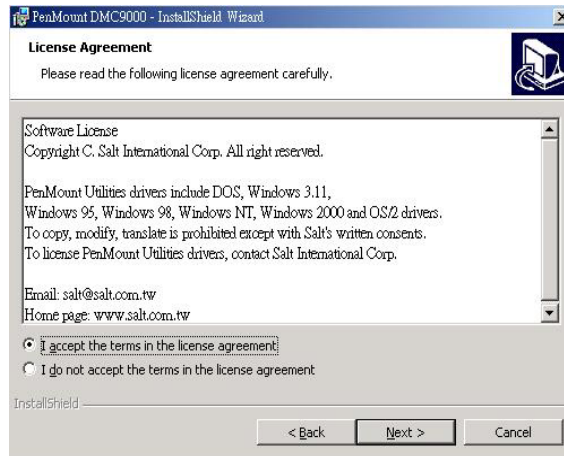

## 4.1.2 Installing Touch Screen Driver in WIN2000

1. Insert Utility CD Disk to your CD-ROM drive. The main menu will pop up as shown below.

2. The screen displays copying Installation Wizard and PenMount Utilities Installation screen plus welcome message appear, click on **Next>**.
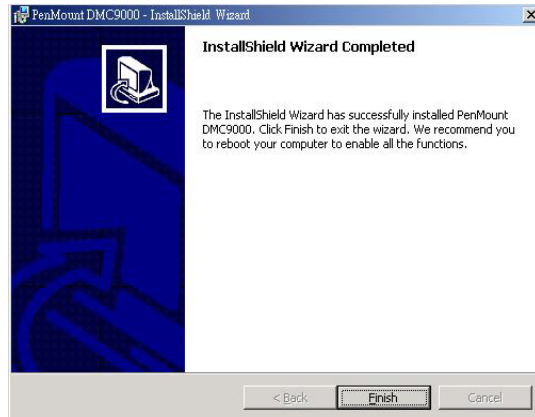
3. The next screen is Software License Agreement, select I accept and click on **Next>**.

4. The next screen is Ready to Install the Program, click on **Install**.
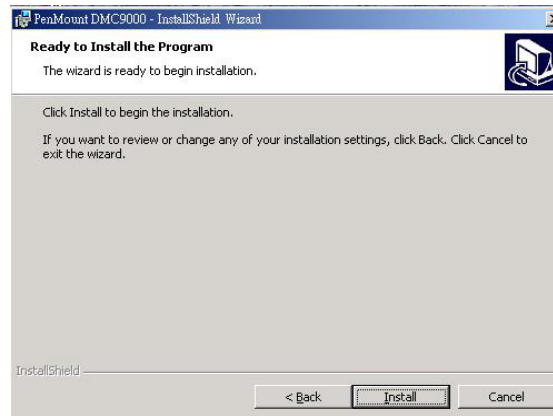
5.   Once the Install Shield Wizard finishes updating your system,
     it will prompt you to restart the computer. Click on **<u>Finish</u>** to
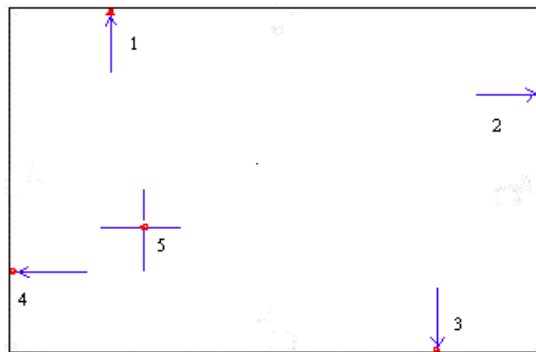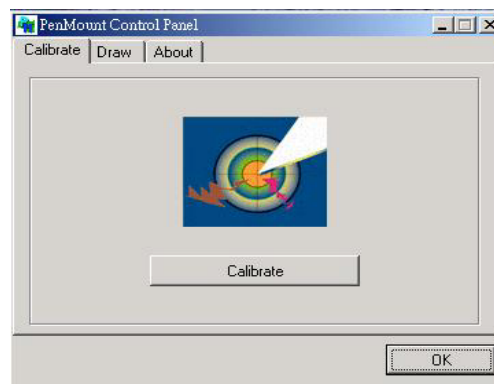   exit the wizard.

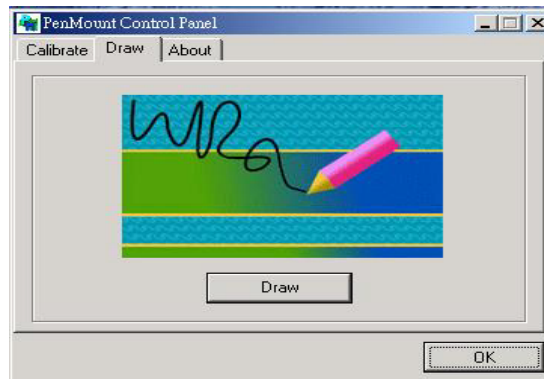## 4.2   Driver Functions

4.2.1 PenMount Control Panel

● **Calibrate**

To adjust the display with touch screen, click on Calibration and follow the calibrate point to do calibration, there are five points on screen for calibration.

● **Draw**

Test or demonstrate PenMount touch screen operation, also the touch location is shown on the display, touch DRAW to start.

● **About**

It shows information about PenMount controller and this driver.

4.2.2 PenMount Monitor

The PenMount monitor icon is shown in the menu bar of WIN2000 system when turn on PenMount monitor from PenMount Utilities.

There are several functions on PenMount monitor:

● **Right Click Button**

When select this function, there is a mouse icon shown in the right-button place of screen. It shows Left Button being as default for normal use, touch this mouse icon to change the next touch to be Right Button function. After one touch, the mouse icon will change to Left Button automatically. If user needs to use right button again, user has to touch the mouse icon again for changing the button function.

● **Beep**

Turn on or off beep sound.

● **Exit**

Close the PenMount Monitor function.

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