



Acuva Arrow 5 UV-LED Water Purifier

OWNER'S PRODUCT MANUAL

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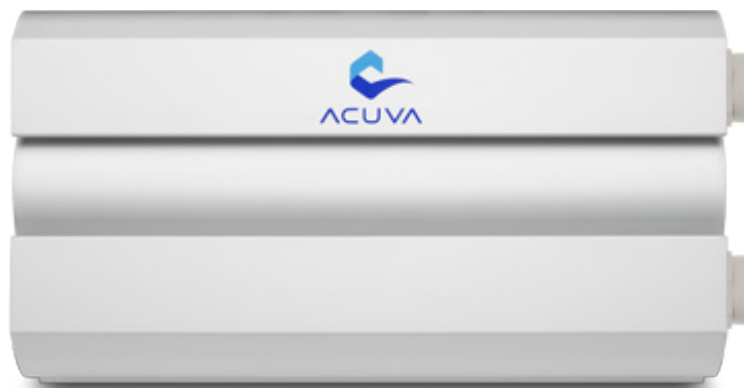
Congratulations on the purchase of your Arrow 5 UV-LED Water Purification System.

This is our high performance system that is ideal suited for single faucet applications, ice-makers, and water fountain upgrades. It fits easily under your sink in your home, cottage, RV and boat, and provides safe drinking water that is convenient, low maintenance and environmentally friendly.

Acuva's system takes water purification to the next level of efficiency and convenience by utilizing two well-established and proven technologies: UV and LED. The Acuva UV-LED chamber exposes harmful microorganisms such as bacteria to the UV dose recommended by the regulatory Standard. Our proprietary design allows for the UV rays to be concentrated directionally, maximizing effectiveness.

The Arrow 5 water purification system is compatible with 12V DC or 110V or 240V AC (using power adapter) and will be active only when system is being used for water purification. The on-demand capabilities provided by the built-in flow sensor will activate UV-LEDs only when water is flowing through the system, improving energy efficiency and extending the life-time of the system.

Our mission is to provide universal access to safe drinking water and we are proud that you have chosen our solution. Enjoy the peace of mind that your new purifier will deliver and please contact us if you have any questions.





Summary

This document is the product manual for the Arrow 5 UV-LED Water Purifier, including safety, product specification, installation and maintenance information.

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Safety Information and Warnings

This section contains important information regarding the safe installation and operation of the Acuva Technologies UV-LED Water Purification Systems (the "device"). **PLEASE READ CAREFULLY.**

Installation or operation of the device in a manner contrary to this manual may result in property damage or personal injury.

Acuva recommends that the device be installed by a qualified technician and shall comply with applicable state and local regulations.

Warnings and Safety Precautions

DANGER

Do not store the device in freezing conditions.

Do not allow water to freeze in the device.

Do not use the device if damaged or dropped.

Do not submerge the device under water.

Do not connect to AC power without an AC to DC power converter; this device uses DC only.

This product is not ignition protected. Do not install in the engine compartment or other areas where explosive vapours may be present.

WARNING

A steady blue light on the device while water is flowing is the only indication that the water is safe to drink. If the blue light is not ON while the faucet is open, please check the "trouble shooting" section of this manual.

The UV device includes fragile parts, including parts made from glass. The device should not be dropped and must be transported/carried with sufficient care.

Install the device at an accessible and visible location for continuous monitoring of the system status using LED indicators and/or in case of any leakage.

CAUTION

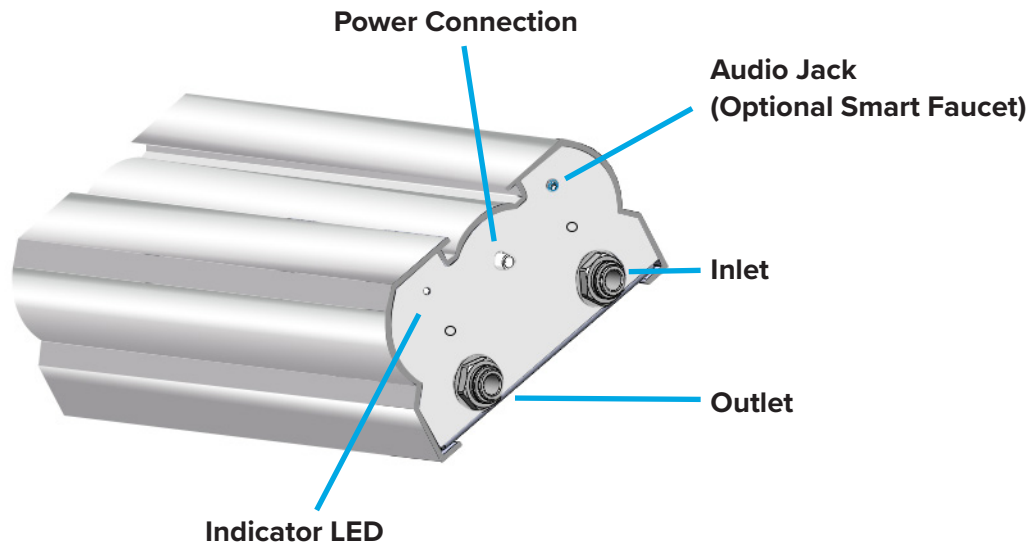
Minor condensation may occur on the device in humid weather and with cold water temperatures (<dew point temperature). Condensation drip may be noticed from inside the unit.

Product Information

Specifications

Dose Delivery	>16 mj/cm ²
Flow Rate	5 Liter/min
Connections	Water Inlet/outlet: 3/8" OD Tube
Voltage	Operate between 11-16 Volts, Direct Current
Power Consumption	~60 Watts (Active), ~0.1 W (Standby)
Maximum Water Temperature	40°C
Maximum Working Pressure	100 PSI
LED Life Time	3,000 hrs (on demand)

Overview of Your Arrow Water Purifier

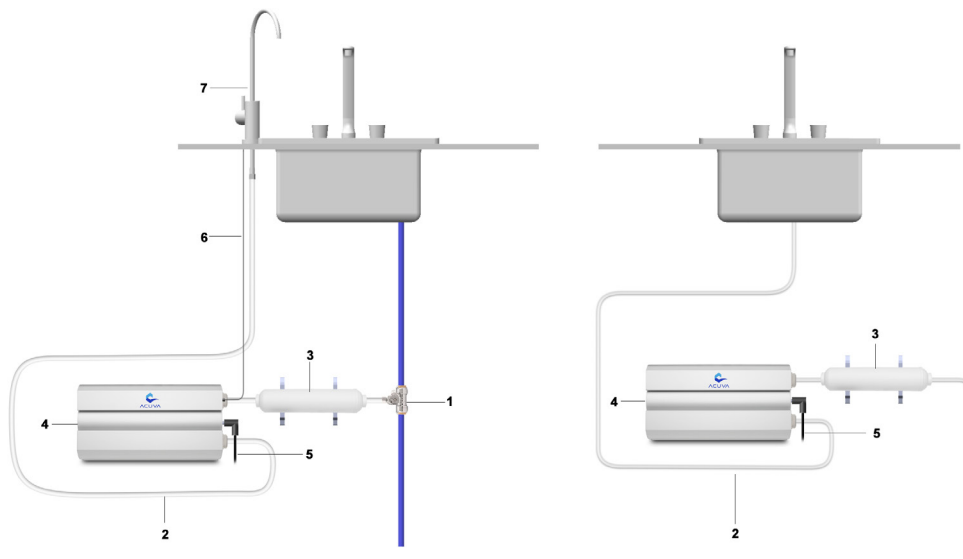


Installation Guide

Acuva systems are designed for ease of installation. Two different installation scenarios are shown below for when the arrow unit is connected to the smart faucet or any dedicated faucet **(A)** or when it's connected to the main faucet **(B)**

(A) Installation with Smart Faucet

(B) Installation without Smart Faucet

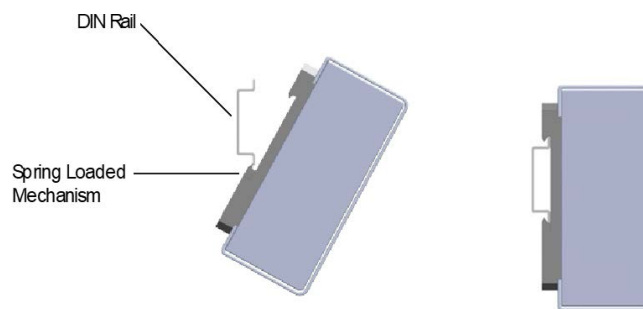


Item No.	Description
1	Tee/Shut-off Valve
2	3/8" OD Tube
3	in-line filter
4	UV-LED System
5	Power Plug cable
6	Smart faucet cable
7	Smart faucet

Installation Guide Cont'd

Mounting the Unit

1. Engage the spring-loaded mechanism by hooking the clip onto the bottom edge of the din rail and adding slight pressure upwards.
2. As bottom portion engages, tilt the upper hook towards the din rail.
3. Release the spring mechanism once the unit is mounted on the rail.



UV Indicator Light

No Light: Unit is not active or no power connected

Blue Light: Unit is active and sterilizing water

Green Light: At the Initial start-up, green light turns ON on the unit for 30 sec meaning the unit is properly powered and the flow switch/smart faucet is properly plugged to the unit. The Arrow unit will perform a self clean if the unit is powered, but not used for 12 hrs. During the self clean mode, the green light turns on for 30 sec.

Note: If there is an issue the indicator light will turn red or yellow and the trouble shooting table in section 5 should be consulted

Conditioning and Powering the Unit

1. Once the Device is connected to the cold waterline, allow water to flow through the system for 1-2 minutes until the bubbles are released from the line. During this time, make sure all the connections are tight and sealed.
2. Connect the DC power source or AC to DC power converter to the Arrow unit
3. Turn on the faucet, a steady blue light should appear on the device which indicates the water purification is in progress
4. Turn off the faucet and the device will automatically go into standby mode.
5. At this point, the device is ready for regular use.



Maintenance

The Acuva UV-LED Water Purification Systems are designed to give years of trouble-free use. Using state-of-the-art UV-LEDs, there are no mercury bulbs to replace, however there are some simple tasks that should be performed to ensure continued trouble-free operation.

Regular Maintenance

1. Check that none of the connectors are leaking annually.
2. Replace the inline 5-micron carbon filter after winterization or as per instruction on the filter label
3. The small quartz windows inside the unit do not reach high temperatures to encourage mineral build-up (scaling) as with UV lamp systems. As a result, no significant scaling or loss of performance due to scaling over time is expected.

Winterizing

 **WARNING**

Frozen pipes mean cracked pipes. Failure to properly winterize the Acuva unit before it is exposed to freezing temperatures can lead to damage and water leakage.

If installed in a Recreational Vehicle (RV) Ensure that your RV is winterized as per your owner's manual.

Trouble Shooting

Indicator LED State	Fault Condition	Comments to User
LED OFF (Faucet Closed)	No Fault	-
LED OFF (Faucet Open)	Unit is not powered or very low flow rate	If no Blue light on the unit, verify that the unit is connected to power. If unit is indeed connected correctly, verify that the power line is electrified with a voltmeter. If the voltage is as expected and the LED indicator light does not light up, please contact Acuva for support. In addition, the flow sensor inside the unit requires a minimal water flow to activate the system (<0.3 lpm), please assure there is enough water pressure in the line to activate the system.
Red Light	LED Power out of range	If persists, please contact Acuva for support.
Orange Light	Low input voltage	Verify that the input voltage is above 11 volts, by using a Voltmeter



Standard Terms and Conditions

The sale and use of all Acuva products is governed by the Acuva Technologies Inc. Standard Terms and Conditions of Sale and Use (the "Agreement"), a copy of which is available at www.acuvatech.com.

The Agreement contains important terms that, among other things, affect Acuva's liability and your legal remedies against Acuva. Please read the Agreement carefully as, by purchasing the Acuva product, you have agreed to be bound by the entire Agreement including the limited warranty, limitations of liability and methods of resolving disputes. In the event of any inconsistency between this manual and the Agreement, the Agreement shall prevail.

Warranty

As set out in the Agreement, Acuva products come with the following limited warranty.

Limited Warranty

SCOPE AND PERIOD

Acuva warrants to you that the Product will be free from defects in materials and workmanship under normal use for 1 year from the original date of purchase by you (the "Warranty Period"). The limited warranty in this Agreement (the "Limited Warranty") is not transferable by you. All subsequent purchasers acquire the Product "as is" without benefit of the Limited Warranty. Where you purchased the Product from Acuva's Site or other online vendors the date of purchase is the date of the purchase invoice issued to you by Acuva or such online vendors by email. Where you purchased the Product from an authorized reseller at a physical location, the date of purchase is the date of the invoice issued to you at the physical location.

DEFECTS

In the event Acuva determines that the Product is defective, Acuva may in its discretion: (i) replace the defective Product with a new Product; or (ii) refund to you the purchase price you paid for the Product. SECTION 6(b) IS NOT APPLICABLE TO RESIDENTS OF QUEBEC.



Warranty Cont'd

REPLACEMENT

Where the Product is replaced during the Warranty Period, except as otherwise prohibited by applicable laws, the warranty for the replaced Product, as applicable, will expire upon the expiration of the original Warranty Period. Any warranty service or support under this Limited Warranty is conditioned upon your return of the Product to Acuva. Where there has been a replacement of the Product, the Product, as provided pursuant to this limited warranty, becomes your property and the Product being replaced becomes Acuva's property. Where there is a refund, you will return the Product to Acuva and such Product becomes Acuva's property. Acuva may condition a refund or replacement on you returning the product or require you to provide a credit card number, which will be charged only if you fail to return the Product. SECTION 6(c) IS NOT APPLICABLE TO RESIDENTS OF QUEBEC.

EXCLUSIONS

The limited warranty does not apply:

1. To normal wear and tear;
2. If the Product was not purchased from Acuva or its authorized retailers;
3. To damage caused by misuse, corrosion, moisture or liquids, proximity or exposure to heat or external environment, accident, abuse, misuse, neglect, improper installation or misapplication;
4. To physical damage to the Product;
5. To any software, whether or not supplied by Acuva.

Appendix: Installation Instructions

UV-LED Device Installation

1. Find an under-counter position for the UV-LED device and pre-filter to be mounted, allowing space for the tubing to be connected without needing to bend the tube to the point of pinching or folding.
2. Mount the Din-Rail (Item shown in the "Mounting The Unit" diagram) that will hold the UV device with two wood screws, and the filter clips for the pre-filter with the two remaining screws.
3. To install the 1/2" - 3/8" OD Tee & shutoff valve (Item no.1) to the cold-water line, assure that the cold-water line is not under pressure, that the water pump is not powered or that water flow is cut off by an upstream shutoff valve. Expect some water to drain from the cold-water line and cut the cold-water line with tube cutters. Insert the 1/2" cold-water lines to the 1/2" female ends of the Tee, push the tubes into the Tee as far as possible and pull slightly to assure that the seal is secure.
4. Attach a length of the provided 3/8" tubing (Item no.2) that will connect the Tee to the Pre-Filter (Item no.3), insert the tube into the female end of the Tee, and push the tube into the Tee as far as possible and pull slightly to assure that the seal is secure.
5. To install the Pre-Filter, depending on the type of filter straight tube adapters may be used to change the size of the tubing from 3/8" to 1/4"OD and back while making sure that water will flow in the proper direction as indicated on the filter. Push the tube into the adapter as far as possible and pull slightly to assure that the adapter is properly sealed. Install the provided filter clips with screws and snap the Pre-Filter into its clips.
6. To install the UV device, mount the UV device to the din-rail as seen in the "Mounting the Unit" figure.
8. Cut a length of 3/8" tubing that will connect the pre-filter to the UV device inlet tube and secure the tube into the UV device inlet push-connect fitting as far as possible and pulling slightly to ensure that their seal is secure.
9. Cut a length of 3/8" tubing that will connect the UV device and the smart faucet using a straight reducer adapter (3/8" - 1/4" OD), and connect the tubing to the desired water faucet or appliance.