

WINCOR

NIXDORF



BEETLE /FUSION

Installation Guide

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BEETLE /FUSION

Installation Guide

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Manufacturer's Certification



The device complies with the requirements of the EEC directive 2004/108/EC with regard to “Electromagnetic compatibility” and 2006/95/EC “Low Voltage Directive”.

Therefore, you will find the CE mark on the device or packaging.

Tested Safety



The device complies with the requirements of the EEC directive 89/336/EEC with regard to “Electromagnetic compatibility” and 73/23/ECC “Low Voltage Directive”.



In addition, the device has received the UL symbol and cUL symbol.

FCC-Class A Declaration

This equipment has been tested and found to comply with the limits for a Class A 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 commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not in-stalled and used in accordance with the instruction manual, may cause harmful interference to radio communications.

Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

Le présent appareil numérique ne génère pas de bruits radioélectriques dépassant les limites applicable aux appareils numériques de la "Class A" prescrites dans le Règlement sur le brouillage radioélectrique édicté par le ministère des Communications du Canada.

BSMI (EMC for Taiwan)



The device complies with the requirements of the BSMI (Bureau of Standards, Metrology and Inspection, Ministry of Economic Affairs) directive CNS14348 with regard to "Electromagnetic compatibility" with the limits for a Class B product.

Technical & Regulatory Information on Wireless

Wireless Interoperability

The WLAN adapter integrated in the BEETLE /Fusion is designed to be interoperable with any wireless LAN product that is based on direct sequence spread spectrum (DSSS) and to comply with the following standards:

- IEEE Std 802.11b Standard on 2.4 GHz Wireless LAN
- IEEE Std 802.11g Standard on 2.4 GHz Wireless LAN
- IEEE Std 802.11a Standard on 5 GHz Wireless LAN
- IEEE Std 802.11 Draft-N on 5 GHz Wireless LAN

Safety Instructions

The WLAN adapter, like other radio devices, emits radio frequency electromagnetic energy. The level of energy emitted by the adapter, however, is less than the electromagnetic energy emitted by other wireless devices such as mobile phones. The adapter operates within the guidelines found in radio frequency safety standards and recommendations. These standards and recommendations reflect the consensus of the scientific community and result from deliberations of panels and committees of scientists who continually review and interpret the extensive research literature. In some situations or environments, the use of the adapter may be restricted by the proprietor of the building or responsible representatives of the applicable organization. Examples of such situations may include:

- Hospital
- Any other environment where the risk of interference with other devices or services is perceived or identified as being harmful

If you are uncertain of the policy that applies to the use of wireless devices in a specific organization or environment (a hospital, for example), you are encouraged to ask for authorization to use the adapter before you turn it on.

Regulatory Information

The WLAN adapter must be installed and used in strict accordance with the manufacturer's instructions as described in the user documentation that comes with the product. The manufacturer is not responsible for any radio or television interference caused by unauthorized modification of the devices included with the WLAN adapter kit, or the substitution or attachment of connecting cables and equipment other than that specified by the Manufacturer. The correction of interference caused by such unauthorized modification, substitution or attachment is the responsibility of the user. The manufacturer and its authorized resellers or distributors are not liable for any damage or violation of government regulations that may arise from the user failing to comply with these guidelines.

Local Restriction of 802.11a, 802.11b, 802.11g, and 802.11n Radio Usage

CAUTION: Due to the fact that the frequencies used by 802.11a, 802.11b, 802.11g and 802.11n wireless LAN devices may not yet be harmonized in all countries, 802.11a, 802.11b, 802.11g and 802.11n products are designed for use only in specific countries, and are not allowed to be operated in countries other than those of designated use. As a user of these products, you are responsible for ensuring that the products are used only in the countries for which they were intended and for verifying that they are configured with the correct selection of frequency and channel for the country of use. Any deviation from permissible settings and restrictions in the country of use could be an infringement of national law and may be punished as such.

Europe-EU Declaration of Conformity



This equipment complies with the essential requirements of the European Union directive 1999/5/EC.

Cet équipement est conforme aux principales caractéristiques définies dans la Directive européenne RTTE 1999/5/CE.

Die Geräte erfüllen die grundlegenden Anforderungen der RTTE-Richtlinie 1999/5/EG.

Questa apparecchiatura è conforme ai requisiti essenziali della Direttiva Europea R&TTE 1999/5/CE.

Este equipo cumple los requisitos principales de la Directiva 1999/5/CE de la UE, "Equipos de Terminales de Radio y Telecomunicaciones".

Este equipamento cumpre os requisitos essenciais da Directiva 1999/5/CE do Parlamento Europeu e do Conselho (Directiva RTT).

O exoplismos autos plhroi tis basikes apaitis ths koinotikhs odhgias EU R&TTE 1999/5/E

Deze apparatuur voldoet aan de noodzakelijke vereisten van EU-richtlijn betreffende radioapparatuur en telecommunicatie-eindapparatuur 1999/5/EG.

Dette udstyr opfylder de Væsentlige krav i EU's direktiv 1999/5/EC om Radio- og teleterminaludstyr.

Dette utstyret er i overensstemmelse med hovedkravene i R&TTE-direktivet (1999/5/EC) fra EU.

Utrustningen uppfyller kraven för EU-direktivet 1999/5/EC om ansluten teleutrustning och ömsesidigt erkännande av utrustningens

överensstämmelse (R&TTE).

Tämä laite vastaa EU:n radio- ja telepäätelaitedirektiivin (EU R&TTE Directive 1999/5/EC) vaatimuksia.

This product is intended to be used in all countries of the European Economic Area when operating in IEEE 802.11b and/or IEEE 802.11g mode at 2.4 GHz (see France below). When operating in the IEEE 802.11a mode at 5 GHz, however, the product is restricted further.

France

In all Metropolitan départements, wireless LAN frequencies can be used under the following conditions, either for public or private use:

- Indoor use: maximum power (EIRP) of 100 mW for the entire 2400-2483.5 MHz frequency band.
- Outdoor use: maximum power (EIRP) of 100 mW for the 2400-2454 MHz band and with maximum power (EIRP) of 10 mW for the 2454-2483.5 MHz band.

Introduction

This installation guide provides you with the information you require to install the Beetle /Fusion system.

Symbols used in this guide

- Text following this mark represents an item in a list.

“ ” Text in quotation marks contains references to other chapters or sections in this document.

• Paragraphs following this symbol are actions to be performed in the specific order.



Text following this symbol has to be given special attention in order to avoid damage or injury.



This symbol identifies paragraphs which contain general notes to facilitate use of the device and help avoid operating errors.

Important safety precautions



Please read the following notes carefully before doing any work on the device.

Installation notes

- When installing the device and/or doing any work on it, make sure that it is disconnected from the power.

General safety precautions

This device complies with the relevant safety regulations for information processing equipment.

- Note the warning and information labels on the device.
- The device is equipped with a safety-tested power cable, which must be connected only to a grounded outlet.
- Always hold the plug when removing the power cable. Never pull the cable itself.
- Have damaged power cables replaced immediately.
- The lithium battery must be disposed of in accordance with local regulations for special waste.
- If the display element is damaged and the liquid crystal solution leaks out onto your hands or clothing, please wash your hands or clothing immediately under running water for at least 15 minutes, using soap or alcohol. If the liquid comes into contact with your eyes, consult a medical doctor immediately.

- Make sure that there is always free access to sockets used or to the electrical circuit-breakers of the house installation.
- In case of an emergency (e.g. damaged cabinets, control or power cables, liquids or foreign objects in the device), switch off the device immediately and inform the customer service responsible for you.
- During the thunderstorm, data transmission lines must not be connected or disconnected.
- Only use accessories and extension components that have been approved by us. Nonobservance can result in damage to the system or violations of regulations concerning safety, radio interference and ergonomical requirements.
- To clean the device only use cleaning agents approved by Wincor Nixdorf International GmbH.

Repairs



Repair work may only be carried out by authorized personnel.

Unauthorized opening of the device or repair work carried out improperly could result in considerable danger to the user.

In case of noncompliance, Wincor Nixdorf International GmbH excludes all liability.

Planning the Installation

This chapter provides you with the information you need to prepare for the installation of the system.

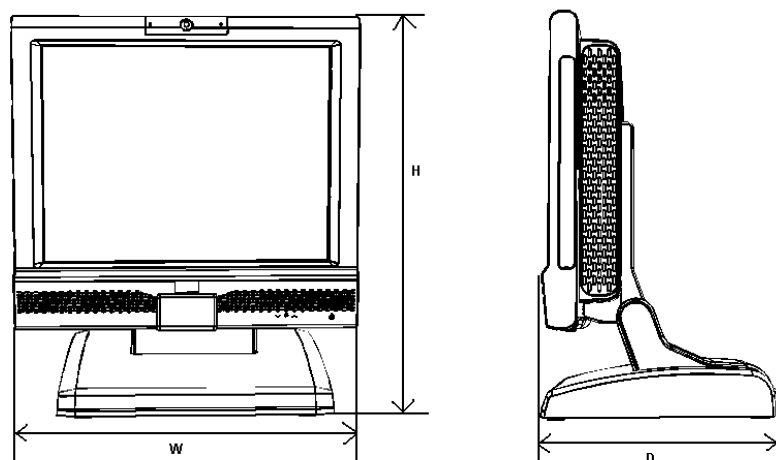
Device dimensions

All dimensions are specified in millimetres. The views of the systems are not drawn to scale.

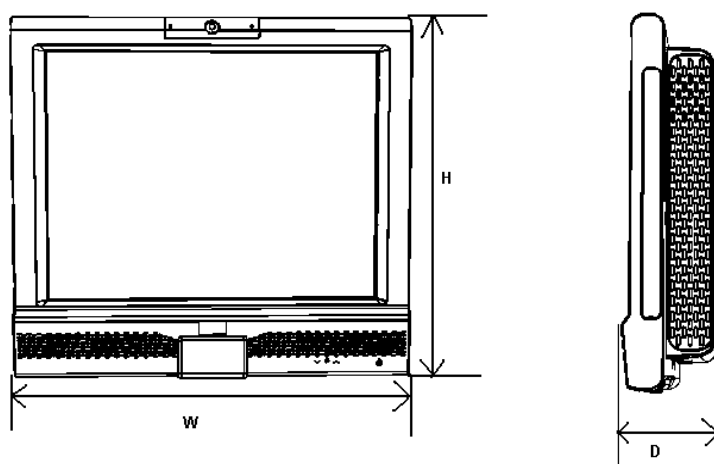
	15" Desktop	15" Wall- mount	12.1" Desktop	12.1" Wall- mount	18.5" Desktop	18.5" Wall- mount
Width (W)	370	370	320	320	476	476
Height (H)	430	336	420	296	434	342
Depth (D)	265	96	265	96	265	96

All dimensions in mm

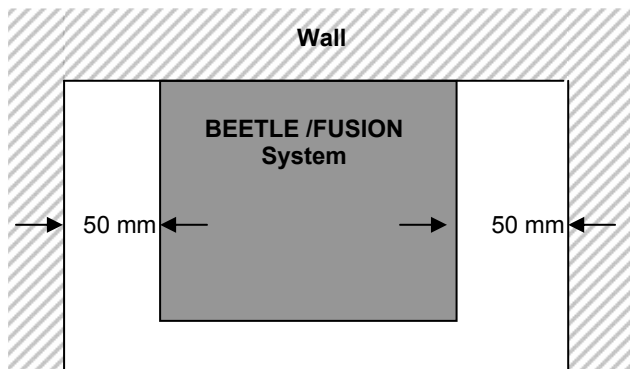
BEETLE /Fusion - Desktop version



BEETLE /Fusion - Wall-mount version



Required operation space



Reservation of minimum space is required to ensure proper ventilation during the operation of the device.

Reserve at least 50 mm of operation space from the side of the device to its nearest barrier / wall.

Installation site requirements

When choosing the installation site, make sure that

- the system is sheltered indoor
- For configuration with IR touch, make sure that the touch panel is not exposed to direct or reflected sunlight as it may cause the touch to malfunction. Please read the Operating Environment for IR Touch found in the Appendix.
- If this system is taken from a cold environment into the operating room, moisture condensation may form. The system must be absolutely dry before being put into service; an acclimatization period of at least two hours must therefore be observed.
- No cascading of power cables

Desktop version

Please take note of the following points for the installation site for desktop version:

- The installation area must be flat leveled.
- The system needs to be installed on the table surface and not on the floor.

If necessary, appropriate arrangements must be made.

Wall mount version

Please take note of the following points for the installation site for wall mount version:

- Plan the mounting location carefully as location such as walkway areas, hallways areas or crowded areas are not recommended in order to reduce the risk that someone might accidentally walk into and damage the system.
- Ensure that all applicable building and electric codes and accessibility requirements are followed.
- The mounting area needs to have enough room for adequate viewing and ventilation, as well as the access to an AC power outlet.
- The mounting method must be able to support the combined weight of the system and the suspended weight of all the cables attached to the system.
- The system is to be mounted on **a solid concrete or brick wall with flat smooth surface.**

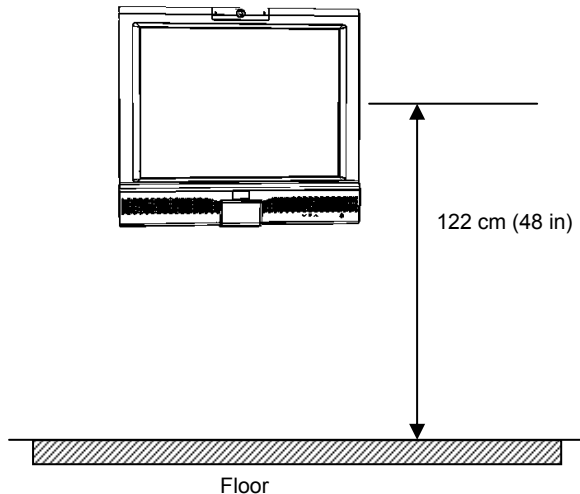
If necessary, appropriate arrangements must be made.

Determining the mounting height of the wall mount plate

The mounting height of the system should be appropriate and comfortable for the majority of the user.

Based on the recommendation of the ADA (American Disability Association), it is recommended that the highest point of the display should not exceed 1370mm height.

It is also recommended that the system is approximately 122cm (48 in) from the floor to the center of the display when the user is in the standing position.



Fasteners Type

Below are the recommended fastener types to wall mount the system:

Fischer universal plug (UX 6 x 50) (<http://www.fischer.de>)

Recommended Screw for wall is Pan head self-tapping M5 x 55.

Drill Diameter: 6 mm

Min Hole Depth: 60 mm

Load per anchor for concrete: 60 kg (Safety factor accounted for)

Load per anchor for Solid brick: 30 kg (Safety factor accounted for)

Thorsman wall plug (TP 6 x 30) (<http://www.thorsman.com>)

Recommended Screw for wall is Pan head Wood Screw TGS-C3- 4.8 x 38L

Drill Diameter: 6 mm

Min Hole Depth: 40 mm

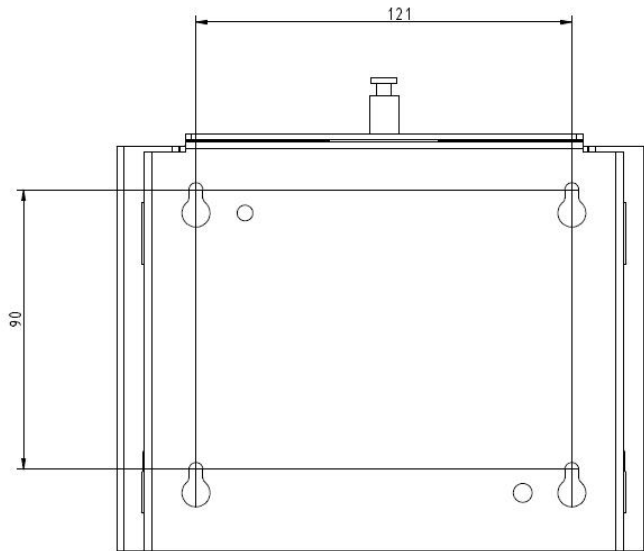
Load per anchor for concrete: 40 kg

Load per anchor for Solid brick: 30 kg

Safety factor is 6

Preparing mounting location

The wall cutout at the mounting location is to be prepared according to the dimensions shown in the following diagram:



Note: All dimensions are specified in millimetres, the diagram is not drawn to scale.

Installation

This chapter describes the steps to be taken to install the system.

All dimensions are specified in millimetres. The diagrams are not drawn to scale.

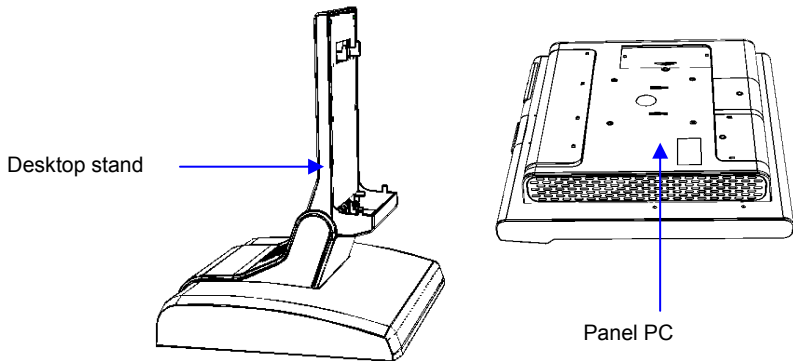
Contact the person in charge of planning the installation to verify that all preparations have been performed completely and professionally and that none of the required power and data cables are missing.

Removing the packaging

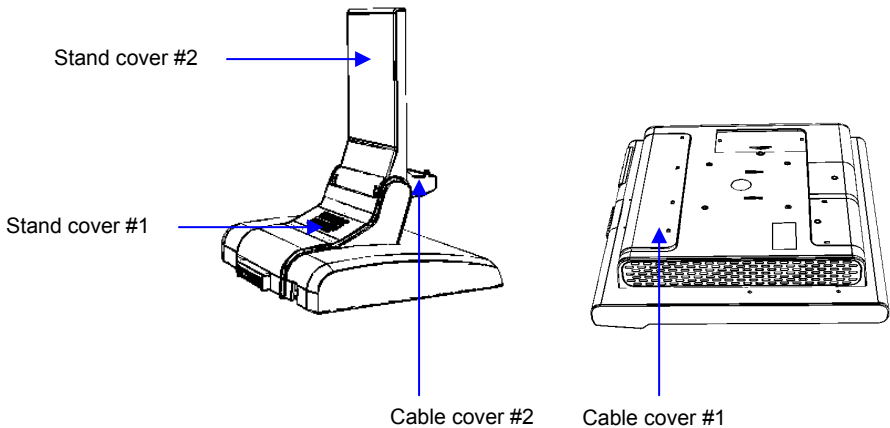
- Remove the packing material of the system or the modules ordered.
- Dispose of the packaging which is no longer needed according to the regulations of your country.

Installing desktop stand onto panel PC module

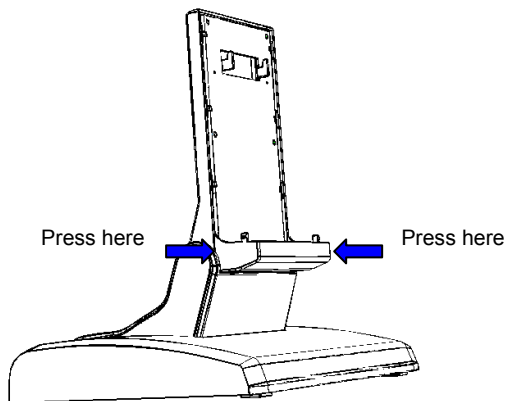
- After retrieving the panel PC and desktop stand from their respective packaging, lay them on the desk as illustrated in the picture below.



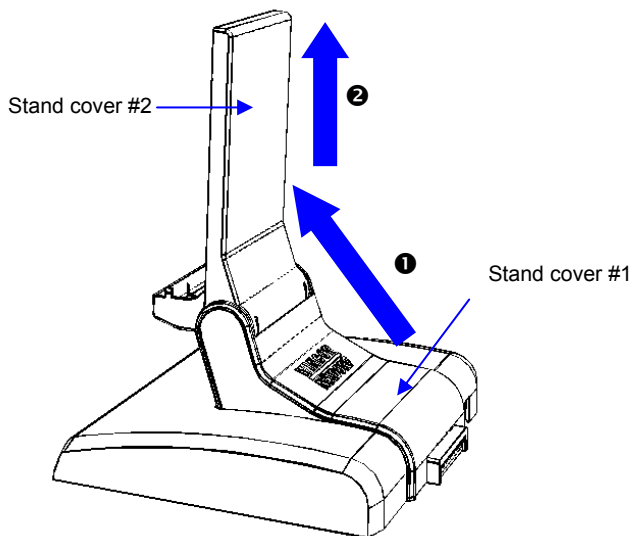
- Remove the stand covers and cable covers as indicated in the picture below to assess to cable routing path.



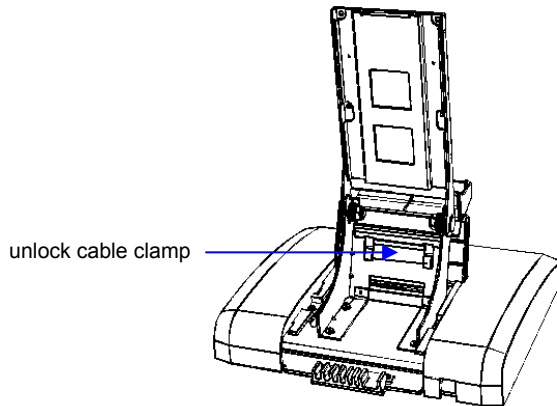
- To remove cable cover #1, press and remove the cover in front of the desktop stand (see picture below).



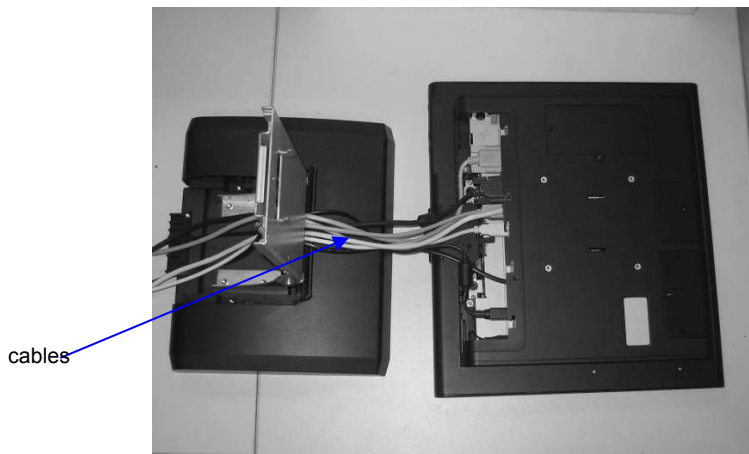
- To remove the stand cover #1 and stand cover #2, push the desktop stand to its most upright position ❶ and remove the covers by sliding the back cover upward ❷ (see picture below).



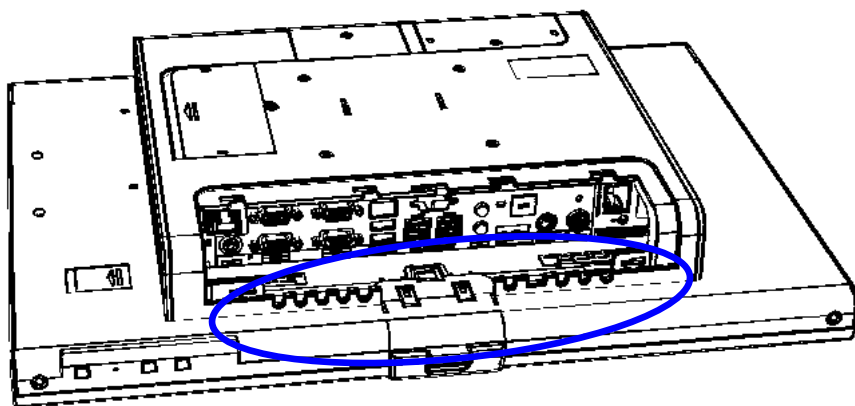
- Unlock the cable clamp at the back of the desktop stand (see picture below).



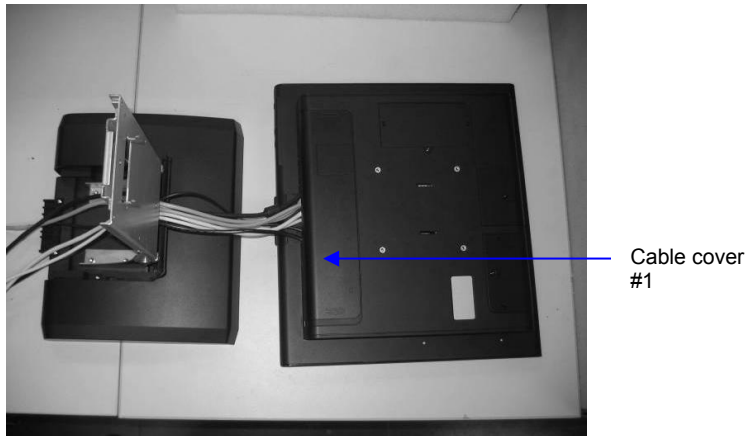
- Route the cables through the desktop stand to the I/O panel of the panel PC, one cable at a time (see picture below).



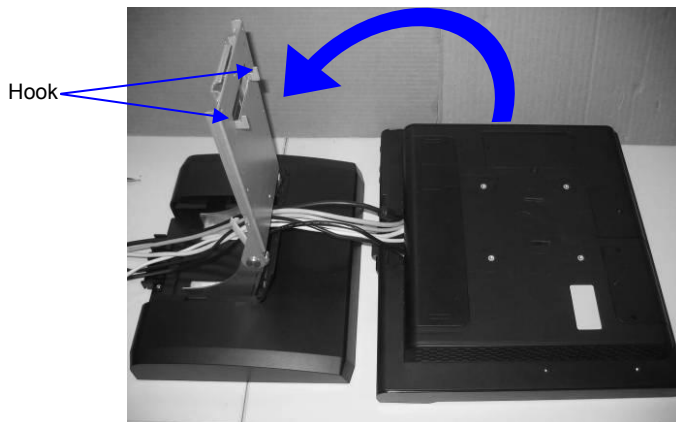
- Alternatively, the cables could also be routed via the restrainers located at the back of the panel PC (see picture below).



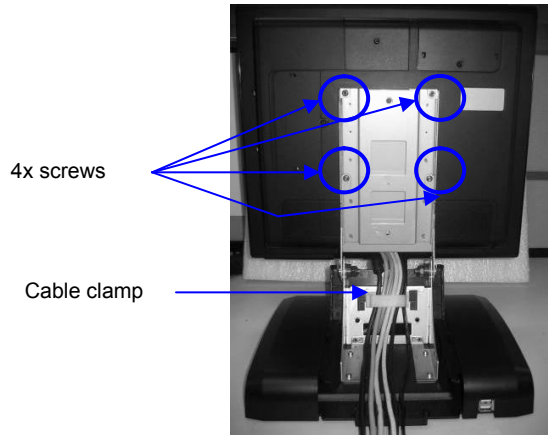
- Ensure that the connectors are secured with their latch or screws.
- Install cable cover #1 (see picture below).



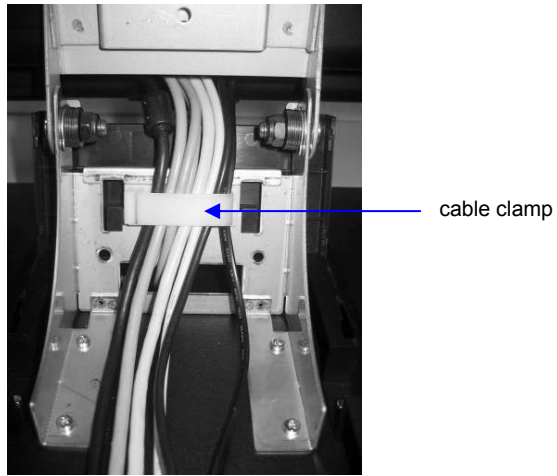
- Lift up the Panel PC and hook it on the desktop stand (see picture below).



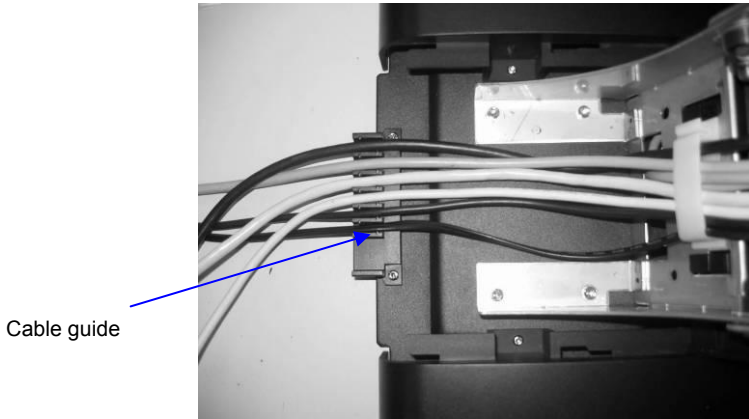
- Fasten the 4 screws to secure the Panel PC to the desktop stand and dress the cables neatly in single file through the cable clamp (see picture below).



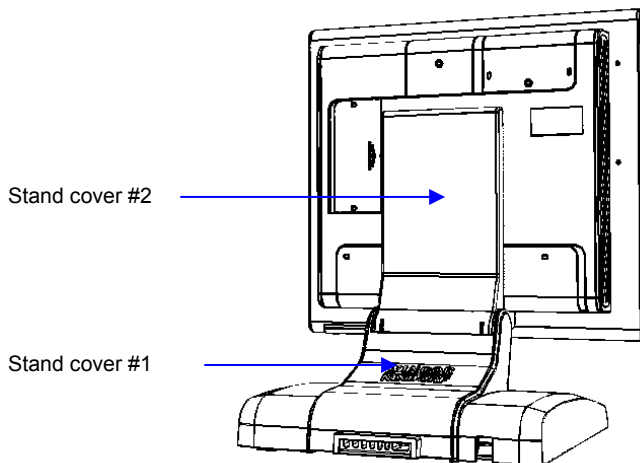
- Lock the cable clamp to secure the cables (see picture below).



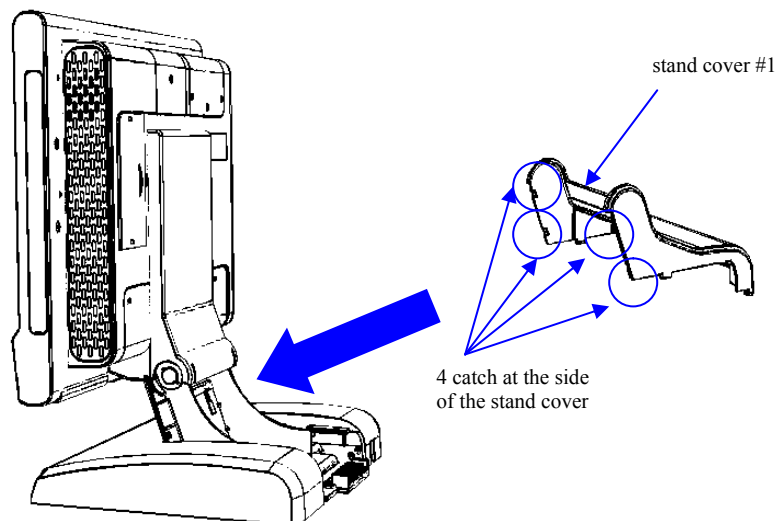
- Dress the cables neatly through the cable guide of the desktop stand (see picture below).



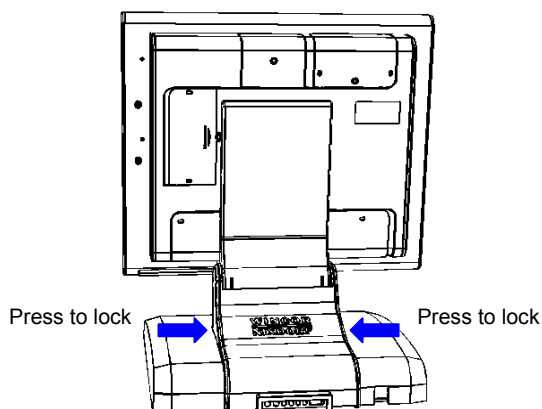
- Install the stand cover #1 and stand cover #2 (see picture below).



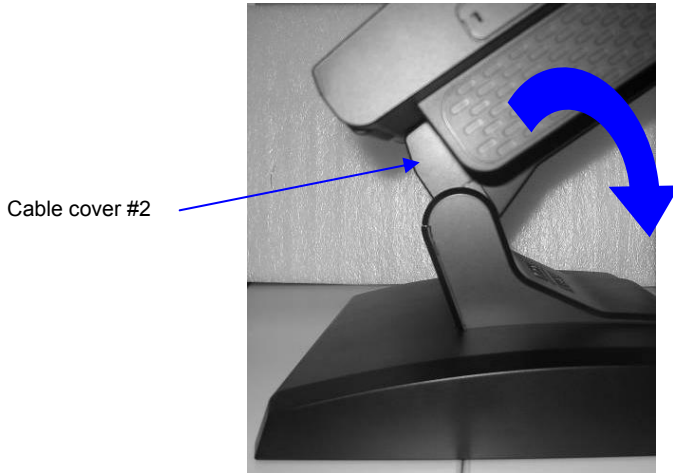
- During the installation of stand cover #1, ensure that the 2 catch at the both sides of the stand cover #1 fitted properly onto the slot on the desktop stand (see picture below).



- When the stand cover #1 is fitted onto the desktop stand, press both side of the stand cover #1 to ensure that the cover click and lock onto the desktop stand (see picture below).



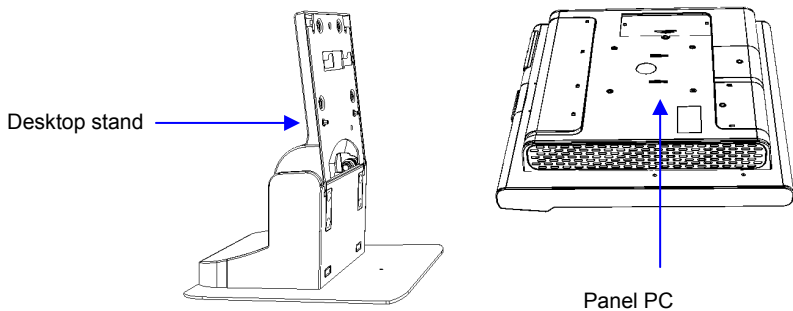
- Tilt the panel PC back fully and install the cable cover #2 (see picture below).



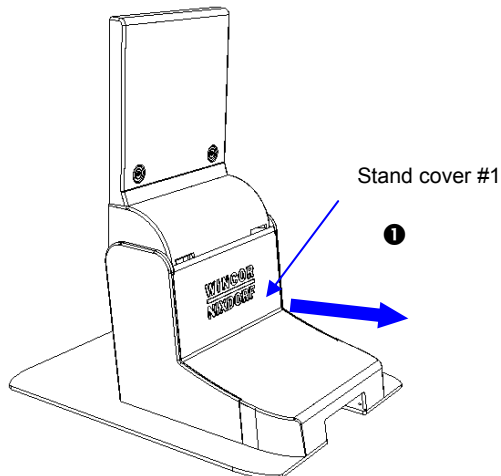
- Ensure that the catch of the cable cover #2 is fitted onto the slot.

Installing desktop stand-2 onto panel PC module

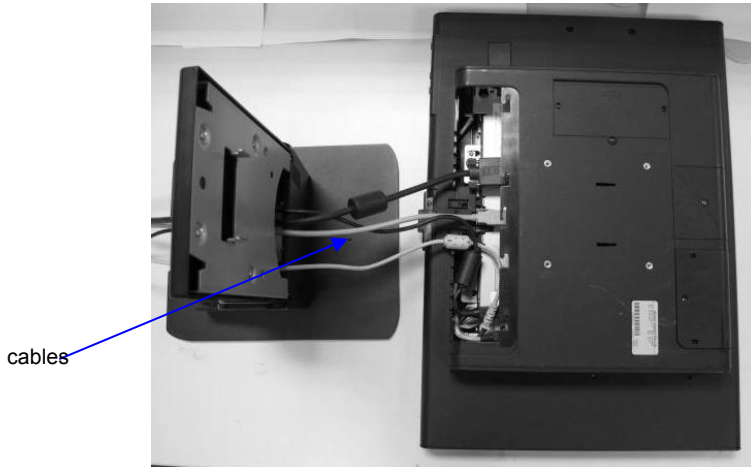
- After retrieving the panel PC and desktop stand from their respective packaging, lay them on the desk as illustrated in the picture below.



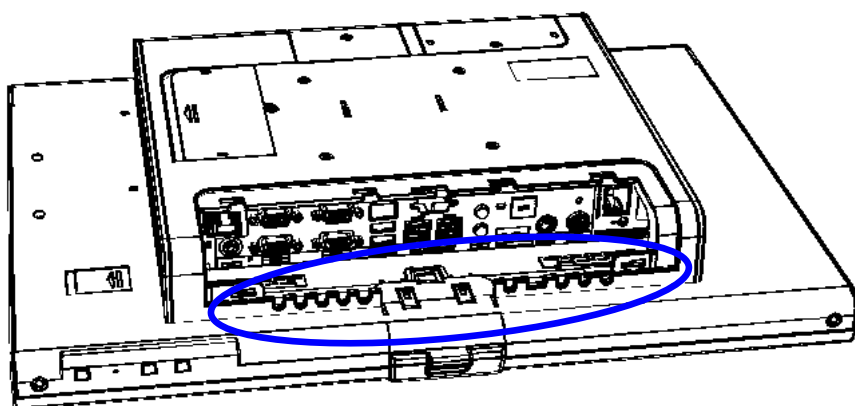
- To remove the stand cover #1, push the desktop stand to its most upright position ❶ and remove by sliding it outward (see picture below).



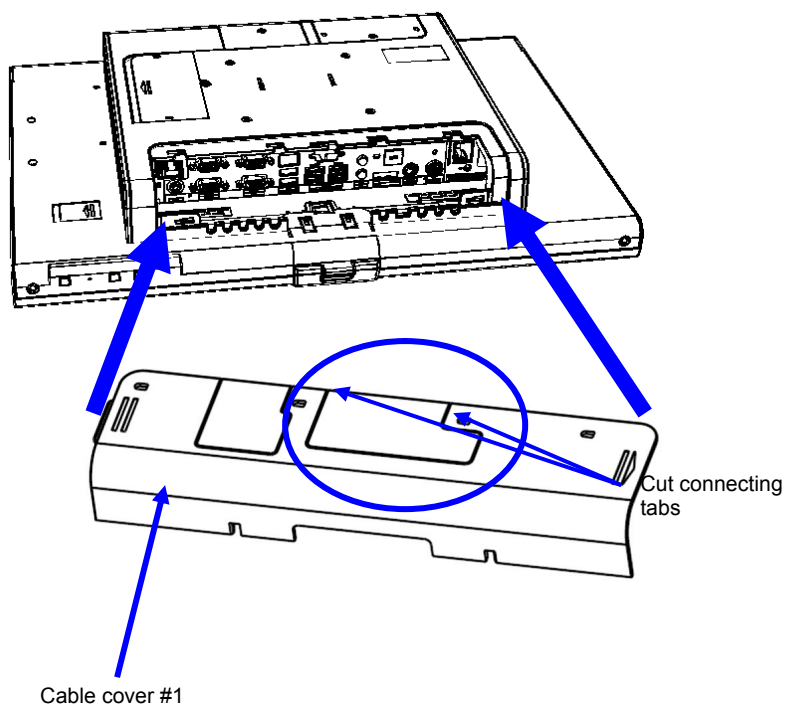
- Route the cables through the desktop stand to the I/O panel of the panel PC, one cable at a time (see picture below).



- Alternatively, the cables could also be routed via the restrainers located at the back of the panel PC (see picture below).

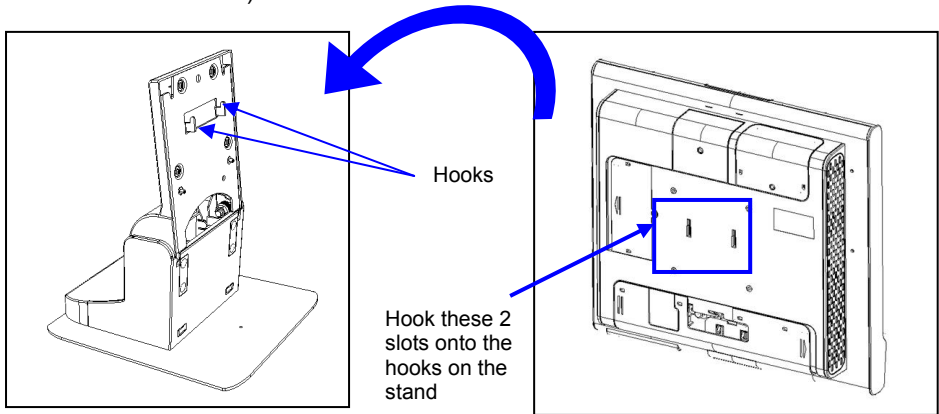


- Ensure that the connectors are secured with their latch or screws.
- Remove the indicated part of cable cover #1 by cutting the connecting tabs with scissors and bend the part to remove it (see picture below).

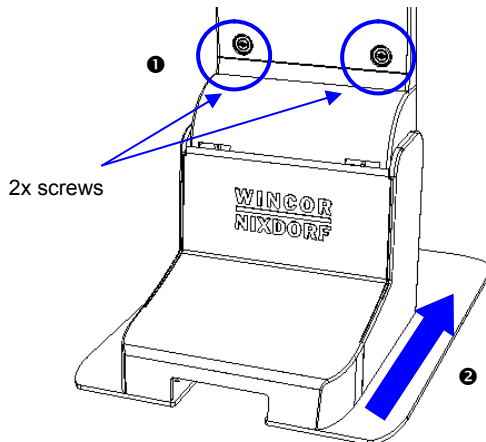


- Slot the cable cover #1 onto the back of the panel PC as shown above.

- Lift up the Panel PC and hook it on the desktop stand (see picture below).

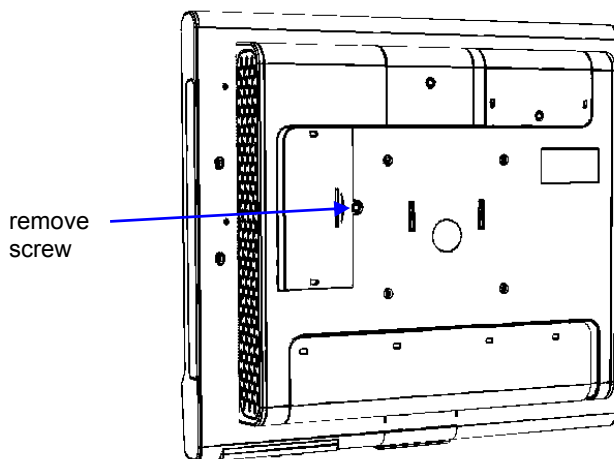


- Fasten the 2 panel fasteners ❶ clockwise with Philip screwdriver to secure the Panel PC to the desktop stand and dress the cable neatly. Install the stand cover #1 by sliding it back into place ❷ (see picture below).



Installing RAM onto panel PC module

- Remove the screws to access the RAM slot PC (see picture below).

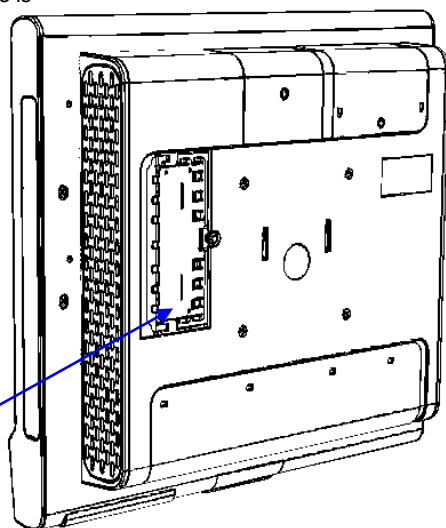


- Insert the RAM module into the RAM slot and make sure it is engaged properly on the slot (see picture below).

Ensure that the RAM module is inserted in this orientation



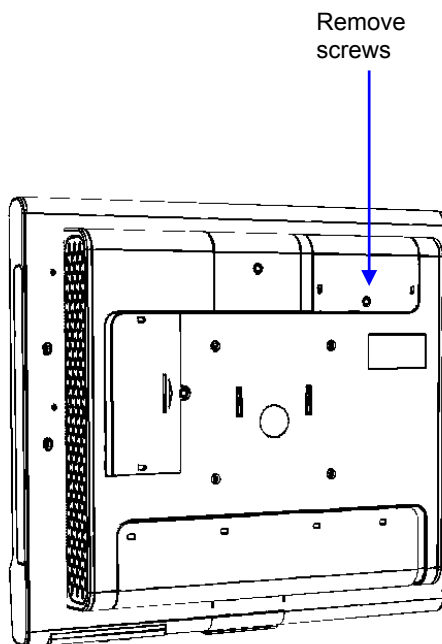
RAM
slot



- Close the cover and tighten the screws.

Installing harddisk onto panel PC module

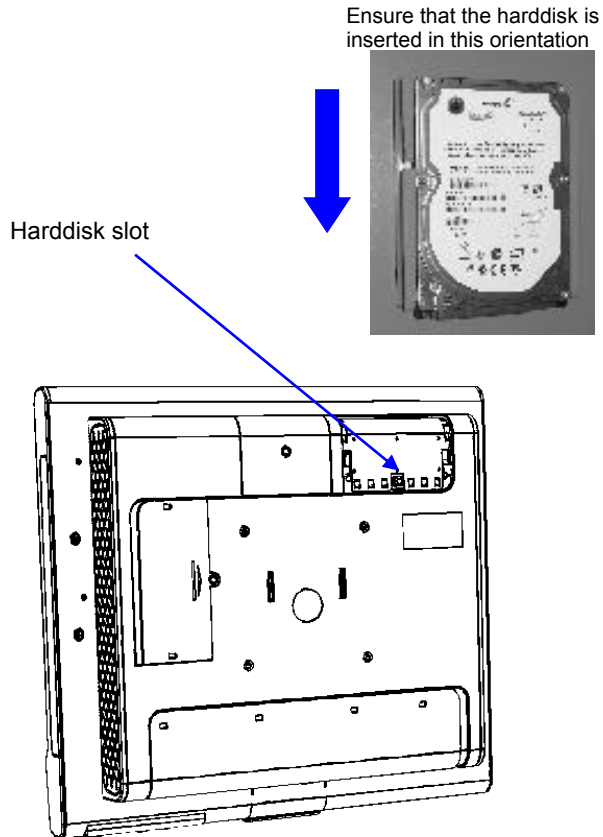
- Remove the screws to access the harddisk slot PC (see picture below).



- Attach the 2 rail guides onto the harddisk. Ensure that the 2 guide rails are snapped onto the harddisk in the orientation shown in the picture below.



- Insert the harddisk assy into the harddisk slot and make sure it is engaged properly on the slot (see picture below).



- Close the cover and tighten the screws.

Connecting the power cord



Ensure that the AC power point is switched off before inserting the specified power cord into the AC power point.

To connect the system to the power source, plug the connector of the power adapter into the power connector at the rear of the system.

Desktop version

- Refer to page 16 to 19 for the steps to connect the power cord to the desktop version

Wall mount version

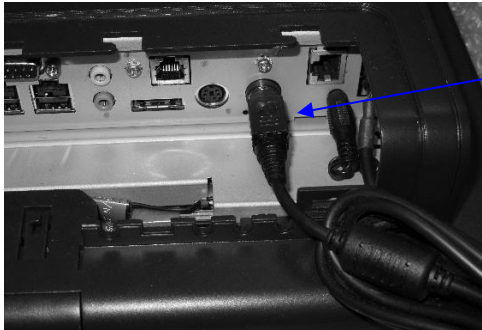
- Place the system on a flat surface and make sure that the display screen is protected against rough surface to prevent damage on the screen especially when a touch panel has been installed (see picture below).



- Slide the I/O shield cover to the right to unlatch (1) before you slide downward to remove the cover (2) in order to access the I/O of the system (see picture below).



- Plug the connector of the power adaptor onto the system (see picture below).



Power
adapter
connector

- Connect all the required peripherals and network port into the I/O ports of the system.
- Re-install the I/O shield covers back to the system.
- Plug the power plug into the socket outlet.
- The socket-outlet is to be installed near the device to ensure easy accessibility to the plug.

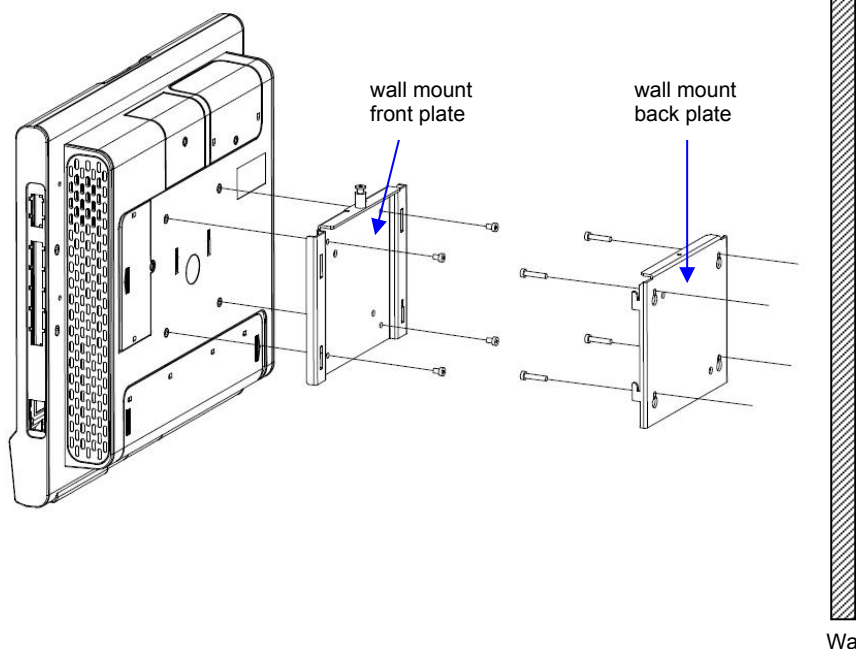
Installation of wall mount unit



IMPORTANT:

Ensure that the wall mount plate must be installed by a professional and qualified installer who is familiar with the building construction methods and the electrical code that are govern by the local laws on the public access areas.

Use only Wincor Nixdorf wall mount plate.



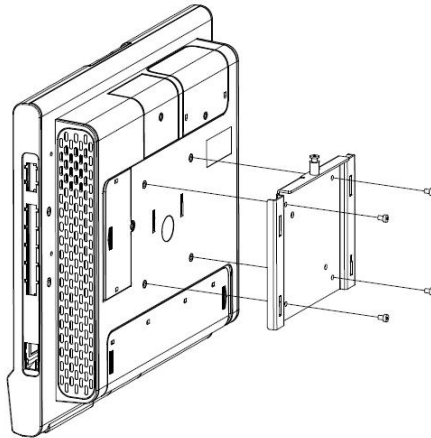
Wall

Mounting wall mount back plate onto the wall

- Prepare the mounting points penetrating from the wall according to the dimension of the mounting holes on the base of the system.
- When the system is mounted onto the wall, ensure that the wall mount back plate must be attached permanently and securely to prevent the system from falling and damaging if it is knocked, bumped or otherwise abused. Failing to do so may cause injury to others.
- Use the provided wall plugs to attach the wall mount back plate onto the concrete wall.
- Check and ensure that the wall mount back plate is mounted squarely by using a bubble level.
- After installation, ensure that the screw heads are flushed or below the outer surface of the wall mount back plate.
- Ensure that the wall mount back plate is firmly and securely attached to the wall.

Mounting wall mount front plate onto the system

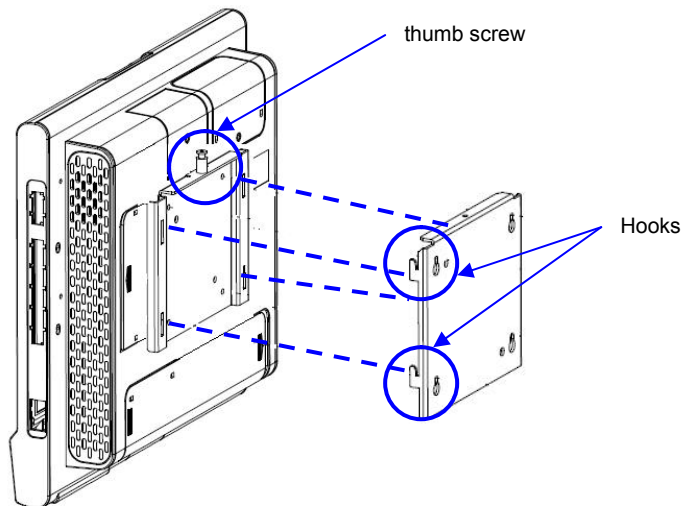
- Align the 4 mounting holes of the wall mount front plate onto the mounting holes of panel PC.



- Secure the wall mount front plate onto the panel PC using the fasteners provided in the wall mount kit.

Securing system onto wall

- Ensure that the power cable has been connected onto the system.
- Hook the system with its wall mount front plate installed onto the wall mount back plate mounted on the wall by ensuring that the hooks at both sides of the wall mount front plate are securely locked on the slots of the wall mount front plate.



- Tighten the thumb screw on the top of the wall mount front plate to secure the hooks of the wall mount plates.
- Dress the cables routing according to the store set up or the overall installation site plan.

Appendix

Technical Data for BEETLE /Fusion 12

	<u>Wall mount</u>	<u>Desktop</u>
Dimensions		
Height	296 mm	420 mm
Depth	96 mm	265 mm
Width	320 mm	320 mm
Weight of device	6.3 kg	9.0 kg
Climatic category		
Operating	IEC 721-3-3 class 3K3+ 5° to +40°C	
Transport	IEC 721-3-2 class 2K2 -25° to +60°C	
Storage	IEC 721-3-1 class 1K2 +5° to +40°C	
	<u>Cat A & B</u>	<u>Cat C</u>
Rated Input voltage	24V DC (nominal)	24V DC (nominal)
Rated Input current	7.5A	4.16A
Certifications	CE, FCC, CB, UL, TUV-GS, CCC, BSMI	CE, CB, CCC, BSMI
Remarks	Resistive touch only	

Technical data for BEETLE /Fusion 15

	<u>Wall mount</u>	<u>Desktop</u>
Dimensions		
Height	336 mm	430 mm
Depth	96 mm	265 mm
Width	370 mm	370 mm
Weight of device	6.8 kg	9.5 kg
Climatic category		
Operating	IEC 721-3-3 class 3K3+ 5° to +40°C	
Transport	IEC 721-3-2 class 2K2 -25° to +60°C	
Storage	IEC 721-3-1 class 1K2 +5° to +40°C	
	<u>Cat A & B</u>	<u>Cat C</u>
Rated Input voltage	24V DC (nominal)	24V DC (nominal)
Rated Input current	5.0A / 7.5A	4.16A
Certifications	CE, FCC, CB, UL, TUV-GS, CCC, BSMI R&TTE (Cat A only) <small>note1</small>	CE, FCC, CB, UL, TUV-GS, CCC, BSMI

note1: Certification applicable to Intel 512AN-MMW module only

Technical data for BEETLE /Fusion 19

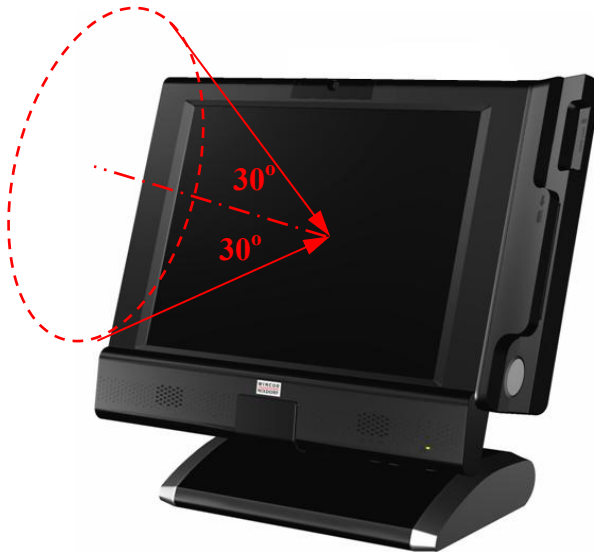
	<u>Wall mount</u>	<u>Desktop</u>
Dimensions		
Height	342 mm	434 mm
Depth	96 mm	265 mm
Width	476 mm	476 mm
Weight of device	8.0 kg	10.7 kg
Climatic category		
Operating	IEC 721-3-3 class 3K3+ 5° to +40°C	
Transport	IEC 721-3-2 class 2K2 -25° to +60°C	
Storage	IEC 721-3-1 class 1K2 +5° to +40°C	
	<u>Cat B</u>	
Rated Input voltage	24V DC (nominal)	
Rated Input current	7.5A	
Certifications	CE, FCC, CB, UL, TUV-GS, CCC, BSMI R&TTE (Cat B only) <small>note1</small>	

note1: Certification applicable to Intel 512AN-MMW module only

Operating Environment for IR Touch

It is not recommended to locate the Fusion such that the touch screen is exposed to direct or reflected sunlight. In setting up the Fusion take note of the IR touch screen limitations as stated below:

- Angle of incidence of sunlight ray perpendicular to the touch screen within $\pm 30^\circ$ in all directions → Touch will function normally.
- Angle of incidence outside $\pm 30^\circ$ in all directions → Touch will not function but will not trigger false touch.



AC Power Adapter

The AC power adapter used must be Wincor Nixdorf's qualified and has to meet the following minimum requirements and industry standards:

Rated Input voltage	100 / 240 Vac
Input Voltage range	90 to 264Vac
Input Frequency range	47 to 63 Hz
Rated Output voltage	24V \pm 5%,
Rated Output current	4.17A (mini) if BEETLE /Fusion rating is 4.17A 5.0A (min) if BEETLE /Fusion rating is 5.0A 7.5A (min) if BEETLE /Fusion rating is 7.5A
Approvals & Certification	UL Listed, TUV-GS, BSMI, CCC, CE

Power Cord Selection

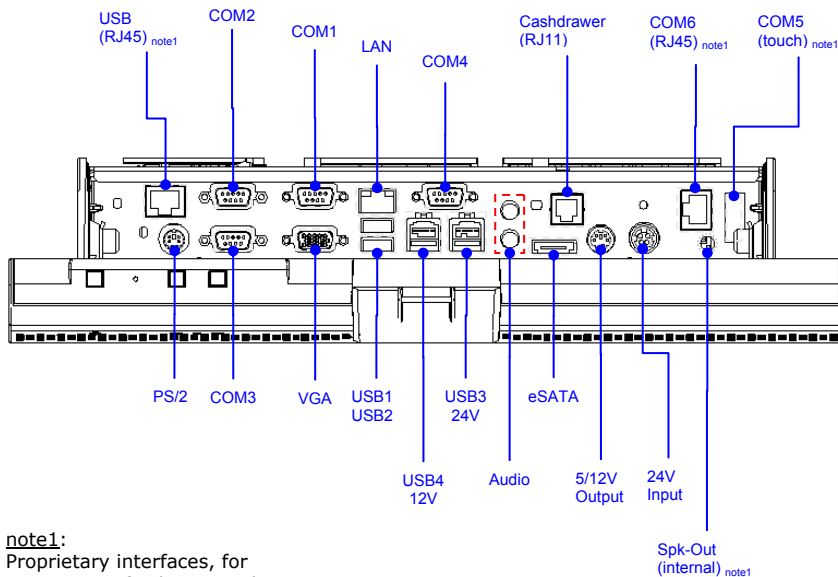
If the power cord is not provided with the system, the user has to ensure that a certified power cord is used as required by the Safety Regulation of the country.

Countries	Safety Approvals
USA	UL
Canada	CSA
Germany	VDE
Japan	PSE
Taiwan	BSMI
China	CCC

For other countries not mentioned in the above list, please check with the local authority.

I/O connection ports

Refer to the diagram below for the available I/O connection ports:



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