

Arthrex® DualWave™ QUICK REFERENCE



Read all safety and set-up instructions in the Arthrex DualWave Arthroscopy Pump User's Guide and Directions For Use before using this this product. Please visit www.Arthrex.com for all product literature.

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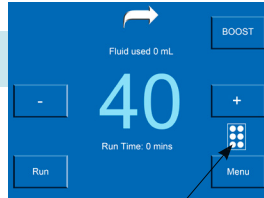
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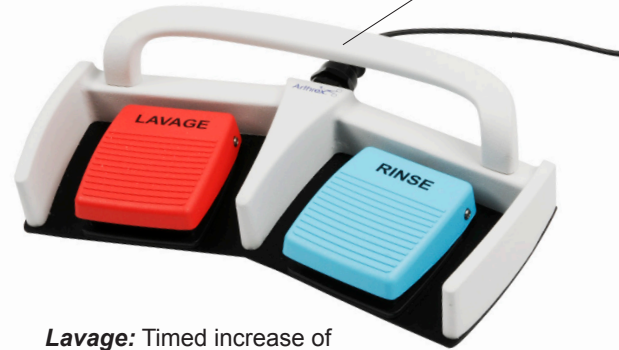
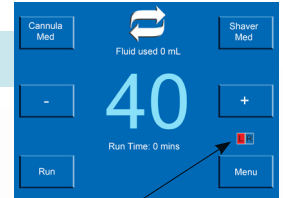
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ARTHROSCOPY PUMP ACCESSORIES

Autoclavable Remote



Foot Control



Lavage: Timed increase of pressure for improved control of bleeding.

Rinse: Timed increase of flow for improved control of debris removal. (Only available when using DualWave outflow)

Shaver Suction Toggle: Allows switching between 4 preset shaver suction levels. (Only available when using DualWave outflow)

INFLOW TUBING SET-UP



1 Remove orange clip



2 Insert connector into pump pressure coupler



3 Open inflow door



4 Insert green tubing hub



5 Wrap tubing around rollers



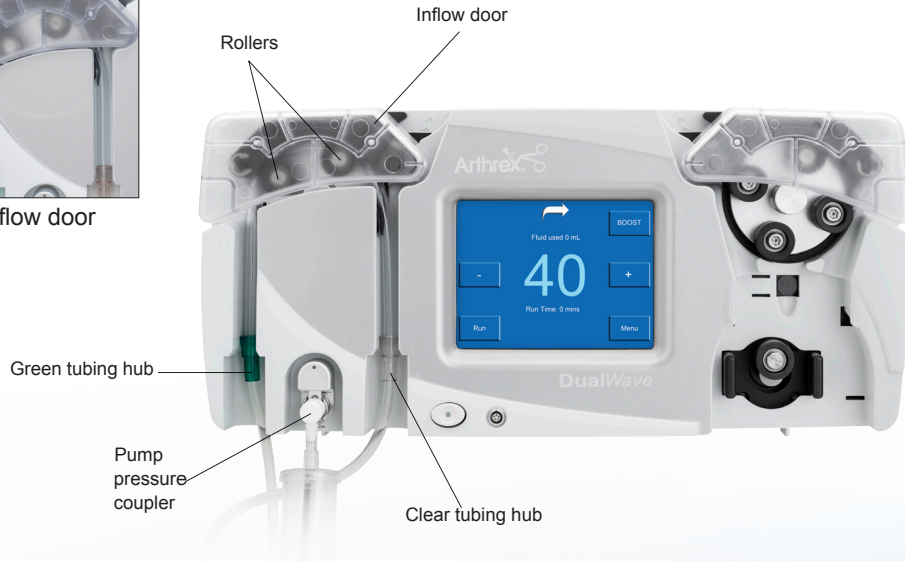
6 Insert clear tubing hub



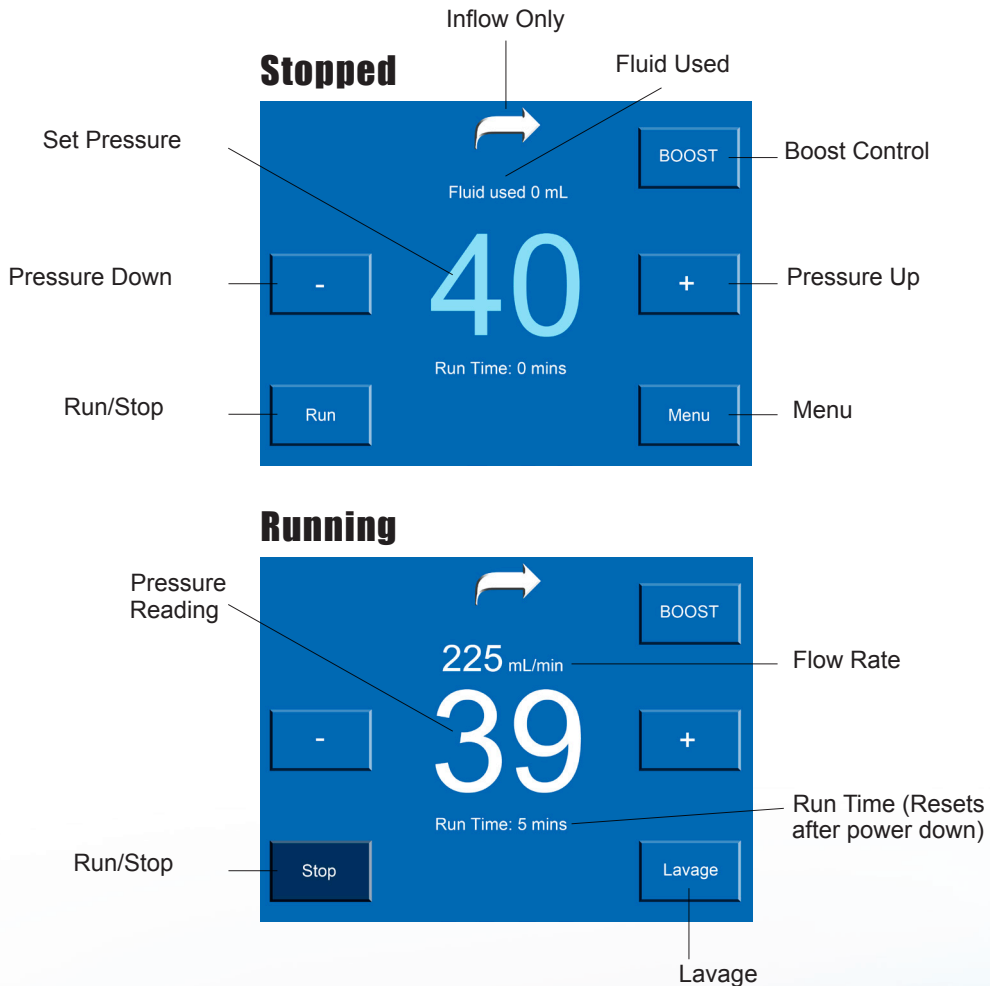
7 Close inflow door



8 Spike saline bags



INFLOW ONLY USER INTERFACE



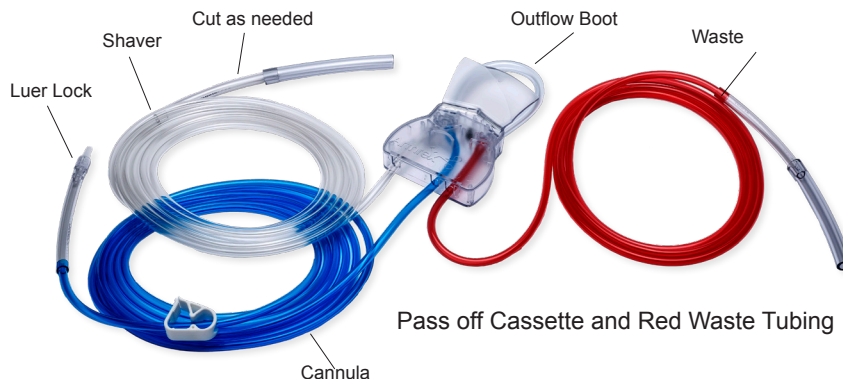
OUTFLOW TUBING SET-UP



1
Connect to shaver suction



2
Connect to independent cannula



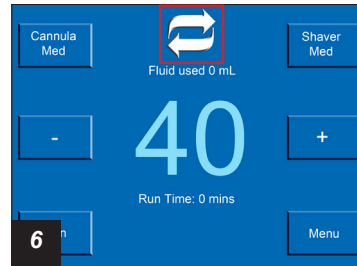
3
Open outflow door



4
*Install outflow cassette



5
Close outflow door



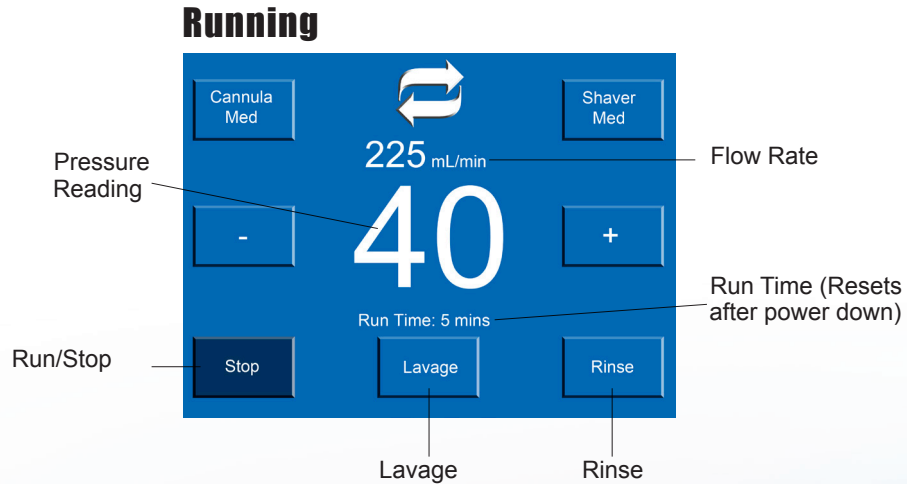
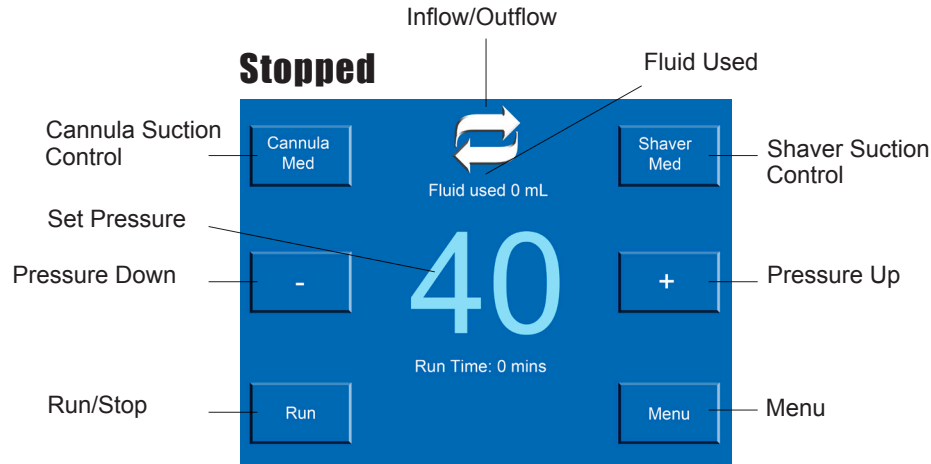
6
Outflow display



7
Connect red waste tubing to waste system

**For easy set-up, move the rollers so that two wheels are flush. Extend the boot of the outflow cassette over the two wheels at the same time. With one hand, hold the boot in place; and, with the second hand, pull down on all three tubes, pushing the cassette in place. The cassette will be held in place by the edges of the outflow bezel.*

INFLOW/OUTFLOW USER INTERFACE



SYNERGY SHAVER DETECTION AND HEADS UP DISPLAY



1

Connect red cable that comes with DualWave™ to the rear of Synergy Resection Console



2

Power on Synergy Resection Console



3

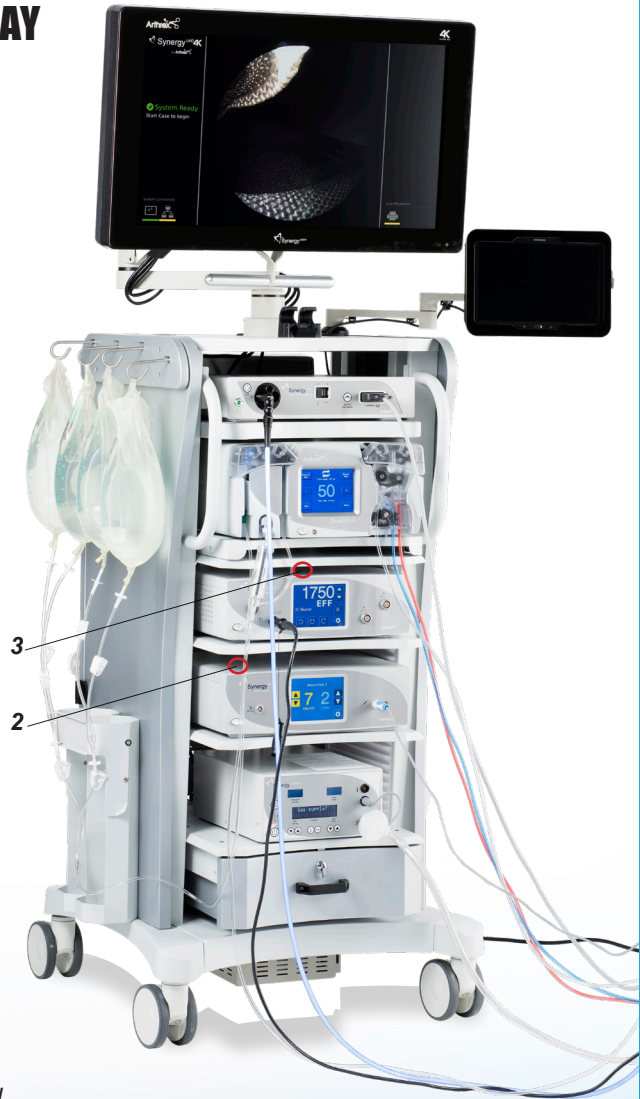
Power on DualWave



4

*Connect to Synergy Imaging for heads up display cable

*For Synergy heads up display use AR-3200-1040 accessory cable kit to connect DualWave to camera console. (Only 1 cable is needed to connect the DualWave to the camera console.) Prior to using this system, see IFU 950-0052-00 for more detail.



TROUBLESHOOTING

| PROBLEM | SOLUTION |
|---|--|
| ** Critical Failure ** | Return to Arthrex® for repair. |
| ** Door Open ** | <ol style="list-style-type: none"> 1. Roller housing is not secured – ensure the locking lever is properly secured. 2. If the failure persists, return to Arthrex for repair. |
| ** Overpressure ** | <ol style="list-style-type: none"> 1. Increase or open the outflow. 2. Manipulate the joint to a stress-free position. 3. If the failure persists, return to Arthrex for repair. |
| ** Pressure Fault ** | <ol style="list-style-type: none"> 1. Ensure adequate fluid supply. 2. Decrease the outflow. 3. Check the tubing for damage or pinches, kinks, or blockages. 4. Check the tubing for the proper connections. 5. Replace the tubing. 6. If the failure persists, return to Arthrex for repair. |
| ** Tubing Out ** | <ol style="list-style-type: none"> 1. If the tubing sensor indicator's LED is red, the tubing is not properly connected. 2. Ensure the tubing sensor coupler is open, not seated. 3. Ensure that the tubing pressure line connector is seated completely. 4. Change the tubing. 5. If the failure persists, return to Arthrex for repair. |
| Console fails Self Diagnostic Test | <ol style="list-style-type: none"> 1. Ensure no tubing is connected to the pump during the power on sequence. 2. If the failure persists, return to Arthrex for repair. |
| Console will not power up | <ol style="list-style-type: none"> 1. Check the AC mains power cord. 2. Try an alternate power outlet. 3. Check the AC mains fuses. 4. If the failure persists, return to Arthrex for repair. |

| PROBLEM | SOLUTION |
|---|--|
| Does not pump when activated | <ol style="list-style-type: none"> 1. Check for error messages. 2. Open all tubing clamps and shut-off valves. 3. Ensure the actual pressure is below the target pressure. 4. Check the tubing for pinches, kinks, or blockages. 5. If the failure persists, return to Arthrex for repair. |
| Inadequate distention, liquid bloody or cloudy | <ol style="list-style-type: none"> 1. Increase the pressure. 2. Activate Lavage mode. 3. Reduce the outflow. 4. Use high-flow cannulas. 5. If the failure persists, return to Arthrex for repair. |
| No (or inadequate) flow | <ol style="list-style-type: none"> 1. Check for error messages. 2. Check that all tubing clamps are open. 3. Check the settings for flow and pressure. 4. Check the tubing for pinches, kinks, or blockages. 5. Check that the tubing seats correctly over the rollers. 6. Verify use of high-flow cannulas. 7. If the failure persists, return to Arthrex for repair. |
| No Shaver Detect | <p>Synergy Shaver Detection</p> <ol style="list-style-type: none"> 1. Verify DualWave™ software is at least 1.8 2. Verify Synergy Resection Console is at least 2.3. 3. Ensure the Synergy cable is connected. 4. Press stop and then run on DualWave while the Synergy Resection Console is on. 5. Replace cable. 6. If the failure persists, return to Arthrex for repair. <p>Universal Shaver Detection</p> <ol style="list-style-type: none"> 1. Ensure the universal shaver cable is connected. 2. Turn DualWave on and off while the shaver system is powered on. 3. Adjust the DELAY and/or THRESHOLD settings. 4. Isolate the power source. 5. If the failure persists, return to Arthrex for repair. |

This description of technique is provided as an educational tool and clinical aid to assist properly licensed medical professionals in the usage of specific Arthrex products. As part of this professional usage, the medical professional must use their professional judgment in making any final determinations in product usage and technique. In doing so, the medical professional should rely on their own training and experience and should conduct a thorough review of pertinent medical literature and the product's Directions For Use.



<http://www.arthrex.com/imaging-resection/fluid-management>
View U.S. patent information at www.arthrex.com/corporate/virtual-patent-marking

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