

HYDRALOOP

H300/H600

Owners Manual

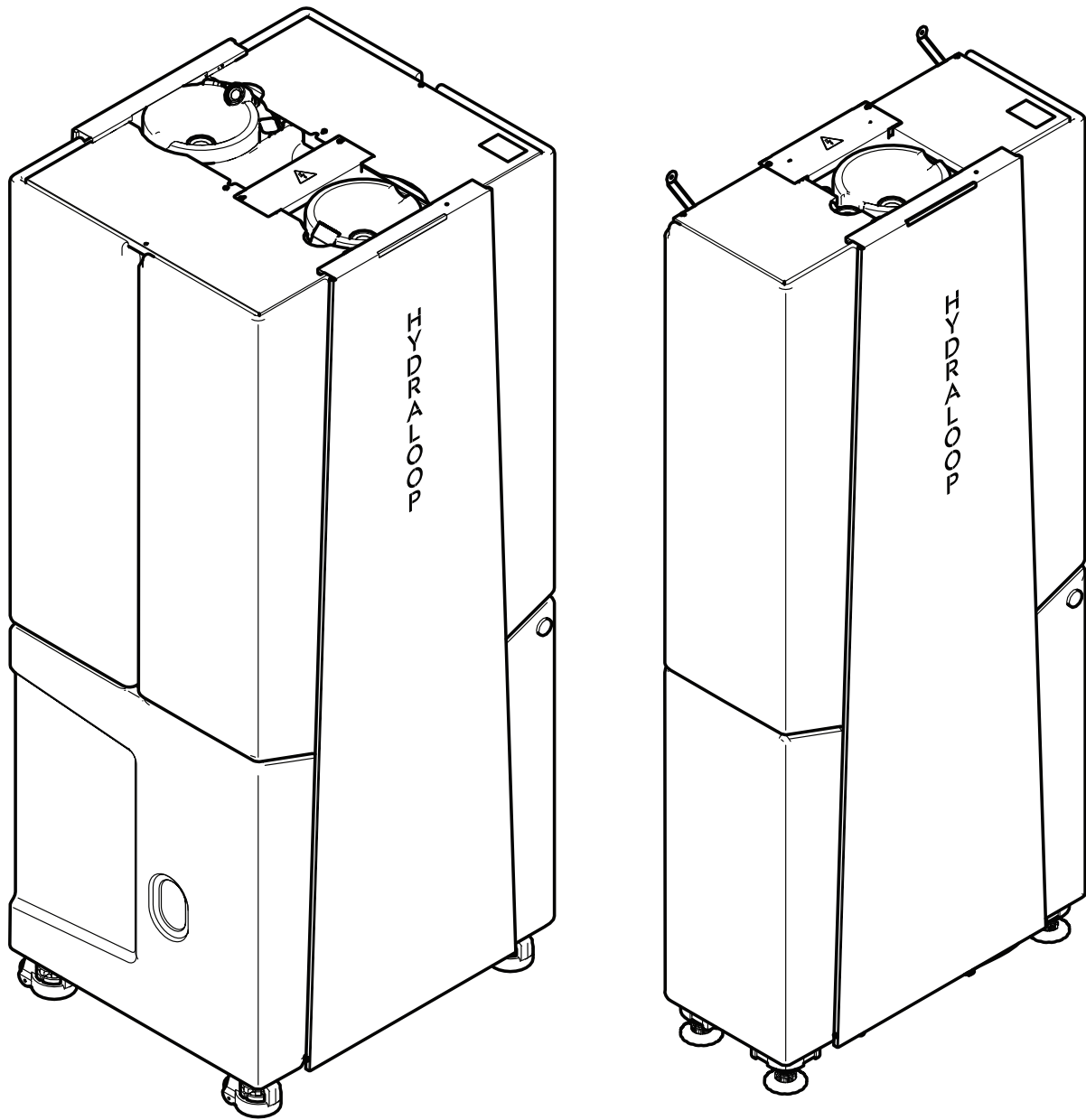


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1. INTRODUCTION

This document provides guidance for the safe operation of the Hydraloop H300/H600 greywater recycling system. It is intended to support users in achieving optimal performance, safety, and longevity of the device.

1.1 DESCRIPTION OF THE USER

This manual is intended for individuals who interact directly with the Hydraloop system, including but not limited to:

- System operators and end users

All work on the Hydraloop system shall be carried out by qualified and authorised personnel who:

- Have read and understood this manual
- Are familiar with plumbing and electrical systems, in accordance with local laws and regulations.
- Are aware of safety risks and proper operating procedures

1.2 RETAINING INSTRUCTIONS

Read this manual carefully before using the Hydraloop system. Keep this document accessible for future reference and make sure it is passed on to any subsequent users or operators.

Non-compliance with the instructions in this manual could void the warranty and release the manufacturer from liability.

1.3 DOCUMENTATION, SUPPORT AND SERVICE

For the latest documentation, technical updates, or service support, contact your authorised Hydraloop partner or visit official Hydraloop channels.

1.4 USE OF CHECKLISTS

Your Hydraloop installation involves two checklists that your installer will complete with you:

- The **Recycle Ready Pre-Checklist** confirms that your building's plumbing is ready for greywater recycling. This is signed before installation begins.
- The **Recycle Ready Confirmation Checklist** confirms that everything is ready for the system to start working. It is signed after installation, before the system is switched on.

Your installer submits both checklists. Keep a copy for your records. If the checklists are not submitted, your warranty may be affected.

1.5 EXPLANATION OF SAFETY WARNINGS

⚠ DANGER

“DANGER” — Indicates a hazard with a high level of risk which, if not avoided, will result in death or serious injury

⚠ CAUTION

“CAUTION” — Indicates a hazard with a low level of risk which, if not avoided, could result in minor or moderate injury.

⚠ WARNING

“WARNING” — Indicates a hazard with a medium level of risk which, if not avoided, could result in death or serious injury.

NOTICE

“NOTICE” — Indicates information considered important, but not hazard-related.

2. DESCRIPTION OF THE H300/H600

2.1 INTENDED USE AND REASONABLY FORESEEABLE MISUSE

The Hydraloop system is intended for the collection, treatment, and reuse of greywater from approved sources such as showers and baths. The treated water is suitable for non-potable applications, including toilet flushing, washing machines, and non-spray garden irrigation, subject to applicable local regulations, which may vary by jurisdiction.

The Hydraloop system shall not be used for other purposes, such as:

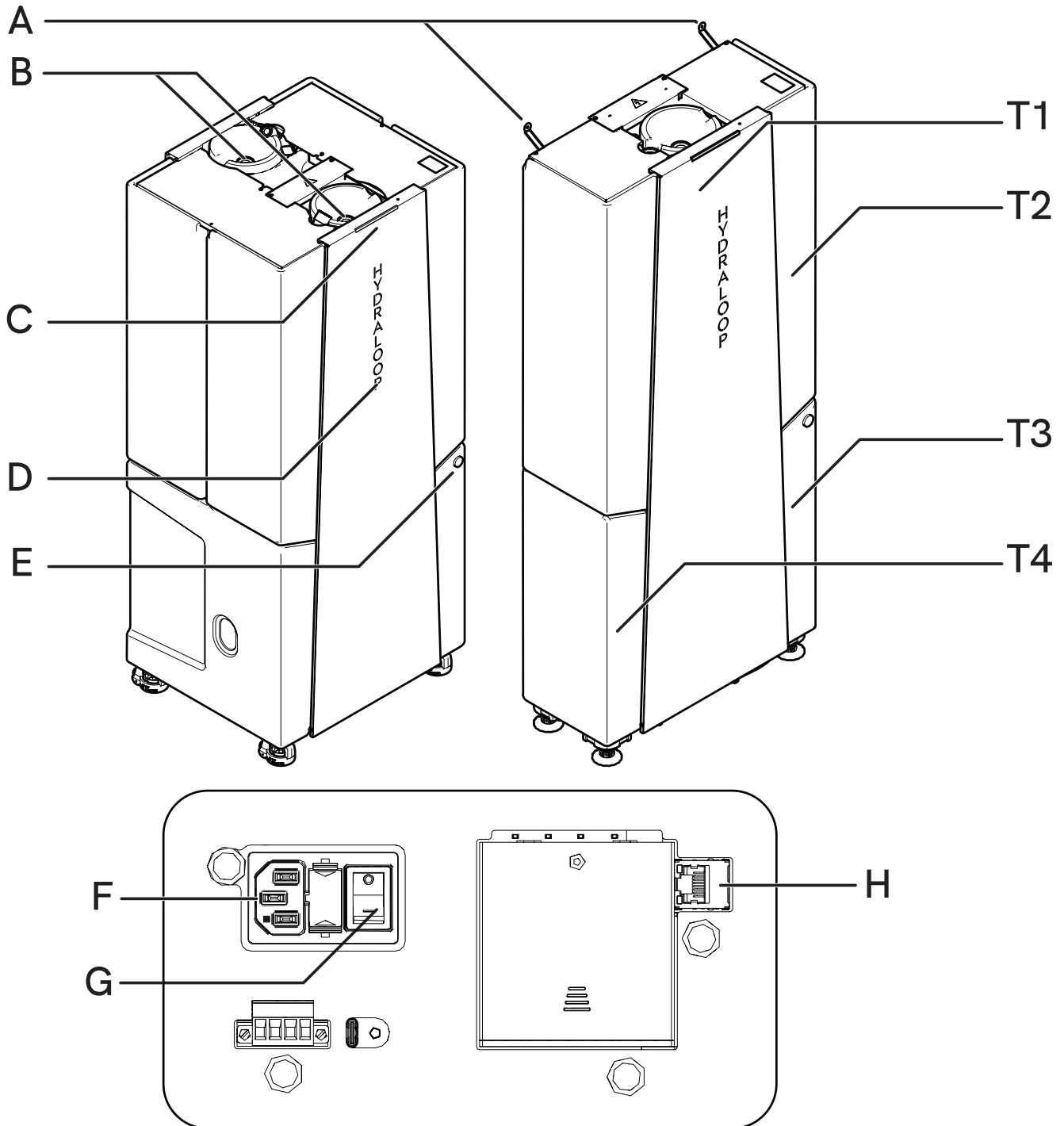
- Treating blackwater (toilet wastewater) or kitchen wastewater;
- Treating water containing solid waste, grease, or food residues;
- Introducing chemicals such as paint, solvents, bleach, disinfectants, or hair dye into the system;
- Treating industrial or process water;
- Producing potable (drinking) water or water for food preparation;
- Operating the system outside the specified environmental and installation conditions.

The Hydraloop system shall be used only in accordance with the instructions in this manual. Any use other than described is considered unintended use.

The Hydraloop system shall be installed, operated, and maintained using approved components, configurations, and procedures. Use of non-approved parts, incorrect installation, or inadequate maintenance could result in system malfunction, reduced performance, or damage, and could void the warranty.

Do not sit or stand on the Hydraloop. Do not use it for storage.

2.2 PRODUCT OVERVIEW



- A. Mounting points (H300 only)
- B. Aerator port(s)
- C. LED status light
- D. Front plate
- E. Maintenance plug
- F. Power port
- G. Power switch
- H. Ethernet port

The Hydraloop consists of 4 tanks:

- T1; Greywater inlet tank
- T2; Bioreactor tank with moving bed bioreactor (MBBR)
- T3; Storage tank holding recycled water
- T4; Tank for backup water connection, with a safe air gap

2.3 TECHNICAL DATA

Parameter	Value H300	Value H600
Device name	Hydraloop H300	Hydraloop H600
System type	Greywater recycling system	
Volume	100 L	200 L
Nominal treatment capacity (depending on user behaviour)	360 L/day	720 L/day
Internal voltage	24 V DC	
Supply voltage	120 V / 230 V AC	
Frequency	50 Hz / 60 Hz	
Average power consumption (actual energy consumption dependent on appliance use)	280 kWh/year	450 kWh/year
Max power during treatment	25 W	50 W
Pump pressure and flow	2.4 bar (240 kPa); max 8 L/min	
Internet connection	Ethernet or 2.4 GHz Wi-Fi	
Frequency band	Wi-Fi: 2.4 GHz; Bluetooth/BLE: 2.4 GHz	
Maximum radio-frequency power transmitted in the frequency bands in which the radio equipment operates	Wi-Fi: 19.68 dBm; Bluetooth: 6.73 dBm; BLE: 8.23 dBm	

2.3.1 Environmental conditions

Parameter	Value
Operating temperature	14 to 35 °C
Relative humidity	< 70 %
Installation location	Indoor only
UV / IP rating	Not rated

2.3.2 Dimensions and weight

Parameter	Value H300	Value H600
Width	800 mm	800 mm
Depth	360 mm	695 mm
Height	1870 mm (excluding inlet)	1892 mm (excluding inlet)
Dry weight	83.5 kg	128 kg
Wet weight	384 kg	740 kg

2.3.3 Input specifications

Parameter	Value
Greywater sources	Shower, bath
Backup water supply	Mains water supply
Maximum backup water pressure	500 kPa
Minimum backup water flow	12 L/min
Inlet pipe size	1/2" BSP
Greywater inlet pipe	Outer diameter Ø 40 mm
Water hardness range	max. 7° dH / 7 GPG / 120-180 ppm

2.3.4 Output specifications

Application	Delivery
Toilet	Permanently pressurised, 1/2" BSP
Washing machine	Permanently pressurised, 1/2" BSP
Auxiliary	Not permanently pressurised, 1/2" BSP
Drain connection	OD Ø 40 mm (clamp connection)

2.3.5 Acoustic performance

Operation	Sound pressure level	Interval
Air pump	29 dB(A)	Daily / long duration
Distribution pump	29 dB(A)	During use
Greywater inflow	49 dB(A)	During use
Backup water filling	48 dB(A)	Weekly (typical)
Inlet diverter	50 dB(A)	During operation
Self-cleaning cycle	50 dB(A)	Weekly / short

2.4 EXPLANATION OF VISUAL AND AUDIBLE CUES

The Hydraloop communicates its operating state through the LED status light and audible buzzer alerts.

2.4.1 Visual cues

Light colour	Meaning
White	Sufficient reusable water is available for all connected outlets.
Blue	No reusable water is available. Backup water is used to supply all outlets.
Blue/White flashing	Reusable water is available in the storage tank, but the volume is insufficient for a full washing machine cycle.
Green	The Hydraloop does its automatic cleaning cycle.
Purple	The Hydraloop detected that the washing machine is in operation.
Orange	The device is not treating greywater and automatically switched to backup water.
Red	A fault is detected in either the connected outlets (toilets or washing machine) or in the Hydraloop itself. Distribution of water is stopped.

2.4.2 Audible cues

Detected faults produce a buzzer pattern, accompanied by a matching number of LED pulses.

Fault	Buzzer and visual pattern
High water level	2 pulses per minute
Air pump	3 pulses per minute
UV-C lamp	4 pulses per minute
Storage tank re-disinfection circulation	5 pulses per minute
Water distribution pump	6 pulses per minute

2.5 SIMPLIFIED DECLARATION OF CONFORMITY

Hereby, Hydraloop Systems B.V., declares that the radio equipment type Hydraloop is in compliance with directive 2014/53/EU. The full text of the EU declaration of conformity is available at the following internet address: <https://www.hydraloop.com/ESP32-WROOM-32E-CE>

3. SAFETY INSTRUCTIONS

⚠ DANGER

READ AND UNDERSTAND THIS MANUAL AND ITS SAFETY INSTRUCTIONS BEFORE USING THIS DEVICE. FAILURE TO DO SO CAN RESULT IN SERIOUS INJURY OR DEATH.

3.1 SAFETY INFORMATION

General safety information

- This appliance is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, even if supervised.
- Children should be supervised to make sure that they do not play with the appliance.
- **RISK OF ILLNESS FROM DRINKING PROCESSED WATER!** DO NOT drink the water produced by the Hydraloop. It is not potable. Drinking the processed water can cause serious illness. Use the Hydraloop output only for permitted applications such as toilet flushing, irrigation, or doing laundry.
- Always prevent solid materials, chemicals, paint residues, hair dye, bleach, disinfectants, or other abnormal substances from entering the system. These can damage the unit and affect water treatment.
- Do not place objects on or against the product. Do not use the product as a support or to lean on. Do not sit or stand on the Hydraloop. Do not use it for storage.
- Always follow instructions in this *Owners Manual* for correct use of the product.

Installation safety information

- Installation work shall only be done by Hydraloop staff, certified partners, or authorised installers.
- Follow the *Installation Manual* for a safe and correct installation.

Electrical safety information

- **RISK OF ELECTRIC SHOCK!** Only Hydraloop staff, certified partners, or authorised installers shall open or service the device to reduce risk of electric shock.
- Check the product and the cables for damage before electrical installation. If there is any visible damage, a strong odour or excessive heating of components, disconnect the power supply immediately and do not use the product.
- If the power cable is damaged, it shall be replaced by Hydraloop staff, a certified partner, or an authorised installer.
- **RISK OF THERMAL HAZARD!** In order to avoid a hazard due to inadvertent resetting of the thermal cut-out, this appliance must not be supplied through an external switching device, such as a timer, or connected to a circuit that is regularly switched on and off by the utility.

Maintenance and repair safety information

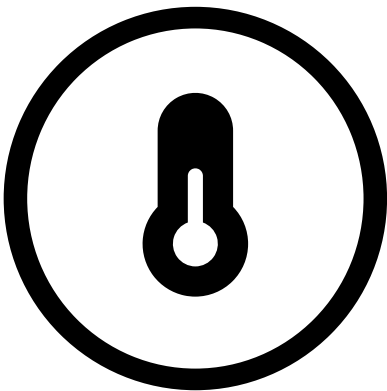
- Maintenance, service, and repair work shall only be done by Hydraloop staff or authorised persons.
- Always follow the maintenance and service schedule as indicated in the *Maintenance Guide*.
- Do not modify or change the product or its technical specifications. Only use original parts and accessories.

4. OPERATION

4.1 WORKING PRINCIPLE

The H300 and H600 are decentralised greywater recycling devices that collect, treat, and store lightly contaminated greywater for non-potable reuse. Treatment combines sedimentation, dissolved air flotation, aerobic biological digestion in the T2 tank, and UV-C disinfection before storage in a lower reusable-water tank. A booster pump distributes treated water on demand to connected outlets.

When reusable water is unavailable or the system detects a fault, the device automatically draws from the backup potable water supply through an air gap to maintain service continuity at the outlets. The two water streams remain physically separated at all times.

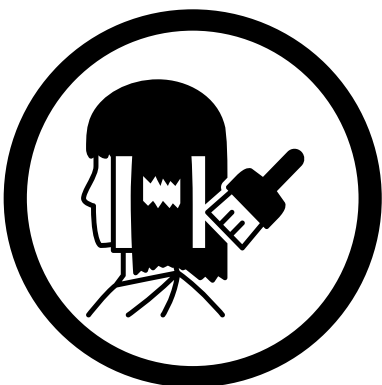


Temperature limits

Maximum process water temperature: 60 °C (140 °F). Water above this temperature damages internal components.

Operating ambient temperature: 14 °C to 35 °C (57 °F to 95 °F).

Do not expose the device to direct sunlight.



No hair dye

Hair dye must not enter the Hydraloop. It damages the biological treatment system and the internal seals.

If hair dye accidentally enters the system, activate Self-Service mode in the Hydraloop App (Section 5.4) and contact the certified installer before resuming normal operation.

Hydraloop Systems B.V. is not liable for damage to laundry caused by hair dye, paint, bleach, or similar substances introduced through the greywater stream.



No human waste

Human waste must not enter the shower or bath drains feeding the Hydraloop. An isolated accident will not cause permanent damage, but repeated incidents will compromise treatment performance.

If human waste accidentally enters the system, activate Self-Service mode in the Hydraloop App (Section 5.4) before resuming normal operation.



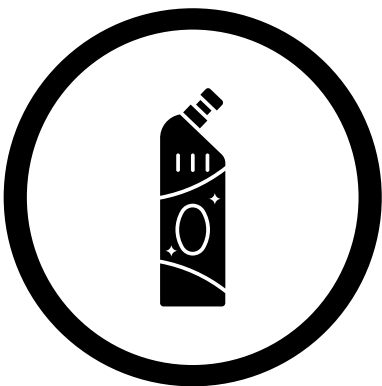
Hair and debris management

Long hair and debris in the inlet stream can clog the wastewater piping and reduce treatment efficiency.

To prevent clogs:

- Install debris traps or strainers in all shower drains, bathtubs, and connected sinks.
- Clean traps regularly to remove accumulated hair and debris.
- Alternatively, use in-bath filters or hair-catching barriers during bathing.

These practices reduce the need for unscheduled service visits.



No bleach or chlorinated cleaners

Do not clean showers, baths, or connected drains with bleach or chlorinated products. These substances damage the biological treatment system and the internal seals.

If bleach accidentally enters the system, activate Self-Service mode in the Hydraloop App (Section 5.4) and contact the certified installer.

Use biodegradable, non-chlorinated cleaning products instead.

4.2 CONNECTED SOURCES AND OUTPUTS

⚠️ WARNING

Reusable water shall not be routed to showers, bidets or toilet hand showers under any configuration.

The table below shows which greywater sources are permitted for each Hydraloop model. In addition, the system provides reusable water for selected non-potable applications, as outlined in this section.

Approved inputs:

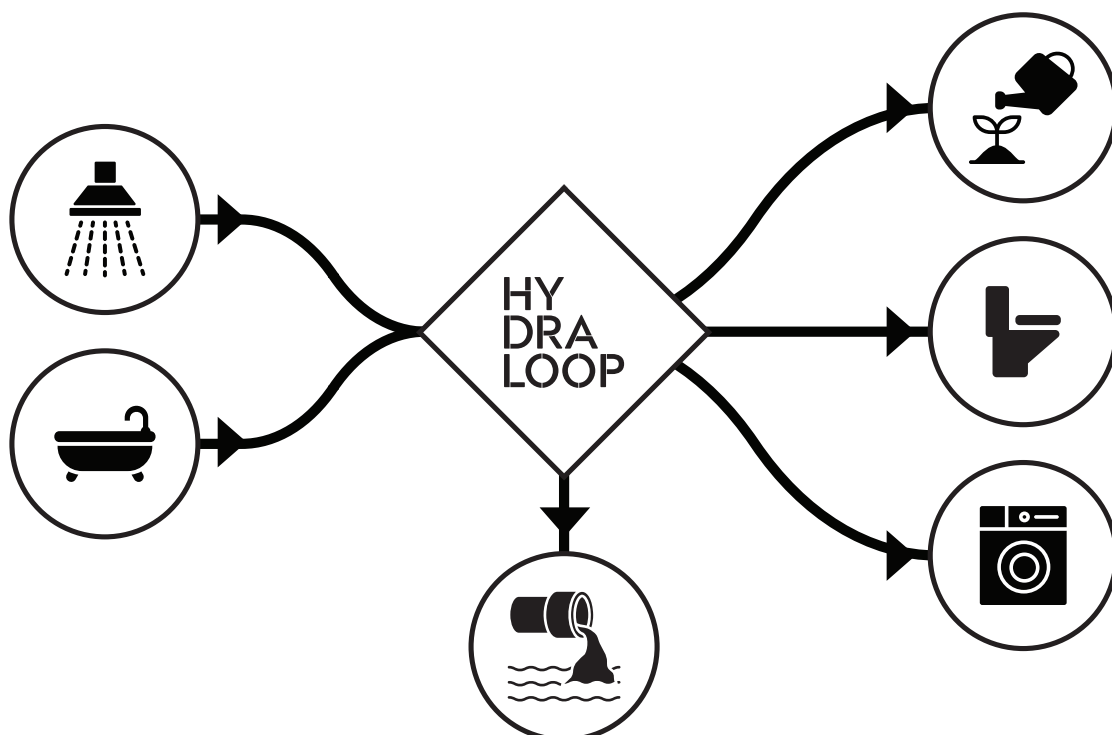
Source	H300	H600
Shower and bath	✓	✓
Bathroom hand basin (dependent on configuration)	✓	✓
Condensate water		✓

Prohibited inputs:

Kitchen sinks, dishwashers, toilets, and floor drains. Connecting any of these voids the warranty and compromises the biological treatment process.

Reusable water outputs:

- Toilet cistern feed
- Washing machine feed
- Auxiliary outlet for external storage tank (e.g., outdoor irrigation applications)



4.3 START-UP AND COMMISSIONING

4.3.1 Initial 21-day biological activation

Following installation and verification by a certified installer, the Hydraloop requires a minimum start-up period of 21 days and 20 shower events to establish the aerobic microbial culture in the T2 treatment tank. During this period:

- Greywater collection and treatment proceed normally.
- Treated water is purged to the sewer rather than stored.
- All connected outlets are supplied from the backup potable water source.

4.3.2 Switchover to reusable water

When both thresholds (time and shower count) are met, the device automatically transitions to delivering reusable water to the configured outlets. No user action is required. The switchover status can be verified via the LED status light (see Section 2.4.1) or the Hydraloop app.

4.4 STANDBY AND NON-ACTIVITY BEHAVIOUR

The device adapts to household occupancy patterns. Two standby states are defined: short-term standby and deep standby.

4.4.1 Loss of internet connection

An internet connection is required for the Hydraloop to operate. If the device has no internet connection for more than 6 consecutive days, the system will switch to backup water only and will no longer dispense recycled greywater until the connection is restored.

4.4.2 Short-term standby (72 hours)

If no incoming or outgoing greywater flow is detected for 72 consecutive hours, the device:

1. Activates the purge valve on the lower storage tank, retaining a residual volume of 15 L (3.5 gal).
2. Maintains the minimum operating volume in both T2 treatment tank.
3. Continues intermittent aeration to preserve the biological culture.

The device wakes automatically on the next detected inflow and resumes normal operation without user intervention.

4.4.3 Deep standby (>1 month)

NOTICE

Keep the device powered on continuously, even during extended absences of up to one month, to avoid triggering the full reactivation cycle.

If non-activity exceeds approximately one month, the upper treatment tank is also purged and the device enters deep standby. On reactivation, the full 21-day biological startup cycle (Section 4.3.1) is repeated automatically.

4.5 POWER OUTAGE BEHAVIOUR

NOTICE

In areas subject to frequent or extended outages, an Uninterruptible Power Supply (UPS) is recommended to preserve stored reusable water and avoid unnecessary purge cycles.

The Electronic Control Unit (ECU) is supported by an internal backup battery and remains active during mains power loss.

Outage duration	Device behaviour
< 40 minutes	Distribution is suspended; stored reusable water and backup water become available immediately on power restoration.
≥ 40 minutes	Reusable water in the storage tank and greywater in the upper treatment tank are purged a few minutes after power is restored.

4.6 SYSTEM MALFUNCTION AND AUTOMATIC BACKUP

The Hydraloop server monitors the Hydraloop continuously via the connected network. If a critical component fault is detected (for example, UV-C lamp failure, air pump failure, or distribution pump failure), the system:

1. Suspends distribution of reusable water as a precaution.
2. Switches all outlets to the backup potable water supply.
3. Notifies the registered installer automatically.
4. Indicates the fault via the LED status light and the Hydraloop app (see Sections 2.4 and 7).

User intervention is not required to initiate the switchover. Service shall only be done by Hydraloop staff or a certified partner.

5. HYDRALOOP APP

The Hydraloop App is a free companion application that allows the device owner to monitor system status, configure reusable water priorities, view water-saving statistics, and access support resources. The app is available for iOS and Android.

5.1 SETUP AND PAIRING

After installing the app, open the Dashboard and complete the following:

1. Enter the device serial number as printed on the data plate.
2. Enter the owner's contact details and the physical installation address. This information is required for warranty registration.
3. Provide the local Wi-Fi network credentials. The device requires a permanent Wi-Fi connection for remote monitoring and automatic fault notification.

A certified installer can assist with this process during commissioning.

5.2 STATUS MONITORING

The Dashboard displays the current operating state of the device. The on-device LED and the in-app indicator share the same colour scheme (see Section 2.4.1).

For detailed fault diagnosis, refer to Section 7.

5.3 REUSABLE WATER PRIORITY SETTINGS

When stored reusable water is limited, the device allocates supply according to a user-configurable priority order. From the Settings page, the user can rank the following outlets:

- Toilet cistern
- Washing machine
- Auxiliary outlet (outdoor irrigation, where installed)

Outlets ranked lower are temporarily supplied from backup water until reusable volume is replenished. The default priority places toilet flushing first, as this represents the most consistent daily demand.

5.4 SELF-SERVICE MODE

NOTICE

The Self-Service mode to purge greywater is not a substitute for correct use. Do not introduce solid materials, chemicals, paint residues, hair dye, bleach, disinfectants, or other abnormal substances into the system. Repeated contamination can damage the device and affect water treatment quality.

The Self-Service function, accessed from the Settings page, allows the user to manually purge all incoming greywater to the sewer and supply outlets exclusively from backup water.

Use Self-Service when contaminants that could damage the biological treatment system have entered, or are likely to enter, the greywater stream. Examples include:

- Hair dye
- Bleach or chlorinated cleaning products
- Paint, solvents, or other household chemicals

After the contamination event is cleared, contact the certified installer before returning the device to normal operation. See Section 4.1 for full guidance on prohibited substances.

5.5 STATISTICS AND WATER SAVINGS

The Statistics page presents a Water Recycled graph with selectable resolution (daily, weekly, or monthly).

Reported values include:

- Total greywater treated
- Total reusable water distributed
- Estimated potable water saved
- Cumulative savings since commissioning

These figures are derived from internal flow sensors and updated in near real time via the Wi-Fi connection.

5.6 INFORMATION AND SUPPORT ACCESS

The Information page provides direct links to:

- Frequently asked questions
- Troubleshooting guides
- Installation documentation
- Warranty information
- Direct contact with the Hydraloop support team

For immediate assistance, support is reachable at service@hydraloop.com or through the in-app contact channel.

6. MAINTENANCE

⚠ WARNING

- All maintenance and service operations on the Hydraloop device shall be done only by Hydraloop staff, certified Hydraloop partners, or authorised installers.
- Opening or servicing the device by unauthorised persons creates a risk of electric shock, contamination of the reusable water circuit, and voids the manufacturer warranty.
- Before any service work, the device shall be disconnected from the backup water supply and from mains power.
- The user is responsible for arranging maintenance at the prescribed intervals but shall not do service tasks directly. To request service, contact the installer of record or Hydraloop support at service@hydraloop.com.

6.1 MAINTENANCE SCHEDULE

Routine maintenance is required to preserve treatment performance, and maintain warranty coverage.

Interval	Activity	Reference
Every 2 years	Visual inspection	6.2
	Tank drain and internal cleaning (T1, T2, T3)	6.2
	Greywater inlet cleaning	6.2
	Pressure tube cleaning (inlet and T1)	6.2
	Air diffuser removal, cleaning, and descaling	6.2
	Transfer tube cleaning (upper, middle, lower)	6.2
	Citric acid cleaning program	6.2
	UV-C lamp replacement	6.3.1
Every 4 years	Backup battery replacement	6.3.2
	Air diffuser replacement	6.3.3
As needed	Additional descaling in hard-water regions	6.4

The certified installer maintains a service log for the device. The user should retain a copy of each service report.

6.2 STANDARD SERVICE TASKS

The standard service visit includes the following operations, done in sequence by the authorised technician:

1. Visual inspection of all water lines, fittings, seals, and internal components for leaks, cross-connections, wear, or damage.
2. Draining and internal cleaning of treatment and storage tanks (T1, T2, and T3).
3. Cleaning of the greywater inlet.
4. Cleaning of the pressure tubes (inlet and T1).
5. Air diffuser service, including removal, mechanical cleaning, descaling, and reinstallation.
6. Cleaning of the upper, middle, and lower transfer tubes.
7. Descaling of the treatment and storage tanks using a citric acid cleaning program.
8. Functional verification of the air pump, UV-C lamp, distribution pump, and ECU sensors via the Hydraloop Device Manager (HDM).

6.3 COMPONENT REPLACEMENT INTERVALS

6.3.1 UV-C lamp (every 2 years)

The UV-C lamp shall be replaced every two years, regardless of operating hours. The lamp is accessed by unscrewing the lid on the UV-C lamp housing. Lamp output degrades progressively over time.

6.3.2 Backup battery (every 4 years)

The internal backup battery shall be replaced every four years. Replacement is carried out by the authorised technician during the scheduled 4-year service visit.

6.3.3 Air diffuser (every 4 years)

The air diffuser shall be replaced every four years. Replacement is carried out by the authorised technician during the scheduled 4-year service visit.

6.4 DESCALING CONSIDERATIONS FOR HARD-WATER REGIONS

Local water hardness should be measured at the time of installation and recorded in the commissioning report. In regions with elevated hardness (typically above 7 °dH or 120 mg/L CaCO₃), more frequent descaling than the baseline is required to prevent scale accumulation on heat-affected surfaces, the air diffuser, and internal piping.

The installer will recommend an adjusted service interval based on the measured hardness. Where applicable, the Hydraloop App reports scale-related warnings via the LED status light (see Section 7).

7. TROUBLESHOOTING

⚠ WARNING

Do not open the Hydraloop device under any fault condition. All internal services shall only be done by Hydraloop staff or a certified partner.

This section provides diagnostic references for the LED status light and the audible alarm. The Hydraloop server monitors the device continuously. In most fault conditions, the registered installer is notified automatically, and no user action is required beyond observation. Conditions requiring direct user contact are noted explicitly.

7.1 LED STATUS REFERENCE

The LED status light on the device and the corresponding indicator in the Hydraloop App share the same colour scheme. Colours fall into three categories: normal operation, temporary, and fault.

Colour	Category	Meaning	User action
White	Normal	Reusable water is available; distributing to outlets.	None
Blue	Normal	No reusable water available; backup water supplied.	None
Blue/white alternating	Normal	Reusable water present, volume below washing machine threshold.	None
Purple	Temporary	Washing machine cycle detected.	None
Green	Temporary	Automatic self-cleaning cycle in progress.	None
Orange	Fault	Greywater treatment suspended; backup water supplied.	If state persists >24 h, contact support via the app.
Red	Critical fault	Distribution suspended or downstream issue detected.	Contact support immediately via the app.

A red indicator can indicate either of the following:

- The device has detected an issue with a connected toilet or washing machine (for example, continuous flow or unexpected demand).
- The device itself has a critical fault and cannot distribute water.

In both cases, open the Hydraloop App and contact support directly. The app will identify which of the two conditions applies.

7.2 AUDIBLE ALARM REFERENCE

When a fault occurs, the audible buzzer and the visual indicator pulse in a matched pattern. The pulse count identifies the affected component.

Pulses per minute	Component	LED colour	Severity
2	High water level sensor	Orange	Fault
3	Air pump	Orange	Fault
4	UV-C lamp	Orange	Fault
5	Storage tank re-disinfection circulation	Orange	Fault
6	Water distribution pump	Red	Critical fault

For all fault patterns, the device automatically switches outlets to the backup water supply and notifies the registered installer. The user does not need to silence or reset the alarm; it clears automatically when the fault is resolved.

7.3 WHEN TO CONTACT SUPPORT

Contact the installer of record or Hydraloop support directly under any of the following conditions:

- Red LED status light at any time
- Orange LED status light persists longer than 24 hours
- Audible alarm that does not clear within the expected service window
- Suspected contamination of the greywater stream by hair dye, bleach, paint, or other prohibited substances (activate Self-Service mode first; see Section 5.4)
- Visible leaks at any connection point, valve, or seal
- Unexpected backup water consumption reported in the Hydraloop App
- Mechanical noise that differs noticeably from normal operation.
- Loss of internet connectivity lasting more than 24 hours, which prevents remote monitoring and automatic fault notification

Contact channels:

- In-app support (preferred): opens a direct ticket linked to the device serial number
- Email: service@hydraloop.com
- Installer of record: contact details provided in the commissioning report

When contacting support, have the device serial number ready (visible on the data plate) and, if possible, a screenshot of the current app status.

8. PRIVACY STATEMENT

Hydraloop is committed to making sure that personal data is handled with care, security, and transparency. This privacy statement explains how information is collected, processed, stored, and protected when using the Hydraloop App and the underlying Hydraloop Device Manager. Data is used solely to make sure the system operates efficiently, securely, and reliably.

Hydraloop follows strict GDPR (General Data Protection Regulation, the European Union's data privacy law) guidelines and applies best practices to give users control over their data while maintaining the highest security standards. For users in North America, the Middle East, and Australia, applicable data protection laws and industry standards are applied to make sure a consistent level of security and privacy protection worldwide.

8.1 HOW USER DATA IS USED

Only the data necessary for system functionality, maintenance, and security is collected:

- **Basic User Information:** Name, email address, and phone number for account setup and support.
- **Hydraloop System Data:** Device status, maintenance logs, and water recycling statistics to make sure optimal system performance.
- **Service and Usage Data:** Performance monitoring, troubleshooting logs, and service requests to provide proactive support.
- **Communication Data:** Any interaction with customer support or the service team.

8.2 WHY USER DATA IS PROCESSED

Personal data is processed to:

- Make sure of the smooth operation, security, and efficiency of the Hydraloop system.
- Provide timely support and maintenance when needed.
- Keep users informed of important service updates and improvements.
- Comply with legal and regulatory obligations to safeguard user rights.

Personal data is not used for advertising, marketing, or other non-essential purposes.

8.3 USER CONTROL

Because the processing of personal data is essential for the operation and security of the Hydraloop system, no additional opt-in is required under GDPR for these functions. Users always have full control over their data and can:

- **Access & Update:** Review and correct personal details.
- **Request Data Deletion:** Request removal of data when it is no longer required.
- **Limit Processing:** Restrict data use under certain conditions.
- **Request a Copy:** Receive data in a portable format.
- **File a Concern:** Contact the local data authority if rights are believed not to be respected.

This privacy statement applies exclusively to the Hydraloop App and Device Manager. Data processing related to the Hydraloop website is governed by a separate policy.

To make any requests regarding personal data, contact the Data Protection Officer at privacy@hydraloop.com.

8.4 DATA SECURITY

Multiple layers of security are applied to make sure personal information is protected:

- Encryption: Data is protected during transmission.
- Access Control: Only authorised Hydraloop technicians and certified partners can access relevant system data for support.
- Multi-Factor Authentication (MFA): An added security layer to safeguard account access.
- Certified Infrastructure: Data is hosted in GDPR-compliant, secure data centres with global standards.

8.5 ACCESS TO USER DATA

Access to personal data is strictly controlled and limited to authorised parties:

- Personal data is never sold or shared for commercial purposes.
- Data is only shared with trusted Hydraloop service partners when necessary for maintenance or support.
- If data is transferred outside the European Economic Area (EEA), North America, the Middle East, or Australia, compliance with local and international data protection regulations is ensured.

8.6 DATA RETENTION

Data is kept only as long as necessary for its intended purpose:

- Service-related data is retained for five years after termination of service.
- Data related to legal obligations is stored in accordance with applicable laws.
- Deletion of personal data can be requested at any time, subject to legal requirements.

8.7 UPDATES TO THIS PRIVACY STATEMENT

This privacy statement may be updated to reflect improvements and changes in services. Any significant updates will be communicated in advance.

8.8 CONTACTING THE DATA PROTECTION OFFICER

For privacy-related inquiries, contact the Data Protection Officer (DPO):

Hydraloop Systems BV Email: privacy@hydraloop.com

9. WARRANTY

Hydraloop guarantees to the original purchaser that the Hydraloop device will be free from material defects for a period of 36 months from the date of the original purchase invoice issued by Hydraloop or one of its authorised Partners, or 24 months from the date of commissioning, whichever period expires first, unless local jurisdiction mandates a longer term.

A "defect" is a manufacturing or design flaw that significantly affects the product's use, is solely attributable to Hydraloop, and is not detectable at the time of delivery.

Warranty coverage is contingent on the requirements set out in this manual being met, including the submission of the signed Recycle Ready Pre-Checklist and Recycle Ready Confirmation Checklist.

For full warranty terms and conditions, refer to the warranty certificate accessible through the Hydraloop Device Manager (HDM).

10. DEFINITION LIST

Term	Definition
Air gap	A physical separation between a potable water supply and a non-potable outlet that prevents backflow and contamination. The Hydraloop uses an AB-class certified air gap in tank T4 to protect the backup water supply.
Approved components	Parts, materials, and accessories supplied or explicitly approved by Hydraloop Systems B.V. for use with the H300 and H600. Using non-approved components may result in system malfunction, reduced performance, or damage and will void the warranty.
Approved inputs	Greywater sources permitted to drain into the Hydraloop. For the H300: showers, baths, bathroom hand basins (dependent on configuration). For the H600: showers, baths, bathroom hand basins (dependent on configuration), and condensate water. Connecting any other source voids the warranty and compromises the biological treatment process.
Authorised installer	A qualified professional approved by Hydraloop Systems B.V. to install, commission, and verify Hydraloop devices. Authorised installers hold active credentials in the Hydraloop Device Manager (HDM). Installation, commissioning, and verification may only be carried out by an authorised installer.

Term	Definition
Backup water	Mains potable water supplied to the Hydraloop's connected outlets when reusable water is unavailable — for example, during the start-up period, when greywater input is insufficient, or when a fault is detected. The backup water supply is kept physically separated from the reusable water circuit at all times.
Blackwater	Wastewater containing human waste, originating from toilets or urinals. Blackwater must never enter the Hydraloop system. Connecting a blackwater source to the greywater inlet voids the warranty and creates a serious health hazard.
Certified partner	A company or organisation that has entered into a formal agreement with Hydraloop Systems B.V. to sell, install, and service Hydraloop products. Certified partners employ authorised installers and are accountable to Hydraloop for the quality of their installations.
Commissioning	The process by which the authorised installer confirms that the Hydraloop has been correctly installed, verified, and registered, and formally hands the system over to the end user. Commissioning is considered complete upon acceptance of the warranty by the end user.
Cross-connection	An accidental link between a potable water line and a non-potable water line, or between a blackwater source and the greywater inlet. Cross-connections compromise water safety and must be identified and corrected before the system is commissioned. A dye test is carried out to detect cross-connections during verification.
Greywater	Lightly contaminated wastewater from approved household sources such as showers, baths, and hand basins. Greywater does not contain human waste. It is collected, treated, and stored by the Hydraloop for reuse in non-potable applications.
HDM (Hydraloop Device Manager)	An online platform used by authorised installers and Hydraloop staff to register, verify, activate, and manage Hydraloop devices. The HDM is also used to log service history, run diagnostic tests, and monitor device health. Access requires approved credentials obtained in advance from Hydraloop.

Term	Definition
Installers and commissioning engineers	Qualified professionals responsible for the physical installation of the Hydraloop device, including all plumbing and electrical connections, and for completing the commissioning process in the HDM. They must hold active HDM credentials and be authorised by Hydraloop.
Maintenance personnel and service technicians	Qualified professionals responsible for carrying out scheduled and unscheduled service visits on installed Hydraloop devices. They must hold active HDM credentials and be authorised by Hydraloop. End users must not carry out service tasks directly.
Manufacturer	Hydraloop Systems B.V. Throughout this manual, "the manufacturer" and "Hydraloop" refer to Hydraloop Systems B.V., the company that designs, produces, and is responsible for the H300 and H600 greywater recycling systems.
Non-potable water	Water that is not safe for drinking or food preparation. The reusable water produced by the Hydraloop is non-potable and may only be used for permitted applications: toilet flushing, washing machine supply, and non-spray garden irrigation via the auxiliary outlet. All non-potable tap points must be labelled with the supplied stickers.
Overhead bypass	A section of pipework that allows greywater to continue flowing to the sewer when the Hydraloop is at capacity, offline, or in bypass mode. The overhead bypass must be installed to ensure uninterrupted drainage from the greywater sources.
Potable water	Water that is safe for drinking and food preparation, supplied via the mains. The Hydraloop uses potable water as its backup water supply but never mixes it with the reusable water circuit.
Recycle Ready Confirmation Checklist	A signed document completed by the authorised installer after installation, confirming that all installation requirements have been met and that the device is ready for commissioning. Must be submitted to Hydraloop before the warranty takes effect. Failure to submit voids the warranty.

Term	Definition
Recycle Ready Guide	A document provided by Hydraloop specifying the plumbing preparation requirements a building must meet before a Hydraloop device can be installed. The installer uses this guide to assess and prepare the site.
Recycle Ready Pre-Checklist	A signed document completed by the authorised installer before installation begins, confirming that the building's plumbing is prepared for greywater recycling in accordance with the Recycle Ready Guide. Must be submitted to Hydraloop before installation can be scheduled. Failure to submit may void the warranty.
Reusable water	Greywater that has been treated by the Hydraloop through sedimentation, dissolved air flotation, aerobic biological digestion, and UV-C disinfection, and is stored in tank T3 ready for distribution. Reusable water is non-potable and may only be used for permitted applications.
Start-up period	A minimum period of 21 days and 20 shower events following installation, during which the aerobic microbial culture establishes itself in tank T2. During this period all connected outlets are supplied from backup water. The device switches automatically to reusable water once both thresholds are met.
System operators and end users	The individuals who use the Hydraloop system on a day-to-day basis, typically the building occupants or owner. They interact with the system through the Hydraloop App and are responsible for arranging scheduled maintenance. They are not authorised to open, service, or repair the device.
Verification	The process carried out by the authorised installer through the HDM to confirm that the device is correctly installed, connected, and functioning before commissioning begins. Verification includes watertightness testing, dye tests for cross-connections, and functional checks via the HDM.

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