

# ScanX<sup>®</sup> 14 IN-COUNTER

DIGITAL IMAGING SYSTEM

## Operator's Manual



*Made by Air Techniques, Inc.  
for*

A6732  ISO 13485:1996  
ISO 9001:2000  
Air Techniques Inc.  
Hicksville, NY

 **ALLPRO** IMAGING

Patented and  
Patents Pending

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## INTRODUCTION

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Thank you for purchasing ALLPRO Imaging's ScanX<sup>®</sup> 14 In-Counter Digital Imaging System (ScanX\*), which is designed and manufactured using state-of-the-art technology to give you many years of dependable service. To ensure that your ScanX gives you the highest level of service, review and follow the guidelines outlined in this Operator's Manual.

\* The ScanX<sup>®</sup> 14 In-Counter Digital Imaging System will be referred to as ScanX throughout the manual.

## WARRANTY

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This ALLPRO Imaging equipment is warranted to be free from defects in material and workmanship from the date of installation for a period of two years.

Any item returned to our factory in Hicksville, New York, during the warranty period, through an **authorized dealer**, will be repaired or replaced at our option at no charge, provided that our inspection shall indicate it to have been defective and that the system is returned to our factory in its **custom shipping case**. Dealer labor, shipping and handling charges are not covered by this warranty.

This warranty does not apply to damage due to shipping, misuse, careless handling or repairs by other than authorized service personnel. ALLPRO Imaging is not liable for indirect or consequential damage or loss of any nature in connection with this equipment.

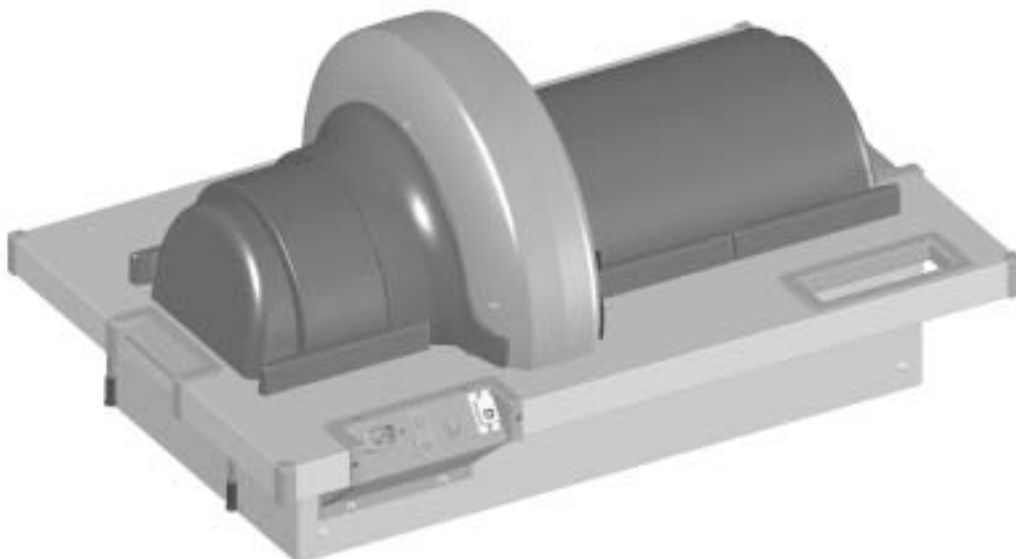
**This warranty is void if the ScanX is operated with any covers removed.**

This warranty is in lieu of all other warranties expressed or implied. No representative or person is authorized to assume for us any liability in connection with the sale of our equipment.

## ON-LINE WARRANTY REGISTRATION

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Quickly and easily register your new ScanX on-line. Just have your product model and serial numbers available. Then go to the ALLPRO website, [www.allproimaging.com](http://www.allproimaging.com), click the **warranty link** and complete the registration form. This on-line registration ensures a record for the warranty period and helps ALLPRO Imaging keep you informed of product updates and other valuable information.



**Figure 1. ScanX 14 In-Counter Digital Imaging System**

# SAFETY INSTRUCTIONS

This equipment has been designed to minimize exposure of personnel to hazards. While the ScanX is designed for safe operation, certain precautions must be observed. Use of the ScanX not in conformance with the instructions specified in this manual may result in permanent failure of the unit.

**Knowledge of Warnings and Cautions.** Users must exercise every precaution to ensure personnel safety, and be familiar with the warnings and cautions presented throughout this manual and summarized below.

In this manual, the following definitions apply for all WARNINGS and CAUTION Statements:

**WARNINGS:** Any operation, procedure or practice, which, if not strictly observed, may result in injury or long-term health hazards to personnel.

**CAUTIONS:** Any operation, procedure or practice, which, if not strictly observed, may result in destruction of equipment or loss of treatment effectiveness or damage to equipment and Phosphor Storage Plates (PSPs).

## Important Information.

The Power Cord is the main power disconnect device.

The interior of the Main Assembly is only accessible by removing hardware with tools and should only be opened and serviced by an Authorized ALLPRO Imaging dealer Service Technician. Failure to heed this warning may result in equipment damage or personal injury, and **will void any and all warranties.**

Please contact your authorized ALLPRO Imaging dealer for service information.

## MARKINGS



This warning label identifies the ScanX as a Class I Laser a product and describes the potential danger to humans in the event the product is opened during authorized service. There is no laser radiation from this product when operated and maintained as instructed.

The Laser Product Accession Number is 0212282-00



Alerts users to important Operating and Maintenance instructions. Read carefully to avoid any problems.



Warns users that uninsulated voltage within the unit may be of sufficient magnitude to cause electric shock.



Indicates that the ScanX complies to the Medical Device Directive 93/42/EEC



MEDICAL ELECTRICAL EQUIPMENT

WITH RESPECT TO ELECTRICAL SHOCK, FIRE, MECHANICAL AND OTHER SPECIFIED HAZARDS ONLY  
IN ACCORDANCE WITH UL-60601-1, CAN/CSA C22.2 NO.601.1  
66CA

## **ATTENTION USERS:**

Manufacturing date code on serial number label is in the format: MONTH YYYY.

# SAFETY INSTRUCTIONS

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**DANGER:** Opening the ScanX by removing any covers or components makes the equipment into a Class III b Laser Product. [Class 3B Laser Product (IEC)].

## WARNINGS -

**The ScanX contains a laser. The ScanX is a Class I [Class 1 (IEC)] Laser Product.**

Use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure. The laser is on only during an active scan.

**Only a trained technician from an authorized ALLPRO Imaging dealer should remove a cover from the ScanX.**

Direct eye contact with the output beam from the laser may cause serious damage and possible blindness.

**Do not open the ScanX to maintain it.**

The ScanX contains no user serviceable parts. If there is a service problem, contact your authorized ALLPRO Imaging dealer.

**Use of Accessory Equipment.**

The use of ACCESSORY equipment not complying with the equivalent safety requirements of this equipment may lead to a reduced level of safety of the resulting system.

Consideration relating to the choice shall include:

- use of the accessory in the PATIENT VICINITY
- evidence that the safety certification of the ACCESSORY has been performed in accordance to the appropriate IEC 601-1 and/or IEC 601-1-1 harmonized national standard.

Use of ACCESSORIES or cables other than those specified or provided by ALLPRO Imaging may result in increased EMISSIONS or decreased IMMUNITY of the EQUIPMENT.

**Operate ScanX in dry environment.**

To prevent fire or electrical shock, do not expose this appliance to rain or moisture.

**Use only grounded electrical connections.**

Use only the power cord provided with the unit.

**Do not use damaged Phosphor Storage Plates (PSPs).**

Damaged PSPs may not provide reliable diagnostic images.

**Disposal of PSPs.**

Consult with your federal, national, state and local government, for rules and regulations on disposal of PSPs.

## CAUTIONS -

**Completely clean and erase PSPs before taking an X-ray exposure.**

See the *PLATE PREPARATION* section of this manual.

**Minimize exposing an X-ray exposed PSP to light.**

Transfer the PSP to the Inlet slot within the Plate Protector and/or quickly and with minimal light exposure.

**Use care in handling PSPs - Avoid fingerprints and scratching**

Refer to the instructions provided with the PSP package for further information on handling.

**Use of Other Manufacturer's Imaging Plates**

Do not put PSPs designed for drum-type or other scanners in the ScanX. The hooks and/or frames on the ends or around these PSPs, or PSPs of different thickness (especially thicker ones) will damage the ScanX. PSPs from another manufacturer may be used as long as the specifications are the same as those for the ScanX PSPs.

# PURPOSE OF THIS MANUAL

This manual provides the information necessary for the setup, operation and routine care and maintenance of the ScanX.

This manual is not to be used as a replacement for training in radiography.

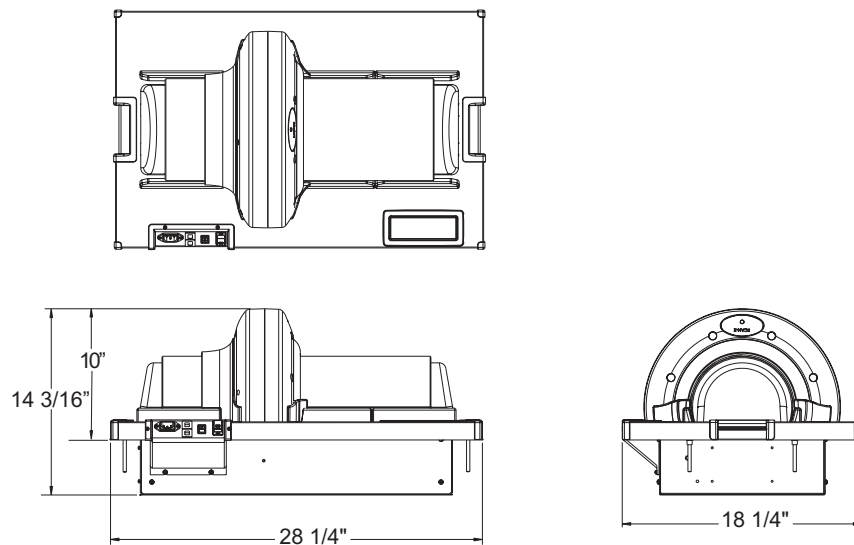
For information regarding the computer system and imaging software, refer to the appropriate documentation provided with your computer hardware and software.

# ABBREVIATIONS

Abbreviations used in this manual are summarized below.

A	ampere(s)	lp/mm	line pairs per mm
AC	alternating current	lux	a measure of light intensity
ATA	Air Transport Association of America	MB	megabytes ( $2^{20} \approx 10^6$ bytes)
CD-ROM	compact disk, read-only memory	mm	millimeter ( $10^{-3}$ m)
CFR	Code of Federal Regulations	PN	part number
cm	centimeter	PSP	phosphor storage plate (imaging plate)
D	depth	RAM	random access memory
GB	gigabyte ( $2^{30} \approx 10^9$ bytes)	SVGA	super video graphics array
GHz	gigahertz ( $10^9$ of hertz)	USB	universal serial bus
H	height	UL	Underwriters Laboratories
Hz	hertz (cycles per second)	VAC	volts alternating current
IEC	International Electro-technical Commission	W	watts, width
IMS	Image Management Software [also referred to as Patient Management Software (PMS)]	$\mu\text{m}$	micrometer ( $10^{-6}$ m)
LED	light emitting diode	$^{\circ}\text{C}$	degree Celsius
lbs.	pounds	$^{\circ}\text{F}$	degree Fahrenheit
		", in	inch

**Figure 2. ScanX 14 In-Counter Footprint Dimensions**



# TECHNICAL SPECIFICATIONS

## Electrical Requirements:

Supply Voltage: 100 to 240VAC +/- 10%, 50/60 Hz  
Supply Current: 1A Maximum  
Power Cord: Country Specific Hospital Grade Line Cord

## Physical Properties:

Dimensions:	<u>Depth</u>	<u>Width</u>	<u>Height</u>	
			(above counter)	(below counter)
	18 1/4 inches (46 cm)	28 1/4 inches (72 cm)	10 inches (25 cm)	4 3/16 inches (11 cm)

Weight: 47 lbs.

## Resolution (LP/mm) - ScanX capability. Achievable resolution is dependent on PSP capability

Vertical 5.0  
Horizontal 5.0

## Environmental Conditions:

Unit in Operation  
Temperature: 0 to 104°F (-18 to 40°C)  
Humidity: 5% to 95% Relative Humidity (Non-Condensing)  
Heat emission <70W  
Storage and Transport  
Temperature: -21 to 130°F (-29 to 54°C)  
Humidity: 5% to 95% Relative Humidity (Non-Condensing)

## Compliance Data:

Laser Class: Class I Laser Product (21 CFR 1040.10)  
Class 1 Laser Product (IEC 60825-1)

Laser Product Report  
Accession Number: 0212282-00

Installation Category: II

Pollution Degree: 2

User Serviceable items: Power Cord (Replacement)  
USB Cable (Replacement)

## IEC601-1 Classification:

Class 1  
Type B  
Transportable  
Continuous Operation  
Equipment not suitable for use in the presence of flammable anaesthetic mixture(s).  
Protection against ingress of liquids -Ordinary

## Electromagnetic Interference:

Electromagnetic interference between the equipment and other devices can occur. Do not use the equipment in close conjunction with sensitive devices, or devices creating high electromagnetic disturbances.

Portable and Mobile RF communications equipment and devices can affect MEDICAL ELECTRICAL EQUIPMENT operation.

# **UNPACKING AND INSPECTION**

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## **UNPACKING**

The ScanX is shipped in a custom Transit Case (P/N 9928-747) covered by a double-wall over-packaging. The Transit Case meets the specifications of the Air Transport Association (ATA) of America to provide equipment protection during shipment. A deposit fee has been paid for this case, which may be returned to ALLPRO Imaging for a full refund of the fee using a Return Authorization (RA) number, or retained, without refund of the fee, to protect the ScanX in the event that it is to be transported or shipped in the future. The over-packaging should be used to return the custom Transit Case to ALLPRO Imaging.

The ScanX consists of the core assembly (PN B2810) and the following accessory kit:

- Custom ATA Certified Transit Case (return for deposit refund)

- Line Cord (Varies depending on country where used.)

- 6-Foot High Speed USB Cable, Type A/Type B

- In-Counter Installation Kit, P/N B2988

- Operator's Manual

- Drivers, Utilities and Manual Disk

- USB Installation Notes

## **INSPECTION**

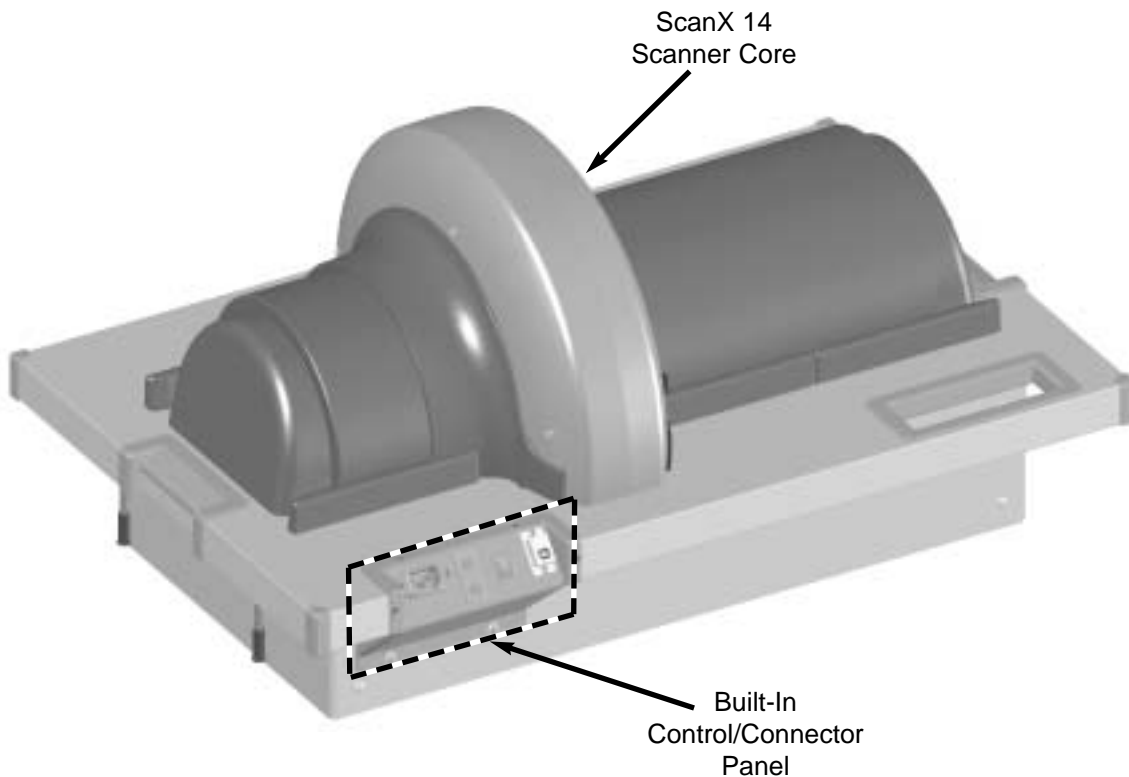
Verify that all listed items were received. If any item is missing, notify your ALLPRO Imaging authorized dealer. Unpack each component of the ScanX and inspect for physical damage such as scratched panels, damaged connectors, etc. If any damage is noted, immediately notify your ALLPRO Imaging authorized dealer so corrective action can be taken.

## SYSTEM DESCRIPTION

The ScanX is a self-contained digital radiography imaging system designed for installation into a standard cabinet countertop. This system comprises a phosphor storage plate (PSP) scanner. The ScanX produces a digital image by scanning PSPs, which have been exposed to X-ray emissions. It uses reusable PSPs in conjunction with compatible user-supplied Image Management Software in place of X-ray film to produce diagnostic quality digital radiographs. The ScanX allows digital storage, processing, retrieval and display of the computed radiographic images using a computer and compatible software.

**ScanX Core Assembly.** The ScanX Core assembly is fitted and secured within the associated user-supplied cabinet countertop allowing easy portability to wherever service is required. Using available facility electrical power (100 to 240 VAC, 50/60 Hz), the ScanX processes PSPs with a maximum width of 14 inches (355 mm) and produces the same high quality digital image as all of ALLPRO Imaging's ScanX product family.

**Figure 3. ScanX 14 In-Counter Component Location**



## SITE SELECTION

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**Note:** An authorized ALLPRO Imaging dealer or user must provide appropriate and compliant computer hardware and software.

The ScanX may be located almost anywhere. Follow these guidelines for optimum performance:

- Lighting conditions: You can set up the scanner in ordinary room light, however, direct sunlight and light fixture(s) above and near the ScanX producing more than 400 lux of light at the PSP inlet or outlet must be avoided.
- Provide a standard cabinet with a countertop large enough for scanner installation, plus provide a working area for resting and opening cassettes.
- Locate the computer within 6 feet.
- Access to a grounded electric Mains AC or Power Inverter Assembly outlets must be within the length of the line cord provided. A line cord matching Mains outlet of country of intended use is provided.

## COMPUTER SYSTEM REQUIREMENTS

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**IMPORTANT:** To operate the ScanX, it must be connected to a compliant Computer System, and the computer must be loaded with ALLPRO Imaging Authorized Image Management Software. ALLPRO Imaging provides neither the PC nor the Software. The PC and Software are provided by the dealer or user.

The Computer System (laptop or computer, monitor, etc.) and any related peripheral or other equipment, supplied by the user, or a third party, must comply with the requirements for accessory Equipment as specified in the appropriate IEC 601-1 and/or IEC 601-1-1 harmonized national standard.

The minimum computer system requirements necessary to operate the ScanX are listed below. Items listed with an asterisk (\*) are required.

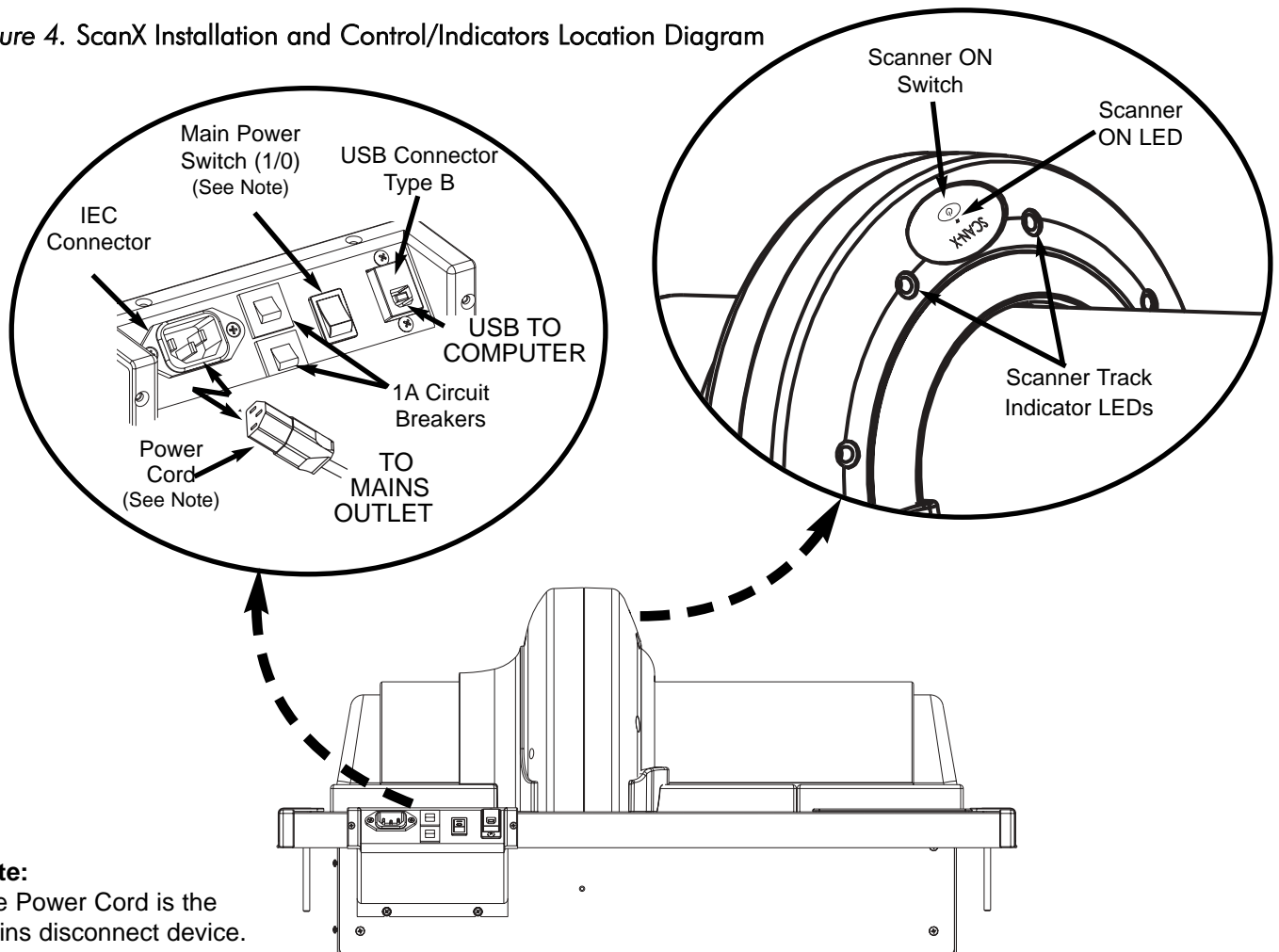
Operating System:	* Windows 2000 Professional for an Intel 32-bit processor with Service Pack 4 or later, or Windows XP Professional for an Intel 32-bit processor with Service Pack 1 and the KB B22603 update or later.
USB Port:	* Must be USB 1.1 or 2.0 or later
CPU:	2.8 GHz Pentium IV
RAM:	1 GB
Hard Drive:	120 GB
Monitor:	SVGA 17", 1024 x768 or higher resolution, contrast ratio 450:1,
1024 x 768 Resolution:	.22 dot pitch capability. For optimum viewing a CRT is recommended.
Video Display Adapter:	32 MB RAM
Peripherals:	* CD ROM Drive Standard Keyboard & Mouse Backup Device External Surge Protector Power supply backup
Image Management Software:	* Compatible software

## SETUP PROCEDURE

Perform the following procedure when setting up the ScanX for operation for the first time.

1. Select a location that meets the SITE SELECTION guidelines.
2. Install the ScanX into countertop per instructions provided with the In-Counter Installation Kit, P/N B2988
3. Set up the computer according to the manufacturer's recommendations.
4. Install ALLPRO Imaging Authorized Image Management Software on the computer.
5. Refer to figure 4 and connect the line cord between the ScanX power IEC connector located on the Built-In Control/Connector Panel and the Mains outlet.
6. Connect the high speed USB cable between the USB Type B connector located on the Built-In Control/Connector Panel and the USB Type A connector located on the computer. Always make sure to use the same USB port whenever reconnection of the USB cable is necessary.
7. Apply the main power to the ScanX by placing the rocker switch on the Built-In Control/Connector panel to the ON (I) position.
8. Switch the scanner from standby to ON by pressing the membrane switch (⏻) on the top of the scanner. Verify that the green light below the switch illuminates.
9. When prompted by Windows, insert the supplied ScanX Drivers and Utilities Disk which contains the USB drivers and install per the Windows Setup Wizard instructions.

Figure 4. ScanX Installation and Control/Indicators Location Diagram



**Note:**  
The Power Cord is the Mains disconnect device.

## PLATE PREPARATION

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Prior to performing Imaging procedures provided on the following pages, the user must be familiar with the care and handling of the PSP in order to ensure successful image scanning. Figure 5 shows the configuration of a typical 10 x 12 inch PSP.

**CAUTION:** PSPs must always be erased prior to use.

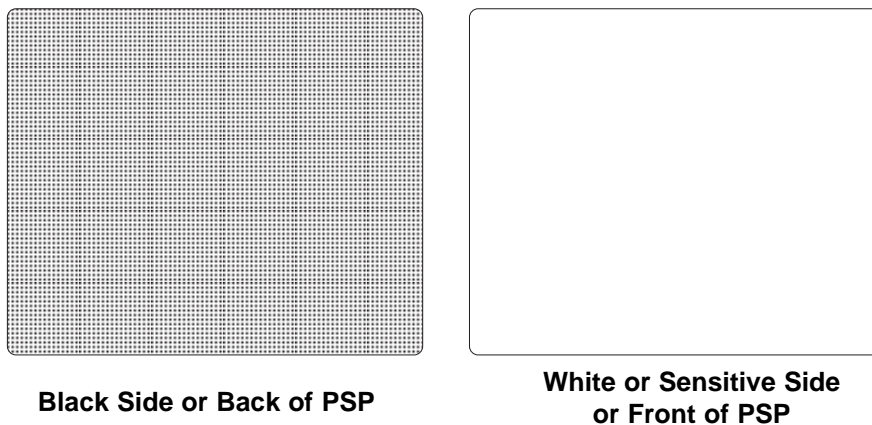
**Erase the PSP.** Each PSP should be used (i.e. X-ray exposed and scanned) **within 24 hours** of erasure since natural radiation will add noise to the PSP. ALLPRO Imaging recommends the use of the ALLPRO ScanX Eraser (p/N B2840) for PSPs measuring a maximum of 14 X17 inches with an erasing time of approximately 15 seconds. Equivalent erasing is achieved with 750,000 lux-seconds of erasing energy.

**CAUTION:** Use a Plate Protector and exercise care in handling the plate so as not to scratch the sensitive surface or nick the edges.

**Plate Protector.** Always exercise care in handling the PSP so as not to scratch or soil the sensitive surface or nick the edges. Make sure to use a correct size Plate Protector with the PSP.

**X-ray Cassette.** Place the PSP covered with a Plate Protector into the appropriate X-ray cassette with the sensitive (front) side of the PSP towards the Tube-side of the cassette and close cassette.

Figure 5. PSP or Imaging Plate Configuration



## IMAGING PROCEDURES

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- Note:**
1. Cassettes must **not** contain intensifying screens when using PSPs.
  2. PSPs may be exposed in cassettes and scanned without Plate Protectors, however, greater care must be exercised to not expose the PSP to light before scanning and to prevent the PSP from being scratched or soiled.

**Take an X-ray Image.** Put an image on the PSP by performing the following procedure.

1. Load cassette containing an erased PSP in a Plate Protector into the exposure device as previously done with film.
2. Take the exposure using either the same settings used for film if previously "green" film was used or with about half the exposure if "blue" film was used with intensifying screens.
3. Bring the closed cassette housing the X-ray exposed PSP containing the latent image to the ScanX. The PSP is now ready to be scanned to read the latent image from the PSP.

**Activate Scanner.** Activate the ScanX by performing the following procedures.

1. Make sure the ScanX and computer components are correctly connected as shown in Figure 4.
2. Apply the main power to the ScanX by placing the rocker switch on the Built-In Control/Connector panel to the ON (I) position.
3. Switch the scanner from standby to ON by pressing the membrane switch (⏻) on the top of the scanner. Verify that the green light below the switch illuminates.
4. Use the user-supplied compatible Imaging Software to activate the Scanner and to select the desired image type and resolution.
5. Verify that the two Scanner track indicator LEDs #2 and #3 illuminate green when the Scanner has been activated, indicating that PSPs can be fed.

**Scanning the Plates.** Scan a PSP with the ScanX by performing the following procedures.

1. Orient the cassette so that the Tube side is facing down and on the table or counter surface.
2. Open the cassette and grasp the Plate Protector guide flaps to lift out the Plate Protector enclosed PSP. Pinch guide flaps between the thumb and index finger to prevent the PSP from sliding out of the Plate Protector. While minimizing exposure to ambient light, move it to the ScanX inlet with the sensitive (front) side of PSP towards the ScanX. (See Figure 6.)
3. Position the Plate Protector containing the PSP against the curved inlet surface and hold it flush against the scanner inlet. A Plate Protector containing an exposed PSP narrower than 14 inches may be centered on the scanner inlet, making sure that it is aligned.
4. Gently slide the PSP and Protector assembly into the scanning slot until the Protector is stopped by both guide flaps resting on the inlet ring as shown by Figure 7, which further aids in alignment.

**Note:** Only one PSP can be fed in at a time. The next PSP may be fed only after the track indicator light Indicator LEDs change from yellow to green.

5. Continue to gently slide the PSP through until the transport mechanism takes over and the PSP moves on its own. At this point the Scanner track indicator LEDs illuminate yellow, indicating the PSP has been sensed and the Scanner is in use acquiring image data.
6. Observe that the scanned PSP exits through the scanner arch and remains on the scanner outlet held by PSP spring action.
7. Retrieve the plate so as not to scratch the sensitive surface or nick the edges when removing from the scanner outlet.
8. View and save the image using an user-supplied ALLPRO Imaging Authorized Imaging Software. The PSP may then be erased and processed for reuse.

**Figure 6. PSP Placement**



**Figure 7. PSP Protector Guide Flaps**



# IMAGING PROCEDURES

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**System Turn Off.** Removing power from the ScanX by performing the following procedures.

1. Exit from your Imaging Software in accordance with its instructions prior to turning off the ScanX.
2. Switch the ScanX from ON to Standby by pressing and holding the membrane switch (⏻) on the top of the scanner for approximately two seconds, until the green LED below the switch button goes out.
3. Turn OFF the main power to the ScanX by placing the rocker switch on the Built-In Control/Connector panel to the OFF (O) position.

## MAINTENANCE

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The ScanX is designed for many years of trouble-free operation. Maintenance as described herein is minimal.

**CAUTION:** Do not use a blower or any forced air devices to remove dust. Blown dust will only be pushed into the interior optical and electronic circuits of the ScanX degrading operation.

Use only a vacuum with soft brush attachment to remove dust from the ScanX exterior or interior as necessary.

**Cleaning and Disinfecting the System.** Turn OFF the ScanX Main Power Switch, disconnect the power cord from the Mains wall outlet and disconnect USB cable before cleaning. Wipe the Scanner outside surfaces with a soft cloth or paper towel dampened with a disinfectant solution or non-abrasive household cleaner using the following precautions.

- DO NOT SPRAY SOLVENTS OR LIQUID DIRECTLY ON THE SCANNER.
- Be careful not to allow solvents TO RUN OR DRIP into the ScanX. This could cause damage to the ScanX.
- Allow to air dry before plugging in or turning back on.

**Internal System Cleaning.** Use a ScanX Cleaning Sheet (P/N B2010 or B2020) to ensure optimal performance of the ScanX. Perform cleaning in accordance with the procedures provided by Instruction Sheet, P/N B2018, included with each box of ScanX Cleaning Sheets.

**Cleaning Phosphor Storage Plates (PSPs).** Imaging Plates should be handled carefully. For the best images, take care not to scratch the PSPs. Keep them dust-free. Perform the following procedure to clean PSPs:

1. Use lint-free, 100% cotton gauze (not cotton balls). Gently wipe the cotton gauze over the dry PSP surface. Wipe back and forth and then in a circular motion.
2. To clean any remaining stains, dampen the gauze in anhydrous ethanol and wipe using the same motion as above.
3. Completely dry the surface by wiping with another piece of cotton gauze. Ensure that the PSP is completely dry before use.

**Disposal of a PSP.** Consult with your federal, national, state and local government, for rules and regulations on disposal of PSPs.

# TROUBLESHOOTING

Trouble	Possible Cause	Corrective Action
No power. No green light illumination on membrane switch.	ScanX not plugged in	Check the line cord connection at each interface to ensure it is firmly plugged in.
	ScanX power not turned on	Place Power switch in ON (I) position
	Outlet does not have power	Make sure that the outlet is grounded and has power.
	ScanX ON/OFF switch or internal power supply is bad.	Call your authorized ALLPRO Imaging Dealer.
Green or Yellow indicator light does not illuminate.	Defective LED or sensor.	Call your authorized ALLPRO Imaging Dealer.
Your Image Management Software does not recognize the scanner when the ScanX is selected.	Inadequate Computer System	Verify <i>COMPUTER SYSTEM REQUIREMENTS</i>
	The scanner has not been turned on.	If the green Scanner ON LED is off, turn ON the Scanner.
	The cable between the ScanX and the computer is loose or defective.	Reconnect the cable. Check for tightness. Replace the cable with a known good one.
	USB cable in new (wrong) USB port	Use original USB port when reconnecting
	The computer does not recognize that the ScanX is connected.	Call your authorized ALLPRO Imaging Dealer.
	There is a hardware problem with the ScanX.	Call your authorized ALLPRO Imaging Dealer.
PSP does not scan properly.	The PSP was not pushed far enough into the inlet feed slot behind the Guide Ring.	Fully feed the PSP completely into the Guide Ring inlet. slot
	PSP transport problem	Call your authorized ALLPRO Imaging Dealer.
After scanning no image appears.	The PSP is fed in backwards. (back or black side towards ScanX)	Re-take the image after erasing the PSP.
	The PSP was erased prior to scanning.	Make sure that the PSPs are scanned immediately and quickly after they are removed from the cassette. Use Plate Protectors when feeding into the ScanX.
	The PSP was not properly exposed.	Re-take the image after erasing the PSP
	Hardware failure.	Call your authorized ALLPRO Imaging Dealer.
	X-ray source failed.	Call your X-ray service dealer.

# TROUBLESHOOTING

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Trouble	Possible Cause	Corrective Action
Image is too dark.	PSP has been overexposed or image processing parameters are incorrect.	Adjust brightness or other image processing functions within software. If this does not resolve the problem, retake image with proper (lower) exposure after erasing the PSP.
Image is too light.	PSP has been underexposed or image processing parameters are incorrect.	Adjust brightness or other image processing functions within software. If this does not resolve the problem, retake image with proper (higher) exposure after erasing the PSP.
Image appears skewed on monitor	PSP was fed skewed	When inserting PSP into inlet feed slot, be sure align PSP, and then push down uniformly as instructed in the manual. Use Plate Protector which also acts as an alignment guide.
Image contains ghost images or shadows.	PSP was not completely erased.	<p>Check Eraser function.</p> <p>Increase the amount of time that is used to erase PSPs. Alternatively, increase the intensity of the light source.</p> <p>To test if a PSP is completely erased, scan it after erasing. If no image is obtained, your procedure was effective.</p> <p>If using an ALLPRO ScanX 14 Eraser, check proper functioning of the Eraser.</p> <p>Refer to the ALLPRO ScanX Eraser Operator's Manual.</p>
	PSP was exposed with the back of the PSP facing the tubehead. Image will be reversed (mirrored).	Ensure the PSPs are inserted properly into the cassette, and the proper orientation to the X-ray source is maintained.
	PSP has been stored in cassette for too long.	Do not store PSPs in cassettes for more than 24 hours. Natural radiation results in noise in the image.
	Partial erasure of the image due to exposure to light during handling of the PSP.	Do not leave exposed PSPs in well lit areas. Even when in the Plate Protector, some light may enter periphery and partially erase the PSP. Transfer PSPs from their protective barriers to the ScanX as soon as possible, within one hour of exposure.
Image shows artifacts	The PSP surface is not clean and has dirt, stains or scratches on it	<p>Clean the PSP.</p> <p>Do not use if the PSP is scratched or stained.</p>

### COMPONENTS AVAILABLE FROM ALLPRO IMAGING

The following is a list of optional accessories available for purchase from your authorized dealer:  
(For ratings and identification see *TECHNICAL SPECIFICATIONS*.)

Description	Quantity	Part Number
<i>Phosphor Storage Plates (PSPs)</i>		
8 by 10 inch	1 per package	73578-8M
10 by 12 inch	1 per package	73578-10
14 by 17 inch	1 per package	73578-14
<i>Plate Protectors</i>		
8 by 10 inch	1 per package	B2160-8M
10 by 12 inch	1 per package	B2160-10
14 by 17 inch	1 per package	B2160-14
<i>Cassettes</i>		
8 by 10 inch	1 per package	74190-8
10 by 12 inch	1 per package	74190-10
14 by 17 inch	1 per package	74190-14
<i>Plate Eraser</i>		
14 by 17 inch Eraser	1	B2840
<i>Power Inverter</i>		
700-watt, 120 VAC Power Inverter Assembly	1	B2895
Hospital Grade Line Cord (North America)*	1	61934
<i>Computer Connector USB Cable</i>		
6-Foot High Speed USB Cable, Type A/Type B	1	B3554
<i>ScanX Cleaning Sheets**</i>		
Box of 12	1	B2010
Box of 25	1	B2020

\*Check with ALLPRO Imaging or your Authorized dealer for optional hospital grade line cords for other countries.

\*\*One Re-usable Release Liner is included in each box of ScanX Cleaning Sheets.

### COMPONENTS SUPPLIED BY USER/DEALER

A compliant computer system, i.e. the CPU, monitor, peripherals, and Imaging management Software.  
(See *COMPUTER SYSTEM REQUIREMENTS*.)

## IF YOU NEED ASSISTANCE

For additional information, please contact your authorized ALLPRO Imaging Dealer or visit our website  
at **[www.allproimaging.com](http://www.allproimaging.com)**

# NOTES

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Air Techniques and AllPro Imaging are leading manufacturers of fine dental, medical and veterinary equipment from air and vacuum systems and X-ray film processors, to an impressive line of new products incorporating the most recent technological advances. These new products, vital components of the innovative professional practice, include intraoral cameras, digital imaging systems, which utilizes phosphor plate technology and, most recently, an intraoral digital X-ray system using sensor technology.

Air Techniques and AllPro Imaging have been manufacturing quality products for the dental, medical and veterinary professional since 1962.

Air Techniques and AllPro Imaging products are distributed only through authorized dealers. Refer to [www.airtechniques.com](http://www.airtechniques.com) or [www.allproimaging.com](http://www.allproimaging.com) to find a dealer in your area.

- ACCENT™ Intraoral Digital X-ray Image System
- Acclaim Intraoral Digital Video Camera System
- AirStar®
- Guardian™ Amalgam Collector
- A/T 2000® XR
- Peri-Pro®
- Provecta 70™
- ScanX®
- STS™
- VacStar™
  
- 100 Plus
- 2010 Plus
- Medscope
- Provecta V
- ScanX® 12
- ScanX® 14
- ScanX® DVM
- ScanX® NDT
- ScanX® 12 EV
- ScanX® 14 PORTABLE
- ScanX® NDT PORTABLE

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