

Kodak Point-of-Care CR 120/140/260/360 Scanners Software Installation QC Version 3.0.0



Important

When doing the procedures in this document, you must use safe work practices and wear the correct Personal Protective Equipment (for example, SAFETY EYEWEAR) according to your Company's Standard Operating Procedures.

Kodak QC Software Installation

Document Number 6H9811

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Use of Manual

The *Kodak* Point-of-Care CR System is designed to meet international safety and performance standards. Personnel operating the unit must have a thorough understanding of the proper operation of the system. This manual has been prepared to aid medical and technical personnel to understand and operate the system. Do not operate the system before reading this manual and gaining a clear understanding of the operation of the system. If any part of this manual is not clear, please contact your Carestream Health representative for clarification.

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Section 1: Safety and Regulatory Information

Introduction

The information contained herein is based on the experience and knowledge relating to the subject matter gained by Carestream Health prior to publication. No patent license is granted by this information.

Carestream Health reserves the right to change this information without notice, and makes no warranty, express or implied, with respect to this information. Carestream Health shall not be liable for any loss or damage, including consequential or special damages, resulting from any use of this information, even if loss or damage is caused by Carestream Health's negligence or other fault.

Document Conventions

In this document the *Kodak Point-of-Care CR 120/140/260/360 System* will be referred to as *Point-of-Care CR*.



Caution

Cautions point out procedures that you must follow precisely to avoid damage to the system or any of its components, yourself or others, loss of data or corruption of files in software applications.



Note

Notes provide additional information, such as expanded explanations, hints, or reminders.



Important

Important highlights critical policy information that affects how you use this manual and this product.

General Safety Guidelines

- This product is designed and manufactured to ensure maximum safety of operation. Operate and maintain it in strict compliance with the safety precautions and operating instructions contained in this manual.
- This product meets all the safety requirements applicable to medical equipment. However, anyone attempting to operate the system must be fully aware of potential safety hazards.
- There are no user serviceable parts in this system. The product must be installed, maintained, and serviced by qualified service personnel according to procedures and preventive maintenance schedules in the product service manual. If your product does not operate as expected, contact your Service Representative.
- Do not modify this product in whole or in part without prior written approval from Carestream Health.
- Personnel operating and maintaining this system should receive training and be familiar with all aspects of operation and maintenance.
- To ensure safety, read all user manuals carefully before using the system and observe all Cautions, Important, and Notes located throughout the manual.
- Keep this manual with the equipment. Reading this manual does not qualify you to operate, test, or calibrate this system.
- Unauthorized personnel are not allowed access to the system.
- If the product does not operate properly or fails to respond to the controls as described in this manual:
 - Follow the safety precautions as specified in this manual.
 - Stop using the unit and prevent any changes to it.
 - Immediately contact the service office, report the problem, and await further instructions.
- Use only legally marketed cassettes. Check periodically the quality of the cassettes, and replace if any defects are apparent.
- The images provided by this system are intended as tools for the trained user. They are explicitly not to be regarded as a sole incontrovertible basis for clinical diagnosis.

-
- Be aware of the product specifications and of system accuracy and stability limitations. Consider these limitations before making any decision based on quantitative values. If you have any doubts, consult your Sales Representative.
 - This system is Class I continuous operated stationary equipment without applied parts and has one signal input/output part.

Electrical Hazards



Caution

- Do not remove or open system covers or plugs. Internal circuits use high voltage capable of causing serious injury.
- Fuses blown within 36 hours of being replaced by a qualified technician may indicate malfunctioning electrical circuits within the system. Have the system checked by qualified service personnel. Do not attempt to replace any fuse.
- Fluids that seep into the active circuit components of the system may cause short circuits that can result in electrical fires. Therefore, do not place any liquid or food on any part of the system.

Explosion and Implosion Hazards



Caution

- Do not operate the equipment in the presence of explosive liquids, vapors, or gases.
- Do not plug in or turn on the system if hazardous substances are detected in the environment. If these substances are detected after the system has been turned on, do not attempt to turn off the unit or unplug it. Evacuate and ventilate the area before turning off the system.

Overheating

Do not block the air circulation around the unit. Always maintain at least 6 inches (15 cm) clearance around the unit to prevent overheating and damage to the system.

Recycling the Unit



In the European Union, this symbol indicates that when the last user wishes to discard this product, it must be sent to appropriate facilities for recovery and recycling.

Contact your local Carestream Health representative or refer to <http://recycle.carestreamhealth.com> or <http://www.carestreamhealth.com/go/recycle2> for additional information on the collection and recovery programs available for this product.

Device-Specific Safety Information



LIFTING HAZARD

The Point-of-Care CR 120/140/260 weighs 45 Kg (99 lb). The Point-of-Care CR 360 weighs 39 Kg (86 lb). Do not try to lift the unit by yourself. Always seek assistance from another person. Lifting equipment that is too heavy may result in serious injury and/or damage to equipment.

IEC Symbols Used

The system may have labels with one or more of the following symbols. These symbols indicate the IEC standards to which the system conforms.



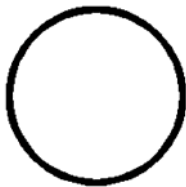
Warning, Caution – consult accompanying documents



Protective earth point (chassis stud)



Power ON



Power OFF



Caution – Electrical shock hazard

Laser Safety Instructions



Laser Warning

- The Point-of-Care CR is a Class 1 laser product
- During normal operation, always keep the unit enclosed in its protective cover to prevent the outside area from being exposed to laser emission.
- During normal operation, do not remove the cover. Only a qualified technician may remove the cover to service this product
- Laser radiation when cover removed. Avoid direct exposure to beam. Class 3B laser inside.
- Do not operate the unit while the access door is open.

Regulatory Information

The Product conforms to the following safety standards: IEC 601-1 Medical Electrical Equipment General Requirements for Safety, EN60601-1-2 Medical Electrical Equipment Electro-Magnetic Compatibility Requirements and Tests, IEC 60825-1 Safety of Laser Products.

This device complies with 21CFR 1040.10.





CE Conformity

This product conforms to the requirements of council directive 93/42/EEC. The Point-of-Care CR is a Class I medical device. The Point-of-Care CR bears the following mark of conformity.



The name and address of the CE representative appears on the back of the front page of this manual.

Labelling Summary

Safety Labels	
	Laser-emitting product
	Class 3B laser product inside unit
	High voltage
	Protective earth point (chassis stud)

Definitions

Term	Definition
PC	Make sure that the PC you are using meets the requirements described in “Computer Requirements” on Page 10 .
Kodak QC	The Software supplied with every Point-of-Care CR system. This software operates the CR system and is used for image acquiring and reviewing processes.
WIBU-KEY	License protection dongle. Without this dongle the <i>Kodak QC</i> application will not run. The dongle can be loaded with additional software options.

Section 2: Packaging

The Point-of-Care CR is shipped in a custom designed box that protects the unit. If the Point-of-Care CR needs to be returned to Carestream Health or one of its dealers, the unit must be packed in its original box, and must include the software CD and the USB cable.

Closed Box



Use all the protective parts in the box to minimize the risk of damage to the unit.

Open Box



Section 3: Site Preparation

General

Inform the client about the site preparation requirements prior to installing the Point-of-Care CR scanner. Without these requirements being met, you cannot complete the installation, and the client's ability to use the Point-of-Care CR System properly cannot be guaranteed. It is recommended that you send the Pre-Installation form to the client prior to installation. See ["Installation Documentation" on Page 43](#).

Computer Requirements

PC:	
CPU	Pentium 4 2.8 GHz minimum
RAM	1 GB (minimum)
Hard-Drive	80 GB
Operating System ^a	<i>Microsoft Windows XP Pro + SP2, Vista Business + SP1</i>
Monitor:	
Size	17 in. (minimum)
Resolution	1024 x 768 or 1280 x 1024
Touch Screen is optional	
Ports:	
4 USB2 ports available	
Parallel ports	
Additional:	
Network adapter (for DICOM send)	

a. The Windows XP operating software must be installed according to the local language. (For Chinese and Japanese see ["Appendix A: Language Setting" on Page 45](#))

Electrical Requirements

Electrical requirements	
Voltage	100 - 240 V AC
Frequency	50 - 60 Hz
UPS – Online	700 V A
UPS connected to CR system, PC, Monitor	

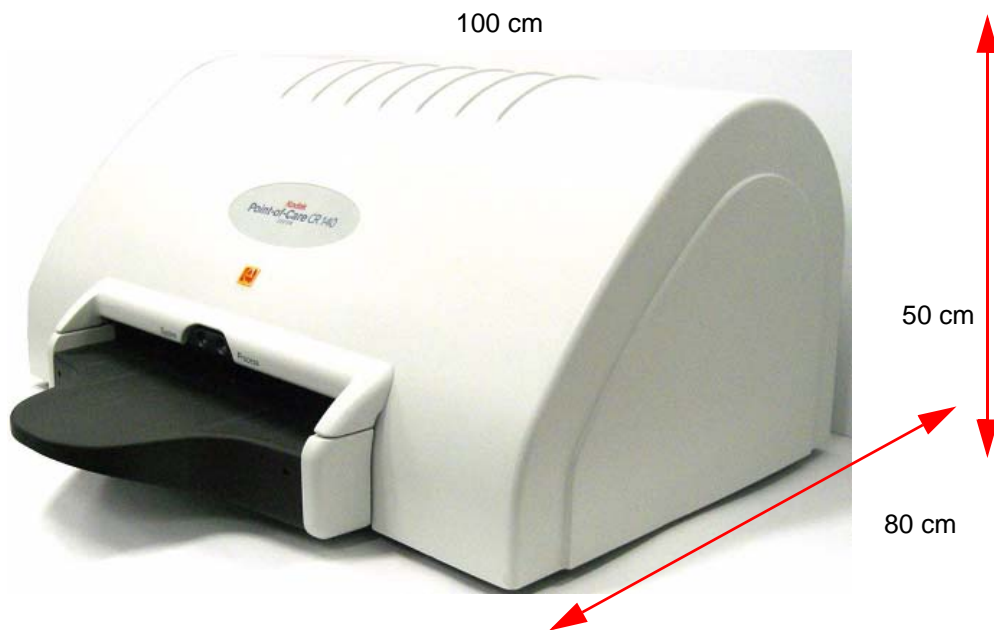
Space Requirements

The Point-of-Care CR System should be positioned on a stable surface, with at least 20 cm (~ 8 in.) free space on every side of the unit. A USB cable will connect the Point-of-Care CR to the computer. The space requirements for the Point-of-Care CR Systems (including unit dimensions and additional space) are illustrated in the following figures.

Point-of-Care CR 360 System - Space Requirements



Point-of-Care CR 140/260 Systems - Space Requirements



Environmental Requirements

Temperature

Maintain the room temperature between 15° - 30°C (59° - 86°F); relative humidity 15 - 76% RH.




Light

The Point-of-Care CR is sealed and protected from light penetration. However, it is recommended to keep the Point-of-Care CR in standard room light, away from exposure to direct sunlight.

The Point-of-Care CR uses phosphor plates for acquiring images. The plates are sensitive to light, and therefore exposure to light should be kept to a minimum.

For optimal results, room light is recommended to be less than 1000 Lux.

Equipment Required

Description	Quantity	Photo
X Ray filter kit TL5259	1	1.0 mm Aluminum sheet 
	1	0.5 mm Copper sheet 
Calibrated Dosimeter	1	
CR 14 x 17 in. Cassette	1	

Section 4: Installation

This chapter explains the installation procedure of *Kodak QC* Version 3.0 Software for the Point-of-Care CR Systems. After completing the installation, fill out the Installation Report (See: [“Installation Report” on Page 44.](#)).

General

On-site installation of the *Kodak QC* Software should be performed by authorized technicians. Installation consists of the following steps:

- [1] Unpack the unit and position it in the desired location.
- [2] Verify the package contents matches the packing list and the order.
- [3] Install the *Kodak QC* Software.
- [4] Install the USB driver.
- [5] Test the system’s functional operation.
- [6] Send a completed Installation Report to the Carestream Health service department. (See: [“Installation Report” on Page 44.](#)).

**Note**

The warranty will not be issued until the service department receives the installation report.

Installing Software

Installing Kodak QC Software

Note

It is recommended that any anti-virus software be disabled before installing the *Kodak QC Software*.

- [1] Insert the QC Point-of-Care CD into the CD-Rom drive. The installation will start automatically.
Click on **[Install Kodak QC]**.

Install Kodak QC



- [2] Installation begins; the following message then appears: Click **[OK]**.

Net Framework Installation Completed



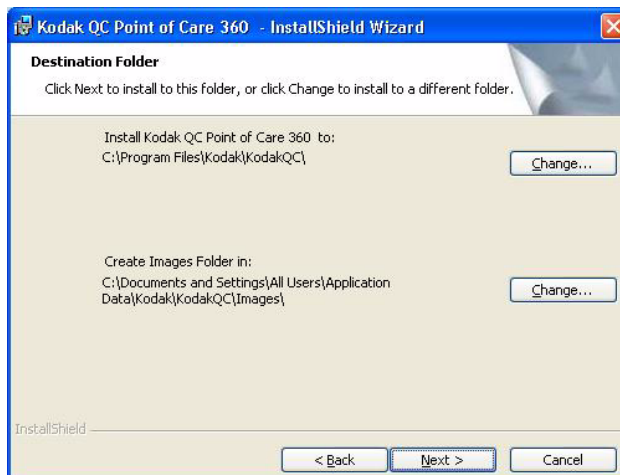
- [3] The InstallShield Wizard is now ready to install Kodak QC V3.0.0 on your computer. Click **[Next]** to continue.

InstallShield Wizard ready for installation



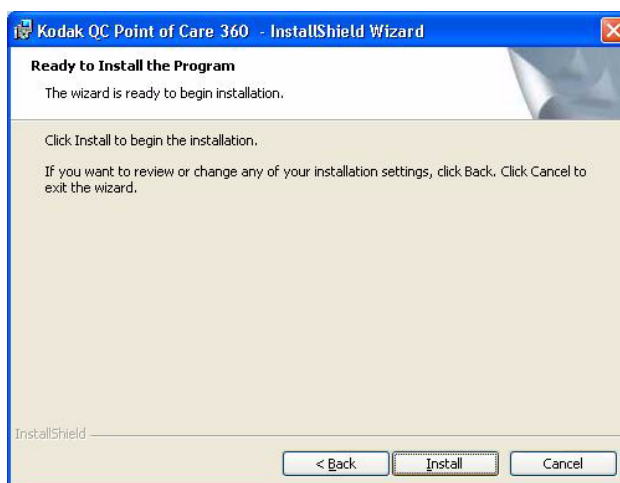
[4] Click [Next] to proceed.

Image file destination



[5] You can click [Back] to review your settings. Click [Install].

Click [Install]



[6] Set the following Configuration options:

- (a) Select Table Top or Z-Cart according to whether the unit will be positioned on a flat surface or installed in a Z-Cart at 60°.

Note

If you are not sure what to select, select Z-Cart.

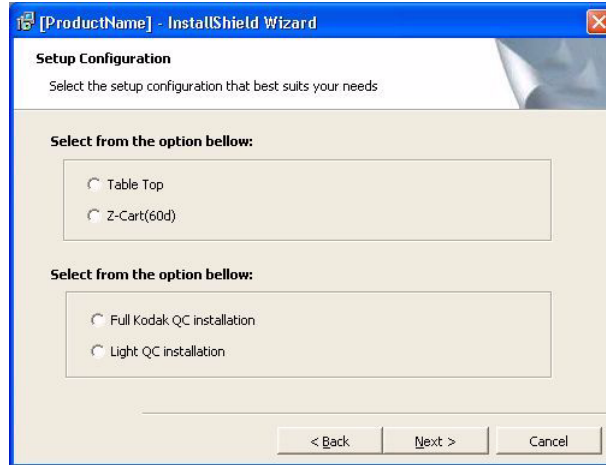
- (b) Select the Setup Type. **Full Kodak QC installation** is the default setting.

Note

Light QC will also be operational with full version installation.

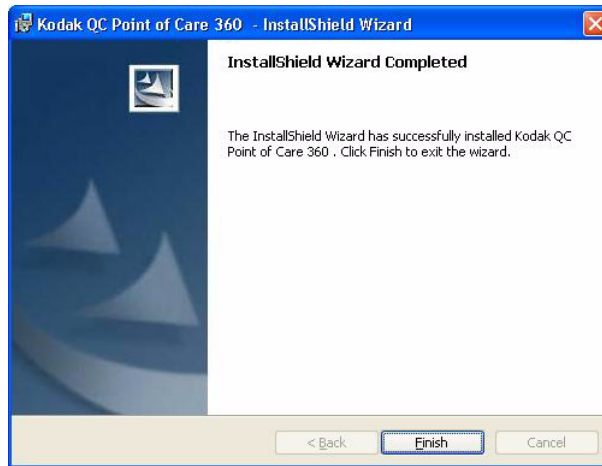
(c) Click [Next] to continue.

Configuration options



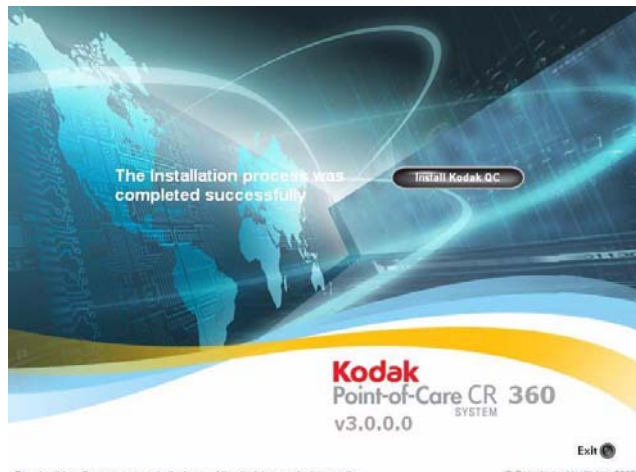
[7] Click [Finish] to exit the InstallShield Wizard

Exit the Setup Wizard



[8] Installation process completed. Click [Exit].

Installation process completed



Note

If *Windows Vista* operating system is being used, reboot the computer when prompted at the end of the installation.

Installing the System Driver

Connecting the Cables

- [1] Connect the power cable from the Point-of-Care CR to the power outlet.
- [2] Connect one end of the USB cable to the USB2 port of the PC, and the other end to the Point-of-Care CR.

Installing the Drivers

- [1] Turn on the Point-of-Care CR. The system makes an initialization tone and the Installation Wizard Screen appears.
Choose **No, not this time** and then click [Next].

Found New Hardware Wizard screen

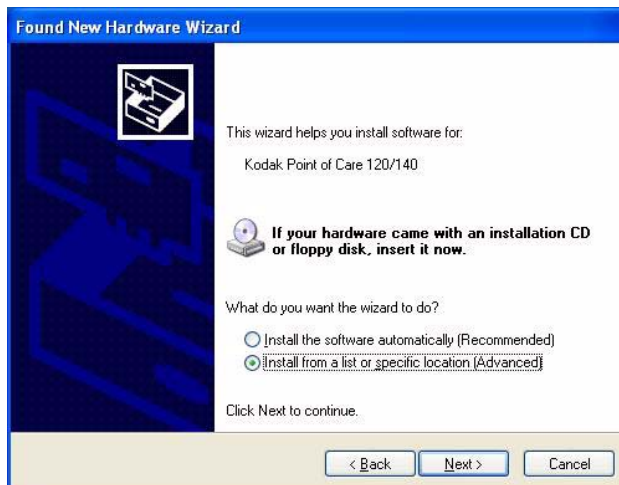


Note

If the Installation Wizard does not appear automatically, go to **Device Manager>Imaging Devices>USB Device>Update Driver** to initiate the installation procedure.

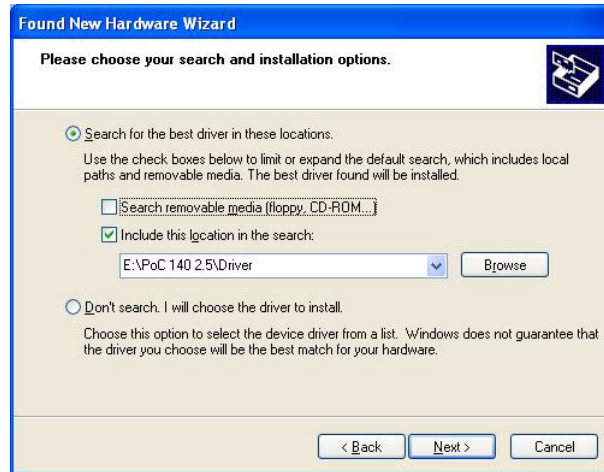
- [2] Select **Install from a list or specific location (Advanced)**, and then click [Next].

Choose installation source



- [3] Select **Search for the best driver in these locations**, and click [Browse] to display your CD-ROM drive. Choose E:\Driver (where E: is the CD-ROM drive).

Choose the CD-ROM drive



- [4] The following screen appears. Click [Continue Anyway].

Windows Logo testing warning

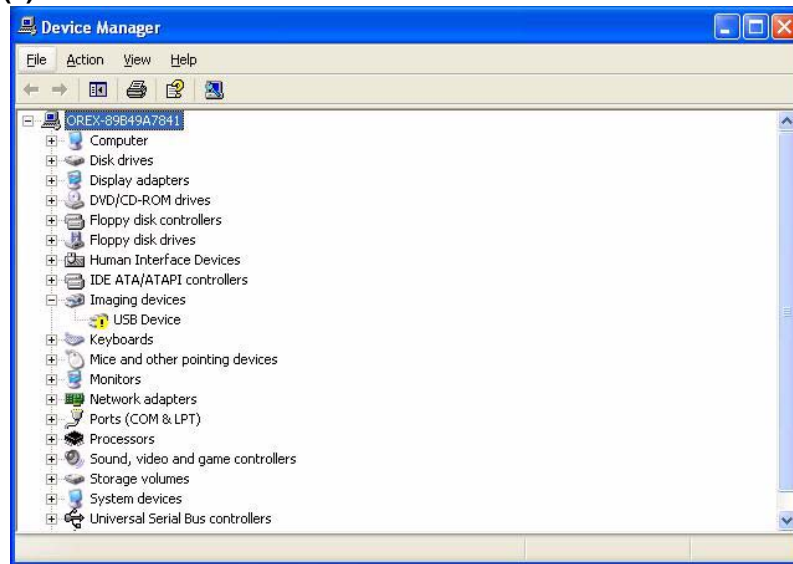


- [5] Click [Finish] to complete the Driver installation.

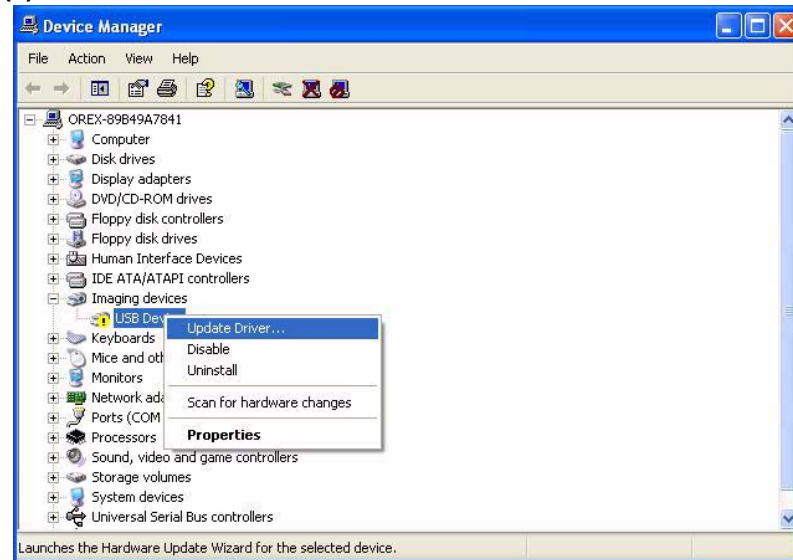
Hardware installation complete



Initiate Driver update (1)



Initiate Driver update (2)



Installing the License Dongle

Kodak QC software in Full Kodak QC installation requires operating the WIBU Key software. WIBU Key contains the license to run Kodak QC on the computer.



Caution

You can plug in only one WIBU Key of this type to the computer. Two WIBU Keys together will cause erratic system behavior.

In Light Kodak QC (Kodak QC Software for Application Integrator) installation the WIBU Key is not required unless the site includes one of the following features:

- Kodak Image Processing Software
- Total Quality Tool Software
- Kodak Long-Length Imaging Software

Installation

- [1] Plug the WIBU Key into a USB outlet port.
- [2] A new hardware wizard popup message appears. Choose **Install the Software automatically (recommended)** and click [Next].

WIBU Key Wizard



- [3] Click [Finish] to close the Hardware wizard.

Found New Hardware



Note

Before starting to use the system, check in the **Settings> Setup** tab that the **Z-Cart** or **Table Top** option is set correctly according to the way the system is set up at your location.

Section 5: Setup and Configurations

DICOM Settings

DICOM Settings

When working with the HIS/RIS PACS services in an imaging facility you must configure the DICOM Settings tab in order to enable the use of the DICOM Services.

- [1] Go to the *Kodak* QC setting screen.
- [2] Choose the **Setup** tab.
- [3] Click **DICOM Settings**.
- [4] Choose the **Settings** tab, and fill in the necessary fields.

Settings Tab

Settings Tab Fields

#	Title	Description
1	Modality Work List	Information obtainable from local network administrator for IP, port, AE title, other fields use default values
2	Modality Work Query	Determines how many days patient lists are retained
3	DICOM Send Source	Use default values
4	Clear Images	Determines max number of images saved in archive. Default recommended.

DICOM Destinations

This tab is used to list PACS stations and DICOM or local printers.

- [1] Go to the *Kodak QC* configuration screen.
- [2] Choose the **Setup** tab.
- [3] Click **DICOM Settings**.
- [4] Choose the **Destinations** tab, and fill in the required fields, starting at #1.

DICOM Destinations

Active	Host Name / IP	Port	AE Title	Name
<input checked="" type="checkbox"/>	192.168.3.30	104	PACS	PACS
<input type="checkbox"/>	192.168.3.32	104	CD Burner	CD Burner

Destinations and Printers Tab Fields

#	Title	Description
1	DICOM Destination	List of PACS stations. IP, port, AE title obtainable from network administrator. Select store for PACS.
2	Add, Modify and Delete buttons	Add, modify or delete a station or printer to the list.
3	Storage Commitment	Enters information for DICOM destination when "store" is selected
4	Add/Update	
5	Keyboard	Activates virtual keyboard on screen
6	Start/Stop Service button	Stop and then restart DICOM service to apply changes that have been made.
7	Close	Close the DICOM Settings screen

DICOM Printers

Pre-requirements

A DICOM Printer can be installed after the Point-of-Care CR System has been successfully installed. The PoC software installation should automatically install the Kodak Printer Driver software.

A DICOM printer must be accessible on the network during the printer installation as the AddDicomPrinter Wizard queries the printer for information before loading the appropriate driver for the printer.

Multiple installations of DICOM Printer Driver application on the same system is not allowed. If attempted the Installer will simply replace the previous installment. Therefore, if a version of Windows DICOM Printer Driver is installed on a workstation, you need to un-install it first. To do so go to **Control Panel>Add/Remove Programs>Carestream DICOM Printer Driver and click [Remove]**.

The Printer Driver installation process prompts for automatic startup of the Add Printer Wizard and the Printer Status Monitor when the installation is complete. The installation will create shortcuts for the driver's "Add DICOM Printer Wizard" and DICOM Printer Status Monitor" programs under **DICOM_Printer_Driver in the Start Programs menu.** (See [Path to DICOM Printer Wizard](#) below)

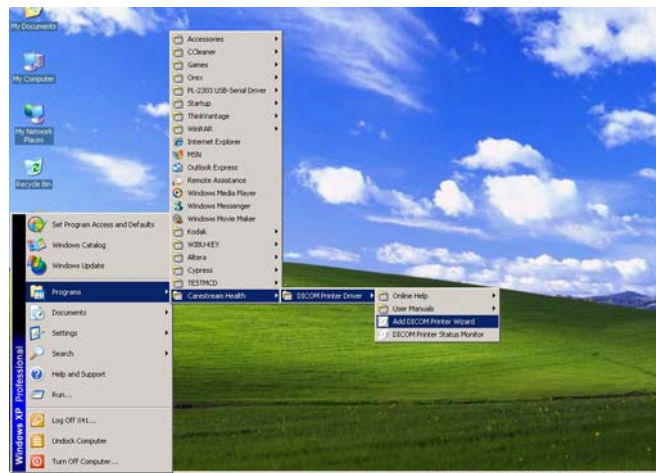
Data that you will need to enter during the procedure: (see [Step 4](#) below)

- Printer's Internet Address (IP)
- DICOM Application Entity Title (AE)
- Printer's Port Number

Adding a DICOM Printer

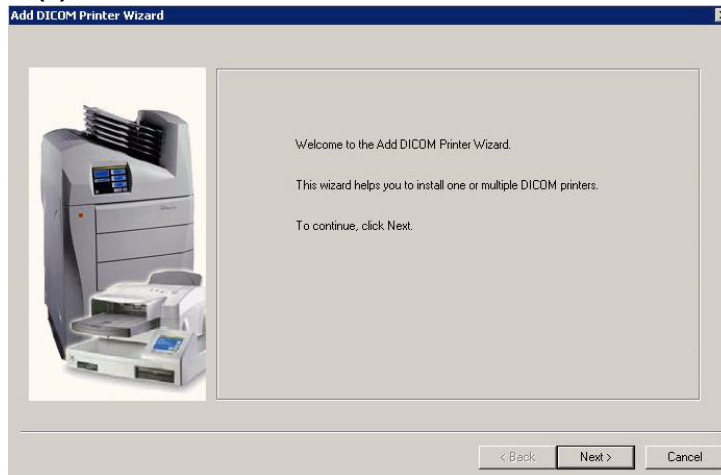
[1] Go to **Start>Program>Carestream>DICOM_Printer_Driver>Add_DICOM_Printer_Wizard**

Path to DICOM Printer Wizard



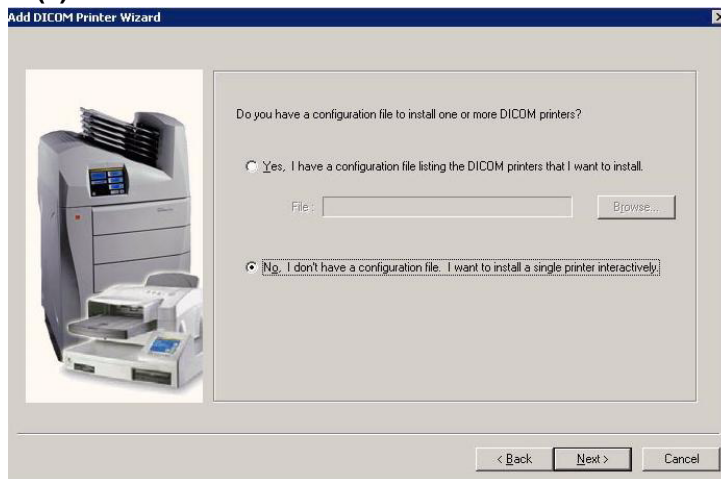
[2] Add DICOM Printer Wizard Screen opens; click [Next].

Add DICOM Printer Wizard (1)



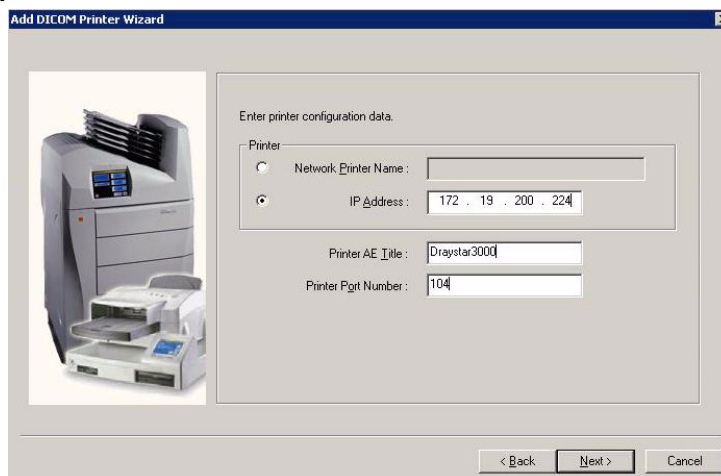
[3] Select **No, I don't have a configuration file. I want to install a single printer interactively**, and then click [Next].

Add DICOM Printer Wizard (2)



[4] Enter the IP Address, AE Title and Port number, then click [Next].

Enter Configuration data



[5] Click [Install] to verify the printer information.

Verify printer information (*Kodak*)

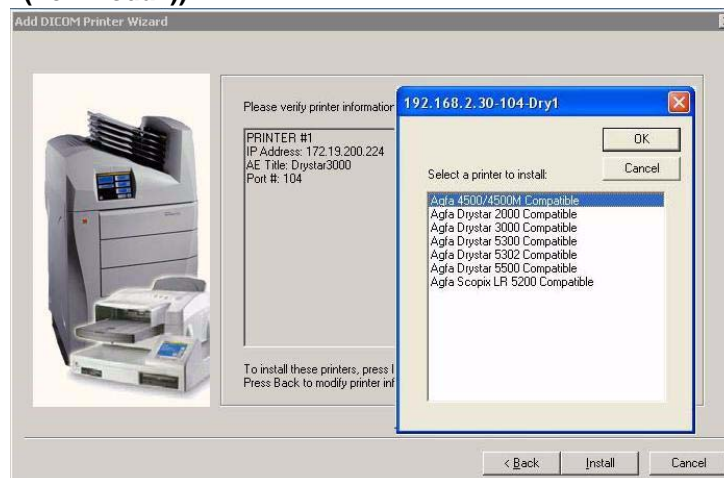


If you are installing a printer that is not a *Kodak* printer, you may be asked to identify the model once the Printer Wizard identifies the brand of printer that you are connecting to. If so, select your printer type from the drop-down list, then click [[OK] and [Install]].

Note

Select only the model to which you are connecting. If your printer is not listed about the installation and check to see if there is an updated version of the DICOM Printer Drivers software. Selecting a model that you do not have may cause image quality issues. Each printer has its own print parameters and by selecting an incorrect driver could cause true size printing problems or other problems.

Verify printer information (non *Kodak*)



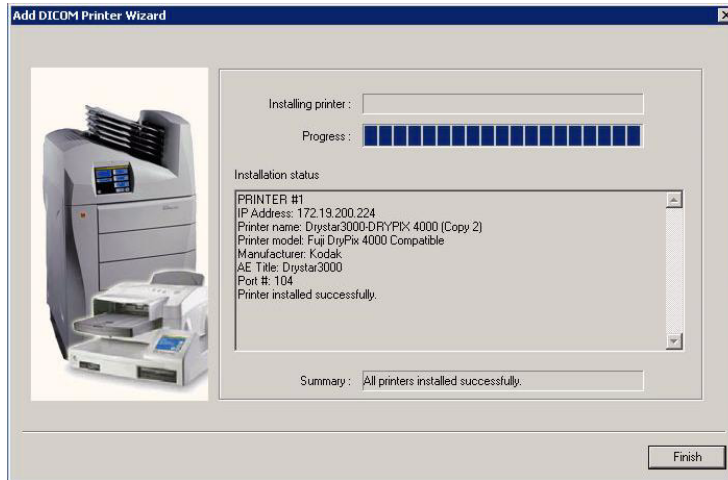
[6] The Install Wizard finds the correct driver and issues a warning message. Click [Continue Anyway].

Wizard message



[7] DICOM printer driver installation is complete. Click [Finish].

Printer has been installed successfully

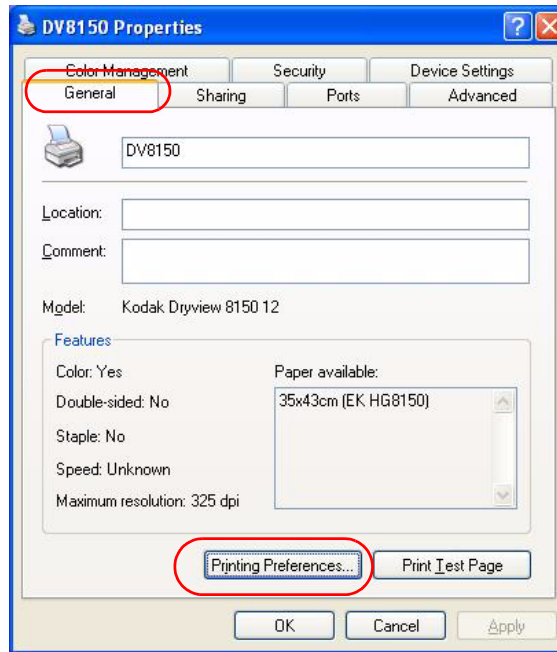


*Kodak Point-of-Care CR System is ready for DICOM print after a DICOM printer is successfully added. The printer information appears in **Start>Setting>Printers and Faxes**.*

Set-up the defaults for the DICOM Printer

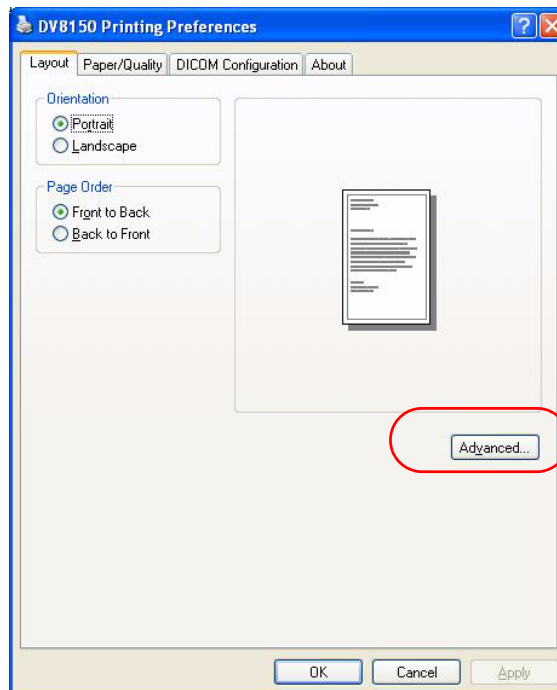
- [1] Go to **Start>Settings>Printers and Faxes**.
- [2] Right click on the icon of the DICOM Printer that you have just added and select **Properties**.
- [3] Select **General tab>Printing Preferences**.

Printer General tab



- [4] Select [Advanced].

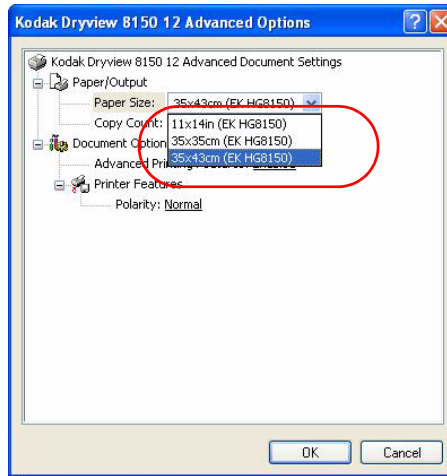
Printing Preferences dialog



[5] In the Advanced Document Settings dialog:

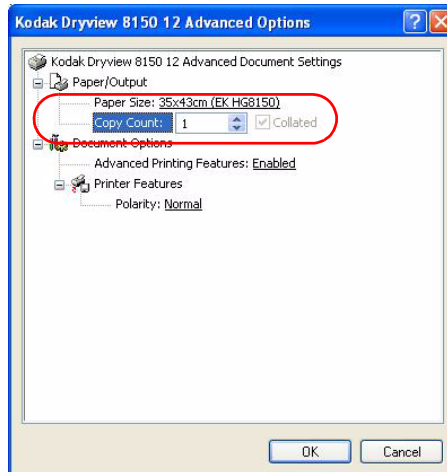
(a) Open the **Paper Size** dialog and select your default setting.

Advanced Document Settings



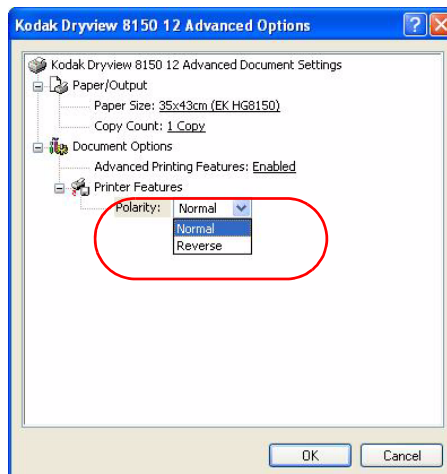
(b) Set your application default **Copy Count** value

Set Copy Count value



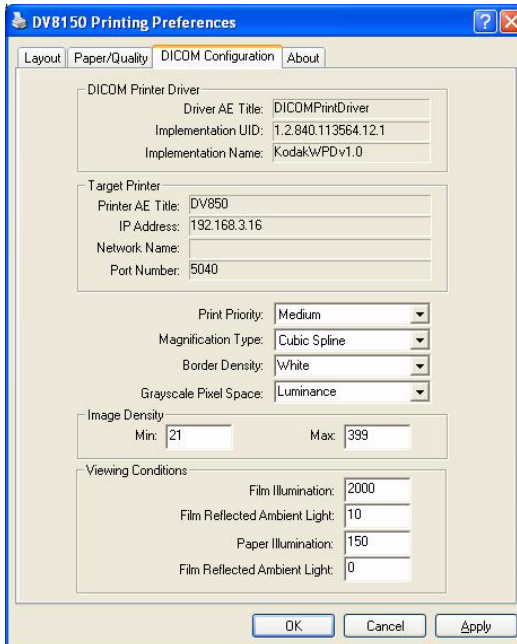
(c) Set your application default **Printers Features>Polarity** value.

Set Printer features



- [6] Go to DICOM Configuration tab and set the following items to your application default settings:, and then click [OK] and [Apply]. (Leave all other settings at default.)
- Print Priority
 - Magnification Type
 - Border Density

DICOM Configuration tab



Note

For more information about configuring *Kodak* DICOM Printers, see [“Recommended Configuration for Kodak Printers” on Page 32](#)

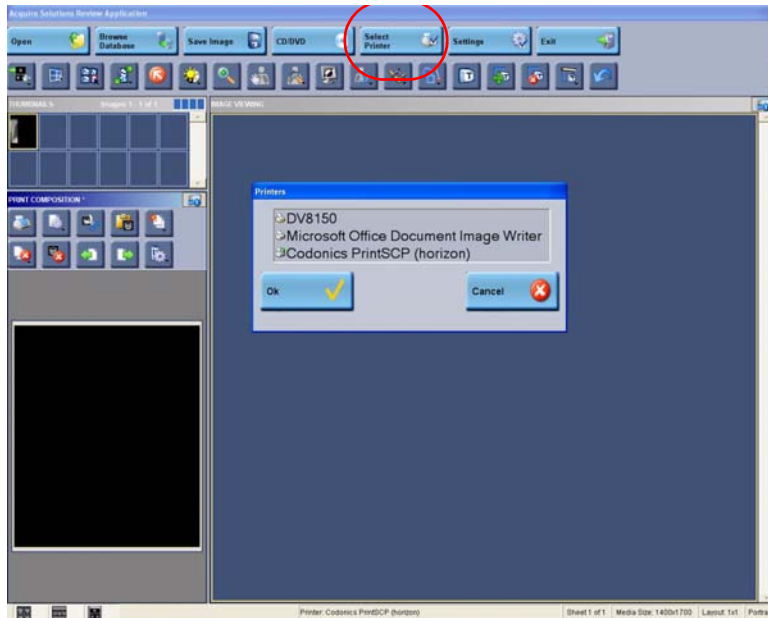
- [7] In the General tab, click **Print Test Page to check your DICOM connection. If you do not receive a test print on the printer that you just set up, you may have selected the wrong printer model. Please be sure that the printer is ON and that it is the correct model.**

Performing a Trial Print from the User application

[1] To perform a trial print send an image from Kodak QC to the DICOM printer:

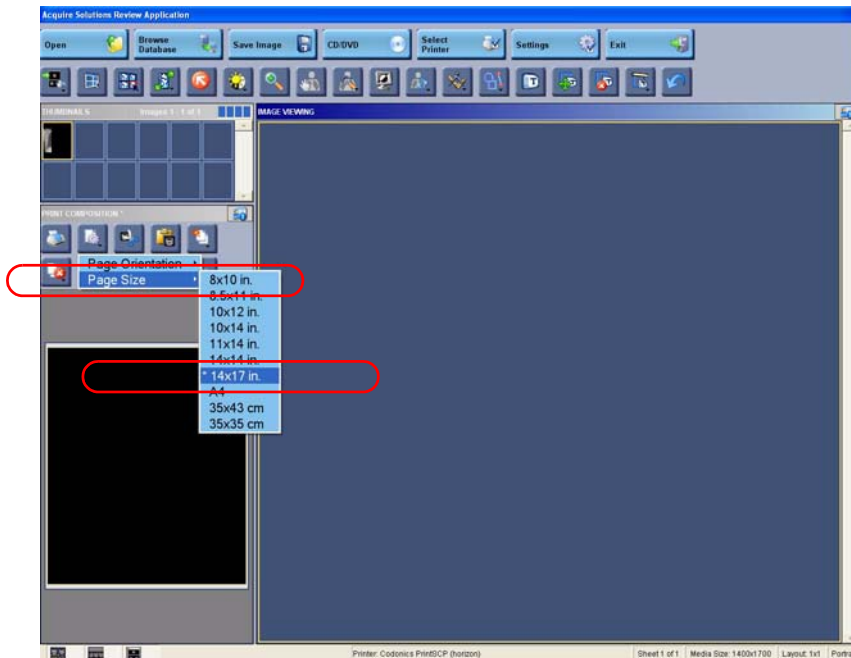
- (a) Login to Kodak QC software.
- (b) Open the Viewer.
- (c) Click on **Select Printer** icon on the main toolbar to select the DICOM printer.

Select Printer



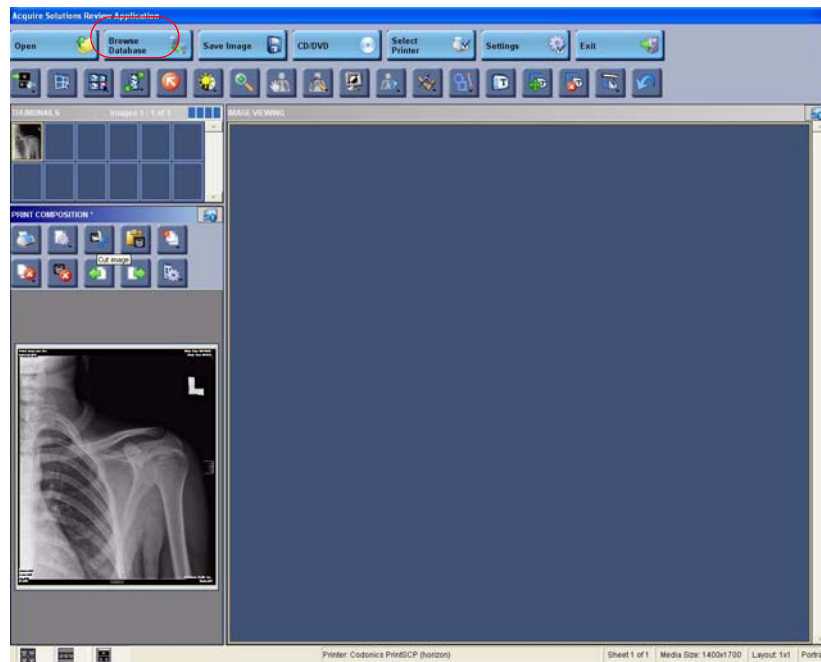
- (d) Choose the Page (film) size in Print Composition pane.

Select Page Size



- (e) Click [Browse Database] to open the database, select an image and print it. (See Print an Image in the Viewer section of the Kodak QC Version 3.0 User Manual)

Select an Image



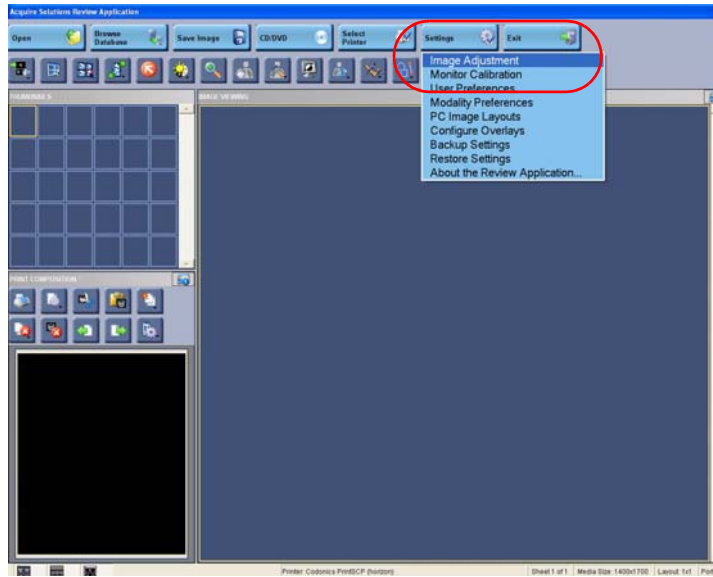
- (f) Check the printing results.

- [2] Select a Default Printer. In **Printers and Faxes** right click on the icon of the printer you want to set as default printer. In the dialog box that opens you can set the default printer.

Recommended Configuration for *Kodak* Printers

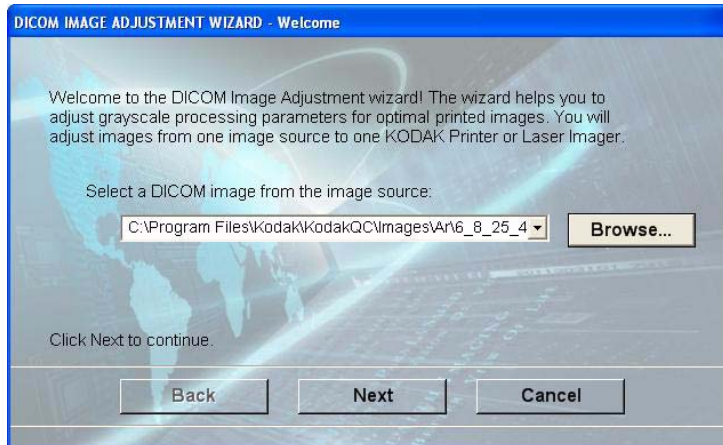
- [1] Open Kodak QC software.
- [2] Go to **Viewer>Settings>Image Adjustment**.

Viewer Settings options



- [3] Browse to select a DICOM image, then click [Next].

DICOM Image Adjustment Wizard



- [4] Click [Next] to verify the image choice.

Verify Image Source



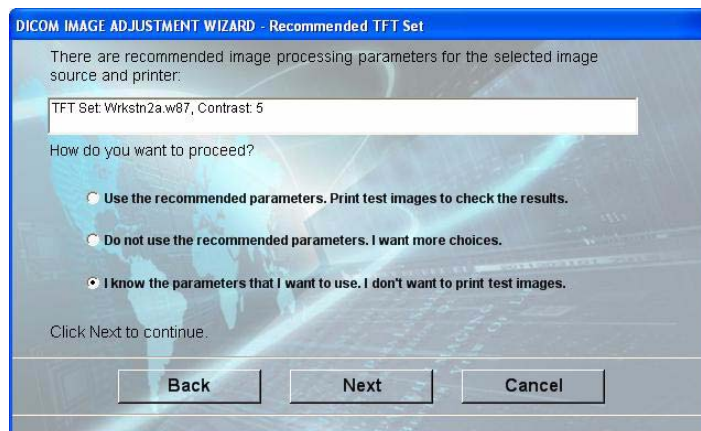
[5] Select the *Kodak* printer, then click [Next].

Select Printer



[6] Select TFT file parameters from the list. Select the last option, "I know the parameters that I want to use. I don't want to print test images.", then click [Next].

Recommended TFT Set



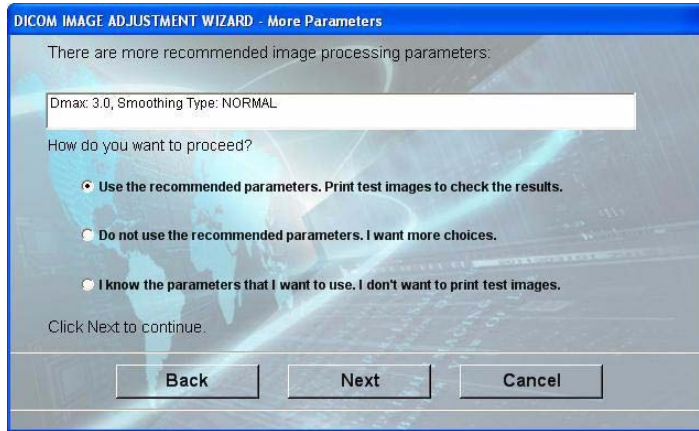
[7] Select TFT parameter: "Wrkstn2a.w87", then click [Next].

Select Parameters



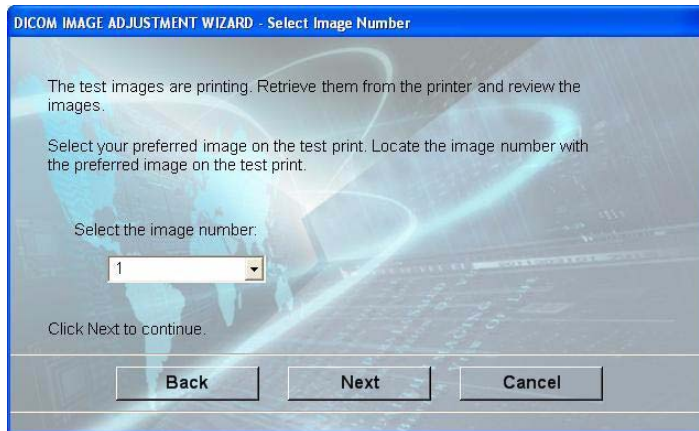
[8] Click [Next] to continue with the recommended parameters.

More DICOM Parameters



[9] Test images are printed. Select the number of the image with the best quality, then click [Next].

Select Image Number



[10] The printer configuration parameters appear on the screen. Record them for future use. Click [Finish] to exit the DICOM Image Adjustment Wizard, or [Next] to repeat the process for another image source and/or printer.

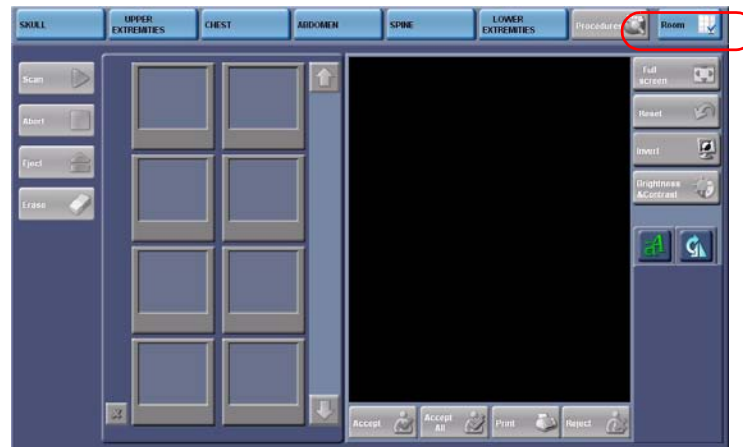
Room Settings

Introduction

A Kodak Point-of-Care CR System is capable of handling several X-ray systems installed in a single hospital. For this purpose, the Kodak QC Software assigns four “Rooms” A “Room” represents a set of user-defined parameters that correspond to and are calibrated to a specific X-ray unit in a particular location.

The “Rooms” are designated by default as Room1, Room2, Room3, and Room4. It is recommended that the “Rooms” be given user-friendly names that correspond to the X-ray units’ location, such as “Operating Room,” “Emergency Room,” or “Dr. Smith’s Room” etc.

Scan Preview Screen

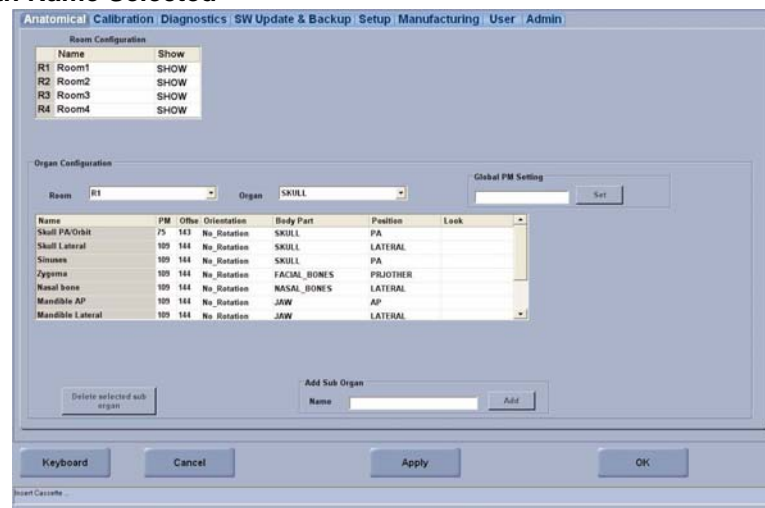


For example: A cassette exposed in the hospital’s operating room will be developed under **Operating Room** in the Kodak QC Software and a cassette exposed in the hospital’s emergency room will be developed under **Emergency Room** in the Kodak QC Software.

Changing Room Names

- [1] Enter the *Kodak QC* configuration screen.
- [2] Login with User Name “admin” and password “admin”.
- [3] Select the **Anatomical** tab.
- [4] In the **Room Configuration** field select the desired room, then enter a new name in the **Name** column.

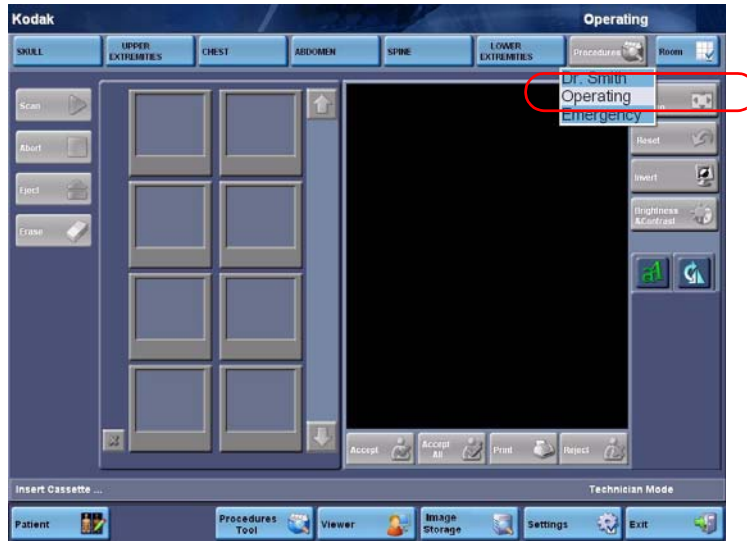
Anatomical Screen with Name Selected



[5] Click **Apply** to save changes.

[6] Click **[OK]** to exit the Configuration screen.

Scan Preview Screen with New Room Name



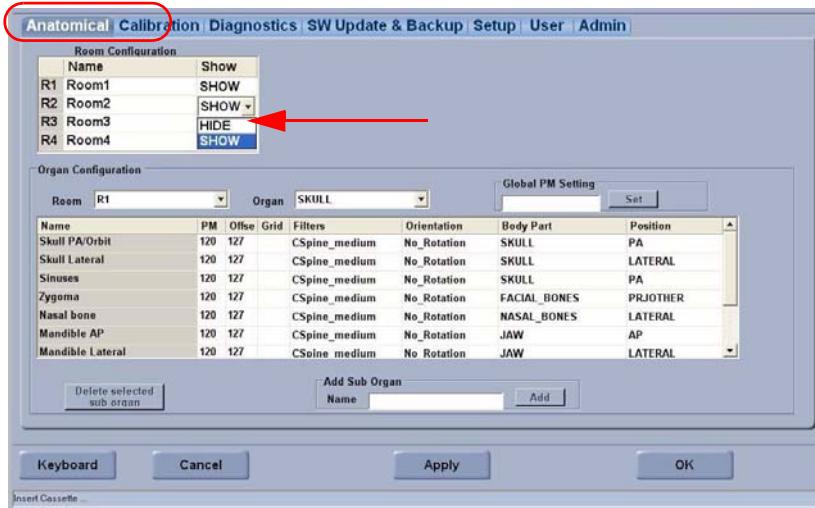
Note

The result will be that each time you reach the Scan screen the new name will appear instead of **Room 1**.

Hiding Rooms Not in Use

If one of the rooms available is not in use, it is possible to hide it.

Anatomical Screen with "Hide" Selected



[1] Enter the *Kodak QC* configuration screen.

[2] Select the **Anatomical** tab.

[3] In the **Show** column of the room that is not in use, change the status from **Show** to **Hide**.

[4] Click **Apply** and then **OK** to save the changes.

Gain Tuning Process

Introduction

Note

This process is not relevant for Point-of-Care 360 Scanners.

The PoC Readers undergo tuning process before leaving the factory, but should be finely tuned during installation in order to set the unit to the nominal point of operation. This nominal point adjusts the PM value to operate with all the body parts without needing to change their values for each different body part. The *Kodak* Image Processing compensates for the different exposure image modifications.

The unit is gain tuned using a 14 x 17 in. flat field 2mR exposure.

Equipment Required

General purpose 14 x 17 in. cassette

0.5 mm Copper Plate

1.0 mm Aluminum Plate

Dosimeter

Gain Tuning Procedure

[1] Set the X-Ray machine as follows:

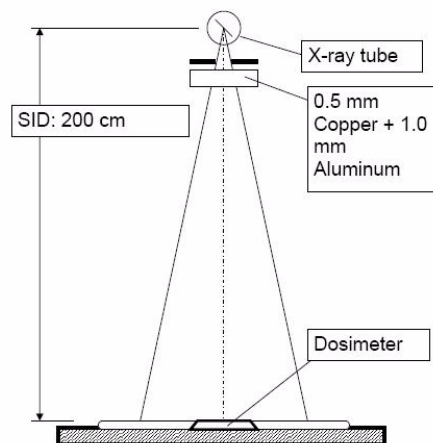
80 kVp, 10 mAs, SID = 2.0m

Large focal spot

Add 0.5 mm Copper plate (above) and 1.0 mm Aluminum plate (below) at the tube exit.

Position the Dosimeter in the exposure field.

X-ray setup



[2] Adjust the SID to get a value of **2mR ±0.1mR (17.4 μGy ±0.4 μGy)**.

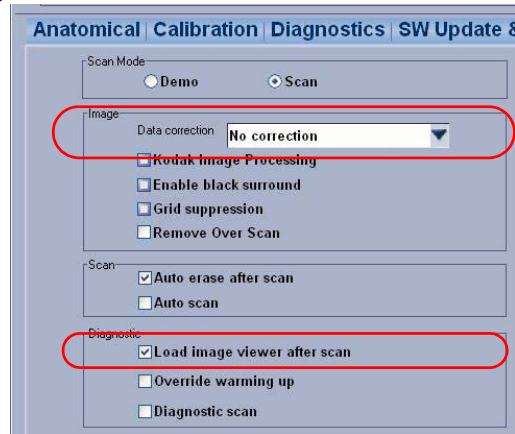
[3] Place 14 x 17 in. cassette in the center of the field.

[4] Make an X-ray exposure.

[5] Wait 5 minutes after exposing the cassette.

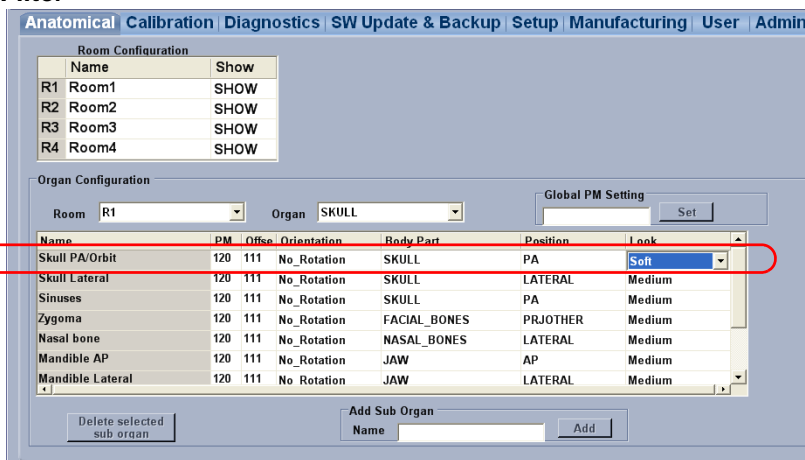
[6] In **Settings>Setup** tab, select **No correction** and check **Load image viewer after scan**.

Set Image and Diagnostic settings



[7] Change the Skull PA filter to soft.

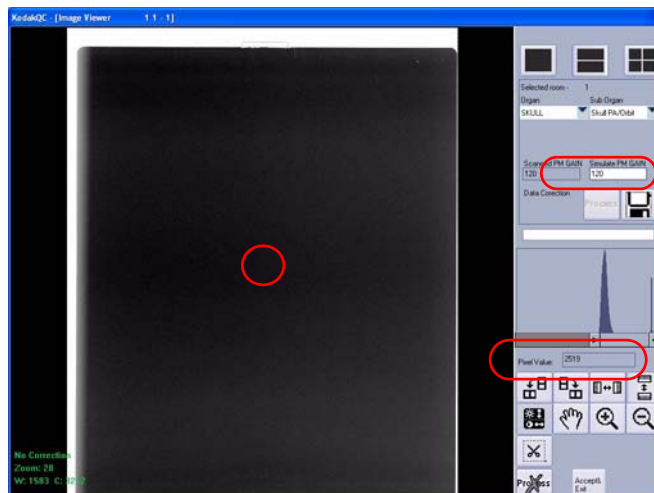
Change the Skull PA Filter



[8] Load the cassette and scan using the existing PM Gain value.

[9] Measure the pixel value in the center of the field.

Measure Pixel Value in Center of Field

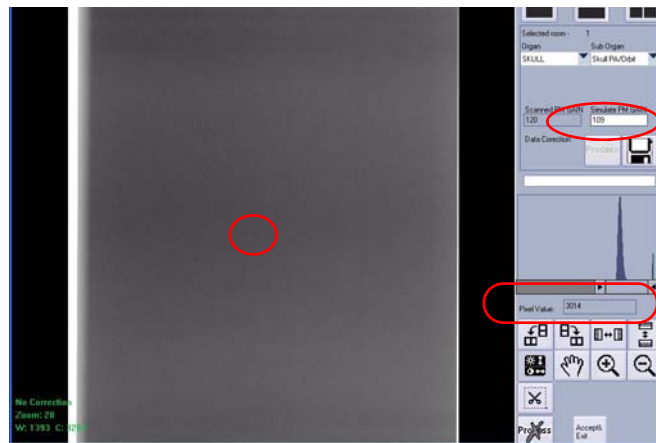


[10] Change the PM Gain to get a pixel value (APV) of 3200 ± 50 .

To increase the Pixel Value, decrease the PM Gain.

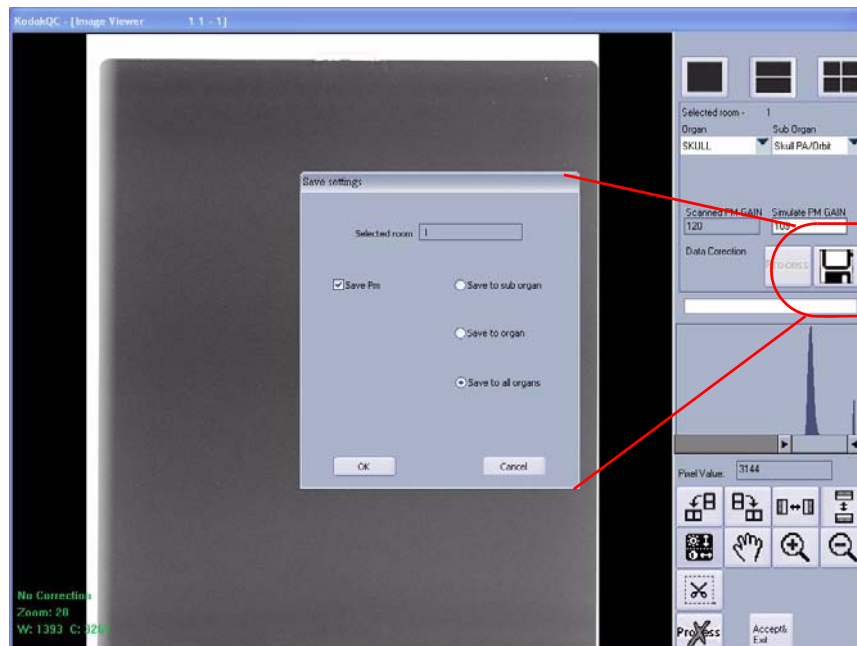
To decrease the Pixel Value, increase the PM Gain.

Change the PM Value



[11] Click on icon to open the **Save Settings** dialog; check **Save PM** and **Save to all organs**, then click **[OK]**.

Save PM settings



[12] Go to **Settings>Anatomical** tab, check that the PM values are set to the value that you saved in the above step; if the PM Value is not updated, type the value in to **Global PM Settings** and click **[Set]**.

Section 6: Troubleshooting

	Problem	What should I do?	Remarks
1.	“Disconnect” error message appears on the “unit interface” screen.	1. Check: <ul style="list-style-type: none"> • Power cable connected? • USB cable connected? 2. Turn scanner off; then on again.	
2.	After the scanner is turned on, initialization sound does not stop.	Turn system off; then on again. If the problem persists, contact your distributor.	
3.	Cassette cannot be inserted into the tray.	Make sure the cassette is positioned at the center of the tray.	
4.	Image is too bright.	From the – Setup menu, increase “PM-Gain” for the type of image which is too bright.	PoC 140/260 only
5.	Image is too dark.	From the – Setup menu, and decrease “PM-Gain” for the type of image which is too light.	PoC 140/260 only
6.	Double exposure received.	Check that the erase lamps are working.	
7.	White lines appear on image.	Contact service.	
8.	Horizontal lines appear on image.	Contact service.	
9.	Scan does not start.	Contact service.	
10.	Systems is shaking.	Place system on steady surface.	
11	Diagonal lines appear on image.	There is light penetration into the system. Place the system away from intense light source (window).	See “Environmental Requirements” on Page 12

Section 7: Installation Documentation

Pre-installation Form

Computer requirements		
PC:		
CPU	Dell Pentium 4, 2.8 GHz (min.)	
RAM	1 GB (minimum)	
Hard-Drive	80 GB	
Operating System	Microsoft Windows XP Pro + SP2 ^a or Vista Business + SP1	
Monitor:		
Size	17 in. (min.)	
Resolution	1024 x 768 or 1280 x 1024	
Ports:		
4 USB2 ports available		
Parallel ports		
Additional:		
Network adapter (for DICOM send)		

a. The Windows XP operating software must be installed according to the local language. (For Chinese and Japanese see ["Appendix A: Language Setting" on Page 45](#))

Space requirements		
Stable surface		
	PoC 360	PoC 120/140/260
Width	115 cm	100 cm
Height	55 cm	50 cm
Depth	95 cm	80 cm

Electrical requirements	
Voltage	100 - 240 V AC
Frequency	50 - 60 Hz
UPS – Online	700 VA
UPS connected to CR system, PC, Monitor	

Environmental requirements	
Temperature	15°C to 30°C (+59°F to +86°F) normal lab conditions
Humidity	80% non condensing (15% to 76% relative humidity)
Light	less than 1000 Lux

Configuration requirements	
Name of PACS on the site *	
DVD Burner	Yes / No
MWL (Modality Work List)	Yes / No

When using the Kodak Point-of-Care CR System with a main PACS on site, the images are DICOM sent to the PACS. Please verify with Carestream the compatibility of the PACS to QC Software.

Installation Report

Reporting distributor		
Company name:		
Technician installing the <i>Kodak</i> Point-of-Care CR System	Name:	
	Tel. No.:	
	e-mail:	

Site information	
Name:	
Address:	
Tel. No.:	
Additional information:	

Installation pre-requisites	
Date:	
SN of system installed:	
Computer requirements available?	
Space requirements available?	
Electrical requirements available?	
Environmental requirements available?	

* See Installation pre-requisites (["Installation Documentation" on Page 43.](#))

Installation process	
Drivers for CR:	
<i>Kodak</i> QC:	

Accessories		
	Quantity	
14 x 17 cassettes		
14 x 14 cassettes		
10 x 12 cassettes		
8 x 10 cassettes		

*** Specify the type and software version of PACS to which the images are sent.

Name:

Signature:

Section 8: Appendix A: Language Setting

Japanese Language

Since the virtual keyboard generates real key events like a physical keyboard, it is not possible to run the 106 keyboard outside of the Japanese OS.

When you install the Japanese OS you must choose the 101 keyboard.

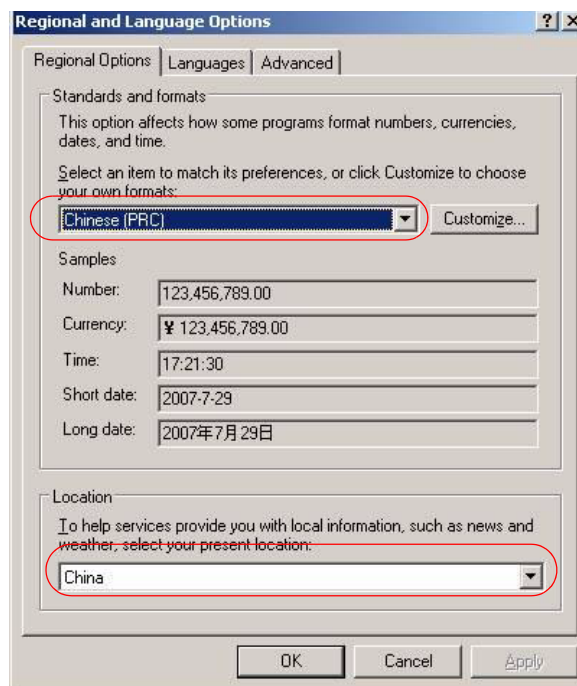
Chinese Language

In order to activate the virtual keyboard as a Chinese keyboard, define the following regional settings, and restart your computer.

You must have "Chinese (simplified) - Microsoft Pinyin IME 3.0" in the Windows Keyboard configuration so that the user can switch between English and Chinese through the VKB.

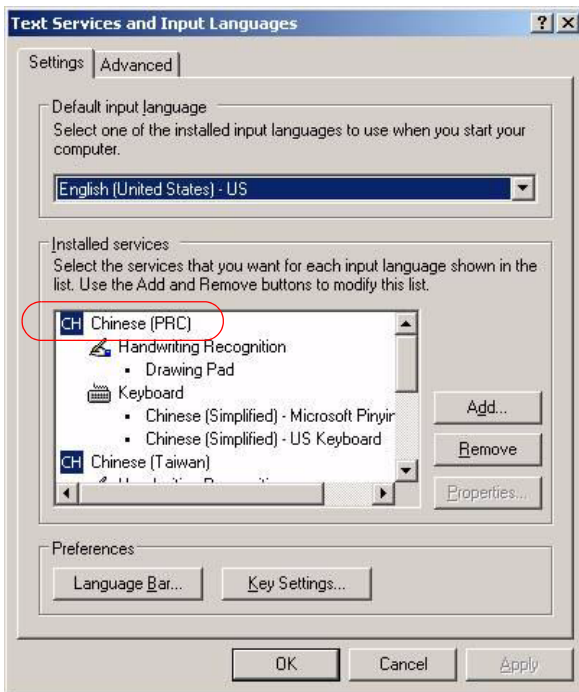
Follow these instructions to enable the Chinese Virtual Keyboard operation.

- [1] Go to Settings>Control Panel>Regional and Language >Regional Options.



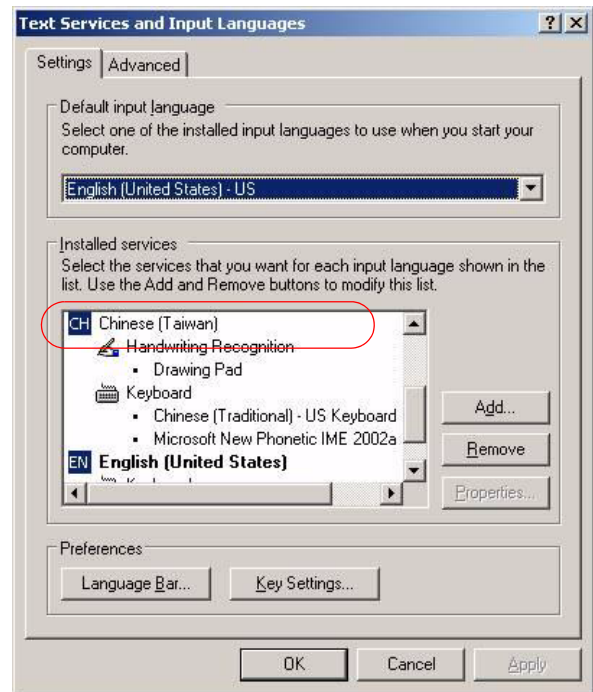
Select Chinese (PRC) from Standards and formats drop down list, and Chinese from the Location list.

[2] Go to Languages tab, then click Details.

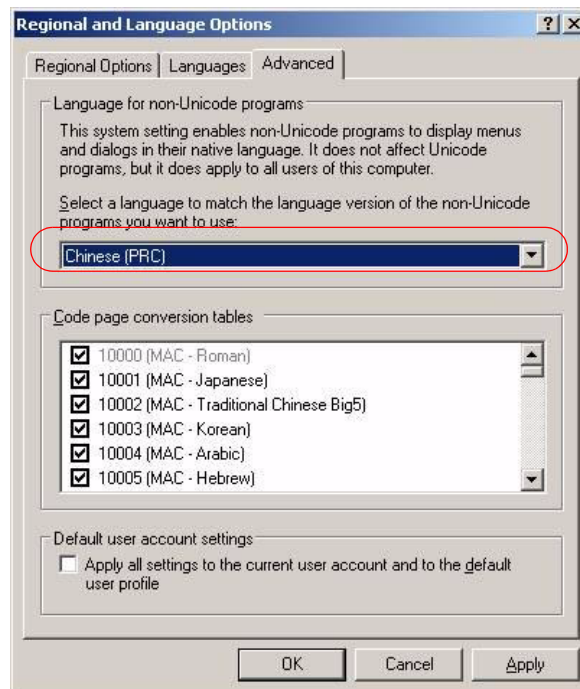


(a) Select Chinese (PRC), then click Add.

(b) Select Chinese (Taiwan), then click Add, then click OK and Apply



[3] Go to the Advanced tab., select Chinese (PRC)



Select Chinese (PRC), click OK, then Apply.

Section 9: Publication History

Publication Date	Publication No.	ECO No.	Changed Pages	File Name	Notes
July-08	6H9811			6H9811_KodakQC_Version_3.0_Installation_Guide	New Publication

