

BEETLE /XL-II

Modular POS System

User Guide



Edition April 2005

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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/EEC "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

The modular POS system BEETLE /XL-II 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 (e.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. The lithium battery must be replaced by authorized personnel only. Incorrect replacement may lead to the *danger of explosion*.

- 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 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.

- Your BEETLE POS system is the result of modern technical innovation. So please see for according structural and technical surroundings to guarantee a faultless and efficient work of your BEETLE.
- Therefore, you should connect your BEETLE or other IT-devices only to power supply systems with separately 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.

Note on the laser

If your device is equipped with a CD ROM drive, the following condition applies:

The CD ROM drive contains a light-emitting diode (LED), classified according to IEC 825-1:1993:LASER CLASS 1; it must not be opened.

Introduction

The BEETLE /XL-II is the compact, powerful and economical basis for your POS system.

The BEETLE conforms to the PC/AT 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.

Optionally, the BEETLE /XL-II can be equipped with a floppy disk drive, a CD-ROM drive or a DVD drive, 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.

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

About this Manual

This documentation is intended to help you work with the POS system and to serve as a reference work. The detailed table of contents helps 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 /XL-II.

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 describes

- the possible configuration variants of your BEETLE /XL-II.

The fourth section provides

- a general overview of the Wincor Nixdorf Retail Software.

Section five

- explains the start and runup behaviour of the BEETLE /XL-II.

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.

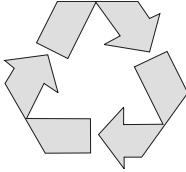
The type and scope of application programs depend on the customer's own selection; therefore software will not be discussed further in this manual.

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 /XL-II

Clean your BEETLE /XL-II 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 /XL-II



Environmental protection does not begin when the time has come 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 /XL-II 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 a 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 Recycling Center Paderborn (for European countries) for information on how to return and re-use devices and disposable materials under the following mail address:

Email: info@wincor-nixdorf.com

We look forward to your mail.

Warranty

Wincor Nixdorf guarantees generally a 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.

For further information of the stipulation look at your contract.

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 /XL-II

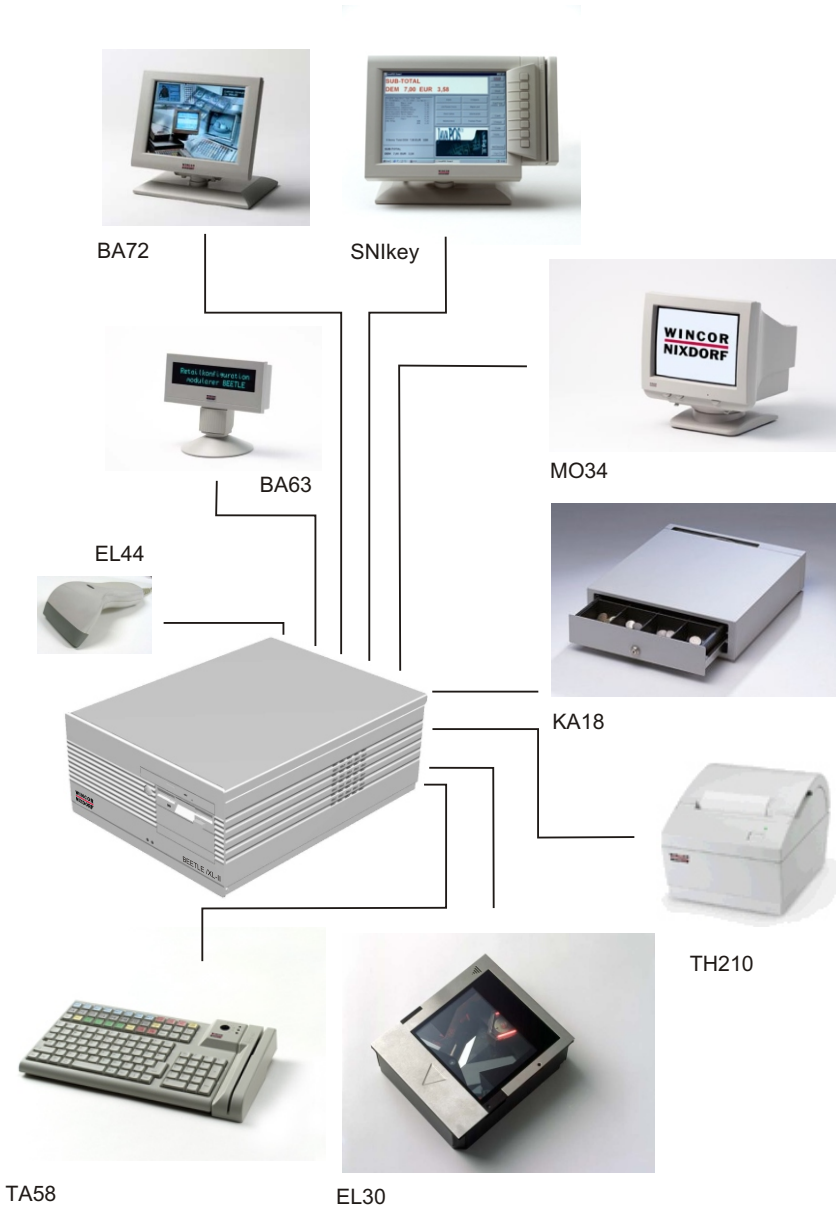
Overview

You can connect a variety of peripherals to your modular POS system BEETLE /XL-II 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, BA72 and BA73, 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 /XL-II in a network after installing a LAN board and upgrade the BEETLE /XL-II, since it can accommodate onboard extension card, such as VGA/TFT/LAN.

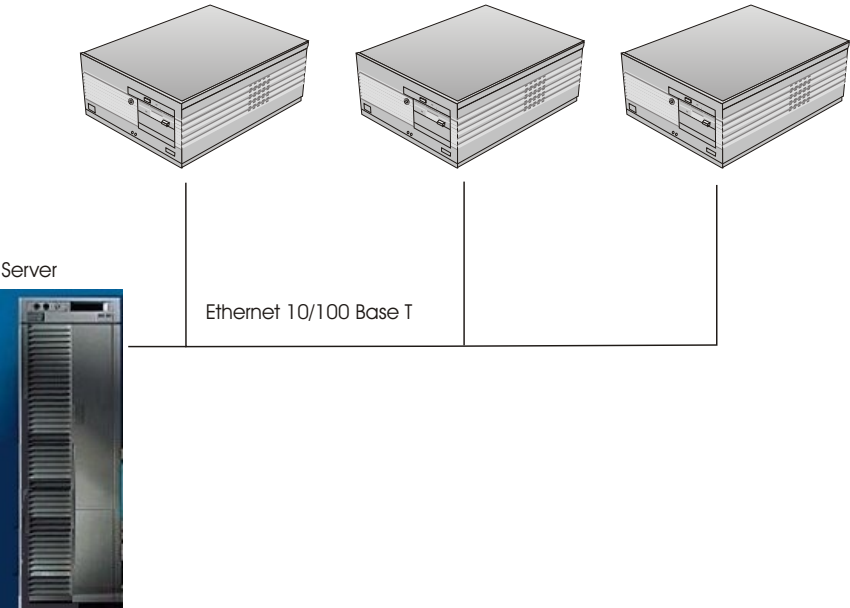
This means that the BEETLE /XL-II can meet your requirements at all times, without having to exchange the complete system for a new one, thus saving you time and money.

The following illustrations show you how your modular POS system can grow - from a scanner to integration into a network.

BEETLE /XL-II Peripherals



BEETLE /XL-II 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 /XL-II 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 /XL-II POS system are not obstructed in order to ensure that the device has sufficient ventilation (left side 30 mm, right side 100 mm by horizontal mounting).

Cabling of the BEETLE /XL-II

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 socket of the BEETLE /XL-II.
- Plug in and secure the data cable.
- Plug the other end of the power cable into the main power supply.



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

Connecting to the Mains Power Supply

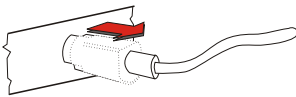
All devices belonging to the modular BEETLE /XL-II system that have a separate power cable must be connected to the same electric circuit.

- Make sure that all data cables on the system unit and peripherals are connected correctly.
- Plug the power cables belonging to the BEETLE and the peripherals into the grounded-contact power sockets.
- You can now switch on the BEETLE /XL-II by means of the switch on the power supply at the rear side. Push the ON button at the front of the box.

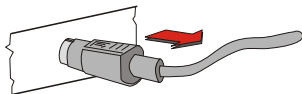
Disconnecting Cables

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

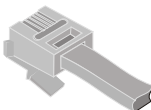
- Turn off all power and equipment switches.
- Remove the cable cover.
- Unplug all data communication cables from the sockets of the data networks.
- Unplug all power plugs from the grounded-contact power sockets.
- Unplug all cables from the devices.



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

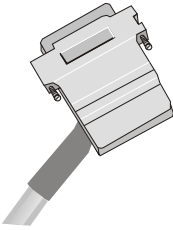


Pull the plastic covering from the connecting socket with your thumb. The lock is released. The metal of the plug is visible.

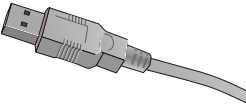


RJ12 plugs lock in when you insert them. To release them push the latch under the plug to the top.

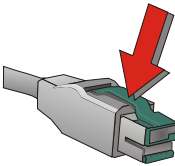
BEFORE SWITCHING ON THE SYSTEM



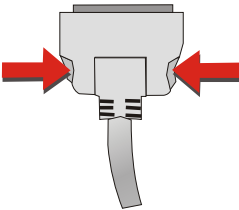
The D-sub type connector or CRT (VGA) connector is used for parallel or serial interfaces. Release the connector by loosening the two screws.



Take hold of the USB connector housing and release the connection.



Loosen the plug of the USB powered connector by pressing the metal latch.



Release the TFT connector by pressing the latches on the left and right inwards.

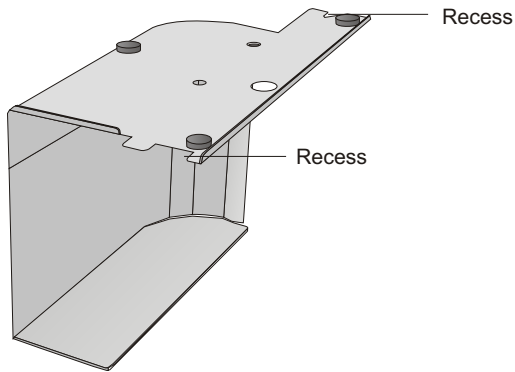
Mounting an Exhaust Air Hood

BEETLE /XL-II-Systems with powerful processors of more than 600 MHz, which are to be built into a piece of furniture, will need an Exhaust Air Hood. The hood will lead the air out of the interior of the system straight forward so that heat accumulation and thus damages to the system will be avoided.

The piece of furniture, into which the BEETLE is to be placed, must be open to the front!

Mounting the Exhaust Air Hood does not require any tools.

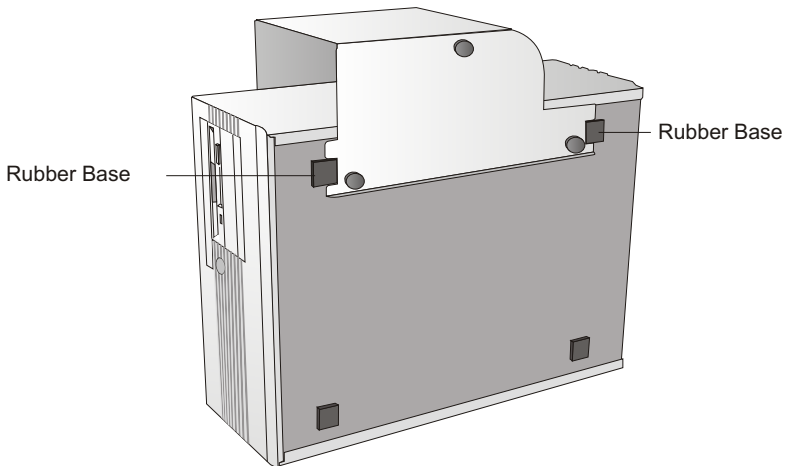
BEFORE SWITCHING ON THE SYSTEM



Exhaust Air Hood

Put the BEETLE upright onto the left side (i.e. the side with three ventilation areas).

Attach the Exhaust Air Hood to the BEETLE: Push the recesses on the left and right hand side of the hood to the rubber base of the BEETLE.



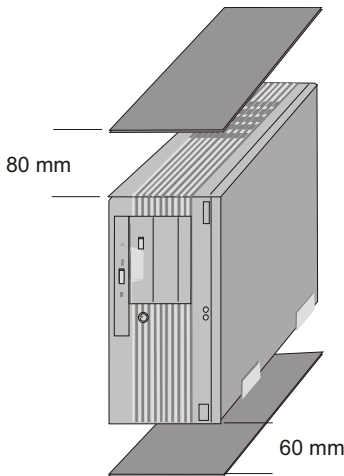
Now put the BEETLE into the position you want: either upright or level position. Hold the hood tight in doing so.

Installation of the BEETLE /XL-II

Vertical Mounting

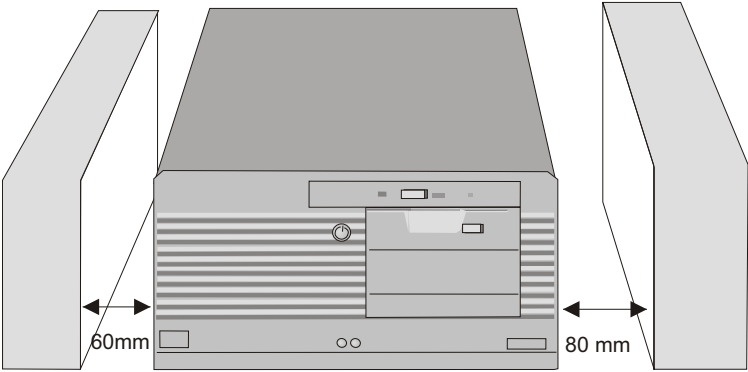
The BEETLE /XL-II is specified for a horizontal mounting. Observe the following if the system still is to be mounted vertically:

- A closed area made of non flammable material (e.g. concrete or metal) must be located under the vertically mounted BEETLE /XL-II.
- Make sure that the angles do not cover the ventilation slots.
- The following minimum clearances must be provided in free convection to ensure sufficient ventilation when vertically mounted:
vertical placement: upwards: 80 mm, downwards: 60 mm



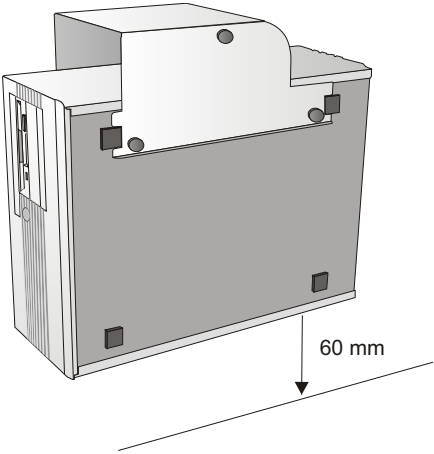
Horizontally Mounting

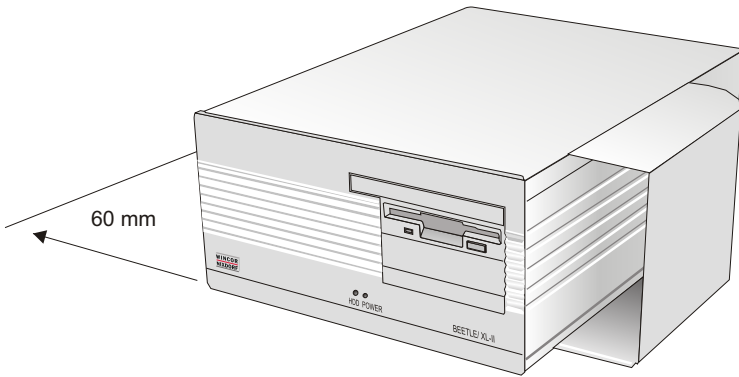
- The following minimum clearances must be provided in free convection to ensure sufficient ventilation, when horizontally mounted:
horizontal placement: left side: 60 mm, right side: 80 mm



BEETLE with Exhaust Air Hood

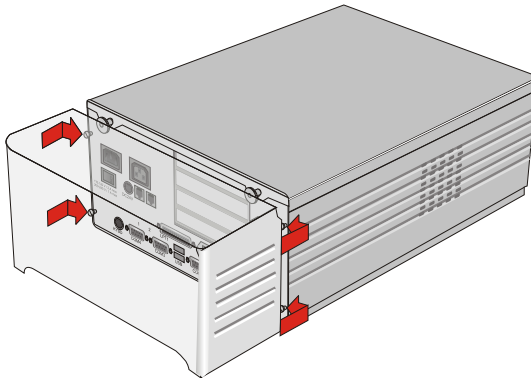
For sufficient ventilation leave a minimum clearance of 60 mm downwards (vertical placement) and 60 mm to the left side respectively, when horizontally mounted.





Mounting the Cable Cover

The scope of supply of your BEETLE /XL-II includes a cable cover. Before mounting the device, you should first remove the cable opening where necessary. This depends on the cables which you wish to lay. Tools are not required as the plastic part can be removed by hand.



In order to mount the cable cover, push it on the four pre-mounted screws on the back of the BEETLE /XL-II.

Tools are not required for mounting the cover.

Basic Settings

Ex works, the BEETLE /XL-II is configured to your order. Your configuration must be subsequently adapted to support supplementary devices such as

CONNECTING PERIPHERALS

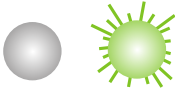
scanners. For more information, contact the Wincor Nixdorf branch office responsible for your area.

Adjusting the Loudspeaker

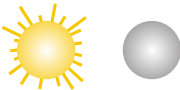
You can set the volume as desired by means of a menu in the BIOS Setup (see manual "BEETLE POS-/Motherboard").

Light Emitting Diode (LED)

You will find the LEDs at the bottom of the front side of the BEETLE /XL-II.



The right LED POWER (green) lights when the BEETLE /XL-II is switched on.



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

Connecting Peripherals

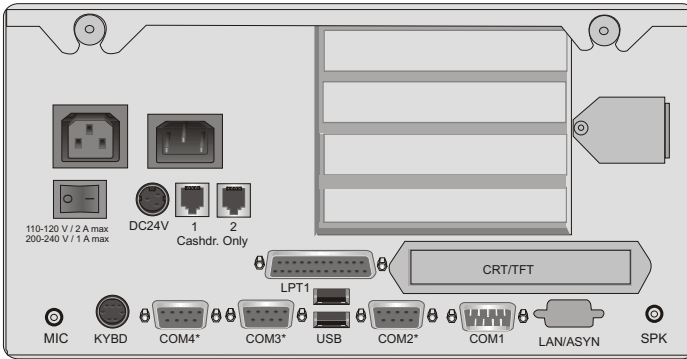
The peripherals mentioned here are available as options and are not part of the basic configuration. A separate manual is provided for each of the connectable components. For more detailed information, please consult the relevant documentation.

The figure shows the back panel of the BEETLE /XL-II 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. You can connect the system to a network via an onboard expansion board.

CRT and TFT interfaces are used alternatively.



Connecting peripherals with the system switched on is not allowed. USB peripherals are an exception. **Only connect devices equipped with a shielded cable to the USB interface.**



Rear panel of the BEETLE /XL-II (150 W power supply unit)

Keyboard (KYBD)

The BEETLE /XL-II 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 Wincor Nixdorf 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.

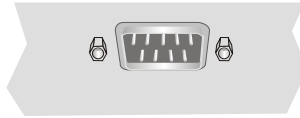


Make sure that the scanner connector is plugged securely into the socket to prevent possible malfunctioning.

CONNECTING PERIPHERALS



If scales which are not supplied by Wincor Nixdorf are connected to the BEETLE /XL-II, 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.

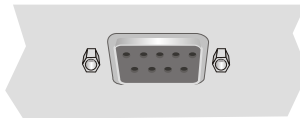
Customer Display (COM2* or COM4*)

With the BEETLE /XL-II, 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.

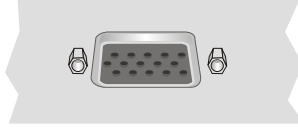


Make sure that the connector for the cashier display is screwed firmly to the socket to prevent possible malfunctioning.



Monitor

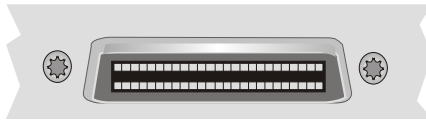
If a CRT adapter is installed, you can connect a monitor to the BEETLE /XL-II via the 15-pin D-sub jack on the CRT adapter.



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 /XL-II 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 is also made via this cable. To implement the touch screen functionality for the COM2* interface you have to change some system settings (see also chapter Configuration variants).



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 /XL-II via the COM1 serial interface.

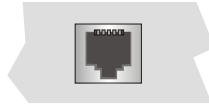


Make sure that all supplementary devices have been tested for RFI suppression pursuant to the legal requirements of your country.



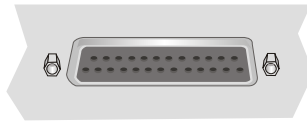
Network

If a network board is installed, the system can be connected to a network (LAN) from the POS terminal back panel. If a LAN board is not installed, this location on the back panel is closed by a dummy cover (see also chapter Configuration variants).



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. A connecting cable with a HOSIDEN (EPSON-compatible) 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 /XL-II with a 150 W power supply unit has two RJ12 sockets at the rear side for connecting cash drawers.

The power supply unit with 212 W provides one RJ12 socket for one cash drawer.

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, P24V +5% / -10%.



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

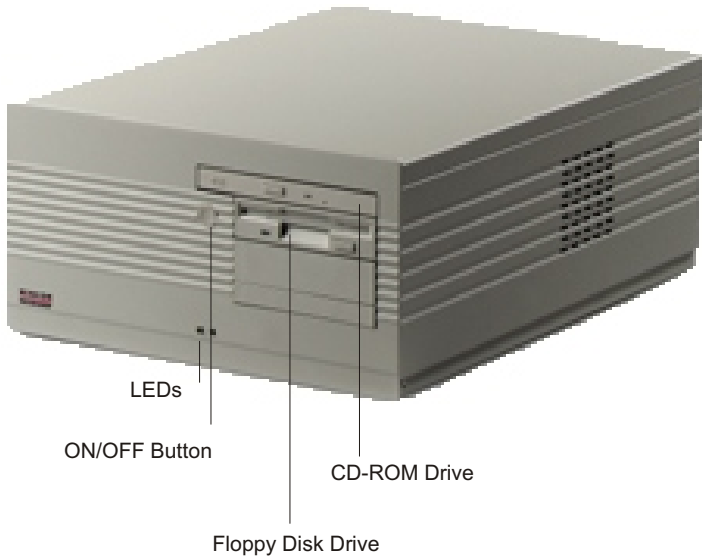


The two RJ12 sockets are only for cash drawers.

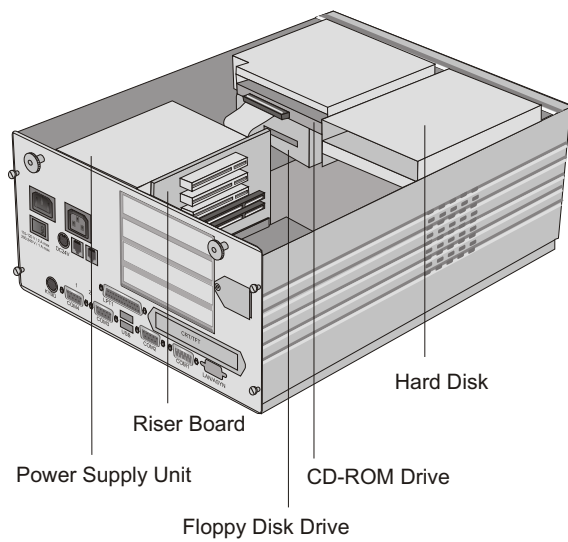
BEETLE /XL-II - the Components

Overview

The following figure shows the outside of the BEETLE /XL-II.



The figure below shows the inside of the BEETLE /XL-II.



Floppy Disk Drive

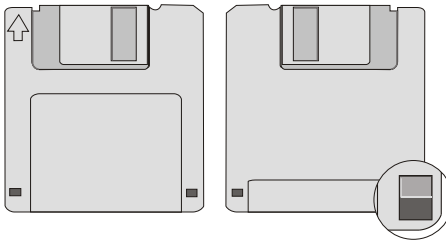
General

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

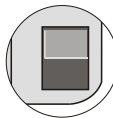
The disks can be used for a variety of applications, such as:

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

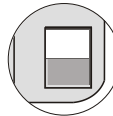
The disk can be write protected to protect your data from accidentally being overwritten. The slide is located at the bottom left of the diskette.



Writing is possible



Writing is not possible



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.



Ejection button

CD-ROM Drive

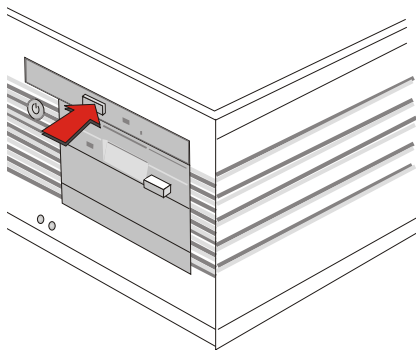
General

Optionally the BEETLE /XL-II can be equipped with a CD-ROM drive. The LED at the drive lights up whenever the system accesses the drive.

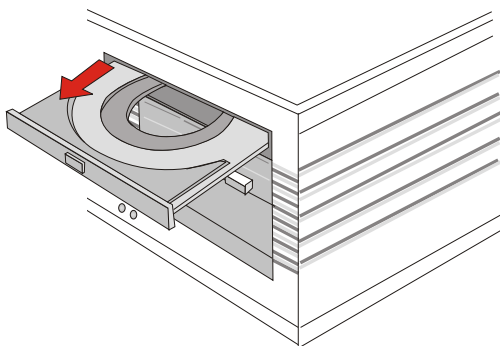
Operating the Drive

To start the drive, follow the procedure below:

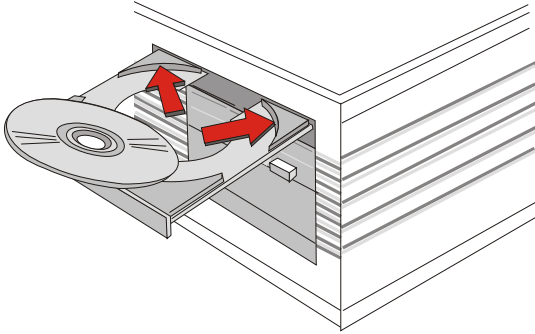
- Turn on the power supply.
- Press the ejection button.



- The drawer is ejected from the drive.



- Place the disc into the drawer with the disc's label facing up. Then restore the drawer softly until it is locked in the drive.



Notes

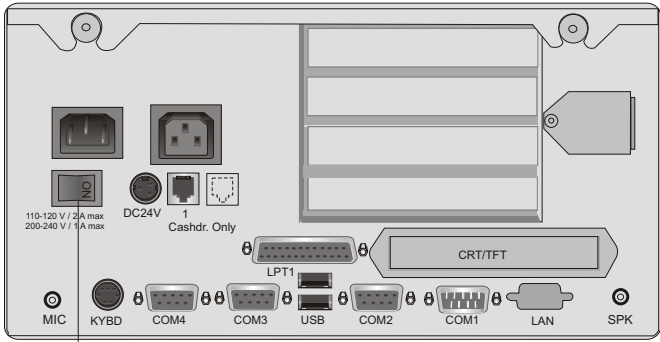
- Never bend a disc.
- Never write on a disc with a hard object, like a ball-point pen or pencil and never fix a label directly on the disc.
- Do not expose discs to direct sunlight and avoid storing them in areas subject to high temperatures or humidity.
- Never touch the surface of the disc. Always handle by their edges.
- For best results, periodically wipe each disc with a soft, dry cloth, gently rubbing outward from center. Never use fluids such as petrol, record cleaning or anti-static fluid. Use of such fluids can damage the disc.

Power Supply Unit

The power supply unit automatically adjusts itself to the particular voltage. The power output of the power supply unit is maximum 150 W or 212 W.

The power cord receptacle, and the ON/OFF switch are located on the back of the BEETLE system. At the front side of the box you will find the ON/OFF button which will turn on the system if the ON/OFF switch at the rear side is in the position ON. Pushing the ON/OFF button (approx. 5 sec.) again will turn the system into the standby mode.

BATTERY



ON/OFF switch

Battery

The battery bridges any power failures and allows a controlled shutdown of the POS program by the appropriate software (see table below).



Battery charging time is approx. 16 hours after initial startup. The battery is charged only while the system is switched on.

The table provides an overview of how long the BEETLE/XL- II is usually supplied with battery power in the event of a power failure (with the battery fully charged).

Duration of power supply	Power output	Operation
3 minutes	Full load	with supply of external peripherals and 24V printer running
20 minutes	Medium load (approx. 60 W)	with supply of external peripherals (usual configuration)
40 minutes	Low load (30 W)	e. g. device switched on



Peripherals connected to the power output socket of the POS terminal are not powered during a power failure.

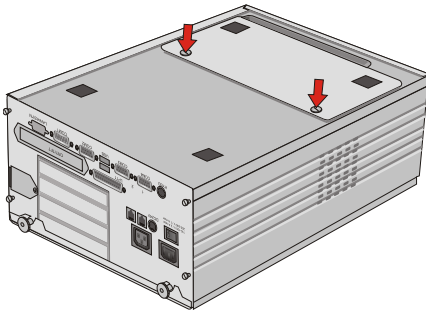
Changing the Battery

All batteries have a limited service life. In order to prevent any loss of data, we recommend that you change the battery at least every five years.

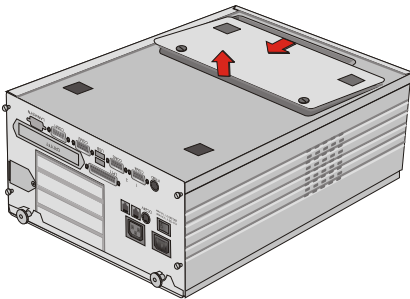


Make sure that the device is switched off and the power plug is disconnected.

Remove the cable cover at the backside of the housing. Pull out the connectors. Turn the BEETLE system on the top.

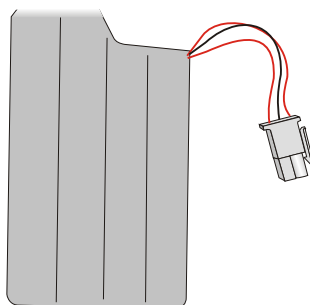
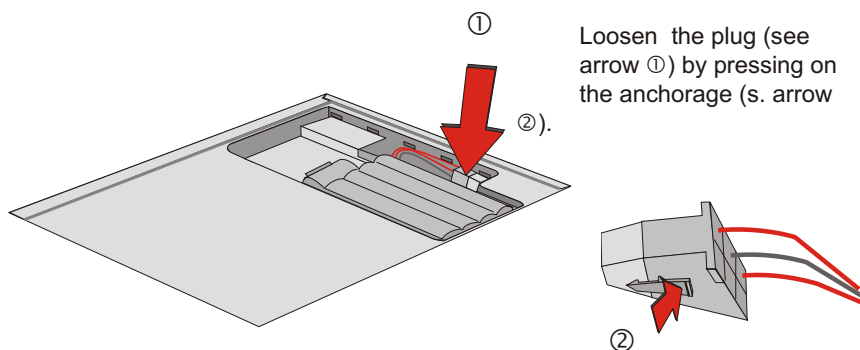


Then loosen the screws (see arrows), e.g. with a coin.



Remove the metal cover.

BATTERY



Remove the battery.



Use only batteries approved by Wincor Nixdorf. Always dispose of batteries in an environmentally safe manner.

Insert the battery. Connect the plug to the jack and reinstall the battery plate with the new battery at the bottom of the BEETLE /XL-II.

Insert the battery plate into the slots and fasten the plate with the screws.

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

This controller can be used to incorporate the BEETLE /XL-II in an Ethernet network (10/100). 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.

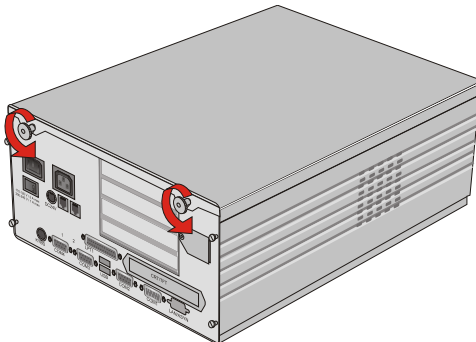
When installing a TFT adapter with touch screen functionality make sure that the touch functionality will be activated via jumper (see jumper settings in the user guide "BEETLE POS Motherboard").

The COM2 interface is no longer available for external use. If the BEETLE system is pre-installed ex works, COM2 will delivered with a cover.

Installing a Submodule

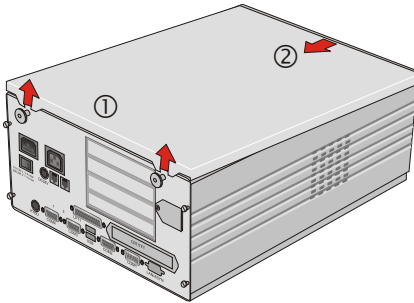
First ensure that the system is switched off and that the power connector is disconnected.

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

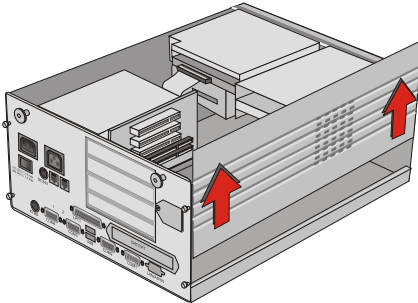


SUBMODULES FOR THE CPU

Lift the top cover at the back side (1) and then shift it out of the front guide (2).

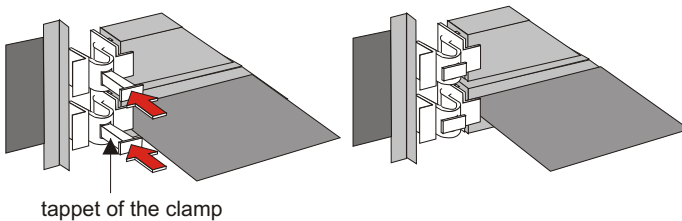


Shift the side part upward.



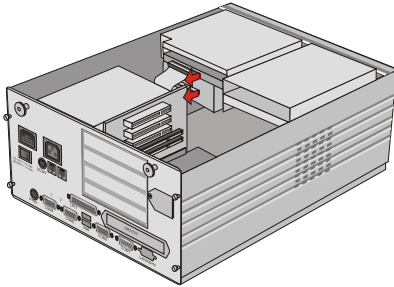
Remove the metal cover you require on the rear side. Plug in the submodule.

Fix the submodule. After connecting it with the motherboard fix the adapter. Press the clamp (see arrow).

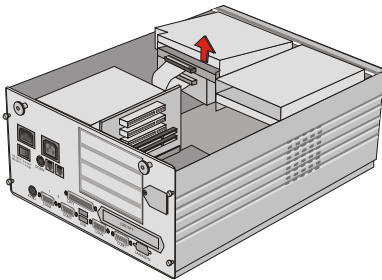


Change of the CD-ROM Drive

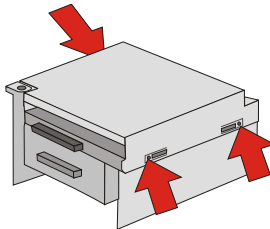
First ensure that the device is switched off and that the power connector is disconnected.



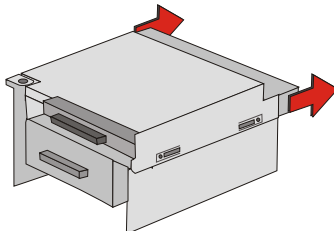
To change the CD-ROM drive open your BEETLE /XL-II as described above. Pull out all cable connectors (see arrows).



Lift up the drive, tilt the CD-ROM holder and take it out.



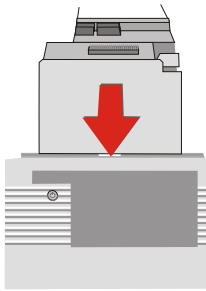
Loosen the three screws.



Shift the CD-ROM drive through the CD-ROM drive holder.

CHANGE OF THE HARD DISK DRIVE

Change the CD-ROM drive and fasten the new drive with the screws.
Insert the CD-ROM drive holder.



Make sure that the recess in the metal rail of the BEETLE corresponds with the latch of the CD-ROM drive holder (see arrow).



Tilt the drive holder to the rear.

Plug in the connectors. Close the cover and reconnect the mains connector.
Now you can switch on the system.

Change of the Hard Disk Drive

Follow the instructions of the section “Change of the CD-ROM drive”. The change of the hard disk drive corresponds to the change of the CD-ROM drive. To change the hard disk drive

- Open your BEETLE /XL-II as described above.
- Loosen the connecting cables.
- Lift up the drive, tilt the hard disk holder and take it out.
- Loosen the four screws.
- Remove the hard disk.
- Insert the new hard disk and fix it with the four screws.



Please pay regard to the correct direction of the ports.

- Insert the hard disk holder and connect the cables.

Installing an Expansion Card



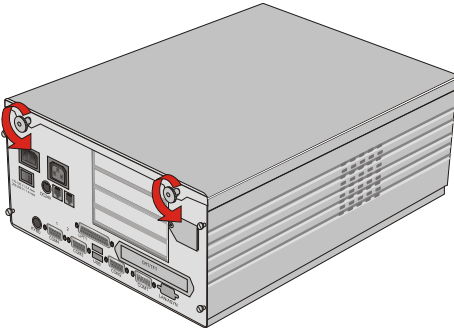
Expansion cards with electrostatic sensitive devices (ESD) can be marked with this sticker.

When you handle boards fitted with ESDs (electronic components), you must observe the following aspects under all circumstances:

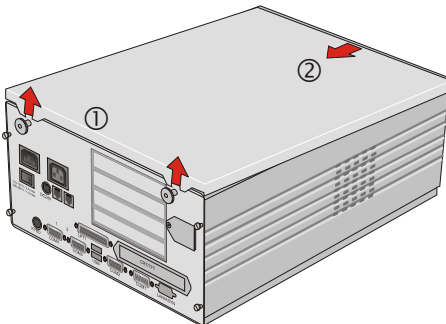
- You must always discharge yourself (e. g. by touching a grounded object) before working with boards containing ESDs.
- The equipment and tools you use must be free of static charges.
- Pull out the power plug before inserting or pulling out boards containing ESDs.
- Always hold boards with ESDs by their edges.
- Never touch pins or conductors on boards fitted with ESDs.



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

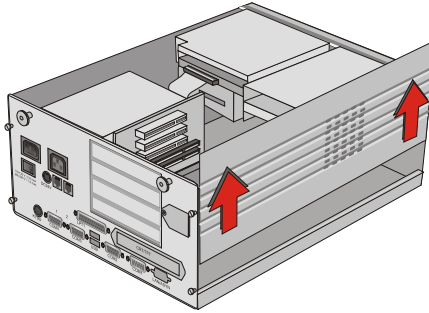


Loosen the two screws (see arrows) at the back of the BEETLE.



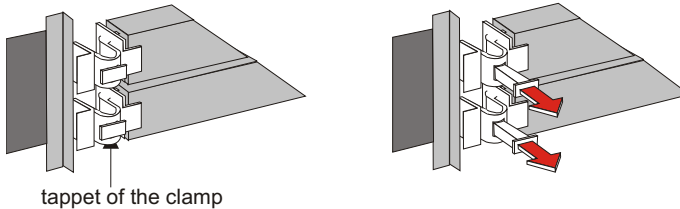
Then lift off the top cover (1) out of the front guide (2).

INSTALLING AN EXPANSION CARD



Shift the side part upward.

There is an easy access to the AT slot now. Remove the lower metal cover at the housing by pushing the clamp (see picture).



Always use the lower slot. This slot is reserved for a PCI- or ISA-Card.

First check whether the jumpers (if present) of the card are set correctly to avoid internal system conflicts. The correct setting for the jumpers can be found in the documentation for the plug-in card. Then slide the expansion card into the slot provided. Ensure that the card establishes contact with the terminal strip.

Secure the card by tightening it with the clamp that you have removed before.

Following this, mount the top cover again. The mains connector can now be reconnected and the device switched on.

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 fulfil the regional requirements of Central Europe may turn out to be inadequate for Asia or Latin America. Wincor Nixdorf provides customers world-wide 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 world-wide (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 world-wide, 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

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 supplement 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 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.

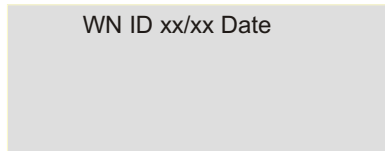
Starting up the System

Start and Runup Behaviour

After installing the BEETLE /XL-II, switch on the ON/OFF switch at the rear side of your POS system and then the On button at the front panel.

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:



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 /XL-II.

The following media can be assigned a drive:

Starting up the system

- Disk
- Network
- Hard disk
- Memory card
- CD-ROM

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

If the system is to be booted from the floppy 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 /XL-II POS system can be booted from the following drives:

- Floppy disk in drive A:
- Hard disk in drive C:
- CD-ROM 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

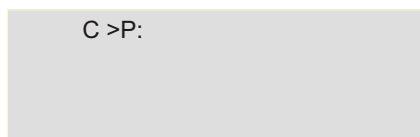
As standard the POS system always attempts to boot from a disk first if it is inserted in the respective drive.

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.



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

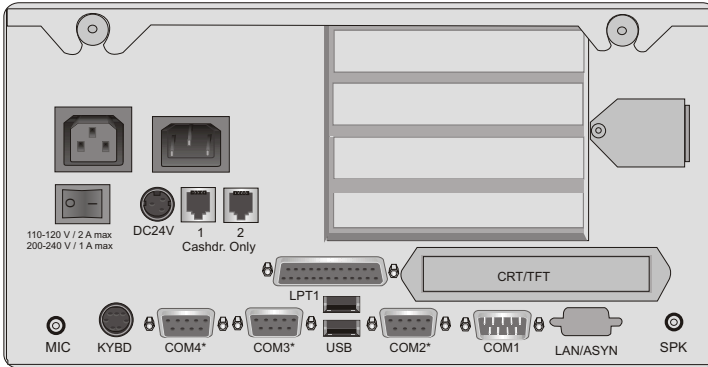
A message is displayed as soon as the BEETLE /XL-II is ready for operation. For more detailed information, see the description of your application program.

Appendix

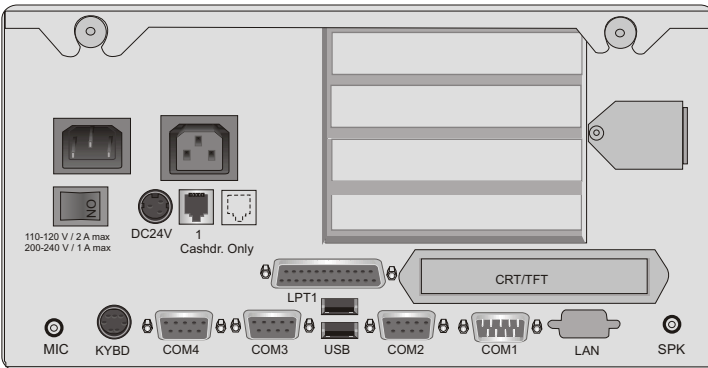
Technical Data for the BEETLE /XL-II

Box		
Width	288 mm	11.34"
Depth (without cable cover)	395 mm	15.55"
Depth (with cable cover)	470 mm	18,5"
Height	149.5 mm	5.89"
Cable cover	75 mm	2.95"
Weight	approx. 12 kg	
Climatic category		
Operating	IEC 721-3-3 Class 3K3 +5°C to +40°C	
Transport	IEC 721-3-2 Class 2K2 -25 C to +60 C	
Storage	IEC 721-3-1 Class 1K2 +5 C to +40 C	
Input voltage	100 - 120 VAC 200 - 240 VAC	
Max. power consumption	3A / 5A (150 W power supply unit) 4A/ 7A (212 W power supply unit)	
Frequency of system voltage	50 - 60 Hz	
UPS support	will be provided as an option	
Mass storage devices		
"external" accessible	2 x 3.5" drive bays 1" height, e.g. for FDD 1 x 3.5" drive bay 0.5" height for a slim line FDD or MC card adapter 1 x 5.25" drive bay 0.5" height for CD-ROM or DVD support	
internal accessible	2 x 3.5" drive bay for 1" height, e.g. for 2 x HDDs 2.5" HDDs can be mounted via adapter frame	
PC Extension slots		
	2 x PCI extension slots short version 1 x PCI/ISA shared slot short version	

Rear Panels of the BEETLE /XL-II



Rear Panel of the BEETLE /XL-II (150W power supply unit)



Rear Panel of the BEETLE /XL-II (212W power supply unit)

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.

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

AT	Advanced Technology
ATA	AT-Attachment
BIOS	Basic Input Output System
BPP	Bits per Inch
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
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
MO	Magneto Optical
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
SIMM	Single In Line Memory Module
SRAM	Static Random Access Memory
SVGA	Super Video Graphics Array
TFT	Thin Film Transistor
UL	Underwriters Laboratories
USB	Universal Serial Bus
UPS	Unbreakable Power Supply
XMS	Extended Memory Specification