Copyright
© 2019 A-dec Inc. All rights reserved.
A-dec Inc. makes no warranty of any kind with regard to this material, including, but not limited to, the implied warranties of merchantability and fitness for a particular purpose. A-dec Inc. shall not be held liable for any errors contained herein or any consequential or other damages concerning the furnishing, performance or use of this material. The information in this document is subject to change without notice. If you find any problems in the documentation, please report them to us in writing. A-dec Inc. does not warrant that this document is error-free.
No part of this document may be copied, reproduced, altered, or transmitted in any form or by any means, electronic or mechanical, including photocopying, recording, or by any information storage and retrieval system, without prior written permission from A-dec Inc.

Trademarks and Additional Intellectual Property Rights
A-dec, the A-dec logo, A-dec Inspire, Cascade, Century Plus, Continental, Decade, ICX, ICV, Performer, Preference, Preference Collection, Preference ICC, Radius, and reliablecreativesolutions are trademarks of A-dec Inc. and are registered in the United States and other countries. A-dec 500, A-dec 400, A-dec 300, A-dec 200, and EasyFlex are also trademarks of A-dec Inc. None of the trademarks or trade names in this document may be reproduced, copied, or manipulated in any manner without the express, written approval of the trademark owner.
Certain touchpad symbols and icons are proprietary to A-dec Inc. Any use of these symbols or icons, in whole or in part, without the express written consent of A-dec Inc., is strictly prohibited.
Advanced Air is a registered trademark of W&H Dentalwerk Bürmoos GmbH (Austria). Acteon, Satelec, and SP Newtron are registered trademarks of Financiere Acteon SAS. Color Coding System is also a trademark of Financiere Acteon SAS. All other trademarks cited herein are the property of their respective owners.

Regulatory Information and Warranty
For required regulatory information and the A-dec warranty, see the Regulatory Information, Specifications, and Warranty document (p/n 86.0221.00) available in the Resource Center at www.a-dec.com.

Product Service
Product service is available through your local authorized A-dec dealer. To locate an authorized dealer, or for additional service information, visit www.a-dec.com or contact A-dec at 1.800.547.1883 in the USA and Canada or 1.503.538.7478 worldwide.

Product Models and Versions Covered in This Document

<table>
<thead>
<tr>
<th>Model</th>
<th>Version</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>532/533</td>
<td>B</td>
<td>Delivery System</td>
</tr>
</tbody>
</table>
Content Map

Features/Topics

1 Touchpad Content Map ............ 3
2 Master Toggle ...................... 4
3 Positive Positioning System ...... 6
4 Foot Control ......................... 7
5 Handpiece Coolant ................. 22
6 Handpiece Drive Air ............... 24
7 Self-Contained Water Bottle/ Waterline Maintenance ........... 28
8 Handpiece Tubing Flush .......... 29
9 Oil Collector ......................... 29

Utilities ................................... 31
Specifications .......................... 32
**Deluxe Plus Touchpad Content Map**

<table>
<thead>
<tr>
<th>Icon</th>
<th>Function</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>a1</td>
<td>Auxiliary Device</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td>Touchpad Lockout</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td>Dental Light</td>
<td>11</td>
</tr>
<tr>
<td></td>
<td>A/B User</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td>Cuspidor Bowl Rinse and Cupfill</td>
<td>12</td>
</tr>
<tr>
<td></td>
<td>Water and Air Coolant On/Off</td>
<td>13</td>
</tr>
<tr>
<td>m1 − m4</td>
<td>Instrument Memory Presets</td>
<td>14, 16</td>
</tr>
<tr>
<td>↑↓←→</td>
<td>Chair Manual Controls</td>
<td>9</td>
</tr>
<tr>
<td>↓→← terribly</td>
<td>Chair Presets</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td>Program Mode</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td>Handpiece Mode</td>
<td>15</td>
</tr>
<tr>
<td></td>
<td>Decrease/Increase/Selection Controls</td>
<td>15</td>
</tr>
<tr>
<td></td>
<td>Motor Forward/Reverse</td>
<td>17</td>
</tr>
</tbody>
</table>

Note: Touchpad icons and symbols are proprietary to A-dec Inc.
Operate / Adjust

Turn On/Turn Off the Air, Water, and Power

NOTE A-dec recommends that you perform a shock treatment on the dental unit waterlines before you use the system for the first time. For more information, see “Waterline Maintenance” on page 28.

Master Toggle

Use the master toggle to turn on the system air, water, and power. If there is no power to the system, verify that the power button on the chair is pressed in. This button must be on in order for the master toggle to control system power.

When to Turn Off the Power

To save energy and reduce the chance of air leaks, press the power button to turn off power at the end of the day and before longer periods of non-use.
Chair Safety Features

A-dec dental chairs and systems include safety features (like the chair stop plate) that may stop or prevent the chair from moving. This may occur due to any of the following:

• There’s an obstruction under the chair or attached module.
• The foot control disc or lever is pressed.
• A handpiece isn’t properly seated in its holder.

If the Chair Stops Unexpectedly or Won’t Move

Check for and correct any of the conditions listed above. If an obstruction is blocking chair movement, use the touchpad or footswitch to raise the chair, then remove the obstruction.

Operate the Autoclavable Syringe

To install the A-dec syringe tip, push the tip in until you feel two clicks. Press both buttons simultaneously for the air/water spray.

IMPORTANT For more details on syringe usage and maintenance, see your A-dec syringe Instructions for Use.
Position the Delivery System

**NOTE** You can place up to 4 pounds (1.8 kg) on top of the system or optional tray holder.

The positive positioning system holds the delivery system in place until you grasp the handle. A sensor detects your grip and releases the brake. To position the system:

1. Grasp the handle.
2. Move the system to the desired location.
3. Release the handle to re-engage the brake.

Position the Handpiece Holders

**CAUTION** Do not use a handpiece or other clinical device to adjust the holder or you may damage that device.

On 532 Traditional delivery systems, you can independently adjust each handpiece holder. Use your hand (or A-dec syringe as leverage) to adjust the holder until you achieve the desired angle.
Operate the Foot Control

To activate a handpiece, lift it from the holder or pull the whip forward. Use the foot control to perform the desired handpiece operation.

<table>
<thead>
<tr>
<th>Control</th>
<th>Operation</th>
<th>Procedure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Disc Foot Control</td>
<td>Run a handpiece.</td>
<td>Press on the disc. Push down to increase speed.</td>
</tr>
<tr>
<td></td>
<td>Run a handpiece with or without water coolant.</td>
<td>Press ♦️ on the touchpad to turn the coolant on or off, or flip the wet/dry toggle (which works as a three-way switch in conjunction with the touchpad). Then press on the disc.</td>
</tr>
<tr>
<td></td>
<td>Run the optional accessory/chip blower.</td>
<td>Press the accessory/chip blower button.*</td>
</tr>
<tr>
<td></td>
<td>Operate the intraoral camera.</td>
<td>Press on the disc to capture an image.*</td>
</tr>
<tr>
<td>Lever Foot Control</td>
<td>Run a handpiece with water coolant.</td>
<td>Move the lever to the left. Move farther to increase speed.</td>
</tr>
<tr>
<td></td>
<td>Run a handpiece without water coolant.</td>
<td>Move the lever to the right. Move farther to increase speed.</td>
</tr>
<tr>
<td></td>
<td>Run the optional accessory or chip blower.</td>
<td>Press the accessory/chip blower switch.*</td>
</tr>
<tr>
<td></td>
<td>Operate the intraoral camera.</td>
<td>Move the lever to the left or right to capture an image.*</td>
</tr>
</tbody>
</table>

* Contact your authorized A-dec dealer for questions about the operation or configuration of your integrated A-dec sanctioned clinical devices.

**NOTE** On systems with a lever foot control, water coolant cannot be activated, or deactivated, from the touchpad.

**NOTE** The lever foot control wet/dry function can be reversed by a technician (change left direction to dry, right direction to wet). For more details, contact your authorized A-dec dealer.
Operate Touchpad Lockout, User Setting, and Auxiliary Device Control

<table>
<thead>
<tr>
<th>Icon/Function</th>
<th>Actions/Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>Touchpad Lockout</td>
<td>Press and hold ( \mathbb{L} ) to activate the touchpad lockout, which allows you to barrier protect and clean/disinfect the touchpad without unintentionally activating any commands. A small light above the icon flashes while the touchpad is locked for 15 seconds.</td>
</tr>
<tr>
<td>A/B User</td>
<td>Two sets of customizable settings (A and B) are available. To select a different user setting, press ( \mathbb{M} ). The selected user setting is indicated by the A or B in the lower left corner of the touchpad display.</td>
</tr>
<tr>
<td>Auxiliary Device On/Off</td>
<td>If your system includes an A-dec relay module and a connected device, press ( \mathbb{A} ) to turn on or turn off that device. A small light above the icon illuminates when the device is on.</td>
</tr>
</tbody>
</table>

**NOTE** If two operators use the delivery system, be sure to select the correct user setting (A or B) before changing any memory settings. The selected set is indicated by the A or B in the lower-left corner of the touchpad display.
Position the Chair with Manual Controls

**IMPORTANT** The A-dec touchpad and footswitch move the chair in the same manner. For more details about footswitch controls, see your chair Instructions for Use.

**WARNING** Ensure that the patient is positioned safely before using the manual or preset chair controls. Never leave the patient unattended while the chair is in motion. Always take extra care with small children and patients with limited mobility.

To stop the chair at any point during preset movement, press any chair positioning button on the footswitch or touchpad.

**NOTE** If you would like to adjust the maximum height of your chair, contact your local authorized A-dec dealer.

<table>
<thead>
<tr>
<th>Icon/Function</th>
<th>Actions/Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>↑ Base Up</td>
<td>Press and hold ↑ to raise the chair base.</td>
</tr>
<tr>
<td>↓ Base Down</td>
<td>Press and hold ↓ to lower the chair base.</td>
</tr>
<tr>
<td>→ Back Up</td>
<td>Press and hold → to raise the chair back.</td>
</tr>
<tr>
<td>← Back Down</td>
<td>Press and hold ← to lower the chair back.</td>
</tr>
</tbody>
</table>
Position the Chair with Preset Controls

Press \( \downarrow \), \( \uparrow \), or \( \rightarrow \) (also \( \leftarrow \) on the standard touchpad) to move the chair to a preset position. See the table (below left) for factory settings.

**Customize the Chair Preset Positions**

To customize chair presets \( \downarrow \), \( \uparrow \), and \( \rightarrow \):

1. Position the chair as desired.
2. Press and hold \( \downarrow \) until you hear one beep, which indicates program mode is on.
3. Within five seconds, press the chair preset you wish to change (for example, press \( \rightarrow \)). Three beeps confirm that your new setting is saved.

**Customize the X-Ray/Rinse Chair Preset**

The factory preset \( \rightarrow \) moves the chair and patient into an upright position for x-rays or cuspidor access. A second press of \( \rightarrow \) returns the chair to the previous position.

You can also set \( \rightarrow \) to function as a customized chair preset position. To change its function:

1. Press \( \downarrow \) and \( \rightarrow \) at the same time and hold for three seconds.
   - One beep indicates \( \rightarrow \) is set as another customizable chair preset.
   - Three beeps indicate that \( \rightarrow \) is set as the x-ray/rinse factory preset (which toggles between the x-ray/rinse position and the previous chair position).
2. If you set \( \rightarrow \) as another customizable chair preset and want to assign a different chair position, follow the steps outlined above in “Customize the Chair Preset Positions.”

<table>
<thead>
<tr>
<th>Icon</th>
<th>Preset Name</th>
<th>Factory Setting</th>
</tr>
</thead>
<tbody>
<tr>
<td>Entry/Exit</td>
<td>Positions the chair for patient entry/exit.</td>
<td></td>
</tr>
<tr>
<td>Treatment 1</td>
<td>Positions the chair base and back down.</td>
<td></td>
</tr>
<tr>
<td>Treatment 2</td>
<td>Positions the chair base down and the back partially up.</td>
<td></td>
</tr>
<tr>
<td>X-Ray/Rinse</td>
<td>Moves the chair to either x-ray or rinse position. A second press moves the chair to the previous position.</td>
<td></td>
</tr>
</tbody>
</table>
**Operate the Dental Light**

**Turn On/Turn Off the Dental Light and Change the Intensity**
- To turn on the light, press \( l \).
- To change the light intensity mode, press \( l \). The indicator light flashes continuously in cure-safe and composite/low modes.
- To turn the light off, press and hold \( l \).

**Set the Dental Light Auto On/Off Function**
When you press \( ~ \) (also \( ~ \) on the standard touchpad), the dental light automatically turns on once chair motion stops. The light turns off when you press \( v \) or \( o \).

To disable or enable this function, press and hold \( l \) and \( p \) at the same time.
- One beep indicates the function is off.
- Three beeps indicate the dental light auto on/off function is on.

**IMPORTANT** For more details on dental light operation, see your dental light Instructions for Use.
Operate the Cuspidor

Turn On/Turn Off Cupfill and Bowl Rinse

Use the icons on the touchpad (💧, ⚪), or the buttons on the cuspidor (💧, ⚪) to control cupfill and bowl rinse functions.

<table>
<thead>
<tr>
<th>Icon/Function</th>
<th>Actions/Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>💧 (or ⚪)</td>
<td>• Press once for a timed operation. The factory preset is a 2.5 second fill. • Press and hold for manual operation.</td>
</tr>
<tr>
<td>⚪ (or 🆕)</td>
<td>• Press once for a timed operation. The factory preset is a 30 second rinse. • Press twice for continuous flow. Then press once to stop the flow. • Press and hold for manual operation. Release to stop the flow.</td>
</tr>
</tbody>
</table>

Customize Cupfill and Bowl Rinse Timing on the Touchpad

1. Press and hold 🆕 until you hear one beep, which indicates program mode is on.
2. Within five seconds, press and hold 🆕 or 💧 for the desired time.
3. Three beeps confirm that your new settings are saved.

Customize Cupfill and Bowl Rinse Timing on the Cuspidor

1. Press and hold 🔷 and 🆕 under the cupfill spout until you hear one beep, which indicates program mode is on.
2. Within five seconds, press and hold 🔷 or 🆕 for the desired time.
3. Three beeps confirm that your new settings are saved.
Activate the Air and Water Coolant

To see and change basic air handpiece functions on the touchpad, lift the handpiece from the holder or pull the whip forward. Basic air appears on the display screen any time a standard air-driven high- or low-speed handpiece is detected.

<table>
<thead>
<tr>
<th>Icon/Function</th>
<th>Actions/Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water Coolant On/Off*</td>
<td>Press ⌀. The icon appears on the left side of the screen when the water coolant is on.</td>
</tr>
<tr>
<td>Air Coolant On/Off</td>
<td>Press ⚫. The icon appears on the left side of the screen when the air coolant is on.</td>
</tr>
<tr>
<td>Euro Mode* On/Off</td>
<td>Euro mode allows you to turn on or turn off water and air coolant functions at the same time with one press of either icon. Press and hold ⚫ and ⌀ (or ⚫ and ⚫) for three seconds. Three beeps indicate that the Euro mode is on. One beep indicates that it is off.</td>
</tr>
</tbody>
</table>

*NOTE The touchpad does not control water coolant on systems with a lever foot control. If you press ⌀ on the touchpad, ⌀ will appear on (or disappear from) the display screen—whether water coolant is on or off at the handpiece. Instead, use the lever (move left or right) for wet or dry handpiece operation. For this reason, Euro Mode is not available on systems with a lever foot control.
Operate Advanced Air® Handpieces

**Advanced Air Memory Presets**

In addition to basic handpiece controls, Advanced Air adds memory presets and handpiece sensitivity settings so you can save maximum bur speed and other function presets similar to an electric motor. Use the foot control to modulate bur speeds from 60,000 rpm up to your selected maximum bur speed shown on the display.

The factory default settings provide the following memory presets:

<table>
<thead>
<tr>
<th>Memory Preset</th>
<th>Maximum Bur Speed</th>
<th>Handpiece Mode</th>
<th>Air Coolant</th>
<th>Water Coolant</th>
</tr>
</thead>
<tbody>
<tr>
<td>m1</td>
<td>60,000 rpm</td>
<td>Torque</td>
<td>On</td>
<td>On</td>
</tr>
<tr>
<td>m2</td>
<td>160,000 rpm</td>
<td>Torque</td>
<td>On</td>
<td>On</td>
</tr>
<tr>
<td>m3</td>
<td>240,000 rpm</td>
<td>Torque</td>
<td>On</td>
<td>On</td>
</tr>
<tr>
<td>m4</td>
<td>320,000 rpm</td>
<td>Torque</td>
<td>On</td>
<td>On</td>
</tr>
</tbody>
</table>

**NOTE** The Advanced Air system provides a maximum bur speed up to 320,000 rpm. However, handpiece performance may vary due to compressor performance, system air flow variances, and maintenance.

**NOTE** The minimum bur speed with Advanced Air is 60,000 rpm. When the maximum bur speed in the memory preset is set to 60,000 rpm, the foot control essentially becomes an on/off switch for the handpiece.
Operate Advanced Air Handpieces (continued)

Customize the Advanced Air Memory Presets

Follow the steps below to customize the Advanced Air memory presets:

<table>
<thead>
<tr>
<th>Icon/Function</th>
<th>Actions/Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>m1 — m4</td>
<td>Each A/B user setting provides four memory presets for each handpiece. To change a preset:</td>
</tr>
<tr>
<td>Instrument Memory Presets</td>
<td></td>
</tr>
<tr>
<td>1. Lift the handpiece from the holder or pull the whip forward.</td>
<td></td>
</tr>
<tr>
<td>2. Press — or + to change your preferred maximum bur speed, press ⚦ or ⚧ to turn on/turn off the water or air coolant, and press ⤷ to change the handpiece mode.</td>
<td></td>
</tr>
<tr>
<td>3. Press and hold ⤷ until you hear one beep, which indicates program mode is on.</td>
<td></td>
</tr>
<tr>
<td>4. Within five seconds, press m1, m2, m3, or m4 to save the settings under your preferred memory preset. Three beeps confirm that your new settings are saved.</td>
<td></td>
</tr>
</tbody>
</table>

Handpiece Mode

Press ⤷ to change the handpiece operating mode:

**Advanced Air Torque Mode** — Provides immediate high torque (as soon as the bur is under a load). Use when you require a high removal rate.

**Advanced Air Tactile Mode** — Provides a softer ramp-up to high torque when the bur is under a load. Use to finish steps where tactile feedback is more critical.

**Advanced Air Basic Mode** — Provides the ability to mimic basic air operation. Eliminates presets and touchpad speed control. Also allows for the use of non-Advanced Air handpieces in this position.
Operate Electric Handpiece Functions

Standard Mode Memory Presets
To activate the electric handpiece, lift it from the holder or pull the whip forward. The touchpad screen displays the previous settings used for that handpiece position. Use the memory presets to control motor speed and air/water coolant. Standard mode provides four factory presets with the following values:

<table>
<thead>
<tr>
<th>Memory Preset</th>
<th>Maximum Motor Speed</th>
<th>Air Coolant</th>
<th>Water Coolant</th>
</tr>
</thead>
<tbody>
<tr>
<td>m1</td>
<td>2,000 rpm</td>
<td>On</td>
<td>On</td>
</tr>
<tr>
<td>m2</td>
<td>10,000 rpm</td>
<td>On</td>
<td>On</td>
</tr>
<tr>
<td>m3</td>
<td>20,000 rpm</td>
<td>On</td>
<td>On</td>
</tr>
<tr>
<td>m4</td>
<td>40,000 rpm</td>
<td>On</td>
<td>On</td>
</tr>
</tbody>
</table>

Customize the Standard Mode Memory Presets
You can customize the memory presets with your own specific values. In standard mode, each A/B user setting provides four memory presets for each handpiece. The endodontics mode offers an additional four presets per handpiece for each A/B user setting.

To change a preset:
1. Press “—” or “+” to change your preferred maximum motor speed.
2. Press 🔄 and 🌪 to turn on/turff off water or air coolant.
3. Press and hold ⏯ until you hear one beep, which indicates program mode is on.
4. Within five seconds, press m1, m2, m3, or m4 to save the settings under your preferred memory preset. Three beeps confirm that your new settings are saved.
Operate Electric Handpiece Functions (continued)

Change the Motor Direction

Press to change the motor direction. In reverse mode, the screen icon flashes continuously. Forward/reverse cannot be saved as part of the standard mode settings. The direction defaults to forward after you return the handpiece to its holder or turn off the system.

NOTE You can also use the foot control to switch between forward and reverse. When the motor has stopped, tap the accessory/chip blower button to change the direction. For more information, see page 7.
Operate Electric Handpiece Functions (continued)

Customize the Endodontics (Endo) Mode Memory Presets

The endo mode allows you to change a number of settings based on the specific file and desired handpiece behavior. Icons on the touchpad display screen reflect the settings.

NOTE For more information regarding speed and torque limits for a specific file, consult the file manufacturer.

To customize the endo mode settings:
1. Lift the handpiece from the holder or pull the whip forward.
2. If the touchpad screen does not display the endo mode, press 🔄.
3. To change settings in endo mode, press − or +. A white reverse video box is displayed on the touchpad screen.
4. Press ↑, ↓, ←, or → to move from setting to setting on the touchpad screen.
5. Press — or + to change the setting as desired.
6. Press and hold 🔄 until you hear one beep, which indicates program mode is on.
7. Within five seconds, press m1, m2, m3, or m4 to save the settings under your preferred memory preset. Three beeps confirm that your new settings are saved.

For more details on these settings, see “Additional Details for Endo Mode Settings” on page 19.
Operate Electric Handpiece Functions *(continued)*

### Additional Details for Endo Mode Settings

<table>
<thead>
<tr>
<th>Icon</th>
<th>Setting</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image" alt="Speed" /></td>
<td>Speed</td>
<td>Setpoint for the file speed limit. For more information, consult your file manufacturer.</td>
</tr>
<tr>
<td><img src="image" alt="Torque" /></td>
<td>Torque</td>
<td>Setpoint for the file torque limit. For more information, consult your file manufacturer.</td>
</tr>
<tr>
<td><img src="image" alt="Torque Units" /></td>
<td>Torque Units</td>
<td>Toggles between newton centimeters (N·cm) and gram centimeters (g·cm). When you change this setting, the change applies to all endo memory presets.</td>
</tr>
</tbody>
</table>
> *Note: 1 N·cm = 102 g·cm.*
| ![Ratio](image) | Ratio     | Indicates the handpiece ratio or handpiece model. For more information, consult your handpiece manufacturer.                               |
| ![Beeper](image) | Beeper    | When active, the warning beep sounds when you approach torque limit and beeps twice when the file auto reverses. When you change this setting, the change applies to all endo memory presets. |
| ![Handpiece Light](image) | Handpiece Light | Indicates if the handpiece light is on in the endo mode.                                                                                  |
| ![Auto Modes](image) | Auto Modes | The auto mode indicator is located inside the forward/reverse indicator. When you change this setting, the change applies to all endo memory presets. |
> *Note: If the endo file gets stuck, the auto forward cycle repeats three times before the motor stops.*

**WARNING** Endo file settings must be set according to the file manufacturer. File speed limits, torque limits, supported gear ratios, and supported auto modes should be provided in the endo file Instructions for Use. If these settings are not set properly, patient injury may occur. For more information, consult with your file manufacturer.

**NOTE** If the endo file gets stuck, the auto forward cycle repeats three times before the motor stops.
Operate Ultrasonic Instrument Functions

NOTE The A-dec foot control provides variable scaler output up to the maximum power limit on the display. Most tabletop devices operate differently and use on/off switching.

Ultrasonic Memory Presets

To activate the device, lift it from the holder. The previous settings used for that handpiece position appear on the display screen. Standard mode provides four factory presets with the following values:

<table>
<thead>
<tr>
<th>Memory Preset</th>
<th>Maximum Power Limit / Acteon Tip Color*</th>
<th>Water Coolant</th>
</tr>
</thead>
<tbody>
<tr>
<td>m1</td>
<td>25% / Green</td>
<td>On</td>
</tr>
<tr>
<td>m2</td>
<td>50% / Yellow</td>
<td>On</td>
</tr>
<tr>
<td>m3</td>
<td>75% / Blue</td>
<td>On</td>
</tr>
<tr>
<td>m4</td>
<td>100% / Orange</td>
<td>On</td>
</tr>
</tbody>
</table>

Customize the Ultrasonic Memory Presets

To customize an ultrasonic instrument preset:

1. Lift the instrument from the holder or pull the whip forward.
2. Press — or + to change the power limit percentage. With Acteon ultrasonic devices, the tip color changes automatically with power limit changes.
3. Press † to turn on or turn off water coolant.
4. Press and hold P until you hear one beep, which indicates program mode is on.
5. Within five seconds, press m1, m2, m3, or m4 to save the settings under your preferred memory preset. Three beeps confirm that your new settings are saved.

*NOTE Tip color settings are only compatible with the Acteon Color Coding System™ and Newtron® tips. For more information, contact your local authorized A-dec dealer.
**Touchpad Help Messages**

The touchpad displays help messages for disabled operations and other errors. When a help message appears, take note of the message, as well as the function you were performing, in case service is required.

For more details on help messages, see the *Regulatory Information, Specifications, and Warranty* document (p/n 86.0221.00), which is available in the Resource Center at [www.a-dec.com](http://www.a-dec.com).

---

**Other Handpiece and Accessory Settings**

Contact your authorized A-dec dealer to change any of these handpiece and accessory settings, if applicable:

- **Auto-Off Delay** – determines how long the handpiece light remains on if the foot control is released. The default setting is 5 seconds.
- **On When Selected** – specifies whether the handpiece light turns on or remains off (until the foot control is pressed) when the handpiece is removed from the holder.
- **On in Endo** – specifies whether the handpiece light turns on or off when the endo mode is selected. The default setting is off.
- **Voltage Adjustment** – allows for customized light output voltage for each handpiece position. The default setting is 3.2 VDC.
Adjust the Handpiece Coolant Spray

**CAUTION** When performing this procedure, do not attempt to completely shut off the water or air flow. The adjustment knobs are not designed to completely shut off flow and can damage the control block if you apply too much force.

The air coolant knob on your delivery system adjusts air flow to all handpiece positions simultaneously. Each water coolant knob adjusts water flow to a single handpiece position.

Use the following process to adjust for the desired handpiece coolant atomization:

1. Ensure that a bur is inserted into each handpiece you expect to adjust.
2. Lift the handpiece from the holder or pull the whip forward.
3. Press \( \text{on the touchpad to turn off the air coolant.} \)
4. Do one of the following:
   - On systems with a disc foot control—use the touchpad or wet/dry toggle to turn on the water coolant, then press the disc all the way down.
   - On systems with a lever foot control—move the lever all the way to the left to run the handpiece at full speed with water.
5. Gently turn the water coolant adjustment knob (to the corresponding handpiece) clockwise until coolant flow stops. Then slowly turn the knob counterclockwise until water droplets are expelled from every water port on the handpiece head.
6. Release the foot control and return the handpiece to the holder.
7. Repeat steps 2 through 6 for each handpiece.

*Continue with step 8 on page 23.*
Adjust the Handpiece Coolant Spray (continued)

8. Lift the handpiece from the holder, or pull the whip forward, and press the touchpad to turn on the air coolant.

9. Fully press the foot control.

10. Locate the air coolant adjustment knob. Adjust the air coolant until you achieve the desired atomization at the cutting surface of the bur. Counterclockwise increases flow.

**CAUTION** Do not continue turning the air coolant adjustment knob counterclockwise after the air coolant stops increasing. The stem may come out of the control block.

11. Use the water coolant adjustment knob, as needed, to make any additional fine adjustments in water coolant output.

12. Repeat steps 8 through 11 for each handpiece.
Adjust Handpiece Drive Air Pressure

**CAUTION** Exceeding the manufacturer’s recommended drive air pressure increases the risk of damage and may significantly decrease the life of your handpiece components. For the proper drive air pressure, see the handpiece manufacturer’s Instructions for Use.

**NOTE** Drive air pressure varies throughout the system and can be more than 5 psi (34 kPa) lower at the handpiece than what is shown on the touchpad. To achieve the most accurate drive air measurement, use a handpiece pressure gauge attached to the handpiece tubing. To order a gauge, or for more information, contact your local authorized A-dec dealer.

**TIP** When you lift the handpiece, or pull the whip forward, a blue light around the water coolant adjustment knob indicates which handpiece is active. Use the light to locate the corresponding drive air adjustment stem under the delivery system.
Adjust Handpiece Drive Air Pressure *(continued)*

A handpiece must be attached to the tubing to read the pressure.

For systems with a **disc foot control:**

1. Lift the handpiece from the holder or pull the whip forward.
2. Use the touchpad or wet/dry toggle to turn off the water coolant.
3. Press — and + at the same time to show the drive air pressure on the touchpad.
4. Locate the drive air pressure adjustment stem, under the delivery system, that corresponds with the active handpiece.
5. Fully press the foot control to run the handpiece and adjust the drive air pressure to meet the manufacturer’s specifications.

For systems with a **lever foot control:**

1. Lift the handpiece from the holder or pull the whip forward.
2. Press — and + at the same time to show the drive air pressure on the touchpad.
3. Locate the drive air pressure adjustment stem, under the delivery system, that corresponds with the active handpiece.
4. Move the foot control lever all the way to the right to run the handpiece at full speed without water.
5. Adjust the drive air pressure to meet the manufacturer’s specifications.
Level the Control Head

If the system is tilted front to back or side to side, level the control head.

1. Place the control head in its normal operating position, then raise the chair.
2. Place a level on top of the system.
3. Use a 3/16" hex key to loosen the adjustment screw just enough to move the control head.
4. Level the control head side to side and front to back.
5. Tighten the adjustment screw.
Adjust the Tray Holder Mount Rotation Tension

If the tray holder mount is difficult to move, or too loose, use a 7/32" hex key to adjust the rotation tension. To make the adjustment easier on the upper tray holder, hold the post while you adjust the tension screw. Clockwise increases the tension.

Upper Tray Holder Mount

Lower Tray Holder Mount (Continental® Delivery Systems Only)
Clean / Maintain

Protect with Barriers

A-dec recommends barrier protection for all applicable touch and transfer surfaces. Touch surfaces are areas that come into contact with hands and become potential cross-contamination points during dental procedures. Transfer surfaces are areas that come into contact with instruments and other inanimate objects.

In the USA, barriers must be produced under the Current Good Manufacturing Practice (CGMP) as specified by the U.S. Food and Drug Administration (USFDA). For regions outside the USA, refer to the medical device regulations specific to your location.

**IMPORTANT** For recommendations on cleaning and chemical disinfection of touch and transfer surfaces (where barrier protection is not applicable or when barriers are compromised), please see the A-dec Equipment Asepsis Guide (p/n 85.0696.00).

Waterline Maintenance

A-dec recommends that you perform a shock treatment on the dental unit waterlines before you use the system for the first time.


**IMPORTANT** For complete details on how to maintain good water quality in your system, see the Instructions for Use for ICX and your self-contained water bottle:

- A-dec ICX .............................................................. p/n 86.0613.00
- A-dec Self-Contained Water System ........ p/n 85.0609.00
- Waterline Maintenance Guide .................. p/n 85.0983.00

**NOTE** For proper use and disposal of barriers, see the barrier manufacturer’s Instructions for Use.
Flush the Handpiece Tubing

Use the flush toggle to move a high volume of water through the handpiece tubing. To flush the tubing:

1. Disconnect the handpieces.
2. Hold all of the handpiece tubing that uses water coolant over a sink, cuspidor bowl, or basin.
3. Flip the flush toggle up and hold for 20–30 seconds.

**NOTE** Flush all handpiece tubing (air and waterlines) in accordance with the regulations in your area. If no regulations exist, flush the tubing for a minimum of 20–30 seconds at the beginning of the day and after each patient.

Maintain the Oil Collector

Service the oil collector on the delivery system once a week for normal use and more often for heavier use. To service:

1. Turn the oil collector housing key clockwise to unlock, then pull out the housing from the control head.

**CAUTION** Take care not to grab the delivery system handle while the oil collector housing is removed. The cotton roll will eject if you activate the positive positioning system.

2. Remove and replace the old cotton gauze (use two 2" x 2" [51 mm x 51 mm] pads folded in half).

**NOTE** Do not replace the cotton roll in the right corner of the oil collector. This is a brake muffler that will rarely need replacement. For more information, see your local authorized A-dec dealer.

3. Reinsert the housing and turn the key counterclockwise to lock.
Bulb for Fiber-Optic Tubing

To replace the bulb in your fiber-optic 5-hole silicone or vinyl tubing:

1. Disconnect the handpiece and quick-connect coupling from the tubing.
2. Pull back the metal handpiece nut.
3. Slide back the metal portion of the handpiece terminal (silicone tubing only).
4. Replace the bulb.
5. Reinsert the metal portion of the terminal into the plastic portion (silicone tubing only).
6. Carefully slide the handpiece nut back over terminal.

IMPORTANT To replace the bulb in your handpiece or quick-disconnect coupling, see your handpiece Instructions for Use.
Access the Utilities

CAUTION When you remove or replace the cover, take care not to damage any wiring or tubing. Verify that the cover is secure after you replace it.

The system utilities are located in the contoured floor box under your chair and typically include the electrical outlet, as well as the system hookups for air, water, and vacuum. To access, lift the cover up and off the floor box frame. For maintenance, contact your local authorized A-dec dealer.
Specifications

System Accessory Load

Maximum accessory load capacity: 4 lb (1.8 kg)
(in addition to integrated accessories)

**IMPORTANT** For electrical specifications, identification of symbols, and other regulatory requirements, see the *Regulatory Information, Specifications, and Warranty* document (p/n 86.0221.00), which is available in the Resource Center at [www.a-dec.com](http://www.a-dec.com).

**NOTE** Specifications are subject to change without notice. Requirements may vary depending on your location. For more information, contact your authorized A-dec dealer.