

6100 Series Scanner

USERS GUIDE



Federal Communications Commission (FCC) Radio Frequency Interference Statement

Warning

Changes or modifications to this unit not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

Note

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.

Information to the User

This equipment must be installed and used in strict accordance with the manufacturer's instructions. However, there is no guarantee that interference of radio communications will not occur in a particular commercial installation. If this equipment does cause interference, which can be determined by turning the equipment off and on, the user is encouraged to contact Pertech immediately.

Pertech is not responsible for any radio or television interference caused by unauthorized modification of this equipment, or the substitution of attachment or connection cables and equipment other than those specified by Pertech. The correction of interferences caused by such unauthorized modification, substitution or attachment will be the responsibility of the user.

Important Information to the User

In order to ensure compliance with the Product Safety, FCC and additional agency markings requirements, you must use the power supply, power cord, and interface cable which were shipped with this product.

Power Supply

(LPS) output for use in North America, input rated 100 - 240 Vac, .4 A, 50/60 Hz, Output rated 24Vdc, .625 A Maximum and 15W Maximum. Use of this product with a power supply other than the approved Pertech power supply supplied will require you to test this power supply and the Pertech scanner for FCC and additional agency mark certifications. For more information check with your Pertech representative for current agency requirements.

Interface Cable

A shielded (360 degree) USB certified interface cable must be used with this product. The shield must be connected to the frame or earth ground reference at each end of the cable.

Use of a cable other than the described here will require that you test this cable with the Pertech scanner and your system for FCC and USB mark certification.

Power cord

For North America a NRTL Recognized detachable power cord must be used. For applications where the power supply module may be located on the floor, a power cord with Type SJT marking must be used.

For applications outside of North America, Power cords which meet the country of installation's certification and application requirements must be used.

Use of a power cord other than described here may result in a violation of safety certifications which are in force in the country of use.

Disclaimer

Information in this document is subject to change without notice. Consult your Pertech sales representative for information that is applicable and current. Pertech reserves the right to improve products as new technology, components, software and firmware become available.

No part of this document may be reproduced or transmitted in any form or by any means, electronic or mechanical, for any purpose without the express written permission of Pertech.

Industry Canada

This Class A digital apparatus complies with Industry Canada Standard ICES-003.

Cet appareil numérique de la classe A est conforme à la norme NMB-003 d'Industrie Canada.

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Web site

<http://www.pertechresources.com/>

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Preface

This manual has been written to help you Install and Operate your Pertech® 6100 Series Scanner. Feel free to contact us if you need further assistance after reading this manual. Please see the Troubleshooting Scanner Problems section of this manual and determine the complete part number of your scanner prior to calling. Pertech provides technical support Monday through Friday from 8:00 AM to 5:00 PM MST at 307-856-4821.

Every effort has been made to insure the information in this manual is complete and accurate. Feel free to contact us with any comments concerning this manual. Pertech assumes no responsibility for errors.

Where to Get Additional information

The following publications contain more information about the 6100 series scanner. Contact your Pertech sales representative to obtain additional copies of this Manual or any of the publications listed below.

Title	Part Number
6100 Scanner: Setup Guide	220349
6100 Scanner: Users Guide	220350
6100 Scanner: Service Guide	220351
6100 Scanner: Pertech API Programming Manual	220346
6100 Scanner: Command Manual	220347
6100 Parts Information Manual	

Ordering Supplies

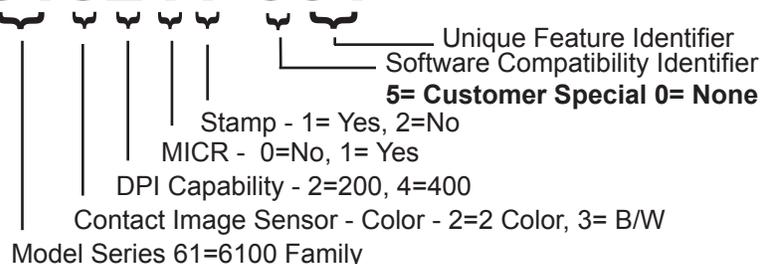
The following section lists the paper and supplies available for order. In addition to paper and ribbons, Parts, service and repair may be obtained by calling 1-800-800-6614.

Description	Part Number
Sun Stamp	108762-001
Imaged Stamp	108762-002
6100 Scanner Certified USB Cable 6'	106356-011
6100 Scanner Certified USB Cable 10"	106356-014
6100 Scanner Contact Image Sensor Wipe	108784

Models & Options

Available Models:

613211-001



Unique Item Examples

Orientation Vertical or Horizontal
Stand
Adjustable Deck Guide
Deck Options
Case Color
Firmware
Logos
Cables



www.pertechresources.com

Unpacking the Scanner

Save all packing materials in case you need to repack the scanner.

To report a scanner that was damaged during shipping, see “Contact Information” on the last page of this Guide.

To repack the scanner, consult the below illustration and use the original packing materials.



Choosing a Location

Place the scanner on a level surface on or near the host computer. Leave space to open the cover, and to insert a form.

The maximum distance from the scanner to the host and the power supply is: 6 feet (USB interface). The scanner should be placed in a location that minimizes Electro-Magnetic Interference (EMI), a minimum of 1 foot away from monitors.

About the 6100 Scanner

The 6100 scanner is a manual single sheet feed imaging solution that has duplex imaging, (both front and back of form). The scanner is capable of rear exit single pass stacking of at least 10 checks, and images standard 256 bit gray scale @ 200DPI imaging. Image compression is CCITT G4 (black/white) or JPEG (grayscale). The 6100 Series Scanner also has an optional MICR reader and form defacing stamp. USB 2.0 interface comes as the standard interface.

The MICR reader is in-line with the image scanner with on-board firmware decoding of E13B MICR characters. Comes Standard with 32MB of DRAM memory upgradeable to a maximum of 64MB and super fast document processing speed of 10 inches per second.



Features Identification

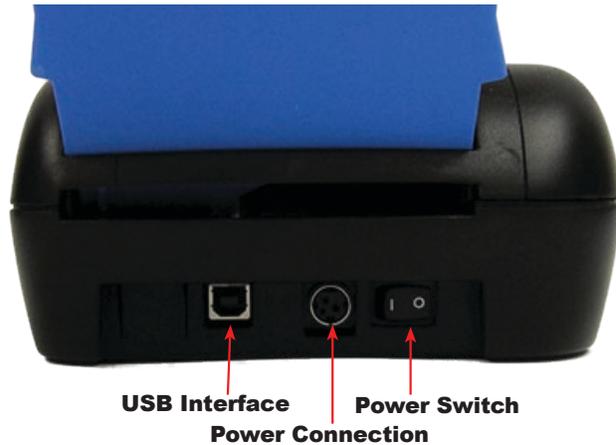
1. *Pressure Rollers*
2. *Contact Image Sensor*
3. *MICR Read Head*
4. *Entrance to Rear Exit Tray*
5. *Stamp Release Actuator*
6. *Defacing Stamp*
7. *ID Card Sensors*
8. *Form-in Sensor*
9. *Mechanism Feed Sensor*
10. *LED Indicator*
11. *Entrance Tray*
12. *ID Card Diverter*
13. *Mid-Field Sensor*

1. *Rear Deck*
2. *ID Card Exit Path*
3. *USB Interface*
4. *Power Connector*
5. *Power Switch*

Cables and Connections

Connecting the Cables

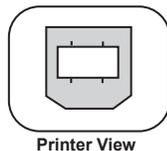
Caution: Be sure the power switch is turned off before connecting cables.



1. Make sure the unit is on a level surface.
2. Make sure the Scanner is powered off.
3. Connect the Power Supply to the Scanner.
3. Connect the Power Supply to the Power Source.
4. Connect The USB cable to the back of the scanner.
5. Load drivers on the PC (See Page 5 of this manual).
6. Connect the USB Cable to the PC and turn the scanner on.

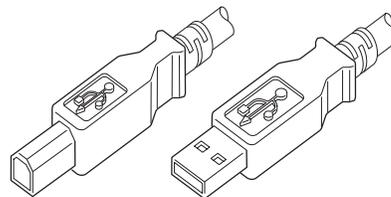
USB 2.0 Interface

Standard	Pinout
Pin 1	EOT/VCC
Pin 2	D-
Pin 3	D+
Pin 4	GND
Pin 5	GND
Pin 6	GND



The USB cable may be attached or detached when the system is on. When Using the USB interface the Windows® Operating System will automatically install the USB port driver. Pertech has available scanner drivers at www.pertechresources.com.

USB Cable Part
Number 106356011



Warning: When Hot Swapping USB cable make sure that cable is installed into the correct connectors or damage to the scanner could result.

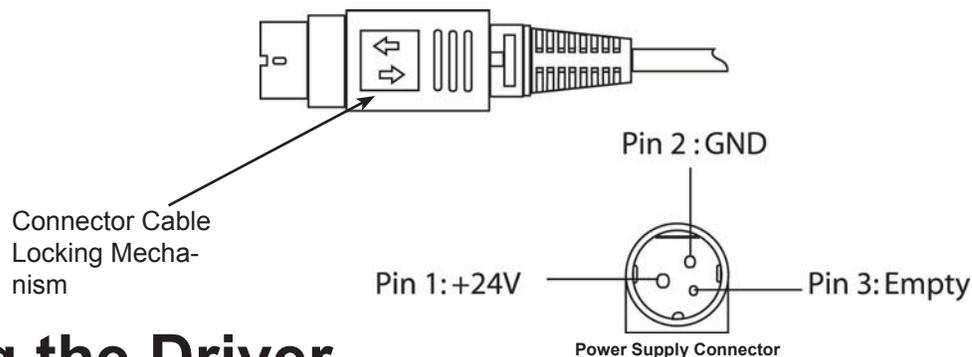
Power Supply

To avoid damage to the scanner connect the Power Supply last.

1. Make sure the scanner power switch is off.
2. Plug the Power Supply Cable into the scanner. The power supply cable connector has a locking mechanism to ensure that the cable stays fastened to the scanner. When removing the cable release the locking mechanism by pulling the mechanism away from the scanner.
3. Plug the Power Supply Cable into a grounded outlet.
4. Reference “Connecting the Cables” on the previous page to complete the process.



Printer
Connection



Installing the Driver

Windows XP, 2000, Vista Drivers

1. Download the 6100 USB driver from the Pertech Website. Unzip the file to a directory of your choosing . Make a note of this location.

2. Next, plug in the 6100 into the host computer's USB 2.0 bus and power up the unit.

When the 6100 Check Scanner is plugged into a USB port for the first time, Windows XP will automatically start the “New Hardware Wizard”. Follow the instructions of the hardware wizard, Browse to the directory where the unzipped 6100 driver files are located.

3. Windows will give a message that the driver is not signed, click “Continue Anyway” to install the driver.

Note that this also installs a WIA class device for the 6100, but the check scanner cannot be used in this manner. Running the scanner requires writing an application that accesses it through the supplied PertechAPI.

Hardware and Software Requirements

USB 2.0

Windows XP, 2000, or Vista Operating System. Pentium 4, 256MB RAM or higher recommended.

Windows drivers / SDK /Application Program Interface are available off the Pertech Web site.

www.pertechresources.com

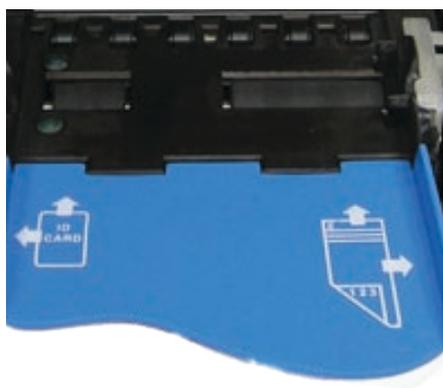
Pertech can supply an API for developers who wish to interface the scanner directly into their application software. Contact your Pertech Representative for the necessary files and documentation.

Operating the Scanner

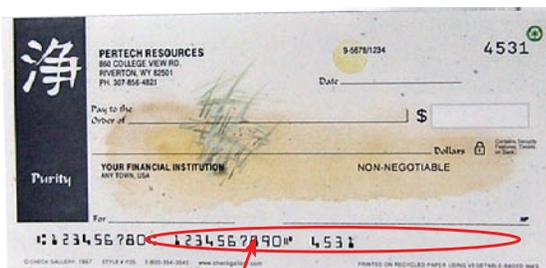
Typical Form Handling

The 6100 teller scanner handles forms between 2 and 3.67 inches wide and 3.2 to 8.75 inches in length. The scanner will handle thicknesses between #16 to #32 (3.0 to 7.5 mills; .032" for ID Cards), with rear exit single pass stacking of a of 10 checks. The unit has a in-line MICR reader with on board software for decoding E13B MICR characters

To load a form into the scanner insert the form justified to the right, face down with the MICR line to the right side of the scanner.



Check face down with
MICR Line to Right side



MICR Line



Typical Form Scanning Process

The application software calls for the user to insert a form into the scanner. The Green Power On LED begins blinking to indicate that the scanner is waiting for a form.

There are two sensors (#8,#9) identified in the Features Identification on page 3. The first sensor tells the scanner that a form is present, activates feed the motor and draws the form into the scanner.

The second sensor, if activated, passes the form through to the imaging heads and MICR reader and ejects the form out the back of the scanner onto the Exit Tray.

If the second sensor does not activate, as in the case of a inserted form being skewed, the user will need to realign the form with the right side of the scanner Entrance Tray before feeding the form.

ID Card Scanning Process

The application software calls for the user to insert a ID card into the scanner, the Green Power On LED begins blinking to indicate that the scanner is waiting for a ID card.

There are two sensors (#7) identified in the Features Identification on page 3. The first sensor tells the scanner that a ID card is present, activates feed the motor and draws the ID card into the scanner.

The second sensor if activated passes the ID card through to the imaging heads and ejects it out the ID card Exit Path (#2 on the bottom image of the Features Identification) in the back of the scanner.



Back of Scanner

LED Indicators

Equipped with one three color led indicator that typically identifies Power on, Ready for Form, and Error.
(See Note Below).

Status	Right LED
Power On	Green
Insert form	Blink Green
Error	Red

Note:

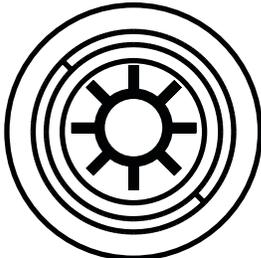
LED functions can also be defined via control commands. Application developers see the 6100 programming manual for details.

Contact your Pertech Representative for the necessary files and documentation.



Stamp Installation & Replacement

The defacing stamp can be purchased as either a Sun or a IMAGED stamp. The stamp is designed for easy replacement and has a capability of up to 10,000 stamps.



Sun Stamp
PN 108762-001



Imaged Stamp
PN 108762-002

Step 1 Installation & Removal

Insert a pencil or pen end into the stamp release and press lightly.

Step 2 Removal

Turn Stamp Counter Clockwise 90° and lift stamp out of stamp locking mechanism.

Step 2 Installation

Orient the new stamp so that the tab is 90° from the back of the stamp slot. Insert the stamp and rotate clockwise to lock into the mechanism.

Stamp Replacement

Step 1

Removal

Step 2

Step 2

Stamp Tab Must Be Rotated Counter Clockwise 90° For Stamp Removal

Step 1

Installation

Step 2

Step 2

Stamp Tab Must Be Rotated Clockwise 90° For Stamp Installation

Step 3

To Reorder Call 800-800-6614

Preventive Maintenance

There is no customer maintenance required for the 6100 scanners. However, scanners gather paper dust and other debris through normal use, continued accumulation can eventually lead to imaging issues. A general preventive maintenance program can help reduce unnecessary failures and downtime. Pertech recommends that you occasionally clean lint and paper dust out of the scanner using low pressure canned air. It is recommended that this be done on a regular basis, such as once a month. Clean the cabinet as needed to remove finger marks and dust. Use any household cleaner designed for plastics, but test it first on a small, inconspicuous area. Additionally, contact sensors should be cleaned with an approved Pertech Cleaning Wipe.

Caution: Do not spray or try to clean the Contact Imaging Sensors (CIS) or the inside of the scanner with any kind of cleaner other than what is recommended. This may damage the CIS or the electronics.

Clearing Jams

If a jam occurs the paper path can be accessed simply by opening the cover. Access to the full paper path allows the user to remove the jam without the hassle of trying to wiggle, pry, or eject the form. When clearing a jam clear the paper path of any documents, paper dust etc.... make sure rollers are free of debris. Close cover to resume operation

Feed Issues

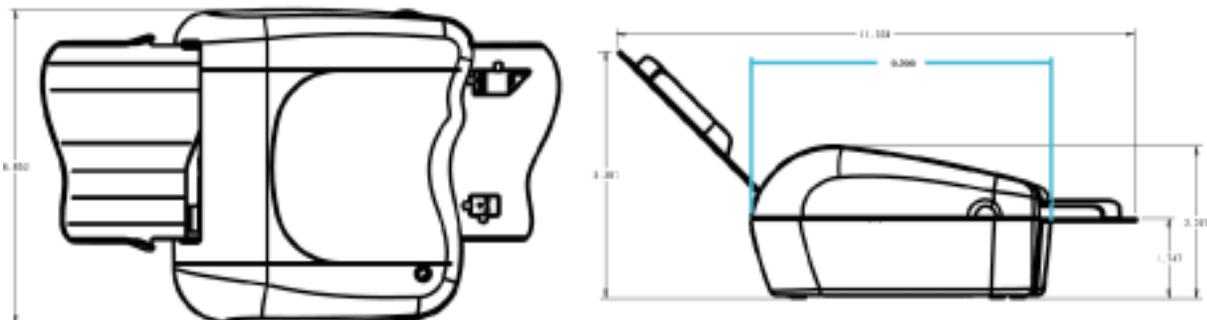
If the document is not being grabbed by the first roller check to see if the form alignment is correctly aligned with the sensor on the right side of the entrance tray. If alignment is OK and form still will not feed, open the 6100 Scanner cover and check for paper or debris and remove. (See preventive maintenance section in this manual.)



6100 Scanner Specifications

Dimensions	
Height	5.38" / (136.65mm)
Width	6.85" / (173.99 mm)
Length	11.3" / (287mm)
Orientation	Horizontal
Weight	
Imager	2.2 Lbs. / (1.0 Kg.)
Ext. Power Supply	1.12 Lbs. Max. / (.051 kg)
Power Supply	24V Wall Mt, 3 Pin Mini Din Locking Connector
Form	
Width	2" (50.8mm) MIN, 3.67" (93mm) MAX
Length	3.2" (80mm) MIN, 8.75" (222mm) MAX
Weight / Thickness	#16 up to 32# or 3.0 to 7.5 mils, .032"(81mm) for ID Cards
Image Quality	8 Bit Grey Scale @ 200DPI 24 Bit Color Option 200DPI 200-400 DPI Option Monochrome
Image Compression	CCITT G4 (Black / White) or JPEG (Grayscale).
Micr	In Line with Image Scanner On- Board E13B Decoding Firmware
Sensors	Form Insert, Jam & Skew
Indicators	Three Color Status LED -- Green, Yellow, Red
Interface	High Speed Capable , USB 2.0
Memory	32 MB DRAM upgrade able to 64MB
Speed	
Processing Time	Single Pass Max 1.5 Seconds
Document Speed	10 Inches Per Second
OS Compatibility	XP/2000 / Vista (Nov 2007)
API Interface	Pertech Proprietary API. TWAIN 2.1
Diagnostics	Command Based Self Test Feature
Maintenance	General Periodic Cleaning takes less than 2 min and Can be performed by the operator.
Reliability	
Life	Seven Years under normal usage
Warranty	2 Years
Environmental	
Noise	58 dB
Operating	10° to 40° C, Humidity 10-85% Non-Condensing
Storage	-10° to 40° C, 10-85% Non-Condensing
Agency Listings	TUV CUE Conforms to EU CE, WEEE and RoHS directives
Emissions	FCC 15B Class A
Drivers	Windows XP, 2000, Vista, Win 7, TWAIN 2.1

Dimensions



Service & Support

Pertech provides Technical Support for this product by calling 307-856-4821 between the hours of 8AM to 5PM Monday through Friday MST, or by submitting a Support Inquiry at the Pertech web site. www.pertechresources.com under the service/support section.

The Model Number, Revision, Date, and Serial Number can be located on the Label attached on the bottom of the scanner. Please have this information available when you contact Pertech.

Warranty Information

Current product warranty information can be found on the Pertech Website.

www.pertechresources.com

Warranty

Pertech Resources warrants all of its transaction printers and scanners against defects in material and workmanship for a period of 24 months from date of shipment by Pertech Resources or the rated maximum number of transactions for the specific product – whichever comes first. Kiosk printers, mechanisms and distributed products carry warranties specific to their application or manufacturers' warranty. Contact warranty@pertechresources.com for details on the specific product warranty.

Pertech Resources does not consider damage caused by replacement ribbons, stamps or replacement parts supplied by parties other than Pertech Resources to be a defect in material or workmanship. This is a limited warranty, limited exclusively to its terms, including the exclusive remedies set forth below. In addition, this warranty is void if the product has been altered, misused, taken apart or otherwise abused. All other warranties, expressed or implied are excluded, including but not limited to the implied warranties of merchantability and fitness for particular purpose. Any warranty claims must be supported by proof of purchase, represented by reference to the customers' purchase order.

Buyer's Remedies

Pertech Resources' obligations and liabilities under the foregoing warranty are limited to repair or replacement of the product without charge, provided it is shipped prepaid to Pertech Resources, 860 College View Drive, Riverton, WY 82501-2298. A charge is made for repairs after the expiration of the warranty period. In addition, if a product is returned and replacement ribbons, stamps or other replacement parts not supplied by Pertech Resources have caused the product damage, a reasonable charge for repair will be assessed. Product returned under warranty discovered to be a "no fault found" will be charged the standard repair cost plus return freight. In no event shall Pertech Resources be liable for claims based upon breach of expressed or implied warranty or negligence or any other damages whether direct, immediate, foreseeable, consequential or special or for any expenses incurred by reason of the use or misuse, sale or fabrications of products which do not conform to the terms and conditions of this contract.

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