





# SK-40 Scantech ID Scan Kiosk Instruction Manual

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SK-40 Scantech ID Scan Kiosk



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#### **Limited Warranty**

Under all circumstances, this manual should be read attentively, before installing and/or using the product. In no event shall ScantechID BV be liable for any direct, indirect, special, consequential, or incidental damages arising out of the use or inability to use this documentation or product, even if advised of the possibility of such damages. In particular, Scantech-ID BV shall not be liable for any hardware, software, or data that is stored or used with the product, including the cost of repairing, replacing, ng or recovering the above. Scantech-ID BV reserves the right to change parts of the device at any time without preceding or direct announcement to the client. ScantechID BV reserves the right to revise this manual, and to make changes in the contents without obligation to notify any person or entity of the revision or change. A serial number appears on the product. Make sure that this official registration number has not been removed. It should be used whenever servicing by Scantech-ID BV or an authorized Scantech dealer is necessary.

### **Important**

This equipment has been tested and found to comply with the limits for a Class B digital device, under EN55022, and with the limits for a Class A digital device, under 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 by the user's manual, may cause harmful interference to radio communications. Operation of the 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. Any unauthorized changes or modifications to this equipment could void the user's authority to operate this equipment. This device conforms with the CE standards. Please note that a Scantech CE-marked power supply unit should be used to conform to these standards.

**Radio and television interference** Operation of this equipment in a residential area can cause interference with radio or television reception.

This can be determined by turning the equipment off and on. The user is encouraged to try to correct the interference by one or more of the following measures:

- · Reorientate the receiving antenna
- · Relocate the devices concerning the receiver
- · Move the device away from the receiver
- Plug the device into a different outlet to have the device and receiver on different branch circuits.

If necessary, the user should consult the manufacturer, an authorized Scantech dealer,r or experienced radio/television technician for additional suggestions. The booklet "How to Identify and Resolve Radio-TV Interference Problems", prepared by the Federal Communications Commission, can be of help. It can be obtained from the U.S. Government Printing Office, Washington, DC 20402, Stock No. 004000003454. Due to Scantech's continuing product improvement programs, and product features, the information and specifications in this manual are subject to change without prior notice.

P/N 0145-SK00011 V1.6 Date 20241018

#### **About this Manual**

This manual provides information for installing and operating the ScantechID ScanKiosk SK-40/SK-50. Read this manual before operating the device and keep it in a safe place for future reference.

# The complete set of SK-40 SK-50 User Documentation consists of:

- · This Installation Manual
- · The Configuration Manual
- · The Integration Manual

At a later stage, these three documents will be merged into one Reference Bookwork.

#### **CHAPTER DESCRIPTIONS**

- Chapter 1: Product Overview introduces the SK-40 / SK-50, and describes its features and unpacking procedures.
- Chapter 2: Installation describes mounting procedures and connecting devices to the SK-40 / SK-50.
- Appendix A: Technical Specifications provides technical information about the SK-40 / SK-50.

#### **USED CONVENTIONS**

This manual contains the following conventions:

- NOTE Gives a tip, an instruction, n or a point of attention.
- IMPORTANT Warns for possible damage to the device or other objects when the instruction is not followed.
- DANGER! Warns for possible harm to persons when the instruction is not followed.

#### LASER SAFETY

- **IMPORTANT** During installation, always follow the instructions.
- DANGER! Avoid long-term viewing of direct laser light. This product conforms with IEC 825 Class 1 and 21CFR1040 Class IIa.

The SK-40/50 complies with safety standard IEC 825-1 (1993) for a Class I laser product. It also complies with

U.S. 21CFR1040 as applicable to a Class LLA laser product. Avoid long-term viewing of direct laser light.

#### Optical:

The use of optical instruments with this product will increase eye hazards. Optical instruments include binoculars, microscopes, and magnifying glasses but do not include eyeglasses worn by the user.

## **Radiant Energy:**

The SK-40/50-0mni uses a low-power laser diode operating at 630...670 nm in an optomechanical scanner resulting in less than 0.6 mW peak output power. Laser light observed at 13 cm (5.1 in.) above the window through a 7 mm (0.28 in.) aperture and averaged over 1000 seconds is less than 3.9 uW per CDRH Class IIa specification. Do not attempt to remove the protective housing of the scanner, as unscanned laser light with a peak output of up to 0.8 mW could be accessible inside.

#### **Laser Light Viewer:**

The scanner window is the only aperture through which laser light may be observed on this product. A failure of the scanner motor, while the laser diode continues to emit a laser beam, may cause emission levels to exceed those for safe operation. The scanner has safeguards to prevent this occurrence. If, however, a stationary laser beam is emitted, the failing scanner should be disconnected from its power source immediately.

#### Adjustments:

Do not attempt any adjustments to or alteration of this product. Do not remove the scanner's protective housing. There are no user-serviceable parts inside.

#### **CAUTION**

Use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous laser light exposure.

### **CAUTION**

Risk of Explosion if Battery is replaced by an incorrect Type. Dispose of Used Batteries According to the regular Instructions.

# **DECLARATION OF CONFORMITY**

The SK-40 and SK-50 comply with the following product specifications:

## Laser safety:

- IEC825 Class 1 and CDRH 21 CFR 1040
- Electrical safety: UL 60950-1 EN 60950-1:2006+A11:2009+A1:2010+A12:2011

#### EMC:

As set out in the Council Directive of the Laws of the Member States relating to Electromagnetic Compatibility (2004/108/EC) and (2006/95/EC) for the evaluation of electromagnetic **compatibility**. **Applicable Standards**:

- EN 55022 CLASS B:2006
- EN 55024:2001
- EN 61000-32:2006+A1:2009+A2:2009 IEC 61000-4-2:2008
- EN 61000-3-3:2008
- IEC 610004-3:2006+A1:2007+A2:2010
- EC 6100044:2004+A1:2010
- EC 610004-5:2005
- IEC 610004-6:2008

- IEC 6100048:2009
- IEC 610004-11:2004

#### RoHS2

We hereby certify the above-listed products, parts, materials, and packaging comply with the European Economic Union (EEU) "Reduction of Hazardous Substances" (RoHS2) Directive 2011 /65/EU, except for the exemptions listed under RoHS2.

· Neil Wu

- QA Director
- January 23 2013 SERVICE INFORMATION

If you encounter any problem with the product, contact ScantechID customer-support in your region, specifying the following information:

- · Model and Part number
- Serial number
- The Firmware level is shown on the display after power-up.

#### **Chapter 1 Product Overview**

### INTRODUCTION

The SK-40 / SK-50 is a powerful Scan Kiosk that combines the conventional Price Checker with the functionality of a 2D imager or omnidirectional laser scanner topped with multimedia capabilities supporting audio and video streaming. The SK-40 / SK-50 features the latest technology. Interfacing is done either through wired Ethernet or Wireless RF. The big full-color display can be used to play slideshows or product promotion videos. Because of its size and compact design, the SK-40 / SK-50 can be mounted anywhere in a store. This flexibility of installation is enhanced by the optional WiFi connection or Power-over-Ethernet.

#### **General Information**

The Scan Kiosk SK-40 and SK-50 are the latest products developed by Scantech-ID, a company that has more than 15 years of experience in the field of Customer Information Terminals.

#### **Quality and Durability**

The SK-40 / SK-50 comes with the same top quality as all other ScantechID products. With SK-40 / Sk-50, you get the same quality and performance as more expensive products but at a very competitive price. Due to the high MTBF times of every component, a long and service-free service-free operation time is ensured.

### **Flexibility**

With its dual mounting options, the SK-40 / SK-50 can be easily installed using the 2 screws or VESA 75mm bracket mounting featured by 4 inserts. The touchscreen display (SK-50) and high-quality stereo audio make it easy to read prices and product information or playback promotional music and videos.

## Integration

The SK-40 / SK-50 comes with a Web-based Configuration and Management tool for easy setting and single/multi SK-40/50 management. Scantech supplies software sample source code (HTML and more) to get the SK-40/50 easily connected to the (Store's) Database. The protocol specification for easy integration is available at Scantech-ID.

#### **GENERAL PRODUCT FEATURES**

Self-service SCAN KIOSK with touch screen and media display function (SK-50) Color-screen Price Verifier (SK40) Multimedia support with high-quality speakers and headphone jack support Compact dimension for easy to deploy virtually anywhere in the store Easy to deploy and map out digital promotion image/video media The rotatable scanner can be tilted upward and downward within a 30° range for the best user convenience. Omni Directional Laser Scanner and 2D Imager available Networking options: IEEE 802.11 B/G/N 2.4 GHz and Power over Ethernet support Compliant with VESA 75mm standard mounting or wall mount with 2 screws Builtin Web Server for user-friendly access to remotely configure, diagnosis, monitor and troubleshoot devices Developer SDK Software Suite support with example Source Code Entry/Exit-Gate control function support (option) Expandable — can easily build on by adding third-party USB/RS232 peripherals, including printers, magnetic stripe readers, keyboards and more.

#### **UNPACKING**

- 1. Remove the device from the box and inspect it for damage.
- 2. Remove other items from the box and check if all accessories are complete.

# The following items should be present:

- · Power adapter
- Installation Manual
- · Configuration Manual

Keep the packaging material in a safe place. The packaging box may needed when the device needs to be transported at a later stage.

#### **NOTE**

If anything is missing or appears damaged, please contact your dealer immediately.

#### **DEVICE PARTS**

Front View

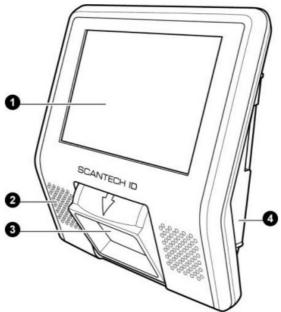


Figure 1: SK-50

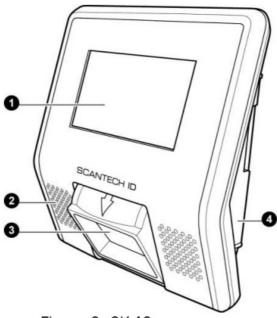
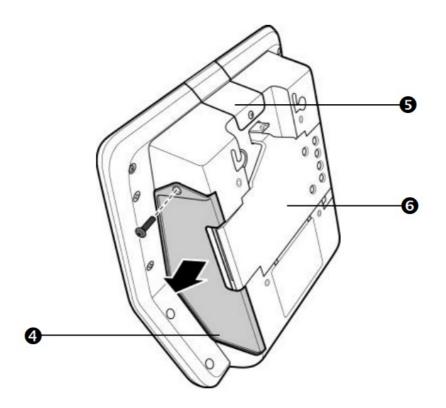


Figure 2: SK-40

Item	Description		
	Touch screen (SK-50)	Displays product information on the 5.7" full-color screen ideal for mul timedia applications	
1	Display screen (SK-40)	Displays product and price information on the 4.3" full-color screen	
2	Speakers	Quality speakers for a superior audio experience	
3	Bar Code Scanner	To identify articles by scanning barcodes with the Omni Directional La ser Scanner or 2D lager	
4	Side compartment	Depending on model and specifications contain either of the following optional components:  Two USB ports: Use for Wi-Fi stick or flash USB drives  Power-over-Ethernet module: Use to power the device through a	
	·	powered Ethernet connection (IEEE 802.3af).	
5	SD card compartment	Contains the optional SD card	
6	Data 1/0 compartment	See the table on the next page.	

To access the side compartment, you need to remove the side compartment cover. Remove the screw to detach the side compartment cover.



# **Back View**

All Data I/O connectors are protected by the back compartment cover. Before making any connections, remove the back compartment cover. Press the tab then pull back to detach the back compartment cover.

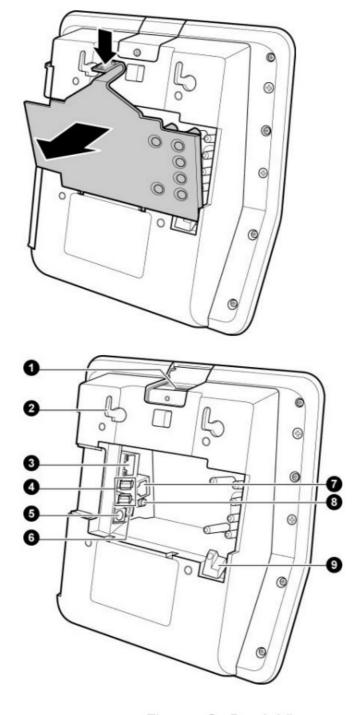


Figure 3: Back View

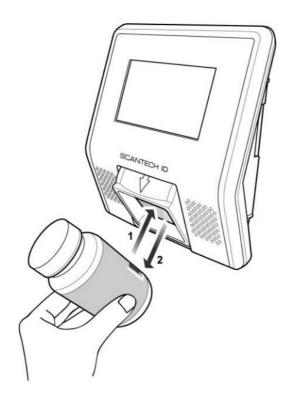
**NOTE** The connectors may vary depending on the device model. Some connectors shown above may not be on your device.

# **DATA 1/0 Compartment**

1	SD card compartment	Contains the SD card slot
2	Wall mount slots	Used to mount the device on the wall by using two screws
3	LAN port	Connects the device to the network using an Ethernet (RJ-45) cab le
4	USB port	Connects USB devices such as a handheld scanner or a flash USB drive  The SK-40 has one USB port only in this location Connects the power adapter.
5	Power jack	Entry/Exit-Gate control support NOTE: Available in SK-50.
	General Purpose	
6	Input/Output (GPIO) connector	Connects an RS-232 handheld scanner or other accessories usin g an RJ-11 or RJ-14 cable.
7	RS-232 connector	NOTE: Available in SK-50.
8	Audio phone jack	Connects to a headphone NOTE: Available in SK-50
9	Scanner window lock	Press and hold to adjust the scanner angle

# **SCANNING WITH SK-40 / SK-50**

- To scan barcodes, move the barcode towards the scanner window.
- The device beeps to indicate a successful scan.

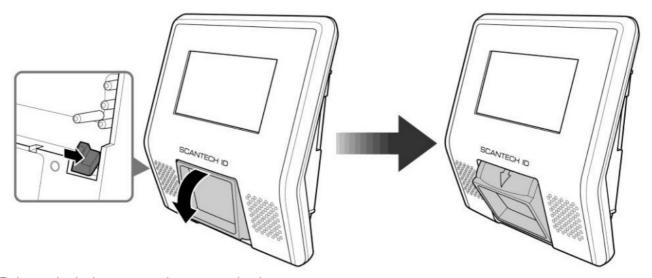


# **ADJUSTING THE SCANNER ANGLE**

For the best user convenience, the scanner can be adjusted over a 30° angle and locked with steps of 5°.

# To adjust the tilt:

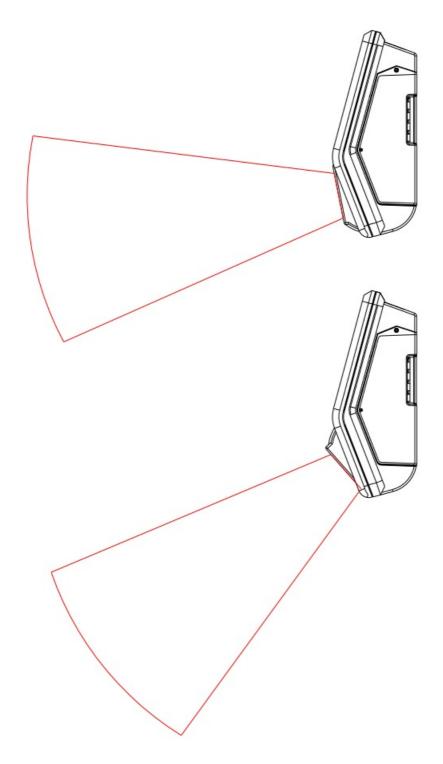
- 1. Open the back compartment cover.
- 2. Press and hold the scanner window lock and adjust the scanner to the desired tilt.



- 3. Release the lock to secure the scanner in place.
- 4. Close the back compartment cover.

# **Scanner Angle and Envelope**

Product profile showing the scan area at the two extreme scanner positions



# **CHAPTER 2 INSTALLATION**

# **MOUNTING THE DEVICE**

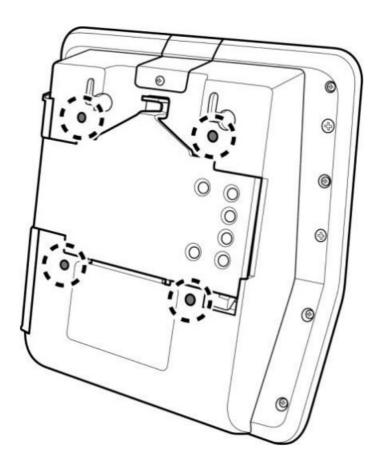
- Before mounting the device, consider the following to ensure proper mounting and the safety of installation:
- The wall is thick enough to sustain the mounted device The mounted height should be convenient enough for everybody to easily scan the article and comfortably read the display. The recommended height is: 130-150 cm.

# The SK-40 / SK-50 provides two mounting options:

- · VESA mounting
- Wall mount with 2 screws, compatible with the Scantech-ID SG 15

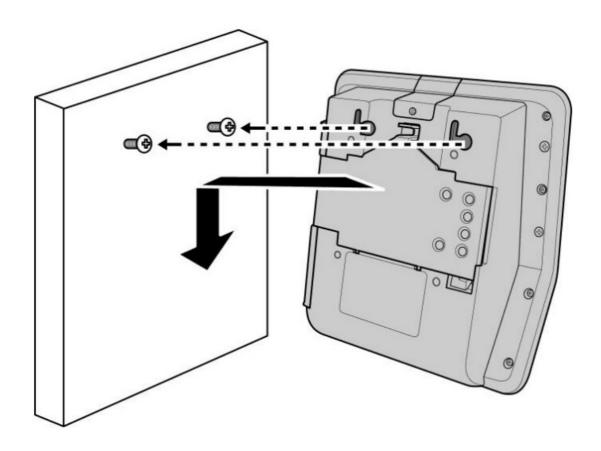
# **VESA Mounting**

• Use a VESA 75mm bracket with the 4 x M4 inserts provided in/at the back, the maximum depth is 8mm.

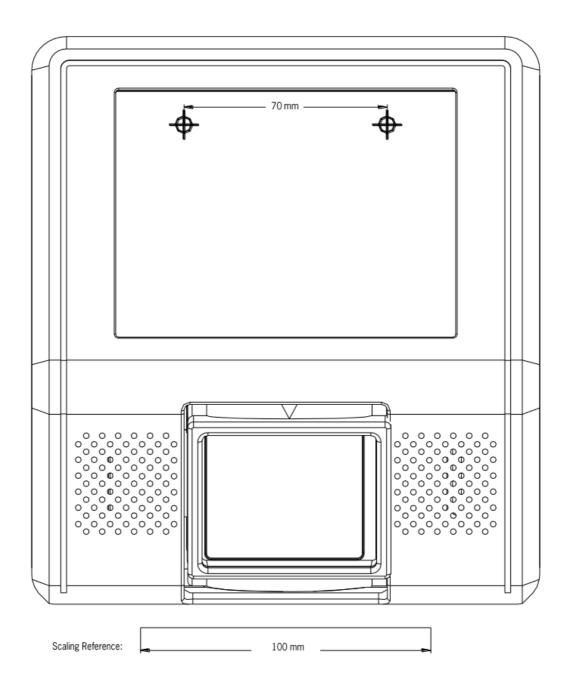


### Wall Mount with 2 screws

- 1. Select a suitable location to mount the device.
- 2. See the next page for a Drilling Template, mark the location for the mounting screws, and drill two holes in the wall.
- 3. Plug the wall plugs into the holes.
- 4. Screw the mounting screws into the wall.
- 5. Connect the power adapter, cables, and other accessories to the device. See the following pages for connection instructions.
- 6. Position the device so the screws fit into the mounting holes and then push the device first to the right and then down to secure it in the right place.



SK-40 SK-50 Wall Mount Drilling Template:



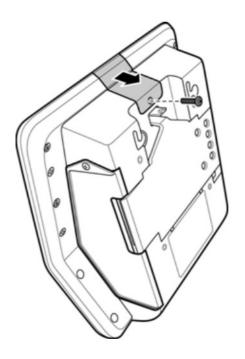
- Enlarge this page to the real product sizes.
- Make sure the scaling reference of 100 mm is respected.

# **EXPANDING THE MEMORY**

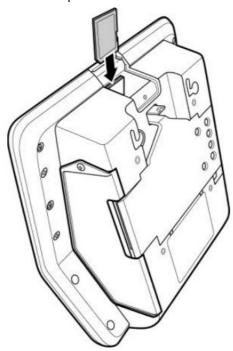
The Sk-40 and Sk-50 have standard built-in flash memory of 256 MB. The flash memory is non-volatile and contains the system firmware, user applications, data, promotion,n, and media files. If necessary the flash memory can be expended in two ways: use an SD card or a USB flash drive.

# Installing an SD Card

1. Remove the screw securing the SD card compartment cover.



- 2. Insert the SD card.
- 3. Attach the screw back to close the SD card compartment cover.



**Insert a Flash USB Drive** into any of the available USB ports in the Data I/O compartment or the side compartment

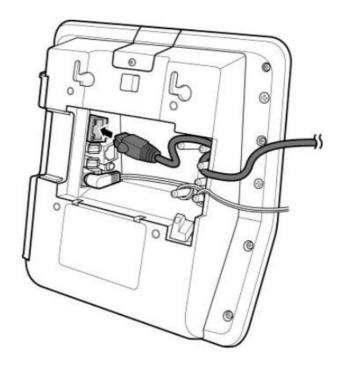
# **CONNECTING THE SK-40 SK-50**

Remove the back cover from the I/O compartment. Ref Chapter 1.4.2

# **CONNECT TO THE LOCAL NETWORK**

# **Wired Ethernet**

Connect the Ethernet cable to the LAN port in the Data I/O compartment to obtain network access. Apply the (6) cable strain relief pins.



#### **NOTE**

The LAN port contains two network LED indicators.

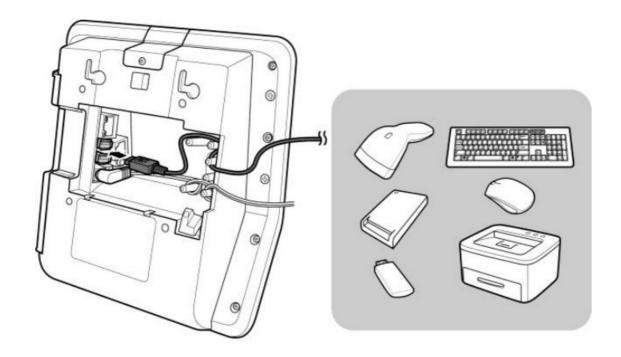
## Wireless connection

A Wi-Fi stick must be present in one of the USB ports in the side compartment or the Data I/O compartment for wireless connection. The SK-40/50 WiFi version is supplied from the factory with the Wifi USB stick built-in. If placed afterward: this must be a Scantech-validated type to guarantee correct wireless communication.

# Connect peripherals through USB (if applicable)

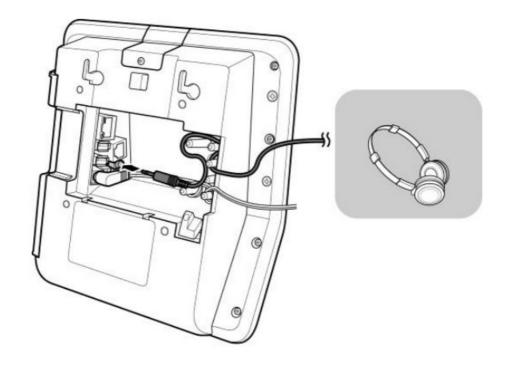
Connect peripheral devices such as a handheld scanner or Wi-Fi stick to the USB port on the back of the device or in the side compartment.

**NOTE** The number of USB ports may vary depending on the model.



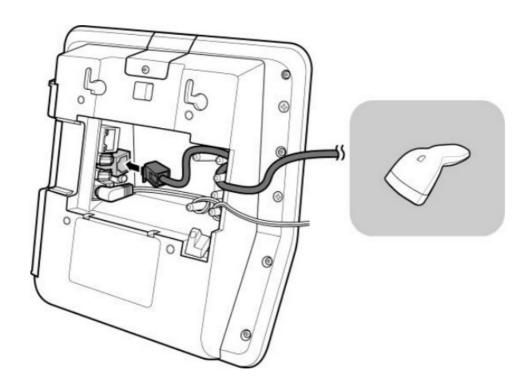
# Connect headphones (if applicable) (SK-50)

Connect the headphones to the audio port on the back of the device. Apply the (6) cable strain relief pins.



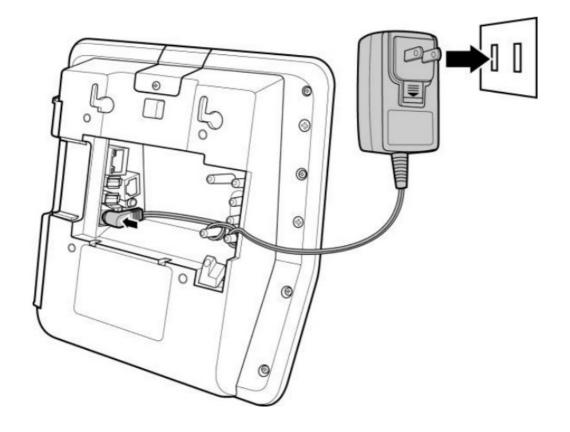
# Connect peripherals through RS-232 (if applicable) (SK-50)

To connect other accessories, such as a handheld scanner, connect the RJ11/14 6pin connector to the RS-232 port on the back of the device. Apply the (6) cable strain relief pins.



# **Connect the Power**

Connect the power adapter to the power jack on the back of the device. Apply the (6) cable strain relief pi.ns.



#### **POWER OVER ETHERNET**

The exceptionally low power consumption of the SK series enables us to offer the ScanKiosks Powered over-Ethernet (POE). This is the alternative for powering the Sk-40/50 through an external PSU adapter. In this way the device gets its DC power directly from the powered (IEEE 802.3af compliant) Ethernet. There is no need to install a (230/110VAC) mains socket in the middle of the store. This SK-40/50 feature reduces the total installation costs. This SK-40/50POE version complies with the official standard: IEEE 802.3af. The standard CA15 network cable (8-pin, fully wired) can be used, with a regular maximum length of 100 meters. Towards thehostsidee this means that a hub/router is required, supporting the Power-Over-Ethernet (PoE) feature, complying with the official standard for this: EEE 802.3af. To avoid any miscommunication in this area: Scantech does not supply network components like power injectors, network cabling o, or powered hubs.

NOTE POE is an optional feature

# Chapter 3 Maintaining the SK-40 SK-50

# **CLEANING**

The SK-40 SK-50 requires little maintenance. Only occasional cleaning of the display window is necessary to remove dirt and fingerprints. Cleaning can be performed during operation with a non-abrasive glass spray cleaner and a soft lint-free cloth. Clean the cover and window of the SK-40 SK-50 now and then.

# Take care of the following:

- Use a mild glass spray cleaner;
- Spray the cleaner on a soft, lint-free cloth;
- Wipe the SK-40 SK-50 clean.

## **IMPORTANT**

# The exterior of the SK-40 SK-50 should NOT be cleaned with cleaners containing:

- Aromatic hydrocarbons
- Chloride
- · Acids, oxidizing agents
- Abrasives
- Other aggressive cleaners

# Appendix A. Technical Specifications SK-40 SK-50

	SK-50		SK-40	
System Architecture		<u> </u>		<u> </u>
Processor	Super RISC Processor 400MHz			
Operating Platform	Standard Linux 2.6 Kernel or WinCE 6.0			
Memory Flash	256 MB, expandable with USB flash drive and SD card			
Memory RAM	128 MB			
Output Media				
Display Size	5.7" diagonal		4.3" diagonal	
Brightness	400 nits		350 nits	
Resolution	640 x 480 pixels (65.535 colours)		480 x 272 pixels (65.535 colors)	
Touch Screen Resistive type		уре	n.a.	
Graphics Supported	PNG, JPEG, GIF, BMP			
Audio Supported	WAV, WM	A, MP3		
Video Supported	MPEG-4, H.264			
Audio Ports	High Definition Stereo (16-bit PCM 44.1 KHz)			
Loudspeakers	High-quality loudspeakers for superior audio performance			

Headphone	3.5 mm standard jack		n.a.	
Data Ports				
SD Card Slot	X 1		X 1	
USB 2.0	x2 x2	(back compartment) (side compartment)	X 1 x2	(back compartment) (side compartment)
LAN port 10/100 MB	X 1		X 1	
Audio port	X 1	(Option)	n.a.	
RS-232 port	X 1	(+5V DC Power)	n.a.	
Power Over Ethernet M odule	Optional		Optional	
Entry/Exit Gate Control Function GPIO	Optional (2-pin conn)		n.a.	

Network Interface			
Wired LAN	<ul> <li>Ethernet: 100MB Base-TX/IOMB Base-T (802.3) standard on board</li> <li>Power over Ethernet IEEE 802. af optional</li> <li>Two network LED indicators in the LAN connector</li> </ul>		
Wireless LAN	Ex-factory through Wi-Fi module WiFi IEEE 802.11 ac a/b/g/n Supporting dual band 2.4 and 5 GHz frequency		
Encryption Protocols	WPA, PSK, and WPA Enterprise security		
Data Input			

	Omni Directional Laser Scanner:
	High Speed, high sensitivity, and omnidirectional scanning. Reading of fragmented bar codes.
	Visible laser diode 635 nm.
	Scan pattern: 6-direction scan field, 24 lines. Scan rate: 2000 scans/sec
	Up to 300 mm @ UPC/EAN 100%, PCS 90% or:
	• 2D lager:
Scanner Possibilities	Visible light 650nm
Scanner Possibilities	Scan rate: 200 scans/sec auto adaptive in linear mode, 56 images/sec auto adaptive 2D mode.
	Resolution: 752 Hor. X 480 Vert. Pixels, 256 gray levels.
	Omni Directional Laser Scanner:
	EAN/UPC/JAN + Add-on, ISBN, Code 128, EAN 128, Code 93,
	Code 39, Code 32, Codabar, Interleaved 2 of 5, MSI-Plessey, and GSI DataBar.
	• 2D lager:
Symbologies	1D Symbologies: EAN/UPC, Australian Post, Aztec, BPO, Canada Post, Dutch Post, EAN.UCC Composite, Interleaved 2 of 5, Japan Post, MSI Code, Planet, Plessey Code, Postnet, GSI Databar, Standard 2 of 5, Telepen, TLC 39
Supported	2D Symbologies: Datamatrix, Matrix 2 of 5, Maxi 2 of 5,
	MicroPDF417, PDF417, Maxicode, QR code
Scan Pattern Orientatio	The Scanner can be adjusted over an angle of 30°
n	and locked with steps of 5° for the best user convenience.

Power Requirements				
Power Supply Voltage	+12 VDC ± 10% / 1.5A			
Power Consumption Nominal: less than I000mA@ 12VDC (standard configuration)				
Physical				
Dimensions (H x Wx D)	193 x 176 x85 mm (7.6" X 6.9" X 3.3")			
Weight	0.9 kg (2 lb)			
Dual Mounting Options	Wall mount with 2 screws (Scantech SG-15 compatible) and VESA 75mm bracket mounting			
Environmental				
Operating Temperature	0° ~ 40°C (32° ~ 104°F)			
Storage Temperature	-20° ~ 60°C (-4° ~ I 40°F)			
Humidity	5% ~ 95% RH (non-condensing)			
Regulatory				
	Electrical Safety: CE EN 60950-1			
	Laser Safety: CDRH 21 CFR part 1040			
	IEC825 Class 1 IEC60825 Class 1 EMC/BMI/RFI: 2004/108/EC and 2006/95/EC			

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• www.Champtek.com

# **Documents / Resources**



SCANTECH ID SK-40 Scantech ID Scan Kiosk [pdf] Instruction Manual SK-40, SK-50, SK-40 Scantech ID Scan Kiosk, SK-40, Scantech ID Scan Kiosk, ID Scan Kiosk, Scan Kiosk, Kiosk

# References

• User Manual

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