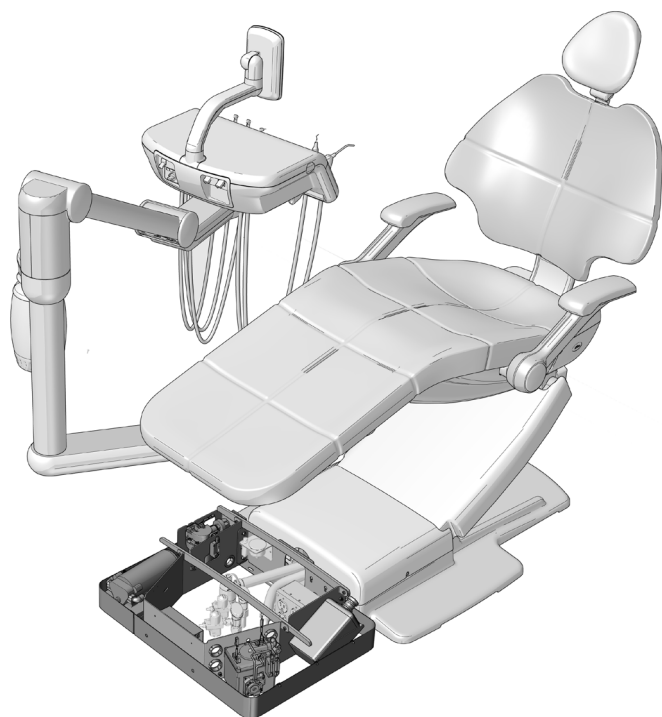


# **A-dec® Maintain Dental Unit Waterline (DUWL) System**












## **Introduction**








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The A-dec Maintain Integrated Dental Unit Waterline (DUWL) Treatment System is performed by dosing A-dec Maintain solution into the water supply for A-dec 300/500 delivery systems.











## Identification of Symbols











These symbols appear on the actual product or are used in documentation to alert the user about cautions, warnings, hazards, or tips. Additional symbols are included in 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).

Symbol	Description
	CE mark.
	Medical device.
	Item number.
	Serial number.
	Manufacturer.
	Date of manufacture.
	Follow instructions for use.
	Follow instructions for use with reference to eIFU.
	Temperature limit.






Symbol	Description
	Beware of electric shock.
	Humidity limit.
	Tank empty.
	End device ready for operation.
	Loudspeaker.
	Sound.
	Inclination / slope.
	Maximum installation altitude.
	Blower / fan.
	On   Off.
	Separate collection of electrical/electronic equipment (WEEE).

## Identification of Symbols *(continued)*

Symbol	Description
	Protective earthing.
	Protection class II.
	Applied part type BF.
	Applied part type B.
	Responsible for the translation.
	Observe instructions for use.
	Use eye protection.
	Use mouth and nose protection.
	Unplug from mains.
	Warning of electrical voltage.

Symbol	Description
	Information.
	Download.
	Do not cut.
	Maintenance / service.
	Stop operation.
	Protect from heat / Protect from sunlight.
	Protect from moisture / Store in a dry place.
	Fragile.
	Package orientation at the top.
	Fault on end device.

## Identification of Symbols *(continued)*

Symbol	Description
	Name and address of the authorized representative's registered office in Switzerland.
	Use hand protection.
	Unique identifier of a medical device.
	Stacking limit n = (quantity).
	UDI marking with standard compliant HIBC data content.

## Operate the Treatment System

Use the delivery system master toggle to turn the DUWL treatment system on and off.

### Turn On/Turn Off the System



**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 “Shock the System” on page 7.

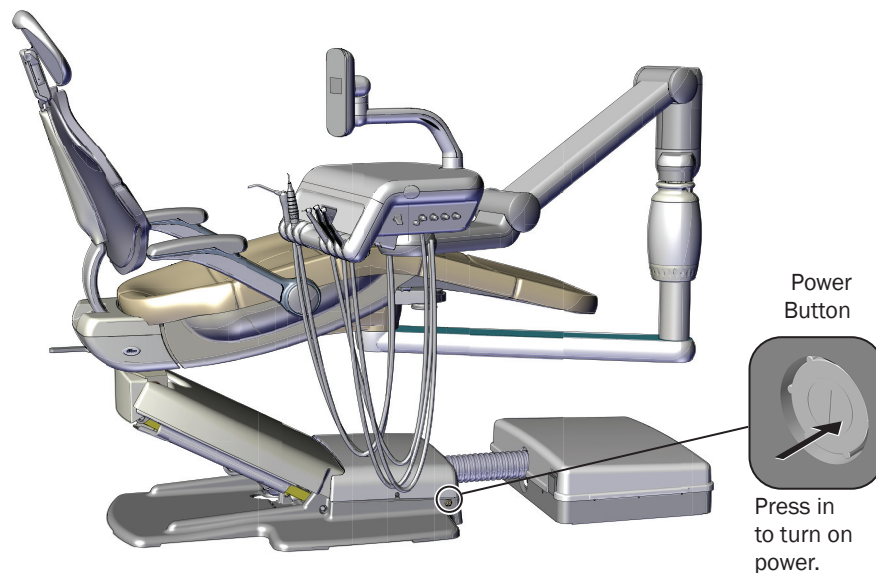


### Master Toggle

Use the master toggle to turn on the DUWL system and the delivery 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.

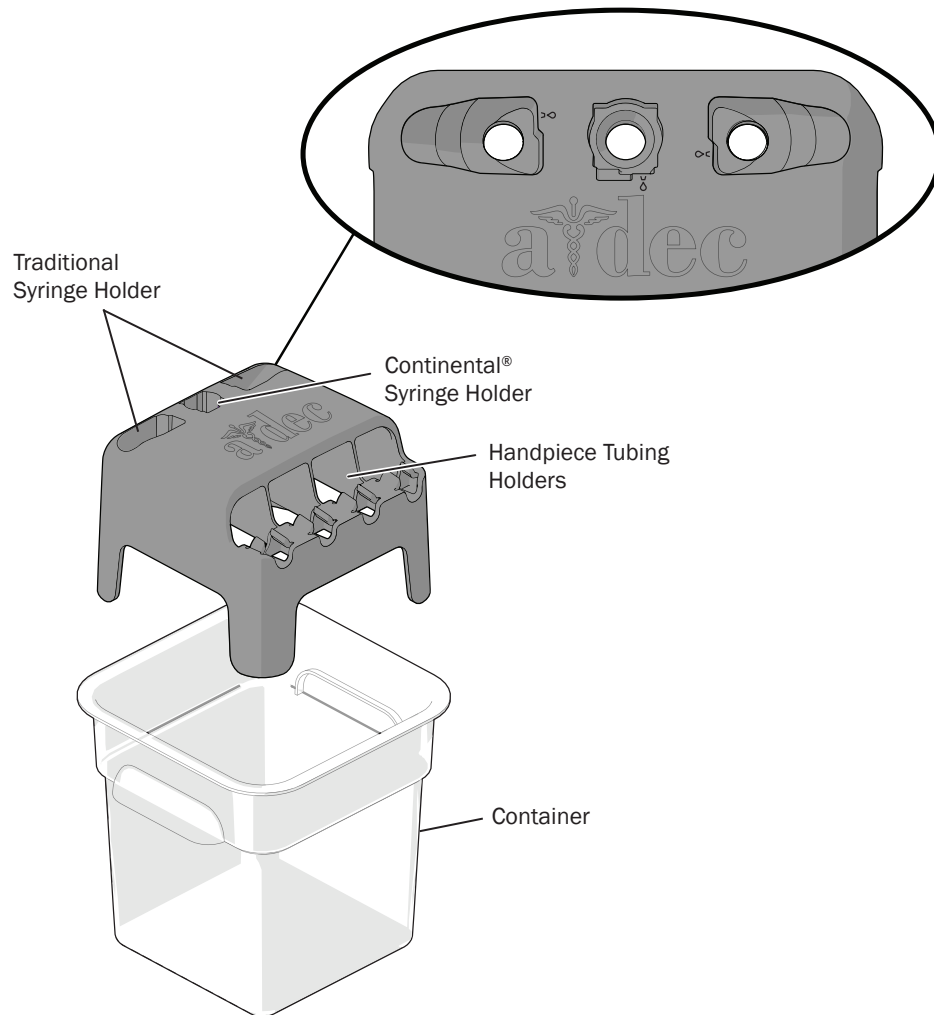
### When to Turn Off the Power

To save energy and reduce the chance of air leaks, use the master toggle to turn off power at the end of the day and before longer periods of non-use.



## Flush the Handpiece Tubing

### Flush the Handpiece Tubing on an A-dec 300/500 Delivery System



**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.

#### Use the Flush Dock When Flushing Handpieces



**NOTE** If a flush dock is not available, flush all handpiece tubing into a sink or bucket.

1. Place the Flush Dock on a flat, stable surface within reach of the air/water syringes and handpieces to be flushed.
2. Remove the syringe tips, handpieces, and handpiece motors.
3. Insert the syringes into the holders with the buttons facing the water symbol. Syringe flushing will begin automatically upon insertion.
4. Insert the handpiece tubing into the designated holders on the Flush Dock.
5. Start the manual or timed flush cycle from the touch control or use the manual toggle to flush for the required duration.
6. When the flush cycle ends, remove all syringes and handpiece tubing from the holders.
7. Remove the Flush Dock top and empty the container into a sink.

## Shock the System



A-dec recommends that you use A-dec ICX Renew® waterline shock treatment\* before you use the system for the first time and whenever the test results exceed your established water quality action level



**IMPORTANT** For complete details on how to maintain good water quality, see the appropriate Instructions for Use provided with your A-dec waterline maintenance products. For quick access to these documents online, scan, tap, or click the QR code below.

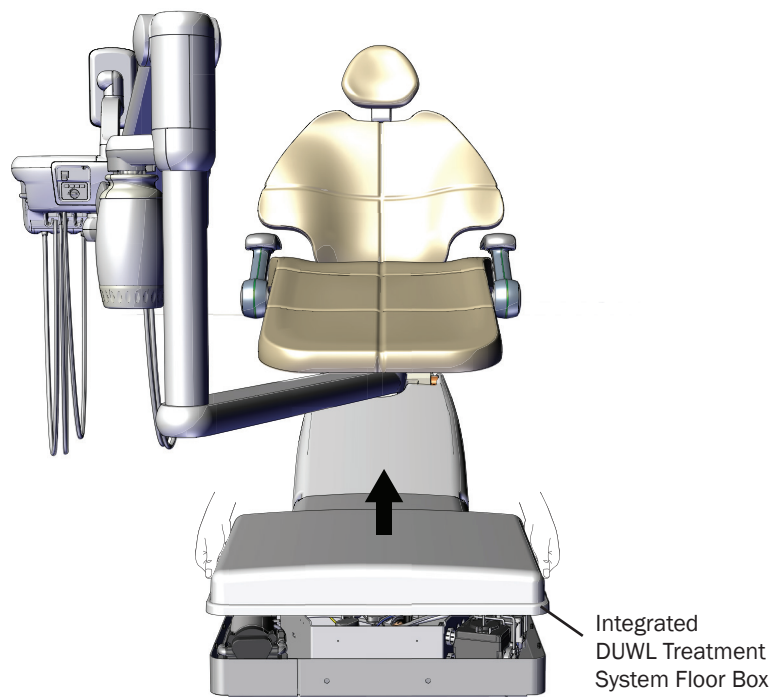


\* Note. ICX Renew may be sold under different names in different regions.

To shock the system:

1. Use the quick disconnects in the floor box to switch the tubing from the treated water to the water bottle shock system.
2. Remove the plug from the water bottle receptacle so you can install the water bottle.
3. Scan the QR code above to access the ICX Renew Instructions for Use, and then follow the steps to shock the system.
4. After completing the shock treatment, purge all water from the lines and use the quick disconnects to switch back to the treated water tubing.

## Access the Utilities



**Warning** Shock hazard. When you remove or replace the covers, take care not to damage any wiring or tubing. Verify that the covers are secure after you replace them.

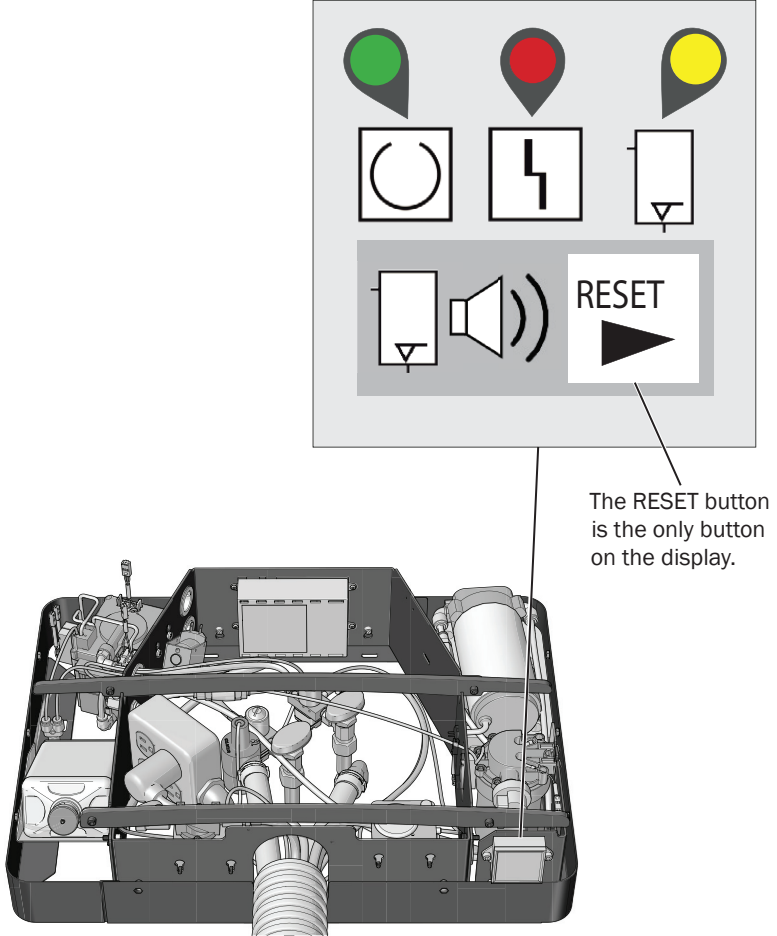
1. The system utilities are located in the floor box for chair-mounted systems (300/500). To access, grip the cover in the channel on each side of the floor box and lift it up to remove it. For maintenance, contact your local authorized A-dec dealer.



# Display

The display on the DUWL floor box communicates the following LEDs and conditions:

LED	Color	State
LED 1	Solid Green	Ready for use.
LED 2	Red	Fault (see the Error Messages section on page 10).
LED 3	Yellow	Disinfection display.
RESET	n/a	Press the button to reset the system. This is the only button on the display.

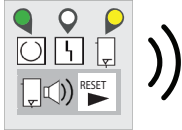
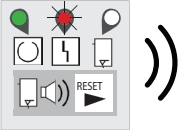
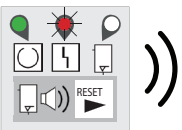


The RESET button is the only button on the display.

## Error Messages



**CAUTION** Assembly, modifications, and repairs may only be performed by an authorized A-dec dealer. For additional information and assistance in repairs, retrofitting, and troubleshooting, contact your local authorized A-dec dealer.

LED	Cause	Troubleshooting Steps	Result
<p>LED 1 = Solid Green LED 3 = Solid Yellow Sound = Buzzing</p> 	<p>Disinfection of the service water is not complete.</p>	<p>Change the A-dec Maintain solution bottle. If you are not able to change the bottle immediately, press the <b>RESET</b> button to cancel the buzzer.</p>	<p>The system remains functional and the clinic's workflow is not interrupted, but no disinfection takes place. However, a short buzzer will continue to sound periodically. If the error message was only caused by an air bubble, the error message will disappear on its own at the next attempt.</p>
<p>LED 1 = Solid Green LED 2 = Flashing Red Sound = Buzzing</p> 	<p>Level probe in the mixing container is dirty, or there is no water supply.</p>	<p>Ensure that the water supply line is open. Clean or replace the mixing container probe.</p>	<p>All valves and the pump are switched off. The buzzer can be switched off with the <b>RESET</b> button. Once the cause has been rectified, the system can only be reactivated by switching it off and on again.</p>
<p>LED 1 = Solid Green LED 2 = Solid Red Sound = Buzzing</p> 	<p>There is a defective double membrane pump or an overflow.</p>	<p>Clean the overflow sensor. Check the double membrane pump and circuit board.</p>	<p>All valves and the pump are switched off. The buzzer can be turned off with the master toggle on the delivery system or the power button on the chair. Once the cause has been rectified, the system can only be reactivated by switching it off and on again.</p>

# Maintenance and Service

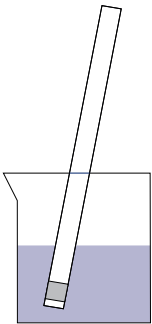


**CAUTION** Installation, modifications and repairs may only be performed by an authorized A-dec dealer.

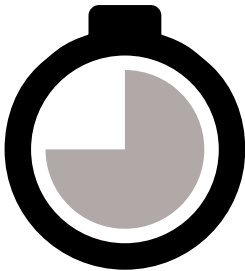
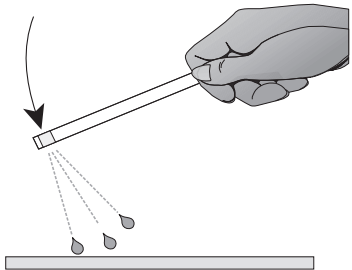
## Test Strips

Use A-dec Maintain test strips to measure the hydrogen peroxide to ensure the correct amount is being mixed with the supply water. The test must be performed weekly.

1. Remove a test strip from the packaging and dip it in the treated water for one second.



2. Shake the test strip to remove excess water, and then wait 45 seconds.



45 Seconds

3. Compare the test strip color to the chart.

	mg	%				Warning field
mg/L H <sub>2</sub> O <sub>2</sub> Peroxide(e)	50	0,005 %				NOT OK
	150	0,015 %				OK
	300	0,03 %				
	500	0,05 %				
	800	0,08%				NOT OK
	1000	0,1 %				

4. If the test strip result is 50 mg or lower (**NOT OK**), press the **REST** button for 4 seconds to start the intensive decontamination programming, and then flush the system. Test again with a new test strip after the intensive decontamination is complete. If the test strip result is between 500 and 1000 mg (**NOT OK**), contact your authorized A-dec dealer for assistance.

# Specifications and Warranty



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



For quick access to this document online, scan, tap, or click this QR code, which points to: [a-dec.com/regulatory-guide](http://a-dec.com/regulatory-guide).



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

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## Product Models and Versions Covered in This Document\*

Models	Versions	Description
332pro/333pro/532pro/533pro	n/a	Delivery System
332/333/532/533	B	Delivery System
311/511	B	Dental Chair
411/511	A	Dental Chair

\* Equipment shown in this document may include optional features or accessories. Some products, versions, and options in this document may not be available in certain regions.



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