

# *Schick Technologies*

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## **CDRPan<sup>®</sup> Installation Instructions For Gendex Orthoralix 9000**

### **B1051111 Rev. – (Draft 2)**

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# **CDRPan<sup>®</sup>**

FOR PANORAMIC SYSTEMS

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## **Installation**

Instructions for Gendex  
Orthoralix 9000

# ***schick***

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# **Safety Issues**

## **Electrical Concerns**

CDRPan conforms to national (U.S.) and international standards for electromagnetic compatibility and electrical safety. A complete list of specifications can be found in the CDRPan User's Guide.

## **Mechanical Considerations**

The sensor package, the remote module, and the cables of the CDRPan system are mounted outside of the patient area to ensure patient safety and reliable equipment operation.

## **Radiation Concerns**

No adjustments or alterations are made to the X-ray source of the panoramic equipment.

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# 1. Introduction

## 1.1 Welcome

The CDR Panoramic X-ray System (“CDRPan”) is an electronic imaging system that integrates with panoramic machines to acquire, display, store and print digital X-rays. Because of its digital format, the X-ray can be enhanced for more detail using CDR tools, and it can be archived for patient histories and retrieved for comparisons.

## 1.2 CDRPan System

The CDRPan system hardware consists of the following components (unless otherwise indicated, all part numbers (P/Ns) refer to Schick Technologies numbers):

- CDRPan kit for Gendex Orthoralix 9000 (P/N B4781050), which includes the sensor, codestrip, other attaching parts, and accessories
- Remote module (P/N B4750100)
- Power supply (P/N A3302300)
- PCI board (P/N B3301100) and cable (B2211001).

The CDRPan system requires the following software:

CDR software (version 2.1 or higher)

- CDRPan software, which includes the PCI board device driver and the series set to be used with panoramic exams

## 1.3 Overview for Installing CDRPan

This Installation Manual is one of two documents you will need to install the CDRPan system completely. After performing the installation procedure in this document, you should refer to the CDRPan User’s Guide (P/N B1051008) to install the software for the CDRPan system. Procedures for installing CDRPan system hardware and software can be found in the following documents.

<b>PROCEDURE</b>	<b>DOCUMENT</b>
Install Sensor and Codestrip	(This Manual)
Install Remote Module and Power Supply	(This Manual)
Install PCI Board	(This Manual)
Install PCI Device Driver	CDRPan User Guide
Install CDR and CDRPan Software	CDRPan User Guide

## 1.4 Before You Start Installing CDRPan

Prior to installing CDRPan on your panoramic system, please perform the following checks.

- A. Make sure your panoramic system is operating properly.
- B. Familiarize yourself with the installation steps before performing them.
- C. Determine the location of your computer. This will be useful when you install the Remote Module and need to run cables between it and your computer.

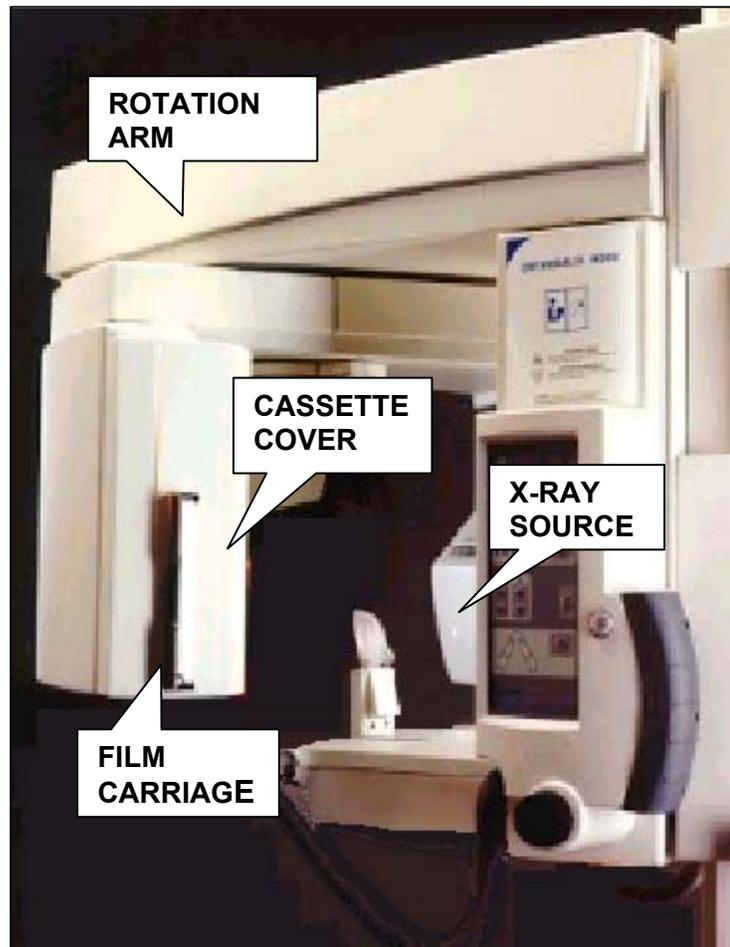


Figure 1. Picture of Gendex Orthoralix 9000

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## 2. What You Will Need For Installation

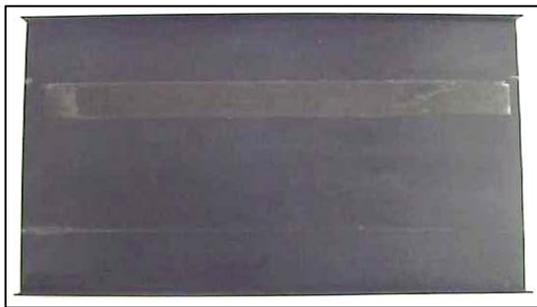
### 2.1 CDRPan System

To perform the installation procedures in this manual, you will need the following CDRPan parts and assemblies.

#### A. Sensor Assembly



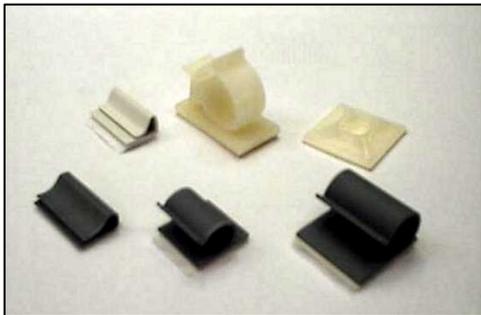
#### B. Cassette Codestrip Assembly



C. Remote Module



D. Cable Holders and Clamps



E. Power Supply



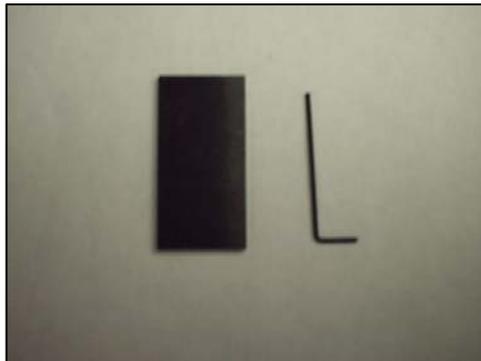
F. PCI Board



G. Data Cable for PCI Board



H. X-ray Filter and Allen Key



## **2.2 Tools and Materials**

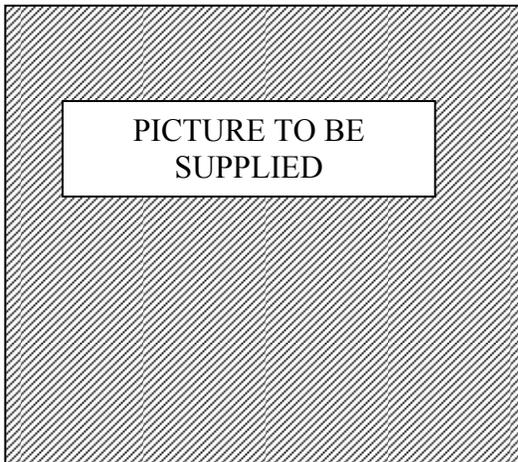
To install the sensor and codestrip, you will need the following tools and materials.

- Allen key (0.050 in.) to install sensor clip to faceplate.
- Allen key to remove and replace 4 screws that secure the cassette transport cover.

## 3. Sensor and Codestrip

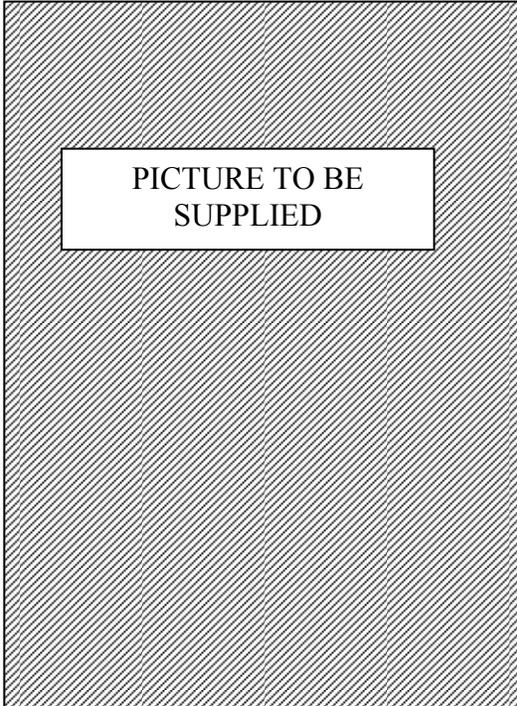
### 3.1 Prepare to Install Sensor Assembly

- A. Using allen wrench (hex key), remove 4 screws that secure the cover over the cassette transport. Then, remove the cover.
- B. Insert the cassette codestrip assembly into the cassette carriage.
- C. Test fit the sensor assembly on the outside of the faceplate. When the sensor clip section is positioned along the edge of the faceplate, the active areas of the sensor should align with the aperture. If they do not line up, adjust clip slide as necessary.



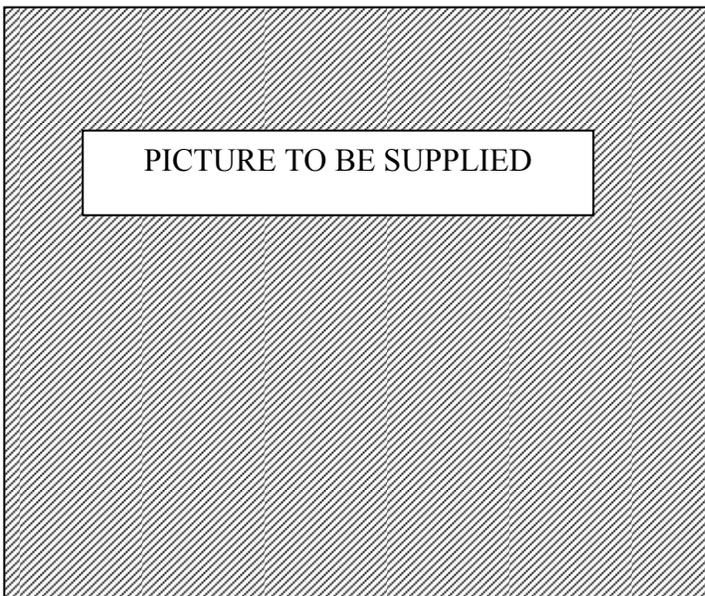
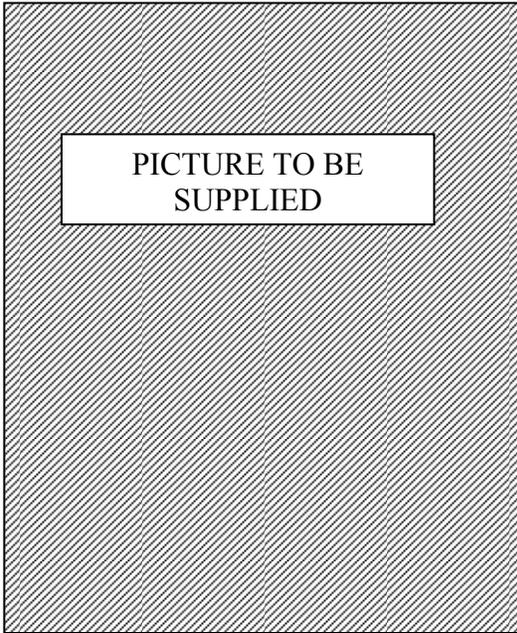
### 3.2 Install Sensor Assembly

- A. Insert sensor assembly on the inside of the faceplate. Again, verify that the active area of the sensor is aligned with the aperture of the faceplate.
- B. Make sure that the sensor assembly fits snug on the faceplate and does not interfere with the cassette transport.



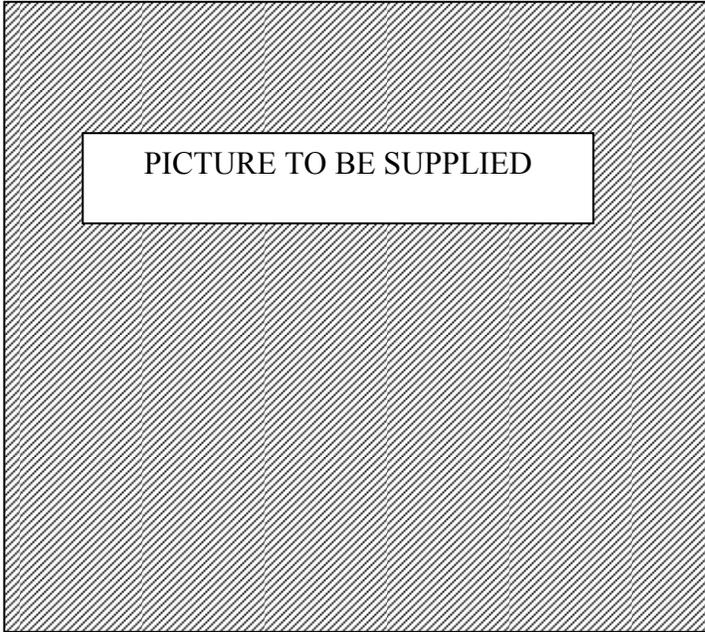
### 3.3 Route Sensor Cable

- A. To facilitate replacement of the cassette transport cover, route the sensor cable from the top edge of the cassette transport.



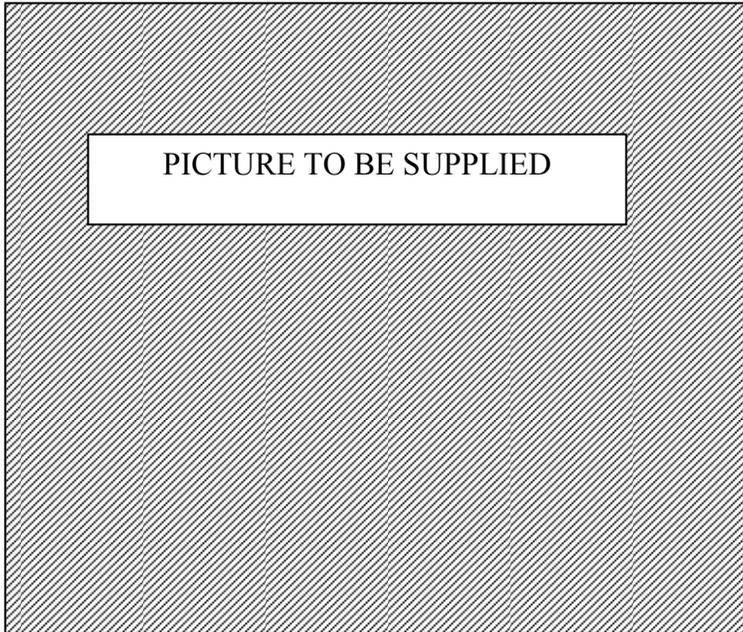
B. Continue to route cable to the top of the panoramic machine, and leave some slack in the cable so the rotation arm can move without straining the cable.

C. Replace the cassette transport cover.



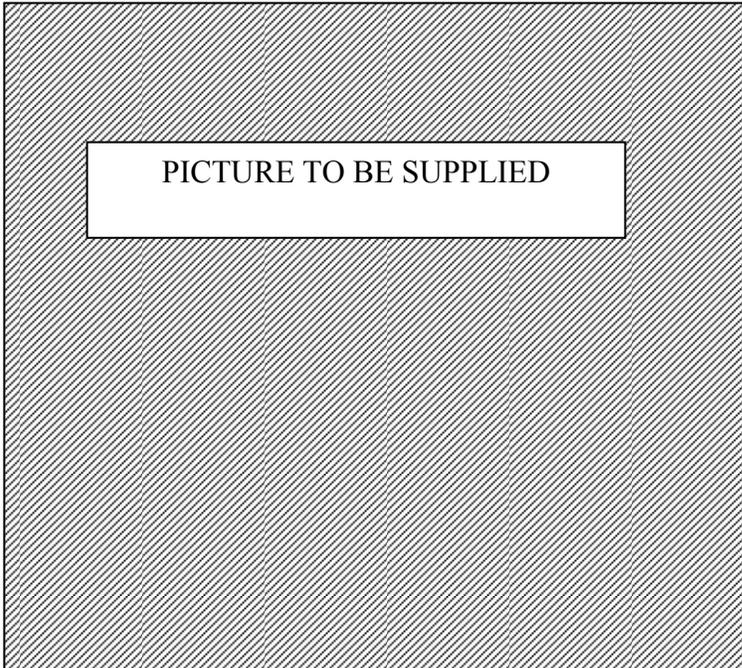
### 3.4 Check Sensor Cable Run

With X-ray source off, move the rotating arm of the panoramic machine to verify that the sensor cable does not kink, bind, or pull out of clips when the rotating arm is in motion.



### 3.5 X-ray Tube Current Adjustment

- A. Turn on the power to the panoramic machine to check the mA (milliamp) value for the X-ray tube. This value can be read from the control panel .
- B. For optimal exposures with the CDRPan system, the X-ray tube current should be 10 mA. If adjustment is necessary, refer to Gendex user documentation provided for your machine.
- C. Proceed to Chapter 4 to continue with CDRPan system installation



## 4. Remote Module, Power Supply, and PCI Board

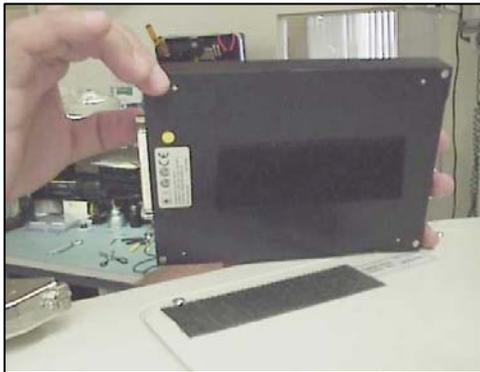
### 4.1 Install Remote Module

#### 4.1.1 Tools and Materials

To install the remote module, you will need velcro patches to secure the module to the top of the panoramic machine, and a screwdriver to secure the sensor cable connector to the remote module.

#### 4.1.2 Step-by-Step Instructions

- A. Apply velcro to the top of the panoramic machine, along the top edge of the rotational arm. This will make it easy to see the status lights on the module.
- B. Apply velcro to the bottom of the remote module also, and mount the remote module to the panoramic machine.



- C. Connect the sensor cable to the remote module. Then, use a small screwdriver to tighten the screws on the 37-pin connector.



- D. The cables on the opposite side of the remote module (power supply and PCI data cable) will be connected after the power supply and the PCI board installation procedures are performed.

## **4.2 Install Power Supply**

### **4.2.1 Tools and Materials**

To install the power supply, you will need cable holders and clamps (P/N B4700140) to secure the cable along the side of the panoramic machine and up to the remote module.

### **4.2.2 Step-by-Step Instructions**

- A. Position power supply at base of panoramic machine.
- B. Route connector cable to the remote module at the top of the panoramic machine.
- C. Connect the connector cable to the remote module.
- D. Plug the power supply cable into a wall outlet.

## **4.3 Install PCI Board**

### **4.3.1 Tools and Materials**

To install the PCI board you will need a small screwdriver to remove the cover from your computer; to secure the PCI board in its slot, and to secure one end of the data cable to the remote module and the other end to the PCI board.

### **4.3.2 Step-by-Step Instructions**

- A. Ensure the computer is turned off and not plugged into an outlet.
  - B. Follow the instructions supplied with your computer to remove the cover. Locate an empty PCI slot in the motherboard and install the PCI board.
-



C. Replace the computer cover.

D. Connect either end of the data cable to the PCI board. Then, use a small screwdriver to tighten the screws on the connector.



E. Connect the other end of the data cable to the remote module. Then, use a small screwdriver to tighten the screws on the connector.

F. Refer to the CDRPan User's Guide (P/N B1051008) to continue with CDRPan system installation.



- ① Mount Sensor Package behind film cassette aperture slit.
- ② Install cable mounting clips and route flexible cable from Sensor Package to Remote Module.
- ③ Mount Remote Module on top of panoramic machine using velcro patch.
- ↺ Mount Power Supply to base of panoramic machine using velcro patch. Connect power supply cable to Remote Module, and connect power cord to wall outlet.
- ↺ Connect cable from CDR Pan PCI board at back of Computer to Remote Module.

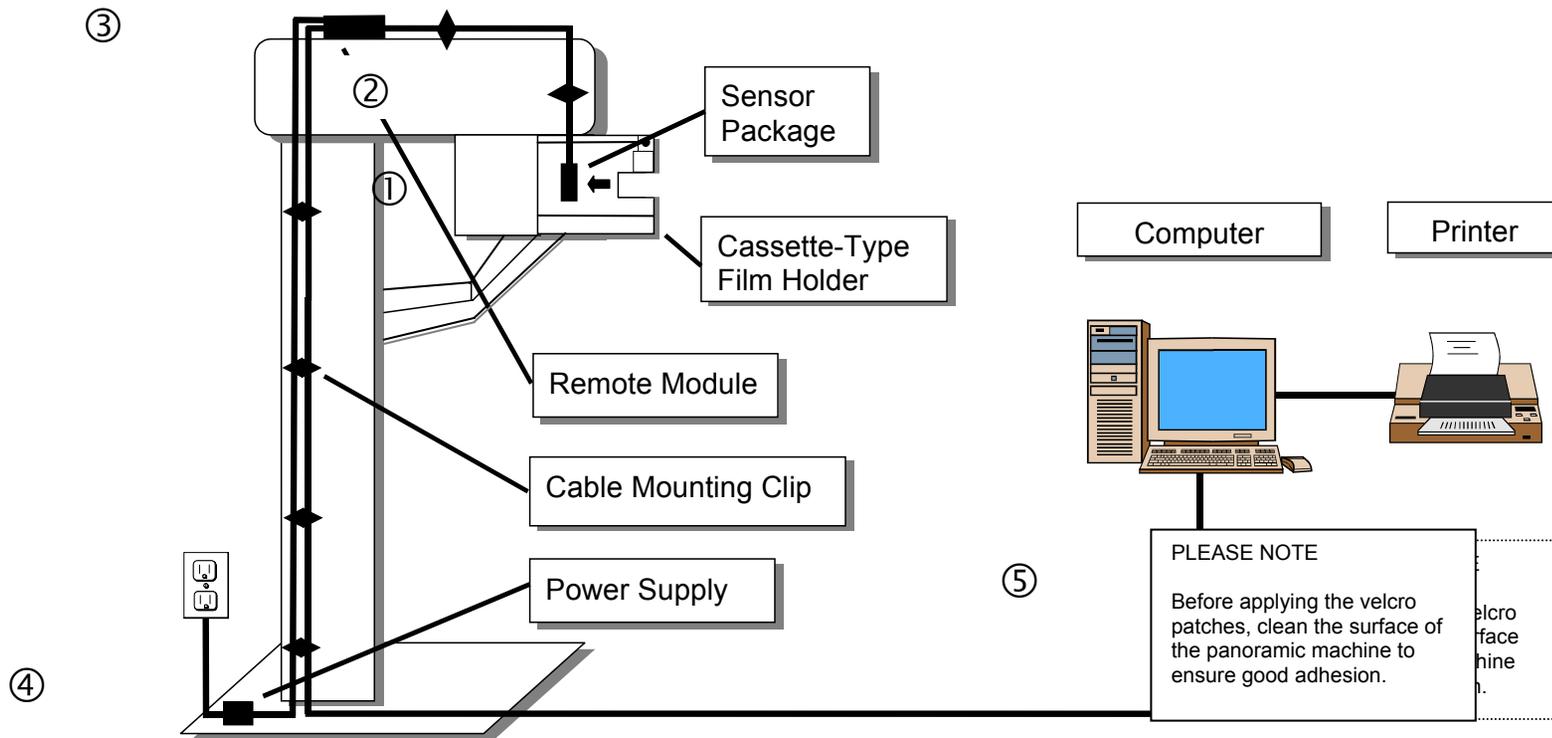


Figure 2. Installing CDRPan on Cassette-Type Machine

