WHITESTAR SIGNATURE™

OWNER'S AND OPERATOR'S MANUAL

Manufactured By:
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CE
0050

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For Order Placement of Surgical Products

(IOLs and Phaco Supplies)
Call 1-800-366-6554 (USA)

For Phaco Returns or Technical Service

Call 1-800-449-3060 (USA)

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AMO™
ADVANCED MEDICAL OPTICS

Rx Only – Z370101 Ver. 5.0 0807

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Compliance

In accordance with:

- IEC/EN 60601-1

3 SYSTEM SETUP

Safety Precautions

Now that the system is set up and you have verified that all of the functions are operating properly, you are almost ready to use your WHITESTAR SIGNATURE™ System.

Read the following Safety Precautions and Warnings carefully before you use the WHITESTAR SIGNATURE™ System in surgery.

1. The WHITESTAR SIGNATURE™ System is equipped with 3-prong plugs which must be plugged into an outlet with a ground receptacle.

   If the plug does not fit the outlet, contact an electrician. DO NOT modify or remove the ground pin.

2. Do not use extension cords with your machine.
3. Do not overload your electrical receptacle (outlet).
4. If the cord or plug is damaged, do not use the instrument. An electric shock or fire hazard can result. Call AMO customer service to order a new cord.
5. The instrument has ventilation openings at the rear of the console to allow ambient air intake and the release of heat generated during operation. If the openings are blocked, heat build-up can cause system failures which can result in a fire hazard.
6. Do not try to move the WHITESTAR SIGNATURE™ System cart on deep pile carpets or over objects on the floor such as cables and power cords.
7. Take care not to trip over power and footpedal cords. Keep power and footpedal cords away from the surgical area.
8. Do not try to lift the WHITESTAR SIGNATURE™ System cart.
9. Do not place the instrument on uneven or sloped surfaces.
10. Do not use disposables, accessories or other surgical instruments that are not designed for this system. Use only parts recommended by AMO to achieve optimum performance and safety.
11. Do not operate the WHITESTAR SIGNATURE™ System in a condensing environment. Take care to protect the instrument from fluid sprays or fluid buildup.
12. To protect the patient from contaminated fluids or handpieces, use only:
    - sterile tubing cassettes
    - sterile irrigation fluid
    - sterile handpieces
13. Use caution when you extend, retract or swivel the Mayo stand articulating arm. Stay clear of the hinged hardware.
14. Use caution when you use handpieces with sharp edges or pointed tips.

15. Always replace the tubing cassette between cases.

16. Wrap the excess power cord neatly around the cord wrap on the back of the console.

Changing Irrigation

Use extreme caution when you lower or raise the balanced salt solution bottle to decrease or increase fluid flow and pressure. If you lower the bottle too much it can cause the anterior chamber to collapse. If you raise the bottle too high it can cause the anterior chamber to deepen. To make sure that the bottle height does not go too high, you can set the maximum bottle height on the Diagnostics screen.

Note: Use a new bottle of balanced salt solution at the start of each case.

Phacoemulsification without Adequate Irrigation

Operating phacoemulsification without an adequate flow can result in an elevated temperature of the tip and subsequent damage to the eye tissue or could cause the chamber to collapse. Confirm that there is irrigation flow before you initiate phacoemulsification. A tight wound or the angle of the needle next to the wound can also constrict the irrigation flow by pinching the coaxial irrigation sleeve assembly on the needle of the phaco handpiece.

Power Failure during Surgery

If there is a loss of power during a procedure, you need to:

- Withdraw the handpiece from the eye
- Release the footpedal to Position 0
- When power is restored, select Prime/Tune to reprime the fluids or use **Bypass**
- Select the mode you were using (PHACO, IA, Vitrectomy or Diathermy)

Connecting Handpieces

It is very important that the electrical connectors on the handpieces are completely dry before they are connected to the WHITESTAR SIGNATURE™ System receptacles. You can receive a “Handpiece Ground Fault Error” message if the connector is wet.

Handling the Phaco Handpiece

The phaco handpiece is a very delicate instrument and must be handled with EXTREME care. If the handpiece is dropped or received any other significant impact, the handpiece will not work properly. The ultrasonic titanium phaco tip must never touch any solid material while in use.

Always flush the handpiece immediately following surgery.

See cleaning instructions given in Chapter 9, “Care and Cleaning”.

Handpieces can be extremely hot immediately after sterilization. Use care and caution when handling.

Phaco and Vitrectomy Operation

The phaco handpiece and vitrectomy cutter must never be activated with the tips exposed to air. If the tips are activated in the air, the useful life of the handpiece and cutter is reduced. If power is to be introduced to the phaco handpiece or vitrectomy cutter, the tips must be in a test chamber filled with a balanced salt solution, in a container of balanced salt solution, or in the patient's eye.

Vitrectomy

Failure to properly attach the tubing to the appropriate vacuum or pressure source can affect the vitrectomy cutter operation. Be sure to read the vitrectomy cutter package insert for correct assembly and connection procedures.

Diathermy

When you enter the Diathermy mode, an audible tone should be heard. Also, whenever diathermy power is applied, an audible tone should be heard.

The diathermy cable must be checked periodically for damage. If the cable shows signs of damage, replace the cable immediately with the same type of cable. Use of other types of cables can affect the diathermy performance.

During surgery, the diathermy output power must be as low as possible for the intended purpose. AMO recommends the 30% setting to start.

The diathermy cable must be positioned in such a way that contact with the patient or other leads is avoided. Grounded or ungrounded metal parts must not come in contact with the patient when diathermy is used.

For proper operation of the diathermy, replace the handpiece with the same type.

Programmable Power IV Pole

Do not exceed the maximum weight of two 500 ml balanced salt solution bottles on the IV pole bottle holder.

Wireless Remote Control

This device complies with part 15 of the FCC (Federal Communications Commission) Rules. Operation is subject to the following two conditions:

1. This device may not cause harmful interference.
2. This device must accept any interference received, including interference that may cause undesired operation.

Any changes or modifications not expressly approved by Advanced Medical Optics, Inc. can void the user's authority to operate the equipment.

Note: This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

Warnings


WARNING: All personnel who might operate this equipment must read and understand the instructions in this manual before the system is used. Failure to do so might result in the improper operation of the system. This device is only to be used by a trained licensed physician.


WARNING: DO NOT attempt to use the system if the system fails to perform properly as stated in this manual.


WARNING: DO NOT use the System in the presence of flammable anesthetics, or other flammable gases, near flammable fluids or objects, or in the presence of oxidizing agents, as a fire could result.


WARNING: This unit might interfere with any cardiac pacemaker fitted to the patient; therefore qualified advice must be obtained prior to such use.


WARNING: The patient must not come into contact with metal parts which are grounded or have appreciable capacitance to ground. The use of an antistatic mat for this purpose is recommended.


WARNING: Proper handling and disposal methods for biohazards must be used when you dispose of the tubing cassette, Mayo stand drape and monitor drape.


WARNING: Monitoring electrodes or other types of equipment must be placed as far from those of the WHITESTAR SIGNATURE™ System as possible. High current limiting devices are recommended for the protection of such systems. Needle monitoring electrodes are not recommended.


WARNING: Keep the diathermy cord away from the patient and other handpieces or leads (for example, monitoring electrodes).


WARNING: The output power selected must be as low as possible for the intended purpose.


WARNING: Although this unit complies with all EMI standards and requirements, it is possible that interference provided by the operation of the HIGH FREQUENCY (HF) SURGICAL EQUIPMENT can adversely influence the operation of other electronic equipment.


WARNING: Skin to skin contact on the patient, for example, between the arms and the torso is not recommended. Insert dry gauze to avoid contact, as appropriate.

Note: The unit contains no neutral electrode.

Note: The diathermy output is bipolar.

Note: It is recommended that the condition of all inter-connecting and handpiece cables be checked on a regular basis.


WARNING: Risk of burns and fire. Do not use the System near conductive materials such as metal bed parts, inner spring mattresses, or similar items. Replace electrode cables on evidence of deterioration.


WARNING: Hazardous electrical output. This equipment is for use only by qualified personnel.


WARNING: Disconnect the power before you service the equipment.


WARNING: Remove the power cord from the power outlet when the equipment is not in use.


WARNING: Do not obstruct the power outlet so that the power cord can be readily removed, as needed.


WARNING: Not recommended for use in condensing environments. If exposed to a condensing environment, allow the system to equilibrate to typical operating room conditions prior to use.


WARNING: This HIGH FREQUENCY (HF) SURGICAL EQUIPMENT is specified for use without a NEUTRAL ELECTRODE.


WARNING: Failure of the HIGH FREQUENCY (HF) SURGICAL EQUIPMENT could result in an unintended increase of output power.


WARNING: DO NOT try to replace the Wireless Remote Control battery. Call your AMO Tecnical Service representative to replace the battery.


WARNING: Sterility assurance is the responsibility of the user. All non-sterile accessories must be sterilized prior to use.

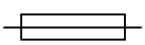
WARNING: Prior to using any invasive portions of the handpiece assembly, examine under the microscope for any obvious damage, oxidation, or the presence of foreign material. If any questionable characteristics are noted, use a backup handpiece for surgery. Use of contaminated or damaged system accessories can cause patient injury.

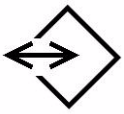
WARNING: Use of non-AMO approved products with the WHITESTAR SIGNATURE™ System, can affect overall system performance and is not recommended. AMO cannot be responsible for system surgical performance if these products are utilized in surgery.

Symbol Definitions

The following symbols appear on the WHITESTAR SIGNATURE™ System front and back panels and in the software:

Table 3.1 Symbol Definitions

Symbol	Definition
	Symbol on power switch indicates Power is On.
	Symbol on power switch indicates Power is Off.
	Indicates that there are important operating and maintenance instructions included in the Owner's and Operator's Manual.
	Indicates the presence of uninsulated high voltage inside the instrument. Risk of electric shock. Do not remove the instrument cover.
	Indicates fuse.
	Single phase alternating current.

Symbol	Definition
	Patient applied part is isolated from earth ground.
	Patient applied part is grounded OR no direct electrical energy is involved.
	Footpedal connection.
	Communications Port
	Programmable Power IV Pole
	Diathermy Forceps
	phaco Handpiece Receptacle
	Vitrectomy Cutter
	Potential Equalizer
 0050	Indicates compliance with the Medical Device Directive.
	Separate Disposal/Collection Required

Symbol	Definition
	Environment Friendly Use Period in Years (RoHS)
	Indicates compliance with IEC 60601-1-2:2001, "Electromagnetic Compatibility Requirements and Tests for Medical Electrical Equipment."
	ETL Listed Mark issued to those products that have met the requirements of product safety standards for the United States and Canada. (ETL formerly Edison Testing Laboratory)
	Universal Serial Bus (USB) Port
	Federal Communications Commission (FCC) The FCC regulates interstate and international communications by radio, television, wire, satellite and cable under the FCC's jurisdiction.
	FUSION™ Mode button used to open the CASE settings screen.
	Shows the position of the footpedal when the footpedal is pressed. The number shown changes when the position is changed.
	WHITESTAR™ Technology is **On**.
	WHITESTAR™ Technology is **On** and ICE Pulse Shaping is **On**.
	Torsional Technology is active (on).

System Disposal

WEEE

The electronic components of the WHITESTAR SIGNATURE™ System are subject to the European Union Directive 2002/96/EC on Waste Electrical and Electronic Equipment. This directive applies to all electronic equipment in the European Union only.

The disposal to municipal waste is prohibited for electronic equipment subject to this directive; this equipment must be treated or recycled. Each component that is subject to this regulation is marked on the component itself with the following symbol:

In some cases where the component's size prohibits marking (such as handpieces) the marking can be found on the directions for use and the warranty. Treatment and/or recycling of the electronic equipment are provided at no cost to you. Please see the contact information below for disposition of unwanted AMO electronic equipment.

For disposal of your unit, contact your local AMO subsidiary or the AMO service center nearest you.

Belgium *Distributor* De Ceunynck Medical nv/sa Kontichsesteenweg 36 B-2630 AARTSELAAR Belgium	**Denmark** *Distributor* AMO Denmark ApS c/o Advanced Medical Optics Norden AB Johanneslundsvagen 2 194 81 Upplands Vasby Sweden
Finland AMO Norden AB Vantaa/Finland Rajatorpantie 41 C, 3. krs FIN-01640 Vantaa Finland Phone: +358 9 8520 2192	**France** AMO France SAS E. Space Park Batiment D 45 Allee des Ormes 06250 Mougins France Phone: +33 49 22 87 228
Germany AMO Germany GmbH Rudolf-Plank_Strasse 31 D-76275 Ettlingen Germany Phone: +49 7243 729 444 (Hotline)	**Greece** *Distributor* Alvia S.A. 18th Klm Marathonos Av. 153 51 Pallini Attikis Athens Greece

Ireland AMO Ireland Sweepstakes Sentre Ballsbridge Dublin 4 Ireland	**Italy** AMO Italy Srl Via Pio Emmanuelli, n.1 00143 Rome Italy Phone: +39 06 51 29 61
Netherlands AMO Netherlands B.V. Business Centre Rhijnhuysen Edisonbaan 14 C-3 3439 MN Nieuwegein The Netherlands Phone: +31 30 75 03 740	**Norway** *Distributor* Advanced Medical Optics Norway AS c/o Advanced Medical Optics Norden AB Johanneslundsvagen 2 194 81 Upplands Vasby Sweden
Portugal *Distributor* Medotec Distribuicao de Medicamentos LDA Av. dos Bomberios Voluntarios 40-8 Alges, 1495 Lisboa Portugal	**Spain** Advanced Medical Optics Spain, S.L. c/Dr. Zamenhof, n. 22, 4B 28027 Madrid Spain Phone: +34 9176 88 000
Sweden Advanced Medical Optics Norden AB Johanneslundsvagen 2 194 81 Upplands Vasby Sweden	**Switzerland** AMO Switzerland GmbH Feldmoosstrasse 6 CH-8853 Lachen Switzerland Phone: +41 554 51 07 80
United Kingdom AMO United Kingdom Ltd Jupiter House Mercury Park Woodburn Green High Wycombe Buckinghamshire HP10 0HH United Kingdom Phone: +44 162 85 51 600	

RoHS (Restriction of Hazardous Substances)

For Chinese Regulation: Administrative Measure on the Control of Pollution Caused by Electronic Information Products

Table 3.2 Names and Content of Toxic and Hazardous Substances or Elements

Parts Name	Toxic and Hazardous Substances or Elements					
	Pb	Hg	Cd	Cr6+	PBB	PBDE
Housing	x	o	o	x	o	o
Power Supply	x	o	o	x	x	x
Motherboard	x	o	o	o	x	x
Rear Panel Assembly Board	x	o	o	x	x	x
Pneumatics	x	o	o	x	o	o
LCD	x	x	o	o	x	x
Base Unit	x	o	o	o	x	x
Fluidics	x	o	o	x	o	o
o: Indicates that this toxic or hazardous substance contained in all of the homogeneous materials for this part is below the limit requirement in SJ/T11363-2006						
x: Indicates that this toxic or hazardous substance contained in at least one of the homogeneous materials used for this part is above the limit requirement in SJ/T11363-2006 (Enterprises may further provide in this box technical explanation for marking "X" based on their actual conditions.)						

Setup Sequence – Anterior Segment Surgery

The following is a general overview of the steps to be taken to prepare the WHITESTAR SIGNATURE™ System for surgery:

1. Connect the WHITESTAR SIGNATURE™ System power cord to the rear of system. Plug the power cord into a grounded power outlet.
2. Connect the footpedal to the rear panel receptacle.
3. Connect the compressed air line to the compressed air receptacle (optional).
4. Turn the system On at the back of the console.
5. Press the On/Off button on the Touch Screen monitor.
6. After completion of the Start Up Self Test, select the surgeon and program.
7. Install the tubing cassette, attach the required accessories (phaco, vitrectomy or diathermy handpieces) and set up the tubing.
8. Prime and tune the handpieces. (Refer to Chapter 4, Equipment Operation, *Prime/Tune*.)

9. Perform the final test of the fluidics and the handpiece integrity with the footpedal. (Refer to Chapter 4, Equipment Operation, *Verify Irrigation/ Aspiration Balance*.)

Figure 3.1 - Rear Panel Connections

1. USB Port
2. Communications Port
3. Foot Pedal Connector
4. Compressed Air
5. Potential Equalizer
6. Power Switch and Power Cord Connection

Phacoemulsification Ultrasonic Handpiece

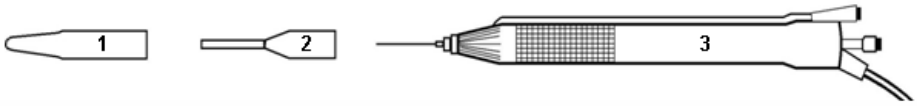
WARNING: Sterility assurance is the responsibility of the user. All non-sterile accessories must be sterilized prior to use.

WARNING: Prior to using any invasive portions of the handpiece assembly, examine under the microscope for any obvious damage, oxidation, or the presence of foreign material. If any questionable characteristics are noted, use a backup handpiece for surgery. Use of contaminated or damaged system accessories can cause patient injury.

1. Use caution to prevent burns when handling the handpiece directly from sterilization.
2. Remove the tubing cassette and accessories from the tubing pack and place them in the sterile area.
3. Assemble the phaco handpiece as shown below. You need the handpiece, titanium phaco tip, the appropriate tip wrench, one of the infusion sleeves and the test chamber.

CAUTION: NEVER ATTEMPT TO STRAIGHTEN A BENT NEEDLE. THIS MIGHT PRODUCE A BROKEN TIP WHEN ULTRASOUND IS APPLIED.

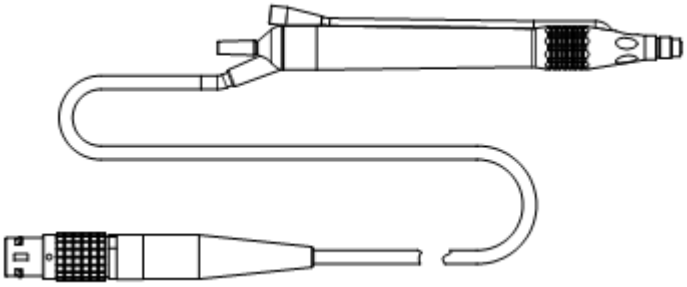
Figure 3.2 - Phaco Handpiece Assembly



1. Test Chamber
2. Infusion Sleeve
3. Handpiece with Tip

4. Attach the connector end of the handpiece to the phaco receptacle on the front of the WHITESTAR SIGNATURE™ System. **Make sure there is no moisture on the connectors prior to connecting. Moisture prevents the handpiece from operating properly.**

Figure 3.3 - Ellips™ Handpiece



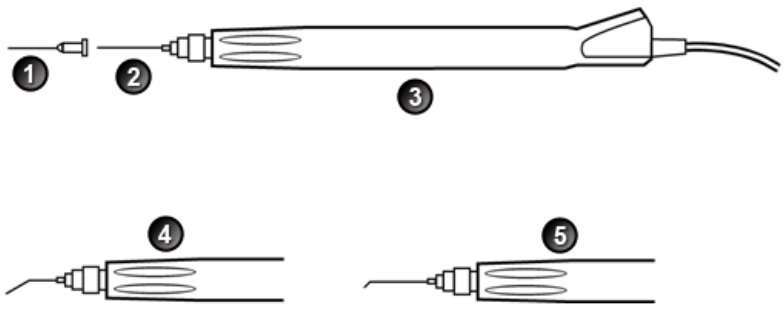
Note: The Ellips™ handpiece can be used with either transversal or logitudinal phaco settings.

Irrigation/Aspiration Handpiece

1. Assemble the SOLO™ Irrigation/Aspiration (IA) Handpiece by attaching the infusion sleeve.

Note: The infusion sleeve and the test chamber are provided in the FUSION™ Tubing Pack. The LAMINAR™ Flow 20 ga. infusion sleeves can also be used and are available with the OPOS20L or any 20 ga. LAMINAR™ Phaco Tip.

Figure 3.4 - IA Handpiece Assembly



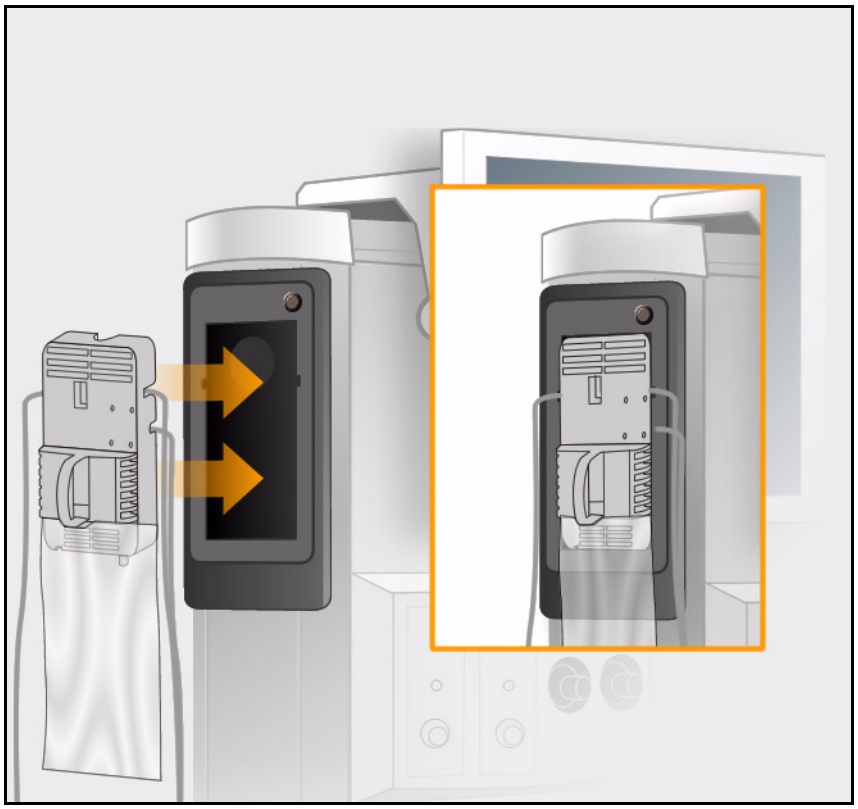
1. Infusion Sleeve
2. SOLO™ Straight Tip
3. Handpiece
4. SOLO™ Curved Tip
5. SOLO™ 45° Silicone Sleeve Tip

Load the FUSION™ Tubing Cassette

1. Open the tubing pack packaging.
2. Install the FUSION™ cassette into the side receptacle, as shown below.
3. Make sure that the drainage bag is properly attached to the cassette.

   Note: Press the button above the cassette to remove the cassette.

Figure 3.5 - Loading the FUSION™ Tubing Cassette

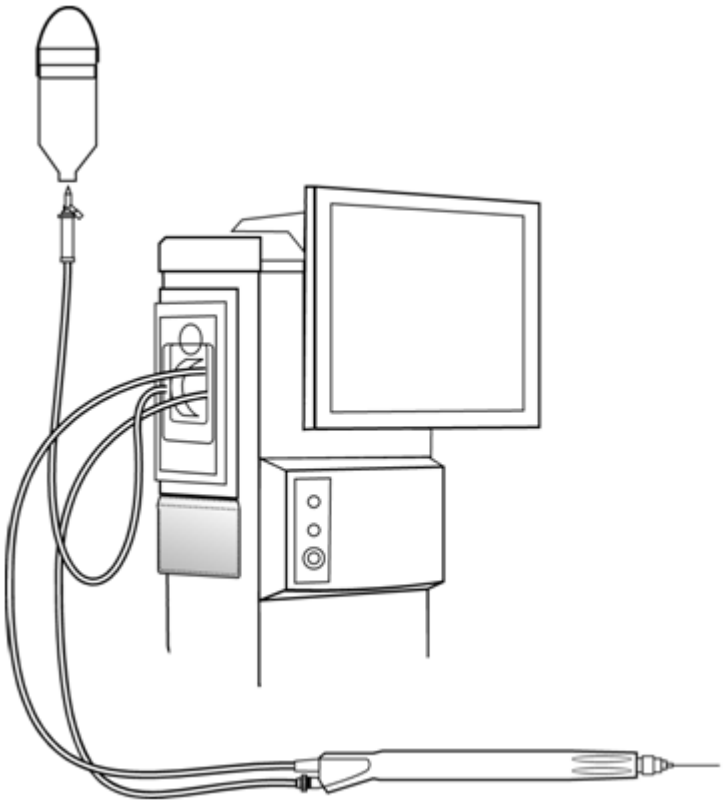


Setup Completion

IMPORTANT! Before you insert the spike into the bottle, shake the irrigation drip chamber at the end of the irrigation tubing to confirm that the irrigation valve moves. If the valve does not rattle, the valve cannot operate properly and irrigation cannot flow.

1. Place a new bottle of balanced salt solution on the top of the system console.
2. Insert the drip chamber spike into the balanced salt solution bottle.
3. Hang the balanced salt solution bottle from the Programmable Power IV Pole and squeeze the drip chamber.
4. Fill the drip chamber with fluid to the half-full level. The Programmable Power IV Pole moves to the appropriate height automatically.
5. Raise or lower the pole as required. Use the IV pole **Up** and **Down** arrows on upper right of the touch screen. You can also use the Up/Down switch on the console.

Figure 3.6 - System Setup

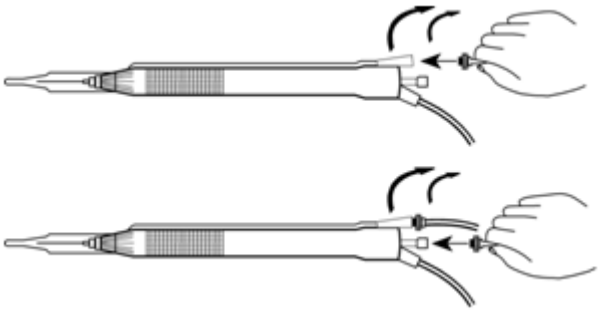


6. Connect the IA tubing to the desired handpiece.
7. For attachment of the tubing to the phaco handpiece, insert the male luer end of the irrigation tubing into the phaco handpiece.
8. Attach the female luer fitting end of the aspiration tubing to the phaco handpiece.

   Note: To protect the patient from contamination, use only:

   - sterile tubing sets
   - sterile irrigation fluid
   - sterile handpieces

Figure 3.7 - Phaco Handpiece Connections



Diathermy

1. Connect the diathermy cord to the Diathermy Forceps or Pencil Probe.
2. Connect the diathermy cord to the diathermy receptacle on the console.

Figure 3.8 - Diathermy Forceps

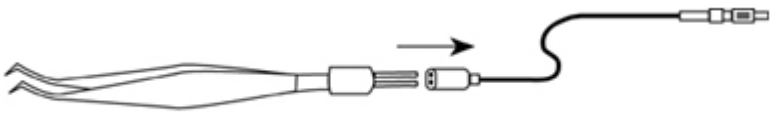
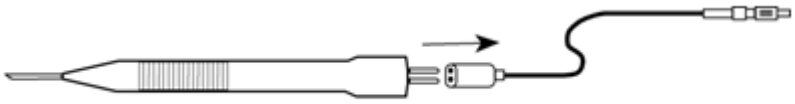


Figure 3.9 - Diathermy Pencil



Note: Other diathermy accessories are regionally available. Contact your AMO representative.

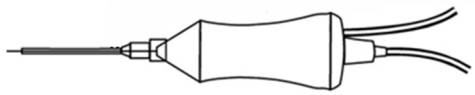
Vitrectomy

If vitrectomy is indicated during surgery:

1. Connect the AMO™ Vitrectomy Cutter as shown below. Vitrectomy requires the following components:
   - IA Tubing (from FUSION™ Tubing Cassette)
   - Vitrectomy Cutter
   - Vitrectomy Infusion Sleeve, or a 23 Gauge Limbal Infusion Needle, if desired.

2. Assemble the handpiece using the instructions provided with the vitrectomy cutter.

Figure 3.10 - Vitrectomy Cutter



3. Attach the connector end of the vitrectomy cord to the vitrectomy receptacle on the console.

Pre-Operative Sterilization

The Instrument Sterilization Procedures in Chapter 9, “Care and Cleaning” identify the WHITESTAR SIGNATURE™ System instruments that must be sterilized prior to each surgical case. The recommended sterilization techniques, times and temperatures are given in Chapter 9, “Care and Cleaning”. AMO recommends that you follow the sterilization guidelines to maximize the life of your WHITESTAR SIGNATURE™ System instruments.

Footpedal

The footpedal controls all of the WHITESTAR SIGNATURE™ System functions, therefore, it is essential that you understand the footpedal operation.

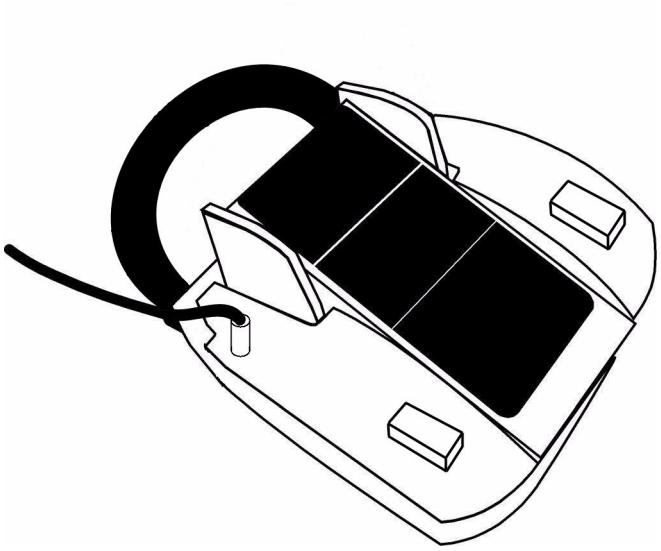
The System software automatically detects if a footpedal is connected during power up, and the footpedal configuration screen automatically loads to provide the appropriate settings options.

The footpedal settings and adjustments can be selected and preset for the footpedal in the Configuration screen. Instructions for the footpedal settings are given in Chapter 5, “Anterior Segment Surgery Operating Modes”. The footpedal housing incorporates a handle, making the footpedal easy to grip for repositioning and storage.

The Footpedal cable attaches to the footpedal connector on the rear of the console.

Note: You must **NEVER** handle the footpedal by the cable.

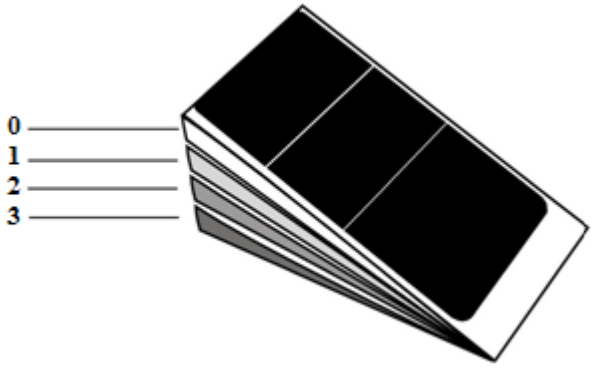
Figure 3.11 - Footpedal



Footpedal Operation

The footpedal has three active "PITCH" ranges, which are referred to as Positions 1, 2 and 3. Position 0 is the Off position, and Position 3 is the fully pressed position. The ranges are shown below.

Figure 3.12 - Footpedal "Pitch" Positions



The footpedal position determines the function that is delivered by the handpiece, which depends on the mode selected on the touch screen. When the footpedal has been connected, place your foot on the pedal and press to the desired position. The footpedal settings and programming are addressed in Chapter 5, "Anterior Segment Surgery Operating Modes".

Reflux

Reflux is the reversal of aspirated fluid flow to assist in the release of unwanted material. The reflux pinch valve opens the aspiration tubing to the positive bottle head pressure (dependent on IV pole height and gravity) and causes fluid to flow toward the handpiece. Reflux stays on until the reflux pinch valve is closed. Reflux must not be used to clear clogged handpieces but reflux can be used to identify a blockage. The Reflux action can be programmed on any available footpedal switch.

WARNING: Reflux is a user selectable switch option. In the event of captured tissue and vacuum present, deactivation of reflux requires the user to release the footpedal to position 1 to open the vent valve.

Programmable Power IV Pole

The Programmable Power IV Pole is controlled by the **Up** and **Down** arrows on the upper right of the touch screen, next to the bottle height indicator. These controls are used to raise and lower the pole, and the height is indicated in the Programmable Power IV Pole screen. The Programmable Power IV Pole moves at a rate of approximately 6 cm (2 inches) per second.

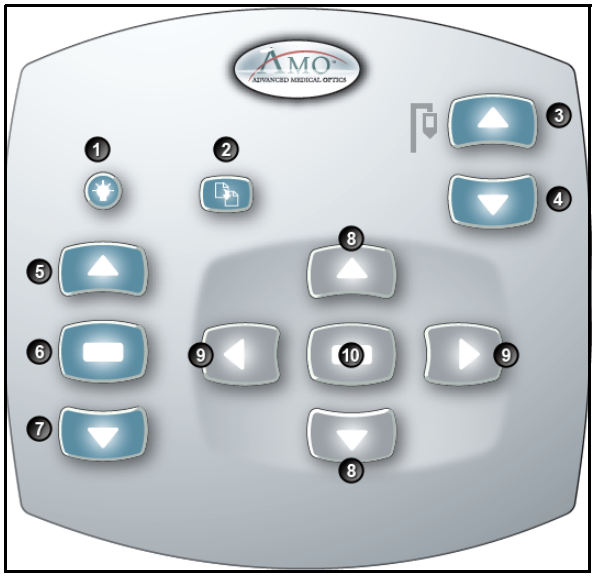
The Programmable Power IV Pole is adjustable from 0 to 107 centimeters, and can be set for either inches or centimeters. The height measurement is relative to the distance from the irrigation valve to the center of the drip chamber. The Programmable Power IV Pole height for each fluidic mode or submode (PHACO, IA, VIT) is saved in the WHITESTAR SIGNATURE™ System memory. A Maximum IV Pole height can be set on the Diagnostics screen.

When a surgery mode is selected, the Programmable Power IV Pole automatically moves to the preset height. To manually adjust the IV pole height, use the **Up** and **Down** arrows on the touch screen. Manual adjustments to the IV pole can also be made by pressing the rocker switch located on the side of the console. If a maximum height has been set, the IV pole will not move above that height.

Wireless Remote Control (Optional)

The wireless remote control keypad can be used to operate the WHITESTAR SIGNATURE™ System. All Modes, Programs, Diagnostics and End Case can be accessed and adjustments to the settings can be made with the remote. The buttons on the remote keypad work the same as the controls on the WHITESTAR SIGNATURE™ System touch screen.

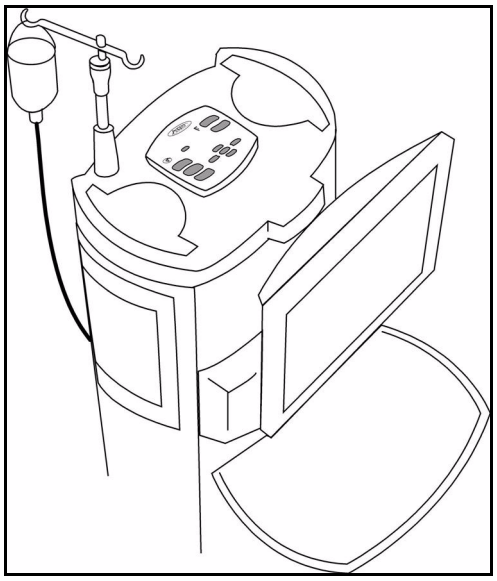
Figure 3.13 - Wireless Remote Control Module



1. Remote Backlight On
2. Reload
3. IV Pole Up
4. IV Pole Down
5. Mode Up
6. Mode Select
7. Mode Down
8. Navigation Up/Down
9. Navigation Left/Right
10. Select

When not in use, store the Wireless Remote Control on the top of the system to charge the battery.

Figure 3.14 - Wireless Remote Control Module Storage

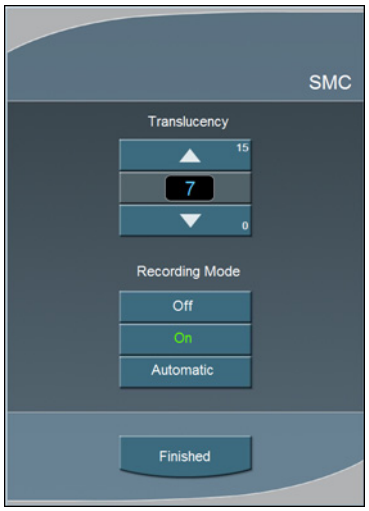


Surgical Media Center (SMC) (Optional)

The Surgical Media Center (SMC) is used to record the surgery and the instrument settings to be viewed at a later date and time. The surgery is displayed on a monitor with the instrument settings. The SMC hardware is connected to your WHITESTAR SIGNATURE™ System Communications port on the rear panel. (See Figure 3.1 Rear Panel Connections.)

1. To configure the Surgical Media Center, select:
   - **Configuration**
   - **System Configuration**
   - **SMC**

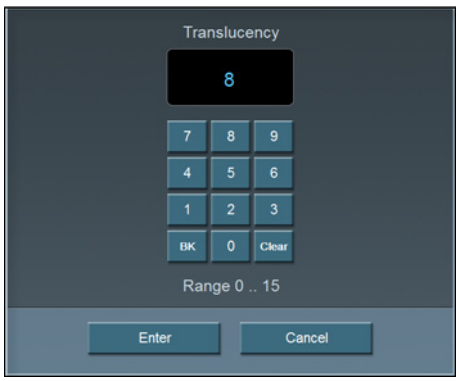
Figure 3.15 - Surgical Media Center Pop-up Window



2. Use the **Up** and **Down** arrows to adjust the settings. **Translucency** is used to make the overlay (instrument settings) more or less opaque.

   Note: Press on the number in the control panel to open a numeric keypad and enter the required value. Press **Enter** on the Keypad pop-up window when you are finished.

Figure 3.16 - Numeric Keypad Pop-up Window



3. Select the **Recording Mode**. **Off**, **On**, or **Automatic**. If the **Recording Mode** is **On**, the recording continues between cases. **Automatic** stops recording between cases.

   Note: The Footpedal Switch can be set up to activate the SMC Record function.

4. Press **Finished** to close the pop-up window.

Shutdown Sequence – Anterior Segment Surgery

The following is a general overview of the steps to be taken to shut the System down after surgery:

1. Select **End Case**.
2. Select **Shutdown**. At the prompt, select **Yes**.
3. Turn the system Off at the back of the console.
4. Remove the power cord from the power outlet.
5. Wrap the excess power cord neatly around the cord wrap on the back of the console.
6. Place the footpedal in the storage area on the console.
7. Place the Wireless Remote Control on top of the console to charge.
8. Refer to Chapter 9, “Care and Cleaning”, *Cleaning Procedures* for additional information.