

# INSTRUCTION

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|----------------------|--|--------------------------|--------------|
| <b>PRODUCT LINE:</b> | TROJANUV (ALL SYSTEMS)<br>AQUAFINE (UV TREATMENT APPLICATIONS) | <b>DOCUMENT NUMBER:</b>  | DC000601-040 |
| <b>TOPIC:</b>        | INSTRUCTION, UV LAMP AND SYSTEM INFORMATION                    | <b>EDITION/REVISION:</b> | 01-09        |

## 1. OVERVIEW

This instruction outlines the safety precautions required for safe storage and handling a UV System and of new and used UV Lamps. A list of UV Lamps and their applicable Product Manuals are located in [Section 5](#).

## 2. SAFETY PRECAUTIONS

Read and observe all labels attached to product. See further directions for use, precautionary statements, claims, storage and disposal information in the product manual.

Read the safety precautions in this section before doing maintenance, service or repair. Obey the instructions in the safety precautions. Failure to follow the instructions in the safety precautions can result in serious injury or death.

### NOTICE

#### Mercury Chemical



- UV lamps contain a small amount of mercury in either elemental or bound amalgam state, depending on lamp type. These lamps are similar to fluorescent and compact fluorescent lamps (CFL). Always comply with local regulations governing the disposal of lamps containing mercury and the waste associated with breakage.
- NEVER use a vacuum cleaner to clean up broken lamps containing mercury. Vacuuming could spread mercury-containing powder or vapor.
- Thoroughly collect broken glass and trace amounts of mercury and place into a sealable bag or container. For further reference see the U.S. EPA guidelines <http://www.epa.gov/cfl/cleaning-broken-cfl>.
- If you have further questions about the safe clean-up of mercury containing lamps, contact the:

**TrojanUV Systems:** Technical Assistance Center at [tac@trojantechnologies.com](mailto:tac@trojantechnologies.com)

**Aquafine Systems:** Aquafine Service Support Group at [techservice@trojantechnologies.com](mailto:techservice@trojantechnologies.com)

### NOTICE



#### Personal Protective Equipment Required.

- ALWAYS use appropriate eye, hand, and foot protection.
- ALWAYS wear UV-C safety glasses when around equipment or a UV-C faceshield with safety glasses or safety goggles when inspecting open running equipment.
- ALWAYS follow plant safety procedures and protocols.
- ALWAYS take necessary precautions when working around, operating, or working on this equipment, if contamination of components is expected within this application due to effluent biological or chemical contaminants.

## NOTICE



Only competent personnel should undertake operation, repairs, maintenance, or servicing of equipment described in the product manual. Maintain the continuity of the lockout tag out between shifts. If you do not understand the information or procedure explanations in the product manual, STOP and contact your Service Provider for assistance.

## NOTICE

The **TrojanUV3000®** has been validated through microbial testing. Through this testing, performance data has been generated for UV dose delivery to inactivate Escherichia coli (E. coli) and fecal coliform.

The **TrojanUV3000®B** has been validated through microbial testing. Through this testing, performance data has been generated for UV dose delivery to inactivate Escherichia coli (E. coli) and fecal coliform.

The **TrojanUV3000®PTP** has been validated through microbial testing. Through this testing, performance data has been generated for UV dose delivery to inactivate Escherichia coli (E. coli) and fecal coliform.

The **TrojanUV3000Plus®** has been validated through microbial testing. Through this testing, performance data has been generated for UV dose delivery to inactivate Escherichia coli (E. coli) and fecal coliform.

The **TrojanUV4000/4000®Plus** has been validated through microbial testing. Through this testing, performance data has been generated for UV dose delivery to inactivate Escherichia coli (E. coli) and fecal coliform.

The **TrojanUVFit®** has been validated through microbial testing. Through this testing, performance data has been generated for UV dose delivery to inactivate Poliovirus, Escherichia coli (E. coli) and fecal coliform.

The **TrojanUVFlex®** has been validated through microbial testing. Through this testing, performance data has been generated for UV dose delivery to inactivate Cryptosporidium, Giardia, and Adenovirus.

The **TrojanUVFlex®** wastewater treatment system has been validated through microbial testing. Through this testing, performance data has been generated for UV dose delivery to inactivate Poliovirus, Escherichia coli (E. coli) and fecal coliform.

The **TrojanUVFlex®AOP** has been validated through microbial testing. Through this testing, performance data has been generated for UV dose delivery to inactivate Cryptosporidium, Giardia, and Adenovirus.

The **TrojanUVPhox®** has been validated through microbial testing. Through this testing, performance data has been generated for UV dose delivery to inactivate Cryptosporidium, Giardia, and Adenovirus.

The **TrojanUVSigna®** has been validated through microbial testing. Through this testing, performance data has been generated for UV dose delivery to inactivate Escherichia coli (E. coli) and fecal coliform.

The **TrojanUVSwift®** has been validated through microbial testing. Through this testing, performance data has been generated for UV dose delivery to inactivate Cryptosporidium, Giardia, and Adenovirus.

The **TrojanUVSwift®ECT** has been validated through microbial testing. Through this testing, performance data has been generated for UV dose delivery to inactivate Cryptosporidium, Giardia, and Adenovirus.

The **TrojanUVSwift®SC** has been validated through microbial testing. Through this testing, performance data has been generated for UV dose delivery to inactivate Cryptosporidium, Giardia, and Adenovirus.

The **TrojanUVTelos®** has been validated through microbial testing. Through this testing, performance data has been generated for UV dose delivery to inactivate Cryptosporidium, Giardia, and Adenovirus.

The **TrojanUVTorrent®** has been validated through microbial testing. Through this testing, performance data has been generated for UV dose delivery to inactivate Cryptosporidium, Giardia and Adenovirus.

The **Aquafine Swift Beverage®** has been validated through microbial testing. Through this testing, performance data has been generated for UV dose delivery to inactivate Cryptosporidium, Giardia, and Adenovirus.

The **Aquafine Logic®** inactivates Escherichia coli (E. coli) and fecal coliform

The **Aquafine MPR®** inactivates Escherichia coli (E. coli) and fecal coliform.

The **Aquafine OptiVenn™** inactivates Alicyclobacillus, Salmonella and Escherichia coli (E. coli) and fecal coliform.

The **Aquafine Avant™** system inactivates Alicyclobacillus, Salmonella and Escherichia coli (E. coli)

Other Aquafine **UV Water Systems** inactivates Escherichia coli (E. coli) and fecal coliform



**WARNING:** This product can expose you to chemicals including phthalates, which is known to the State of California to cause cancer, and mercury, which is known to the State of California to cause birth defects or other reproductive harm. For more information go to [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov).

**Notes:** 1) *Dispose of contaminated parts/components as per country requirements.*

2) *Refer to the Safety Data Sheets for accidental exposure to materials.*

### 3. STORAGE REQUIREMENTS



UV Lamps contain mercury. Refer to [Section 2](#).

The manufacturer recommends indoor storage of the UV System and UV Lamps. The UV System and UV Lamps should be stored in dry warehouse. Heating is not necessary during storage. However, before installation, the equipment must be warmed to greater than 15 °C (60 °F) for a period of 24 hours.

Storage area conditions:

- Ambient air temperature between -40 °C to 55 °C (-40 °F to 130 °F).
- Relative humidity from 10% to 90%, non-condensing.
- Free from dust and dirt ingress.
- Must not contain corrosive or explosive gases.
- Free from salt air.
- Vermin free

### 4. STORAGE REQUIREMENTS AND DISPOSAL OF USED UV LAMPS



UV Lamps contain mercury. Refer to [Section 2](#).

Put used UV Lamps into the replacement UV Lamp shipping container, or a similar container. It is preferable that the original packing materials be used where possible, or materials adequate to prevent breakage during storage and transportation.

Boxes of used UV Lamps should be labeled as such and stored in a location where the potential for accidental breakage is minimized.

A UV Lamp recycler may have specific procedures and UV Lamp storage requirements. Consult with a UV Lamp recycler to determine all applicable policies.

This component contains Mercury. Dispose according to Local, State, or Federal Laws.

If you are located in North America, we invite you to participate in our Lamp Recycling Program. More information can be found on our website:

<https://www.trojantechnologies.com/en/parts-services/municipal/recycle-genuine-parts>

## 5. NEW AND LEGACY UV SYSTEM AND LAMP INFORMATION

The directions for use can be found in the relevant Product Manual listed in the tables below.

**Note:** The product number signifier 'xx' is a place holder for document language. For example, the 'xx' will be replaced with a 01 for a document provided in English for all product manuals.

*\*Legacy Product. This system is no longer in production, please contact Trojan Technologies for product manual.*

### 794447G UV Lamps

| Part Number | Product                         | Product Manual Document Number |
|-------------|---------------------------------|--------------------------------|
| 794447-ORD  | TrojanUV3000Plus (Type 07)      | DC0501xx                       |
|             | TrojanUVFit                     | DC3101xx                       |
|             | TrojanUVSwiftSC (Type D Series) | DC1701xx                       |
|             | TrojanUVPhox (Type 12AL40)      | DC1301xx                       |
|             | TrojanUVPhox (Type 18AL50)      | DC1401xx                       |
|             | TrojanUVPhox (Type 30AL50)      | DC3301xx                       |
|             | TrojanUVPhox (Type xxAL75)      | DC1501xx                       |
|             | Aquafine Swift Beverage         | DC1001xx                       |
|             | Aquafine Logic (Type 06AL30)    | DC6701xx-06AL30                |
|             | Aquafine Logic (Type 12AL40)    | DC6701xx-12AL40                |
|             | Aquafine Logic (Type 18AL50)    | DC6701xx-18AL50                |
| 331014-003  | TrojanUV3000Plus                | <i>*Legacy Product</i>         |
| 794447-0GN  | TrojanUV3000Plus                | <i>*Legacy Product</i>         |
|             | TrojanUVFit (Type AL20)         | DC1101xx                       |
|             | TrojanUVFit (Type AL40)         | DC1201xx                       |
|             | TrojanUVFit (Type AL50)         | DC3001xx                       |
|             | TrojanUVSwiftSC (Type D Series) | <i>*Legacy Product</i>         |
|             | Aquafine Logic (Type AL20)      | DC6601xx-AL20                  |
|             | Aquafine Logic (Type 18AL40)    | DC6701xx-18AL40                |
| 331014-004  | TrojanUV3000Plus                | <i>*Legacy Product</i>         |
| 794447-0YW  | TrojanUV3000Plus                | <i>*Legacy Product</i>         |
|             | TrojanUVSwiftSC (Type D Series) | <i>*Legacy Product</i>         |
| 331014-005  | TrojanUV3000Plus                | <i>*Legacy Product</i>         |

### 908081G UV Lamps

| Part Number              | Product                    | Product Manual Document Number |
|--------------------------|----------------------------|--------------------------------|
| 908081-007               | TrojanUVFlex (Type 100)    | DC3601xx                       |
| 338299-401               | TrojanUVFlex (Type 100)    | DC3601xx                       |
| 908081-005               | TrojanUVFlex (Type 200)    | DC3501xx                       |
| 338299-301               | TrojanUVFlex (Type 200)    | DC3501xx                       |
| 908081-004               | TrojanUVTelos              | DC4401xx                       |
| 338299-501               | TrojanUVTelos              | DC4401xx                       |
| 908081-003<br>908081-103 | TrojanUVSigna (Type 2 Row) | DC3401xx                       |
|                          | TrojanUVSigna (Type 4 Row) | DC0901xx-04R                   |
|                          | TrojanUVSigna (Type 6Row)  | DC0901xx-06R                   |

| Part Number | Product                       | Product Manual Document Number |
|-------------|-------------------------------|--------------------------------|
| 338299-101  | TrojanUVSigna (Type 2 Row)    | DC3401xx                       |
|             | TrojanUVSigna (Type 4 Row)    | DC0901xx-04R                   |
|             | TrojanUVSigna (Type 6Row)     | DC0901xx-06R                   |
| 908081-001  | TrojanUVTorrent (Type 16SL48) | * Legacy Product               |
|             | TrojanUVTorrent (Type 40SL48) | * Legacy Product               |
|             | TrojanUVTorrent (Type 96SL48) | * Legacy Product               |
| 338299-601  | TrojanUVTorrent (Type 16SL48) | * Legacy Product               |
|             | TrojanUVTorrent (Type 40SL48) | * Legacy Product               |
|             | TrojanUVTorrent (Type 96SL48) | * Legacy Product               |

### 794113 and 793xxx UV Lamps

| Part Number | Product                         | Product Manual Document Number |
|-------------|---------------------------------|--------------------------------|
| 794113      | TrojanUVSwiftSC (Type A Series) | DC1601xx-SSCA                  |
| 793010      | TrojanUVSwiftSC (Type B Series) | DC1601xx-SSCB                  |
| 793658      | Aquafine Logic (Type AM)        | * Legacy Product               |
| 793661      | Aquafine Logic (Type AS)        | * Legacy Product               |
| 793664      | Aquafine Logic (Type AL)        | * Legacy Product               |
| 793923      | TrojanUVSwiftSC (Type B Series) | * Legacy Product               |
|             | Aquafine Logic (Type AS)        | * Legacy Product               |

### 302509G UV Lamps

| Part Number          | Product                    | Product Manual Document Number |
|----------------------|----------------------------|--------------------------------|
| 302509<br>302509-004 | TrojanUV3000Plus (Type 07) | * Legacy Product               |
| 331014-006           | TrojanUV3000Plus (Type 07) | * Legacy Product               |

### 302417 and 302418 UV Lamps

| Part Number          | Product         | Product Manual Document Number |
|----------------------|-----------------|--------------------------------|
| 302417<br>302417-004 | TrojanUV3000PTP | DC0301xx                       |
| 302418<br>302418-004 | TrojanUV3000    | * Legacy Product               |
|                      | TrojanUV3000B   | DC0201xx                       |
|                      | TrojanUV3000PTP | DC0301xx                       |
| 331014-001           | TrojanUV3000PTP | DC0301xx                       |
| 331014-002           | TrojanUV3000    | * Legacy Product               |
|                      | TrojanUV3000B   | DC0201xx                       |
|                      | TrojanUV3000PTP | DC0301xx                       |

### 820xxx UV Lamps

| Part Number | Product                   | Product Manual Document Number |
|-------------|---------------------------|--------------------------------|
| 820392      | TrojanUVSwift (Type xL12) | * Legacy Product               |
| 820856      | TrojanUVSwift (Type xL12) | DC1801xx                       |
|             | Aquafine MPR              | * Legacy Product               |

| Part Number | Product                      | Product Manual Document Number |
|-------------|------------------------------|--------------------------------|
| 820777      | TrojanUVSwift (Type xL24)    | DC1901xx                       |
|             | TrojanUVSwiftECT (Type xL24) | DC2001xx                       |
| 820776      | TrojanUVSwift (Type xL30)    | DC2101xx                       |
|             | TrojanUVSwiftECT (Type xL30) | DC2201xx                       |

### 441169G UV Lamps

| Part Number | Product          | Product Manual Document Number |
|-------------|------------------|--------------------------------|
| 441169-024  | TrojanUV4000     | * Legacy Product               |
| 441169-028  | TrojanUV4000Plus | DC0701xx                       |

### 316xxx UV Lamps

| Part Number | Product                    | Product Manual Document Number |
|-------------|----------------------------|--------------------------------|
| 316670      | TrojanUV3000Plus (Type 22) | DC3801xx                       |
| 316702-001  | TrojanUV3000Plus (Type 22) | DC3801xx                       |
| 316702-002  | TrojanUV3000Plus (Type 22) | DC3801xx                       |
| 316702-003  | TrojanUV3000Plus (Type 22) | DC3801xx                       |
| 316702-004  | TrojanUV3000Plus (Type 22) | DC3801xx                       |
| 316702-024  | TrojanUV3000Plus (Type 22) | DC3801xx                       |
| 316702-048  | TrojanUV3000Plus (Type 22) | DC3801xx                       |

### 52885G UV Lamps

| Part Number                                | Product           | Product Manual Document Number |
|--|-------------------|--------------------------------|
| 52885-Dx                                   | Aquafine OptiVenn | DC6401xx                       |
| 52885-Dx                                   | Aquafine Avant    | DC6501xx                       |
| * Contact Aquafine for all legacy systems. |                   |                                |

## 6. ASSISTANCE

If you require technical assistance, please contact the Technical Assistance Center (TAC) using the contact information below:

North America: 1-866-388-0488  
 All other areas: 1-519-457-2318  
 E-mail: [tac@trojantechnologies.com](mailto:tac@trojantechnologies.com)

If you require technical assistance, please contact Aquafine Corporation Technical Support using the contact information below:

Telephone: 1-800-423-3015  
 E-mail: [techservice@trojantechnologies.com](mailto:techservice@trojantechnologies.com)

At the time of publishing, the information within this document is current. Due to continuous improvements, we may have future changes and recommendations which will be sent via product bulletins.