

ENGLISH

Cavitron[®]
DualSelect[™]
Dispensing System

Directions For Use

*Please read carefully and completely
before operating unit.*

Introduction

Cavitron[®] DualSelect[™] Dispensing System

Congratulations. Your purchase of the Cavitron[®] DualSelect[™] Dispensing System represents a wise investment.

The DualSelect[™] Dispensing System is designed to provide various medicaments and/or clean water (sterile) through Cavitron[®] ultrasonic scalers, Cavitron[™] JET Systems and PROPHY-JET[®] Systems. The DualSelect[™] System allows operator selection from either two internal bottles or an external dental office water line as a fluid delivery source. In addition, the DualSelect[™] Dispensing System can assist you in complying with CDC (Centers for Disease Control and Prevention) and ADA (American Dental Association) guidelines by offering a closed line option and dispensing clean water (less than 200 Colony Forming Units/milliliter).

Your DualSelect[™] Dispensing System is UL (Underwriters Laboratories) listed.

Technical Support

For technical support and assistance call DENTSPLY[®] Product Services 1-800-347-7412 Monday through Friday, 8:00 AM to 5:00 PM (Eastern Time). Outside the U.S., contact your local DENTSPLY[®] distributor.

Caution: U.S. Federal Law restricts this device to sale by or on the order of a dentist.

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Section 1: Indications

1.1 Indications for Ultrasonic Prophylaxis Procedures

Indicated for Fluid Delivery to Ultrasonic Scaler Units for Ultrasonic Prophylaxis Procedures.

1.2 Indications for Air Polishing Procedures

Indicated for Fluid Delivery to Air Polishing Prophylaxis Units for Air Polishing Procedures.

Section 2: Contraindications

The DualSelect™ Dispensing System is not indicated for use with medicaments other than those found in Section 8.2.

Section 3: Warnings

When using the DualSelect™ Dispensing System as a closed line system, avoid increased biofilm formation by:

1. Using water containing fewer than 200 Colony Forming Units/milliliter during dental procedures.
2. Following required maintenance.

Do not operate the system unless Shield is closed.

Section 4: General Precautions

- The system is portable and must be handled with care when moved.
- Equipment flushing and air purging maintenance are required. [See Section 10: System Care]
- If dental office water is used, close the dental unit water shut-off valve at the end of the work day.
- Fluid leakage may occur if Shield is opened with Selector Knob in “A” or “B” position.
- Some medicaments may stain the system and/or bottles.
- To avoid increased biofilm formation, sterile water is recommended for flushing the system. [See Section 10: System Care]
- The system is not designed to achieve sterility but can assist you in complying with CDC and ADA guidelines by offering a closed line option and dispensing clean water (less than 200 Colony Forming Units/milliliter).

Section 5: Infection Control

5.1 Infection Control Information Reference Card

Please refer to the enclosed Infection Control Reference Card which has been included with your DualSelect™ Dispensing System. In the U.S., additional cards can be ordered by calling DENTSPLY® Customer Service at 1-800-989-8825 or 717-767-8500 Monday through Friday, 8:00 AM to 5:00 PM (Eastern Time). Outside the U.S., contact your local DENTSPLY® distributor.

5.2 General Infection Control Recommendations

As with all dental procedures, use standard personal protection equipment (i.e., wear face mask, eyewear, or face shield, gloves and protective gown).

Section 6: Installation Instructions

6.1 General Information

- The DualSelect™ Dispensing System requires connection to the office air supply and can be connected to the external dental office water supply lines.
- If the installation of your DualSelect™ Dispensing System is performed by someone other than an authorized DENTSPLY® representative, care should be taken to observe the following requirements and recommendations.

6.2 Unpacking the Unit

- Carefully unpack your DualSelect™ Dispensing System and verify that all components and accessories are included:

<u>QTY</u>	<u>ITEM</u>
1	DualSelect™ Dispensing Unit with air and water lines and quick disconnects
2	Bottle assemblies and 2 storage caps
1	Disinfectant bottle assembly and storage cap
1	Literature packet

6.3 Water Line Requirements & Recommendations

- Incoming dental office water line pressure to the system must be between 25 psi (172 kPa) and 60 psi (414 kPa). If water line pressure is above 60 psi (414 kPa), a water pressure regulator should be installed.
- Close the manual shut-off valve on the dental water system supply line when the office is unoccupied.
- A filter can be installed in the dental water system supply line to prevent any particles in the water supply from reaching the system.
- All lines should be thoroughly flushed prior to connection to the DualSelect™ System. [See section 10: System Care]

6.4 Water Supply Connection to the System

- Flush incoming water line free of contaminants.
- Shut the manual shut-off valve on the external water supply line.
- Connect the DualSelect™ water line (blue) to the external office water source line.
- Open the manual shut-off valve on the external water supply line, and inspect all connections for leaks.

NOTE: For closed line option, remove DualSelect™ water line completely.

6.5 System Set-Up

- The system should be placed on a stable surface, or set on top of a Cavitron SPS™ Ultrasonic Scaler or Cavitron JET SPS Combination System.
- Ensure ultrasonic scaler unit is off.
- Close shield and place selector knob on the “Open • H₂O” position.
- Connect office air and water lines to appropriate air and water inputs on the DualSelect™ Dispensing System. (See note)
- Connect ultrasonic scaler/JET air line (if applicable) and water line to the DualSelect™ air and water output lines.

NOTE: For closed line option, remove DualSelect™ water line completely.

Section 7: DualSelect™ System Component Description

7.1 System Controls - Front of System

Shield (closed position)

- The shield must be closed to receive fluid from bottle "A" or "B."
- Opening the shield relieves bottle air pressure and allows removal or replacement of bottles. Selector knob should be in "Open • H₂O" position when removing bottles.

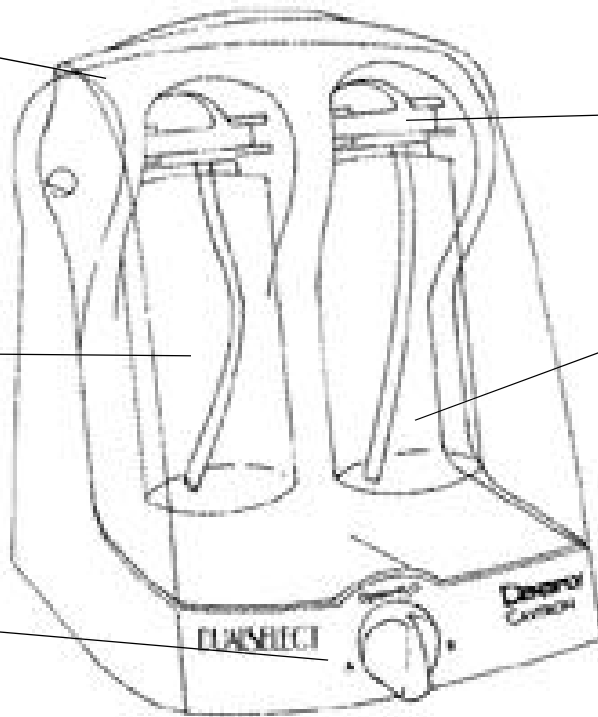
Bottle "A"

Cap

Bottle "B"

Selector knob

- Selects between Bottles "A" and "B", and "Open • H₂O" which is external office water supply.



7.2 Connections - Back of System

Air (in)

Connect DualSelect™ air line (gray) to office air supply.

Air (out)

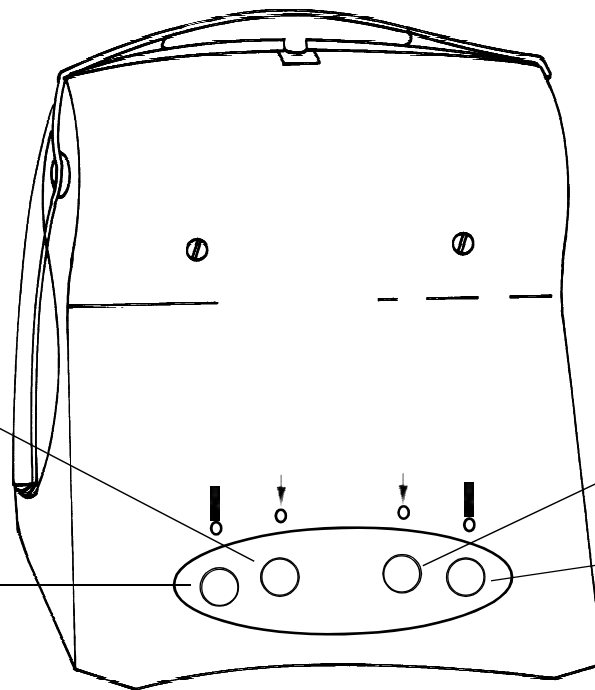
Connect Scaler/JET air line to this port.

H₂O (in)

Connect DualSelect™ water line (blue) to external office water supply.

Lavage (out)

Connect Scaler/JET water line to this port.



NOTE: For closed line option, remove DualSelect™ water line completely.

Section 8: Accessories

8.1 Accessories List*

1. Accessory pack includes 2 bottle assemblies and 2 storage caps.
2. Disinfectant bottle assembly and storage cap.
3. Shield.

*For detailed information, contact your local DENTSPLY® distributor or, in the U.S., call DENTSPLY® Customer Service at 1-800-989-8825 or 717-767-8500.

8.2 Medicaments

The following medicaments are compatible with the DualSelect™ Dispensing System.

- Chlorhexidine Gluconate 0.12%
- Cetylpyridinium Chloride (Cepacol®)
- Essential Oils (Listerine®)
- Hydrogen Peroxide, 3% USP
- Povidone Iodine, 10% Solution
- Saline Solution
- Sanguinaria Extract (Viadent®)
- Sterile Water, USP
(for irrigating and system maintenance purposes)

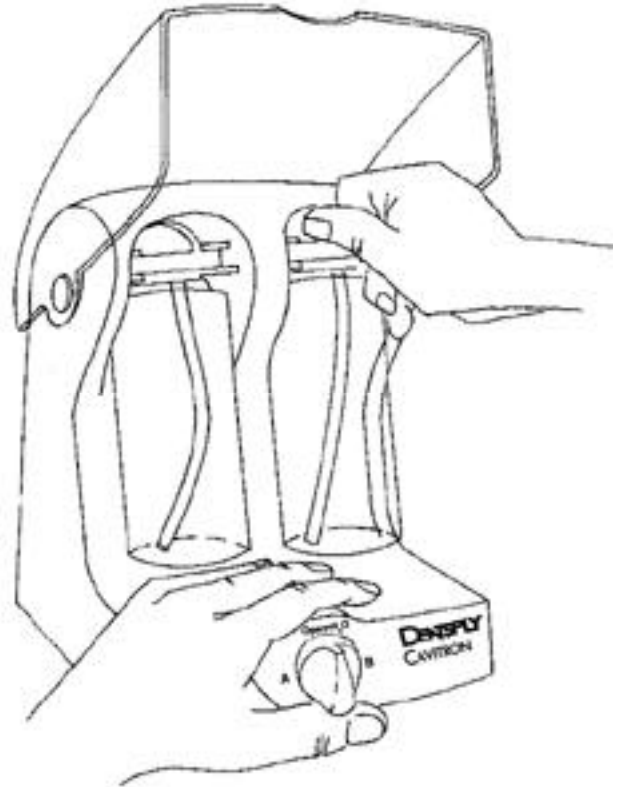
NOTE: Prolonged use of Povidone Iodine without an adequate water flush afterwards will reduce the useful life of your DualSelect™ Dispensing System.

Section 9: Operation

9.1 Filling Bottles

- Set Selector Knob on “Open • H₂O” position. Lift Shield carefully and slowly to fully open position.
- Opening the shield de-pressurizes the bottles. The sound of air pressure releasing is normal.
- Remove bottles as shown. Pull the cap grip with one hand while holding the base of the DualSelect™ Dispensing System with the other hand. The bottle should be pulled parallel from the system base.
- Unscrew cap; remove and place it upside down on a clean area to avoid contamination of the evacuation tube.
- Fill bottle to the desired level and replace cap.
- Tighten cap securely to prevent air leakage.
- Insert bottle by aligning the cap between the guide ribs and push cap onto the couplings. The couplings are loose for easy bottle alignment during insertion. Both openings in the cap must be aligned over the male couplings.
- Close Shield.

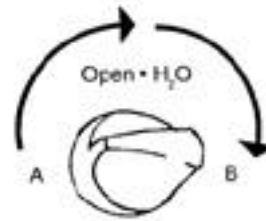
The system is now ready for operation.



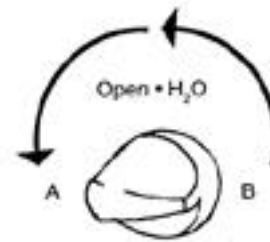
9.2 Dispenser Operations

- Turn on the scaler/JET. Fluid flow from the DualSelect™ Dispensing System is controlled by the water control on the ultrasonic scaler, Cavitron JET® Systems or PROPHY-JET® Systems.
- Turn the Selector Knob to the desired position: Bottle “A”, “Open • H₂O”, or Bottle “B”. Selector knob can only be rotated 180° through the “Open • H₂O” setting; “A” to “B” or “B” to “A”. (as shown to right)
- The scaler/JET connected to the DualSelect™ System can now receive fluid from the selected source.
- When switching between bottles “A” & “B”, allow 30 seconds for new fluid to exit handpiece.
- To use office water, set Selector Knob to “Open • H₂O” position.

NOTE: When utilizing closed line option, no water will exit the system on “Open • H₂O” position since no external water line is connected to the DualSelect™ System. The “A” or “B” position must be selected to receive fluid.



“A” to “B”



“B” to “A”

Section 10: System Care

10.1 Recommended Maintenance

Beginning the Day

1. Place bottle with sterile water in position “A.”
2. Close Shield and set Selector Knob to position “A.”
3. Operate ultrasonic scaler/JET at maximum water flow for at least one minute, per the Centers for Disease Control and Prevention (CDC) guidelines.
4. Set selector knob to “Open • H₂O” position.
5. Lift shield, remove bottle from position “A” and place it in position “B.” Repeat steps 2 & 3 in position “B.”
6. Open shield and remove bottle from “B” position.
7. Place bottle with sterile water/medicament in one or both positions, close shield and set Selector Knob to appropriate position.
8. Place a freshly sterilized insert/nozzle into the handpiece.
9. Unit is now ready for operation.

Between Patients

1. Remove ultrasonic/JET insert or air polishing nozzle from the handpiece, clean and sterilize.
2. Place bottle with sterile water in position “A.” Close Shield and set Selector Knob to position “A.”
3. Operate ultrasonic scaler/JET at maximum water flow for at least 30 seconds, as per the Centers for

Disease Control and Prevention (CDC) guidelines, to flush all previously used fluids from the system.

4. Set Selector Knob to “Open•H₂O” position and open Shield. Remove bottle with sterile water from position “A” and place it in position “B.” Repeat steps 2 & 3 in position “B.” Set selector knob to “Open•H₂O” position, open shield and remove bottle with sterile water from position “B.”
5. Clean and disinfect all surfaces of the DualSelect™ Dispensing System and attachments by applying an approved non-immersion type disinfectant solution carefully following the instructions provided by the disinfectant solution manufacturer. To clean system, generously spray disinfectant solution on a clean towel and wipe entire unit. Discard used towel. To disinfect system, generously spray disinfectant on a clean towel and wipe entire unit. Allow disinfectant solution air dry.
6. Place bottle with sterile water/medicament in one or both positions, close Shield and set Selector Knob to appropriate position.
7. Place a freshly sterilized insert/nozzle into the handpiece.
8. Unit is now ready for operation.

NOTE: Water based disinfectant solutions are preferred. Some alcohol based solutions may be harmful and may discolor plastic materials.

Ending the Day

1. Remove ultrasonic/JET insert or air polishing nozzle from the handpiece, clean and sterilize.
2. Place bottle with sterile water in position "A." Close Shield and set Selector Knob to position "A."
3. Operate ultrasonic scaler/JET at maximum water flow for at least 30 seconds to flush all previously used fluids from the system.
4. Set selector knob to "Open•H₂O" position and open Shield. Remove bottle with sterile water from position "A" and place it in position "B". Repeat steps 2 & 3 in position "B". Set Selector Knob to "Open•H₂O" position, open Shield and remove bottle with sterile water.
5. Place an empty bottle in position "A" and close Shield. Set Selector Knob to position "A" and operate ultrasonic scaler/JET for 30 seconds at maximum water flow to air purge the line. Set Selector Knob to "Open•H₂O" position and open Shield.
6. Remove empty bottle from position "A" and place it in position "B". Repeat step 5 in position "B". Set Selector Knob to "Open•H₂O" position, open Shield and remove empty bottle from position "B". At the end of the cycle, the line should be relatively dry.
7. Clean and disinfect all surfaces of the DualSelect™ Dispensing System and attachments by applying an approved non-immersion type disinfectant solution carefully following the instructions provided by the disinfectant solution manufacturer. To clean system, generously spray disinfectant solution on a clean towel and wipe entire unit. Discard used towel. To disinfect system, generously spray disinfectant on a clean towel and wipe entire unit. Allow disinfectant solution air dry.

End of the Week

1. Remove ultrasonic/JET insert or air polishing nozzle from the handpiece, clean and sterilize.
2. Place bottle with sterile water in position "A." Close Shield and set Selector Knob to position "A."
3. Operate ultrasonic scaler/JET at maximum water flow for at least 30 seconds to flush all previously used fluids from the system. Set Selector Knob to "Open•H₂O" position and open Shield.
4. Remove bottle with water from position "A" and place it in position "B". Repeat steps 2 & 3 in position "B". Remove bottle with sterile water from position "B".
5. Place an empty bottle in "A" position, close Shield and set Selector Knob to position "A". Operate ultrasonic scaler/JET for 30 seconds at maximum water flow to air purge the line. Set Selector Knob to "Open•H₂O" position and open Shield.
6. Remove empty bottle from position "A" and place it in position "B". Repeat step 5 in position "B". Remove empty bottle from position "B".
7. Prepare a 1:10 solution hypochlorite (NaOCl) solution

- by filling 5.25% sodium hypochlorite to the designated line on the disinfectant bottle. Fill the remainder of the disinfectant bottle with sterile water. Place disinfectant bottle in position "A". Close Shield and set Selector Knob to position "A". Operate ultrasonic scaler/JET at maximum water flow for at least 30 seconds until solution drains from the handpiece.
8. Set Selector Knob to "Open•H₂O" position and open Shield. Remove disinfectant bottle from position "A" and place it in position "B". Switch Selector Knob to position "B" and operate for at least 10 seconds. Set Selector Knob to "Open•H₂O" position, open Shield and remove disinfectant bottle. *Leave unit undisturbed for at least 10 minutes but no more than 30 minutes to allow sodium hypochlorite solution to soak in lines. As a suggestion, PLACE A SIGN WHICH STATES THAT THE SYSTEM IS BEING DISINFECTED WITH A STRONG DISINFECTANT AND SHOULD NOT BE USED.*
9. Fill a bottle with sterile water, place it in position "A" and close Shield. Set Selector Knob to position "A" and operate ultrasonic scaler/JET at maximum water flow for at least 30 seconds or until sodium hypochlorite odor disappears. ALL CHEMICALS MUST BE FLUSHED FROM THE SYSTEM BEFORE IT IS READY FOR PATIENT USE. Set Selector Knob to "Open•H₂O" position and open Shield. Remove bottle from position "A" and place it in position "B." Close Shield and set Selector Knob to position "B". Operate ultrasonic scaler/JET at maximum water flow for at least 30 seconds until water drains or sodium hypochlorite odor disappears. No residual odor should remain in the system.
10. Set Selector Knob to "Open•H₂O" position, open Shield and remove bottle with sterile water from position "B". Place empty bottle in position "A", close Shield and set Selector Knob to position "A". Operate ultrasonic scaler/JET system at maximum water flow for at least 30 seconds to air purge line dry. Set Selector Knob to "Open•H₂O" position and remove empty bottle from position "A" and place in position "B". Operate ultrasonic scaler/JET system at maximum water flow for at least 30 seconds to air purge line dry. At the end of the cycle, the line should be relatively dry.

NOTE: Dispose of all medicaments/disinfecting solutions from bottles on a weekly basis. Bottles may be thoroughly rinsed with soap and water. Bottles may also be placed in top rack of dishwasher. DISINFECTANT BOTTLE SHOULD BE USED FOR DISINFECTANT PURPOSES ONLY.

Section 10.2 Routine Maintenance

IMPORTANT: O-rings are a wear item and must be replaced routinely. Please contact your dealer or Cavitron Care™ for replacement Part No. 628051001.

Section 11: Troubleshooting

Although service and repair of the DualSelect™ Dispensing System should be performed by DENTSPLY® Product Services Department [See Section 11.2: Technical support Information], the following are some basic troubleshooting procedures that will help avoid unnecessary service calls.

11.1 Troubleshooting Instructions

If desired fluid does not flow from empty handpiece after operating for 60 seconds:

1. Check all connections on the DualSelect™ Dispensing System back panel to verify that lines are properly installed.
2. Check Selector Knob is in appropriate position.
3. Check selected bottle is not empty.
4. When dental office water is utilized, ensure shut-off valve is open.
5. Check cap is securely tightened on bottle.
6. Check fluid level is covering bottom of internal tube.

11.2 Technical Support Information

For technical support and assistance in the U.S., call DENTSPLY® Product Services Department at 1-800-347-7412 Monday through Friday, 8:00 AM to 5:00 PM (Eastern Time). Outside the U.S., contact your local DENTSPLY® distributor.

Section 12 : Product Specifications

Dental water line pressure	25 – 60 psig	(172 – 414 kPa)
Dental air line pressure	65 –100 psig	(448 – 690 kPa)
Output lavage pressure	30 psig	(207 kPa)
Output air pressure	65 –100 psig	(448 – 690 kPa)
Bottle capacity	480 ml	
Flow rate	15 – 55 ml/min.	
Weight	4.2 lbs	(1.9 kg)
Dimensions	Height:	10 ¼ in. (26.0 cm)
	Width:	8 in. (20.3 cm)
	Depth:	9 in. (22.9 cm)
	Air Supply Line:	96 in. (2.4 m)
	Water Supply Line:	96 in. (2.4 m)

Operating Environment

Temperature:	15 to 40 Deg. Celsius
Relative Humidity:	30% to 75% (non-condensing)

Transport and Storage Conditions

Temperature:	0 to 70 Deg. Celsius
Relative Humidity:	10% to 95% (non-condensing)
Atmospheric Pressure:	500 to 1060 kPa