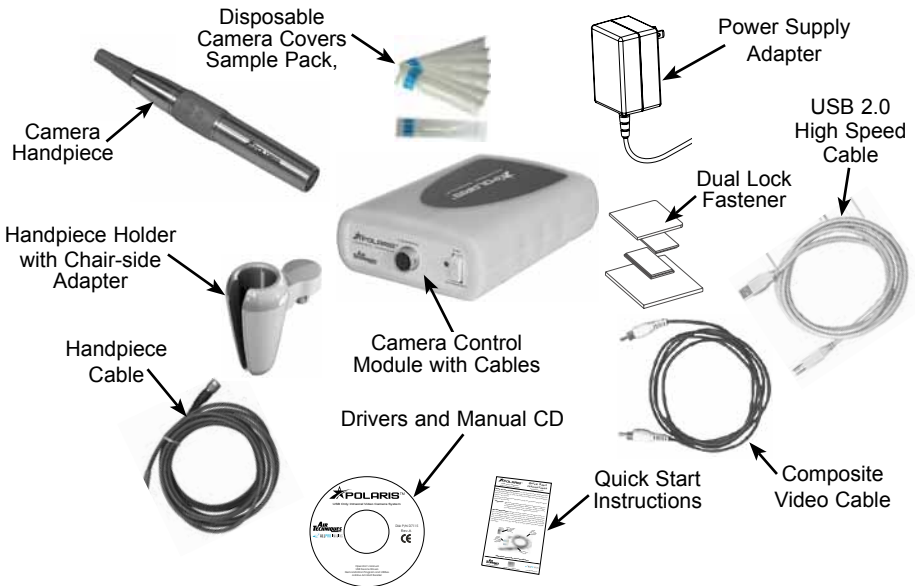


Thank You and Congratulations on your purchase of the Polaris Universal Intraoral Video Camera System, the latest camera in the dental video imaging product line from Air Techniques, a leading manufacturer of dental, medical and veterinary equipment since 1962. The Polaris is hereafter referred to as the Polaris System in this manual.

This document provides brief information to help you get started using your Polaris System for the first time.

Important: Refer to the Operator's Manual PDF file included on the Drivers and Utilities Disk for detailed information. Review and follow the guidelines included in the Operator's Manual to ensure your Polaris System gives the highest level of service.

On-line Registration. Quickly and easily register your new Polaris System on-line. Just have the product model and serial numbers available. Then go to the Air Techniques web site, www.airtechniques.com, click the Warranty Registration link and complete the registration form. This on-line registration ensures a record for the warranty period and helps us keep you informed of product updates and other valuable information.



Polaris System Key Parts Identification

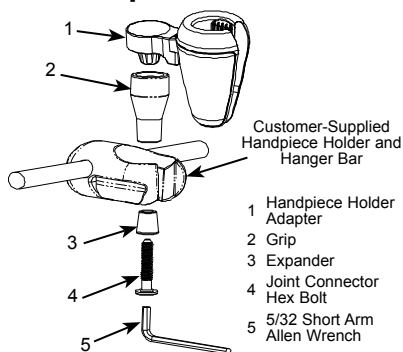
SYSTEM SETUP

Set up the Polaris System by performing the following steps as shown below..

- Locate the Control Module on a table top, cart or any flat stable surface. It can also be installed hanging under a table top, under the chair or on the computer using the supplied Dual Lock Fastener Kit
- Install Handpiece Holder with Chair-side Adapter to convenient location.
- Connect the Handpiece Cable between Control Module and the Handpiece.
- Connect the USB Cable between Control Module and the PC & Install WDM drivers from disk
- Make Video cable connections as required by individual office equipment.
- Connect the power supply adapter to an AC power outlet and the cable to the jack on the rear of the Camera Control Module.

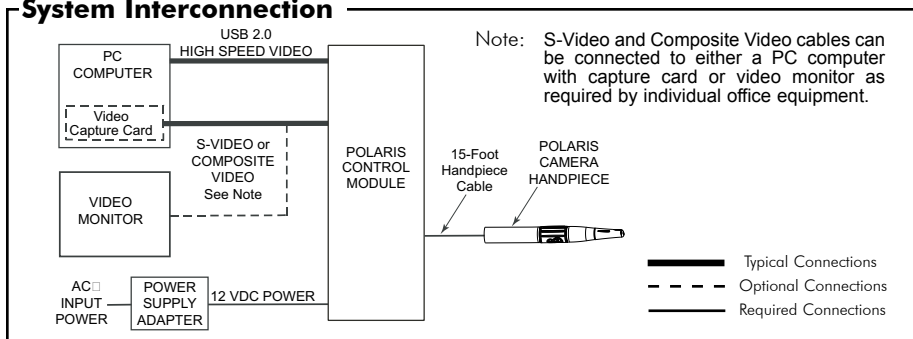
Camera Handpiece Holder with Chair-side Adapter Installation-

1. Insert Handpiece Holder Adapter (1) into the wide end of Grip (2).
2. Press Grip (2) into the top of the chosen Handpiece Holder.
3. Insert Expander (3) into the bottom of Grip (2)
4. Insert and push the Joint Connector Hex Bolt (4) into Expander (3) engaging the thread of Handpiece Holder Adapter (1) by turning the Joint Connector Hex Bolt (4) clockwise.
5. Using the supplied Short Arm Allen Wrench (5), tighten Joint Connector Hex Bolt (4) until the Chair-side Adapter is secure in the Handpiece Holder.



Handpiece Holder Chair-side Adapter Assembly

System Interconnection



Video Connection Options - Make connections as required by individual office equipment to connect the Polaris System video outputs.

1. S-Video. Using an optional 6-foot S-Video, 4-pin Mini DIN cable, connect between the Control Module S-VIDEO connector and the associated connector of a video monitor or a computer as required.
2. Composite Video. Connect the supplied composite video cable between the Control Module VIDEO RCA connector and the associated RCA connector of a video monitor or a computer as required.

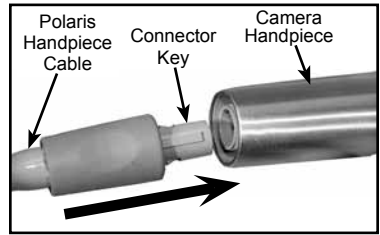


Do not twist or turn the cable connectors. The Handpiece Cable connectors are keyed and mate straight on with the associated Camera Handpiece and Control Module connectors.

Camera Cable Connection - Carefully connect the supplied Camera Handpiece Cable between the Camera Handpiece and Control Module as follows:

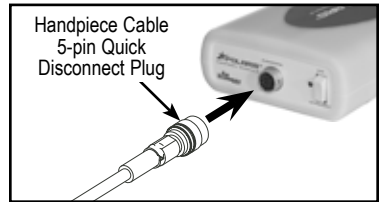
Camera Handpiece Connection.

1. Using the gray molded connector cable end, align the connector key with the keyway of the Handpiece connector.
2. Insert straight into Handpiece connector until it securely snaps into place.



Control Module Connection

1. Using the 10-pin quick disconnect plug end, align connector key with the keyway of the mating CAMERA connector located on the front panel of the Control Module.
2. Insert the connector straight into the mating CAMERA connector until it securely snaps into place.



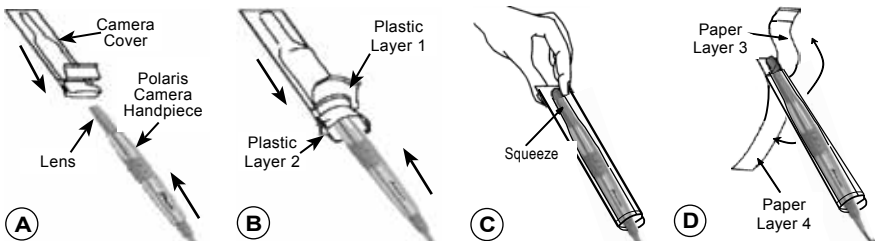
Notes: Imaging Software, such as VISIX, or other Air Techniques authorized third-party software, must be installed on the computer in order to operate the Polaris System.

A Microsoft® **Driver Not Signed** statement may appear. If it does, click **Continue** to proceed with installation.

USB Device Driver Installation - Before connecting the Polaris System to your computer or attempting to use it for the first time, run the Setup program on the Polaris System Drivers and Utilities Disk included with the Polaris System. The supplied CD provides the device drivers needed to communicate between the Polaris System and the associated user-supplied USB streaming video software application installed on the PC computer system. This must be completed before the Polaris System will operate properly. Normally, this program runs automatically when the CD is inserted into the drive for the first time. If not, run the setup program located in the root directory of the CD (typically **D:\Polaris.exe**).

Install the Standard Device Drivers by selecting Standard (default option) from the Setup program menu. If full device functionality is not present after the Standard Device Drivers are installed, the Legacy Device Drivers may need to be installed. More information can be found in the Installation Instructions and Notes file on the Polaris System Drivers and Utilities Disk included with the system.

Disposable Camera Cover Installation - Install a new camera cover on the Camera Handpiece for each patient as follows:



SYSTEM OPERATION

Operating Procedure – The Polaris System is normally operated connected directly to a computer system running various PC USB streaming video capture software applications. In this configuration the camera provides the image/video source while the computer and associated software are used to display and save the resultant images. When the system is operated directly connected to just a video monitor, the connected monitor only displays high-resolution live video images and the images can not be frozen or saved. Perform the following procedures to operate the system.

1. Perform step a only when connected to a computer. Perform step b only when connected to a video monitor.
 - a. Turn on the Power switches on the Control Module and PC System. Start the imaging software and proceed to step 2.
 - b. Turn on the Power switches on the Control Module and video monitor then proceed to step 2.
2. Remove the Camera Handpiece from the handpiece holder and observe that the monitor shows the high-resolution live video images taken by the camera.

Important: Use care when rotating the Handpiece lens head. The swivel lens head turns nominally only 165° left or right from the center point. Forcing the head past the 165° limit will damage the device.

Prior to rotating the lens, slide the Camera Cover about 1/2 to 3/4 inches up on the handle to provide enough slack in the cover for unrestricted rotation.

3. If desired, rotate the lens head left or right from center.
4. Place the camera lens window over area of interest and view image on display. When connected only to a video monitor, proceed to step 8. Perform step 5 when connected to a computer.
5. Press and release the top keypad button on the Camera Handpiece to freeze (ie. capture) the displayed image on the computer monitor screen. Press and release the keypad button again to unfreeze the displayed image. The keypad button used may depend on the video capture software installed.
6. Press and release the bottom keypad button on the Camera Handpiece to save the captured image to the computer hard drive and then to return to a live image display. The keypad button used may depend on the video capture software installed.
7. Repeat steps 3 through 6 as necessary.
8. When imaging an X-ray film on a light box, deactivate the LED light source by depressing both Camera Handpiece buttons simultaneously for approximately 3 seconds. Perform steps 3 through 6 to freeze and save the X-ray film image as desired.
9. Return the Camera Handpiece to the holder when done. Verify that the LED light source and camera turns OFF.

Markings - The following terms or symbols are used on the equipment or in this manual to denote information of special importance:



Alerts users to important Operating and Maintenance instructions. Read included documents.



Indicates type BF equipment in accordance with UL/IEC 60601-1



Alerts users that the camera cover must be used for only one patient and disposed of properly in accordance with local code.

Manufacturer: Air Techniques, Inc.
1295 Walt Whitman Road
Melville, New York 11747 USA



Identifies the name of the manufacturer.



Indicates date of manufacture

ATTENTION USERS:

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