

POC-125

**Pentium® M processor-based
Point of Care Terminal with 12.1"
TFT LCD**

User Manual

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Declaration of Conformity

FCC Class B

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules.

These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a residential environment. This equipment generates, uses and can radiate radio frequency energy. If not installed and used in accordance with this user manual, it may cause harmful interference to radio communications.

Note that even when this equipment is installed and used in accordance with this user manual, there is still no guarantee that interference will not occur. If this equipment is believed to be causing harmful interference to radio or television reception, this can be determined by turning the equipment on and off. If interference is occurring, 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 to a power outlet on a circuit different from that to which the receiver is connected
- Consult the dealer or an experienced radio/TV technician for help

Warning *Any changes or modifications made to the equipment which are not expressly approved by the relevant standards authority could void your authority to operate the equipment.*

Caution *Danger of explosion if battery is incorrectly replaced. Replace only with the same or equivalent type recommended by the manufacturer. Dispose of used batteries according to the manufacturer's instructions.*

Packing List

Before installing your Point of Care Terminal, ensure that the following materials have been received:

- POC-125 series Point of Care Terminal
- User manual
- Accessories for POC-125
 - Y-shaped adapter for PS/2 mouse and keyboard
 - Power cord (1.8 m) - USA type (other types are available on request)
 - Drivers and Utilities CD-ROM disc
 - Mounting kits and packet of screws

*Warning To prevent electric shock, do not remove cover.
No user serviceable parts inside, refer servicing to qualified personnel.*

Technical Support and Assistance

1. Visit the Advantech websites at www.advantech.com or www.advantech.com.tw where you can find the latest information about the product.
2. Contact your distributor, sales representative, or Advantech's customer service center for technical support if you need additional assistance. Please have the following information ready before you call:
 - Product name and serial number
 - Description of your peripheral attachments
 - Description of your software (operating system, version, application software, etc.)
 - A complete description of the problem
 - The exact wording of any error messages
 - This equipment is a source of electromagnetic waves. Before use please, make sure that there are no EMI sensitive devices in nearby which may malfunction because of these electromagnetic waves.

- Note
- 1 *Use only the following approved power adapters:*
 - *SINPRO Model no.MPU50-108
(Input voltage rated 100 ~ 240 VAC, 47 ~ 63 Hz, 1.35 A max; output voltage rated 24 VDC, 2.08 A)*
 - *XPiQ Model no.PCM80PS24
(Input voltage rated 100 ~ 240 VAC, 47 ~ 63 Hz, 1.1 ~ 0.45 A; output voltage rated 24 VDC, 3.33 A max)*
 - 2 *Use a 3 V @ 195 mA lithium battery (Model No. BR2032)*
 - 3 *Carry the unit with both hands, handle with care*
 - 4 *Our European representative is:
Advantech Europe GmbH
Kolberger Straße 7
D-40599 Düsseldorf, Germany
Tel: 49-211-97477350
Fax: 49-211-97477300*
 - 5 *To properly maintain and clean the surfaces, use only approved products or clean with a dry applicator*

Safety Instructions

1. Read these safety instructions carefully.
2. Keep this User Manual for later reference.
3. Disconnect this equipment from any AC outlet before cleaning. Use a damp cloth. Do not use liquid or spray detergents for cleaning.
4. For plug-in equipment, the power outlet socket must be located near the equipment and must be easily accessible.
5. Keep this equipment away from humidity.
6. Put this equipment on a reliable surface during installation. Dropping it or letting it fall may cause damage.
7. The openings on the enclosure are for air convection. Protect the equipment from overheating. **DO NOT COVER THE OPENINGS.**
8. Make sure the voltage of the power source is correct before connecting the equipment to the power outlet.
9. Position the power cord so that people cannot step on it. Do not place anything over the power cord.
10. All cautions and warnings on the equipment should be noted.
11. If the equipment is not used for a long time, disconnect it from the power source to avoid damage by transient overvoltage.
12. Never pour any liquid into an opening. This may cause fire or electrical shock.
13. Never open the equipment. For safety reasons, the equipment should be opened only by qualified service personnel.
14. If one of the following situations arises, get the equipment checked by service personnel:
 - a. The power cord or plug is damaged.
 - b. Liquid has penetrated into the equipment.
 - c. The equipment has been exposed to moisture.
 - d. The equipment does not work well, or you cannot get it to work according to the user manual.
 - e. The equipment has been dropped and damaged.
 - f. The equipment has obvious signs of breakage.
15. **DO NOT LEAVE THIS EQUIPMENT IN AN UNCONTROLLED ENVIRONMENT WHERE THE STORAGE TEMPERATURE IS**

BELOW -20° C (-4° F) OR ABOVE 60° C (140° F). THIS MAY DAMAGE THE EQUIPMENT.

16. If your computer's clock is losing time, or the BIOS configuration has reset to defaults, the battery has no power.

Caution

- 1 *Do not replace the battery yourself. Please contact a qualified technician or your supplier.*
- 2 *The computer is provided with a battery-powered real-time clock circuit. There is a danger of explosion if battery is incorrectly replaced. Replace only with same or equivalent type recommended by the manufacturer. Discard used batteries according to the manufacturer's instructions.*

17. IMPROPER INSTALLATION OF THE VESA MOUNTING KIT CAN RESULT IN SERIOUS PERSONAL INJURY! The VESA mounting kit should be installed by a professional technician. Please contact a service technician or your supplier if you need this service.
18. CLASSIFICATION:
 - Class I Equipment
 - No applied part
 - IPX1
 - Continuous Operation
 - Not AP or APG category
19. Disconnect device at the appliance inlet.
20. Follow national regulations when disposing of the unit.
21. To properly maintain and clean the surfaces, use only the approved products or clean with a dry applicator.
22. Contact information:
No.1, Alley 20, Lane 26, Reuiguang Road
Neihu District, Taipei,
Taiwan 114, R.O.C.
TEL: (02)27927818



Medical Equipment
With Respect to Electric Shock,
Fire, and Mechanical Hazards Only,
In Accordance with UL 60601-1,
CAN/CSA C22.2 No. 601.1, and
IEC 60601-1

23. This equipment shall not be used in life support systems.
24. This equipment shall be connected only to IEC 60601-1 approved equipment.
25. The sound pressure level at the operator's position according to IEC 704-1:1982 is no more than 70dB(A).

DISCLAIMER *This set of instructions is given according to IEC 704-1. Advantech disclaims all responsibility for the accuracy of any statements contained herein*

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General Information

This chapter gives background information of the POC-125.

Sections include:

- Introduction
- General Specifications
- Cleaning/Disinfecting
- Dimensions

Chapter 1 General Information

1.1 Introduction

The POC-125 is a multimedia Pentium® Mobility processor-based computer that is designed to serve as a Point of Care terminal (POC). It is a PC-based system with 12.1" color TFT LCD display, on-board PCI Ethernet controller, dual COM port interfaces and a 16-bit stereo audio controller. With a built-in 2.5" HDD drive, and CF card sockets, the POC-125 is as quiet and user-friendly as a notebook computer. For system integrators, this silent, compact, mobile, and highly integrated multimedia system lets you easily build a Point of Care Terminal into your applications. Common industrial applications include factory automation systems, precision machinery, and production process control. It is also suitable for many non-industrial applications, including interactive kiosk systems, entertainment management, and car park automation. The POC-125 is a reliable solution to your application's processing requirements.

1.2 General Specifications

General

- **Dimensions** (W x H x D): 348 x 257 x 92 mm (13.70" x 10.12" x 3.62 ")
- **Weight:** 4.54 kg (10 lb)
- **Power supply:** DC model: 50 watts max
External DC Adapter (Manufacturer: SINPRO; Model no. MPU50-108) used within POC-125XXXXXXXX
 - Input voltage: 100 ~ 240 VAC, 47 ~ 63 Hz, 1.35 A max
 - Output voltage: +24 VDC, 2.08 A maxExternal DC Adapter (Manufacturer:XPiQ; Model no. PCM80PS24) used within POC-125XXXXXXXX
 - Input voltage: 100 ~ 240 VAC, 47 ~ 63 Hz, 1.1 ~ 0.45 A
 - Output voltage: +24 VDC, 3.33 A max
- **Disk drive housing:** Space for one 2.5" HDD
- **Front panel:** IP65/NEMA compliant
- **Whole System:** IPX1 compliant

Standard PC functions

- **CPU:** Intel® Pentium® M or Celeron® M processor
- **Memory:** DDR200/266/333 SDRAM, 184-pin DIMM socket x 2, Max. to 2 GB capacity
- **System chipset:** Intel 855GME GMCH/ ICH4 Chipset 400 MHz PSB
- **BIOS:** Award 256 KB Flash BIOS, supports Plug & Play, APM
- **Serial ports:** Two RS-232 ports with optical isolation. All ports are compatible with 16C550 UARTs
- **Universal serial bus (USB) port:** Supports up to four USB ports
- **IEEE1394a port:** 1 IEEE1394a port
- **Watchdog timer:** 62-level, interval 1 ~ 62 seconds. Automatically generates system reset when the system stops due to a program error or EMI.
- **CMOS Battery (BIOS):** 3.0 V @ 195 mA lithium battery

Flat panel interface

- **Chipset:** Intel 855GME
- **Memory Size:** Optimized shared memory architecture, supports 1 or 8 MB frame buffer using system memory
- **Display type:** Simultaneously supports CRT and flat panel displays (EL, LCD and gas plasma)
- **Display resolution:** Supports non-interlaced CRT and TFT LCD displays up to 1280 x 1024 @ 16 M colors

Audio function

- **Chipset:** Realtek ALC202
- **Audio controller:** 16-bit codec, Full-Duplex stereo single-chip PCI audio solution
- **Speaker:** Full alarm volume > 70 dB(A) 1 meter
- **Stereo sound:** 100% DOS game compatible (Sound Blaster or Sound Blaster Pro)
- **Audio interface:** Microphone-in, Line-in, Line-out and Game ports (MPU-401)

PCI bus Ethernet interface

- **Ethernet interface:** Full compliance with IEEE 802.3u 100Base-T and 10 Base-T specifications. Includes software drivers and boot ROM
- 100/10Base-T auto-sensing capability

Touchscreen (optional)

Type	Analog Resistive
Resolution	Continuous
Light Transmission	75%
Controller	RS-232 interface (uses COM4)
Power Consumption	+5 V @ 200 mA
Software Driver	Supports Windows 2000, Windows XP
Durability (touches in a lifetime)	30 million

Note *The Point of Care Terminal with the optionally installed touchscreen will share COM4. Once the touchscreen is installed, COM4 cannot be used for other purposes.*

Optional modules

- **Memory:** 128/256/512 MB DDR200/266/333 DRAM
- **HDD:** 2.5" HDD
- **Touchscreen:** Analog resistive

Environment

- **Temperature:** 0 ~ 40° C (32 ~ 104° F)
- **Relative humidity:** 10 ~ 40° C / 20% ~ 90% RH operating -20 ~ 50° C / 10% ~ 95% RH Storage (Non-condensing)
- **Shock:** 30 G, half sine, 11 msec duration
- **Random Vibration:** 0.002 G²/Hz (1Grms) (5 ~ 500 Hz)
- **Power MTBF:** 100,000 hours
- **Altitudes:** 6,000 feet (Operational); 40,000 feet (shipping)
- **Certifications:**
 - EMC: CE, FCC approved
 - Safety: UL60601-1 and EN60601-1 approved.
 - This device bears the CE label in accordance with the provisions of the EMC Directive 89/336/EMC.

LCD Specifications

- **Display type:** 12.1" TFT LCD
- **Resolution:** 800 x 600
- **Colors:** 262,144 (6 bits/color)
- **Dot size (mm):** 0.307 x 0.307
- **Viewing angle (H/V):** 140°/110°
- **Luminance:** 400 cd/m²
- **Contrast ratio:** 500 : 1
- **LCD MTBF:** 50,000 hours
- **Backlight lifetime:** 50,000 hours

1.3 Cleaning/Disinfecting

During normal use, the POC-125 may become soiled and should, therefore, be cleaned regularly. Agents: Green tinctured soap and Enzymatic detergents.

Steps:

1. Wipe the POC-125 with a clean cloth that has been moistened in the cleaning solution.
2. Prepare the cleaning agent according to the manufacturer's instructions or hospital protocol.
3. Wipe thoroughly with a clean cloth.

Cautions *Do not immerse or rinse the POC-125 and its peripherals. If you accidentally spill liquid on the device, disconnect the unit from the power source. Contact your Biomed regarding the continued safety of the unit before placing it back in operation.*

Do not spray cleaning agent on the chassis.

Do not use disinfectants that contain phenol.

Do not autoclave or clean the POC-125 or its peripherals with strong aromatic, chlorinated, ketone, ether, or Esther solvents, sharp tools or abrasives.

Never immerse electrical connectors in water or other liquids.

1.4 Dimensions

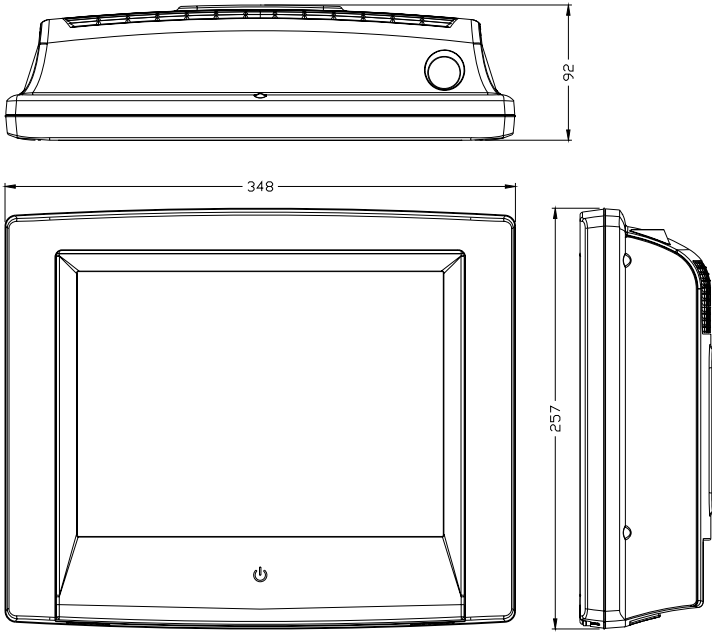


Figure 1.1: Dimensions of the POC-125

System Setup

This chapter provides brief instructions for operating the POC-125.

Sections include:

- A Quick Tour of the POC-125
- Installation Procedures
- Running the BIOS Setup Program
- Installing System Software
- Installing the Drivers

Chapter 2 Chapter 2 System Setup

2.1 A Quick Tour of the POC-125

Before you start to set up the POC-125, take a moment to become familiar with the locations and purposes of the controls, drives, connections and ports, which are illustrated in the figures below.

When you place the POC-125 upright on the desktop, its front panel appears as shown in Figure 2-1.

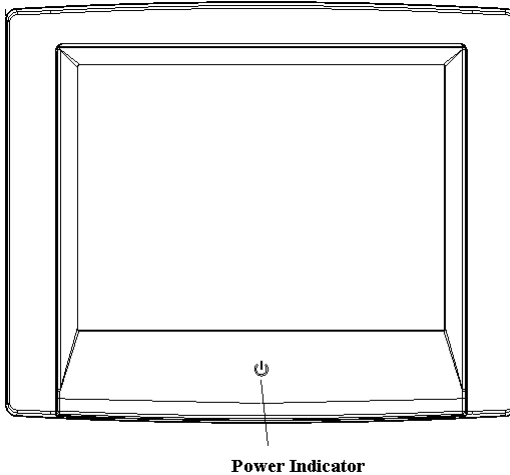


Figure 2.1: Front View of the Point of Care Terminal

When you turn the Point of Care Terminal around and look at its rear cover, the sunken I/O section is at the rear of the panel PC, as shown in Figure 2-2. The I/O section includes various I/O ports, including serial ports, VGA port, the Ethernet port, USB ports, the microphone jack, and so on.

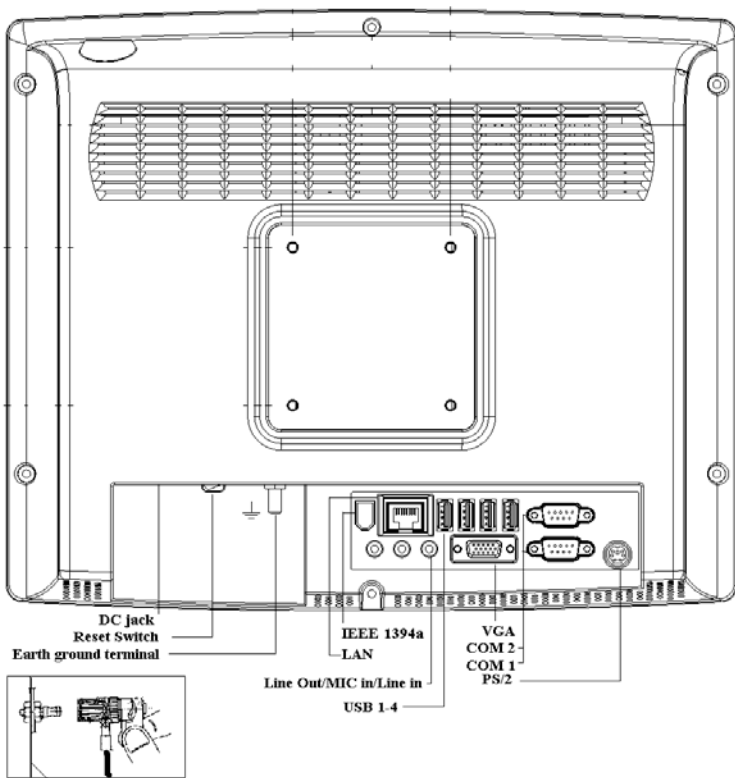


Figure 2.2: Rear view of the Point of Care Terminal

2.2 Installation Procedures

2.2.1 Connecting the power cord

The POC-125 can only be powered by a DC power adapter (SINPRO Model no.MPU50-108). Be sure to always handle the power cords by holding the plug ends only.

Follow these procedures:

1. Connect the female end of the power adapter to the DC jack of the panel PC. (See Figure 2-3.)
2. Connect the female end of the power cord to the DC power adapter.

3. Connect the 3-pin male plug of the power cord to an electrical outlet.

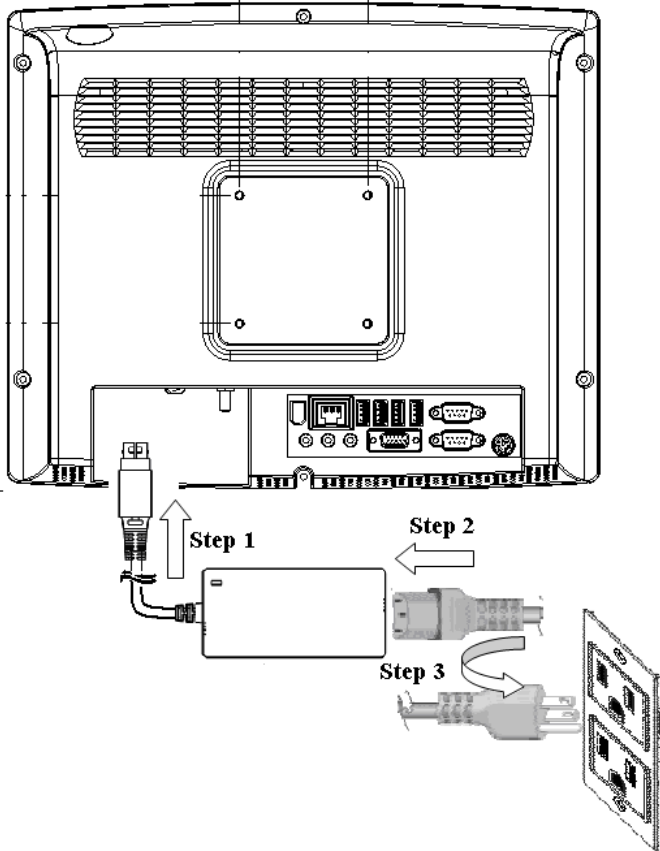


Figure 2.3: Connecting the power cord

2.2.2 Connecting the keyboard and mouse

1. Connect the Y-shaped adapter to the PS/2 mouse and keyboard port on the I/O section of the POC-125. (See Figure 2-4.)
2. Connect the PS/2 mouse and keyboard to the Y-shaped adapter. (See Figure 2-4.)

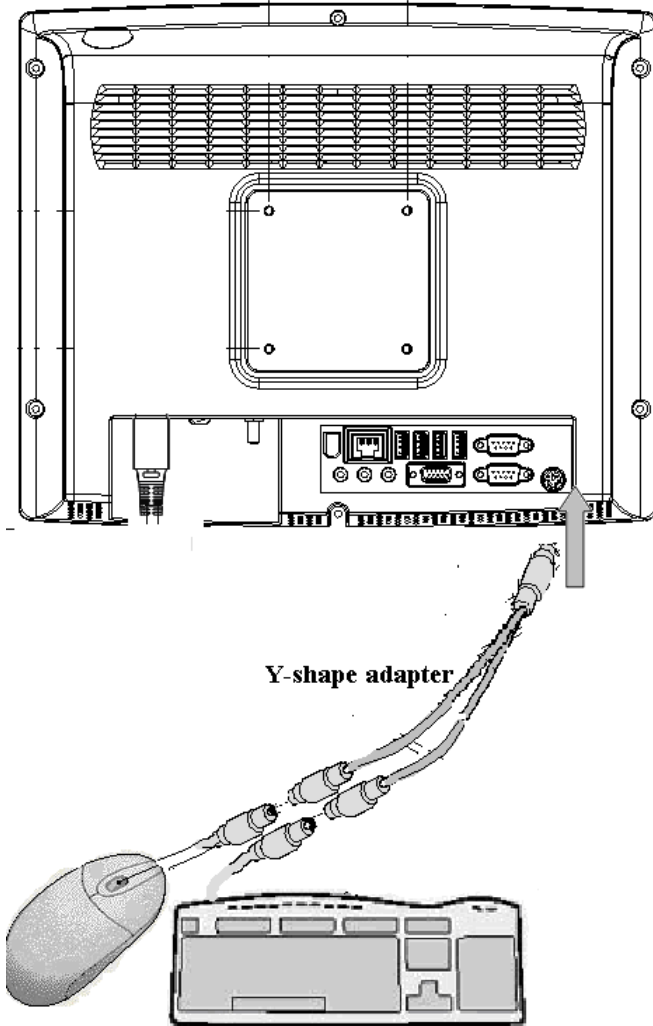


Figure 2.4: Connecting the mouse and keyboard

2.2.3 Switching on the power

Switch on the power switch on the rear cover. (See Figure 2-5.)

2.2.4 Connecting the COM ports (COM 1, 2)

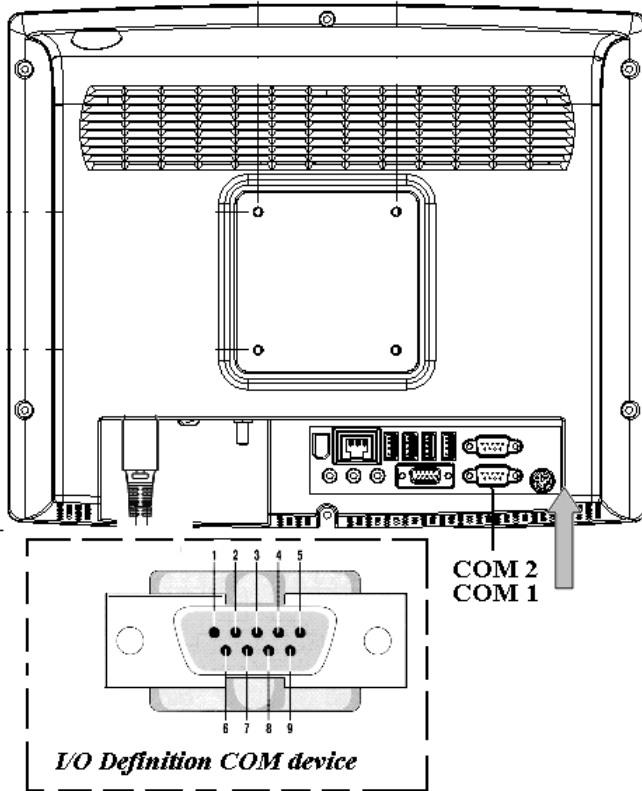


Figure 2.5: COM port and power switch location

2.2.5 Install the ground safety cable

The POC-125 provides an Earth Ground connector (See Figure 2-2). This connector provides earth ground to the unit if the AC power receptacle you are plugging into does not contain a ground prong.

2.3 Running the BIOS Setup Program

Your POC-125 is likely to have been properly set up and configured by your dealer prior to delivery. You may still find it necessary to use the BIOS (Basic Input-Output System) setup program to change system configuration information, such as the current date and time or your type of hard drive. The setup program is stored in read-only memory. It can be accessed either when you turn on or reset the panel PC, by pressing the Ctrl+Alt+Del keys immediately after powering on the computer.

The settings you specify with the setup program are recorded in a special area of memory called CMOS RAM. This memory is backed up by a battery so that it will not be erased when you turn off or reset the system. Whenever you turn on the power, the system reads the settings stored in CMOS RAM and compares them to the equipment check conducted during the power on self-test (POST). If an error occurs, an error message will be displayed on screen, and you will be prompted to run the setup program.

2.4 Installing System Software

Recent releases of operating systems from major vendors include setup programs which load automatically and guide you through hard disk preparation and operating system installation. The guidelines below will help you determine the steps necessary to install your operating system on the panel PC hard drive.

Note *Some distributors and system integrators may have already pre-installed system software prior to shipment of your panel PC.*

If required, insert your operating system's installation or setup diskette into the external diskette drive until the release button pops out.

The BIOS supports system boot-up directly from the CD-ROM drive. You may also insert your system installation CD-ROM disk into your external CD-ROM drive.

Power on or reset the system by pressing the Ctrl+Alt+Del keys simultaneously. The Point of Care Terminal will automatically load the operating system from the diskette or CD-ROM.

If you are presented with the opening screen of a setup or installation program, follow the instructions on screen. The setup program will guide you through preparation of your hard drive, and installation of the operating system.

2.5 Installing the Drivers

After installing your system software, you will be able to set up the Ethernet, VGA, audio and touchscreen functions by your own external CD-ROM drive. All the drivers except the CD-ROM drive driver are stored in a CD-ROM disc entitled “Drivers and Utilities.”

The standard procedures for installing the Ethernet, VGA, audio, and touchscreen drivers are described in Chapters 3, 4, 5, and 6 respectively.

The utility directory includes multimedia programs. Refer to the README.TXT file inside the VGA folders for more detailed information. The various drivers and utilities in the CD-ROM disc have their own text files which help users install the drivers and understand their functions. These files are a very useful supplement to the information in this manual. For your reference, the directory of drivers on the “Drivers and Utilities” CD-ROM is:

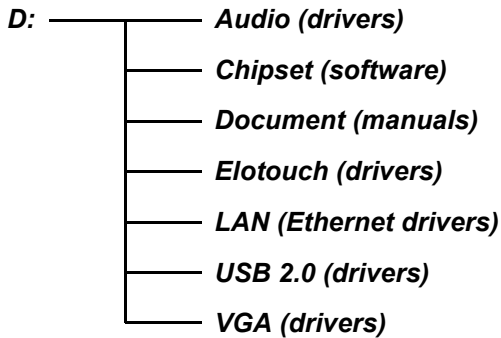


Figure 2.6: *The file directory on “Drivers and Utilities” CD-ROM*

Note *The drivers and utilities used for the POC-125 panel PCs are subject to change without notice. If in doubt, check Advantech's website or contact our application engineers for the latest information regarding drivers and utilities.*

PCI Bus Ethernet Interface

This chapter provides brief instructions about configuring the Ethernet interface of the POC-125.

Sections include:

- Introduction
- Installation of Ethernet Driver
- Further information

Chapter 3 PCI Bus Ethernet Interface

3.1 Introduction

The POC-125 is equipped with a high-performance 32-bit Ethernet chipset which is fully compliant with IEEE 802.3 100 Mbps CSMA/CD standards. It is supported by major network operating systems. It is also both 100Base-T and 10Base-T compatible.

3.2 Installation of Ethernet Driver

3.2.1 Installation for Windows 2000/XP

Complete the following steps to install the LAN driver. Follow the procedures in the flow chart that apply to the operating system that you are using within your POC-125.

Important *The following Windows illustrations are examples only. You must follow the flow chart instructions and pay attention to the instructions which appear on your screen.*

Note *The external CD-ROM drive is designated as “D” throughout this chapter.*
<Enter> means pressing the “Enter” key on the keyboard.

3.3 Further information

For further information about the Ethernet installation in your POC-125, included Driver updates, troubleshooting guides and FAQ lists please visit the following web resources.

Realtek website: www.intel.com.tw

Advantech websites: www.advantech.com
www.advantech.com.tw

PCI Graphic Setup

This chapter provides brief instructions about configuring the graphics interface of the POC-125.

Sections include:

- Introduction
- Installation of PCI Graphic Driver
- Further information

Chapter 4 PCI Graphic Setup

4.1 Introduction

The POC-125 has an on-board PCI/AGP flat panel/VGA interface. The specifications and features are described as follows.

4.1.1 Chipset

The POC-125 uses a Intel 855GME for its graphic controller. It supports LVDS LCD displays, and CRT monitors.

4.1.2 Display memory

The 855GME chip can support up to an 8 MB dynamic frame buffer that is shared with system memory. The VGA controller can drive CRT displays up to 1600 x 1200 at 85 Hz and 2048 x 1536 at 75 Hz. Color panel displays in the LVDS model support resolutions up to UXGA panel resolution with frequencies between 25 MHz and 112 MHz.

4.1.3 Display types

CRT and panel displays can be used simultaneously. The POC-125 can be set in one of three configurations: CRT only, LVDS only, both CRT and LFP (LVDS). The system is initially set to simultaneous display mode - CRT and LFP (LDVS).

4.2 Installation of PCI Graphic Driver

Complete the following steps to install the VGA driver. Follow the procedures in the flow chart that apply to the operating system that you are using within your POC-125.

Important *The following Windows illustrations are examples only. You must follow the flow chart instructions and pay attention to the instructions which appear on your screen.*

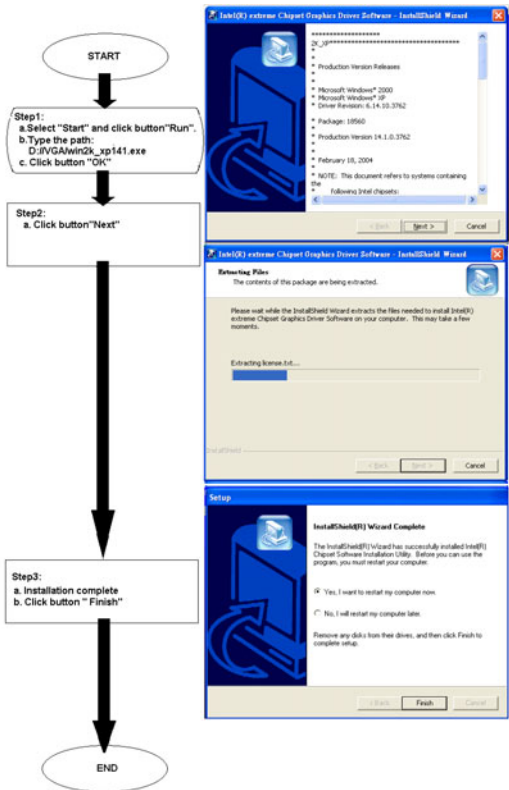
Note

The external CD-ROM drive is designated as “D” throughout this chapter.

<Enter> means pressing the “Enter” key on the keyboard.

Before you install the graphic driver of POC-125, please ensure you have installed the INF driver of the Intel 855GME chipset. You can find this driver in the Utility CD-ROM.

4.2.1 Installation for Windows 2000/XP



4.3 Further information

For further information about the VGA installation in your POC-125, included Driver updates, troubleshooting guides and FAQ lists please visit the following web resources.

Intel website: www.intel.com

Advantech websites: www.advantech.com
www.advantech.com.tw

Audio Interface

This chapter provides brief instructions about configuring the audio interface of the POC-125.

Sections include:

- Introduction
- Installation of Audio Driver
- Further information

Chapter 5 Audio Interface

5.1 Introduction

The POC-125's onboard audio interface provides high-quality stereo sound and FM music synthesis (ESFM) by using the ALC202 audio controller from Realtek. The audio interface can record, compress, and play back voice, sound, and music with a built-in mixer control. The POC-125's onboard audio interface also supports the Plug and Play (PnP) standard and provides PnP configuration for audio, FM, and MPU-104 logical devices. It is compatible with Sound Blaster, Sound Blaster Pro version 3.01, voice, and music functions. The ESFM synthesizer has extended capabilities and is register compatible with the OPL3 chip.

5.2 Installation of Audio Driver

Before installing the audio driver, please take note of the procedures detailed below. You must know which operating system you are using in your POC-125, and then refer to the corresponding installation flow chart. Just follow the steps in the flow chart. You can quickly and successfully complete the installation, even though you are not familiar with instructions for Windows.

***Important** The following Windows illustrations are examples only. You must follow the flow chart instructions and pay attention to the instructions which appear on your screen.*

***Note** The external CD-ROM drive is designated as "D" throughout this chapter.*

<Enter> means pressing the "Enter" key on the keyboard.

Before you install the graphic driver of POC-125, please ensure you have installed the INF driver of the Intel 855GME chipset. You can find this driver on the Utility CD-ROM.

5.2.1 Installation for Windows 2000/XP



5.3 Further information

For further information about the Audio interface installation in your POC-125, included Driver updates, troubleshooting guides and FAQ lists please visit the following web resources.

Realtek website: www.realtek.com.tw

Advantech websites: www.advantech.com
www.advantech.com.tw

Touchscreen Interface

This chapter provides brief instructions about configuring the touchscreen interface of the POC-125.

Sections include:

- Introduction
- Installation of Driver for Touchscreen
- Further Information

Chapter 6 Touchscreen Interface

6.1 Introduction

6.1.1 General Information

The POC-125's optional touchscreen incorporates advanced second-generation 5-wire resistive technology. They allow 75% light transmission respectively. The resistive and capacitive models have an antiglare surface. All models provide greatly enhanced visual resolution. They also have new improved scratch-resistant features.

The touchscreen is manufactured from UL-recognized components. When properly installed, the touchscreen's ball impact resistance meets the UL 1950 standard. Its fire resistance meets the UL-746C, 19 mm (0.75") flame test standard. Systems incorporating the touchscreen, controllers, and cables have been approved to FCC Class A and Class B standards.

6.1.2 General specifications

Please refer to Chapter 1, Section 1.2 of this manual.

6.1.3 Environmental specifications

- Temperature:
 - 0 ~ 40° C (operating)
 - 20 ~ 60° C (storage)
- Relative humidity:
 - 90 RH at 35° C (operating)
 - 90 RH at 35° C for 240 hours, non-condensing (storage)
- Chemical resistance: The active area of the touchscreen is resistant to the following chemicals when exposed for a period of one hour at a temperature of 21° C (71° F):
 - Acetone
 - Methylene chloride
 - Methyl ethyl ketone
 - Isopropyl alcohol
 - Hexane
 - Ammonia-based glass cleaners
 - Turpentine

- Mineral spirits
- Foods and beverages

6.2 Installation of Driver for Touchscreen

To facilitate installation of the touchscreen driver, you should read the instructions in this section carefully before you attempt installation.

Important *The following Windows illustrations are examples only. You must follow the flow chart instructions and pay attention to the instructions which appear on your screen.*

Note *The external CD-ROM drive is designated as “D” throughout this chapter.*

<Enter> means pressing the “Enter” key on the keyboard.

Before you install the graphic driver of POC-125, please ensure you have installed the INF driver of the Intel 855GME chipset. You can find this driver in the Utility CD-ROM.

6.2.1 Installation for Windows 2000

START

Step1:
a. Select "Start" and click button "Run".
b. Type the path "D:\Elo\Touch\Win2k\SetupElo.exe"
c. Click button "OK"

Step2:
a. Click button "Next"

Step3:
a. Click button "Yes" to accept the agreement

Step4:
a. Choose "COM4"
b. Click button "Next"

Step5:
a. Installation complete
b. Click button "Finish"

END

Elo Monitor/Mouse for Windows 2000 Setup

Welcome to Elo's Monitor/Mouse for Windows 2000 Setup.

This program will install the Elo touchmonitor driver on your computer. It is strongly recommended that you read all Windows programs before running the Setup program.

Next > Back Cancel

Elo Monitor/Mouse for Windows 2000 Setup

License Agreement

Please read the following license agreement carefully. Press the PAGE DOWN key to see the rest of the agreement.

End User License Agreement

IMPORTANT: READ CAREFULLY: This Elo TouchSystems End User License Agreement ("EULA") is a legal agreement between you (either an individual or a single entity) and Elo TouchSystems for the software portion of this Elo TouchSystems touchmonitor and controller, which includes the accompanying computer software, printed manuals and any "order" or electronic documentation ("SOFTWARE"). By installing, copying or otherwise using the SOFTWARE, you agree to be bound by the terms of the EULA. If you do not agree to the terms of this EULA, promptly return the licensed SOFTWARE and accompanying Elo TouchSystems touchmonitor and controller to the place from which you obtained them for a full refund.

Do you accept the terms of the preceding license agreement? If you choose No, you will not have full touchmonitor functionality and setup will close. To have full functionality you must accept the license agreement.

Back Yes No

Elo Monitor/Mouse for Windows 2000 Setup

Choose one of the COM ports listed below to use with your touchmonitor. All COM ports supported by your system are listed.

COM4
COM1
COM2

Once you have selected a COM port, click Next to continue the installation.

Back Next > Cancel

Elo Monitor/Mouse for Windows 2000 Setup

The first part of the Elo touchmonitor setup is complete.

Choose Finish to install your system. After Windows boots, setup will run automatically to complete the installation. Please remove all floppy disks before restarting.

Back Finish Cancel

6.2.2 Installation for Windows XP

START

Step 1:
a. Select "Start" and click button "Run".
b. Type the path "D:\Elo\ouch\Win2k\SetupElo.exe"
c. Click button "OK"

Step 2:
a. Click button "Next"

Step 3:
a. Click button "Yes" to accept the agreement

Step 4:
a. Choose "COM4"
b. Click button "Next"

Step 5:
a. Installation complete
b. Click button "Finish"

END

6.3 Further Information

For further information about the Touchscreen installation in your POC-125, included Driver updates, troubleshooting guides and FAQ lists please visit the following web resources.

Elo website: www.elotouch.com

Advantech websites: www.advantech.com
www.advantech.com.tw

APPENDIX A

VESA Mounting

This appendix provides brief instructions about configuring the VESA mounting of the POC-125.

Appendix A VESA Mounting

A.1 Install VESA Mounting

The POC-125 also provides standard VESA mounting to help system integrators conveniently integrate the panel PC into their system.

Only use Advantech mounting brackets to prevent unreliable fixing of the POC-125. The VESA mounting kit should be installed by a professional technician. Please contact a service technician or your supplier if you need this service.

Installation instructions follow:

The wall-mounting attachment is comprised of two parts: one back bracket, and one mounting bracket.

1. Attach the back bracket to the rear cover of the POC-125, securing it in place with four of the Phillips-head screws provided.
2. Attach the mounting bracket to the wall or another flat surface. The back bracket slides vertically from the top into the mounting bracket. It can be secured to the mounting bracket by screwing four of the Phillips-head screws provided through the corresponding holes at the top of the mounting bracket.

Warning *Be sure to secure the screws of the mounting bracket tightly. Loose joints between POC-125 and mounting bracket could harm human life.*

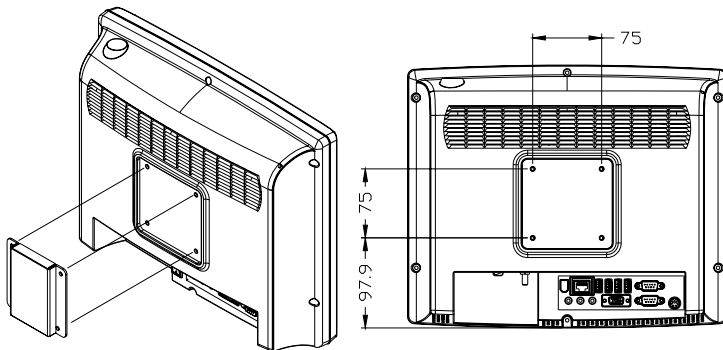


Figure A.1: VESA mounting dimension diagram (75 x 75 mm)

APPENDIX **B**

Hardware Installation

This appendix provides brief instructions about internal mechanical installation of the POC-125.

Sections include:

- Overview of Hardware Installation
- Installing the Battery Pack
- Installing the 2.5" HDD

Appendix B Hardware Installation

B.1 Overview of Hardware Installation

The Point of Care Terminal consists of a PC-based computer that is housed in a plastic rear panel and a metal shielding case. Your HDD, DDR DRAM, power supply, CPU, and so on are all readily accessible by removing the rear panel and shielding case. Any maintenance or hardware upgrades can be easily completed after removing the rear panel and shielding case.

Note *The color LCD display installed in the Point of Care Terminal is high-quality and reliable. However, it may contain a few defective pixels which do not always illuminate. With current technology, it is impossible to completely eliminate defective pixels. Advantech is actively working to improve this technology.*

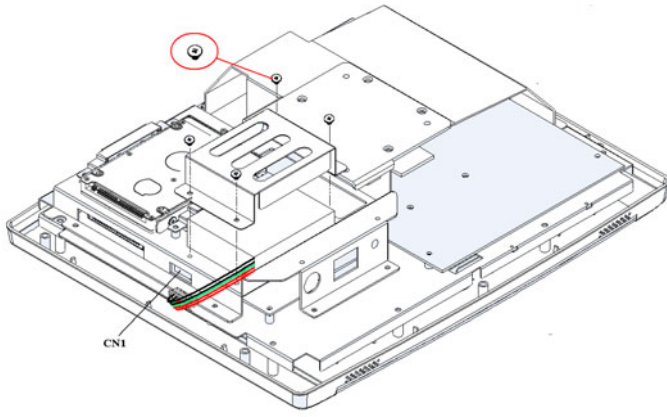
Warning *Do not remove the plastic rear cover until you have verified that no power is flowing within the panel PC.*

Power must be switched off and the power cord must be unplugged. Every time you service the panel PC, you should be aware of this.

B.2 Installing the Battery Pack

The following are standard procedures for installing the Li-ion battery pack. All procedures are illustrated in Figure B-2.

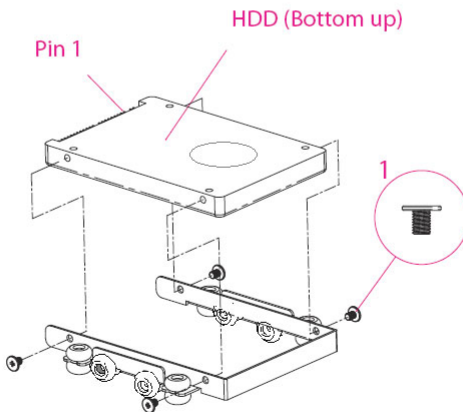
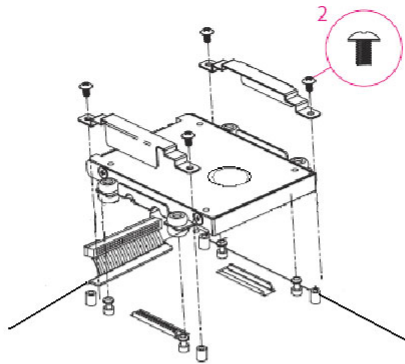
1. Unscrew the screws that secure the plastic rear cover, and then remove the cover.
2. Put the battery pack in, then connect the battery cable to battery connector at the left side of POC-125's motherboard (CN1). Make sure the red wire corresponds to Pin 1 on the connector. Screw the screws that secure the metal cover.



B.3 Installing the 2.5" HDD

You can attach one enhanced Integrated Device Electronics (IDE) hard disk drive to the Point of Care Terminal's internal controller which uses a PCI local-bus interface. The advanced IDE controller supports faster data transfer and allows the IDE hard drive to exceed 60 GB. The following are instructions for installation:

1. Detach the HDD bracket by unscrewing the four screws (#2) on the top of the HDD bracket.
2. Place the HDD inside the HDD bracket and tighten four screws (#1) from both sides of the HDD bracket.



- Screw**
1. 1930030400-M3x4L
 2. 1933030500-M3x5L

3. The HDD cable (1 x 44-pin to 1 x 44-pin) is next to the HDD bracket. Connect the HDD cable to the POC-125. Make sure that the red wire corresponds to Pin 1 on the connector (CN6), which is labeled on the board. Plug the other end of the cable into the HDD, with Pin 1 on the cable corresponding to Pin 1 on the HDD.

Caution *Always disconnect the power cord from your panel PC when you are working on it. Do not make connections while the power is on as sensitive electronic components can be damaged by the sudden rush of power. Only experienced electronics personnel should open the panel PC.*

Description of Interfaces

This appendix provides a description of the Interfaces provided by the POC-125.

Appendix C Description of Interfaces

C.1 Inverter Power Connector

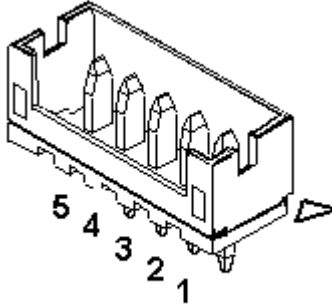


Figure C.1: POC-125 Inverter power connector

Table C.1: Inverter power connector (CN9)

Pin No.	Signal Description
1	+12 V
2	GND
3	ENABLE
4	Brightness Adjustment
5	+5V

C.2 Internal Speaker Connector

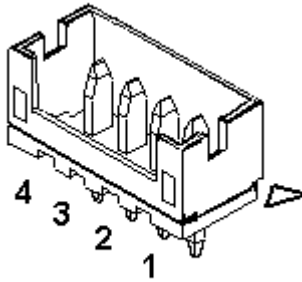


Figure C.2: POC-125 Internal speaker connector

Table C.2: Internal speaker connector (CN25)

Pin No.	Signal Description
1	Speaker out_R-
2	Speaker out_R+
3	Speaker out_L+
4	Speaker out_L-

C.3 Internal Power Button Connector

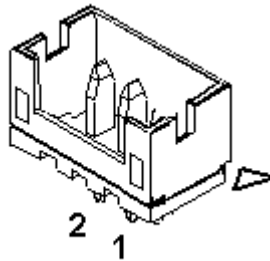


Figure C.3: POC-125 internal power button connector

Table C.3: Table C-3: Internal power button connector (CN4)

Pin No.	Signal Description
1	Power SW+
2	Power SW-

C.4 EIDE Hard Disk Drive Connector

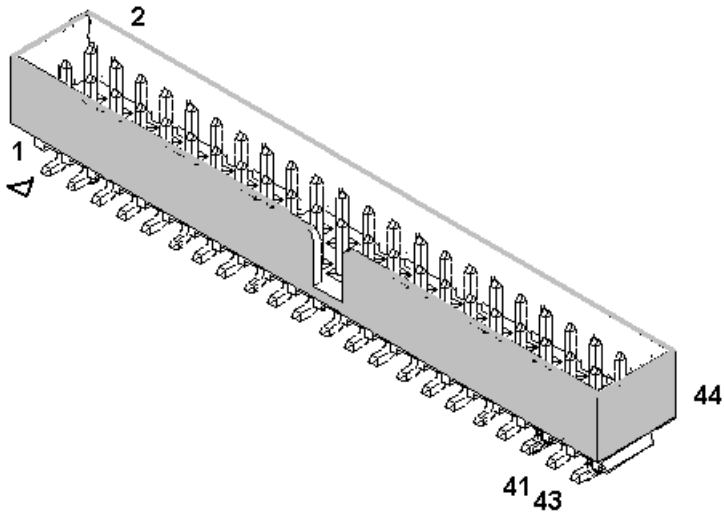


Figure C.4: POC-125 EIDE hard drive connector

Table C.4: EIDE hard disk connector (CN6)

Pin No.	Signal Description	Pin No.	Signal Description	Pin No.	Signal Description
1	IDE RESET#	16	DATA14	31	IRQ14
2	GND	17	DATA0	32	NC
3	DATA7	18	DATA15	33	ADDR1
4	DATA8	19	SIGNAL GND	34	NC
5	DATA6	20	NC	35	ADDR0
6	DATA9	21	HDD DREQ	36	ADDR2
7	DATA5	22	GND	37	HDD SELECT 0#
8	DATA10	23	IO WRITE	38	HDD SELECT 1#
9	DATA4	24	GND	39	IDE ACTIVE 0#
10	DATA11	25	IO READ	40	GND
11	DATA3	26	GND	41	Vcc
12	DATA12	27	HD READY	42	Vcc
13	DATA2	28	CABLE SELECT	43	GND
14	DATA13	29	HD ACK0#	44	NC
15	DATA1	30	GND		

Low active

C.5 CD-ROM Connector (*Reserved)

Table C.5: CD-ROM connector (CN8)

Pin No.	Signal Description	Pin No.	Signal Description	Pin No.	Signal Description
1	Audio_L	15	DATA3	29	IRQ15
2	Audio_R	16	DATA13	30	NC
3	GND	17	DATA2	31	ADDR1
4	GND	18	DATA14	32	NC
5	IDE RESET #	19	DATA1	33	ADDR0
6	DATA8	20	DATA15	34	ADDR2
7	DATA7	21	DATA0	35	HDD SELECT 0#
8	DATA9	22	HDD DREQ	36	HDD SELECT 1#
9	DATA6	23	GND	37	Vcc (+5V)
10	DATA10	24	IO READ	38	Vcc (+5V)
11	DATA5	25	IO WRITE	39	GND
12	DATA11	26	GND	40	GND
13	DATA4	27	HD READY		
14	DATA12	28	HD ACK0#		

C.6 CPU Fan Power Connector (*Reserved)

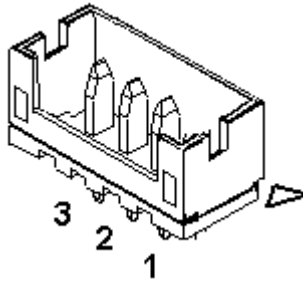


Figure C.5: POC-125 CPU fan connector

Table C.6: Table C-6: CPU fan power connector (CN3)

Pin No.	Signal Description
1	FAN_DET
2	+12V
3	GND

C.7 PCI Bus Expansion Connector (PCI1)



Figure C.6: POC-125 PCI slot connector

Note *This PCI slot uses standard PCI Bus V2.2. If you wish to use this slot, you can connect the add-on cards directly without any issues.*

C.8 Touchscreen Connector

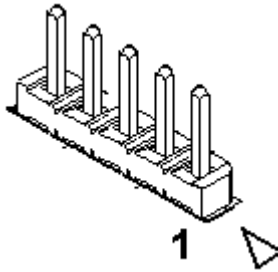


Figure C.7: POC-125 Touchscreen connector

Table C.7: Touchscreen connector (CN33)

Pin No.	Signal Description
1	H
2	X
3	SENSE
4	Y
5	L

C.9 COM2

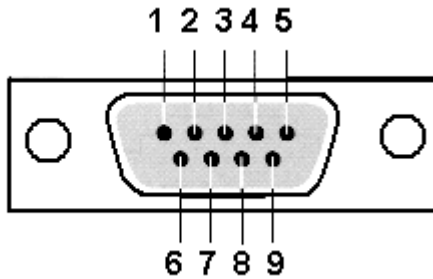


Figure C.8: POC-125 COM2 connector

Table C.8: COM2 pin assignment

Configure	Signal Description		
Pin No.	RX	TX+	DATA+
1	TX	RX+	--
2	DTR	RX-	--
3	GND	GND	--
4	DSR	--	--
5	RTS	--	--
6	CTS	--	--
7	RI	--	--

Jumper Settings and Connectors

This appendix describes POC-125 jumper settings and connectors.

Section include:

- Jumpers and connectors
- CMOS Clear for External RTC
- COM port Interface Configuration
- VGA Interface

Appendix D Jumper Settings and Connectors

D.1 Jumpers and connectors

D.1.1 Setting jumpers

You can configure your Point of Care Terminal to match the needs of your application by setting jumpers. A jumper is the simplest kind of electrical switch. It consists of two metal pins and a small metal clip (often protected by a plastic cover) that slides over the pins to connect them. To “close” a jumper, you connect the pins with the clip. To “open” a jumper you remove the clip. Sometimes a jumper will have three pins, labeled 1, 2, and 3. In this case, you would connect either pins 1 and 2 or pins 2 and 3.

The jumper settings are schematically depicted in this manual as follows:

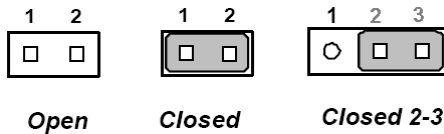


Figure D.1: Jumper Setting

A pair of needle-nose pliers may be helpful when working with jumpers. If you have any doubts about the best hardware configuration for your application, contact your local distributor or sales representative before you make any changes.

D.1.2 Jumpers and switches

The motherboard of the Point of Care Terminal has a number of jumpers that allow you to configure your system to suit your applications. The table below lists the function of each of the board's jumpers.

Table D.1: Jumpers and their functions

Label	Function Description
JP6	Isolated COM2 RS-232/422/485 setting
S2	CMOS clear for external RTC
JP2	COM1 Pin 9 output type setting
JP3	COM3 Pin 9 output type setting
JP4	COM2 Pin 9 output type setting

D.1.3 Locating jumpers

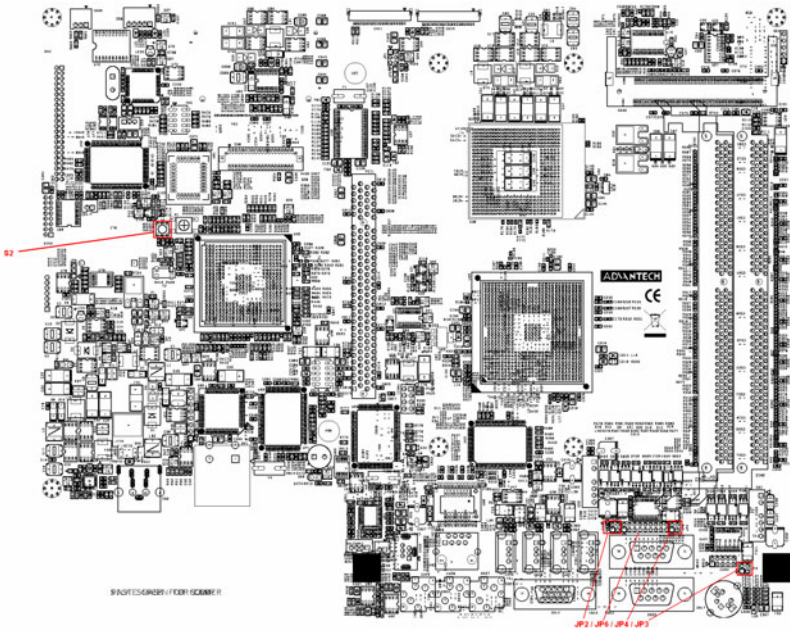


Figure D.2: Locating jumpers on the POC-125 motherboard

D.1.4 Connectors

Onboard connectors link the Point of Care Terminal to external devices such as hard disk drives or floppy drives. The table below lists the function of each of the board's connectors.

Table D.2: Panel PC connectors

Label	Function Description
CN19	USB5/USB6 internal connector
JP1	Flat panel power selection connector
CN10	Flat panel display LVDS connector (Channel 1)
CN11	Flat panel display LVDS connector (Channel 2)
CN8	CD-ROM connector
CN9	Inverter power connector
CN6	EIDE hard disk drive connector
CN3	CPU fan power connector
PCI1	PCI Bus expansion connector

D.1.5 Locating connectors

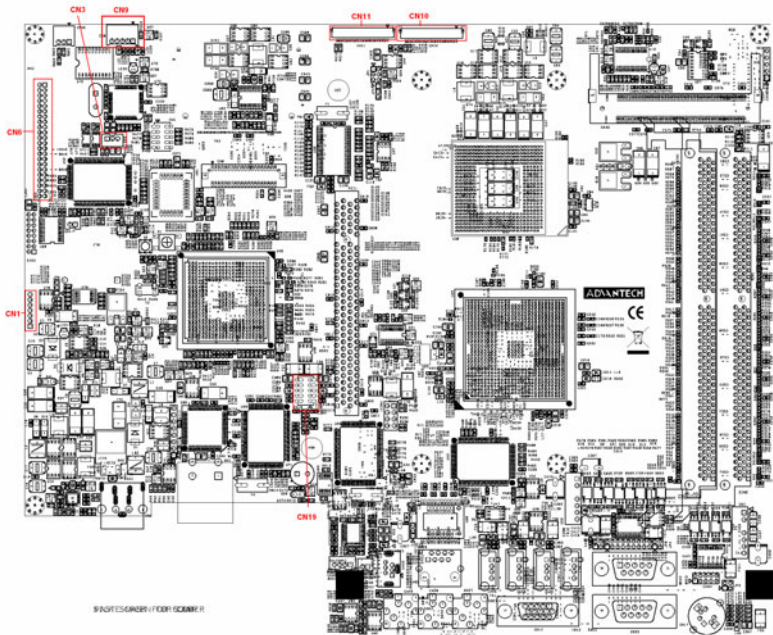


Figure D.3: Locating connectors on the POC-125 motherboard

D.2 CMOS Clear for External RTC (S2)

Warning To avoid damaging the computer, always turn off the power supply before setting “Clear CMOS”. Set the jumper back to “Normal operation” before turning on the power supply.

D.3 COM port Interface Configuration (JP1)

The Point of Care Terminal provides four serial ports (COM1/COM3/COM4: RS-232; COM2: RS-232/422/485 optional in one COM port connector).

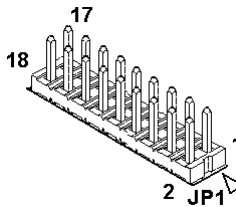


Figure D.4: COM port jumper

COM2 can be configured to operate in RS-232, RS-422, or RS-485 mode. This is done via JP1. JP1 is the 18-pin jumper close to the COM Port Connector.

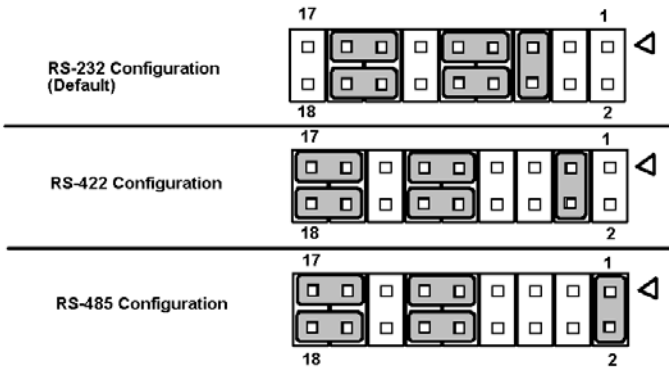


Figure D.5: COM2 port configuration

Table D.3: COM2 Port Configuration (JPI)

Pin No.	Open/Closed	Function Description
Pin 5, 6 Pin 7, 9 Pin 8, 10 Pin 13, 15 Pin 14, 16	Closed	COM2 is RS-232 port (Default)
Pin 3, 4 Pin 9, 11 Pin 10, 12 Pin 15, 17 Pin 16, 18	Closed	COM2 is RS-422 port
Pin 1, 2 Pin 9, 11 Pin 10, 12 Pin 15, 17 Pin 16, 18	Closed	COM2 is RS-485 port

The IRQ and the address ranges for COM1, 2, 3, and 4 are fixed.

However, if you wish to disable the port or change these parameters later you can do this in the system BIOS setup. The table overleaf shows the default settings for the panel PC's serial ports. COM1 and COM2 are one set. You can exchange the address range and interrupt IRQ of COM1 for the address range and interrupt IRQ of COM2. After exchanging, COM1's address range is 2F8 ~ 2FF and its interrupt is IRQ3, and COM2's address range is 3F8 ~ 3FF and its interrupt is IRQ4. COM3 and COM4 are another set. Their selectable function is the same as the COM1/COM2 set.

Table D.4: Serial port default settings

Port No.	I/O Address Range	Interrupt Request
COM1	3F8~3FF	IRQ4
COM2	2F8~2FF	IRQ3
COM3	3E0~3E7	IRQ10
COM4	2E0~2E7	IRQ5

D.3.1 COM1/COM2/COM3 Pin9 Output Type Setting (JP2/JP4/JP3)

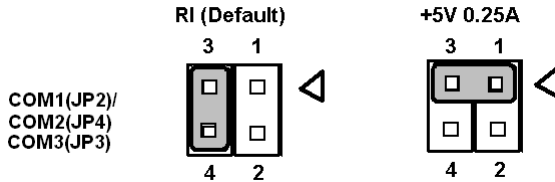


Figure D.6: COM port Pin 9 configuration

Table D.5: COM Port Pin 9 Output Type Configuration (JP2/JP4/JP3)

Pin No.	Open/Closed	Function Description
Pin 3, 4	Closed	COM1/COM2/COM3 port Pin 9 Ring (Default)
Pin 1, 3	Closed	COM1/COM2/COM3 port Pin 9 output +5V

D.4 VGA Interface

The Point of Care Terminal's AGP VGA interface can drive conventional CRT displays. It is also capable of driving a wide range of flat panel displays, including electroluminescent (EL), gas plasma, passive LCD and active LCD displays. The board has two connectors to support these displays simultaneously: one for standard CRT VGA monitors, and one for flat panel displays. Pin assignments for the flat panel display connector, backlight connector and other related connectors are shown in Appendix C.

D.4.1 VGA information

The analog display port provides a RGB signal output along with a HSYNC and VSYNC signal. There is an associated DDC signal pair that is implemented using GPIO pins dedicated to the analog port. The intended target device is for a CRT-based monitor with a VGA connector. Display devices such as LCD panels with analog inputs may work satisfactory but no functionality has been added to the signals to enhance that capability.

Table D.6: Analog Display VGA Port

Pin No.	Function Description
1	Red Analog Video Output
2	Green Analog Video Output
3	Blue Analog Video Output
4	NC
5	GND
6	GND
7	GND
8	GND
9	Vcc
10	GND
11	NC
12	Analog DDC data
13	CRT Horizontal Synchronization
14	CRT Vertical Synchronization
15	Analog DDCA_Clock