



Intraoral
Video Camera System

Quick Start Instructions

Part Numbers: D8000

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

This document provides brief information to help you get started using your Astra 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 Astra System gives the highest level of service.

On-line Registration. Quickly and easily register your new Astra 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.



Astra System Key Parts Identification



1295 Walt Whitman Road, Melville, NY 11747-3062

Website: www.airtechniques.com

East Coast: 1-800-AIR-TECH (1-800-247-8324)

West Coast: 1-800-822-2899



SYSTEM SETUP

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

- Install drivers from the disk.
- Connect the Astra Handpiece Cable between a PC and the handpiece.
- Install Handpiece Holder with Chair-side Adapter to convenient location.

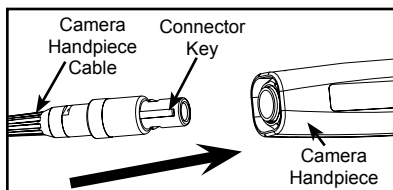


DO NOT twist or turn the cable connectors. The Astra Handpiece Cable connector is keyed and mates straight on with the handpiece.

Camera Handpiece Connection -

Carefully connect the Astra Camera Handpiece to the supplied Handpiece Cable as follows:

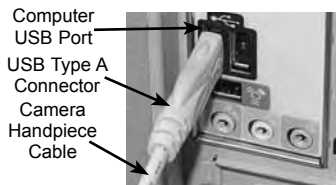
1. Using the gray molded connector end of the Handpiece Cable, align the connector key with the keyway of the Handpiece connector.
2. Insert straight into Handpiece connector until it securely snaps into place.



Astra Handpiece Connection

Important: Use a High Speed High Power (500 mA) USB 2.0 Port Only

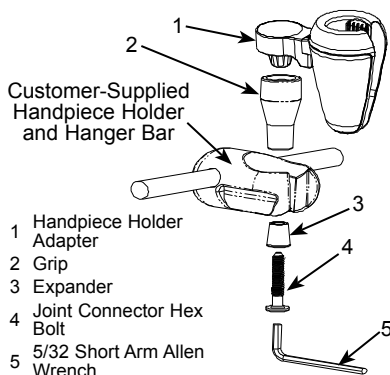
USB Interface Connection - Connect the USB Type A connector side of the Astra Handpiece Cable to any available USB 2.0 high Speed, high power port on the user supplied Computer System. Always make sure to use the same USB port whenever re-connection of the USB cable is necessary.



USB Interface Connection

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

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 Astra System.

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

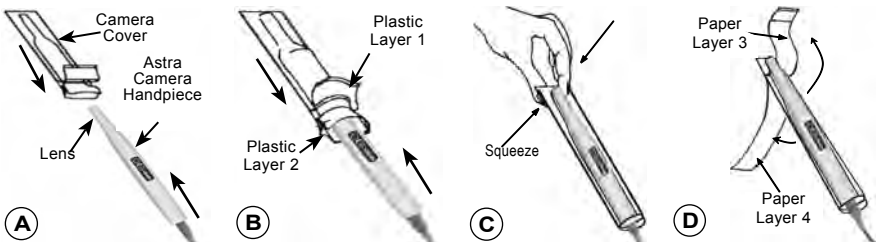
USB Device Driver Installation - Before connecting the Astra System to your computer or attempting to use it for the first time, run the Setup program on the Astra System Drivers and Utilities Disk included with the Astra System. The supplied CD provides the USB drivers needed to communicate between the Astra System and the associated USB imaging software application installed on the PC computer system. 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:\Astra.exe**).

The Setup program guides the user through updating the computer library files, which must be completed before the Astra System will operate properly. More information can be found in the Installation Instructions and Notes file on the Astra System Drivers and Utilities Disk included with the system.

PRE-OPERATION

Handpiece Preparation - Install a new Camera Cover on the Camera Handpiece for each patient as follows:

1. Remove the Camera Handpiece from the holder.
2. Insert the Camera Handpiece tip between the second and third layers (between the outer paper and plastic layers) with the camera/light facing towards the paper layer. See A.
3. Push the Camera Handpiece completely in until the tip is fully inserted into the narrow tip of the sheath. See B.
4. Gently squeeze the illuminated tip of the Camera Handpiece between the thumb and index finger to ensure that the optically clear area of the camera cover is flat against the lens tip. See C.
5. Peel away and discard the top plastic layer and the bottom paper layer. See D.



SYSTEM OPERATION



Verify that the software is running and correctly configured. Refer to the System Check Section of the Operator's Manual manual as necessary.

Operating Procedure – After preparing for the intended examination as described above, perform the following steps to operate the Astra system:

1. Start the imaging software.
2. Remove the Camera Handpiece from the handpiece holder and observe that the computer display shows the high-resolution live video images taken by the camera.
3. Place the camera lens window over the area of interest and view image on display.
4. 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 top keypad button again to unfreeze the displayed image.
5. 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.
6. Repeat steps 3 through 6 as necessary.
7. 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.
8. 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.



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



Identifies the name of the manufacturer.



Indicates the month & year of manufacture



Indicates that the Astra complies with the Medical Device Directive 93/42/EEC.



Medical Device Safety Service
Schiffgraben 41
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