

DIEBOLD

NIXDORF



BEETLE /Express
BEETLE /Express 15

Operating Manual

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BEETLE /Express BEETLE /Express 15

Operating Manual

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Contents

Manufacturer’s Certification	1
Tested Safety.....	1
FCC-Class A Declaration.....	2
BSMI (EMC for Taiwan).....	2
Supplier’s Declaration of Conformity.....	3
Introduction	4
Symbols used in this guide	4
Important Safety Precautions	5
Replacing the Lithium Battery	7
Recycling the system	9
Overview	10
Main Features.....	10
Configuration	11
Setting Up the system	12
Power ON	12
Indicator Light.....	14
Powering OFF.....	14

Adjusting the viewing angle of Display.....15

Operating the system16

- Touch screen16
 - Cleaning Instructions16
- Magnetic swipe card reader (optional)17
 - Cleaning Instructions18
- Waiter Lock.....19
- Customer display (optional)21

Appendix.....22

- Technical Data22
- I/O Port Rating23
- AC Power Adapter24
- Power Cord Selection25
- Specification26
- I/O connection ports.....28
 - Rear Panel.....28
 - Side I/O29

Manufacturer's Certification



The device complies with the requirements of the EEC directive 2014/30/EC with regard to “Electromagnetic compatibility” and 2014/35/EC “Low Voltage Directive” and RoHS directive 2011/65/EU.

Tested Safety



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 installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area may cause harmful interference in which case the user will be required to correct the interference at own expense. Modifications not authorized by the manufacturer may void user's authority to operate this device.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

1. This device may not cause harmful interference, and
2. This device must accept any interference received, including interference that may cause undesired operation.

CAN ICES-3 (A)/NMB-3(A)

BSMI (EMC for Taiwan)



The device complies with the requirements of the BSMI (Bureau of Standards, Metrology and Inspection, Ministry of Economic Affairs) directive CNS13438 with regard to "Electromagnetic compatibility" with the limits for a Class B product.

Supplier's Declaration of Conformity

Product Description: POS Terminal

Model: BEETLE / Express 15

Party issuing Supplier's Declaration of Conformity

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FCC Compliance Statement (for products subject to Part 15)

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Introduction

This operating manual provides all the information required for the operation of the BEETLE/ Express or BEETLE/ Express 15 system, collectively known as the system.

Having studied the operating manual, you will be able to properly operate the system.



BEETLE/ Express carries a 10.4" Color TFT display and BEETLE/ Express 15 carries a 15" Color TFT display

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.



Texts following this symbol are actions to be performed 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.

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.
- Ensure that the correct power cord with safety approval is used (see chapter “Appendix”, is as specified in the “Power Cord Selection”).
- Always hold the plug when removing the power cable. Never pull the cable itself.
- Install cables in such a way that they will not be damaged or crushed in any way.
- 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 agronomical requirements.
- To clean the device only use cleaning agents approved by Diebold Nixdorf.

Repairs



Repair work may only be carried out by authorized personnel.

Unauthorized opening of the device or repair work carried out improperly not only could result in considerable danger to the user but also cancel all the warranty and liability agreements.

In case of non-compliance, Diebold Nixdorf excludes all liability.

Replacing the Lithium Battery



Incorrect replacement of the Lithium Battery may lead to a risk of explosion

The end user must replace the lithium battery only by identical batteries or types recommended by Diebold Nixdorf.

Do not throw Lithium Batteries into the trashcan. It must be disposed of in accordance with local regulations concerning special waste.

To access to the battery slot, you need to remove the harddisk first.

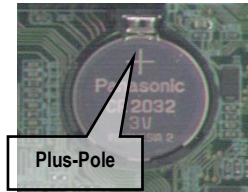
Gently lift the edge of the Harddisk upward (1) so that the Harddisk could be lightly tilted in order to slide (2) and remove the Harddisk.



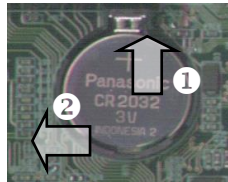
(1) Tilt harddisk upward

(2) Slide to remove Harddisk

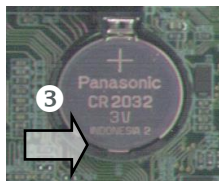
Make sure that you insert the Battery the right way round. The plus pole must be on the top!



- *Push the Latch **1** and remove the Lithium Battery from its Socket **2**.*



- *Insert and press a new Lithium Battery of same type in the Socket **3**.*



Recycling the system

Environmental protection does not begin when the time has come to dispose of the system; it begins with the manufacturer. This product was designed according to our internal norm "Environmental conscious product design and development".

The system is manufactured without the use of CFC and CHC and is produced mainly from reusable components and materials. Please do not stick labels onto plastic case parts. This would help us to re-use components and material.

But there are still some parts that are not reusable. Diebold Nixdorf guarantees the environmentally safe disposal of these parts in a Recycling Centre, which is certified pursuant to ISO 9001 and ISO 14001.

You can protect our environment by only switching on your equipment when it is actually needed. If possible, even avoid the stand-by-mode as this wastes energy, too. Also switch your equipment off when you take a longer break or finish your work.

Please contact your competent branch or the Recycling Centre Paderborn (for European countries) for information on how to return and reuse devices and disposable materials under the following mail address.
Email: info@dieboldnixdorf.com or on the internet.

Overview

The system is a POS terminal that is configurable for desktop application. It is designed for indoor installation.

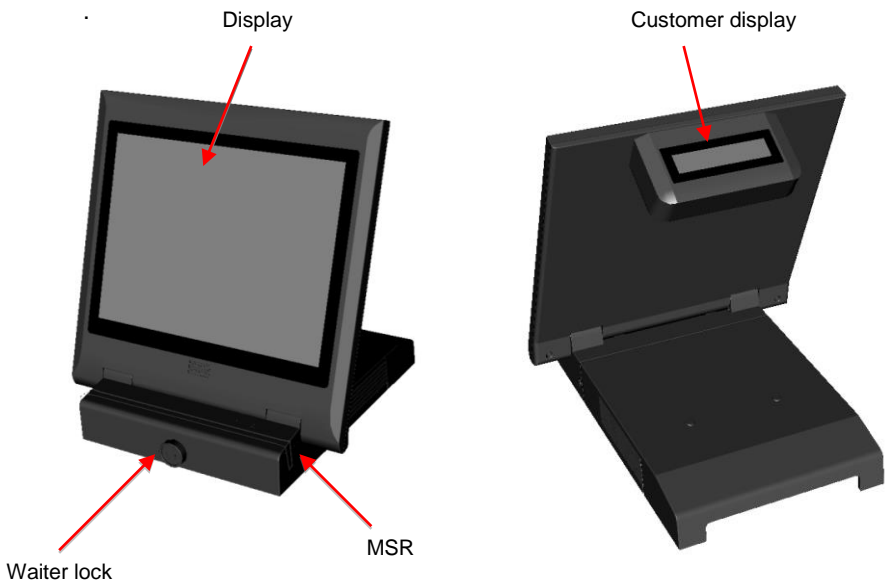
Main Features

- Processor: Intel Atom D525 processor
- Memory options:
 - 1GB RAM (default)
 - 2GB RAM (optional)
- Mass storage options:
 - 160GB 2.5" hard disk (min.) note 1
 - CF Card Type 1
- Primary Display:
 - 10.4" Color TFT or 15" Color TFT
 - Resistive Touch
- Magnetic swipe card reader (optional)
- Customer display (optional)
- Waiter Lock (optional)

Note 1: support 9.5mm thick hard disk only

Configuration

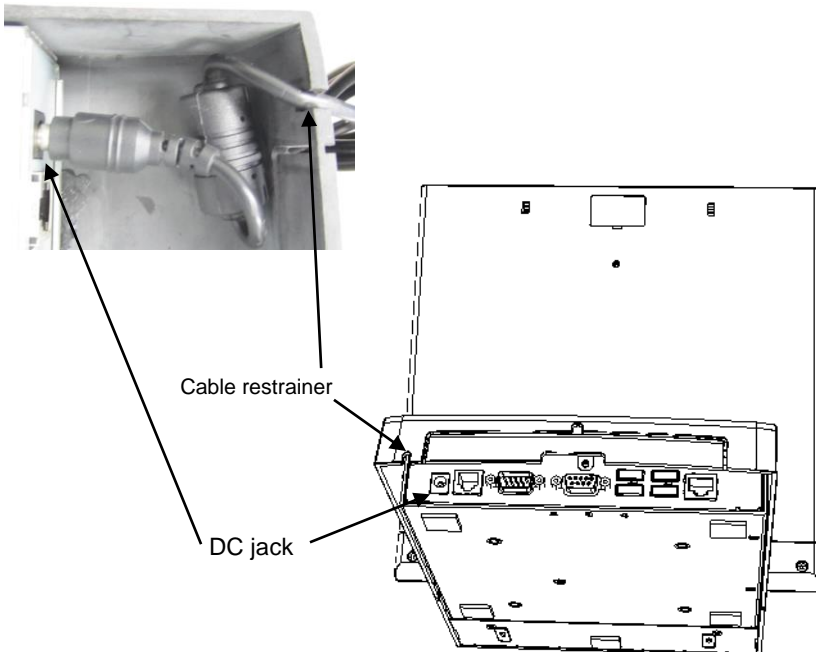
The 3 optional devices (MSR, Waiter Lock and Customer Display) can be integrated as shown in the picture below.



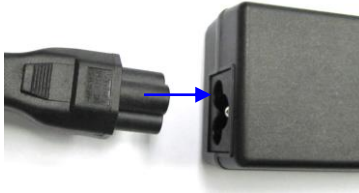
Setting Up the system

Power ON

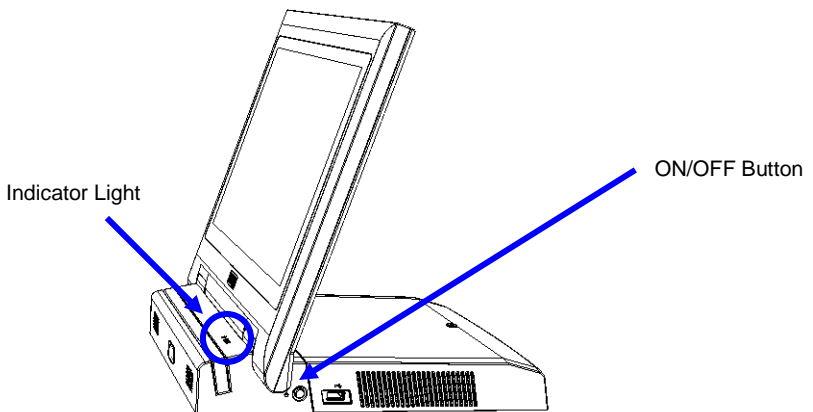
1. Insert the DC plug of the power supply into the DC jack.
Route the cable as shown in the picture, make sure that the cable pass through the restrainer (add additional picture – point to DC jack).



2. Insert the power cord into the power adaptor.



3. Connect the power plug into the main power point and switch on. The LED Indicator should be lighted RED.
4. Press ON/OFF Button at the side of the system, the LED Indicator should change to GREEN.



5. The system should boot up the Operating System.

Indicator Light

The Indicator Light has the following meaning:

No light	Main is OFF
Red	Power OFF (Standby)
Blinking Green (at 1 Hz)	Hibernation / Sleep
Blinking Green (random)	Hard disk activity indication

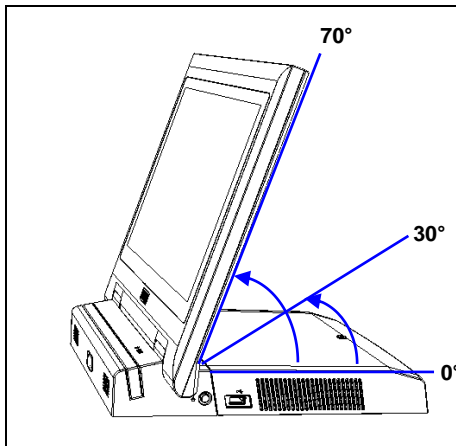
Powering OFF

To power down normally, perform a shut-down of the Operating System. The LED Indicator should turn to RED when shut down is completed.

Adjusting the viewing angle of Display

The tilt angle of the display screen can be adjusted to suit the usage and the operating comfort of the user of the terminal.

- Adjustment angle is from 0° to 70° from the normal for the display screen.
- When the customer display is installed in the system, the recommended adjustment angle is from 30° to 70°



Operating the system

Touch screen

Touching the touch screen momentarily has the same effect as clicking the left mouse button, and touch and hold is the same as clicking the right mouse button.

As resistive touch, it requires slightly harder touch to get a response, and touch with glove is possible.

Cleaning Instructions

Always **turn off the system** before cleaning!

The surface of your Touch Screen should be cleaned with a mild, abrasive free, commercially available glass cleaning product. All pH neutral materials (pH 6 to 8) are good for cleaning. Cleaners with pH values 9 to 10 are not recommended. Cleaning with water and isopropyl alcohol is possible as well. Do not use solvents containing acetic acid. Use a soft, fine-meshed cloth to clean the surface. Dampen the cloth slightly and then clean the screen.

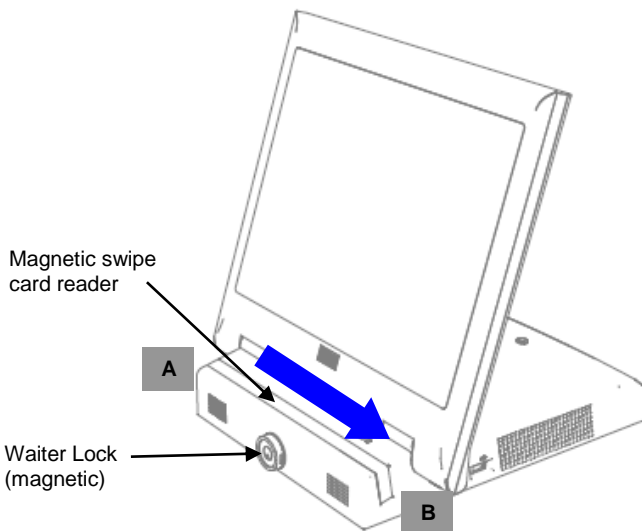
A wrong maintenance may cause damages to the screen, which are not covered by guarantee or warranty.

Magnetic swipe card reader (optional)

Swipe the card through the slot in one smooth and quick motion to ensure that the magnetic swipe card reader could read the card information effectively.

Hold the card with the front side facing you and swipe from left to right (as indicated by the arrow shown in picture below).

- Swipe the card from left to right (point A to point B)
- The magnetic stripe of the card should be facing towards the screen



WARNING

If the Waiter Lock is installed, ensure that magnetic card is not be brought close to it (min. 20mm away) as the magnetic field from the permanent magnet of the receptacle may corrupt the data in the card.

Cleaning Instructions

The magnetic swipe card reader is cleaned with a cleaning card. Make sure that no dirt remains in the card insertion slot. (If necessary, clean the card insertion slot with a brush).



NOTE

You can clean the read head when the device is switch on or switch off.
Cleaning interval: every 20,000 transactions
Cleaning material: Cleaning card Universal or ID card reader

Cleaning process:

- Remove the cleaning ID card from its packaging.



NOTE

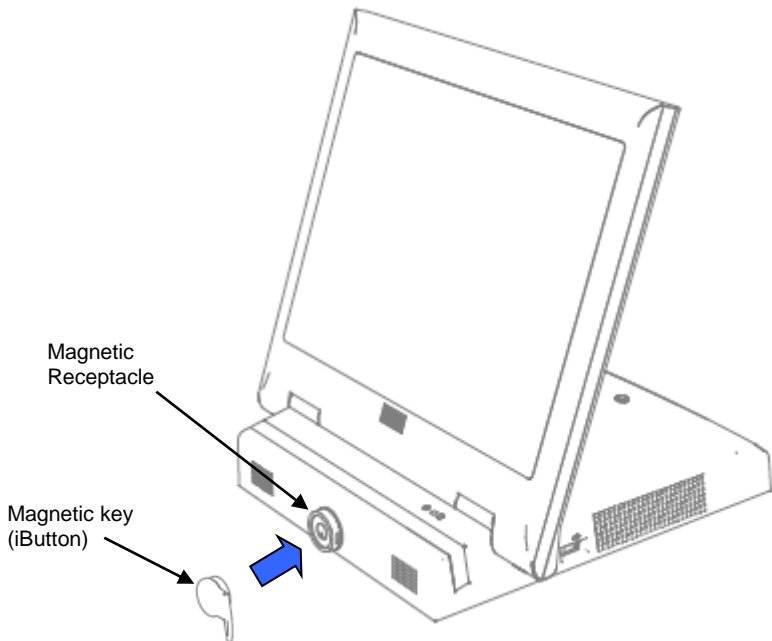
The cleaning card can only be used for a brief period as it is pre-saturated cleaning card which dries out after removal from its packaging.

- Swipe the cleaning card through the card slot like the regular ID card.
- Repeat this a few times.
- Dispose of the cleaning card.

Waiter Lock

Waiter lock is optional feature for the system. The built-in permanent magnet in the receptacle holds the electronic key (iButton). There is a spring-loaded contact in the receptacle that establish electrical connection with the attached electronic key (iButton).

To read the electronic key (iButton), place it on the magnetic receptacle (as shown in picture below).



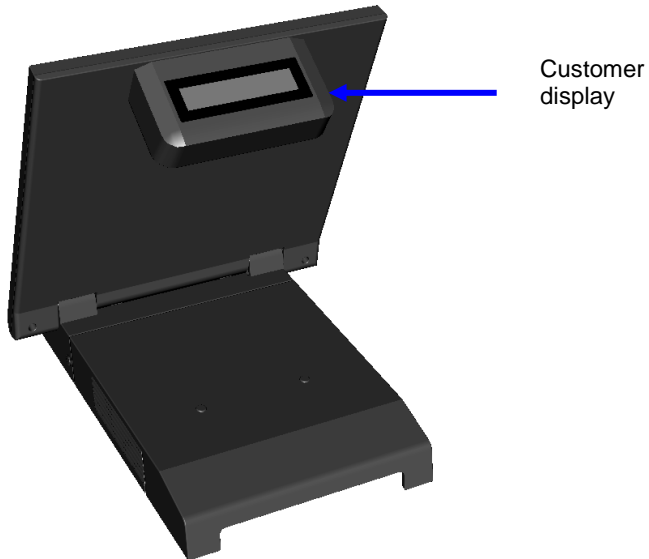


NOTE

Always keep the Magnetic Receptacle and Magnetic Key (iButton) clean. If you encounter difficulty in getting the Waiter Lock to read the information, please check and ensure that the contact is clean.

Customer display (optional)

The Customer display is integrated with the system as shown in the picture below. As the position of the customer display is fixed relative to the operator display, the viewing angle of the customer display is dependent on the operator display tilt angle. Adjust the angle of the main display screen appropriately to suit the usage of the customer display as well.



Appendix

Technical Data

	BEETLE/ Express	BEETLE/ Express 15
Display size	10.4"	15"
Dimensions		
Height	285 mm	354 mm
Depth	293 mm	293 mm
Width	263 mm	360 mm
Weight of device (approx..)	3.3 kg	4.8 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	
Rated Input voltage	19V DC (nominal)	
Rated Input current	3.42A	
Certifications	CE, FCC, CB, UL, cUL, TUV-GS, CCC, BSMI	

I/O Port Rating

Port Type	Voltage Rating	Current Rating
USB	5.0VDC	0.5A
Powered COM (combined COM1 & 2)	12VDC	0.5A
	5VDC	0.75A
Cash Drawer	24V	0.14A

AC Power Adapter

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

Power Input	100 - 240 Vac, 50 to 60Hz, auto-ranging
Power Output	19VDC 65W
Approvals & Certification	CE, FCC, CB, UL, cUL, CCC and BSMI

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.

Specification

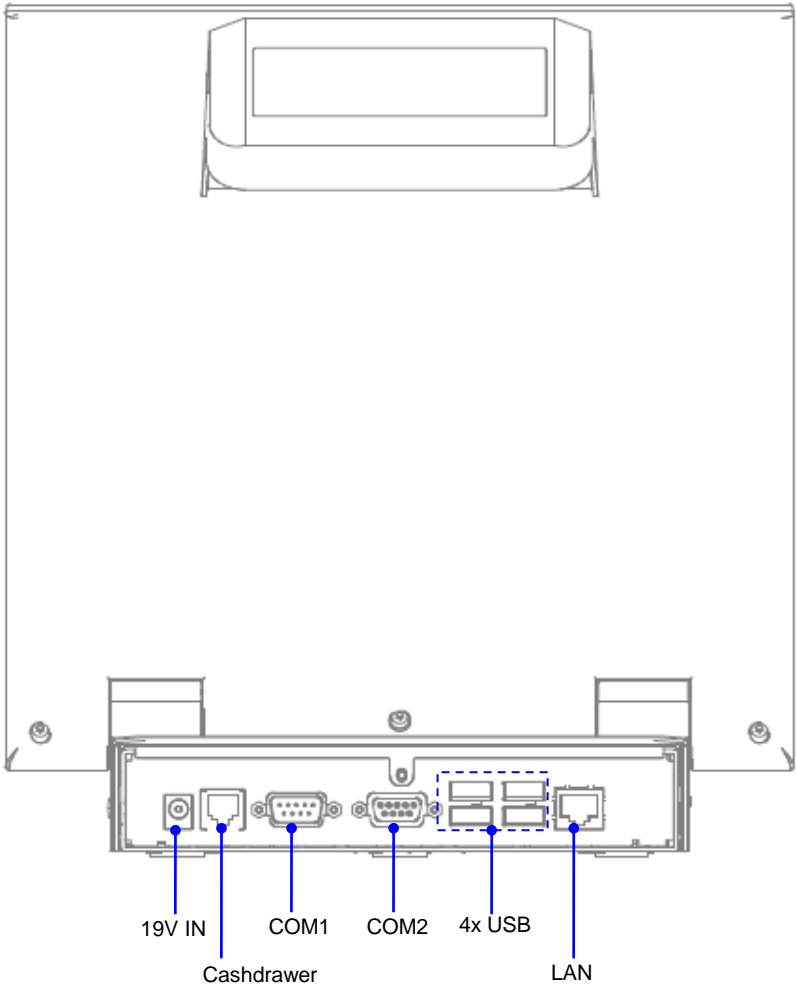
Processor	Intel ATOM D525 1.8GHz, Dual core
Chipset	Intel ICH8M
Memory	1 slot, 1067MHz DDR3 SODIMM un-buffered, max 2 GB
Primary Display	Size: 10.4" or 15" Resolution: 800x600 (for 10.4"), 1024x768 (for 15") Backlight: LED, 180cd/m ² (typical) Adjustable tilting angle: 0 to 75 degree
Touch	5-wire Resistive, USB
Mass Storage	1x 2.5" form-factor fixed disk bay, SATA 1x CF Socket for Type I CF cards
External interface (user accessible)	5x standard USB (4x rear & 1x right-side) 1x standard RS232C 1x powered RS232C 1x RJ12 cash drawer interface for 24V cash drawer 1x RJ45 LAN 10/100Mb/s 1x 19VDC power input
NVRAM option	4Kb only
Other Features	<ul style="list-style-type: none">Dual function Indicator: Power ON status (solid colour) and HDD activity (blinking)

Customer Display options	<p>STN LCD, white pixel on blue background</p> <ul style="list-style-type: none"> • ASCII Character: 2 rows x 20, 8x16 cell size <ul style="list-style-type: none"> ✓ Codepage 437 only • Double-byte Characters: 2 rows x 10, 16x16 cell size <ul style="list-style-type: none"> ✓ Simplified Chinese ✓ Traditional Chinese
MSR options	<ul style="list-style-type: none"> • Single head: Standard 3-track (ISO 7811) • Dual-head: track 1&2 (ISO 7811), Type II Card conforming to JIS B 9561.
Waiver Lock option	<p>Magnetic receptacle for holding and connecting to electronic key.</p> <ul style="list-style-type: none"> ✓ 1-Wire protocol ✓ Serial Number iButton only (DS1990A) <small>note 1</small>
Power Consumption	<p>Normal operation (idle) – 32W</p> <p>Normal operation (sleep) – 2.2W</p> <p>Off – 2.2W</p>

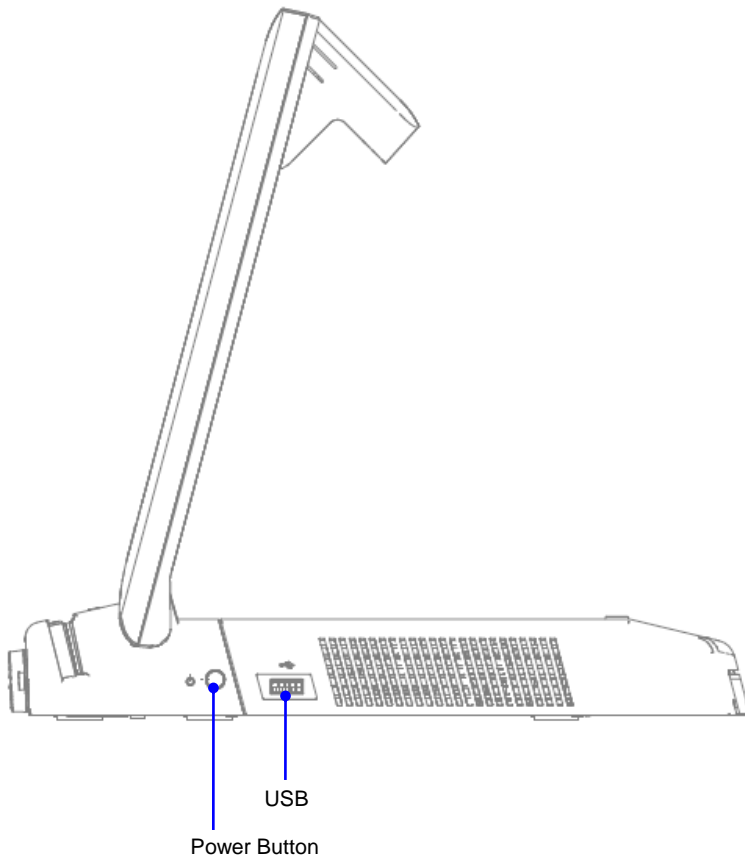
Note 1: recommended source Olitronic GmbH, Magnetic Key 95-D-04

I/O connection ports

Rear Panel



Side I/O



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