

User Manual

POC-624 Series

23.8" Point-of-Care Terminal
with Intel® Core™ i7/i5/i3/
Celeron® Processor

ADVANTECH

Enabling an Intelligent Planet

User Instructions/Instructions pour l'utilisateur

This document combines text and illustrations to provide a comprehensive overview of the product. Information is presented as a sequential series of actions that allow users to learn directly how to use the device. The text also provides explanations and short, clear instructions regarding the installation and practical use of the product.

Le document combine du texte et des illustrations, offrant un aperçu complet du système. Les informations sont présentées sous forme d'actions séquentielles, permettant à l'utilisateur d'apprendre directement à utiliser le périphérique. Le texte fournit des explications et informe l'utilisateur, étape par étape, de l'utilisation pratique du produit, avec des instructions courtes et claires, dans une séquence facile à suivre.

Definitions/Définitions

Warning! *A warning statement provides important information about a potentially hazardous situation that, if not avoided, may result in death or serious injury.*



Un avertissement fournit d'importantes informations concernant une situation potentiellement dangereuse qui, si elle n'est pas évitée, pourrait entraîner la mort ou des blessures graves.

Caution! *A caution statement provides important information about a potentially hazardous situation that, if not avoided, may result in minor or moderate injury to the user or patient, or damage to the equipment or property.*



Une attention fournit d'importantes informations concernant une situation potentiellement dangereuse qui, si elle n'est pas évitée, pourrait entraîner des blessures mineures ou modérées à l'utilisateur ou au patient et endommager l'équipement ou d'autres propriétés.

Note! *A note provides additional information for avoiding inconvenience during operation.*



Une remarque fournit des informations supplémentaires destinées à éviter les inconvénients en cours de fonctionnement.

Safety Instructions

1. Read these safety instructions carefully.
Lisez attentivement ces consignes de sécurité.
2. Retain this user manual for future reference.
Gardez ce manuel pour référence future.
3. Disconnect the equipment from all power outlets before cleaning. Use only a damp cloth for cleaning. Do not use liquid or spray detergents.
Déconnectez cet équipement de toute prise secteur avant de le nettoyer. Utilisez un chiffon humide. Ne pas utiliser de liquide ou de sprays détergents pour le nettoyage.
4. For pluggable equipment, the power outlet socket must be located near the equipment and easily accessible.
La prise de courant doit être située près de l'équipement et doit être facilement accessible.
5. Protect the equipment from humidity.
Gardez cet équipement à l'abri de l'humidité.

Caution! *To avoid short-circuiting and otherwise damaging the device, do not allow fluids to come in contact with the device. If fluids are accidentally spilled on the equipment, remove the affected unit from service as soon as possible and contact service personnel to verify that patient safety has not been compromised.*



Pour éviter tout court-circuit ou tout autre dommage pour l'appareil, évitez tout contact des liquides avec celui-ci. En cas de déversement accidentel de liquides sur l'équipement, retirez dès que possible l'unité concernée du service et contactez le personnel de maintenance pour vérifier que la sécurité du patient n'est pas compromise.

6. Place the equipment on a reliable surface during installation. Dropping or letting the equipment fall may cause damage.
La chute de l'équipement pouvant l'endommager, celui-ci doit être installé sur une surface stable.
7. The openings on the enclosure are for air convection. Protect the equipment from overheating. Do not cover the openings.
Les ouvertures du boîtier sont nécessaires au refroidissement de l'appareil. Veillez à protéger l'appareil contre la surchauffe. Ne pas couvrir les ouvertures.
8. Ensure that the voltage of the power source is correct before connecting the equipment to a power outlet.
Assurez-vous que la tension de la source d'alimentation est correcte avant de brancher l'appareil à la prise de courant.
9. Position the power cord away from high-traffic areas. Do not place anything over the power cord.
Placez le cordon d'alimentation de manière à éviter que des personnes marchent dessus. Veillez à ce qu'aucun objet ne soit placé sur le cordon d'alimentation.
10. All cautions and warnings on the equipment should be noted.
Tous les conseils et avertissements concernant ce matériel et son utilisation doivent être lus et compris.
11. If the equipment is not used for a long time, disconnect it from the power source to avoid damage from transient overvoltage.
Si l'appareil n'est pas utilisé pendant une longue période, débranchez-le de la source d'alimentation pour éviter les dommages causés par des surtensions transitoires.

12. Never pour liquid into an opening. This may cause fire or electrical shock.
Ne jamais verser de liquide dans une ouverture. Cela peut provoquer un incendie ou un choc électrique.
13. Never open the equipment. For safety reasons, the equipment should be opened only by qualified service personnel.
Ne jamais ouvrir l'équipement. Pour des raisons de sécurité, l'équipement ne peut être ouvert que par du personnel qualifié.

Warning! *Because of the danger of electric shock, never remove the cover of a device while it is in operation or connected to a power outlet.*
En raison du danger de choc électrique, ne retirez jamais le couvercle d'un appareil en cours de fonctionnement ou sur une prise secteur.



14. If any of the following occurs, have the equipment checked by qualified service personnel:
Si l'une des situations suivantes se présente, faites vérifier le matériel par le personnel de service:
 - The power cord or plug is damaged.
Le cordon d'alimentation ou la prise est endommagé.
 - Liquid has penetrated the equipment.
Du liquide a pénétré dans l'appareil.
 - The equipment has been exposed to moisture.
L'équipement a été exposé à l'humidité.
 - The equipment is malfunctioning, or does not operate according to the user manual.
L'équipement ne fonctionne pas bien, ou vous ne pouvez pas le faire fonctionner selon le manuel d'utilisation.
 - The equipment has been dropped and damaged.
L'appareil est tombé et est endommagé.
 - The equipment shows obvious signs of breakage.
L'équipement présente des signes évidents de casse.
15. Do not leave the equipment in an environment with a storage temperature of below 0 °C (0 °F) or above 50 °C (122 °F) as this may damage the components. The equipment should be kept in a controlled environment.
Ne pas laisser ce matériel dans un environnement où la température de stockage peut descendre en dessous de 0 °C (0 °F) ou être supérieure à 50 °C (122 °F). Ceci pourrait endommager l'équipement. L'équipement doit être maintenu dans un environnement contrôlé.
16. If your computer does not keep the correct time or the BIOS configuration has been reset to default, the battery may have no charge.
Si votre ordinateur ne conserve pas l'heure exacte ou si la configuration du BIOS a été réinitialisée, la batterie peut ne pas avoir de charge.

Caution! *The computer is equipped with a battery-powered, real-time clock circuit. There is a risk of explosion if the battery is incorrectly replaced. Replace only with same or equivalent type recommended by the manufacturer. Discard used batteries according to the manufacturer's instructions.*



L'ordinateur est équipé d'un circuit d'horloge temps réel alimenté par batterie. Il y a un risque d'explosion si la batterie est remplacée de manière incorrecte. Remplacez uniquement avec le même type recommandé par le fabricant. Jetez les piles usagées conformément aux instructions du fabricant.

Caution! *A battery charge indicator is not included with this device. It will be added during assembly and included with the completed system.*



L'indicateur de charge de la batterie n'est pas inclus avec cet appareil. Il sera ajouté à l'assemblage du système fini et sera affiché avec le système terminé.

17. Improper installation of the VESA mount can result in serious personal injury. Mount installation should be performed by a qualified technician. Contact your retailer for this service.

Une installation incorrecte du montage VESA peut entraîner des blessures graves! L'installation du support VESA doit être effectuée par un technicien professionnel. Veuillez contacter le technicien de maintenance ou votre revendeur si vous avez besoin de ce service.

18. Classification:

- 1). Class I internally powered or with power adapter
Adaptateur secteur classe 1
- 2). No applied parts
Aucune partie appliquée
- 3). Continuous operation
Opération continue
- 4). Non-AP or APG category
Pas de catégorie AP ou APG4

Warning! *This device is not suitable for use in the presence of flammable anesthetic mixtures that contain air, oxygen, or nitrous oxide, or for use as a life-support system.*



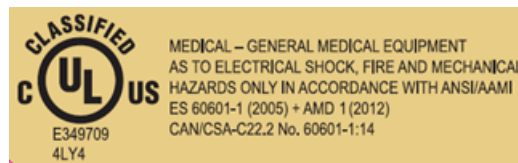
Ce dispositif ne convient pas pour une utilisation en présence d'un mélange anesthésique inflammable avec de l'air, de l'oxygène, de l'oxyde nitreux ou pour des systèmes de survie.

Warning! *When servicing the device, always use replacement parts that are qualified to Advantech standards. Advantech Digital Healthcare cannot warrant or endorse the safe performance of third-party replacement parts for use with our medical device.*



Lors de l'entretien de l'appareil, utilisez toujours des pièces de rechange conformes aux normes Advantech. Advantech Digital Healthcare ne peut en aucun cas garantir ou garantir la sécurité des pièces de rechange tierces à utiliser avec notre dispositif médical.

19. Ensure that contact between SIP/SOPs and the patient does not occur.
Assurez-vous que l'utilisateur n'autorise pas le contact simultané entre SIP/SOP et le patient.
20. When networking with electrical devices, the operator is responsible for ensuring that the resulting system meets the requirements set forth by the following standards:
Lors de la mise en réseau d'appareils électriques, il incombe à l'opérateur de s'assurer que le système résultant répond aux exigences définies par les normes suivantes:
- EN 60601-1 (IEC 60601-1) Medical electrical equipment
Part 1: General requirements for safety
EN 60601-1 (IEC 60601-1) Appareils électromédicaux
Partie 1: Prescriptions générales pour la sécurité
 - EN 60601-1 (IEC 60601-1) Medical electrical equipment
Part 1-1: General requirements for safety
Collateral standard: Safety requirements for medical electrical systems
EN 60601-1 (IEC 60601-1) Appareils électromédicaux
Partie 1-1: Exigences générales pour la sécurité
Norme collatérale: exigences de sécurité pour les systèmes électriques médicaux
 - EN 60601-1-2 (IEC 60601-1-2) Medical electrical equipment
Part 1-2: General requirements for safety
Collateral standard: Electromagnetic compatibility; Requirements and tests
EN 60601-1-2 (IEC 60601-1-2) Appareils électromédicaux
Partie 1-2: Exigences générales pour la sécurité
Norme collatérale: compatibilité électromagnétique; Conditions et tests
21. Accessory equipment connected to analog and digital interfaces must be in compliance with the respective nationally harmonized IEC standards (i.e., IEC 60950 for data processing equipment, IEC 60065 for video equipment, IEC 61010-1 for laboratory equipment, and IEC 60601-1 for medical equipment).
Les équipements accessoires connectés aux interfaces analogiques et numériques doivent être conformes aux normes CEI harmonisées au niveau national (CEI 60950 pour les équipements de traitement de données, CEI 60065 pour les équipements vidéo, CEI 61010-1 pour les équipements de laboratoire et CEI 60601-1 pour équipement médical).



22. All configurations must comply with the IEC 60601-1 standard. Anyone who connects additional equipment to the signal input port or signal output port is configuring a medical system, and therefore, is responsible to ensure that the system complies with the requirements of the IEC 60601-1 standard. The unit is for exclusive interconnection with IEC 60601-1-certified equipment in the patient environment and IEC 60XXX-certified equipment outside of the patient environment. If in doubt, consult the technical services department or your local representative.
Toutes les configurations doivent être conformes à la norme système CEI 60601-1. Quiconque connecte un équipement supplémentaire à la partie d'entrée de signal ou à la partie de sortie de signal configure un système médical et est donc responsable de la conformité du système aux exigences de la

norme système CEI 60601-1. L'unité est destinée à une interconnexion exclusive avec un équipement certifié CEI 60601-1 dans l'environnement du patient et un équipement certifié CEI 60XXX en dehors de l'environnement du patient. En cas de doute, consultez le service technique ou votre représentant local.

Caution! *Use suitable mounting apparatus to avoid risk of injury. The device should only be mounted by trained personnel using materials of adequate quality.*



Utilisez un appareil de montage approprié pour éviter tout risque de blessure, il doit être monté par un personnel formé et autorisé sur des tolérances adéquates pour la qualité des matériaux utilisés pour effectuer la connexion.

23. Grounding reliability can only be achieved when the equipment is connected to an equivalent receptacle marked "Hospital Only" or "Hospital Grade".
La fiabilité de la mise en terre ne peut être garantie que si l'équipement est branché à une prise certifiée "hôpital uniquement" ou "grade-hôpital".
24. Use a power cord that matches the voltage of the power outlet and is compliant with relevant safety standards in your particular country.
Utilisez un cordon d'alimentation homologué de calibre correspondant à la tension du secteur et qui est conforme aux normes de sécurité propres à votre pays.

Note! *Environmental protection: Follow national guidelines for disposing of the unit.*



Protection de l'environnement: Respecter les exigences nationales en matière d'élimination de l'appareil.

25. Do not modify this equipment without authorization from the manufacturer.
Ne modifiez pas cet équipement sans l'autorisation du fabricant.
26. To avoid risk of electric shock, this equipment must only be connected to a supply mains with protective grounding.
Afin d'éviter le risque de décharges électriques, cet équipement doit être branché à une prise d'alimentation équipée d'une mise à terre.
27. Remove the power cord to fully turn off the device.
Retirez le cordon d'alimentation pour éteindre l'appareil.
28. Use only the power cord provided with the product to power the device. If in doubt, contact Advantech for more information.
Utilisez uniquement le cordon d'alimentation fourni avec le produit, en cas de doute, veuillez contacter Advantech pour plus d'informations.
29. The device is intended to be used as SIP/SOP when facing downward.
L'appareil est destiné à être utilisé comme SIP/SOP orienté vers le bas.

Explanation of Graphical Symbols



IEC 60878 and ISO 3864-B.3.6: Warning: dangerous voltage



ISO 7000-0434: Caution, consult accompanying documents



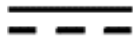
ISO 7000-1641: Follow operating instructions or consult instructions for use



IEC 60417 -5009: Standby



IEC 60417-5032: Alternating current. AC model only



IEC 60417-5031: Direct current



IEC 60417-5021: Equipotentiality



ISO 7010-M002: Follow instructions for use

Disposing of Old Products

Within the European Union



EU-wide legislation, as implemented in each member state, requires that all waste electrical and electronic products carrying the mark shown on the left must be disposed of separately from normal household waste. This includes monitors and electrical accessories, such as signal cables and power cords. To dispose of display products, follow the guidance of your local authority, or ask the shop where you purchased the product or, if applicable, follow any agreements between you and the provider.

The mark on electrical and electronic products only applies to current European Union member states.

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 in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, 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 receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for assistance.

Warning! *Any changes or modifications made to the equipment that are not expressly approved by the relevant standard's authority may void your authority to operate the equipment.*




Toute modification apportée à l'équipement sans l'approbation explicite de l'autorité de normalisation compétente pourrait annuler votre droit à utiliser l'équipement.

Accessories List

Before installing the device, ensure that the following items have been received:

- 1 x POC-624 series terminal
- Accessories for POC-624
- 1 x Mount kits and packet of screws
- 1 x VESA mount note

 **Warning!** *There are no user-serviceable parts inside the device. Refer all repairs or servicing to qualified personnel. Only the accessories indicated on the list of accessories above have been tested and approved to be used with the device. Accordingly, we recommend that only these accessories be used in conjunction with the specific device. Otherwise, the correct functioning of the device may be compromised.*

Aucune pièce réparable par l'utilisateur. Pour l'entretien, adressez-vous à des personnes qualifiées. Seuls les accessoires décrits dans la liste ci-dessus ont été vérifiés et approuvés pour être utilisés avec cet appareil. Conséquemment, il est fortement recommandé d'utiliser ces accessoires spécifiquement avec cet appareil. Autrement, le fonctionnement adéquat de l'appareil serait compromis.

Technical Support and Assistance

1. Visit the Advantech website at www.advantech.com/support to obtain the latest product information.
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 calling:
 - 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
 - This equipment is a source of electromagnetic waves. Before use ensure that there are no EMI-sensitive devices in the surrounding area that may malfunction as a result.

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Chapter 1

General Information

1.1 Introduction

Advantech's POC-624 series are point-of care (POC) terminals equipped with an Intel® Core™ i7/i5/Celeron® processor, 23.8" widescreen TFT LCD display, and water-resistant sealed I/O ports. Easily configured for a wide range of applications and infrastructures, POC-624 terminals provide the ideal solution for diverse medical computing operations. The front panel is IP65 rated for protection from water and dust ingress, facilitating regular cleaning for enhanced hygiene and infection control.

Intended Use - The POC-624 series is designed to serve as general-purpose POC terminals that can be integrated with existing hospital systems and used for data collection/information displays. POC-624 terminals should not be used as life-support systems.

The latest version of this user manual is available for download at the Advantech website: <http://support.advantech.com.tw/support/>

1.2 Specifications

POC-624 Series Models

| Model Name | Model Differences | |
|----------------|--|--|
| POC-624-11 | DC-In model (with external Sinpro adapter) | |
| POC-624-01 | AC-In model (with internal FSP PSU) | |
| <hr/> | | |
| System | Processor | Intel® Core™ i7-8665UE (8M cache, up to 4.40 GHz) Intel® Core™ i5-8365UE (6M cache, up to 4.10 GHz) |
| | Memory | 8 GB DDR4 (supports up to 32GB DDR4 SODIMM) |
| | Graphics Controller | Intel® HD Graphics 620/610 |
| Storage | Primary (Default) | NVME SSD 256 GB (M.2 2280) |
| | Secondary (Optional) | 2.5" SATA SSD available |
| Display | Size | 23.8" |
| | Max. Resolution | 1920 x 1080 |
| Touch | Type | 10-point multi touch P-CAP (clear glass); optional AG/AR upon request |
| Expansion Slot | Mini PCIe | 1 (full size) |
| | M.2 2230 | 1 (for Wi-Fi/Bluetooth module) |
| | PCIe x4 | 1 (card length: 167.65 mm/6.6 in) |
| I/O | USB 3.2 Gen 2 (Type A) | 2 |
| | USB 3.2 Gen 2 (Type C) | 1 (with display function via USB type C alternative mode) |
| | USB 2.0 Type A | 2 |
| | HDMI | 1 |
| | LAN 1.5 kV | 2 (with isolation) |
| | Mic-In/Headphone-Out | 1/1 |
| | COM (RS-232) 1.5 kV | 2 |
| | DC-In | 18 VDC (POC-624-11 model) |
| | AC-In | 100 ~ 240 VAC, 47 ~ 63 Hz (POC-624-01 model) |
| Power Input | DC/AC | DC model: 18V, max. AC model: 100 ~ 240V, max. 150W |
| Certification | EMC & Safety | Medical CE, FCC (IEC 60601-1-2, 4th edition) EN 60601-1 UL 60601-1 |
| Environmental | Operating Temperature | 0 ~ 35 °C/32 ~ 95 °F |
| | Storage Temperature | 0 ~ 50 °C/32 ~ 122 °F |

| | | |
|--------------------------|--|---|
| Physical Characteristics | Dimensions (W x D x H) | 583 x 387 x 68 mm/22.95 x 15.2 x 2.68 in |
| | Weight (Bare System) | 7.78 kg/17.15 lb |
| | VESA Mount | 100x100, 75x75 |
| Optional Configuration | Operating System | Windows 10 IoT Enterprise (64 bit), Linux (upon request) |
| | Memory | Up to 32 GB DDR4 SODIMM |
| | WLAN | Intel® wireless-AC9260 or dual-band wireless-AC 8265 |
| | Bluetooth | 5.1/4.2 |
| | Backup Battery | Optional (choose either backup battery or PCIe x4) |
| | Hot-Swappable Battery | Optional with 2 x batteries (choose either backup battery or hot swapping battery module) |
| | RFID Reader | Optional (choose either RFID or smart card reader) |
| | Smart Card Reader | Optional (choose either RFID or smart card reader) |
| | Backup Battery | Optional (Choose either backup battery or PCIe x4) |
| | Camera | 1 x 5-megapixel camera (optional) |
| | Speaker | 2 x 2W |
| | LED Book Light | 2 |
| | TPM 1.2/2.0 | 2.0 (default via firmware) |
| Touch Panel | 23.8", clear glass with optional AR/AG coating | |

1.3 Dimensions

(Unit: mm)

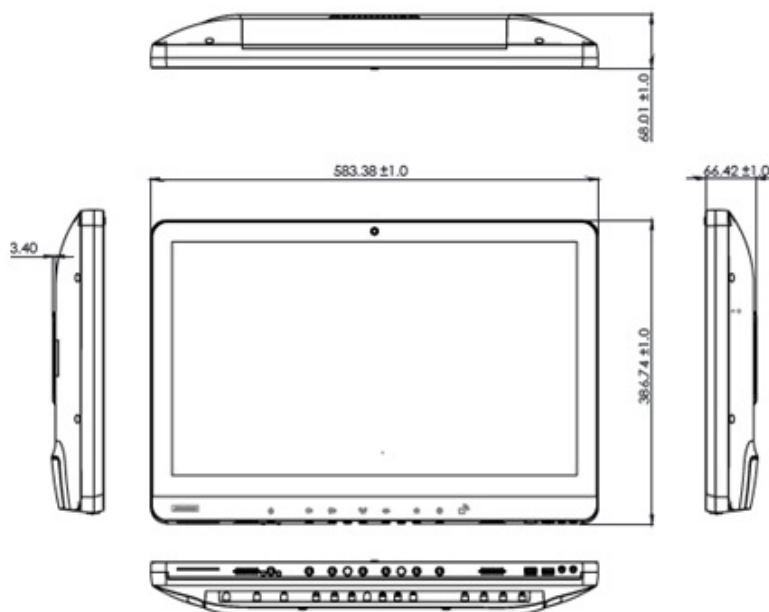


Figure 1.1 POC-624 Terminal

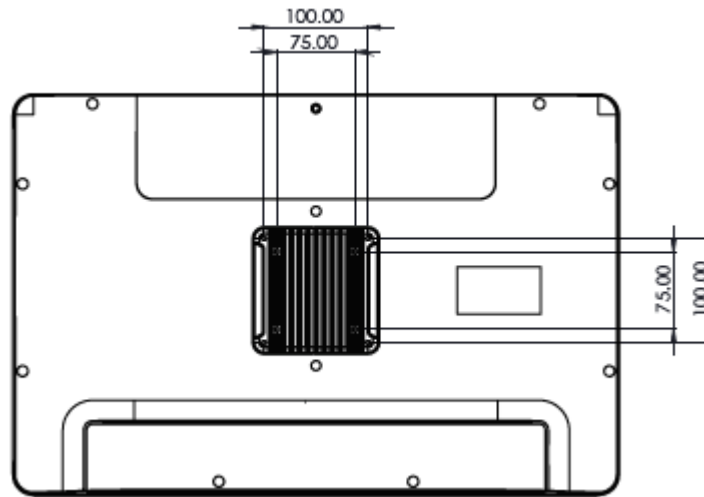
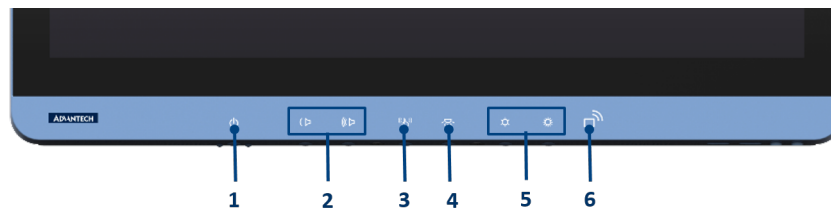


Figure 1.2 VESA Mount

VESA Mount: 75x75; 100x100

4 x M4 x 10L screws



- | | |
|---------------------------------|--------------------------|
| 1. Power | 2. Volume up/down |
| 3. Touchscreen status control | 4. Reading light control |
| 5. Brightness increase/decrease | 6. Smart card reader |

Figure 1.3 POC-624 Front Panel

1.3.1 Optional Modules

- **Memory:**
 - 2 x DDR4 SODIMM (up to 32 GB)
 - 2 x DDR4 SODIMM (up to 32 GB)
- **Primary Storage:** NVME (M2 2280, PCIe Interface) 2.5" SATA SSD
- **Wi-Fi and Bluetooth Module:** Intel® wireless-AC9260, dual-band wireless-AC 8265
- **RFID Module:** Optional (choose either RFID or smart card reader)
- **Smart Card:** Optional (choose either RFID or smart card reader)
- **Backup Battery:** Optional (choose either 1 x battery or PCIe x4)
- **Hot-Swappable Battery Pack:** Optional with 2 x batteries (choose either backup battery or hot-swappable battery module)
- **Camera:** 1 x 5-megapixel camera (optional)
- **Touchscreen:** Optional AR coating/AG etching

The above options may be mutually exclusive. Contact Advantech for more information.

1.3.2 Cleaning and Disinfecting

POC-624 terminals may become dirty during normal operation and thus should be cleaned regularly. Follow the steps below to clean the device.

Steps

1. Prepare water for cleaning.
2. Moisten a clean cloth with the water.
3. Wipe the surfaces of the terminal thoroughly with the moist cloth.

Caution! *Do not immerse or rinse the POC-624 terminal or peripherals. If liquid is accidentally spilled on the device, disconnect the device from all power sources. Contact your IT support department regarding the continued safety of the unit before placing it back in operation. Do not spray cleaning agents onto the chassis. Do not use disinfectants that contain phenol. Do not autoclave or clean the POC-624 terminal or peripherals with aromatic or chlorinated solvents, ketones, ether, or ether solvents, sharp tools, or abrasives. Never immerse electrical connectors in water or other liquids.*



N'immergez pas et ne rincez pas le POC-624 ou ses périphériques. Si vous accidentellement renverser du liquide sur l'appareil, débranchez l'appareil de l'alimentation la source. Contactez votre service de support informatique concernant la suite sécurité de l'appareil avant de le remettre en service-Ne pas vaporisez un produit de nettoyage sur le châssis. N'utilisez pas de désinfectants contenant du phénol. N'autoclavez pas et ne nettoyez pas le POC-624 ou ses périphériques avec solvants aromatiques, chlorés, cétoniques ou éthers, outils tranchants ou abrasifs. Ne plongez jamais les connecteurs électriques dans l'eau ou autre liquides.

1.4 Operating Principle

POC-624 supports data input via the touchscreen, physical keys, and accessories connected via USB or LAN/WLAN. The central processing unit processes the data and outputs the results to the LCD panel, accessories, or other devices connected via the I/O ports or LAN/WLAN. Data can be stored in the device storage. Thus, even when the device is powered off, the data is still maintained in storage memory.

1.5 Intended User Profile

- Age: 18 ~ 65 years
- Weight: Not relevant
- Health: Not relevant
- Nationality: Global
- Patient state: Patient will not be the operator
- Part of the body or type of tissue applied to or interacted with: Hands and fingers (expected contact time is less than 1 minute)
- Education level: At least 8 years of intensive reading experience (school)
- Knowledge:
 - Minimum – Can read and understand westernized Arabic numerals written in Arial font
 - Can distinguish every part of the body described in the user manual
 - Trained and authorized by the manufacturer

To be considered trained, installation personnel must complete the training course of the manufacturer; see document number POC-624 User Manual for qualification method. When considered necessary by the manufacturer, technicians may be called back for retraining. Annual training is also considered necessary.

- Language: English; when other languages are required, a professional translation company should be contracted and the resulting translation reviewed by the manufacturer.
- Experience: Mentally and physically competent; specific medical training for understanding basic symbols
- Permissible impairments:
 - Mild reading vision impairment or vision corrected to log MAR 0,2 (6/10 or 20/32)
 - At least one arm/hand capable of operating the device
 - Average degree of aging-related short-term memory impairment
 - Up to 40% hearing impairment, resulting in 60% of hearing capacity at 500 ~ 2 kHz

Chapter 2

System Setup

2.1 Quick Tour

Before setting up the POC-624 terminal, take a moment to familiarize yourself with the locations and functions of the controls, drives, connectors, and ports (refer to the figures below).

When placed upright on a desktop, the POC-624 front panel should appear as shown in Figure 2.1.

2.1.1 Front View

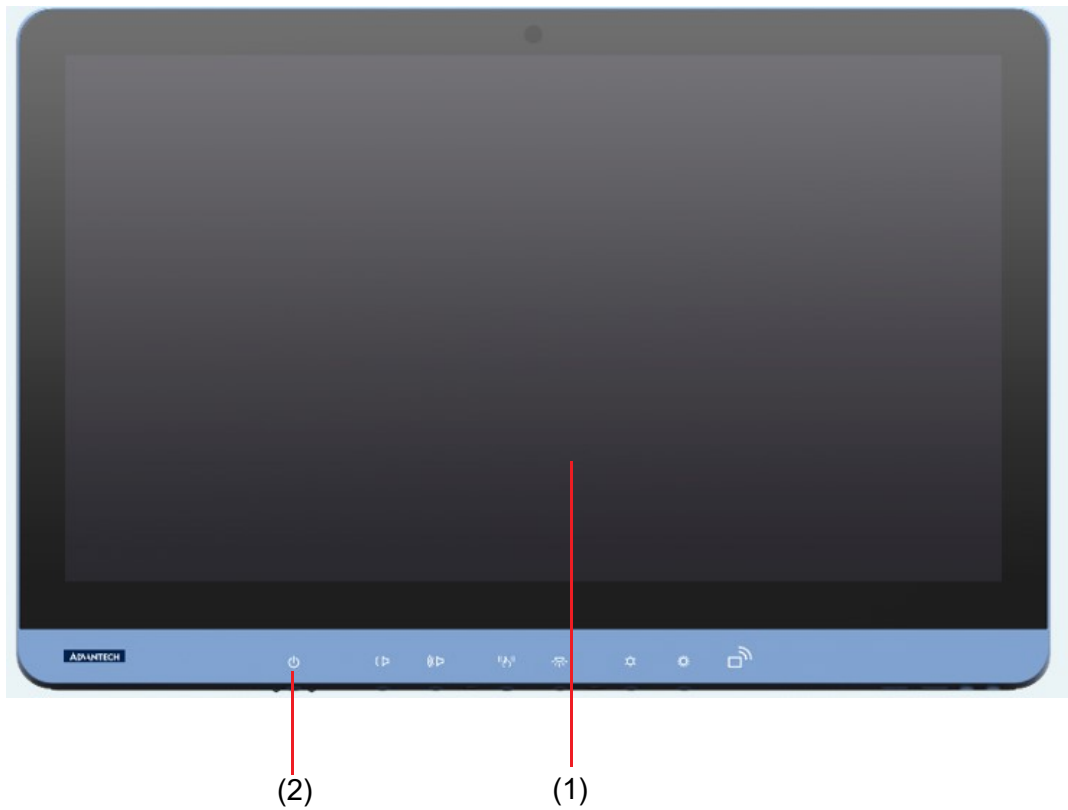


Figure 2.1 POC-624 Front View

Front View

- (1) LCD panel with touchscreen
- (2) Power LED indicator

2.1.2 Rear View

Located at the underside of the rear of the POC-624 terminal is the recessed I/O section, as shown in Figures 2.2 and 2.3. (The I/O section includes various I/O ports, including HDMI, Ethernet, USB, and serial ports.)

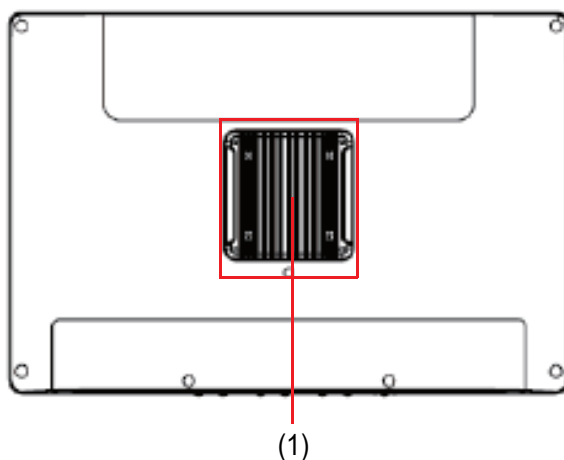


Figure 2.2 POC-624 Rear View

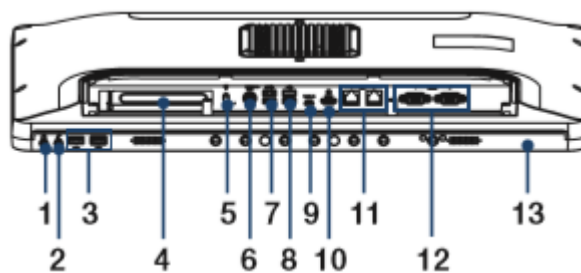


Figure 2.3 POC-624-11 Underside View

- | | |
|---|----------------------|
| 1. 1 x Headphones-Out | 2. 1 x Mic-In |
| 3. 2 x USB 2.0 | 4. 1 x PCIe x4 |
| 5. 1 x Equipotential terminal | 6. 1 x DC-In |
| 7. 2 x USB 3.2 (Type A) | 8. 2 x USB 2.0 |
| 9. 2 x USB 3.2 (Type C) | 10. 1 x HDMI |
| 11. 2 x Gigabit Ethernet | 12. 2 x COM (RS-232) |
| 13. 1 x Smart card reader/ 4kV isolation board (optional) | |

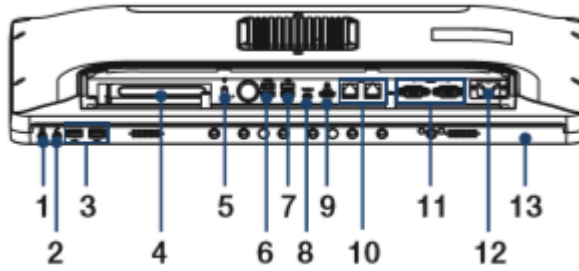


Figure 2.4 POC-624-01 Underside View

- | | |
|---|--------------------------|
| 1. Headphones-Out | 2. 1 x Mic-In |
| 3. 2 x USB 2.0 | 4. 1 x PCIe x4 |
| 5. 1 x Equipotential terminal | 6. 2 x USB 3.2 (Type A) |
| 7. 2 x USB 2.0 | 8. 1 x USB 3.2 (Type C) |
| 9. 1 x HDMI | 10. 2 x Gigabit Ethernet |
| 11. 2 x COM (RS-232) | 12. 1 x AC-In |
| 13. 1 x Smart card reader/ 4kV isolation board (optional) | |

Note! *The equipotential terminal must be linked to the hospital ground/earthing system before system boot up to protect the operator and device.*

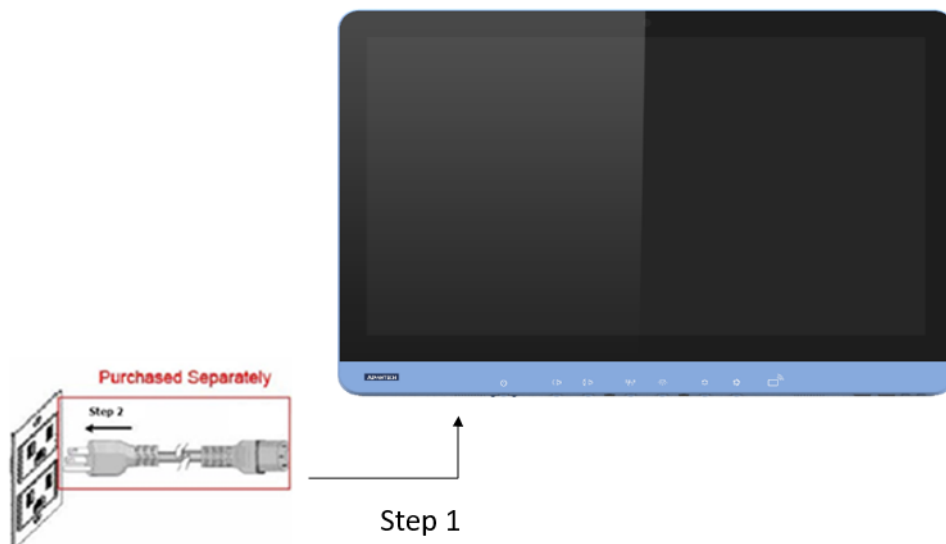


2.2 Installation Procedures

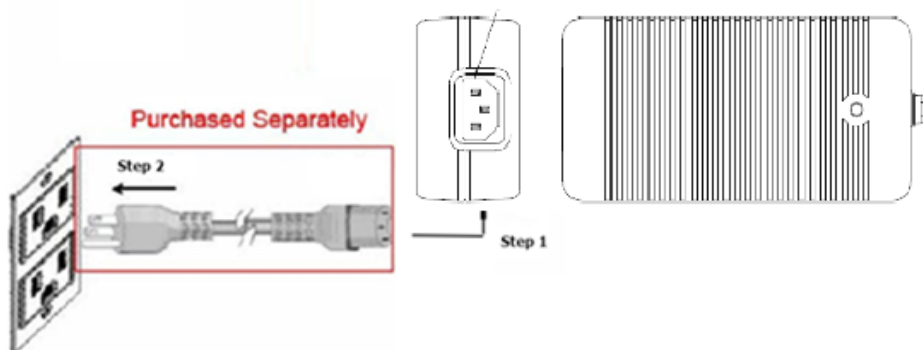
2.2.1 AC-In Power (for POC-624-01)

The POC-624-01 model should be powered by an internal AC power supply (Model Number: FSP150M-K24-18). When handling power cords, always hold them by the plug ends only.

1. Connect the female end of the power cord to the AC-In port.
2. Connect the 3-pin male plug of the power cord to an electrical outlet.



2.2.2 DC-In Power (for POC-624-11)



Connect the output of the AC adapter to the DC-In socket on the POC terminal.

Caution! The adapter output and DC-In plug have specific directions for use. Be sure to connect the adaptor correctly.



La prise DCIN de l'adaptateur a une direction spécifique. Veuillez aligner correctement la fiche et le connecteur DC-In..



Warning! Connecting the wrong cable to the DC-In socket may damage the POC terminal or adapter.



Le plugin Miss direction peut endommager le système POC ou l'adaptateur.

2.2.3 Ground Pin Connection

An equipotential terminal is provided to facilitate connection to the ground/earthing system.

1. On the underside of the POC-624 terminal, locate the equipotential terminal pin.

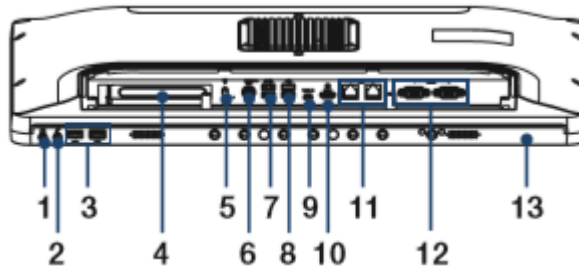


Figure 2.5 POC-624-11 Equipotential Terminal

- | | |
|--------------------------------------|----------------------|
| 1. 1 x Headphones-Out | 2. 1 x Mic-In |
| 3. 2 x USB 2.0 | 4. 1 x PCIe x4 |
| 5. 1 x Equipotential terminal | 6. 1 x DC-in |
| 7. 2 x USB 3.2 (Type A) | 8. 2 x USB 2.0 |
| 9. 1 x USB 3.2 (Type C) | 10. 1 x HDMI |
| 11. 2 x Gigabit Ethernet | 12. 2 x COM (RS-232) |
| 13. 1 x Smart card reader (optional) | |



Figure 2.6 POC-624-01 Equipotential Terminal

- | | |
|--------------------------------------|--------------------------|
| 1. 1 x Headphones-Out | 2. 1 x Mic-In |
| 3. 2 x USB 2.0 | 4. 1 x PCIe x4 |
| 5. 1 x Equipotential terminal | 6. 2 x USB 3.2 (Type A) |
| 7. 2 x USB 2.0 | 8. 1 x USB 3.2 (Type C) |
| 9. 1 x HDMI | 10. 2 x Gigabit Ethernet |
| 11. 2 x COM (RS-232) | 12. 1 x AC-In |
| 13. 1 x Smart card reader (optional) | |

2. Prepare the grounding cable by connecting one end to the hospital's ground/earthing system.



Figure 2.7 Grounding Cable with Connector

3. Connect the other side of the grounding cable to the equipotential terminal pin at the underside of POC-624 terminal.

2.3 BIOS Setup

Your POC-624 terminal was most likely setup and pre-configured by the vendor prior to delivery. However, you may still find it necessary to access the BIOS setup program to modify the system configuration data, such as the date and time or type of hard drive.

The BIOS utility is stored in read-only memory and can be accessed when the device is powered on by pressing <F2> or during boot up. The configuration settings are recorded in CMOS RAM. This memory is backed up by a battery to ensure it is retained when the system is powered off.

Upon boot up, the system reads the settings stored in CMOS RAM and compares the data to the results of the equipment check performed during the power on self-test (POST). If a discrepancy is identified, an error message will be displayed onscreen, and users will be prompted to run the setup program.

2.4 Software Installation

Recent releases of operating systems (OS) from major vendors include setup programs that load automatically and guide users through hard disk preparation and operating system installation. The information below provides instructions regarding OS installation on the system hard drive.

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



If OS installation is required, insert the installation or setup disk into the external disk drive. The BIOS utility supports system bootup directly from the Flash disk or via USB. Power on or reset the system, then press <F2> or to boot into the BIOS setup menu and adjust the boot device sequence. When <F12> is pressed during bootup, a popup menu appears with a list of bootable devices. Users can select the device for bootup. POC-624 terminals automatically load the OS driver from the Flash disk. However, if a setup or installation program menu is displayed on screen, follow the instructions provided. The setup program will guide you through hard drive preparation and OS installation.

2.5 Driver Installation

After installing the system software, users can install the chipset, graphics, Ethernet, audio, and touchscreen drivers. The standard procedures for installing the drivers are described in Chapter 5.

The various drivers and utilities on the CD-ROM disk are accompanied by text files that provide driver installation instructions and function descriptions. Those files are a useful supplement to the information provided in this manual. Additionally, all drivers can be downloaded from the Advantech website.

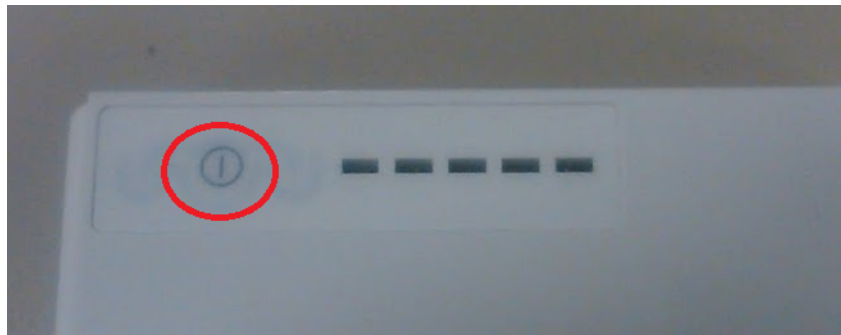
2.6 Troubleshooting

If the POC-624 terminal is malfunctioning or does not operate according to the user manual, reference the sections below to troubleshoot the issue.

2.6.1 Power On Failure

Pressing the power button fails to activate the device (the power indicator does not light up).

1. Check that the adapter and DC-In port are properly connected.
2. Check that the adapter is plugged into the DC-In port in the correct direction.
3. Check that the power cord is properly plugged into the adapter.
4. Check that the power cord is properly plugged into the power supply socket.
5. If the device is in battery mode, check that the battery is properly installed and charged. (To check the battery capacity, remove the battery pack from the device and press the capacity indicator button.)



The illuminated LEDs represent the remaining battery capacity.

| | State of Charge |
|-----------|-------------------|
| LED Green | Current (I)>0 |
| LED1 | 0% ~ 20% |
| LED2 | 0% ~ 40% |
| LED3 | 0% ~ 60% |
| LED4 | 0% ~ 80% |
| LED5 | 0% ~ 100% |

2.6.2 Adapter Power LED Off

The power LED indicator on the adapter fails to light up.

1. Check that the power cord is properly plugged into the adapter properly.
1. Check that the power cord is properly plugged into the power supply socket.

2.6.3 System Fails to Boot Into Windows

The POC-624 terminal is powered on, but fails to boot into Windows.

1. Check that the Windows OS is properly installed.
2. Check that the BIOS boot order is properly configured. If not, configure the device boot up settings in the BIOS following the steps below.
 - a) After powering on the device, press “Del” to access the BIOS Utility.
 - b) In Boot Option #1, select “Windows Boot Manager (storage name)” and configure the settings.
 - c) Save changes and reset the device.

2.6.4 Power Indicator Is On But System Fails to Power On

Both the adapter power indicator and POC-624 terminal power indicator are emitting a green light, indicating that they are powered on. Yet the device fails to power on. Please contact Advantech’s customer service for technical support.

2.6.5 Battery Charging Failure

1. Check that the battery pack is properly installed. Push the battery pack into the battery slot to ensure that it is firmly inserted.
2. Check that the adapter cable is properly connected to the DC-In port.
3. The battery capacity must be less than 98% to initiate charging. This design prevents frequent overcharging. If the battery capacity exceeds this amount, the battery will not charge.

2.6.6 Technical Support

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 calling:

- 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
- Event logs, images, or video evidence of the symptoms (if available)

2.7 EMC Declaration

Guidance and Manufacturer's Declaration – Electromagnetic Emissions

| POC-624 series terminals are intended for use in electromagnetic environments as specified below. The customer or user of a POC-624 terminal should ensure that it is used in such an environment. | | |
|--|------------------------|--|
| Emissions Test | Compliance | Electromagnetic Environmental Guidance |
| RF emissions CISPR 11 | Group 1 | POC-624 series terminals use RF energy only for internal function. Therefore, the RF emissions are very low and unlikely to cause interference for nearby electronic equipment. |
| RF emissions CISPR 11 | Class B | POC-624 series terminals are suitable for use in all establishments, including domestic establishments and those directly connected to the public low-voltage power supply network that supplies buildings used for domestic purposes. |
| Harmonic emissions IEC 61000-3-2 | Class D | |
| Voltage fluctuations/ flicker emissions IEC 61000-3-3 | Meets the requirements | |

Recommended Separation Distances Between Portable and Mobile RF Communications Equipment and POC-624 Series Terminals

| POC-624 series terminals are intended for use in electromagnetic environments where radiated RF disturbances are controlled. The customer or user of a POC-624 terminal can help prevent electromagnetic interference by maintaining a minimum distance between portable and mobile RF communications equipment (transmitters) and the POC-624 terminal, as recommended below, according to the maximum output power of the communications equipment. | | | |
|---|---|---|--|
| Rated Maximum Output Power of Transmitter W | Separation Distance According to Frequency of Transmitter m | | |
| | 150 kHz to 80 MHz $d = 1,2 \sqrt{P}$ | 80 MHz to 800 MHz $d = 1,2 \sqrt{P}$ | 800 MHz to 2,5 GHz $d = 2,3 \sqrt{P}$ |
| 0,01 | 0,12 | 0,12 | 0,23 |
| 0,1 | 0,38 | 0,38 | 0,73 |
| 1 | 1,2 | 1,2 | 2,3 |
| 10 | 3,8 | 3,8 | 7,3 |
| 100 | 12 | 12 | 23 |
| For transmitters rated at a maximum output power not listed above, the recommended separation distance d in meters (m) can be estimated using the equation in the table above applicable to the frequency of the transmitter, where P is the maximum output power rating of the transmitter in watts (W) according to the transmitter manufacturer. | | | |
| Note 1: At 80 MHz and 800 MHz, the separation distance for the higher frequency range applies. | | | |
| Note 2: These guidelines may not apply in all situations. Electromagnetic propagation is affected by absorption and reflection from structures, objects and people. | | | |

Guidance and Manufacturer's Declaration – Electromagnetic Immunity


POC-624 series terminals are intended for use in the electromagnetic environment specified below. The customer or user of a POC-624 terminal should ensure that it is used in such an environment.

| Immunity Test | IEC 60601 Test Level | Compliance Level | Electromagnetic Environmental Guidance |
|--|--|--|---|
| Electrostatic dis-charge (ESD) IEC 61000-4-2 | ±8 kV contact ±15 kV air | ±8 kV contact ±15 kV air | Floors should be wood, concrete or ceramic tile. If floors are covered with synthetic material, the relative humidity should be at least 30%. |
| Electrical fast transient/burst IEC 61000-4-4 | ±2 kV for power supply lines ±1 kV for input/output lines | ±2 kV for power supply lines ±1 kV for input/output lines | Main power quality should be that of a typical commercial or hospital environment. |
| Surge IEC 61000-4-5 | ±1 kV line(s) to line(s) ±2 kV line(s) to earth | ±1 kV line(s) to line(s) ±2 kV line(s) to earth | Main power quality should be that of a typical commercial or hospital environment. |
| Interruptions and voltage variations on power supply input lines IEC 61000-4-11 | Voltage Dips 0% reduction for 0.5/1 cycle at 50Hz 70% reduction for 25/30 cycle at 50/60Hz Voltage Interruptions 0% reduction for 250/300 cycle at 50/60Hz | Voltage Dips 0% reduction for 0.5/1 cycle at 50Hz 70% reduction for 25/30 cycle at 50/60Hz Voltage Interruptions 0% reduction for 250/300 cycle at 50/60Hz | Main power quality should be that of a typical commercial or hospital environment. If the user of a POC-624 terminal requires continued operation during mains power interruption, we recommend powering the POC-624 terminal via an uninterruptable power supply or battery. |
| Power frequency (50/60 Hz) magnetic field IEC 61000-4-8 | 30 A/m | 30 A/m | Power frequency magnetic fields should be at levels characteristic of a typical location in a typical commercial or hospital environment. |

Note: *UT* is the A.C. main voltage prior to application of the test level.

Guidance and Manufacturer's Declaration – Electromagnetic Immunity

POC-624 series terminals are intended for use in the electromagnetic environment specified below. The customer or user of a POC-624 terminal should ensure that it is used in such an environment.

| Immunity test | IEC 60601 Test Level | Compliance Level | Electromagnetic Environmental Guidance |
|-------------------------------|---|---|--|
| Conducted RF IEC 61000-4-6 | 3 and 6 Vrms 150 kHz ~ 80 MHz and specific ISM, AM frequency | 3 and 6 Vrms 150 kHz ~ 80 MHz and specific ISM, AM frequency | Portable and mobile RF communications equipment should be used no closer to any part of a POC-624 terminal, including cables, than the recommended separation distance calculated from the equation applicable to the frequency of the transmitter. Recommended Separation Distance $d = 1,2 \sqrt{P}$ $d = 1,2 \sqrt{P}$ 80 ~ 800 MHz $d = 2,3 \sqrt{P}$ 800 MHz ~ 2,5 GHz where P is the maximum output power rating of the transmitter in watts (W) according to the transmitter manufacturer and d is the recommended separation distance in meters (m). |
| Radiated RF IEC 61000-4-3 | 3V/m 80 MHz ~ 2.7 GHz, and specific frequency | 3V/m 80 MHz ~ 2.7 GHz, and specific frequency | Field strengths from fixed RF transmitters, as determined by an electromagnetic site survey, ^a should be less than the compliance level in each frequency range. ^b Interference may occur in the vicinity of equipment marked with the following symbol:  |

Note 1: At 80 MHz and 800 MHz, the higher frequency range applies.

Note 2: These guidelines may not apply in all situations. Electromagnetic propagation is affected by absorption and reflection from structures, objects and people.

a. Field strengths from fixed transmitters, such as base stations for radio (cellular/cordless) telephones and land mobile radios, amateur radio, AM and FM radio broadcasts, and TV broadcasts cannot be predicted theoretically with accuracy. To assess the electromagnetic environment due to fixed RF transmitters, an electromagnetic site survey should be considered. If the measured field strength in the location in which the POC-624 terminal is used exceeds the applicable RF compliance level above, the POC-624 terminal should be observed to verify normal operation. If abnormal performance is observed, additional measures may be necessary, such as reorienting or relocating the unit.

b. Over the frequency range of 150 kHz ~ 80 MHz, field strengths should be less than 3 V/m.

Chapter 3

Operation and Safety

3.1 General Safety Guide

To ensure user safety and prevent equipment damage, always disconnect the power (by pulling the plug, not the cord) and remove the battery pack from the POC terminal in the following situations:

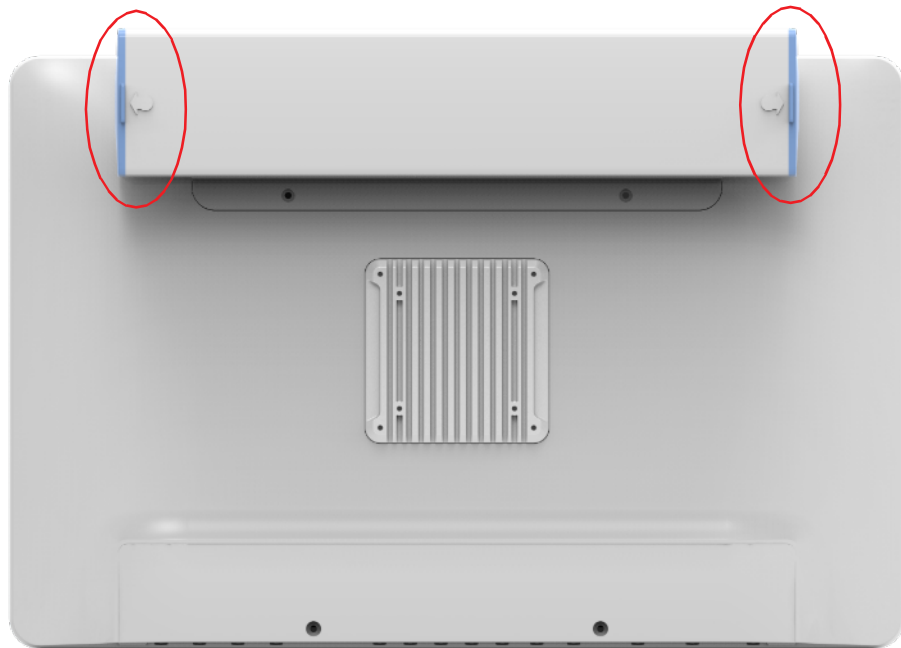
- The power cord or plug is frayed or otherwise damaged.
- Any substance is spilled onto the POC terminal.
- The POC terminal has been dropped or the case has been damaged.
- The POC terminal needs servicing or repair.
- The POC terminal needs to be cleaned.
- Any internal parts need to be installed or removed (excluding the hot-swappable battery pack).

3.2 Hot-Swappable Battery Module

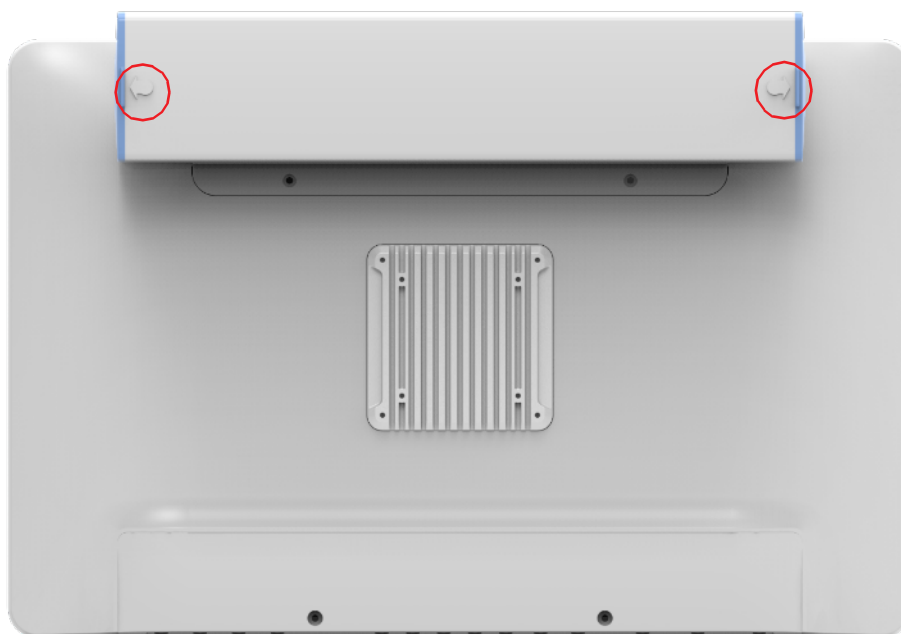
To ensure convenient operation, POC-624 series terminals also support an optional hot-swappable battery module (Part Number: POC-624-BAT-201-62), in which two battery packs can be installed.

3.3 Battery Pack Installation

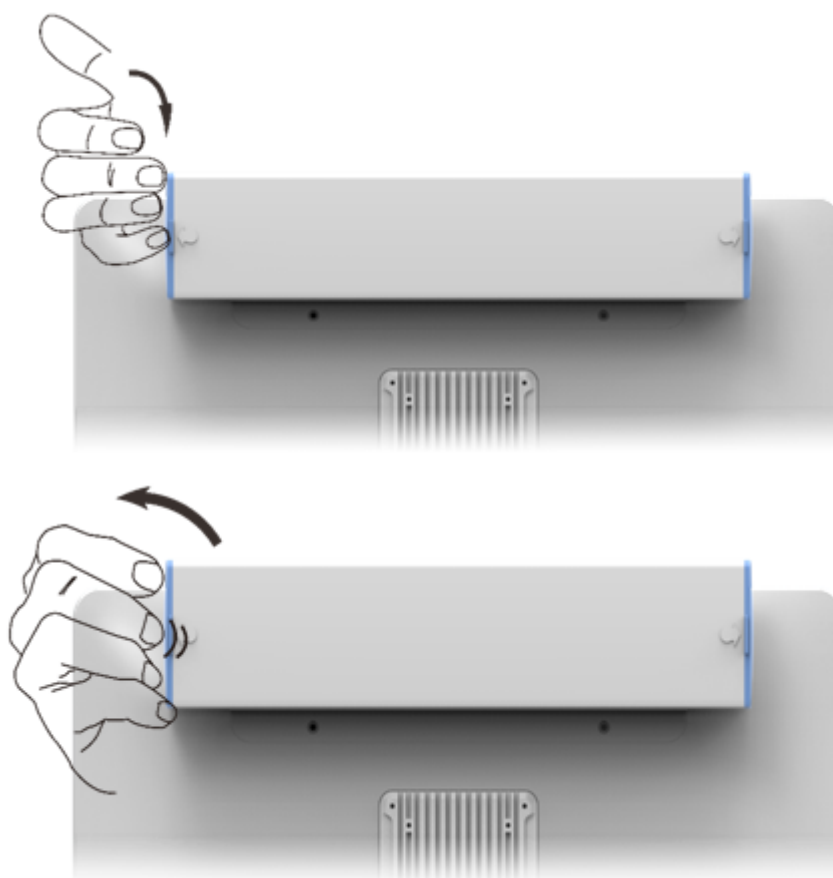
1. Locate the blue doors (circled in red below) on either side of the battery module at the rear of the POC terminal.



2. Locate the arrow push buttons next to the blue doors.



3. Press the arrow push buttons and pull open the doors to access the battery module slot.



4. Insert the battery pack into the battery module. The module opening and battery packs feature notches (circled in red below) that indicate the correct installation direction.



Caution! We recommend holding the battery pack with both hands when installing it into the battery module.



Nous vous recommandons de tenir la batterie à deux mains lors de son installation dans le module de batterie.

5. Close the battery module door and press firmly until an audible “click” is heard to ensure that the door is securely closed.



Warning! If the module doors are not securely closed, the battery may fall out.

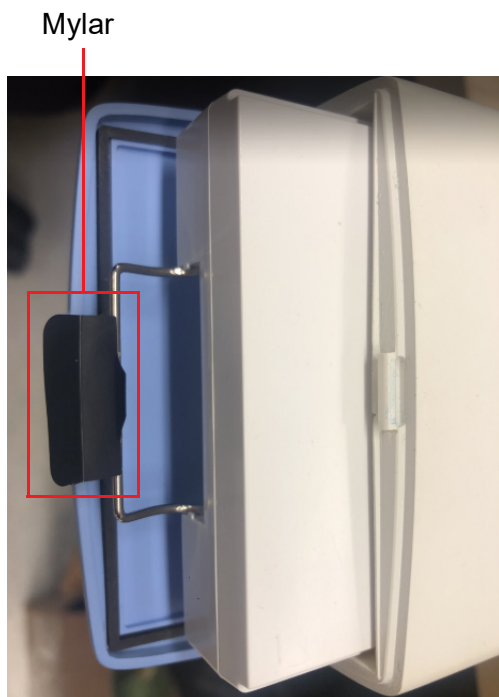


Si les portes du module ne sont pas correctement fermées, la batterie peut tomber.

Caution! *Ensure that the mylar and pull ring (indicated in the image below) are returned to their original position (flat against the battery) before closing the door.*



Placez l'anneau de traction et le mylar (indiqués dans l'image ci-dessous) à plat dans leur position d'origine (à plat contre la batterie) avant de fermer la porte.



3.4 Thermal Management

The POC-624 terminal cover features vent holes that function as air inlets and outlets that transfer heat from inside the equipment to the cooler air outside. Do not block the holes/vents with any material.

During operation, it is normal for the metal heatsink at the rear of the device to become warm. The metal heatsink functions as a cooling surface that transfers heat from inside the equipment to the cooler air outside. Do not block the heatsink with any material.

To protect the battery pack from overheating, use/charge the battery in accordance with the instructions provided in this user manual.

Warning!



1. *Temperatures that are too high or too low may damage the battery.*
2. *If the temperature is too high or too low, the battery may fail to charge. Batteries may resume charging when the temperature returns to the acceptable range.*
3. *Do not place the POC-615 terminal on a pillow or other soft material when powered on, as the material may block airflow and cause the system to overheat.*
4. *Des températures trop élevées ou trop basses peuvent endommager la batterie.*
5. *Si la température est trop élevée ou trop basse, vos batteries peuvent arrêter la charge. La batterie peut redémarrer la charge lorsque sa température revient à une température spécifique.*
6. *Ne placez pas votre système POC-615 sur un oreiller ou un autre matériau souple lorsqu'il est allumé, car le matériau peut bloquer le flux d'air et provoquer une surchauffe du système.*

3.5 Disconnect the Power

The only way to disconnect the power completely is to unplug the power cable. When using the device, ensure that at least one end of the power cable is within easy reach to allow for unplugging if necessary.

Warning!



The AC power cable is equipped with a 3-wire grounding plug (the plug has a third grounding pin). This plug will only fit a grounded AC outlet. If you are unable to insert the plug into an outlet because the outlet is not grounded, contact a licensed electrician to replace the outlet with a properly grounded outlet. Do not try to get around this or you will defeat the purpose of the grounding plug.

Votre cordon d'alimentation est équipé d'une fiche de mise à la terre à trois fils (une fiche qui a une troisième broche de mise à la terre). Cette fiche s'adapte uniquement à une prise secteur mise à la terre. Si vous ne parvenez pas à insérer la fiche dans une prise parce que la prise n'est pas mise à la terre, contactez un électricien agréé pour remplacer la prise par une prise correctement mise à la terre. Ne supprimez pas la fonction de la fiche de mise à la terre.

Warning! *Never push objects through the openings in the case into the device as this may cause fire or electric shock.*



Never place anything on the case before powering off the device.

Never power on the device if any of the internal or external parts have been removed. Operating the device when open or missing parts can be dangerous and may damage your computer.

Ne poussez jamais d'objets d'aucune sorte dans ce produit à travers les ouvertures du boîtier. Cela pourrait être dangereux et entraîner un incendie ou un choc électrique dangereux.

Ne placez jamais rien sur le boîtier du système avant d'éteindre l'ordinateur.

N'allumez jamais votre ordinateur tant que toutes ses pièces internes et externes ne sont pas en place. Faire fonctionner l'ordinateur lorsqu'il est ouvert ou qu'il manque des pièces peut être dangereux et peut endommager votre ordinateur.

3.6 Proper Handling

Handle the POC terminal with care. The device is made of metal, glass, and plastic and contains sensitive electronic components. Because the POC-624 terminal is heavy, we recommend using both hands when carrying the device. We also recommend using both hands when installing, removing, or replacing a battery pack.

Warning! *Do not attempt to use the POC-624 terminal if it is damaged (for example, the case is cracked or broken) as this may cause injury.*



N'essayez pas d'utiliser le système POC-624 s'il est endommagé (par exemple, le boîtier est fissuré ou cassé) car cela pourrait provoquer des blessures.

Caution! 1. *Setup and install the POC-624 terminal on a stable surface.*



2. *Do not push objects into the ventilation openings.*

1. *Configurez et installez le système POC-624 sur une surface de travail stable.*

2. *Ne poussez pas d'objets dans les ouvertures de ventilation.*

3.7 Battery Warnings

Read all safety instructions and warnings before using or charging the battery.

Warning! *Li-ion battery packs may explode and cause fire if defective or used incorrectly. To prevent this from happening, follow all usage instructions and safety guidelines provided in this user manual.*



Les batteries Li-ion peuvent exploser et provoquer un incendie si elles sont défectueuses ou mal utilisées. Pour éviter que cela ne se produise, suivez toutes les instructions d'utilisation et les consignes de sécurité fournies dans ce manuel d'utilisation.

Caution! 1. *Removal of the battery pack and unplugging of the power adapter will cause the POC-624 terminal to shut down, which may result in data losses. To prevent data losses, always save your work and shut down the POC-624 terminal before removing the battery or power adapter.*




1. *Lithium batteries have a predetermined lifespan. Replace old batteries with new batteries when they have reached the end of their service life (the warranty is for 1 year or 300 cycles with 70% capacity, whichever occurs first).*

1. *Le retrait de la batterie du système POC-624 et le débranchement de l'adaptateur secteur entraîneront l'arrêt du système POC-624 connecté, ce qui peut entraîner des pertes de données. Pour éviter la perte d'informations, enregistrez toujours votre travail et arrêtez le système POC-624 via le système d'exploitation Windows avant de retirer la batterie ou l'adaptateur secteur.*


1. *Les batteries au lithium ont une durée de vie prédéterminée. Remplacez les vieilles piles par des piles neuves lorsqu'elles ont atteint la fin de leur durée de vie (la garantie est de 1 an ou 300 cycles avec 70% de capacité normale, selon ce qui survient en premier).*

3.8 Battery Safety


1. The POC terminal should only be powered by an Advantech battery pack or compatible battery pack supplied by Advantech.

- Warning!**
1. Do not insert non-Advantech battery packs into the POC terminal.
 2. Do not attempt to use battery packs of a different brand.
- 
1. N'insérez pas de blocs-batteries non Advantech dans le système POC.
 2. N'essayez pas d'utiliser des batteries d'une marque différente.


3. Be careful not to make the wrong polarity connection when charging and using battery packs. Always double check the battery installation direction before insertion or connection with the charger.

- Warning!** Batteries installed in the wrong direction with the opposite polarity are at risk of exploding, which may cause fire.
-  Les batteries installées dans le mauvais sens avec la polarité opposée risquent d'exploser, ce qui peut provoquer un incendie.


4. Use only the specific li-ion battery charger provided by Advantech to charge the battery pack.

- Warning!** Using a battery charger of a different brand may cause the battery to explode and result in fire.
-  L'utilisation d'un chargeur de batterie d'une marque différente peut entraîner la explosion et provoquer un incendie.


5. Do not short the battery pack connector by using a wire lead.

- Warning!** Wire lead shorts can cause the battery to explode and result in fire.
-  Les courts-circuits du fil peuvent provoquer l'explosion de la batterie et provoquer un incendie.

6. Do not drop the battery pack.

- Warning!** If the battery cover is cracked, split, or broken, do not use the battery.
-  Si le couvercle de la batterie est fissuré, fendu ou cassé, n'utilisez pas la batterie.

7. Do not expose the battery pack to fire or high temperatures.

- Warning!** Exposure to high temperatures may cause the battery to explode.
-  L'exposition à des températures élevées peut provoquer l'explosion de la batterie.

8. Do not penetrate the battery with nails, strike the battery with a hammer, step on the battery, or otherwise subject it to significant impact or shock.

Warning! *Batteries are at risk of exploding and may cause fire if subjected to significant impact.*



Les batteries risquent d'exploser et de provoquer un incendie si elles sont soumises à impact significatif.

9. Do not expose the battery pack to moisture or water.
10. Do not disassemble or modify the battery pack. The battery pack contains safety and protection circuits that if damaged, may cause the battery to overheat, explode, or ignite. There are no user-serviceable parts inside the battery pack.
11. Always refer to the battery charger user manual for charging instructions.
12. Charge the battery pack in indoor environments with a controlled temperature.

Caution! *Exposure to extreme temperatures can damage the battery and reduce the battery life capacity.*



L'exposition à des températures extrêmes peut endommager la batterie et réduire la capacité de la batterie.

13. Do not leave fully charged battery packs connected to the charger for prolonged periods of time.

Caution! *When the battery is fully recharged, disconnect it from the charger or unplug the charger power cable.*



Lorsque la batterie est complètement rechargée, déconnectez-la de l'ordinateur ou débranchez le câble d'alimentation.

14. Do not discharge the battery pack using any device other than the POC terminal or a device specified by Advantech.

Warning! *Using the battery pack to power devices other than the POC-624 terminal may damage the battery, limit performance, or reduce the battery capacity. Additionally, exposure to abnormal current may cause the battery pack to overheat, explode, or ignite and cause serious injury.*



L'utilisation de la batterie pour alimenter des appareils autres que le système POC-624 peut endommager la batterie, limiter les performances ou réduire la durée de vie de la batterie. De plus, une exposition à un courant anormal peut entraîner une surchauffe, une explosion ou une inflammation de la batterie, entraînant des blessures graves.


15. Use/discharge the battery pack in indoor environments where the temperature is controlled.

Caution! *Using the battery in environments with temperatures outside the acceptable range may damage the battery, limit performance, or reduce the battery capacity.*




L'utilisation de la batterie dans des environnements avec des températures en dehors de la plage acceptable peut endommager la batterie, limiter les performances ou réduire la durée de vie de la batterie.

16. Inspect all battery packs before use.

- Warning!**
- 
1. *Never use battery packs that are visibly damaged or that may be internally damaged.*
 2. *Never remove a battery cover or use a battery pack with a damaged cover.*
1. *N'utilisez jamais de blocs-piles visiblement endommagés ou dommagés internes.*
 2. *Ne retirez jamais le couvercle extérieur de la batterie et n'utilisez jamais de batterie avec un couverture endommagée.*


16. Replace the entire battery pack with a new battery pack when the time between charges decreases significantly.

- Caution!**
- 
- When the time between charges decreases significantly, check the voltage of the battery pack before charging. If the battery performance drop significantly, do not use the battery pack.*
- Lorsque le temps entre les charges diminue considérablement, vérifiez la tension de la batterie avant de la charger. Si les performances de la batterie diminuent considérablement, veuillez ne pas utiliser cette batterie.*

3.9 Emergency Scenarios

If you notice any of the following, stop charging or using the battery immediately:

1. The battery is swollen, bulging, or deformed.
2. The battery is leaking fluid, smoke, or a foul odor.
3. The battery temperature is extremely hot.
4. The battery appears abnormal in any way.
5. The battery cover is cracked, split, or broken.
6. The battery has been exposed to moisture.

- Warning!**
- 
1. *If any of the above conditions are observed, place the battery pack and charger outside on a concrete floor, away from any flammable materials, for approximately 15 minutes and contact Advantech. Do not attempt to reuse the battery pack.*
 2. *In the event that the battery is leaking and the fluid gets into your eye, rinse well with water and seek immediate medical care. If left untreated, exposure to battery fluid may damage your eye.*
1. *Si l'une des conditions ci-dessus est observée, placez la batterie et le chargeur à l'extérieur sur un sol en béton, à l'écart de tout matériau inflammable pendant environ 15 minutes et contactez Advantech. N'essayez pas de réutiliser la batterie.*
 2. *Si la pile fuit et que le liquide pénètre dans vos yeux, rincez abondamment à l'eau et consultez immédiatement un médecin. Si elle n'est pas traitée, l'exposition au liquide de la batterie peut endommager vos yeux.*

3.10 Battery Storage and Transportation

1. Store the battery in a dry environment with a room temperature of 0 ~ 25 °C (32 ~ 77 °F) for optimum health.
2. Do not expose the battery pack to direct sunlight (heat) or store the battery pack inside vehicles in hot weather for extended periods.
3. When transporting or temporarily storing the battery in a vehicle, the internal vehicle temperature should be greater than -20 °C (-4 °F) but no more than 50 °C (122 °F).
4. If possible, remove the battery pack from the device if the device will be unused for several months.
5. Do not remove individual battery packs from the original packaging until required for use.

Warning! *To reduce the risk of damage, do not expose battery packs to high temperatures for extended periods of time. This may damage the battery and cause fire.*



Pour réduire le risque de dommages, n'exposez pas les batteries à des températures élevées pendant des périodes prolongées. Cela pourrait endommager la batterie et provoquer un incendie.

Caution! 1. *Stored batteries should be checked every 3 months. If the capacity is less than 50%, recharge the battery before returning it to storage.*



2. *Batteries may leak if left in the device for extended periods of time. After long periods of storage, check the battery pack before charging.*

1. *Les batteries stockées doivent être vérifiées tous les 3 mois. Si la capacité est inférieure à 50%, rechargez la batterie avant de la remettre en stockage.*

2. *Les piles peuvent fuir si elles sont laissées dans l'appareil pendant de longues périodes. Après de longues périodes de stockage, vérifiez la batterie avant de la charger.*

3.11 Battery Disposal

When the battery pack has reached the end of its service life, do not use general household waste for disposal. Follow local laws and government regulations for correct battery disposal.

Caution! *Cover terminals with tape to prevent inadvertent contact with other batteries or metal objects.*



Couvrez les bornes avec du ruban adhésif pour éviter tout contact accidentel avec d'autres batteries ou des objets métalliques.

Warning! 1. *To reduce the risk of fire or burns, do not disassemble, crush, puncture, expose to fire or water, or short the battery's external contacts.*



2. *Used batteries may still have a partial charge. If partially charged batteries come into contact with other batteries or metal objects, the remaining stored energy may be discharged and cause a fire or explosion.*

1. *Pour réduire le risque d'incendie ou de brûlure, ne démontez pas, n'écrasez pas, ne percez pas, n'exposez pas au feu ou à l'eau, et ne court-circuitiez pas les contacts externes de la batterie.*

2. *Les batteries usagées peuvent encore avoir une charge partielle. Si des batteries partiellement chargées entrent en contact avec d'autres batteries ou des objets métalliques, l'énergie stockée restante peut être déchargée et provoquer un incendie ou une explosion.*

Chapter 4

VESA Mounting

4.1 VESA Mount Installation

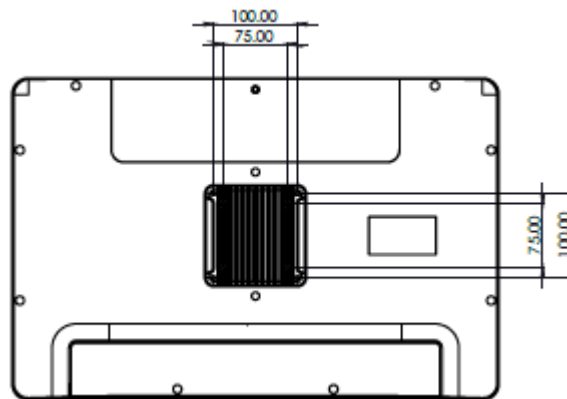
The POC-624 series terminals support VESA mounting, allowing system integrators to conveniently integrate the device into various computing infrastructures. To prevent unreliable and dangerous mounting, only use mount brackets provided by Advantech. Additionally, we recommend that mount installation be conducted by a qualified service technician according to the instructions provided below.

1. Attach the wall mount to the heatsink of the POC terminal, securing it in place with the four Phillips-head screws provided.
2. Mount the unit onto a wall, stand, or other flat surface.

Warning! *Secure the screws of the mount bracket tightly. A loose joint between the POC-624 terminal and mount bracket may cause the device to fall and result in injury.*



Assurez-vous de bien fixer les vis du support de montage. Un joint desserré entre la série POC-624 et le support de montage peut créer un risque de blessure.



Chapter 5

Driver Installation

The POC-624 series terminals support the Windows 10 IoT (64 bit), RS5 version or later, operating system. However, the 32-bit driver is no longer supported.

Warning! Conduct a clean installation of the OS before installing the drivers to avoid unexpected errors.



Veillez utiliser un système d'exploitation propre pour installer le pilote, sinon cela pourrait provoquer une erreur inattendue.

5.1 Windows Driver List

Install the correct drivers that are compatible with the OS version you are using.

Drivers should be installed according to the order listed below.

| Installation Order | Folder Name | Note |
|--------------------|-----------------------------------|---|
| 1 | Chipset | Install the chipset driver first. |
| 2 | Graphics | Because the Intel Graphics Command Center (IGCC) is no longer combined with the driver, after installing the graphics driver, install IGCC from PowerShell. |
| 3 | Audio | |
| 4 | LAN | |
| 5 | AMT | Intel Management Engine Driver |
| 6 | RST | Intel Rapid Storage Technology |
| 7 | Wireless Card (Wi-Fi + Bluetooth) | Optional |
| 8 | RFID | Optional |
| 9 | Smart Card | Optional |

Chapter 6

PCM-8722 Connector Map

The POC-624 series terminals feature a PCM-8722 printed circuit board assembly.

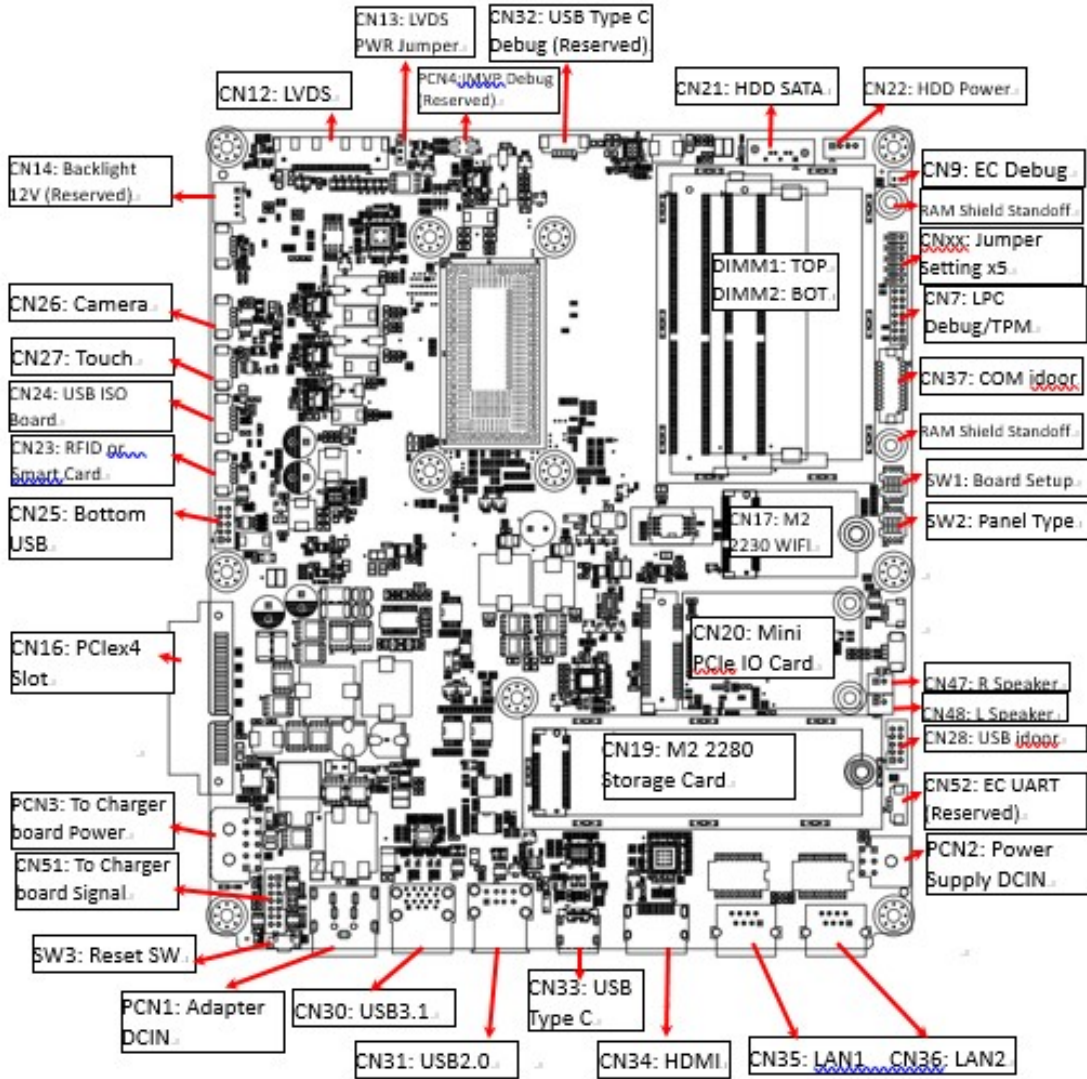


Figure 6.1 Motherboard Top Side View

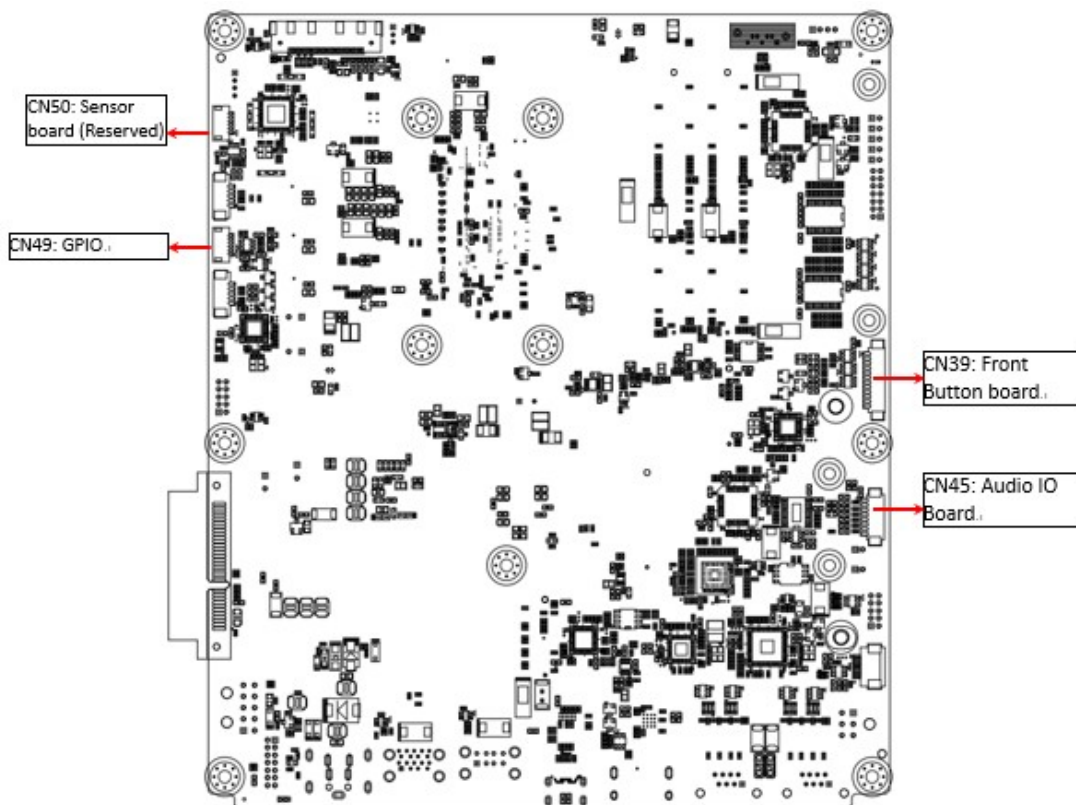


Figure 6.2 Motherboard Bottom Side View

Chapter 7

PCM-8722 Jumper Settings

The POC-624 series terminals feature a PCM-8722 printed circuit board assembly. All jumpers and DIP switches are located on the top side of the motherboard.

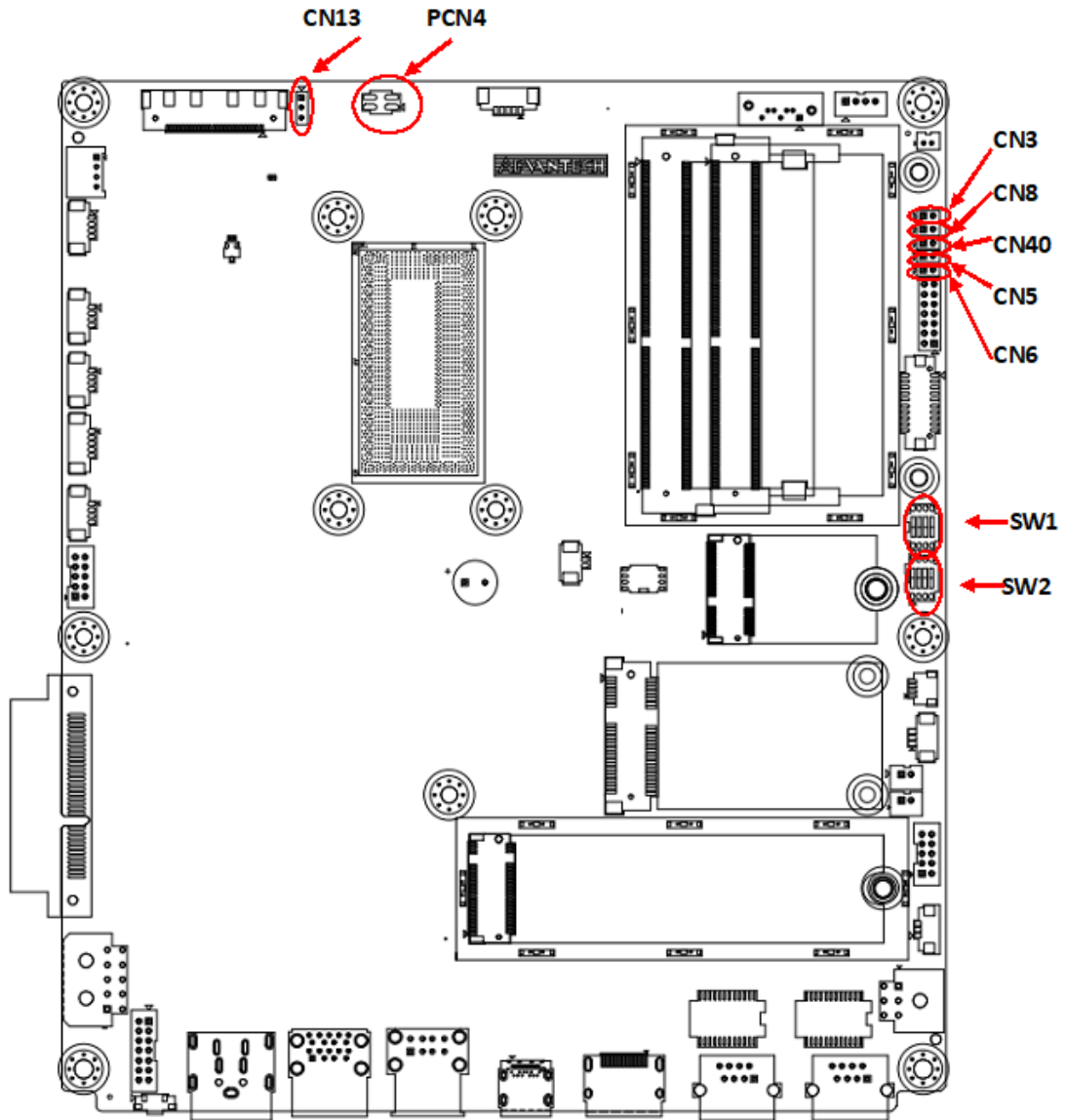
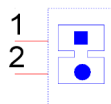


Figure 7.1 Motherboard Top Side

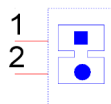
Jumper Settings

| | |
|------|---|
| CN3 | ME Manufacturing Mode |
| CN5 | Clear CMOS |
| CN6 | Clear ME (reserved, not installed) |
| CN8 | System Reset (reserved, not installed) |
| CN13 | LVDS Voltage |
| CN40 | Power Button (reserved, internal test only) |
| PCN4 | Power Debug (reserved) |
| SW1 | Board Setup |
| SW2 | Panel Setup |

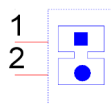
| | |
|-----------------|------------------------------|
| CN3 | ME Manufacturing Mode |
| Description | ME manufacturing mode |
| Setting | Function |
| (1-2) | ME manufacturing mode |
| (Not connected) | Normal operation (default) |



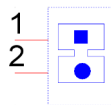
| | |
|-----------------|----------------------------|
| CN5 | Clear CMOS |
| Description | Clear CMOS setup |
| Setting | Function |
| (1-2) | Clear CMOS setup |
| (Not connected) | Normal operation (default) |



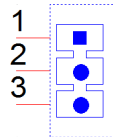
| | |
|----------------------------|----------------------------|
| CN6 (Not Installed) | Clear ME |
| Description | Clear ME setup |
| Setting | Function |
| (1-2) | Clear ME setup |
| (Not connected) | Normal operation (default) |



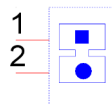
| | |
|----------------------------|----------------------------|
| CN8 (Not Installed) | System Reset |
| Description | Reset system button |
| Setting | Function |
| (1-2) | System reset |
| (Not connected) | Normal operation (default) |



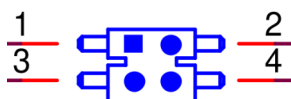
| CN13 | LVDS Voltage Setup |
|-------------|-----------------------------------|
| Description | Select panel LVDS voltage setting |
| Setting | Function |
| (1-2) | Panel LVDS voltage 5V (default) |
| (2-3) | Panel LVDS voltage 3.3V |



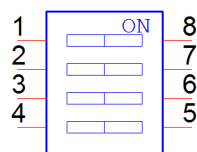
| CN40 | Power Button (Internal Test Only) |
|-----------------|--|
| Description | Power button signal |
| Setting | Function |
| (Pin 2) | Short pin 1 to power on |
| (Not connected) | Normal operation (default) |



| PCN4 | Power Debug (Reserved) |
|-----------------|---------------------------------|
| Description | Power debug, internal test only |
| Setting | Function |
| (Not connected) | Normal operation (default) |



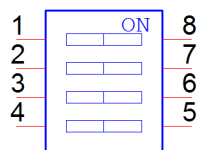
| SW1 | Board Setup |
|-------------|-------------------------|
| Description | Select board setting |
| Setting | Function |
| (SW1-1/2/3) | Select board type |
| (SW1-4) | Force speaker always on |



| SW1 Pin 1 | SW1 Pin 2 | SW1 Pin 3 | Board Configuration |
|------------|------------|------------|--------------------------|
| High (Off) | High (Off) | High (Off) | Board Config 1 (default) |
| High (Off) | High (Off) | Low (On) | Board Config 2 |
| High (Off) | Low (On) | High (Off) | Board Config 3 |
| High (Off) | High (Off) | High (Off) | Board Config 4 |
| Low (On) | High (Off) | High (Off) | Board Config 5 |
| Low (On) | High (Off) | Low (On) | Board Config 6 |
| Low (On) | Low (On) | High (Off) | Board Config 7 |
| Low (On) | High (Off) | High (Off) | Board Config 8 |

| SW1 Pin 4 | Speaker Function |
|------------|---|
| High (Off) | Speaker mute when audio plug in – with audio board system (default) |
| Low (On) | Speaker always on – without audio board system (default) |

| SW2 | Panel Resolution/Type Setup |
|-------------|-----------------------------|
| Description | Select panel setting |
| Setting | Function |
| (SW2-1~4) | Select panel type |



| SW2 Pin 1 | SW2 Pin 2 | SW2 Pin 3 | SW2 Pin 4 | Panel Resolution | LVDS Channel |
|------------|------------|------------|------------|---------------------|----------------|
| High (Off) | High (Off) | High (Off) | High (Off) | 1920x1200 | 24 bits dual |
| Low (On) | High (Off) | High (Off) | High (Off) | 1920x1080 (default) | 24 bits dual |
| High (Off) | High (Off) | Low (On) | High (Off) | 1600x900 | 24 bits dual |
| Low (On) | Low (On) | Low (On) | High (Off) | 1366x768 | 24 bits single |
| Low (On) | High (Off) | High (Off) | Low (On) | 1280x1024 | 24 bits dual |
| Low (On) | High (Off) | Low (On) | Low (On) | 1024x768 | 24 bits single |
| Low (On) | Low (On) | Low (On) | Low (On) | 800x600 | 18 bits single |

Different System Summary

POC-624 terminal

POC-624, without audio board, 5V LVDS panel

| SW1 Pin 1 | SW1 Pin 2 | SW1 Pin 3 | SW1 Pin 4 | SW2 Pin 1 | SW2 Pin 2 | SW2 Pin 3 | SW2 Pin 4 | CN13 |
|------------|------------|------------|------------|-----------|------------|------------|------------|-------|
| High (Off) | High (Off) | High (Off) | High (Off) | Low (On) | High (Off) | High (Off) | High (Off) | (1-2) |



Chapter 8

Front Panel Buttons

8.1 Front Panel Function Buttons



Button Description

Power Button 

Press this button to power on/off the device. When the device is on, this icon will emit green light. When the device is off, the LED indicator will be off.

Reduce Volume 

Press this button to reduce speaker and headphone volume.

Increase Volume 

Press this button to increase speaker and headphone volume.

Disable Touch Function 

Press this button to disable/enable touch function. When touch function is enabled, this icon will emit green light. When touch function is disabled, the LED indicator will be off.

Reading Light 

Press this button to enable/disable the reading light.

Reduce Brightness 

Press this button to reduce the LCD backlight brightness.

Increase Brightness 

Press this button to increase the LCD backlight brightness.

Additional Functions

Press and hold both the reduce brightness and increase brightness buttons for half a second to turn off/on the LCD backlight.

Turning the backlight off will not impact any program or the operation of the POC-624 terminal.

The backlight off function is useful for hospital and dark room environments because it allows users to quickly turn off the backlight without affecting the system operation. After a system restart, the backlight will automatically resume on status.

Chapter 9

Advanced BIOS Function

9.1 Additional BIOS Utility Functions

1. Power Button Function

Users can enable/disable power button function in the BIOS utility. If the power button function is disabled when the device is in S0 (System On) status, the user will not be able to power off the device using the power button. Instead, the user will need to power off the device via software. This can prevent unexpected shutdowns caused by accidentally touching the power button.

BIOS Location

BIOS Menu – Advanced – IT5121 HW Monitor – Power Button Function

Enable: The power button function is enabled when in S0 (System On) status (default).

Disable: The power button function is disabled when in S0 (System On) status. Because disabling the power button function means the system will not power on when the power button is pressed, when this function is disabled, the BIOS will set the “State After G3” to “Power On” automatically. Thus, the system can be powered on by plugging in the power adapter.

2. Brightness Button Function

Users can enable/disable the LCD backlight button function in the BIOS utility. If the LCD backlight button function is disabled, users will not be able to adjust the LCD backlight luminance using this button. This can prevent unexpected changes in LCD backlight luminance caused by accidentally touching the LCD backlight button.

BIOS Location

BIOS Menu – Advanced – IT5121 HW Monitor – Brightness Button Control

Enable: The LCD backlight button function is enabled (default).

Disable: The LCD backlight button function is disabled.

3. Volume Button Function

Users can enable/disable the front volume button function in the BIOS utility. If the volume button function is disabled, users will not be able to adjust the volume using this button. This can prevent unexpected changes in volume caused by accidentally touching the volume button.

BIOS Location

BIOS Menu – Advanced – IT5121 HW Monitor – Volume Button Control

Enable: The volume button function is enabled (default).

Disable: The volume button function is disabled.

4. Touch Button Function

Users can enable/disable the touch button function in the BIOS utility. If the touch control button function is disabled, users will not be able to use this button to turn off touch control. Thus, the touch function will be always on.

BIOS Location

BIOS Menu – Advanced – IT5121 HW Monitor – Touch Button Control

Enable: The touch control button function is enabled (default).

Disable: The touch control button function is disabled.

5. **Reading Light Button Function**
Users can enable/disable the reading light button function in the BIOS utility. If the reading light button function is disabled, users will not be able to turn on the reading light using this button. Thus, the reading light function will be always off.

BIOS Location

BIOS Menu – Advanced – IT5121 HW Monitor – Read Light Control

Enable: The reading light button function is enabled (default).

Disable: The reading light button function is disabled.

6. **EC Beep Function**
Users can enable/disable the EC beep function in the BIOS utility. If the EC beep function is disabled, no sound will be emitted when a front panel function button is pressed.

BIOS Location

BIOS Menu – Advanced – IT5121 HW Monitor – Beep Sound Function

Enable: When a front panel function button is pressed (default), a beeping sound is emitted.

Disable: No sound is emitted when a front panel function button is pressed.

7. **Setup Popup Menu F12**
Users can setup the popup menu during system bootup by pressing F12. When F12 is pressed during bootup, the BIOS utility will display a bootable device menu. Users can select the device to bootup.

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