

**PSP<sup>®</sup>** Pro-Select  
Platinum<sup>®</sup>  
PIEZO ULTRASONIC

*Operation and instruction manual*





# PSP<sup>®</sup> Pro-Select Platinum<sup>®</sup>

## PIEZO ULTRASONIC

*easy on you, easy on your patients*

Two instruments in one – ultrasonic scaling and heated irrigation system. PSP<sup>®</sup> is a superb piezo ultrasonic scaling solution and the only system that combines scaling with heated subgingival irrigation. Upgrade your practice today.

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## ***Product Documentation***

Date installed: \_\_\_\_/\_\_\_\_/\_\_\_\_

Installer:

Control Unit #:

Handpiece #:

Irrigator #:

Tips:

| Tip # | Date of first use |
|-------|-------------------|
|       |                   |
|       |                   |
|       |                   |
|       |                   |
|       |                   |

Handpiece cable:

| Cable # | Date started | Date finished | LED lights |
|---------|--------------|---------------|------------|
|         |              |               |            |
|         |              |               |            |
|         |              |               |            |
|         |              |               |            |
|         |              |               |            |

Solution ordered:

| NaF | CHX | Date |
|-----|-----|------|
|     |     |      |
|     |     |      |
|     |     |      |
|     |     |      |
|     |     |      |

**Overview**

**Control unit**

Front view



Back view



## Accessories

Included with the PSP®

| Item                                                                                                                                                                                                                                                                           | Re-order #                                                                                                                                                                                                           | Description                                                                                         |                                                                                       |                |                                                                                                                                                                                                                      |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|----------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Solution bottles                                                                                                                                                                                                                                                               | S40200                                                                                                                                                                                                               | Deliver purified or distilled water and antimicrobial solutions, such as chlorhexidine and fluoride |    |                |                                                                                                                                                                                                                      |
| <table><tr><td><b>Warning</b></td><td>Use distilled or sterile water only in the water bottle. Do not use tap water. This will void warranty.<br/><br/>Particulate suspensions or viscous fluids should not be used in PSP® system. This will void warranty.</td></tr></table> |                                                                                                                                                                                                                      |                                                                                                     |                                                                                       | <b>Warning</b> | Use distilled or sterile water only in the water bottle. Do not use tap water. This will void warranty.<br><br>Particulate suspensions or viscous fluids should not be used in PSP® system. This will void warranty. |
| <b>Warning</b>                                                                                                                                                                                                                                                                 | Use distilled or sterile water only in the water bottle. Do not use tap water. This will void warranty.<br><br>Particulate suspensions or viscous fluids should not be used in PSP® system. This will void warranty. |                                                                                                     |                                                                                       |                |                                                                                                                                                                                                                      |
| Scaler handpiece                                                                                                                                                                                                                                                               | S40801                                                                                                                                                                                                               | Connect handpiece to LED cable and attach tip, see page 8                                           |    |                |                                                                                                                                                                                                                      |
| Irrigator handpiece                                                                                                                                                                                                                                                            | S40851                                                                                                                                                                                                               | Connect handpiece to LED cable and attach 23g cannula, see page 8                                   |   |                |                                                                                                                                                                                                                      |
| Foot pedal                                                                                                                                                                                                                                                                     | S40901                                                                                                                                                                                                               | Hands-free method for changing modes and functions, see page 10                                     |  |                |                                                                                                                                                                                                                      |
| Universal straight tip                                                                                                                                                                                                                                                         | S30930                                                                                                                                                                                                               | Designed to remove calculus and provide lavage during scaling, see page 8                           |  |                |                                                                                                                                                                                                                      |
| 23 gauge side port cannula                                                                                                                                                                                                                                                     | 2054                                                                                                                                                                                                                 | Use for irrigation, see page 9                                                                      |  |                |                                                                                                                                                                                                                      |
| LED cable                                                                                                                                                                                                                                                                      | S40750                                                                                                                                                                                                               | Use cable to connect handpieces to control unit                                                     |  |                |                                                                                                                                                                                                                      |
| LED light attachment                                                                                                                                                                                                                                                           | S40871                                                                                                                                                                                                               | Used to illuminate mouth                                                                            |  |                |                                                                                                                                                                                                                      |

| Item                 | Re-order #                  | Description                                                                                                                                                                                                                                                                            |                                                                                       |
|----------------------|-----------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| Transformer          | 100200 (US)<br>S30500 (CAN) | Connect transformer to control unit then plug into a standard power outlet                                                                                                                                                                                                             |    |
| Tip wrench           | 100773                      | Tighten and remove tip from handpiece and measure tip wear                                                                                                                                                                                                                             |    |
| Tip grip             | 100540                      | Non-slip rubber makes tip changing easier                                                                                                                                                                                                                                              |    |
| 2.0% NaF*            | 2037MTM                     | <ul style="list-style-type: none"> <li>• Increased patient comfort because no trays are required</li> <li>• In-office rinse compatible with composite and porcelain dental restorations</li> <li>• Available in both berry or mint flavors for increased patient acceptance</li> </ul> |   |
| 0.12% Chlorhexidine* | 2193B                       | Antimicrobial rinse - irrigation solution                                                                                                                                                                                                                                              |  |

\*All medicaments packaged separately, not included in Canada.

## Getting Started

|                                                                                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|---------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Note</b>                                                                                             | <p>Before use it is recommended that you:</p> <ul style="list-style-type: none"> <li>• Lay out all of the components for assembly</li> <li>• Record date of installation and serial numbers of control unit, scaler handpiece(s), irrigator handpiece(s) and scaler tip(s)</li> <li>• Record start use date for handpiece cable(s) and medicament solutions</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| <b>Warning</b><br><br> | <ul style="list-style-type: none"> <li>• To avoid injury, read all operating instructions and safety information before using PSP®</li> <li>• Avoid electrical shock, do not plug or unplug transformer with wet hands</li> <li>• Minimize risk of short circuit and electric shock; prevent water from contacting control unit</li> <li>• Do not disassemble or alter handpiece</li> <li>• Keep away from explosive substances and flammable materials</li> <li>• Do not use this product in presence of inflammable anesthetics or gases</li> <li>• Use recommended fuse: 1 Amp / 5x20 Metric / medium time delay</li> </ul>                                                                                                                                                                                                                                                                                                                                                                     |
| <b>Attention</b>                                                                                        | <ul style="list-style-type: none"> <li>• During vibration, handpiece and cable may affect computer and LAN cables</li> <li>• Operation near a radio receiver may result in static noise</li> <li>• Users are responsible for operation control, maintenance and inspection</li> <li>• Do not subject system to dust, sulfur or salinity</li> <li>• The handpiece is designed for clinical dental use only</li> <li>• Always consider patient safety during operation</li> <li>• Check tip vibration irregularities before use on patient, if found, discontinue use immediately and contact DenMat Customer Care at 800-433-6628</li> <li>• Do not force or pull on transformer, handpiece cable or foot pedal</li> <li>• Do not use tips on metal or ceramic restorations</li> <li>• Check tip before every use <ul style="list-style-type: none"> <li>- Bent, worn or compromised tips should be replaced</li> </ul> </li> <li>• Contact DenMat at 800-433-6628 for parts and support</li> </ul> |

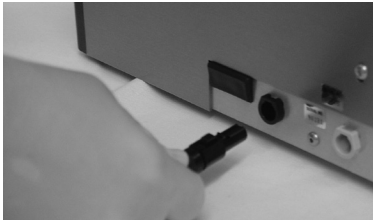
## Plug in foot control

### Warning



PSP® foot pedals are not compatible with any other brand or model. Interchanging will void warranty.

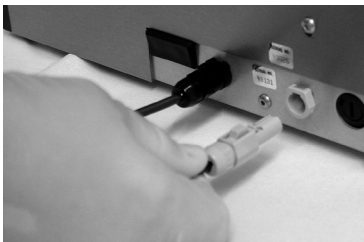
1. Plug black pedal control connector into black jack on control unit back
2. Push until clicks



3. To remove, depress locking tab and remove connector from jack

## Plug in power transformer

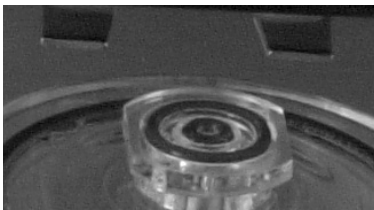
1. Plug gray transformer connector into gray jack on control unit back
2. Push until it clicks



3. Control unit will beep
4. To remove, depress locking tab and remove connector from jack

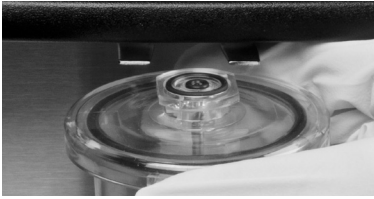
## Placing solution bottles

Solution bottles have been designed to slide easily into control unit brackets. If there is resistance, DO NOT FORCE

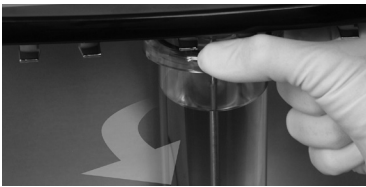


1. Fill bottle with appropriate solution. Be sure lid is securely placed on bottle

2. Align bottle with flat sides of lid perpendicular to control unit



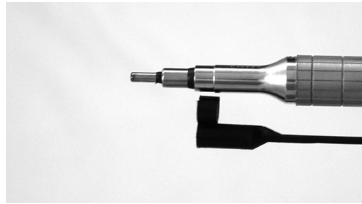
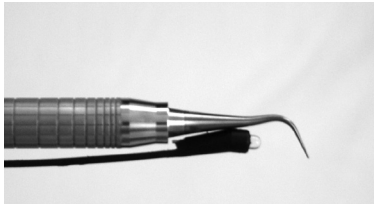
3. Grasp bottle by cap
4. Align bottle with control unit bracket. Slide onto bracket until it stops
5. Using cap, rotate bottle right 1/4 turn until it stops



6. Repeat procedure with remaining bottles/brackets

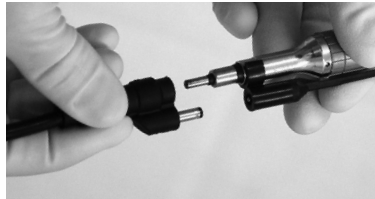
### Connect handpiece LED

1. Attach LED on the top of scaler or irrigator handpiece ring, then clip to the bottom of handpiece



### Connect handpiece cable

1. Plug handpiece cable into cable connector, ensure black ring is seated in opening
2. Plug Scaler handpiece or Irrigator handpiece onto other end of cable



### Connect scaler tip

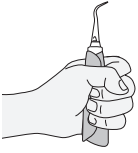
#### Attention

PSP® provides two types of handpieces; one for ultrasonic scaling (threaded); one for heated subgingival irrigation (non-threaded).

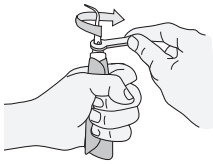
1. Use lint free cloth to wipe all surfaces of threaded scaler handpiece where tip connects
2. Use lint free cloth to wipe threaded end of scaler tip

### 3. To connect scaler tip:

- Place handpiece in center of tip grip



- Using a clockwise rotation, screw tip onto handpiece
- Align tip wrench with flat sides of tip base
- Use tip grip and wrench to tighten until tip is secure



### 4. To remove the scaler tip:

- Place handpiece in center of tip grip
- Turn wrench counterclockwise to loosen tip and remove tip with fingers

## Connect irrigator tip

### Warning



Irrigation handpiece heater has been designed for use with a 23 gauge side ported cannula. Do not use other gauge cannulas, as fluid heat variation will result.

1. Slide 23 gauge side ported cannula on irrigation handpiece
2. Using cannula cap, bend cannula for proper adaptation



### Attention

An irrigator cannula is a single patient use, disposable item and should NOT be sterilized.

## Connect handpiece to cable

### Attention

LED will remain activated for 10 seconds after foot control is released.

1. Plug handpiece into cable



2. Place handpiece in cradle when not in use

## Operation

### Turn on the PSP®

Press  or Press  to turn PSP® on or off

### Change scaler and irrigation modes

Press and hold down outer pedal, roll foot to center  or press  to switch from scaler mode to irrigator mode

### Increase power level

Press  or press 

### Decrease power level

Press  or press 

### Adjust scaler fluid flow rate

Press  then use  to increase flow and  to decrease flow

### Select solution bottles

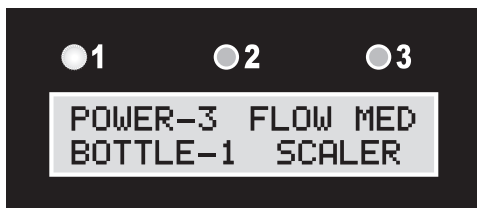
Press and hold down outer pedal, roll foot to center  or press  to change solution bottles

### Using LED handpiece light

Press foot pedal to activate light or press  to turn handpiece LED on or off

### Monitoring PSP® functions

LCD status display indicates power level, flow rate, current bottle and function mode. LED lights indicate bottle selection



## Scaler mode

### Attention

- Liquid is utilized to flush area and cool frictional heat at tooth surface and scaler tip interface. Liquid flow should be used at all times during operation.
- Use linear motion similar to hand scaling, move side of tip across tooth surface.



Horizontal orientation



Vertical orientation

- Scaler tip length wears with use.
- It is important to regularly measure tip for wear, as shown on page 15.
- Regularly inspect tip for other performance reducing flaws such as a bent tip or tip with flat side(s).
- To flush area for supragingival lavage in scaler mode set power level to “0”, no vibration, and adjust flow rate as needed.
- Do not place point of scaler tip directly against tooth surface as this could result in tooth damage.
- The last 3 millimeters of scaler tip is the effective working area.
- When scaling, use light, sweeping, eraser-like strokes.
- Do not “tap” tooth or use a start-stop motion.
- For best results, use 3 – 5 grams of lateral pressure.
- The round tip profile allows entire circumference of tip to be used for calculus removal.

1. Press  to turn on PSP® or press 

2. Select desired fluid bottle

- Press  or press  on control unit
- A double beep will be heard as you change bottles
- An LED light will illuminate to indicate active bottle and LCD will display which bottle is active

### Note

It is common for a clinician to use distilled water, sodium fluoride, or chlorhexidine for periodontal debridement procedures.

3. Set power level

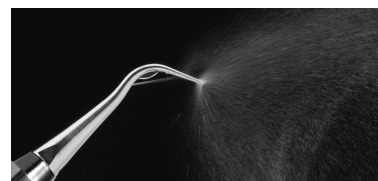
- Default power level is 3
- Power level has 11 settings shown as 0 - H on LCD
- Use   or   to change setting

### Attention

For a patient with light deposits or for a child, a power setting of “1” or “2” may be adequate.

4. Adjust flow rate

- Default flow rate is 2
- Flow rate has 10 levels; 3 low, 4 medium and 3 high
- Flow rate will be shown on LCD
- Press  and then   until liquid emits as a fine mist



5. To reset default press  and hold until four beeps are heard
6. A light pen grasp using a stabilizing fulcrum, rather than a power fulcrum, is all that is required using PSP®



## Irrigation mode

### Attention

- Attach irrigator handpiece while in scaler mode or when power is off.
- Flush distilled water for 30 seconds when finished using medicaments.

1. Place patient in a more upright position
2. Press  to turn on PSP® or press 
3. Flush irrigator handpiece with water in scaler mode
4. Select irrigator mode by using foot control or pressing  on control panel. LCD will show IRR and LCD will blink while in irrigator mode. Irrigator handpiece will automatically begin a 45 second pre-heat cycle, when pre-heat cycle is complete a beep will sound
5. Place cannula on irrigator handpiece
6. While waiting for heating cycle activation bend cannula as appropriate for access



7. Select desired fluid bottle

Use  or press  on control unit. A double beep will be heard as you change bottles. An LED light will illuminate to indicate active bottle and LCD will show which bottle is active

8. Thorough low volume vacuum is sufficient for fluid evacuation from oral cavity
9. Prolonged inactivity will de-activate heater, you must 'reboot' by pressing  off, then  again to re-activate 45-second pre-heat cycle.
10. Remove and properly discard cannula.
11. Flush irrigator handpiece with distilled water before autoclaving
12. Use  or press  to switch back to scaler mode. LCD will display scaler mode and current power level. LCD will stop blinking

### Attention

- Flow rate of liquid from irrigator handpiece is pre-set and not adjustable.
- Studies have shown heated chlorhexidine is more effective than at room temperature\*.

\*Data on file

## ***Cleaning***

### ***for Scaler Handpiece, Irrigator Handpiece, and Scaler Tips.***

| <b>Cleaning protocol (hand piece, irrigator, h/p cable, wrench, tips, tip grip, LEDs)</b> |                                    |             |                                                     |                                                                                                                                                                                                |
|-------------------------------------------------------------------------------------------|------------------------------------|-------------|-----------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Step                                                                                      | Solution                           | Time (min)  | Temperature                                         | Instructions                                                                                                                                                                                   |
| 1                                                                                         | Hospital grade enzymatic detergent | At least 10 | Warm, as delivered from the available hot water tap | Clean thoroughly - Immerse and soak for required time, scrub all external surfaces with a soft bristle brush, or other cleaning tools as needed. Inspect for visible soil on exposed surfaces. |
| 2                                                                                         | Water                              | At least 1  | Warm, as delivered from the available hot water tap | Rinse thoroughly immediately after Step 1.                                                                                                                                                     |
| 3                                                                                         | Air                                | As required | Ambient                                             | Allow to air dry in clean area. To speed dry, place in clean oven at a temperature not to exceed 40° C.                                                                                        |

### **Cleaning for Control Unit**

Cover control unit with a disposable barrier or wipe clean with a 70/30 IPA by following disinfectant manufacturer's recommendations.

After each patient medicament use and at end of day, each bottle port on control unit, handpiece cable and handpieces should be flushed with distilled water for 30 seconds. Place distilled water-filled bottles on each of the three brackets and activate the scaler mode for approximately 30 seconds and repeat process in irrigation mode. It is important no medicaments are left in control unit lines.

1. Turn off the power switch
2. Remove tip from handpiece using tip wrench and grip
3. Remove handpiece from handpiece cable by grasping the cable connector and pulling straight off connector end of handpiece, do not pull grasping cable
4. Wipe control unit and foot control with a clean cloth dampened with 70/30 IPA.
5. Do not use an abrasive wipe or cleaning solution, this may damage surface of control unit
6. Safeguards for brushed stainless steel
  - Lightly apply high quality stainless steel cleaner on a clean, soft cloth
  - Wipe in direction of metal grain. Do not use abrasive cleaning agents or pads which may scratch the finish
  - Chlorine compounds can cause stainless steel to discolor if left to stand for more than 5-10 minutes

## Solution bottles

### Warning



PSP® bottles are not autoclavable.

Bottles can be wiped clean with a pH neutral surface disinfectant by following disinfectant manufacturer's recommendations.

## Handpiece cable

After use flush water through cable, wipe cable with a clean cloth dampened with a surface disinfectant

or

- Roll into autoclave bag for sterilization, avoid crimping
- Follow the autoclave manufacturer's recommended sterilization procedures
- Cables routinely autoclaved will require more frequent replacement

## Handpieces and LED lights

1. Clean outer surface of handpiece and LED light by wiping with a soft cloth dampened with pH neutral surface disinfection solution

### Attention

- Do not use disinfection solution containing phenols.
- Do not spray cleaning solution directly on the handpiece.

2. Remove LED light from handpiece, place handpiece and LED light in a cassette or sterilization bag and seal
3. Steam sterilize in accordance with autoclave manufacturer's instructions

## Scaler tips

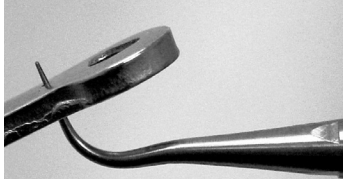
Clean, disinfect, inspect and steam sterilize, per steam autoclave manufacturer's instructions, before each use

## Tip change kit

1. Tip wrench and tip grip have been designed to be sterilized in a steam autoclave
2. Place tip wrench and tip grip in an autoclave bag and sterilize by following autoclave manufacturer's instructions.

**Any method of sterilization not specifically recommended in this Operation and Instruction Manual should be approved by DenMat prior to its use, in order to prevent voiding of warranty**

## Maintenance

| Component    | Suggested maintenance                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|--------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Control unit | Flush all bottle ports with distilled water at end of every day in both modes for 30 seconds.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Bottles      | Clean the filters on the bottom of the stems with soft bristled tooth brush every 1-2 weeks.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| Tip          | <p>Routinely check tips.</p> <p>1. Place the tip all the way into the small hole at the end of the tip wrench.</p>  <p>2. If no portion of the tip extends through the hole, then the tip is no longer functional and needs to be replaced.</p>  <p>3. Regularly inspect for bent tips or wear patterns that result in flattening of the side(s) of the tip. Tips that exhibit these characteristics need to be replaced.</p> <p>4. New tips can be purchased by calling DenMat at 800-433-6628 or at <a href="http://denmat.com">denmat.com</a>.</p> |

## Service

To return materials: Please call DenMat Customer Care at 800-433-6628 for an RMA (Return Material Authorization) number.

Shipping your product in original packaging will offer the best protection against damage during shipping.

All items returned for service must be cleaned, disinfected and sterilized before shipment.

## Limited Hardware Warranty

### What does this warranty cover?

Den-Mat Holdings LLC, warrants to the purchaser that the company's hardware will be free from defects in workmanship or material under normal use and service for the warranty period as specified in the warranty schedule below. The warranty period becomes effective on the date of delivery of the product to the original purchaser. FAILURE ON THE PART OF THE PURCHASER TO USE DISTILLED WATER OR ANY OTHER NON-APPROVED LIQUID WITH THIS PRODUCT WILL VOID THIS WARRANTY.

### What is the Company's obligation under this warranty?

During the period of this warranty, the company agrees to repair or replace, as its sole option, without charge to purchaser, any defective hardware (workmanship or material) according to the warranty schedule below:

| WARRANTY SCHEDULE                                                                                                                                                                                                             |                 |                      |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|----------------------|
| Item                                                                                                                                                                                                                          | Warranty Period | Eligible for Repair  |
| Control Unit                                                                                                                                                                                                                  | 12 months       | Yes*                 |
| Foot Pedal                                                                                                                                                                                                                    | 12 months       | No, replacement only |
| Scaler Handpiece                                                                                                                                                                                                              | 12 months       | No, replacement only |
| Irrigator Handpiece                                                                                                                                                                                                           | 12 months       | No, replacement only |
| A/C Adapter                                                                                                                                                                                                                   | 12 months       | No, replacement only |
| 6' Autoclave Cable                                                                                                                                                                                                            | 6 months        | No, replacement only |
| Bottles                                                                                                                                                                                                                       | 6 months        | No, replacement only |
| Scaler Tips                                                                                                                                                                                                                   | 6 months        | No, replacement only |
| LED Light                                                                                                                                                                                                                     | 6 months        | No, replacement only |
| Wrench                                                                                                                                                                                                                        | 6 months        | No, replacement only |
| Tip Grip                                                                                                                                                                                                                      | 6 months        | No, replacement only |
| *If the Control Unit needs to be sent in for repair, all components of the PSP must be included so that DenMat's technical support team can repair the unit and test it for functionality prior to returning to the customer. |                 |                      |

Hardware may only be returned to the company after a Return Material Authorization (RMA) number has been obtained. To obtain an RMA number and information on where to deliver the hardware, call Customer Care at 800-433-6628. Purchaser must return the hardware to the company in an adequate container for shipping, with freight and insurance prepaid. The RMA number must appear on the outside of the shipping container. Upon receipt, the company will promptly repair or replace the defective hardware, and return said hardware to purchaser, freight and insurance prepaid. The company may use reconditioned or like new parts or systems, at its sole option, when fulfilling its obligations under this warranty. In any event, the company's liability for defective hardware is limited to repairing or replacing the hardware. If hardware is replaced at the option of the company, returned hardware will become the property of the company.

**What does this warranty not cover?** This warranty is contingent upon proper use of the hardware. Normal wear to scaler tips, cables and bottles are not covered. The warranty does not cover damage due to accident, unusual physical, electrical or electromechanical stress, neglect, misuse, unauthorized sterilization procedures, improper installation, failure of electric power, air conditioning, humidity control, transportation, or tampering with or altering the hardware. The company assumes no responsibility or obligation to purchaser resulting from future hardware changes made by the company or its component suppliers, after purchase of the hardware.

**What are the limits on the company's liability?** In any case, the company shall not be liable for the loss of profits, lost savings, special, incidental, consequential, indirect or other similar damages arising from the breach of contract, negligence, or other legal theory even if the company or its agent has been advised of the possibility of such damages, or for any claim by any other party.

THIS WARRANTY IS EXCLUSIVE AND IN LIEU OF ALL OTHER REPRESENTATIONS AND WARRANTIES, EXPRESS OR IMPLIED; AND SELLER EXPRESSLY DISCLAIMS AND EXCLUDES ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE. SELLER SHALL NOT BE LIABLE FOR ANY INCIDENTAL OR CONSEQUENTIAL DAMAGES FOR BREACH OF ANY EXPRESS OR IMPLIED WARRANTY ON THIS PRODUCT.

## ***Troubleshooting Guide***

| <b>Problem</b>                                                               | <b>Solution</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
|------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| System produces water, but has no tip vibration or has pulsing tip vibration | <ul style="list-style-type: none"> <li>• Make sure cable is firmly attached to handpiece and control unit</li> <li>• Measure tip</li> <li>• Make sure tip is cleaned and tightened with tip wrench and tip grip</li> <li>• Try second cable</li> <li>• Try second handpiece</li> <li>• Try second tip</li> <li>• If problem persists, contact DenMat Customer Care at 800-433-6628</li> </ul>                                                                                                                                                                                                                                     |
| No water flow in scaler or irrigator mode                                    | <ul style="list-style-type: none"> <li>• Check to ensure that the flow rate is set on Low, Med, or Hi on the LCD display</li> <li>• Make sure the bottles are locked in and there is liquid in the bottles</li> <li>• Check flow rate directly from control unit</li> <li>• Select a different bottle, replace bottle</li> <li>• Check flow rate from the cable, try a second cable</li> <li>• Check flow rate from the handpiece, try a second handpiece</li> <li>• Check flow rate from the tip or cannula, try a second tip or cannula</li> <li>• If problem persists, contact DenMat Customer Care at 800-433-6628</li> </ul> |
| LED light not working                                                        | <ul style="list-style-type: none"> <li>• To activate handpiece LED light press center foot pad or  on the keypad</li> <li>• Make sure the metal connection at the top of the LED light is secured to the handpiece ring</li> <li>• Make sure cable is firmly attached to handpiece and control unit</li> <li>• Try a second LED light</li> <li>• Try a second cable</li> <li>• If problem persists, contact DenMat Customer Care at 800-433-6628</li> </ul>                                                                                  |
| Irrigator not working                                                        | <ul style="list-style-type: none"> <li>• Make sure irrigator assembly/set up has been precisely followed</li> <li>• Make sure system is in irrigator mode</li> <li>• Make sure irrigator handpiece is being used</li> <li>• Make sure cable is firmly attached to handpiece and control unit</li> <li>• Try a second cable</li> <li>• Try a second irrigator handpiece</li> <li>• If problem persists, contact DenMat Customer Care at 800-433-6628</li> </ul>                                                                                                                                                                    |
| Too much water                                                               | <ul style="list-style-type: none"> <li>• Lower the flow rate (see page 8) in scaler mode only</li> <li>• Make sure to use the proper cannula in irrigator mode only</li> <li>• If problem persists, contact DenMat Customer Care at 800-433-6628</li> </ul>                                                                                                                                                                                                                                                                                                                                                                       |
| Will not change to irrigation mode with foot pedal                           | <ul style="list-style-type: none"> <li>• Check foot pedal (up/down) to verify foot pedal</li> <li>• Manually change to irrigator mode with keypad</li> <li>• If problem persists, contact DenMat Customer Care at 800-433-6628</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                         |

**To contact DenMat Customer Care, call 800-433-6628**

## ***Parts, Accessories and Specifications***

### **Replacement part numbers**

When inquiring about new or replacement parts for your PSP® system, please refer to the following part numbers

|         |                                                  |
|---------|--------------------------------------------------|
| 2037MTM | 2.0% Neutral NaF irrigation solution (64oz)      |
| 2054    | Irrigator cannulas (100/Box)                     |
| 2193B   | 0.12% Chlorhexidine irrigation solution (16 oz.) |
| 100351  | Autoclave cassette                               |
| 100540  | Tip grip                                         |
| 100773  | Tip gauge/wrench                                 |
| 100200* | Power transformer                                |
| S30500* | Power transformer                                |
| S30550  | 6 ft. Autoclavable cable (non-LED)               |
| S30920  | Set of three tips (left, right, straight)        |
| S30930  | Universal straight tip                           |
| S30940  | Set of three left curve tips                     |
| S30950  | Set of three right curve tips                    |
| S30960  | Set of three universal straight tips             |
| S40200  | Solution bottle with lid assembly                |
| S40750  | LED handpiece cable                              |
| S40871  | LED light                                        |
| S40801  | Scaler handpiece                                 |
| S40851  | Irrigator handpiece                              |
| S40901  | Multi-function foot pedal                        |

\*Refer to label on back of control box

### **Specifications**

|                        |                      |
|------------------------|----------------------|
| Device classification: | Class II equipment   |
|                        | Type bf applied part |

#### **Dimensions**

|                 |                                                                           |
|-----------------|---------------------------------------------------------------------------|
| Control unit    | Length 11.25 In (28.6Cm) depth 6.2 In (15.75Cm)<br>Height 8.6 In (21.9Cm) |
| Handpiece w/tip | Length 6.5 In (16.5Cm)                                                    |

#### **Weight**

|              |                     |
|--------------|---------------------|
| Control unit | 114 oz (3228 grams) |
| Handpiece    | 1.8 oz (52 grams)   |

|                           |                |
|---------------------------|----------------|
| <b>Voltage, frequency</b> | 120v, 50/60 hz |
|---------------------------|----------------|

|                   |               |
|-------------------|---------------|
| <b>Transducer</b> | piezoelectric |
|-------------------|---------------|

|                    |                                |
|--------------------|--------------------------------|
| <b>Transformer</b> | 24vac, 50/60 hz /model #S30500 |
|--------------------|--------------------------------|

|             |                                         |
|-------------|-----------------------------------------|
| <b>Fuse</b> | 1 amp / 5x20 metric / medium time delay |
|-------------|-----------------------------------------|

|                          |               |
|--------------------------|---------------|
| <b>Power consumption</b> | 35 watts max. |
|--------------------------|---------------|

|                   |                                                      |
|-------------------|------------------------------------------------------|
| <b>Tip design</b> | Universal straight tip, similar to periodontal probe |
|-------------------|------------------------------------------------------|

|                                |                                           |
|--------------------------------|-------------------------------------------|
| <b>Tip operating frequency</b> | Approx. 45,000 Hz (vibrations per second) |
|--------------------------------|-------------------------------------------|

|                              |              |
|------------------------------|--------------|
| <b>Operating temperature</b> | 15°c to 35°c |
|------------------------------|--------------|

## Disclaimers and Special Conditions

- Equipment is not suitable for use in presence of a flammable anesthetic mixture with air OR with oxygen OR with nitrous oxide.
- Equipment is not intended to be defibrillation proof.
- Some accessories must be sterilized according to common clinical practice. Other accessories may be sterilized according to choice. No accessories are supplied in a sterile condition.
- Equipment is designed for intermittent operation. When using equipment, there is a potential for electromagnetic interference with other devices. If there is interference, operate only one of the pieces of equipment at a time or physically move them apart until the interference is no longer a problem.
- There are no waste products or residues that will be generated during the operation of equipment.
- There are user changeable accessories, but no user serviceable parts in Pro-Select Platinum equipment.
- There are no special humidity or temperature environmental conditions for transport or storage.
- Please dispose of any and all component parts of this product according to all local and national regulations governing the disposal of electronic devices.
- Service is to be performed by a qualified DenMat professional only.
- Pacemakers and Ultrasonics - Modern pacemakers are shielded against electromagnetic interference. However, most electronic devices do generate an electromagnetic field. Refer to the patient's cardiologist for approval to treat with ultrasonic instrumentation.

### Guidance and manufacturer's declaration - electromagnetic emissions

PSP® is intended for use in the electromagnetic environment specified below. The customer or the user of Pro-Select Platinum should assure that it is used in such an environment.

| Emissions Test                                                   | Compliance     | Electromagnetic environment - guidance                                                                                                                                                             |
|------------------------------------------------------------------|----------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| "RF emissions CISPR 11"                                          | Group 1        | PSP® uses RF energy only for its internal function. Therefore, its RF emissions are very low and are not likely to cause any interference in nearby electronic equipment.                          |
| "RF emissions CISPR 11"                                          | Class A        | PSP® is suitable for use in all establishments other than domestic and those directly connected to the public low voltage power supply network that supplies buildings used for domestic purposes. |
| "Harmonic emissions IEC 61000-3-2"                               | Not applicable |                                                                                                                                                                                                    |
| "Voltage fluctuations/ flicker emissions Complies IEC 61000-3-3" | Complies       |                                                                                                                                                                                                    |

### Guidance and manufacturer's declaration electromagnetic emissions

PSP® is intended for use in the electromagnetic environment specified below. The customer or the user of Pro-Select Platinum® should assure that it is used in such an environment.

| Emissions Test                                                                                     | IEC 60601 test level                                                                                                                                           | Compliance | Electromagnetic environment - guidance                                                                                                                                                                                                                                                         |
|----------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Electrostatic discharge (ESD) IEC61000-4-2                                                         | ±6kVcontact ±8kVair                                                                                                                                            | A          | Floors should be wood, concrete, or ceramic tile. If floors are covered with synthetic material, the relative humidity should be at least 30%.                                                                                                                                                 |
| Electrical fast transient/burst IEC61000-4-4                                                       | ±2kVforpowersupply lines<br>±1kVforinput/output lines                                                                                                          | A          | Mains power quality should be that of a typical commercial or hospital environment.                                                                                                                                                                                                            |
| Surge IEC61000-4-5                                                                                 | ±1kVdifferentialmode<br>±2kVcommonmode                                                                                                                         | A          | Mains power quality should be that of a typical commercial or hospital environment.                                                                                                                                                                                                            |
| Voltage dips, short interruptions and voltage variations on power supply input lines IEC61000-4-11 | <5%UT(>95% dip in UT)<br>for 0.5 cycle<br><40%UT(60% dip in UT)<br>for 5 cycle<br><70%UT(70% dip in UT)<br>for 5 cycle<br><70%UT(70% dip in UT)<br>for 5 cycle | A, C       | Mains power quality should be that of a typical commercial or hospital environment. If the user of Pro-Select Platinum requires continued operation during power mains interruptions, it is recommended that Pro-Select Platinum be powered from an uninterruptible power supply or a battery. |
| Power frequency (50/60Hz) magnetic field IEC61000-4-8                                              | 3A/m                                                                                                                                                           | A, C       | Power frequency magnetic fields should be at levels characteristic of a typical location in a typical commercial or hospital environment.                                                                                                                                                      |

NOTE: UT is the a.c. mains voltage prior to application of the test level. Compliance level A: Provides essential performance and remains safe. Compliance level C: Loss of essential performance provided the Equipment Under Test remains safe, experiences no component failure and is restorable to the pre-set state with operator intervention.





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CONFORMS TO UL STD 60601-1  
CERTIFIED TO CAN/CSA STD C22 NO.601.1



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