



HYDRO IP TESTER

User Manual

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Europe Energy Saving Notice

Energy Saving Matters (EuP 2009/125/EC)

Saving electric energy is a key to help protecting the environment. Please turn off all electrical products when they are not in use. To avoid power consumption in idle mode, disconnect all electrical equipment from power when not in use. Thank you!

DOCUMENT VERSION



Due to additional product features and/or enhancements, an updated version of this document may be available online.

Please check www.adj.com for the latest revision/update of this manual before beginning installation and/or programming.

Date	Document Version	Software Version	DMX Channels	Notes
05/08/2023	1.0	1.02	Not Applicable	Initial Release
10/08/2024	1.1	N/A	N/A	Removed PC/App Interface

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GENERAL INFORMATION

Introduction: Please read and understand the instructions in this manual carefully and thoroughly before attempting to operate this device. These instructions contain important safety and use information.

Unpacking: Every device has been thoroughly tested and has been shipped in perfect operating condition. Carefully check the shipping carton for damage that may have occurred during shipping. If the carton is damaged, carefully inspect the device for damage, and be sure all accessories necessary to install and operate the device have arrived intact. In the event that damage has been found or parts are missing, please contact our customer support team for further instructions. Please do not return this device to your dealer without first contacting customer support. Please do not discard the shipping carton in the trash. Please recycle whenever possible.

Box Contents:

- (1) 3-5 ft Coiled Air Hose/Quick Connect Fitting
- (1) M12 Treaded Brass Nozzle/Push-to-Connect Fitting
- (1) M12x1.5 Hex-Socket Cap-Head A4-70 Stainless Steel Bolt/Washer
- (1) 5 ft Power Cable
- (1) 6 ft USB Cable
- (1) 4GM (min) Micro SD Card

Customer Support: Contact ADJ Service for any product related service and support needs. Also visit forums.adj.com with questions, comments or suggestions.

Parts: To purchase parts online visit:

<http://parts.adj.com> (US)

<http://www.adjparts.eu> (EU)

ADJ SERVICE USA - Monday - Friday 8:00am to 4:30pm PST

Voice: 800-322-6337 | Fax: 323-582-2941 | support@adj.com

ADJ SERVICE EUROPE - Monday - Friday 08:30 to 17:00 CET

Voice: +31 45 546 85 60 | Fax: +31 45 546 85 96 | support@americandj.eu



IMPORTANT NOTICE!

THIS DEVICE MUST ONLY BE USED BY AN AUTHORIZED ELATION TRAINED SERVICE TECHNICIAN. DO NOT ATTEMPT TO USE THIS DEVICE UNLESS YOU HAVE BEEN FULLY TRAINED ON ITS USAGE. ANY DAMAGE OR REPAIRS TO THIS DEVICE OR ANY ELATION AND/OR NON-ELATION LIGHTING FIXTURES CONNECTED TO THIS DEVICE RESULTING FROM IMPROPER USE, INCORRECT PRESSURE/VACUUM SETTINGS, AND/OR THE DISREGARD OF THE SAFETY AND OPERATION GUIDELINES IN THIS USER MANUAL VOIDS THE ELATION WARRANTY AND IS NOT SUBJECT TO ANY WARRANTY CLAIMS AND/OR REPAIRS, AND MAY ALSO VOID THE WARRANTY FOR ANY NON-ELATION LIGHTING FIXTURES.

CONSULT WITH YOUR RESPECTIVE LIGHTING MANUFACTURER BEFORE USING THIS DEVICE ON NON-ELATION BRAND FIXTURES! DEVICE SETTINGS CONTAINED IN THIS MANUAL DO NOT APPLY TO NON-ELATION BRAND FIXTURES AND MAY DAMAGE YOUR FIXTURE. PLEASE CONTACT ELATION SERVICE FOR FURTHER DETAILS.

LIMITED WARRANTY (USA ONLY)

- A. ADJ Products, LLC hereby warrants, to the original purchaser, ADJ Products, LLC products to be free of manufacturing defects in material and workmanship for a prescribed period from the date of purchase (see specific warranty period on reverse). This warranty shall be valid only if the product is purchased within the United States of America, including possessions and territories. It is the owner's responsibility to establish the date and place of purchase by acceptable evidence, at the time service is sought.
- B. For warranty service, you must obtain a Return Authorization number (RA#) before sending the product back—please contact ADJ Products, LLC Service Department at 800-322-6337. Send the product only to the ADJ Products, LLC factory. All shipping charges must be prepaid. If the requested repairs or service (including parts replacement) are within the terms of this warranty, ADJ Products, LLC will pay return shipping charges only to a designated point within the United States. If the entire instrument is sent, it must be shipped in its original package and packaging material. No accessories should be shipped with the product. If any accessories are shipped with the product, ADJ Products, LLC shall incur no liability whatsoever for loss of or damage to any such accessories, nor for the safe return thereof.
- C. This warranty is void if the product serial number and/or labels are altered or removed; if the product is modified in any manner which ADJ Products, LLC concludes, after inspection, affects the reliability of the product; if the product has been repaired or serviced by anyone other than the ADJ Products, LLC factory unless prior written authorization was issued to purchaser by ADJ Products, LLC; if the product is damaged because it was not properly maintained as set forth in the product instructions, guidelines and/or user manual.
- D. This is not a service contract, and this warranty does not include maintenance, cleaning, or periodic check-up. During the period specified above, ADJ Products, LLC will replace defective parts at its expense with new or refurbished parts, and will absorb all expenses for warranty service and repair labor by reason of defects in material or workmanship. The sole responsibility of ADJ Products, LLC under this warranty shall be limited to the repair of the product, or replacement thereof, including parts, at the sole discretion of ADJ Products, LLC. All products covered by this warranty were manufactured after August 15, 2012, and bear identifying marks to that effect.
- E. ADJ Products, LLC reserves the right to make changes in design and/or improvements upon its products without any obligation to include these changes in any products theretofore manufactured.
- F. No warranty, whether expressed or implied, is given or made with respect to any accessory supplied with products described above. Except to the extent prohibited by applicable law, all implied warranties made by ADJ Products, LLC in connection with this product, including warranties of merchantability or fitness, are limited in duration to the warranty period set forth above. And all warranties, whether expressed or implied, including warranties of merchantability or fitness, are limited in duration to the warranty period set forth above. The consumer's and/or dealer's sole remedy shall be such repair or replacement as is expressly provided above; and under no circumstances shall ADJ Product, LLC be liable for any loss and/or damage, direct and/or consequential arising out of the use of, and/or inability to use this product.
- G. This warranty is the only written warranty applicable to ADJ Products, LLC products, and supersedes all prior warranties and written descriptions of warranty terms and conditions heretofore published.

MANUFACTURER'S LIMITED WARRANTY PERIODS:

- Non-LED Lighting Products = 1-Year (365 Days) (Including Special Effect Lighting, Intelligent Lighting, UV lighting, Strobes, Fog Machines, Bubble Machines, Mirror Balls, Par Cans, Trussing, Lighting Stands, Power/Data Distribution, etc. excluding LED and lamps)
- Laser Products = 1-Year (365 Days) (excluding laser diodes which have a 6-Month Limited Warranty)
- LED Products = 2-Year (730 Days) (excluding batteries which have a 180 Day Limited Warranty)
- NOTE: 2-Year (730 Days) Limited Warranty ONLY applies to product purchased within the United States.
- StarTec Series = 1-Year (365 Days) (excluding batteries which have a 180 Day Limited Warranty)
- ADJ DMX Controllers = 2 Year (730 Days)
- American Audio Products = 1 Year (365 Days)

SAFETY PRECAUTIONS

This device is a sophisticated piece of electronic equipment. To guarantee smooth operation, it is important to follow all instructions and guidelines in this manual. ADJ Products, LLC is not responsible for injury and/or damages resulting from the misuse of this device due to the disregard of the information printed in this manual. Only the original included parts and/or accessories for this device should be used. Any modifications to the device and/or included accessories will void the original manufacturer's warranty and increase the risk of damage and/or personal injury.



PROTECTION CLASS 1 - DEVICE MUST BE PROPERLY GROUNDED.



THIS DEVICE MUST ONLY BE USED BY AN AUTHORIZED ELATION TRAINED SERVICE TECHNICIAN. DO NOT ATTEMPT TO USE THIS DEVICE UNLESS YOU HAVE BEEN TRAINED ON ITS USAGE. ANY DAMAGE OR REPAIRS TO THIS DEVICE OR ANY ELATION AND/OR NON-ELATION LIGHTING FIXTURES CONNECTED TO THIS DEVICE RESULTING FROM IMPROPER USE, INCORRECT PRESSURE/VACUUM SETTINGS, AND/OR THE DISREGARD OF THE SAFETY AND OPERATION GUIDELINES IN THIS USER MANUAL VOIDS THE ELATION WARRANTY AND IS NOT SUBJECT TO ANY WARRANTY CLAIMS AND/OR REPAIRS, AND MAY ALSO VOID THE WARRANTY FOR ANY NON-ELATION LIGHTING FIXTURES.



**DO NOT PLUG DEVICE INTO A DIMMER PACK!
KEEP FLAMMABLE MATERIALS AWAY FROM DEVICE.**



DRY LOCATIONS USE ONLY! DO NOT EXPOSE DEVICE TO RAIN, MOISTURE, AND/OR SEVERE ENVIRONMENTS! DO NOT SPILL WATER AND/OR LIQUIDS ONTO OR INTO THE DEVICE!



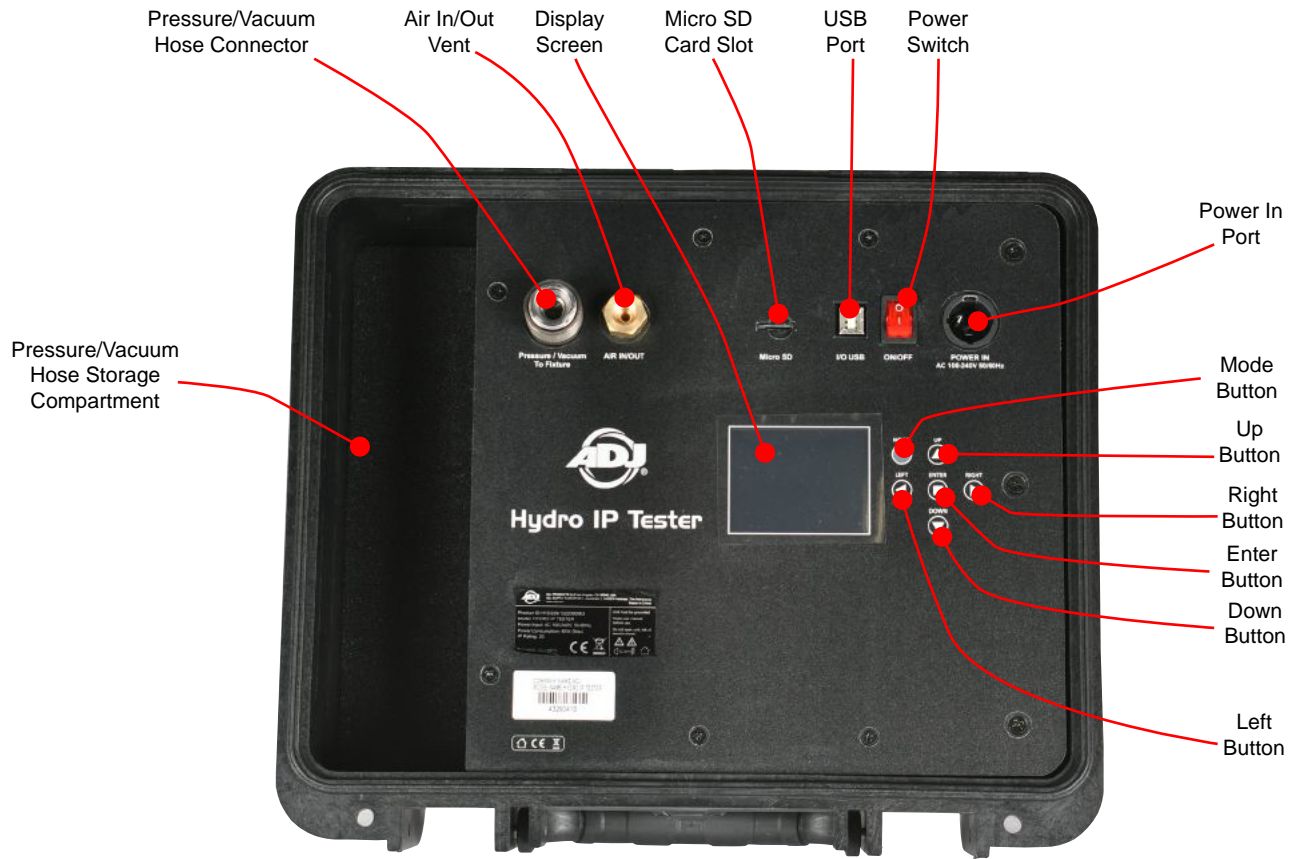
IP FIXTURE MUST BE POWERED OFF AND PROPERLY COOLED BEFORE TESTING. PLEASE REFER TO THE IP FIXTURE USER MANUAL FOR PROPER COOLING TIMES.



ENSURE NO DUST, WATER, OR DEBRIS ENTERS THE IP FIXTURE WHEN REMOVING THE AIR RELIEF VALVES! CAREFULLY INSPECT THE AREA AROUND THE AIR RELIEF VALVE OPENINGS BEFORE REPLACING THE AIR RELIEF VALVE AFTER TESTING IS COMPLETE.

- DO NOT connect an external compressor to the device.
- AVOID brute force handling when transporting or operating. DO NOT expose any part of the device to open flame or smoke. Keep device away from heat sources such as radiators, heat registers, stoves, or other appliances (including amplifiers) that produce heat.
- DO NOT use device in extreme and/or severe environments.
- DO NOT operate device if power cord is frayed, crimped, damaged and/or if any of the power cord connectors are damaged and do not insert into the device securely with ease. NEVER force a power cord connector into device. If the power cord or any of its connectors are damaged, replace it immediately with a new connector of the same power rating.
- CAUTION: Device should be operated by qualified and trained professionals ONLY.
- Read user manual carefully to ensure normal operation and lifespan of the device.
- ONLY use the original packaging materials and/or case to transport the Hydro IP Tester in for service.

OVERVIEW



RECOMMENDED TOOLS

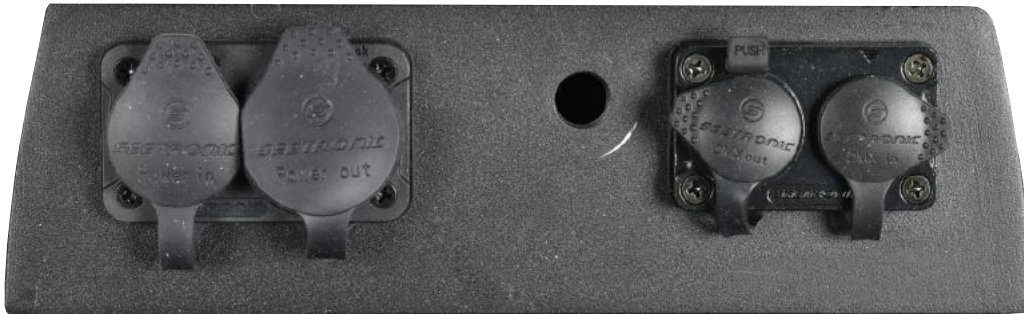
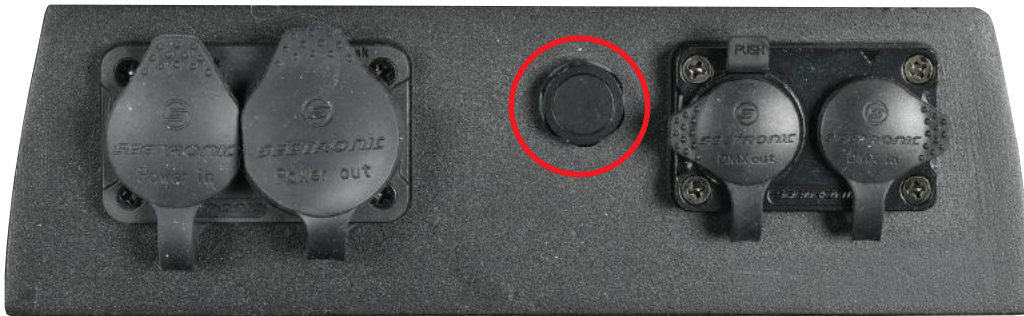
Tools pictured below are required to remove and/or replace the pressure relief valves used on most IP fixtures. These are not included with the Hydro IP Tester but can be purchased at any local hardware store.



CONNECTIONS



1. Connect the air hose quick-connect fitting to the Hydro IP Tester.



2. Remove the main pressure relief valve from the fixture.



3. If the fixture has a second pressure relief valve, remove and replace it with an M12x1.5 Hex Socket Cap Head A4-70 Stainless Steel Bolt/Washer (included), and tighten using a 6mm Hex Wrench. **NOTE: Make sure the bolt has its O-ring for a proper seal.**

CONNECTIONS



4. Carefully insert the threaded end of brass nozzle into the fixture air relief valve hole and twist it until it is finger tight and slightly compresses the rubber O-ring seal.
5. Connect power cable to the Hydro IP Tester and switch the device on.

NOTE: If a leak is suspected at the nozzle or nylon bolt, check the following items:

- Confirm brass nozzle is properly inserted and secure, and apply an additional $\frac{1}{4}$ -turn if needed.
- Confirm air hose is fully inserted approximately 1-inch (2.5cm). Remove and reinsert if needed.
- Confirm the nylon bolt is properly installed and secure, and apply an additional $\frac{1}{4}$ -turn if needed. Retest fixture again to verify the nozzle or nylon bolt leak no longer exists.



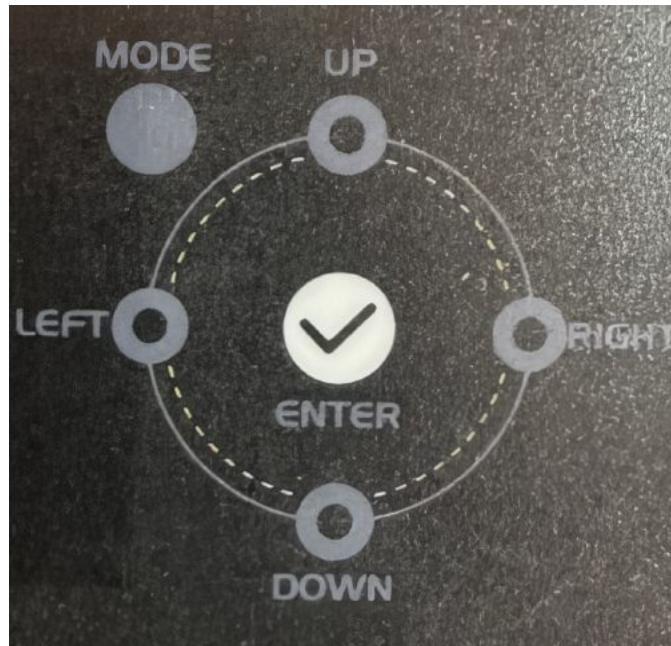
WARNING: DO NOT OVER TIGHTEN BRASS NOZZLE OR NYLON BOLT!

OPERATION

CONTROL PANEL

This device features a keyed control panel, as pictured below. Key functions are as follows:

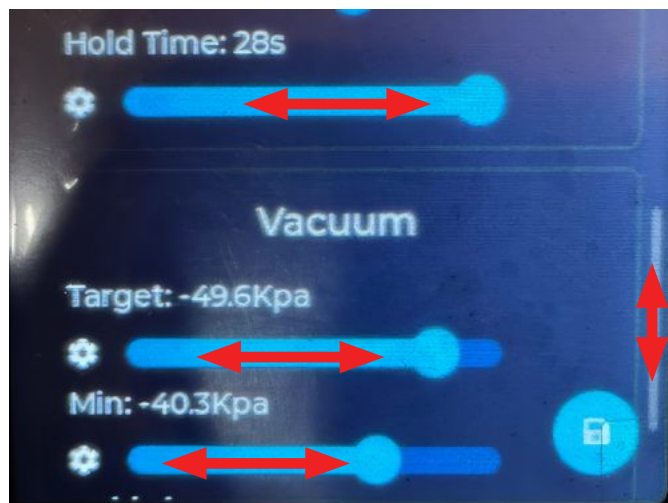
- UP: Scroll to the previous option.
- DOWN: Scroll to the next option.
- LEFT: Scroll to option on the left, or decrease the value of selected field.
- RIGHT: Scroll to option on the right, or increase the value of the selected field.
- ENTER: Confirm or select.
- MODE: Return or cancel.



TOUCH SCREEN OPERATION

Alternately, this device features touch screen functionality. Touch screen functions are as follows:

- Tap icon or item on screen to select.
- Swipe left to return to the previous menu screen.
- Swipe up/down to vertical scroll.
- Touch screen also includes ability to drag sliders to adjust values.

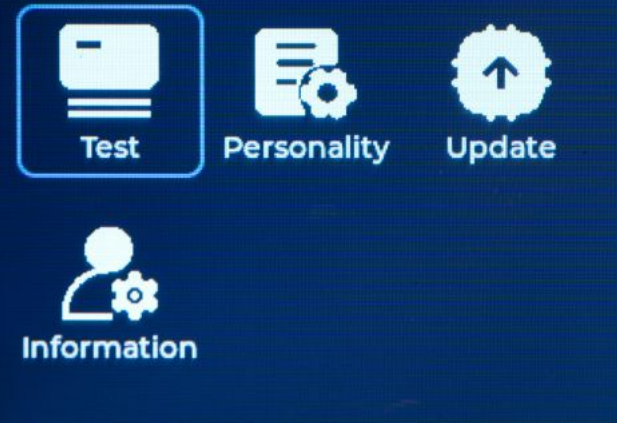
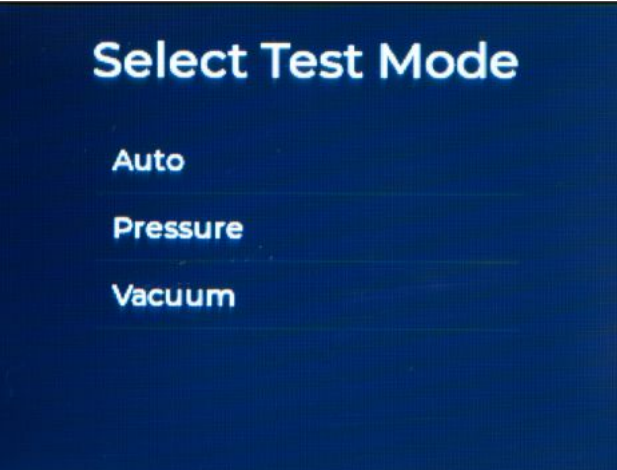
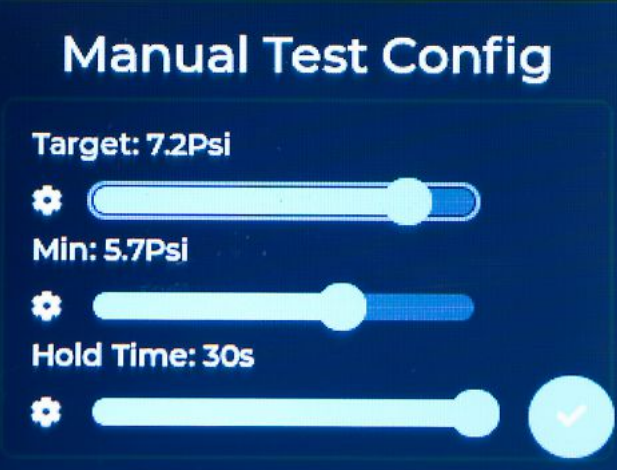


FUNCTIONS



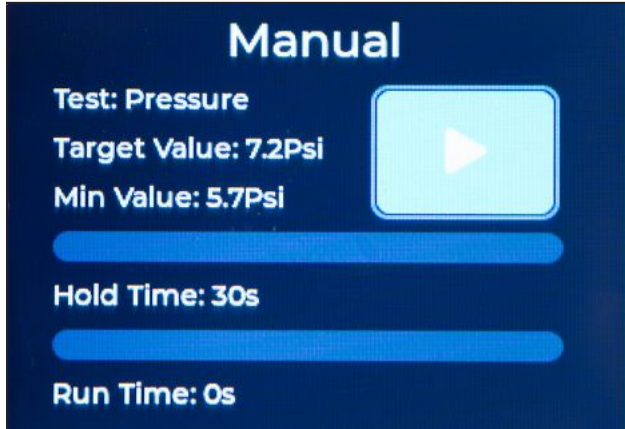
CONSULT WITH YOUR RESPECTIVE LIGHTING MANUFACTURER BEFORE USING THIS DEVICE ON NON-ELATION BRAND FIXTURES! DEVICE SETTINGS CONTAINED IN THIS MANUAL DO NOT APPLY TO NON-ELATION BRAND FIXTURES AND MAY DAMAGE YOUR FIXTURE. PLEASE CONTACT ELATION SERVICE FOR FURTHER DETAILS.

TEST

 <p>The screenshot shows a dark blue main menu with four white icons and labels: 'Test' (a document with lines), 'Personality' (a document with a gear), 'Update' (a gear with an upward arrow), and 'Information' (a person icon with a gear).</p>	<p>1. Select "Test" from the main menu.</p>
 <p>The screenshot shows a dark blue menu titled 'Select Test Mode' with three white text options: 'Auto', 'Pressure', and 'Vacuum'.</p>	<p>2. Select the desired test mode. Available options include Auto, Pressure, or Vacuum. Note: Auto will run one of the test settings configured in the Personality menu.</p>
 <p>The screenshot shows a dark blue menu titled 'Manual Test Config' with three sliders and a checkmark button. The sliders are labeled: 'Target: 7.2Psi', 'Min: 5.7Psi', and 'Hold Time: 30s'. Each slider has a gear icon to its left. A white checkmark button is at the bottom right.</p>	<p>3. If the Pressure or Vacuum test modes are selected, a Manual Test Config menu will open, which will require the user to set the desired test parameters and press the checkmark button to confirm. Note: This menu does not appear if the Auto test mode is selected.</p>

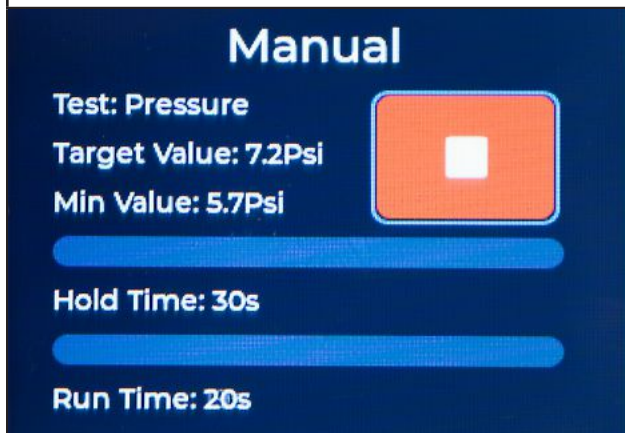
FUNCTIONS

TEST



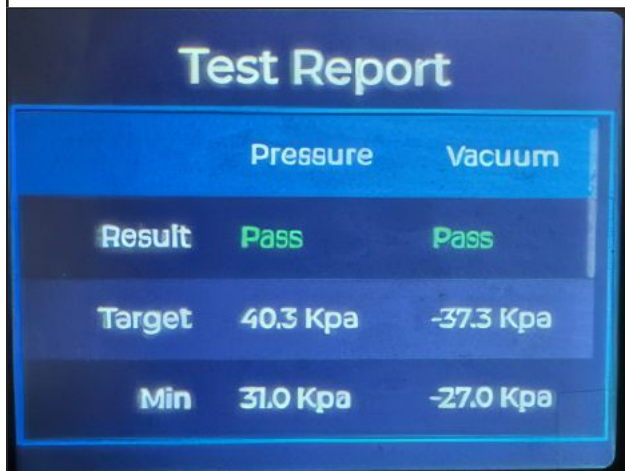
The screenshot shows a 'Manual' test configuration screen. It displays 'Test: Pressure', 'Target Value: 7.2Psi', and 'Min Value: 5.7Psi'. There are two progress bars: a top blue bar and a bottom blue bar. The 'Hold Time' is set to 30s and 'Run Time' is 0s. A large cyan play button is visible on the right side of the screen.

4. Press Enter or touch the Play button on the touch screen to begin the test.



The screenshot shows the 'Manual' test configuration screen during the test. The 'Run Time' has increased to 20s. A large red stop button is visible on the right side of the screen. The progress bars are partially filled.

5. Press Enter or touch the Stop button on the touch screen to stop the test. The upper bar indicates the test pressure, and will be colored green if the pressure is within the acceptable range, or red if the pressure is outside the acceptable range. The blue-colored lower bar indicates the hold time.



The screenshot shows a 'Test Report' screen with a table of results.

	Pressure	Vacuum
Result	Pass	Pass
Target	40.3 Kpa	-37.3 Kpa
Min	31.0 Kpa	-27.0 Kpa

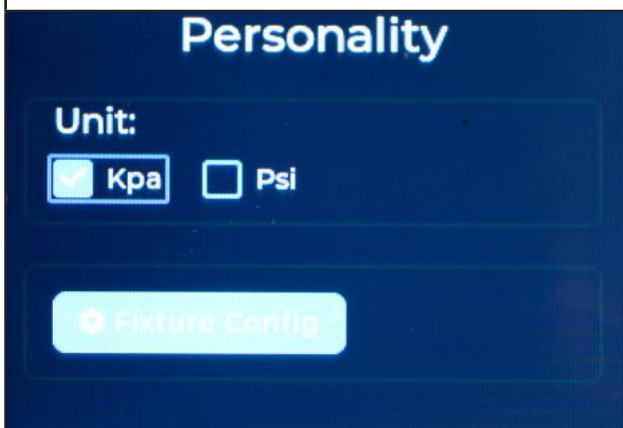
6. The device will generate a test report. Results in green are passing results, while results in red are failed results. Please make sure to scroll up and down to make sure you view the entire test report.

FUNCTIONS

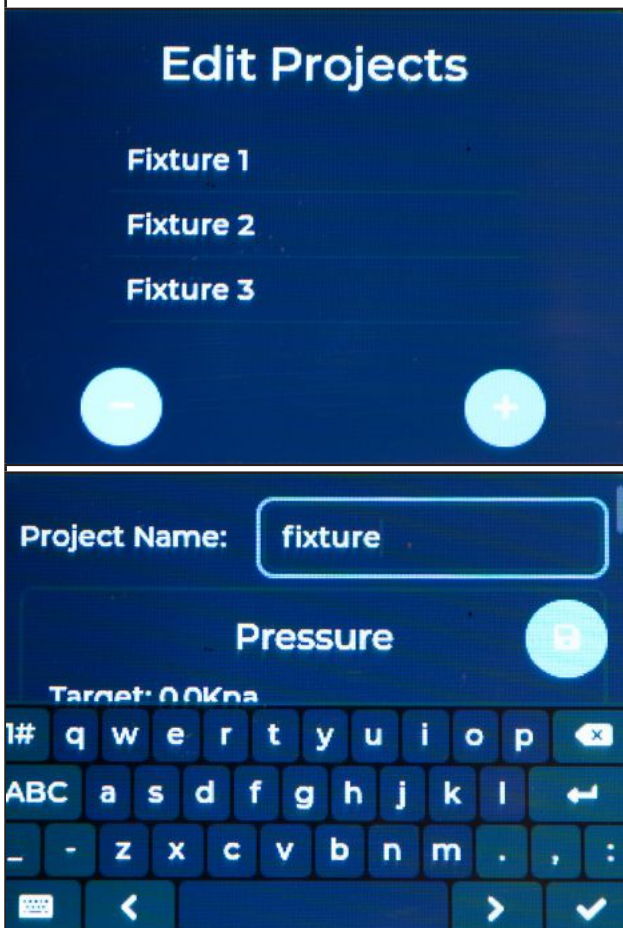
PERSONALITY



1. Select “Personality” from the main menu.



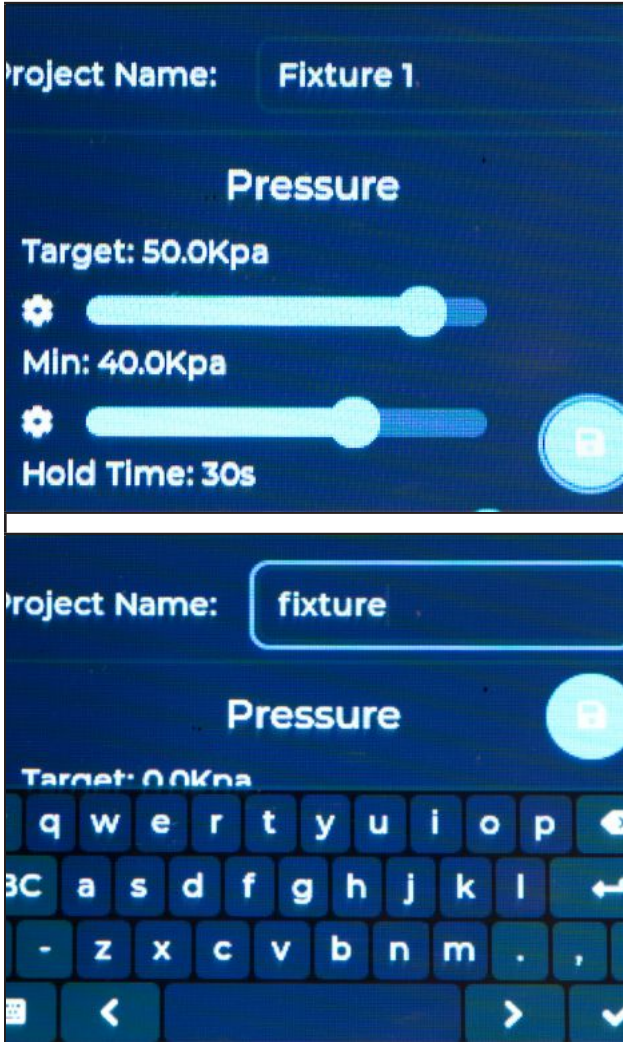
2. Select the checkbox next to the pressure units that you would like to use, then select the “Fixture Config” button.



3. The “Edit Projects” menu will open. In this menu, you can select existing projects to modify, remove existing projects by selecting a project or projects and pressing the “-” button, or add new projects by pressing the “+” button. **Note:** The device can accommodate up to 20 projects at a time.

FUNCTIONS

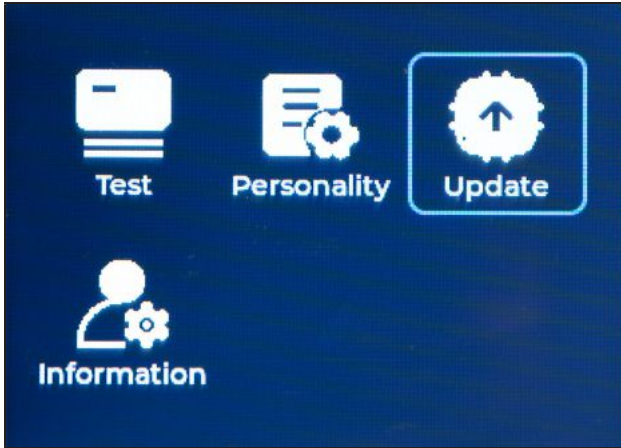
PERSONALITY



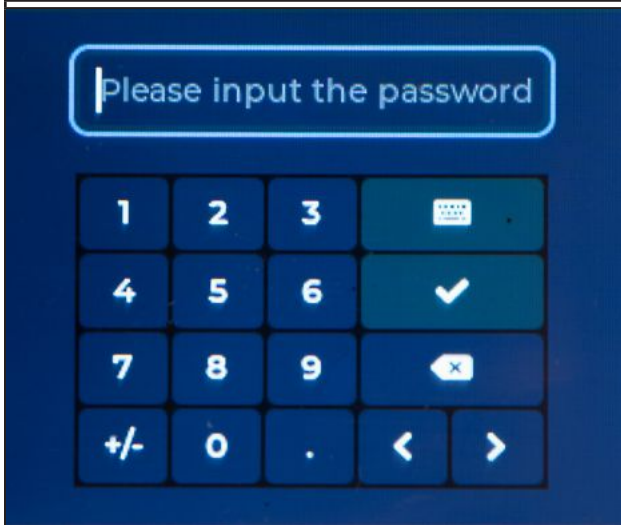
4. If adding a new project or editing an existing project, type in the project name, then use the sliders to configure the desired target value, minimum value, and hold time. Press the Save button to confirm.

FUNCTIONS

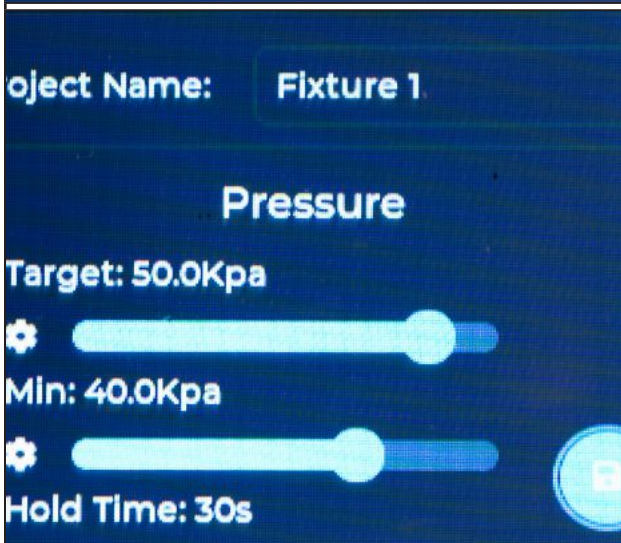
UPDATE



1. Select "Update" from the main menu.



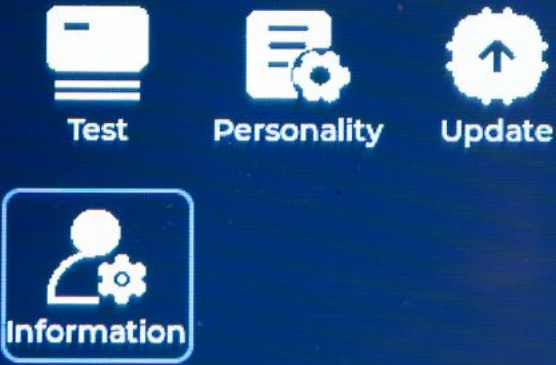
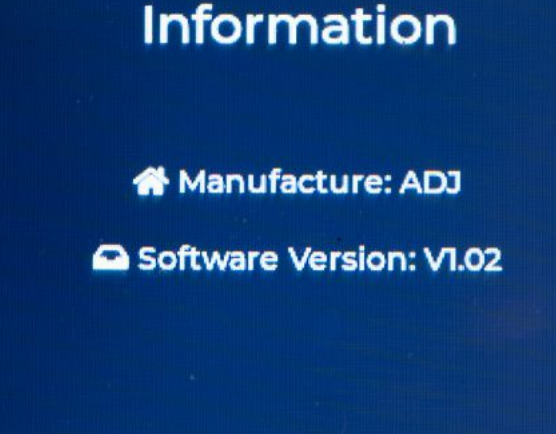
2. Use the keypad to type in the password, then press the Checkmark button to confirm. **Note:** The default password is "038".



3. Select the desired update file from the displayed list. **Note:** Selecting an incompatible file will result in an error message.

FUNCTIONS

INFORMATION

 <p>The image shows a dark blue background with four white icons. The top row contains three icons: a test tube labeled 'Test', a document with a gear labeled 'Personality', and a gear with an upward arrow labeled 'Update'. Below these is a fourth icon, a person silhouette with a gear, labeled 'Information'.</p>	<p>1. Select “Information” from the main menu.</p>
 <p>The image shows a dark blue background with the word 'Information' at the top. Below it, there are two lines of text: 'Manufacture: ADJ' with a house icon and 'Software Version: V1.02' with a document icon.</p>	<p>2. Information about the unit manufacturer and software version will now be displayed on the screen. Swipe left or press the Back button to return to the main menu.</p>

TESTING EXAMPLE: ADJ ENCORE LP18IP

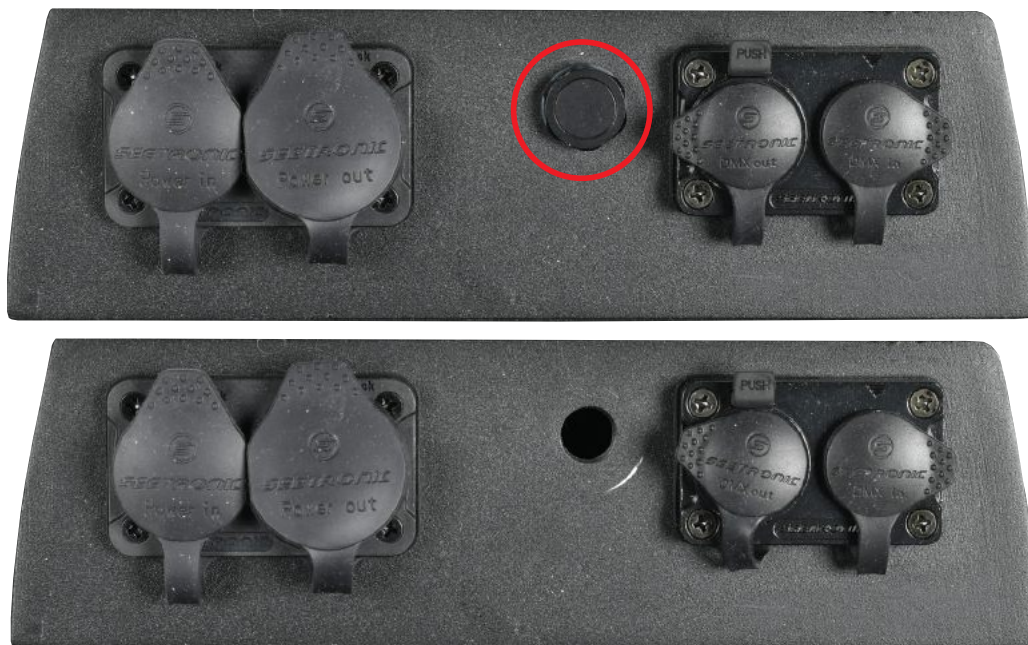
The following sequence of instructions demonstrates a typical IP fixture test. However, specific testing instructions will vary for each IP fixture.

The **ADJ Encore LP28IP**, which is used for this testing example, does NOT have a secondary pressure relief valve. Therefore, for testing, it is only required to remove a single valve for this fixture, but other fixture models may require the removal of a secondary valve.

Always review the manual for your IP fixture for specific information about whether your unit features a secondary valve, and for instructions on accessing the pressure relief valves.



1. Connect the air hose quick-connect fitting to the Hydro IP Tester.



2. Remove the main pressure relief valve from the fixture.

TESTING EXAMPLE: ADJ ENCORE LP18IP



3. Carefully insert the threaded end of brass nozzle into the fixture air relief valve hole and twist it until it is finger tight and slightly compresses the rubber O-ring seal. Make sure not to over tighten the brass nozzle or nylon bolt!

4. Connect power cable to the Hydro IP Tester and switch the device on.

NOTE: If a leak is suspected at the nozzle or nylon bolt, check the following items:

- Confirm brass nozzle is properly inserted and secure, and apply an additional ¼-turn if needed.
- Confirm air hose is fully inserted approximately 1-inch (2.5cm). Remove and reinsert if needed.
- Confirm the nylon bolt is properly installed and secure, and apply an additional ¼-turn if needed. Retest fixture again to verify the nozzle or nylon bolt leak no longer exists.

5. Use the directional buttons on the control panel to select “Personality,” then press ENTER.

6. Scroll to “Fixtures,” then press ENTER.

7. Use the LEFT and RIGHT arrow buttons to scroll through a list of available fixture models, and press ENTER when the desired model is shown on the screen. The fixture name and test parameters will be displayed on the screen. Press ENTER again to confirm and load your selection.

8. Press MODE to return to the main menu, then use the directional buttons on the control panel to select “Test”. Press ENTER.

9. Select “Auto” and press ENTER to bring up a screen showing the fixture model and the option to start the test.

10. Scroll to “Start Test” and press ENTER. This brings you to a menu to input the serial number of the fixture. Use the LEFT and RIGHT arrows to highlight each digit of the serial number, and the UP and DOWN arrows to change the value of the selected digit. Press ENTER to start the test. Alternately, you may bypass the serial number input by simply pressing ENTER.

CASE DIMENSIONS

Weight: 15.4 lbs / 7 Kg



OPTIONAL ACCESSORIES

ORDER CODE	DESCRIPTION
50501990323	3-5 ft Coiled Air Hose/Quick Connect Fitting
9900010723	M12 Threaded Brass Nozzle/Push-to-Connect Fitting
IP TESTER PLUG	M12x1.5 Hex Socket Cap Head A4-70 Stainless Steel Bolt/Washer
NEU007	Power Cable

