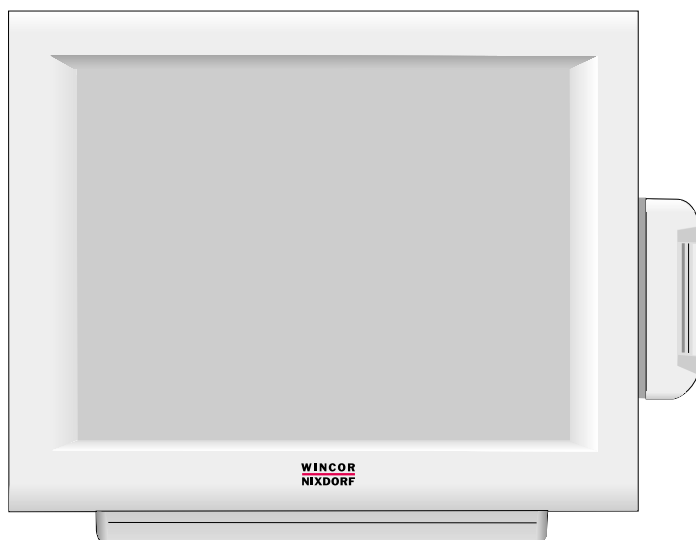


WINCOR
NIXDORF



Smart Card Reader

für/ for BA7X
Chipkartenleser/ Smart Card Reader

Benutzerhandbuch/ User Guide

We would like to know
your opinion on this
publication.

Please send us a copy of this
page if you have any constructive
criticism.

We would like to thank you in
advance for your comments.

With kind regards,

Uns interessiert Ihre
Meinung zu dieser
Druckschrift.

Schicken Sie uns bitte eine
Information, wenn Sie uns
konstruktive Hinweise geben
wollen:

Dafür bedanken wir uns im
voraus.

Mit freundlichen Grüßen

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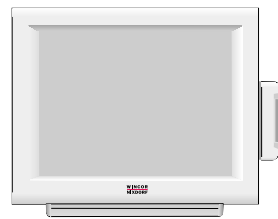
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Smart Card Reader

for BA7x

User Guide



Edition October 2000

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FCC-CLASS A DECLARATION

Manufacturer's Certification



The device complies with the requirements of the EEC directive 89/336/EEC with regard to 'Electromagnetic compatibility'.

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

The device is intended only for operation with for this purpose by Wincor Nixdorf approved flat screens.

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.

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.

Important notes

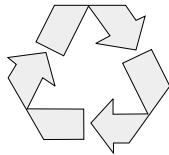
The smart card reader conforms to the current safety standards for data processing equipment.

- 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.
- 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 in an environmentally safe manner.
- 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.

Recycling the SCR module



Environmental protection does not begin at the time of disposal of the smart card reader; it begins with the manufacturer. This product was designed according to our internal norm "Environmental conscious product design and development".

The smart card reader 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.

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

So do not simply throw your smart card reader 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 numbers

Tel. +49 (0) 5251 8-18010
Fax. +49 (0) 5251 8-18015

The center is always ready to answer any questions you may have about Wincor Nixdorf GmbH environmental protection policies.

Tel. +49 (0) 5251 8-26707
Fax. +49 (0) 5251 8-26709

Email referat.umweltschutz@wincor-nixdorf.com

We look forward to your messages.

BEFORE SWITCHING ON THE SYSTEM

Before switching on the System

Unpacking and checking the System

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

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).

The Smart Card

Smart cards are chip cards in size of credit cards with a microprocessor and a programmable data storage. These data can be read by a chip card reader except for the personal key. Using these cards ensures the highest level of data security.

The large advantage of the smart card compared with the magnetic card is the security. The stored data are better protected against unrequested access and manipulation. Only the internal CPU is to access the internal data.

A smart card provides a higher reliability and lifetime than a magnetic card. The data can be stored encoded.

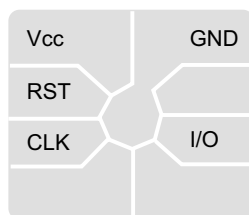
Chip cards are mainly used as telephone cards or identification cards.

Communication

The smart card is an identification card, which is characterised by the fact that it is equipped with an integrated circuit (chip). Via contact areas the data are exchanged. Via the I/O port individual instructions are sent to the operating system of the smart card which process the instruction and data. A transmission protocol is defined by the ISO standard 7816 part of 3.

The contacts of the chip are gilded, in order to ensure an optimal corrosion protection.

Contact Assignment



The contact assignment of such a smart card is subject to standardization according to ISO 7816-2-standard. The structure is shown in the figure left side.

Supply voltage **Vcc** is defined with $5\text{ V} \pm 10\%$.

CONTACT ASSIGNMENT

The micro controller is reset via the reset line. The reset **RST** takes place during the operation (warm reset) or during the power-on procedure (cold reset).

The clock **CLK** is created from the outside during the clock supply.

According to ISO 7816-3 the ground **GND** must be created before supply voltage.

The data communication **I/O** takes place according to the half duplex method.

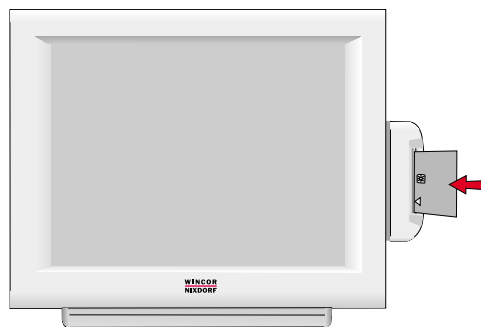
Smart Card Reader (SCR Module)

General

The SCR module is delivered in two variants, depending on which side of the screen module (right or left) it is to be installed. The connection to the BEETLE system is made via a powered COM interface (COM2-4).

How to Operate

Run the smart card through the slot of the smart card reader from front to back. Make sure that the chip shows to the left.



When using smart cards, the following should be observed:

- smart cards should never be allowed to come into contact with liquids.
- smart cards should not be bent or folded in any way.
- smart cards should not be allowed to come into close contact with a magnetic field.



Smart cards should only be inserted in the top of the specially designed slit of the reading device. If the card is inserted in another place, the contacts could be damaged.

CLEANING INSTRUCTIONS

Cleaning Instructions

Clean the surface of the smart card reader weekly with a suitable commercially available surface cleaner.



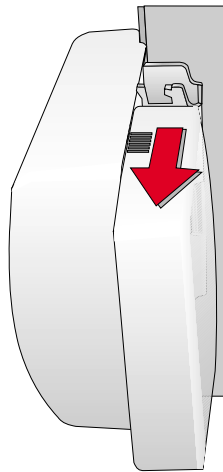
Make sure that the power plug is disconnected, connector cables are unplugged and that no liquid finds its way into the device.

Pollution by foreign bodies

Should foreign bodies, e.g. coins, find their way into the smart card reader remove them as described below. The order for the left-hand side installed smart card reader corresponds to the following description.

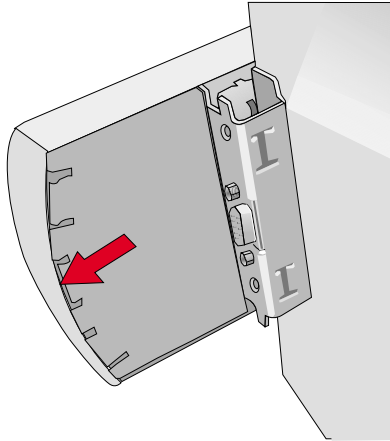


Before working you must always discharge yourself, e.g. by touching a grounded object.

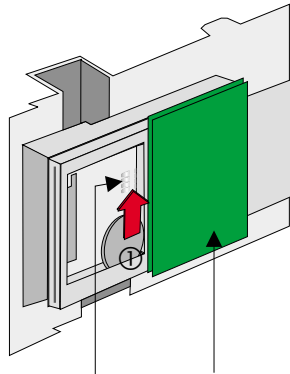


Shift the cable cover forward.
Remove the connector from the socket or make sure that the main connector is unplugged.

POLLUTION BY FOREIGN BODIES



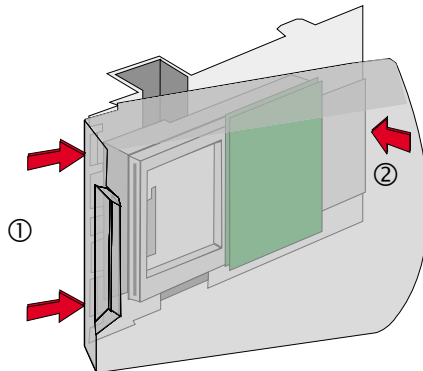
Put a small screwdriver into the slot marked by the arrow. Remove the cover from the rest of the smart card reader.



Remove the foreign body from the device ①.

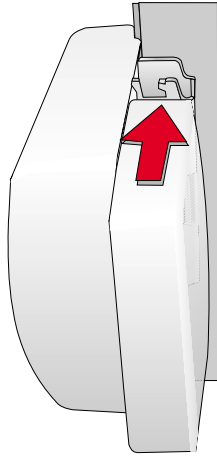


Do not touch the electronic board and the contacts!



First hook the cover in the front ① and then press the cover at the back ②, until you hear a click.

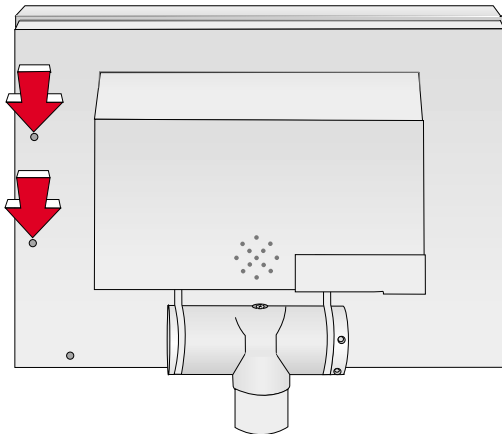
POLLUTION BY FOREIGN BODIES



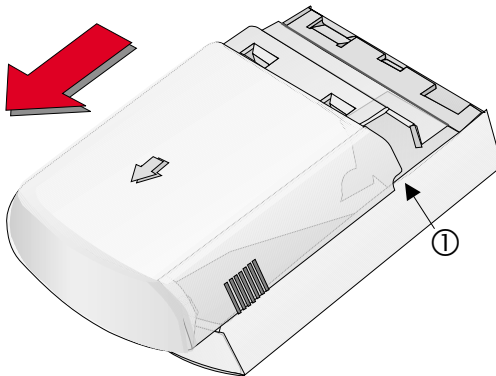
Connect the connector to the socket.
Now shift the cable cover to the back until you hear a click.
Make sure that the cable is not get caught.

RIGHT JUSTIFIED INSTALLATION AT A BA7X

Right justified Installation at a BA7x



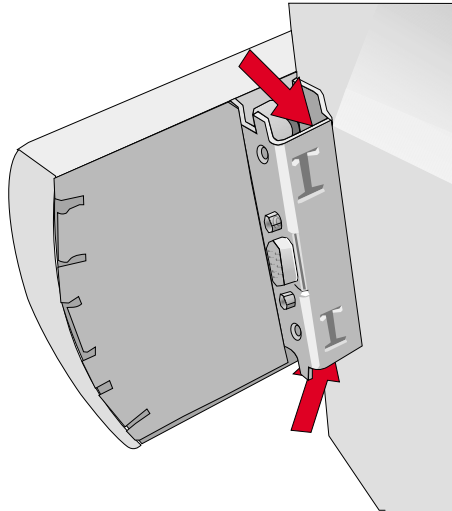
Insert the delivered screws (Phillipshead) into the bore holes of the screen marked by the arrows. Fasten the screws a little but do not screw them too tightly so that the distance corresponds to the plate thickness.



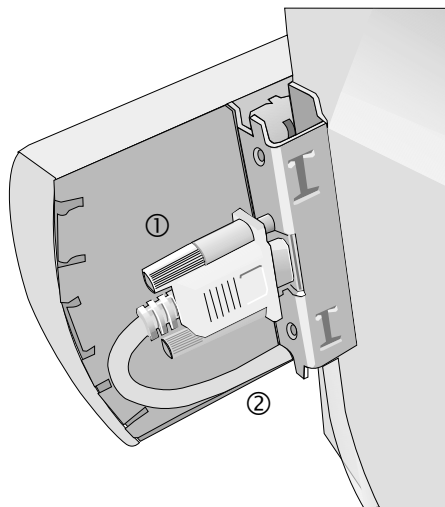
Remove the cover of the smart card reader from the rest of the device.

The smart card reader of a right justified installation has a notch for the data cable at this side ①.

RIGHT JUSTIFIED INSTALLATION AT A BA7X

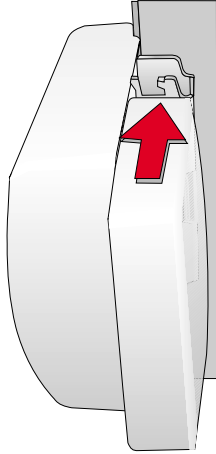


Then place the SCR with the openings (see arrows) on the screws. Tighten the screws with a Phillipshead.



Connect the connector to the socket. Tighten the screws ① and put the cable according to the figure ②.

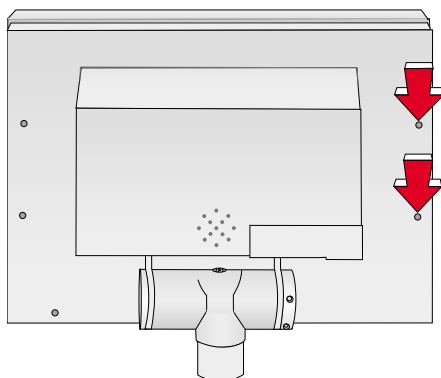
RIGHT JUSTIFIED INSTALLATION AT A BA7X



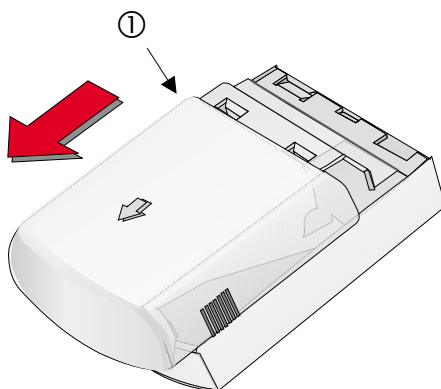
Now shift the cable cover to the back until you hear a click. Make sure that the cable is not get caught.

LEFT JUSTIFIED INSTALLATION AT A BA7X

Left justified Installation at a BA7x

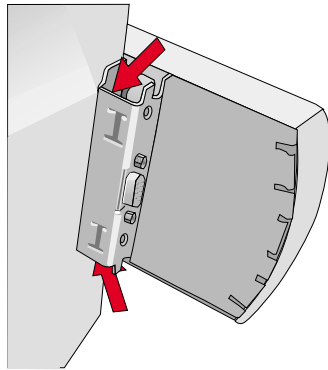


Insert the delivered screws (Phillipshead) into the bore holes of the screen marked by the arrows. Fasten the screws a little but do not screw them too tightly so that the distance corresponds to the plate thickness.

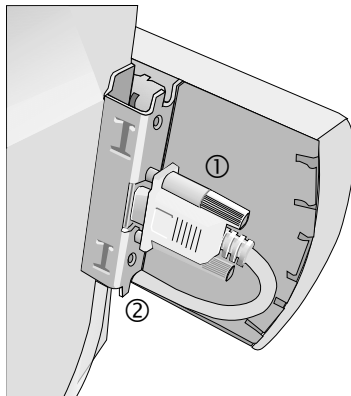


Remove the cover of the smart card reader from the rest of the device. The smart card reader of a left justified installation has a notch for the data cable at this side ①.

LEFT JUSTIFIED INSTALLATION AT A BA7X

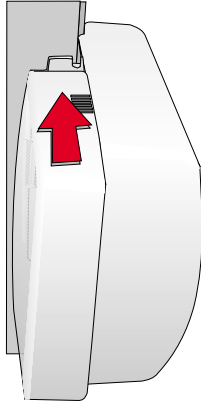


Then place the SCR with the openings (see arrows) on the screws. Tighten the screws with a Phillipshead.



Connect the connector to the socket. Tighten the screws ① and put the cable according to the figure ②.

LEFT JUSTIFIED INSTALLATION AT A BA7X



Now shift the cable cover to the back until you hear a click. Make sure that the cable is not get caught.

Herausgegeben von/Published by Wincor Nixdorf GmbH & Co. KG
D-33094 Paderborn, D-13629 Berlin

Bestellnummer /Order No.: **01750033635A**
Printed in Germany