

# Customer/Operator Displays

The use of PC technology and the switchover from character to graphical user interfaces have changed the demands placed on current POS systems and applications substantially. Computerized POS systems used to focus on cash registration but are now increasingly turning into multifunction consulting/POS workstations.

This trend makes it necessary to use PC-compatible operator displays, and these must meet requirements for ergonomic design and compactness.

Customer displays have to output clearly legible item and pricing information so proven line displays mainly come into play in this area. New concepts also support monitors based on thin film technology (TFT).

Wincor Nixdorf has an extensive portfolio of customer/operator displays that have been specially developed for use in the retail and service sectors: character-oriented VFD line displays, VGA-compatible cathode ray tube (CRT) models and multifunction liquid crystal displays (LCD).

No matter whether information is output as text or in graphical form, in monochrome or in color, on a CRT or flat panel display, our range of products provides you with



all the features that you need for your solution. Low space requirements, various adaptation options, and power supplied by the system are features of all displays. Flat panel displays can also feature an integrated magnetic card reader and touch surface.

The **SNikey**, is a multifunction input/output device from Wincor Nixdorf that is highly

integrated. A flat panel display, touch surface, softkeys, POS keyboard, magnetic card reader and system loudspeakers are united in one device which can be used in all kinds of areas. This product delivers maximum functionality and has an ergonomic design. Easy, intuitive operation, online help and training at the POS system help to reduce total cost of ownership.

## LCD flat screens

Our flat panel models are based on liquid crystal display (LCD) technology. They are compact in size but big when it comes to presenting information. These are low-energy, low-radiation and flicker-free devices.

The BA69 is a type of customer and operator display that is tailored to modern POS applications featuring a graphical user interface. The 5.7" LCD provides standard VGA compatibility in 1/4 format of a standard display.

The BA70 is a 10.4" monochrome VGA flat panel display with a magnetic card reader option.






A small footprint, ergonomic design and graphics support are features that distinguish these two displays from the usual line displays. This means more information for customers and operators alike, for example outputting the electronic journal with the ability to scroll through it, or tailoring the displays with the aid of variable font sizes and symbols. The BA70 and BA69 can be connected jointly to one controller.

The BA72 and BA73 displays are based on active TFT. This ensures optimum legibility even if there are irritations such as external light and smears on the glass.

The touch function supports fast, menu-driven input and can make peripherals such as a keyboard and mouse superfluous. Customer and credit cards can be read with the aid of the integrated three-track magnetic card reader.

Flat panel displays are powered by the POS system so they are integrated in existing emergency power supply concepts. Of course, this also applies to our SNIkey.

The BA72 R features its own power supply unit and a standard analog VGA port.

TECHNICAL DATA					
					
	BA69	BA70	BA72	BA72 R	BA73
<b>Classification</b>	VGA/4 LCD display	Monochrome flat screen	TFT-color screen		
■ Technology	STN	DSTN	TFT		
■ Diagonal	5.7 inch	10.4 inch	12.1 inch	15 inch	
■ Max. resolution	320 x 240	640 x 480	800 x 600	1024 x 768	
■ Max. number of colors	monochrome		64 K	16 Mio.	
■ Pixel size in mm	0.36	0.30			
■ Reading angle horizontal/vertical	80° / 40°	70° / 40°		60° / 40°	140° / 50°
■ Video signal	digital			VGA analog	digital
■ Brightness	140 cd	100 cd	190 cd	120 cd	230 cd
■ Contrast	12 : 1	8,5 : 1	180 : 1	80 : 1	230 : 1
■ Touch interface	No		Optional		
■ Magnetic card reader (MSR)	No	Optional			
■ Dimensions (H x W x D in mm incl. display stand)	180 x 185 x 160	260 x 280 x 190	300 x 315 x 200		390 x 355 x 200
■ Power supply	via controller			own power pack	via controller
■ Weight in kg	0.95	3.8	4.0		7.6
■ Mounting variants	Display stand, tube, keyboard	Display stand, tube, keyboard BEETLE /S and /XS			
■ Color options	light grey		light grey , black		

# SNIkey

The SNIkey is our multifunction input/output device with a modular, design. Its active TFT color display delivers brilliant output and legibility. Softkeys and a touch surface make it intuitive and extremely easy to operate. The functions of the adapted keyboard and the eight softkeys can be programmed by the application

software to meet specific requirements. That is ideal for arranging a flexible, easy-to-use user interface.


The integrated magnetic card reader ensures that customer and credit cards can be read quickly, and makes external solutions superfluous. The controller that

is delivered with it provides not only the ports for the display, touch surface and built-in loudspeakers but also three additional powered RS232c interfaces to connect more peripherals. The SNIkey is a space-saving combo device for input and output at the point of sale, and is the ideal supplement to our BEETLE POS systems.

## TECHNICAL DATA





**SNIkey**

TECHNICAL DATA	
	 <b>SNIkey</b>
<b>Classification</b>	Multifunctional I/O Device
<ul style="list-style-type: none"> <li>■ Flat screen               <ul style="list-style-type: none"> <li>– Technology</li> <li>– Diagonal</li> <li>– Resolution</li> <li>– Pixel size</li> <li>– Number of colors</li> </ul> </li> </ul>	TFT 12.1 Zoll 800 x 600 pixels (SVGA) 0.30 mm 64 k
■ Reading angle (horizontal/vertical)	70° / 40°
■ Brightness	190 cd
■ Contrast	180 : 1
■ Touch interface	Capacity-related
■ Softkeys	8
<ul style="list-style-type: none"> <li>■ Keyboard               <ul style="list-style-type: none"> <li>– No. keys / matrix</li> <li>– Freely programmable / keys</li> </ul> </li> </ul>	32 / 8 x 4 ✓ / 1-, 2-, 4way
■ Beeper	✓
■ Magnetic card reader (MSR)	3-track (ISO 1, 2, 3)
<ul style="list-style-type: none"> <li>■ Device interfaces               <ul style="list-style-type: none"> <li>– Flat screen</li> <li>– Touch interface</li> <li>– Keyboard</li> <li>– Softkeys</li> <li>– MSR</li> <li>– Beeper</li> <li>– MF/2</li> </ul> </li> </ul>	Digital LCD controller RS232c via controller via PS/2 via PS/2 via PS/2 Connection on motherboard Connecting of a separate PC keyboard
■ Power supply	via LCD controller
■ System distance (cable length)	2.0 m
■ Mounting variants	Display stand, tube, BEETLE /S and /XS
■ Dimensions in mm (H x W x D)	300 x 315 x 200 (Display including stand)
■ Weight	6.1 kg
■ Color options	light grey , black


## Line displays

The BA63 and BA66 line displays are the classic customer and operator displays for text-based applications such as item/price information and operator instructions. The vacuum fluorescent display technology (VFD) guarantees optimum clarity and legibility even under difficult lighting conditions. Power is supplied via the POS system's RS232c interface. Tilt and swivel adapters are available for mounting purposes for the display stand, tube and keyboard assembly.

TECHNICAL DATA		
	 <b>BA63</b>	 <b>BA66</b>
<b>Classification</b>	Customer display	Customer / operator display
■ Display technology	Vacuum fluorescence	
■ Character display	2 lines of 20 charact. each	4 lines of 20 charact. each
■ Character matrix	5 x 7 pixels	
■ Character size	9 mm	5 mm
■ Mounting variants	Display stand, tube, keyboard	
■ Dimensions (H x W x D in mm)	165 x 207 x 46	165 x 206 x 46
■ Weight in kg	0.5	
■ Power requirement	RS232 12 V, USB 5 V	
■ Interface	USB 5 V, RS232 (energized)	
■ Color	light grey, black	

## CRT monitor

The M033 is a CRT monitor. With its 9" screen it offers space advantages over traditional PC monitors and has thus been in use successfully for years in the POS environment. The monitor is delivered with a pedestal.

TECHNICAL DATA	
	 <b>M033</b>
<b>Classification</b>	Monochrome monitor
■ CRT	9 inch
■ Video modes	VGA, SVGA, 8514/A
■ Max. resolution in pixels	1024 x 768
■ Frequencies	
– Horizontal	30 – 38 kHz
– Vertical	50 – 90 Hz
■ Interface	VGA, 15 Pin D-Sub
■ Power supply	100 – 240 V AC 50 / 60 Hz
■ Dimensions (H x W x D in mm)	233 x 249 x 253
■ Weight in kg	3.8

Published by  
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Order No. R20302-J-2734-5-7600  
 Printed in Germany, March 2005