

Modular POS System

User Guide

Edition November 2000

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## **Manufacturers Certification**



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".

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

**Tested Safety** 



The POS system has been provided with the symbol for "Tested Safety".



In addition, the BEETLE 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 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.

#### **IMPORTANT NOTES**

### Important notes

The modular POS system BEETLE NetPOS conforms to the current safety standards for data processing equipment.

If this device is taken from a cold environment into the operating room, moisture condensation may form. The device must be absolutely dry before being put into service; an acclimatization period of at least two hours must therefore be observed.

- This device is equipped with a safety-tested power cable and may be connected only to a prescribed grounded-contact power socket.
- When setting up the device, ensure that the power socket on the device and the grounded-contact power socket are easily accessible.
- To disconnect the device from the supply voltage completely, switch off the device and disconnect the power plug.
- Ensure that no foreign objects (c.g. office clips) find their way into the device, as this may lead to electric shocks or short-circuits.
- Never plug in or unplug data communication lines during thunderstorms.
- Protect devices from vibrations, dust, moisture and heat.
- Always dispose of used parts, such as batteries, in an environmentally safe manner.
- The lithium battery must be disposed of in accordance with local regulations for special waste.
- In emergencies (e.g. damaged housing or damaged power cable, penetration by liquids or foreign bodies), the device must be switched off immediately, the power plug disconnected and the Customer Service of Wincor Nixdorf (WN) or your dealer must be notified.
- The device may only be repaired by authorized qualified personnel. Unauthorized opening of the device and inexpertly carried-out repairs may not only seriously jeopardize the safety of the user, but also cancel all warranty and liability agreements.

#### **IMPORTANT NOTES**

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- You should connect your BEETLE or other IT-devices only to poer supply systems with serarately guided protective earth conductor (PE). This kind of electricity system is known as TN-S network. Do not use PEN conductors!
- Please also observe the recommendations of the norm DIN VDE 0100, Part 540, Appendix C2 as well as EN50174-2, §5.4.3. Thus you can help to avoid possible malfunctions.

#### INTRODUCTION

## Introduction

The BEETLE NetPOS is the compact, powerful and economical basis for your POS system.

The BEETLE conforms to the PC industry standard. Powerful processors ensure a quick processing of all operations.

You can connect a variety of different peripheral devices to your BEETLE and even the choice of the software is not limited to a certain product.

Optional the BEETLE NetPOS can be equipped with a floppy disk drive or a memory card adapter, a hard disk or a compact flash.

This provides you with a considerable degree of flexibility when arranging the configuration of your POS system.

The BEETLE can also be connected to a network once an appropriate network card has been installed.

In the event of a mains voltage failure, the version with battery and corresponding software enables you to save the data by means of a controlled program shutdown.

Whatever configuration you need: Wincor Nixdorf offers the right solution. So, whenever you want to expand your BEETLE NetPOS, please contact your Wincor Nixdorf GmbH branch office or your dealer.

#### **ABOUT THIS MANUAL**

## About this manual

This manual describes the modular POS system BEETLE NetPOS.

This documentation is intended to help you work with the POS system and to serve as a reference work. The detailed table of contents help you find the desired information quickly and easily.

The first section describes

- everything you need to do before switching on the POS system and
- how to connect peripherals to the BEETLE NetPOS.

The second section contains

a brief overview of the components of your BEETLE POS system. Here, you will also find a detailed description of recurring actions, for example, how to use the disks.

The third selection provides

a brief overview of the Wincor Nixdorf Retail Software.

The Appendix

 contains the most important technical data, a glossary and a list of abbreviations.

Notes in the manual are marked by this symbol.

This symbol is used for warnings.

The type and scope of application programs depend on the customer's own selection; therefore, software will not be discussed further in this manual.

Separate manuals are included in the scope of the connectable peripherals. For this reason, a more detailed description of these devices will not be provided here. For more information, see the relevant manuals.

## Care of the BEETLE NetPOS

Clean your BEETLE NetPOS at regular intervals with a suitable plastic-surface cleaner. Make sure that the power plug is disconnected, connector cables are unplugged and that no liquid finds its way into the device.

#### **RECYCLING THE BEETLE NETPOS**

## Recycling the BEETLE NetPOS



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

The modular BEETLE NetPOS POS System is manufactured without the use of CFCs and CCHS and is produced mainly from reusable components and materials.

The processed plastics can, for the most part, be recycled. Even the precious metals can be recovered, thus saving energy and costly raw materials.

Please do not stick labels onto plastic case parts. This would help us to re-use components and material.

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.

At this time, there are still some parts that are not reusable. Wincor NIxdorf guarantees the environmentally safe disposal of these parts in the Recycling Center, which is certified pursuant to ISO 9001.

So don't simply throw your BEETLE POS system on the scrap heap when it has served its time, but take advantage of the environmentally smart, up-to-date recycling methods!

Please contact your competent branch or the department environmental protection for information on how to return and re-use devices and disposable materials under the following fax number:

Fax: +49 (0) 5251 8-18015

We look forward to your telephone call or your fax.

#### WARRANTY

## Warranty

Wincor Nixdorf guarantees a limited warranty engagement for 12 months beginning with the date of delivery. This warranty engagement covers all those damages which occur despite a normal use of the product.

Damages because of

- Improper or insufficient maintenance,
- Improper use of the product or unauthorized modifications of the product,
- Inadequate location or surroundings

will not be covered by the warranty.

All parts of the product which are subject to wear and tear are not included in the warranty engagement. Please order spare parts at the Wincor Nixdorf customer service.

## **BEETLE NetPOS**

## **Overview**

You can connect a variety of peripherals to your modular POS system BEETLE NetPOS and thus implement a wide range of expansion stages. You can connect a two or four-line alphanumeric customer display and a four line cashier display. Alternatively you can connect Flat screens, such as BA69 (VGA/4), BA70 (b/w) or BA71 and BA72 (color), use various types of scanners such as distance, touch or stationary scanners, use scales and scanner scales (please take into account the official certification regulations), connect various printers, use POS keyboards with or without a swipecard reader, use different types of cash drawers, connect a monitor, install the POS workplace SNIkey, integrate the BEETLE NetPOS in a network.

This means that the BEETLE NetPOS can meet your requirements at all times, without having to exchange the complete system for a new one, thus saving you time and money.

The illustration below show you how your modular POS system can grow - from a scanner to integration in a network.

### OVERVIEW

## **BEETLE NetPOS Peripherals**



### OVERVIEW

## **BEETLE NetPOS in a network**



## Before switching on the System

#### Unpacking and checking the System

Unpack the parts and check to see whether the delivery matches the information on the delivery note.

The carton contains the basic unit and a country-specific accessories kit. Some ordered composition may be installed.

If damage has occurred during shipping or if the package contents do not match the delivery note, promptly inform your Wincor Nixdorf sales outlet.



Transport the device only in its original packaging (to protect it against impact and shock).

### Setting up the device

Set up the BEETLE NetPOS POS system where it will not be exposed to extreme environmental conditions. Protect the device from vibrations, dust, moisture, heat and strong magnetic fields.



Make sure that the side ventilation slots on the BEETLE NetPOS and the external power supply are not obstructed in order to ensure that the device has sufficient ventilation.

### Cabling of the BEETLE NetPOS

Follow the steps below in the order given when installing devices:

- The cable cover must be removed, if present.
- Plug one end of the power cable into the external power supply and connect the other end to the main power supply.
- Plug one end of the other power cable into a grounded-contact power socket of the external power supply and the other into the socket of the BEETLE NetPOS.
- Plug in and secure the data cable.



Always make sure that the system is switched off when you do cabling works.

### **Disconnecting cables**

Never unplug a cable by pulling on the cable itself; always take hold of the actual plug. Follow the procedure below when disconnecting cables:

- Turn off all power and equipment switches.
- Remove the cable cover.
- Unplug all data communication cables from the sockets of the data networks.
- Unplug all power plugs from the grounded-contact power sockets.
- Unplug all cables from the devices.



With MINI-DIN plugs, the plug remains inserted until released.



Pull the plastic covering from the connecting socket with your thumb. The lock is released. The metal of the plug is visible.



RJ12 plugs lock in when you insert them. To release them push the latch under the plug to the top.



The D-sub typ connector or CRT (VGA) connector is used for parallel or serial interfaces. Release the connector by loosen the two screws.



## Mounting the cable cover

The scope of supply of your BEETLE NetPOS includes a cable cover. Before mounting the device, you should first remove the cable openings where necessary.

Tools are not required as the plastic parts can be removed by hand.



In order to mount the cable cover, insert it in the guide  ${\rm I}{\rm O}_{-}$  and turn it to the BEETLE box. Press from the inside against the exterior and pull it to the

rear side until it is fixed in the second pin  $\ \ \textcircled{0}$  on the back of the BEETLE box.

In doing so, ensure that the cable cover does not fit askew.

## Connecting to the mains power supply

All devices belonging to the modular BEETLE NetPOS system that have a separate power cable must be connected to the same electric circuit.

- Make sure that all data cables on the system unit and peripherals are connected correctly.
- Make sure that the DC cable is connected to power supply and to system unit.
- Plug all power cables belonging to the BEETLE and the peripherals into the grounded-contact power sockets.



The power supply can be connected to all standard power supply networks. The unit adjusts automatically to the respective voltage. The maximum output of the power pack is 150 W.

### **Basic settings**

Ex works, the BEETLE NetPOS is configured to your order. Your configuration must be subsequently adapted to support supplementary devices such as scanners. For more information, contact the WN branch office responsible for your area.

### Adjusting the loudspeaker

You can set the volume as desired by means of a menu described in the manual "BEETLE POS Motherboard", chapter "BIOS Setup".

Light emitting diode (LED)



The left LED green (POWER) lights when the BEETLE NetPOS is switched on.



The right, yellow LED (HDD) lights up while the hard disk is being accessed.

## **Connecting peripherals**

The peripherals mentioned here are available as options and are not part of the basic configuration. A separate manual is provided for each of the connectable components. For more detailed information, please consult the relevant documentation.

The figure shows the back panel of the BEETLE NetPOS with the locations of the connecting sockets and connecting plugs. If you wish to connect a monitor, however, you must also have a video board.

CRT and TFT interfaces are used alternatively.



Connecting peripherals with the system switched on is not allowed.



**Power Connector** 

Rear panel of the BEETLE NetPOS



Rear panel of the power supply

### **Keyboard (KYBD)**

The BEETLE NetPOS has a 6-pin mini-DIN jack for connecting a keyboard. Make sure that the connector is plugged firmly into the socket to prevent malfunctioning. Power is supplied to the keyboard via this socket. If you wish to connect a standard PC keyboard with DIN connector, you must use a special adapter cable, obtainable from the WN branch office responsible for your area.





When removing cables with locks, please grip the cable at the connector housing.

### Scanners and scales (COM1 - COM4\*)

Depending on the systems configuration, scanners without an independent power supply are connected to the COM2\*, COM3\* or COM4\* serial interface (standard setting COM3). Connect scales with their own power supply to the COM1 interface. COM1 is designed as a 9-pin D-sub plug, whereas COM2\* - COM4\* are 9-pin D-sub jacks. Make sure that the scanner connector is plugged securely into the socket to prevent possible malfunctioning.



If you connect scales to the BEETLE NetPOS which are not supplied by Wincor Nixdorf, you must obtain a licence for the driver software.





The COM2 interface is without effect if the onboard TFT adapter with touch screen function is installed.

### Customer display (COM2\* or COM4\*)

With the BEETLE NetPOS, and depending on the system's configuration, the customer display is connected to either the COM2\* or COM4\* serial interface. The interface connection is a 9-pin D-sub jack. Make sure that the connector for the customer display is screwed firmly to the socket to prevent possible malfunctioning. Power is supplied via this jack.



### Cashier display (COM3\*)

Connect the cashier display to the serial interface COM3\*. This port is a 9-pin D-sub jack.

Make sure that the connector for the cashier display is screwed firmly to the socket to prevent possible malfunctioning.



Monitor

If a CRT adapter is installed, you can connect a monitor to the system via the 15-pin D-sub jack on the CRT adapter. The power supply of the monitor is done by the rubber socket of the external power pack. The socket is situated at the front of the power pack.



A LCD screen can be connected alternatively if a TFT adapter is installed.

## **TFT - LCD display**

If a TFT adapter is installed you can connect a SNIkeyTFT/ BA71/ BA72/ BA73 to the BEETLE NetPOS without using an ISA slot. Connect the 50-pin data cable of the LCD to the system. The signals for the touch screen function and the power supply are also made via this cable. To implement the touch screen functionality for the COM2 interface you have to change some system settings ( see manual "BEETLE POS Motherboard", chapter "Technical data").



If the display is equipped with a keyboard cable connect this with the KYBD terminal. You can only connect one keyboard cable to the BEETLE NetPOS at a time - either that of the LCD or that of the free standing keyboard (e.g. PC keyboard, TA57, TA61)

To find out how to connect a second keyboard, refer to the user guide of the display.

Connecting standard PC peripherals (COM1)

You can connect supplementary standard peripherals to the BEETLE NetPOS via the COM1 serial interface.

Make sure that all supplementary devices have been tested for RFI suppression pursuant to the legal requirements of your country.



Network

If a network board is installed, the system can be connected to a network (LAN) from the POS terminal back panel.



### Modular printers

The standard parallel interface LPT1 is intended for connecting a printer.



Appropriate POS printers can also be connected via the low-voltage jack 24V, max. 2A at the external power supply. A connecting cable with a HOSIDEN plug is required for this.





Do not connect the HOSIDEN plug when the system is turned on, this can lead to an automatic reboot of the system.



Connect only cable to the 24V connector which are marked with DP-1 or DP-2.

Cash drawer (1,2)

The BEETLE NetPOS has two RJ12 sockets at the external power supply for connecting cash drawers. Make sure that the connector is plugged firmly into the socket to prevent malfunctioning. RJ12 plugs lock in when you insert them. Power is supplied to the cash drawer via this socket, +24V + 5% / -10%.





Connecting daisy chained cash drawers and 12V OEM-drawers is prohibited!

## **BEETLE NetPOS - the components**

Overview

The following figure shows the outside of the BEETLE NetPOS.



## OVERVIEW

The figure below shows the inside of the BEETLE NetPOS.



#### **FLOPPY DISK DRIVE**

## Floppy disk drive

### General

The BEETLE NetPOS is equipped with a floppy disk drive for 3.5" disks. The LED at the drive lights up whenever the system accesses the drive.

The disks can be used for a variety of applications, such as:

- Loading programs
- Saving data (e.g. daily sales figures)
- Access control (electronic key)

The disk can be write protected to protect your data from accidentally being overwritten. The slide is located at the bottom left of the diskette.



#### **POWER SUPPLY**

Inserting a disk

Hold the disk so that the arrow symbol is at the top and points away from you. Now insert the disk in the drive slot provided. The disk has been correctly inserted when the grey ejection button has popped out.

#### Removing a disk

Press the ejection button next to the drive slot. You can now remove the disk.

Never remove the disk while the drive is being accessed, i.e. when the LED indicator for the drive is illuminated. Otherwise, you could damage the drive and the disk.



## **Power Supply**

The power supply automatically adjusts itself to the particular voltage. The power output of the power supply is maximum 150 W.

The power cord receptacle and the ON/OFF switch are located on the back of the power supply. At the front side of the BEETLE NetPOS you will find the ON/OFF button which will turn on the system if the ON/OFF switch at the rear side of the external power supply is in the position ON. Pushing the ON/OFF button again (push at least 4 sec.) will turn the system into the Stand by mode.

#### POWER SUPPLY



Rear panel of the power supply

#### SUBMODULES FOR THE CPU

## **Configuration variants**

## Submodules for the CPU

Various controllers can be plugged in on the CPU. The following is a brief description of the available options:

LAN controller 10/100 Mbit (PCI)

This controller can be used to incorporate the BEETLE NetPOS in an Ethernet network (10/100 Base T). It uses the internal PCI bus.

### **CRT- or TFT-adapter**

Both adapters must be installed alternatively. You can connect either a CRT monitor or a TFT-LCD module with optional touch screen functionality. When installing a TFT adapter with touch screen functionality make sure that the internal loudspeaker will be taken off to activate the loudspeaker in the screen display (see chapter installation in the manual of the screen display) and the touch functionality will be activated via jumper (see jumper settings in the manual "BEETLE POS Motherboard"). The COM2 interface is no longer valid for external use. If the BEETLE system is pre-installed ex works, COM2 will delivered with a cover.

#### SUBMODULES FOR THE CPU

Installing the submodules when using a TFT/CRT adapter

First ensure that the system is switched off and that the power connector is disconnected.

Loosen the screws at the rear side (see arrows).



Then lift off the top cover.

When using a TFT or CRT adapter, loosen the screws on the rear side of the adapter (see arrows).



Loosen the connector of the adapter from the motherboard, loosen the screws and shift the adapter through the open slot  $\mathbb{O}$ . Remove the metal cover of the LAN/ASYNC interface  $\mathbb{Q}$ .



#### SUBMODULES FOR THE CPU

Plug in the submodule (see drawing).



Fix the submodule (here LAN controller) with two screws at the rear side of the BEETLE system O and push the TFT adapter or CRT adapter through the slide back in the right position O. After connecting it with the motherboard fix the adapter with the two screws.



Installing the submodules

Proceed according to the description in the section before, however without installation of the TFT or CRT adapter.

#### CHANGE OF THE HARD DISK

## Change of the hard disk

To change the hard disk open your BEETLE NetPOS as described on the pages before.



Pull out the connectors, lift up the hard disk floppy disk.



Leverage the hard disk out of the guide rail. Loosen the screws and change the hard disk. Fix the new hard disk with the screws. Shift the carrier of the hard disk into the guide until you hear a click.

Plug in the connectors again and close the cover. Plug the power cable (external power supply) and switch on the system.

#### WINCOR NIXDORF STORE SOLUTIONS

## Retail Software

The market for retail store solutions presents a broad array of requirements for the functions in these solutions as well as for the software technologies used. Moreover, the software and hardware is used internationally, and must meet a wide range of regional requirements. This means, for example, that solutions that fulfill the regional requirements of Central Europe may turn out to be inadequate for Asia or Latin America. Wincor Nixdorf provides customers worldwide with standard products appropriate to the commercial and technical complexity of their organizations. In keeping with this strategy, Wincor Nixdorf has defined a portfolio of in-store solutions that accommodates this variety of requirements. The portfolio offers in-store solutions for the different operating system platforms that are prominently used worldwide (Microsoft and Linux), and also offers varying degrees of solution complexity. Besides demanding products that will remain viable in the future, today's retail customers also require that a solution provider offer other services, such as project management, customization and integration services, as well as advice in the selection of basic core technologies.

## Wincor Nixdorf store solutions

As an international product provider, we are oriented to market developments and standards that are available worldwide, allowing us to offer our customers open solutions and services with guaranteed viability into the future.

Software must of course meet the customers' needs, and these can often vary greatly. But for the software to be a long-term success, its design and implementation must also take into account the fundamental trends and standards that are emerging in the market. Only if you stay open to the dynamics of retail, it can be ensured that new commercial trends will be reflected within the scope of the solutions provided. To accommodate these dynamics, Wincor Nixdorf must have the appropriate technical expertise. When working on product development, projects or consulting, this expertise is essential to effectively meet current as well as future requirements.

#### PLATFORMS AND PRODUCTS

## Platforms and products

Solution platforms today are expected to utilize state-of-the-art, standardized operating systems. Some of the decisive factors in selecting an operating system in the retail trade include:

- An operating system should provide software administration mechanisms to help minimize the total cost of ownership
- The flexibility of an operating system for use with different hardware and peripherals
- Global availability to ensure complete coverage, as well as
- Scalability with regard to user requirements.

In light of these criteria, the Microsoft operating systems have established themselves in the market, and the Microsoft Windows NT platform is now positioned as an important technological factor.

However, the growing discussion of operating system scalability, as well as the demand for continued reduction of the total cost of ownership, have led to the emergence of other operating systems. The strongest trend has been to Linux. Regardless of the industry involved, Linux offers itself as an interesting supplemement to the world of Microsoft.

In view of this trend, Wincor Nixdorf has defined a software strategy that accommodates both Linux and the popular Microsoft platform:

#### Microsoft

Wincor Nixdorf currently offers two products for retail customers based on the Microsoft platform - the successful POSition store solution and the next-generation Trading Post software.

With POSition, Wincor Nixdorf offers an optimized solution for use in the self-service food and self-service non-food market segments. It is a flexible and highly integrative solution. Meeting the needs of its international clientele, it is based on a client/server architecture with MS-DOS at the POS terminals and a Windows NT-based server.

Trading Post presents itself as an object-based POS solution which uses the Microsoft Windows NT operating system throughout. With standardization concepts for interfacing POS peripherals (OPOS), an

#### PLATFORMS AND PRODUCTS

innovative, modular customizing concept and a graphical user interface at the POS terminal, Trading Post is positioned in markets with demanding requirements for system architecture and application versatility.

#### Linux

With CALYPSO, Wincor Nixdorf provides an international, high-performance sales system for the control and administration of sales activities in the self-service food and self-service non-food market segments. It is based on a Linux server and MS-DOS or Linux clients. The system architecture and platform guarantee optimal security and performance. CALYPSO is one of the first retail solutions with a homogenous Linux platform throughout.

### **Technology** evaluation

The further development of Wincor Nixdorf retail solutions takes place in dialog with its customers. Before being included in existing products, new trends and technologies are carefully examined with regard to their readiness for the market. To ensure market acceptance and market orientation in the selection of technologies, Wincor Nixdorf conducts technology evaluation projects with its customers and partners. This significantly reduces technological risks.

#### START AND RUNUP BEHAVIOUR

## Starting up the system

The configuration label shows you the equipment included in your modular BEETLE /NetPOS system.

The label is located at the underside of the BEETLE /NetPOS. The data specified there are required for entering the setup parameters (see section Setup in the manual "BEETLE POS Motherboard").

## Start and runup behaviour

After installing the BEETLE /NetPOS, switch on the POS system using the ON/OFF button on the front panel and the power switch on the power supply.

The system first performs an automatic self-test to test its basic functions.

For example, you may see the following message (irrespective of processor type) on the four-line cashier display or on the monitor:

WN POS xx/xx Date

xx/xx is the place holder of the BIOS version number

The system then determines the medium from which the operating system and POS application are to be booted. Each medium is assigned a logical drive according to the configuration of your BEETLE /NetPOS.

The following media can be assigned a drive:

- Disk
- Network
- Hard disk
- Memory card
- CD-ROM (not for BEETLE /NetPOS)

The logical drives are designated A:, B:, C: and D:.

#### START AND RUNUP BEHAVIOUR

If the system is to be booted from disk, this medium must always be assigned drive A:. The network is always assigned to the C: drive during the runup procedure. The hard disk can be assigned to the C: or D: drive. The system can only be started from the hard disk if the disk has been configured as the C: drive.

Corresponding to the Setup configuration the modular BEETLE /NetPOS POS system can be booted from the following drives:

- Floppy disk in drive A:
- Hard disk in drive C:
- CDROM in EL TORITO format
- Network adapter with BOOTPROM

Please mind that the storage medium must be system-boot-capable.

The following priorities apply:

Floppy disk (A:)	High priority
Network (C:)	Medium priority
Hard disk (C:)	Low priority

As standard the POS system always attempts to boot from a disk first if it is inserted in the respective drive.

If the POS system does not find a disk resp. a CD-ROM in drive A:, it automatically continues the loading process from drive C:.



If drive A: contains a disk on which no operating system is stored, the POS system cannot be booted. In this case, either replace the disk with one that is system-boot-capable or remove the disk altogether.

The operating system responds with additional messages on the cashier display or monitor, as shown in the illustration below.

C >P:

#### START AND RUNUP BEHAVIOUR

If the operating system has started up without error, the POS application software is automatically booted if necessary.

A message is displayed as soon as the BEETLE /NetPOS is ready for operation. For more detailed information, see the description of your application program.

## TECHNICAL DATA FOR THE BEETLE NETPOS

# Appendix

## Technical data for the BEETLE NetPOS

Box		
Width	288 mm	11.34 in
Depth	255 mm	10.04 in
Height	58 mm	2.24 in
Cable cover	80 mm	3.15 in
Power Supply		
Width	162 mm	6.38 in
Depth	223 mm	8.87 in
Height	80 mm	3.15 in
Weight		
Box	approx. 3.5 kg	
Power supply	approx. 2.5 kg	
Climatic category		
Operating	IEC 721-3-3 Class	3K3 +5°C to +40°C
Transport	IEC 721-3-2 Class	2K2 -25°Cto +60°C
Storago	IEC 721-3-2 Class	1K2 15°C to 140°C
Storage	IEC 721-3-1 Class	TK2 +5 C 10 +40 C
Input voltage	100 - 120 VAC	
	200 - 240 VAC	
Max. power consumption	3A: 200 - 240V	
	5A: 100 - 120V	
Frequency of system voltage	50 - 60 Hz	

## Installation BA7x on NetPOS



Loosen the screws 0, slightly lift up the cover of the NetPOS 0 and pull out forward 3.



Take the pre-mounted cover, put it on the NetPOS system and push it to the rear. Fasten the screws.



Open the cable cover of the display (see arrow) on the rear side and remove it. You see the cable connection.



Put the grey connection part into the display swivel  $\ joint \ \mathbb{O} \$  and fix it with the screw  $\mathbb{Q}.$ 



Add the swivel joint into the mounting foot. Press your finger on the screw  $\oplus$ , so that the grey connection part is in the back. Shift the display into the mounting foot until A fits in B.



Fasten the swivel joint at the display (see figure). Plug the cable connection and reinsert the cable cover.



Tilt the display backwards. Set the locking noses of the impact-blind into the support angles of the swivel joint  $\mathbb{O}$  and press the impact-blind until it is locked  $\mathbb{Q}$ .



Install the impact-blind to avoid injuries.



## Supplement

It is possible to lay an additional cable into the mounting foot beside the display cable . Minimum distances are depending upon type of cable ( 0 cable of swipe card reader, 0 cable of smart card reader, values ± 5 mm apply to BA70, BA71 and BA72).



#### GLOSSARY

## Glossary

#### Bit

A bit is a binary digit (0 or 1). It is the smallest unit used in data processing.

#### BPP

Bits per Pixel, depth of colour.

#### Controller

Serves to control data input and output in a data processing system or between a computer and the connected peripherals.

#### CPU

Abbreviation of central processing unit. It includes the main components of a data processing system. The CPU monitors all operations and provides data and programs. It comprises the control unit for input and output, the computer and the main memory, divided into ROM and immediate access storage.

#### Interface

Designates the transition point between different hardware units and software units or between hardware and software units of computers or their peripherals.

#### JEIDA

Abbreviation of Japan Electronic Industry Development Association. Industry standard for memory cards.

#### **Operating system**

Refers to all programs that are a component of a computer and are required for operating the system and executing application programs.

#### PCMCIA

Abbreviation for Personal Computer Memory Card International Association. Industry standard for memory cards.

#### Plug and PLay (PnP)

PnP means the automatic recognition of hardware components by the system. Thus the installation, integration and configuration of new components is made substantially easier.

#### GLOSSARY

#### **Peripherals**

Devices serving as an input/output device or storage for a computer. This includes, for example, document readers, keyboards, printers and disk storage.

#### Server

This is a computer connected to a local network and whose services are available to all of the network subscribers, e.g. a print server for printing the data from all of the network subscribers on the printer connected to the server.

#### VGA

Stands for Video Graphics Array and is the interface for connecting colour monitors.

ABBREVIATIONS

## Abbreviations

AT	Advanced Technology
ATA	AT-Attachment
BIOS	Basic Input Output System
COM	Communication Port
CPU	Central Processing Unit
CRT	Cathode Ray Tube
cUL	canada Underwriters Laboratories
DIMM	Dual Inline Memory Module
ECP	Extended Capability Port
EPP	Enhanced Parallel Port
EPROM	Erasable Programmable Read Only Memory
FD	Floppy Disk
GS	"Geprüfte Sicherheit" (Tested Safety)
HDD	Hard Disk Drive
HFT	High Frequency Table
HSF	Hash File Access Method
IDE	Integrated Drive Electronic
ISA	Industrial Standard Architecture
ISO	International Standardization Organization
JEIDA	Japan Electronic Industry Development Association
LAN	Local Area Network
LBA	Logical Block Addressing
LED	Light Emitting Diode
LPT	Line Printer
OEM	Original Equipment Manufactures
PCI	Peripheral Component Interconnect
PCMCIA	Personal Computer Memory Card Intern. Association
PnP	Plug and Play
RAM	Random Access Memory
ROM	Read Only Memory
SCSI	Small Computer Systems Interface
SD RAM	Synchronous Dynamic Random Access Memory
SIMM	Single In Line Memory Module
SRAM	Static Random Access Memory
SVGA	Super Video Graphics Array
TFT	Thin Film Transistor
UPS	Unbreakable Power Supply
UL	Underwriters Laboratories
USB	Universal Serial Bus
XMS	Extended Memory Specification