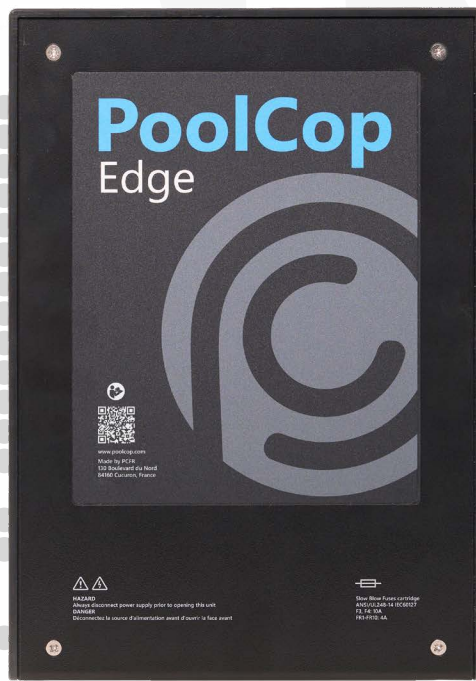




# PoolCOP



## INSTALLER & USER GUIDE

PoolCOP Edge



EDGE50EN - V50 - MARCH 2026

# **PoolCop** Edge **Update Listings**

03/03/2026

1st Edition

# PoolCop Edge

## Installer and User Guide

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# 1 INTRODUCTION

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## 1 INTRODUCTION

- Foreward
- Important Information
- Product Information and Guidelines
- Notes, Cautions, Warnings and Definitions
- Important Information, Safety Notices and Precautions
- Disposal Information

### 1.1 FOREWORD

We maintain a policy of continuous research and development and therefore reserve the right to make changes and improvements to this manual and any of the products described. Any reference in this manual to “the pool owner” refers also to the owner of the product or products. The owner may appoint a representative to act on their behalf. The owner retains full and all responsibility for decisions made by and the actions of this representative.

### 1.2 IMPORTANT INFORMATION

#### **SAFETY AND CONFORMITY INFORMATION**

All relevant safety instructions and conformity details for this product are provided in the instruction manual.

#### **IMPORTANT NOTICE BEFORE INSTALLATION**

Before installing any equipment, it is essential to:  
Download the installation manual.  
Read and thoroughly understand all included information.  
Follow the instructions carefully.

Failure to comply with these guidelines may lead to significant risks, including damage to the equipment and/or personal injury. Adherence to these instructions is mandatory.

### 1.3 PRODUCT INFORMATION AND GUIDELINES

PoolCop products are designed, engineered, and manufactured to the highest standards. To ensure optimal performance and longevity, it is essential to handle them with care. The following information will help you meet warranty requirements and enjoy years of reliable use.



#### **IMPORTANT GUIDELINES: Compliance with Standards**

Always adhere to applicable standards for electrical, hydraulic, chemical, and swimming pool installation and operation. PoolCop cannot accept responsibility for improper installation or use that does not comply with these standards.

#### **Safety First**

To maintain your pool as a safe and enjoyable space, prioritize the safety of bathers and ensure adherence to proper installation practices.

#### **Electrical Connections**

Electrical connections must be performed by a qualified professional in accordance with all relevant standards.

# 1 INTRODUCTION

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## 1.4 NOTES, CAUTIONS, WARNINGS AND DEFINITIONS

Within the instruction manual some information is highlighted in the form of notes, cautions, warnings, etc. The following definitions apply throughout:



### NOTE

A step, procedure, technique, etc. which is considered important or essential to emphasize.



### CAUTION

A step, procedure, technique, etc. which could result in damage to equipment if not carefully followed.



### WARNING

A step, procedure, or technique which could result in personal injury if not carefully followed.



### MANUAL

Read the installation manual and all warnings in full.  
Follow all instructions.



### WEAR HAND PROTECTION

Always wear correct chemical resistant hand protection when handling chemicals.



### EYE PROTECTION

Always wear correct eye protection when handling chemicals.

## 1.5 IMPORTANT INFORMATION, SAFETY NOTICES AND PRECAUTIONS



### WARNING:

Read the security instructions attentively before any use.  
Instructions given are all important for your safety.

Always respect all norms for electrical, hydraulic, chemical and swimming pool installation and operation. No responsibility will be accepted for installation or use of this product outside the applicable norms.

For the swimming pool to remain a place of pleasure and user-friendliness, it is necessary to take care of the safety of those who bathe and of the installation standards.

The electric connections must be carried out, according to the applicable norms, by a qualified person.



### WARNING:

Keep the equipment and all associated equipment out of the reach of the general public and animals.



### WARNING:

Inappropriate use can cause accidents, bodily injury, fire, electrocution, system failure and flooding.

# 1 INTRODUCTION

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**CAUTION:**

Keep the covers closed at all times when not interacting with the equipment to prevent inadvertent damage.



**CAUTION:**

Do not drop any objects into any openings of the equipment and the associated equipment as this could cause serious damage.



**CAUTION:**

This equipment and any associated equipment must be located in an area protected from the elements.



**CAUTION:**

The equipment is splash proof but must never be exposed to water or other liquids for extended periods. Precipitation, humidity and liquids contain minerals that will corrode electronic circuits.



**WARNING:**

The equipment should not be installed near flammable gas or products. In the event of the escape of gas or dangerous products, there is risk of fire and explosion.



**WARNING:**

Do not remove any of the protective covers on the equipment or the associated equipment. Touching parts inside these compartments could result in an electrical shock and/or damage to the system.



**CAUTION:**

Do not use harsh chemicals, solvents or detergents to clean the equipment. Wipe with a soft cloth, slightly dampened in a mild soap-and-water solution.



**WARNING:**

In case of malfunction or if an anomaly occurs (such as smoke or a burning smell from the unit), disconnect the power supply and contact the installer.



**CAUTION:**

Use only approved replacement parts. Unauthorized parts and/or modifications could damage the entire system and will void your warranty.



**CAUTION:**

Verify that any auxiliary equipment is correctly installed as per the manufacturer's instructions and is compatible with the equipment and installation.



**WARNING:**

Risk of electric shock. A dedicated GFCI circuit breaker must be installed by a licensed electrician.



**WARNING:**

Installation requires a properly protected power source. Refer to local regulations for ground fault protection.

# 1 INTRODUCTION

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**WARNING:**

Always mount products in a secure location that is protected from potential damage by moving objects.  
Never bury power cords.



**WARNING:**

Always disconnect power and ensure that the electrical current is shut off before servicing.



**WARNING:**

Any person using, adjusting, or monitoring the equipment must be at least 18 years of age and be familiar with these instructions and the contents of the instruction manual.



**WARNING:**

If the equipment is used for water treatment control, or to control any equipment that does not have no-flow protection, a water circulation flow detection sensor must be correctly installed and configured where required.



**WARNING:**

Always take and record manual water chemistry readings in conformance with Health Department requirements. Although automated controllers are a great aid in maintaining healthy water quality, controllers are not a substitute for manual water testing with an accurate test kit.



**WARNING:**

Always read and become familiar with Material Safety Data Sheets (MSDS) and safe handling instructions for all chemicals used with the equipment.

## 1.6 DISPOSAL INFORMATION



If you wish to discard electrical and electronic equipment (EEE), please contact your dealer or supplier for further information.

# 2 GENERAL INSTALLATION

---

## 2 GENERAL INSTALLATION

- General
- Pre-Installation Preparation and Inspection
  - Pre-Installation Checklist
  - Functional Mapping
  - Box Content
  - Optional Accessories
- Installing the PoolCop Core Unit
  - Installation Specifications
  - Cable Entries
  - Electrical Voltage Separation
  - Electrical Connection
  - Cable Selection and Connection

### 2.1 GENERAL



#### **IMPORTANT:**

- Equipment must be installed by qualified and experienced technicians.
- Improper installation or failure to follow the instructions in this manual will void the warranty.
- Use this installation manual as a checklist—tick each box as you complete each step to ensure the correct sequence is followed.
- An additional device (smartphone, tablet, laptop) with WiFi connection and internet browser is advisable in order to access the manual and configurations app simultaneously.

#### **USING NEW OR UPDATED FEATURES**

- Our products may include new or updated features that are not fully detailed in this manual.
- Before using any new function, ensure you fully understand its operation and any limitations.
- Always refer to the latest version of the manual or additional documentation for guidance.
- If you are unsure about how a feature works, or if you cannot find sufficient information, do not use that function until you have consulted an expert or contacted our support team for assistance.

# 2 GENERAL INSTALLATION

## 2.2 PRE-INSTALLATION PREPARATION AND INSPECTION



### NOTE:

PoolCop Edge is a control extension for a PoolCop Core or PoolCop Infinity, it does not perform repairs or guarantee immediate water quality, and cannot function as a singular unit.

Installers must ensure the pool and all equipment are in suitable condition before proceeding.

If you, as the installer, find any aspect of the pool or its equipment to be unsatisfactory, these issues must be repaired and thoroughly tested before proceeding with the installation.

Repairs should only be performed with the full knowledge and explicit consent of the pool owner.

Contact your PoolCop distributor with any queries and for more information.

### PRE-INSTALLATION CHECKLIST

Before beginning installation, these four steps must be completed:

#### 1. Confirm Equipment and Sensor Locations with the Pool Owner

- Determine the preferred location for the PoolCop unit.
- Identify any auxiliary equipment to be connected and controlled (optional).

#### 2. Assess Pool Condition

- Ensure there is no debris in the pool.
- Verify that the pool water is acceptably clean.
- Confirm that the water balance is within the acceptable range.
- Check the overall condition of the pool's electrical system, specifically the electrical box.
- Inspect the filter and filter media.
- Make sure skimmer and pump pre-filter baskets are clear of debris.
- Test that pool lighting and other equipment are functioning properly.

#### 3. Inspect Filtration and Circulation Systems (While the system is running)

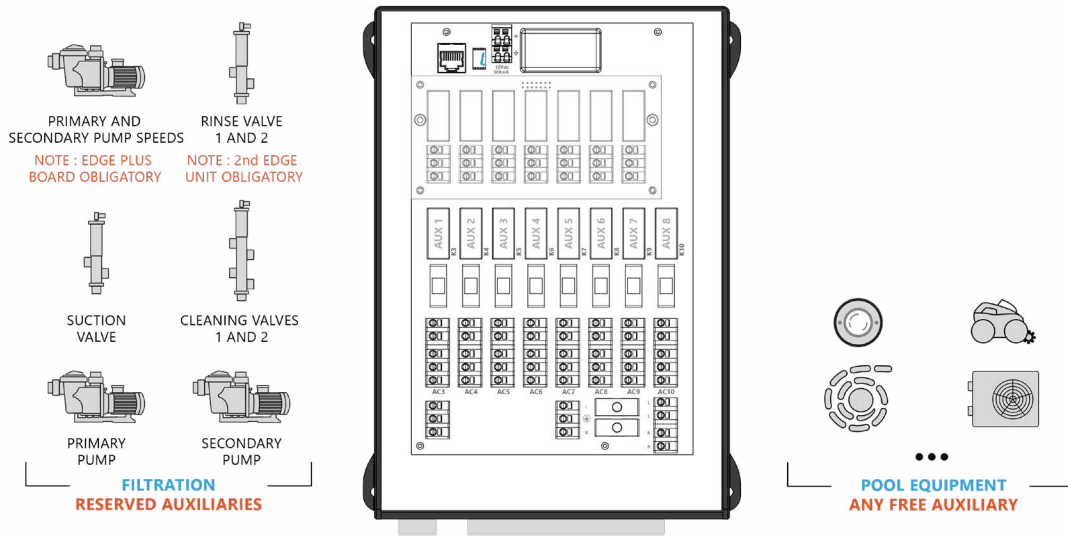
- Check the condition of the pool pump and motor.
- Inspect for leaks throughout the plumbing and filtration system.
- Ensure the filtration system's hydraulic coefficient is adequate.

#### 4. Prepare for Installation

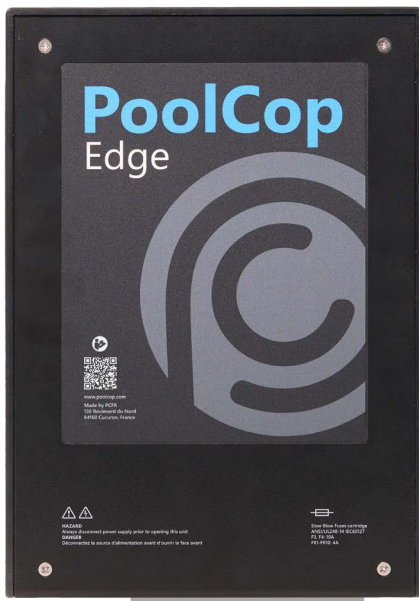
- ⚠️ Disconnect all electrical power to the pool and related systems.
- Close all valves, and if necessary, block all inlets and outlets to the pool—especially if the pool water level is higher than the pump and filter installation.

# 2 GENERAL INSTALLATION

## 2.2.1 FUNCTIONAL MAPPING

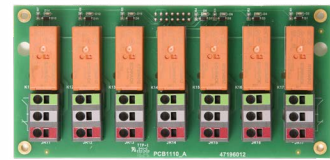


## 2.2.2 BOX CONTENTS



**POOLCOP EDGE UNIT WITH CABLE**


## COMPATIBLE OPTION



**POOLCOP EDGE PLUS**

# 2 GENERAL INSTALLATION

## 2.3 INSTALLING THE POOLCOP EDGE UNIT



**CAUTION:**  
Use only the predrilled holes for mounting the Edge unit. Drilling additional holes or creating new openings may allow water or debris to enter the unit, which can cause damage and will void the warranty.

The unit must be mounted with the cable entries at the bottom. Incorrect cable insertion may allow water or debris to enter the unit, which can cause damage and will void the warranty.

The ingress protection rating is IP54. Ensure the unit is installed in a location that complies with the rating limitations.

### 2.3.1 INSTALLATION SPECIFICATIONS

1




The unit must be installed horizontally, level and securely.

In a location sheltered from sun and rain, not exposed to excessive dust and jets of water.

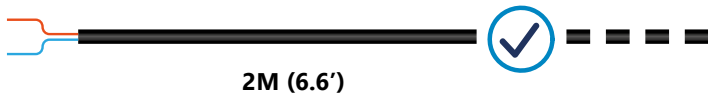
2



The PoolCop Edge unit should be installed next to a PoolCop Infinity or PoolCop Core.



**NOTE:**  
Most cables can be lengthened using suitable wire. See each diagram for information.



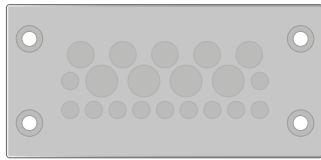
2M (6.6')

Can be lengthened using suitable wire

# 2 GENERAL INSTALLATION

## 2.3.2 CABLE ENTRIES

The PoolCop Core has water and tug proof cable entry plates, that need to be pierced or inserted accordingly:



Cable capacity:  
11  
5  
4

Cable Diameter:  
3.2 - 6.5 mm  
5 - 10.2 mm  
7.5 - 12 mm

 **WARNING :**  
reserved for low  
voltage signals.




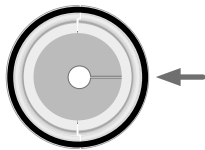
Pierce the membrane with a Phillips head (crosshead) screwdriver or equivalent object.



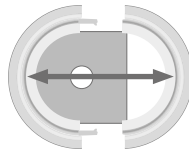
Cable capacity:  
1

Cable Diameter:  
4 mm

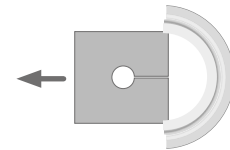
 **WARNING :**  
reserved for the RJ45  
connection cable to  
a PoolCop Core or  
PoolCop Infinity.



1 - Remove the washer from the thread.



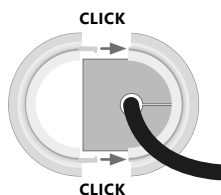
2 - Open the plate by pulling apart the split frame.



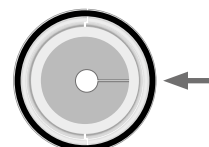
3 - Remove the cable holder according to the correct diameter.



4 - Pass the cable through the opening.



5 - Slot the cable holder back in place and close the frame ensuring both sides click into place.

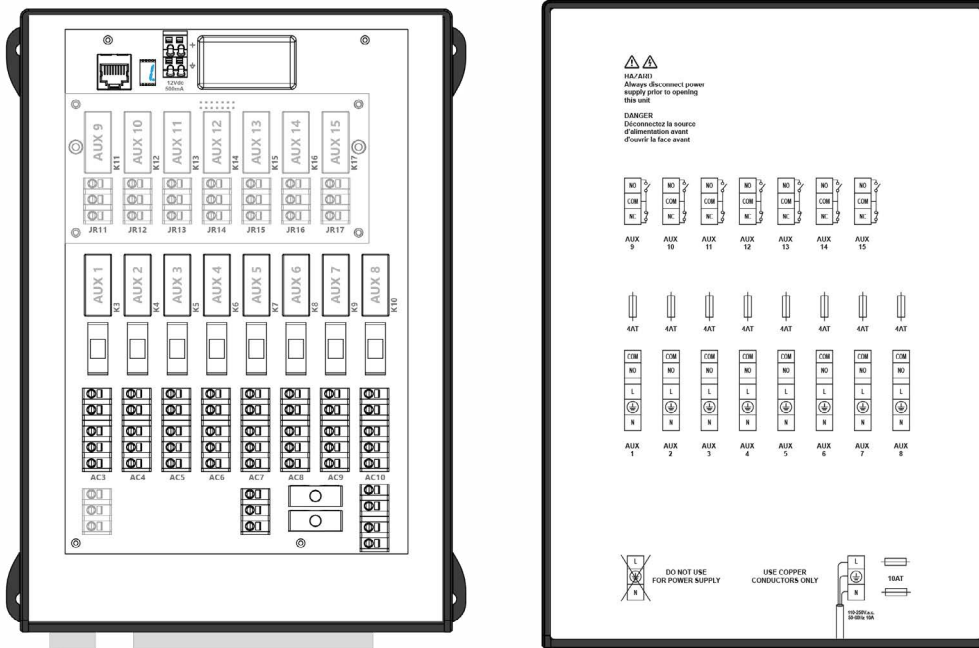


6 - Replace the washer and fix the cable holder in place with the locknut.

# 2 GENERAL INSTALLATION

## 2.3.3 ELECTRICAL CONNECTION

PoolCop Edge is used for High Voltage wiring. The inside of the cover shows a mapping of the auxiliary connections.



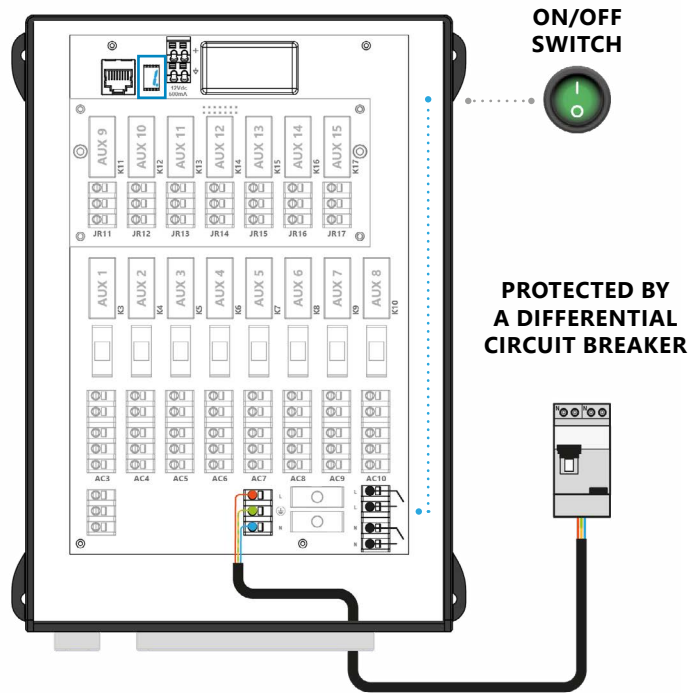
### IMPORTANT:

Read 1.3 "Important Information, Safety Notices and Precautions" before starting electrical connection.

### CAUTION:

The electric standard applicable is **IEC 60364-7-702 (NFC15-100** in France). It is mandatory that the installation complies with this standard. When installing the device, **the installer must ensure that the circuitry is protected by a 30mA differential circuit breaker. The installer must also ensure a bipolar external circuit breaker** to remove electrical power so that maintenance operations can be done safely.

# 2 GENERAL INSTALLATION

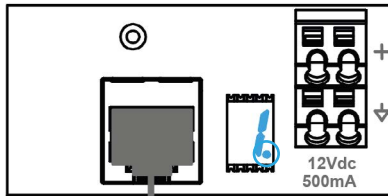


## POWERING UP THE UNIT:

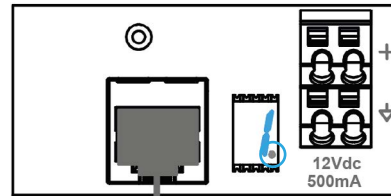
Switch the PoolCop Edge **ON**.

The ON/OFF switch must illuminate.

The dot next to the module number shows if power is supplied to the electronic board.



Electronic board is powered



Electronic board is not powered



### WARNING:

When the on/off switch is turned off the electrical power is still live. Remove the power supply to avoid any electrical risk.

# 2 GENERAL INSTALLATION

## 2.3.4 CABLE SELECTION AND CONNECTION



### NOTE:

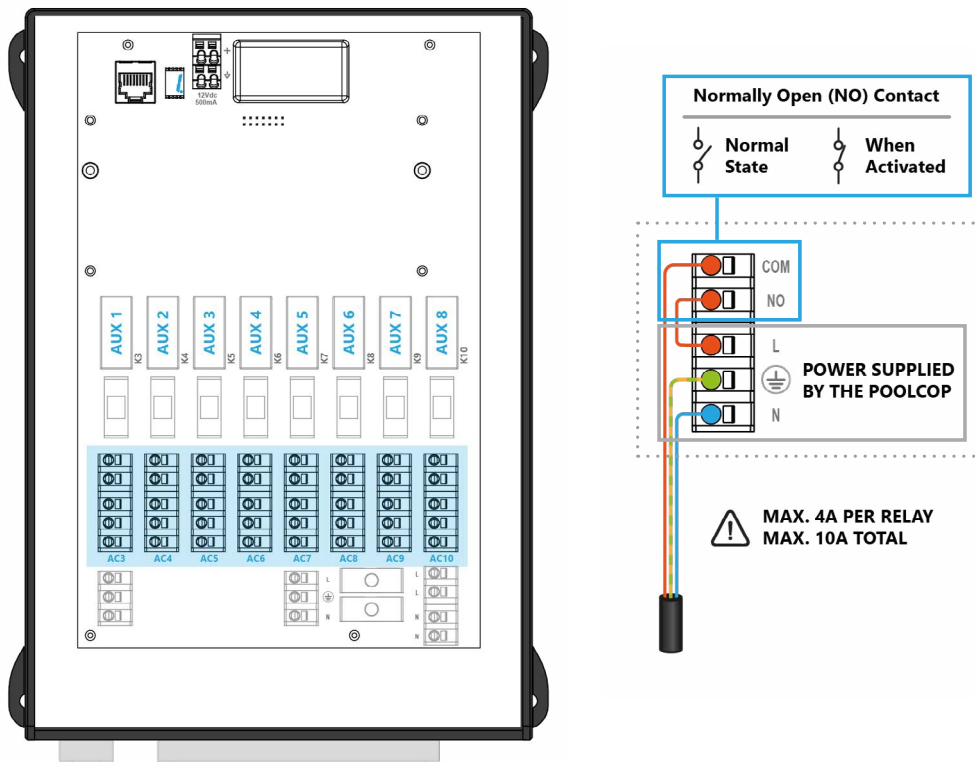
Edge power supply: H03VV-F & H05VV-F with section 3G1.5.

Pump and auxiliary control: H03VV-F & H05VV-F with section 2x0.75.

Smaller sections and multiple conductor cables can be used depending on amperage (ex JZ-602 12G0.5).

**Cable selection must conform with local regulations.**

## 2.3.5 POOLCOP EDGE RELAYS



Relays **AC3 to AC10 (AUX 1 to AUX 8)** are composed of 2 parts:

- The bottom 3 connectors deliver the **220 V.a.c. power supply**
- The top 2 connectors constitute a **Normally Open Dry Contact**

Use a **flat-head screwdriver with a maximum 3 mm tip** to connect the cables to the relays.

# 3 INSTALLING A POOLCOP EDGE

## 3 INSTALLING A POOLCOP EDGE

- Connecting a PoolCop Edge to PoolCop Infinity & PoolCop Core
- PoolCop Edge 1
  - Mapping
    - Single Pump
    - Dual Pump
- PoolCop Edge 2
  - Mapping
    - Single Pump
    - Dual Pump
- Installing as Edge Plus board

### 3.1 CONNECTING A POOLCOP EDGE

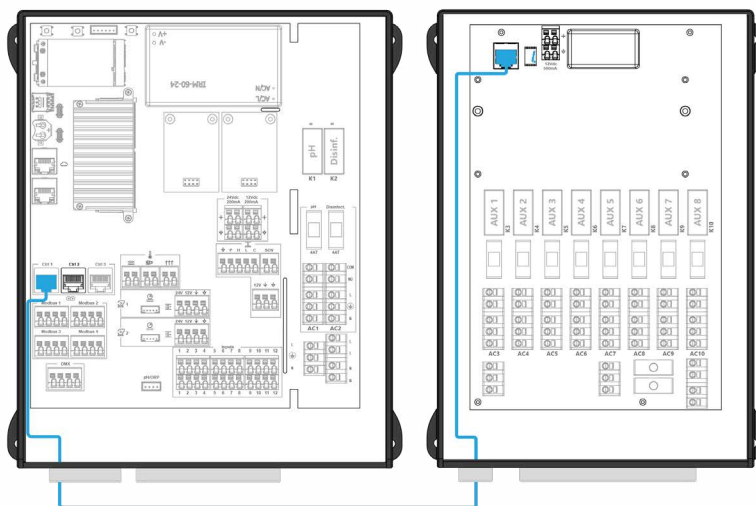
A PoolCop Edge is connected to a PoolCop Core or a PoolCop Infinity via an RJ45 cable.



#### **IMPORTANT:**

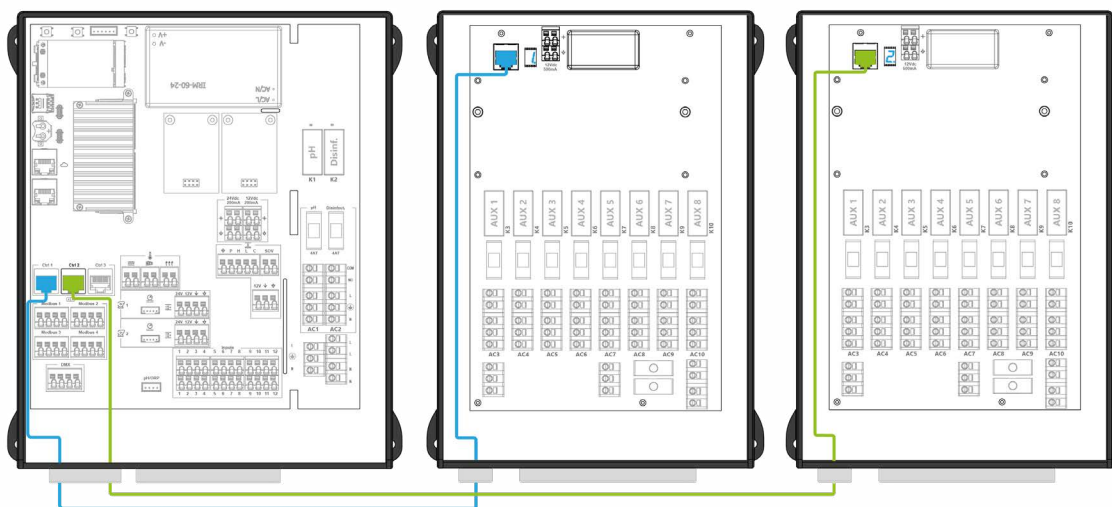
Ensure the PoolCop Core or PoolCop Infinity is switched OFF before adding the cable, and then switch both units ON for the Edge to be automatically recognised.

#### 3.1.1 CONNECTING A POOLCOP EDGE TO A POOLCOP CORE

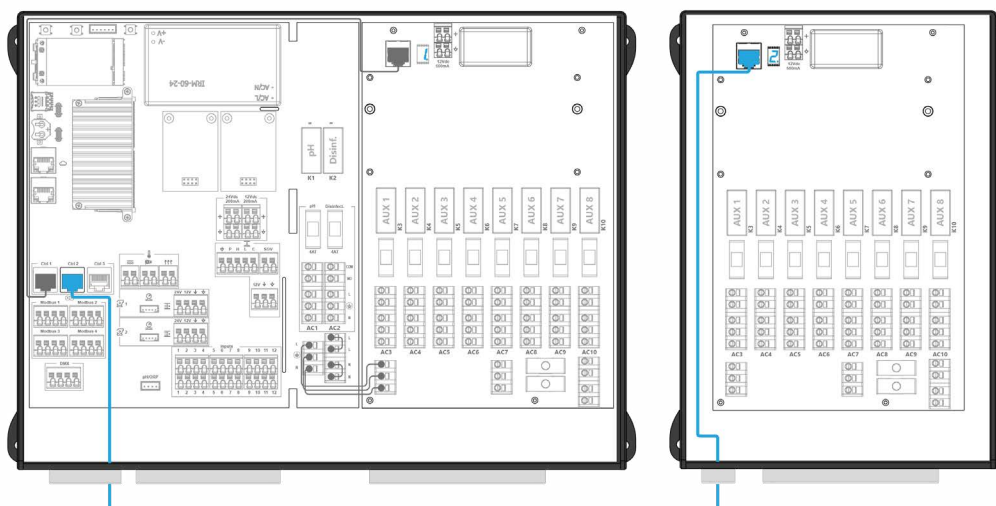


# 3 INSTALLING A POOLCOP EDGE

## 3.1.2 CONNECTING A SECOND POOLCOP EDGE TO A POOLCOP CORE



## 3.1.3 CONNECTING A POOLCOP EDGE TO A POOLCOP INFINITY



## 3.2 POOLCOP EDGE 1

### 3.2.1 MAPPING



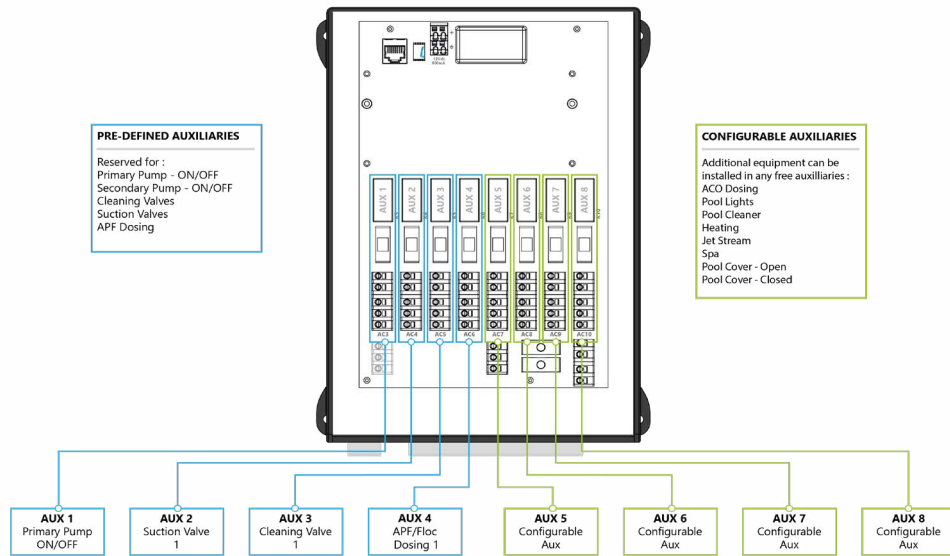
**IMPORTANT:**

Certain auxiliaries are pre-defined for specific equipment, which cannot be operated from any other relay.

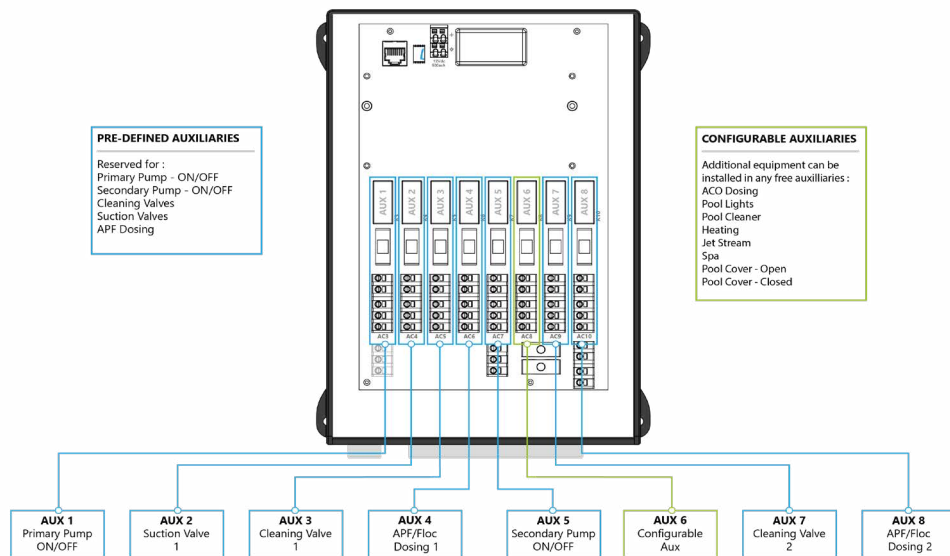
Additional equipment may be connected and configured on any available auxiliary, including unused pre-defined positions.

# 3 INSTALLING A POOLCOP EDGE

## SINGLE PUMP



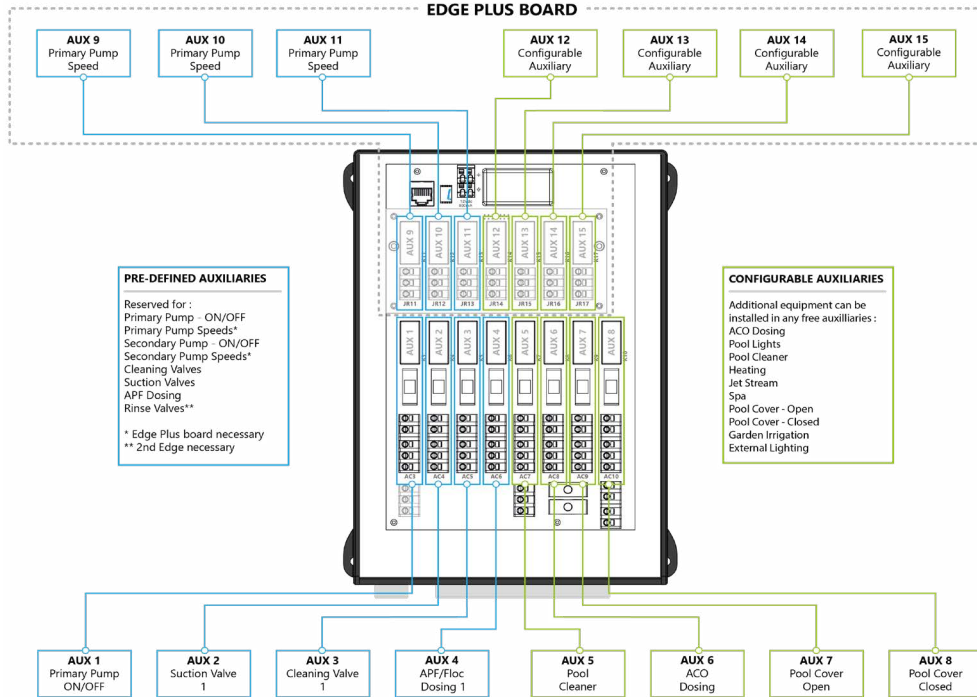
## DUAL PUMP



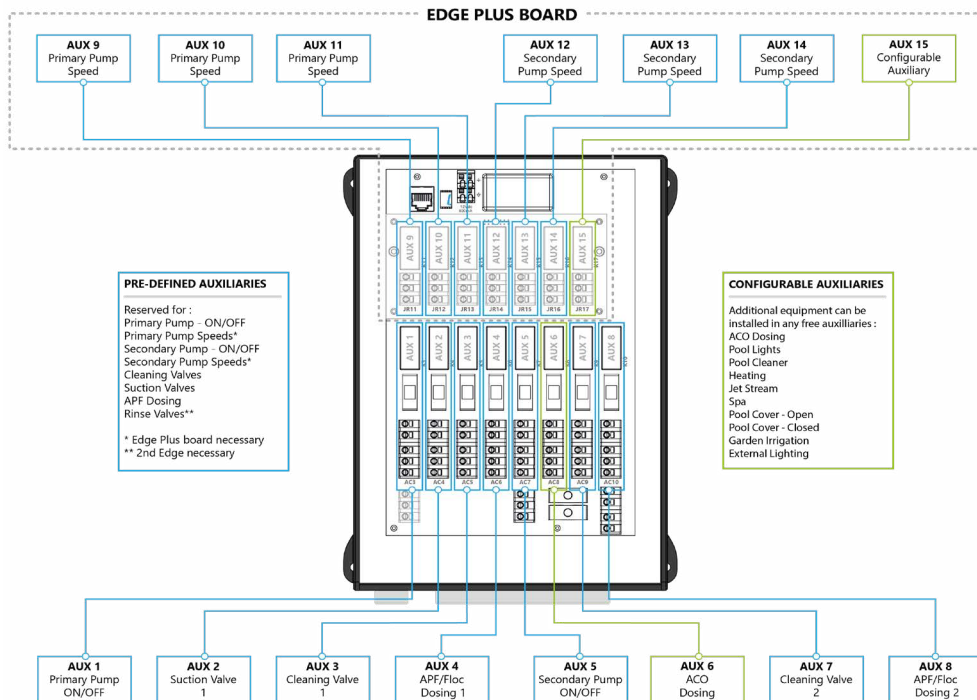
# 3 INSTALLING A POOLCOP EDGE

## 3.2.2 POOLCOP EDGE PLUS

### SINGLE PUMP WITH VARIABLE SPEED OPTION

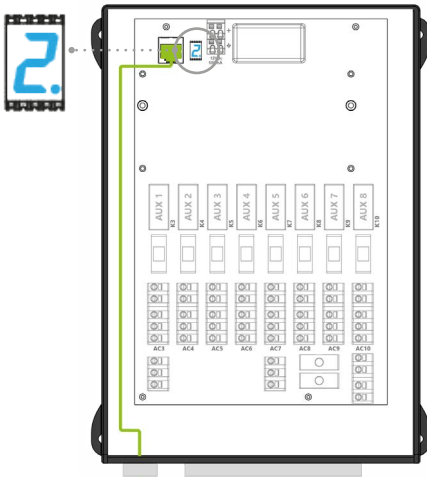


### DUAL PUMP WITH VARIABLE SPEED OPTION



# 3 INSTALLING A POOLCOP EDGE

## 3.3 POOLCOP EDGE 2



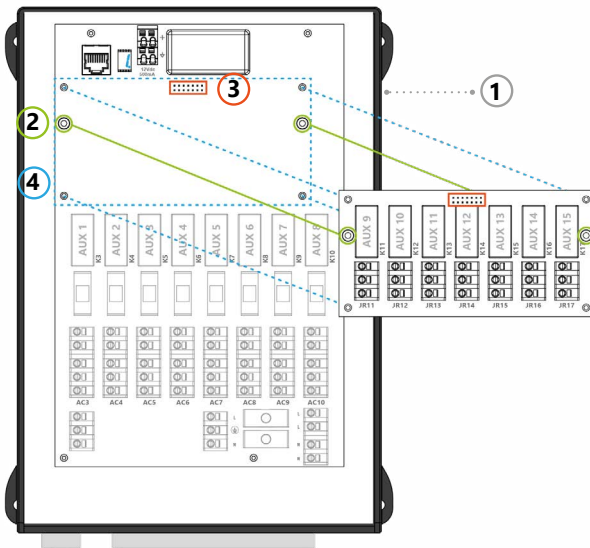
When a second PoolCop Edge is connected, the unit is defined automatically, and recognizable by the number 2 that appears.

In addition to extending the options for equipment, a second PoolCop Edge is essential to install 1 or 2 Rinse Valves (see page XX)

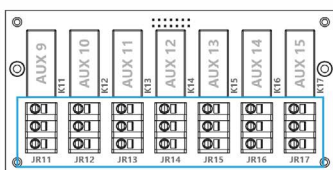
## 3.4 INSTALLING AN EDGE PLUS BOARD



**IMPORTANT:  
MANDATORY FOR VARIABLE SPEED PUMPS**

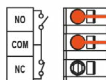


1. Switch the PoolCop unit **OFF**
2. Place the Edge Plus board in front of the installation guides
3. Press the board to the back plate until the male / female connectors clips together, to ensure correct communication between both boards.
4. Screw the board in place with the 4 screws provided.
5. Switch the PoolCop unit back **ON**.



Normally Open Contact (NO)

Normally Closed Contact (NC)



Edge Plus relays are **Dry Contact relays**.

When activated, the Normally Open (NO) relays will close and the Normally Closed (NC) relays will open.

**WIRING EXAMPLE FOR NO CONTACT**

# 4 INSTALLING ADDITIONAL EQUIPMENT

---

## 4 INSTALLING ADDITIONAL EQUIPMENT

- Setting up the filtration
- Pumps
  - Connecting 1 single speed pump
  - Connecting 2 single speed pumps
  - Connecting 1 variable speed pump
  - Connecting 2 single speed pumps
  - Assessing pump control and pressure baselines
- Filtration settings
  - Specific speed settings
- Pressure inhibition
- Installing 1 - or 2 - Backwash Valve(s) (5 way Besgo)
  - Testing backwash valve(s)
- Installing 1 - or 2 - rinse valve(s) (3 way Besgo)
- Installing a suction valve (3 way Besgo)
- Installing the flocculant injection

# 4 INSTALLING ADDITIONAL EQUIPMENT

## 4.1 SETTING UP THE FILTRATION

### 4.1.1 PUMPS



**IMPORTANT:**

If installing the PoolCop unit in a **preexisting installation:**

- Disconnect the power supply to and from the existing pump timer.
- Disconnect the pump timer, or remove if appropriate, noting the wires that are connected to the pump or pump protection and relay.

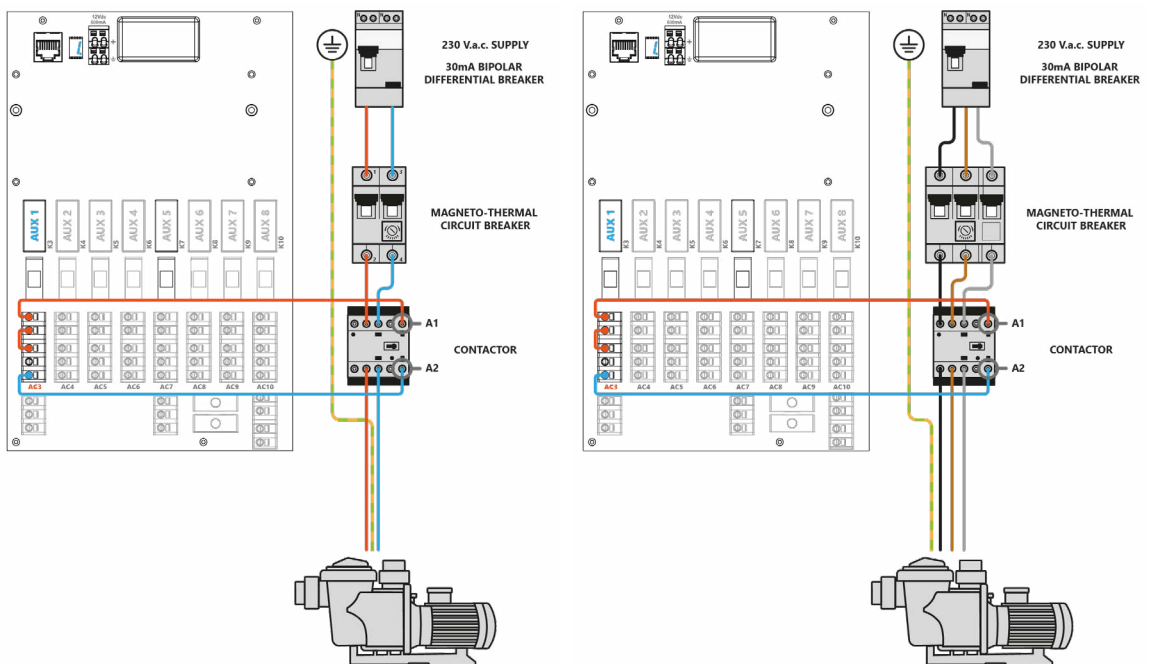
### CONNECTING 1 SINGLE SPEED PUMP



**IMPORTANT:**

**Pump 1 is the PRIMARY pump**, controlling the water treatment and water level.

AUX 1 (AC3) is reserved for 1 single speed pump



### SINGLE PHASE PUMP CONNECTION

If connecting a **single (or two) phase pump**, it is recommended that the pump has an independent supply.

### THREE PHASE PUMP CONNECTION

If connecting a **three-phase pump**, the pump must have an independent supply.



# 4 INSTALLING ADDITIONAL EQUIPMENT

## CONNECTING 1 VARIABLE SPEED PUMP

A variable speed pump allows precise control over water circulation, adapting its speed to the needs of the pool system. This flexibility results in lower energy consumption, quieter performance, and more efficient filtration compared to single-speed pumps. Operating at adjustable speeds also puts less stress on equipment, contributing to a longer service life and reduced maintenance.

Pump speeds can be easily adjusted through the filtration settings, allowing operators to schedule and set specific speeds according to pool requirements. This ensures optimal performance based on factors like cleaning, heating, or routine filtration, with settings that can be quickly adapted as needed

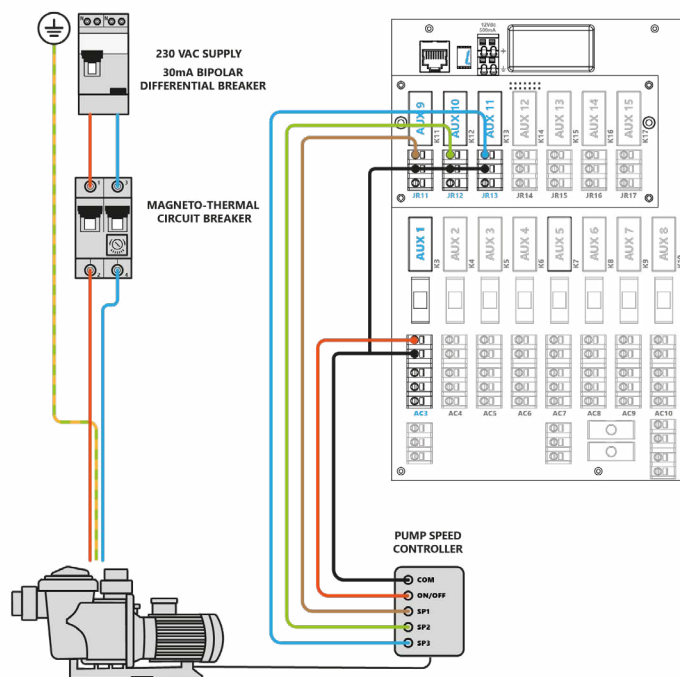


**IMPORTANT:**  
**The Edge Plus board is obligatory.**

**Pump 1 is the PRIMARY pump**, controlling the water treatment and water level.

AUX 1 (AC3) is reserved for **ON/OFF** of the PRIMARY pump.

AUX 9 (JR11), AUX 10 (JR12) and AUX 11 (JR13) are reserved for pump speeds.



### THEORETICAL WIRING.

REFER TO THE VARIABLE SPEED PUMP GUIDE FOR PUMP SPECIFIC WIRING

[www.poolcop.com/downloads](http://www.poolcop.com/downloads)

# 4 INSTALLING ADDITIONAL EQUIPMENT

## CONNECTING 2 VARIABLE SPEED PUMPS

The unit can manage two variable speed pumps simultaneously, offering coordinated control over both primary and secondary circulation systems. This allows operators to independently adjust the speeds and schedules of each pump to match different pool zones or operational requirements, ensuring efficient performance and adaptability for more complex installations.

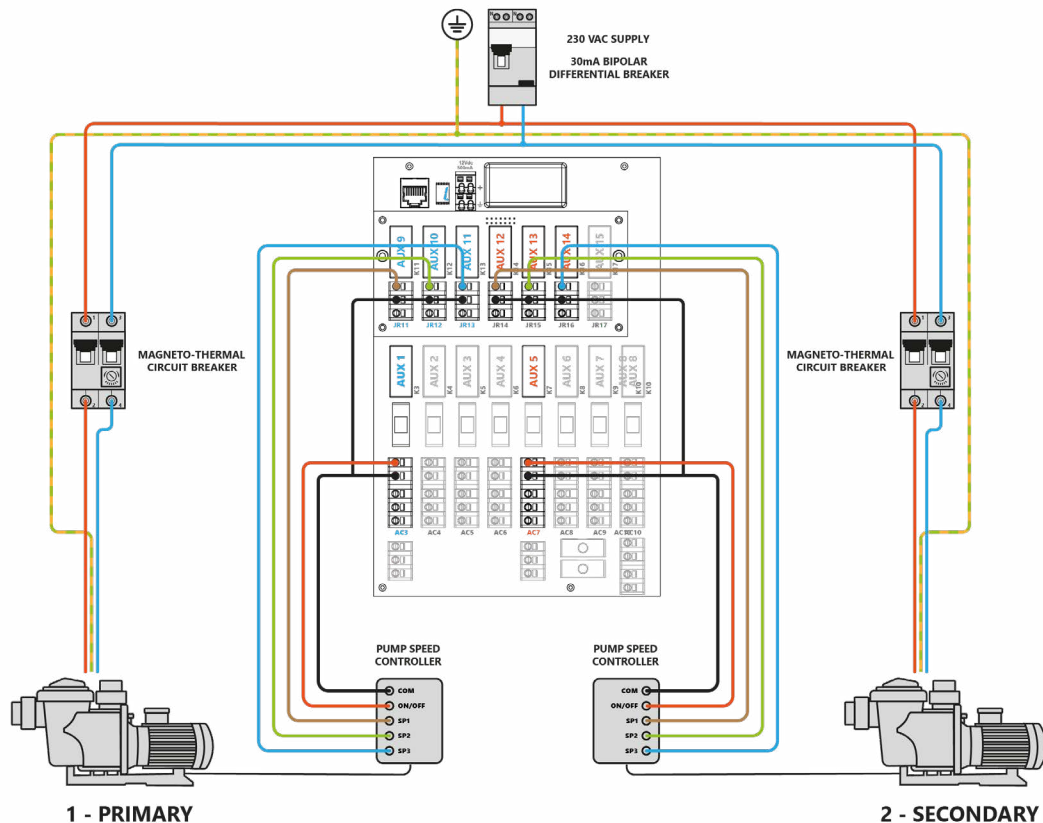


**IMPORTANT:**  
The Edge Plus board is obligatory.

**Pump 1 is the PRIMARY pump**, controlling the water treatment and water level.

AUX1 (AC3), AUX 9 (JR11), AUX 10 (JR12) and AUX 11 (JR13) are reserved for the PRIMARY pump speed control.

AUX5 (AC7), AUX 12 (JR14), AUX 13 (JR15) and AUX 14 (JR14) are reserved for the SECONDARY pump speed control.



**THEORETICAL WIRING.**

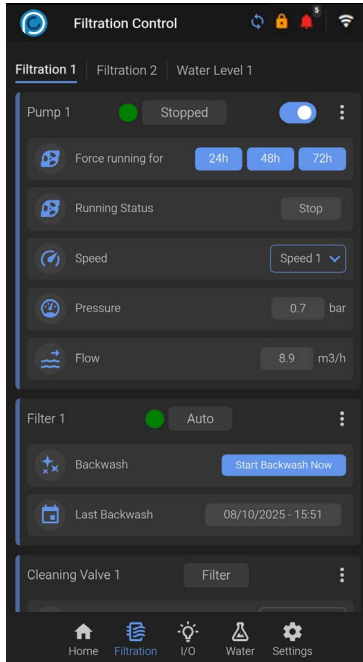
REFER TO THE VARIABLE SPEED PUMP GUIDE FOR PUMP SPECIFIC WIRING.

[www.poolcop.com/downloads](http://www.poolcop.com/downloads)

# 4 INSTALLING ADDITIONAL EQUIPMENT

## ASSESSING PUMP CONTROL AND PRESSURE BASELINES

In general, the filtration pump is controlled automatically by PoolCop using filtration in manual, timer or automatic modes. If, however, you want to run the pump at another time or need to restart the pump after stopping it for any reason, this is done from the **FILTRATION SHORTCUT MENU**.



Test the control of the PoolCop on the filtration pump:  
Use the toggle and Speed settings to START / STOP and CHANGE THE SPEEDS of the pump.

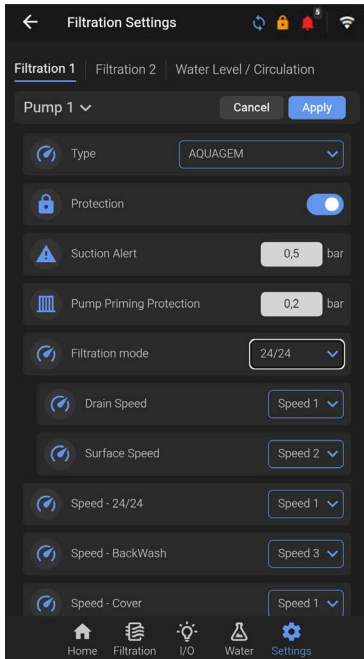


### NOTE:

While testing pump control, note down the pressure measurements for subsequent system protection and filter settings.

# 4 INSTALLING ADDITIONAL EQUIPMENT

## PUMP SETTINGS



### PUMP TYPE:

Choose **NO PUMP**, **SINGLE SPEED** or **VARIABLE SPEED** pump type in the dropdown menu.

### PROTECTION:

Setting PUMP PROTECTION will effectively protect the pool equipment in case of pump failure, or alert if the pressure is lower than usual and the system requires attention (See "4.6.2 Assessing Pressure Parameters"):

#### • PUMP PRIMING:

The pump is considered not primed when the pressure falls below this threshold.

All water treatment and all equipment slaved to the filtration will stop, and a "No Pressure" alert will be triggered.

If protection is enabled, the pump will also stop.

The threshold should be set approximately 0.2 bar above the static pressure, meaning the pressure when the pump is stopped, but below the pressure at the lowest speed.

#### • SUCTION ALERT:

If protection is set, a "Low Pressure" alert will be triggered to indicate potential clogging of skimmer or pump baskets.

This will not affect filtration operation.

The threshold should be set above the Pump Priming pressure but below the pressure at the lowest speed.

**ERROR MESSAGES** can occur if pressure settings are incoherent (ex: Pump priming > Suction alert).



### 4.1.2 FILTRATION SETTINGS

Filtration is the foundation of effective pool management. A properly maintained filter and suitable filtration duration help reduce organic matter and nutrients in the water, making chemical treatment more stable and predictable. When filtration is poor, whether due to inadequate runtime or degraded media, even high chemical doses may fail to keep the water safe and healthy.

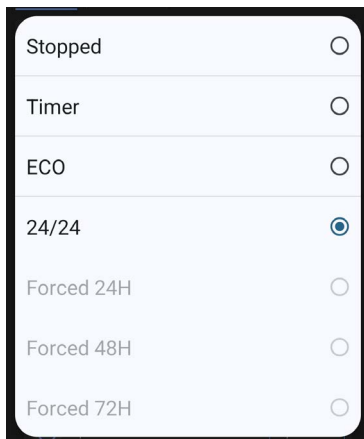
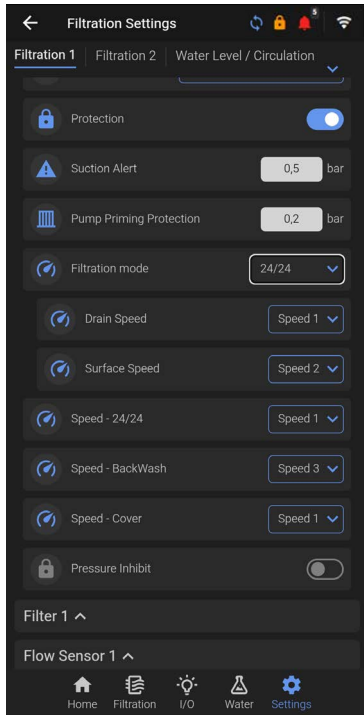
The PoolCop Core or Infinity unit offers several filtration modes—such as timed cycles, eco settings, and continuous operation—to accommodate different pool usage patterns and requirements. By selecting the most appropriate mode, users can ensure filtration remains efficient and effective at all times, supporting clean and healthy water before, during, and after changes in demand.

# 4 INSTALLING ADDITIONAL EQUIPMENT



## WARNING:

The filtration mode used must respect local and national codes and regulations.  
In commercial pools 24/24 or NO PUMP modes are typically required.



## FILTRATION MODE

**STOPPED** : no filtration set.

### NO PUMP

Pump and Pump Speeds are not controlled by the PoolCop. **Filtration is considered as ongoing if the pressure is above the Pump Priming threshold.**

### TIMER

Allows configuration of up to 4 filtration cycles with individual speed settings.

### ECO

Set up the 1st cycle duration and the start of the 2nd cycle, and PoolCop Infinity will calculate optimal filtration time based on water temperature and hydraulic coefficient.

*WARNING : Requires complete Pool Setting configurations. Only recommended when water temperature is below 25°C.*

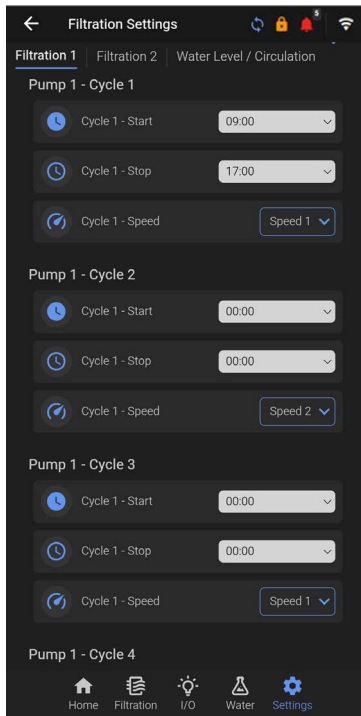
### 24/24

Runs the pump continuously, 24 hours a day, at the speeds set for each cycle or according to suction valve position, if equipped.

### FORCED 24h/48h/72h (started in shortcut menu):

Temporarily runs filtration in 24/24 mode for the selected period, then automatically reverts to previous settings.

# 4 INSTALLING ADDITIONAL EQUIPMENT



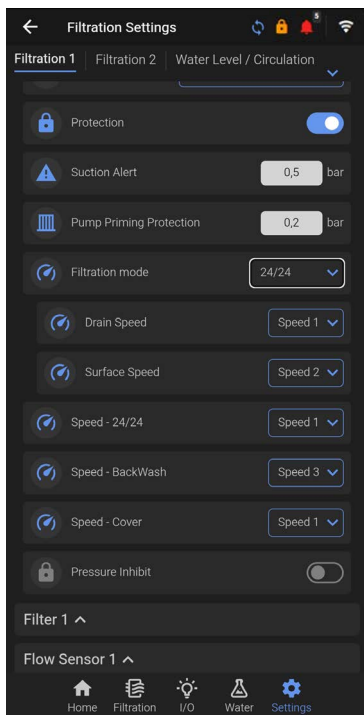
## SETTING THE FILTRATION CYCLES

(Timer - 24/24 without suction valve – Forced Modes)

Configure up to four filtration cycles to match pool usage, adjusting for factors like day/night variation and bathing load.

- Set the start and end times for each cycle.
- Assign a pump speed to each cycle as needed.
- During 24/24 mode, assigned speeds are used outside of defined cycles.
- If cycles overlap, the order of priority applies: Cycle 1 > Cycle 2 > Cycle 3 > Cycle 4.

## SPECIFIC SPEED SETTINGS

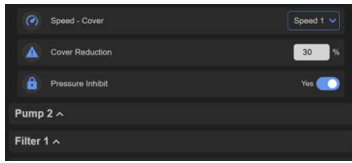


Some pump settings relate to specific situations :

- **Backwash Speed:** If backwash valve installed, speed at which the PoolCop will perform a backwash.
- **Speed Cover:** If no suction valve installed and cover position detected via an Input, speed when cover closed.
- **Cover Reduction:** If single speed pump and cover position detected via an Input, will reduce water treatment by the set percentage.

# 4 INSTALLING ADDITIONAL EQUIPMENT

## 4.1.3 PRESSURE INHIBITION



⚠ **Only if Flow Switch installed.**

Will disable Pressure Protections temporarily **in case of pressure sensor disfunction:**

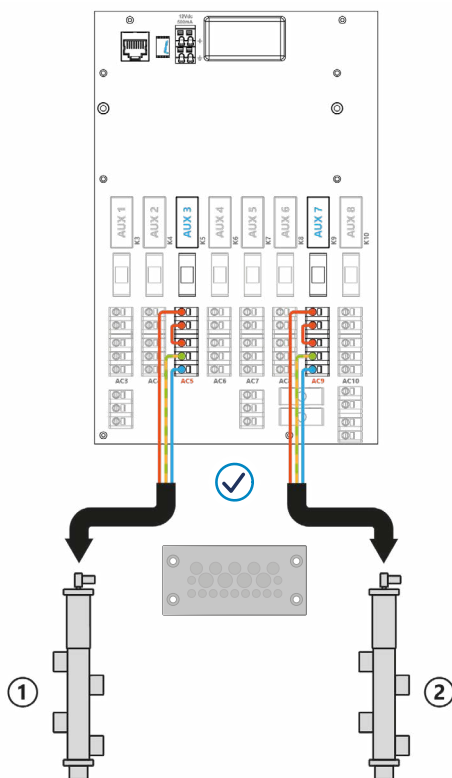
Pump Speed settings and Water treatment will be maintained.

⚠ **This is a temporary setting and should only be used in emergency situations.**

**CAUTION:** Chemical injections security will be based solely on the flow switch signal, so make sure the flow switch is working properly.

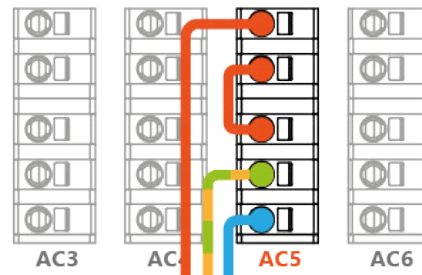
## 4.1.4 INSTALLING 1 - OR 2 - BACKWASH VALVE(S) (5 WAY BESGO)

1 or 2 BESGO 5 ways valve can be installed to clean the filter and reduce the water level in case of heavy rain. The valve must be controlled via the AUX3 (AC5) relay (Cleaning Valve 1) or AUX7 (AC9) relay (Cleaning Valve 2) and must be appropriately programmed.



**IMPORTANT:**

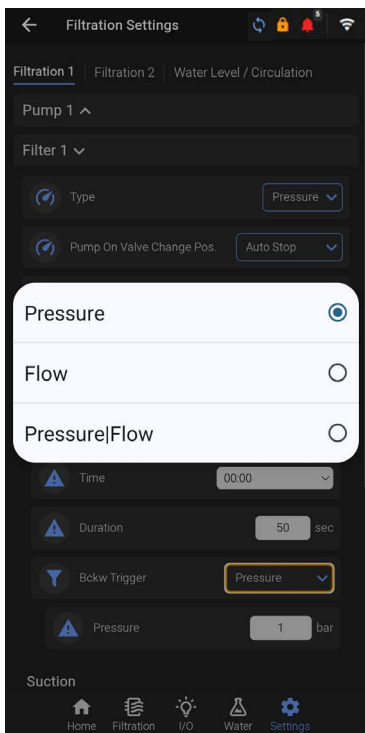
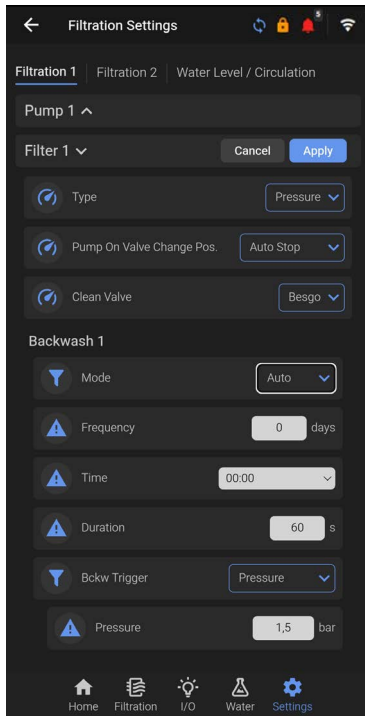
Use only a 5 Way valve.  
To install the valve on the filter please refer to the BESGO instruction manual.



**INSTALLATION NOTES:**

- Stop the pump and all hydraulic power sources.
- Ensure the PoolCop unit is switched **OFF** and disconnect the electrical power
- Route the wire through the adapted entry plate
- Extendable cable
- Use AUX 3 (AC5) for the PRIMARY filter backwash
- Use AUX 7 (AC9) for the SECONDARY filter backwash
- Switch the PoolCop unit ON.

# 4 INSTALLING ADDITIONAL EQUIPMENT



**FILTER 1 / FILTER 2 correspond to PUMP 1 and PUMP 2 backwash valves respectively.**

- **Type** : NONE / PRESSURE / SUCTION
- **Pump On Valve change position** : Choose whether the pump stops when the valve position changes.
- Install **Cleaning Valve**: NONE/BESGO

## **BACKWASH 1:**

Configure settings and triggers for backwash valve 1 :

- **Mode**: Auto / Manual / Inhibited
- **AUTO Mode Triggers**:
  - **Frequency**: Number of days between 2 backwashes
  - **Time**: Scheduled time for backwash
  - **Duration**: Set in seconds
  - **Trigger Type**:
    - **Pressure**: Start backwash when above threshold
    - **Flow**: Start backwash when below threshold
    - **Both**: Starts backwash when either the pressure or the flow are below threshold

*Note : if Frequency is set to 0, backwash triggers will solely be based on Pressure and/or Flow*

- **MANUAL Mode**: Alerts are emitted when the above thresholds are met

## **BACKWASH 2:**

Chose settings and triggers for backwash valve 2

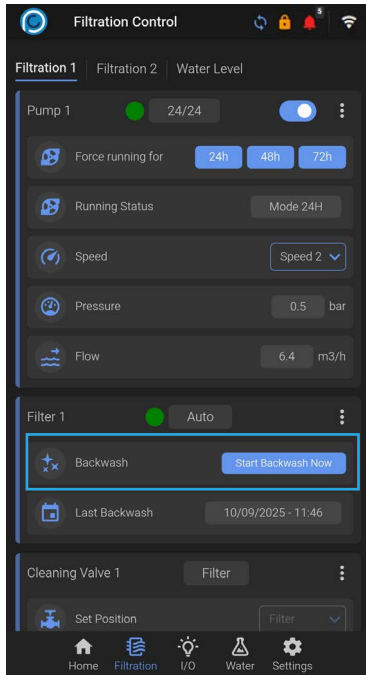


### **NOTES:**

The first trigger reached will start a backwash (this includes frequency).

# 4 INSTALLING ADDITIONAL EQUIPMENT

## TESTING BACKWASH VALVE(S)



Go to the Filtration ShortCut Menu and launch a Backwash MANUALLY:



### REMINDER

Depending on previous settings, stop the Pump if required to do so for cleaning the filter.

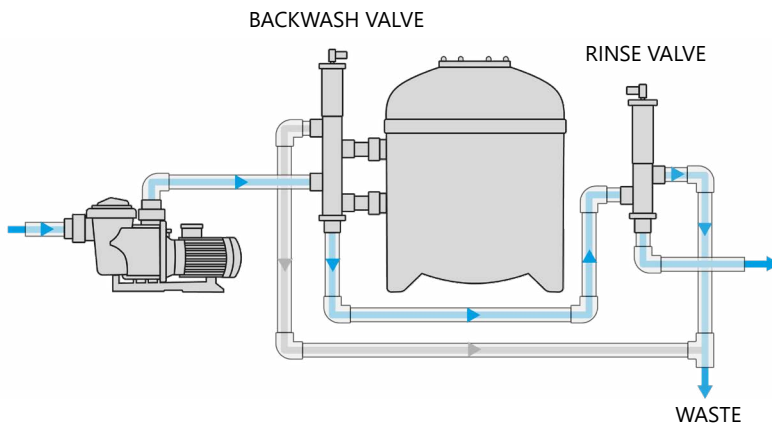
### 4.1.5 INSTALLING 1 - OR 2 - RINSE VALVE(S) (3 WAY BESGO)



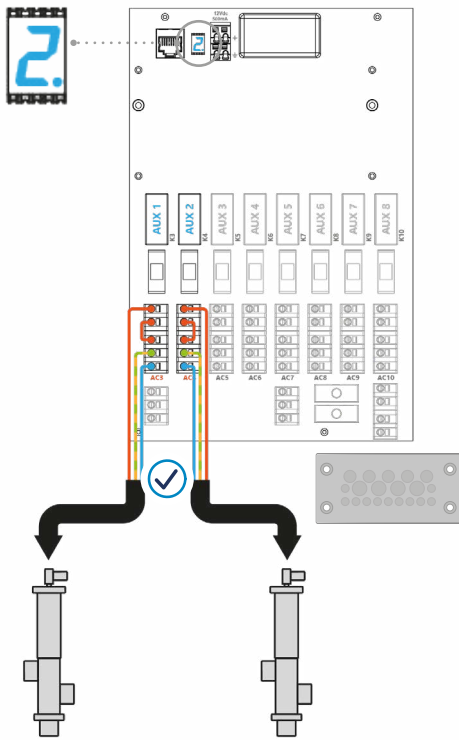
#### IMPORTANT:

Rinse valves must be installed in a **secondary** Edge unit.

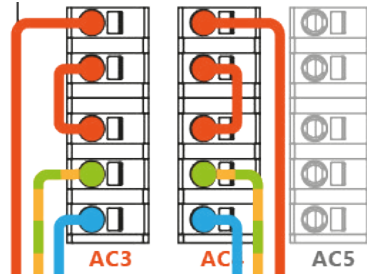
If the filter is a pressure-type model and a backwash valve has been configured, a BESGO 3-way valve can be added to perform a rinse cycle.



# 4 INSTALLING ADDITIONAL EQUIPMENT



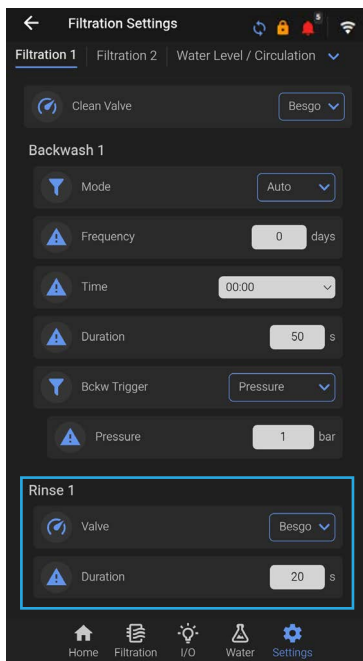
**IMPORTANT REMINDER:**  
Rinse valves must be installed in a **secondary** Edge unit



## INSTALLATION NOTES:

- Stop the pump and all hydraulic power sources.
- Ensure the PoolCop unit is switched **OFF** and disconnect the electrical power
- Route the wire through the adapted entry plate
- Extendable cable
- AUX 1 (AC3) of Edge n° 2 is reserved for the primary rinse valve.
- Use AUX 2 (AC4) of Edge n° 2 is reserved for the secondary rinse valve.
- Switch the PoolCop unit ON.

## TESTING RINSE VALVE(S)



**RINSE 1 / RINSE 2 correspond to PUMP 1 and PUMP 2 rinse valves respectively.**

- **Valve Type** : NONE / BESGO
- **Duration**: Set in seconds

### Testing the 3 Way rinse valve(s):

Go to the Filtration SHORTCUT Menu and launch a backwash manually as described in the previous section.

# 4 INSTALLING ADDITIONAL EQUIPMENT

## 4.1.6 INSTALLING A SUCTION VALVE (3 WAY BESGO)

A BESGO 3 way valve can be installed to select pump suction:

- Either via the **SURFACE** - skimmers or buffer tank
- Or via the **DRAIN** - bottom drain

With a BESGO 3-way valve, cleaning can be performed automatically through the main drain, which boosts washing efficiency by using the pool's cleanest water and providing higher pressure for faster cleaning. This setup also prevents pump drying during cleaning cycles on skimmer-equipped pools.

Conversely, surface suction (through skimmers or a balance tank) primarily captures floating contaminants such as oils and debris, making it especially effective when the pool cover is open.

Automating the selection of the water intake (surface or main drain) based on season or temperature further enhances energy efficiency and water quality.



### NOTE:

**The position of the suction valve is governed by a set of rules (listed below in decreasing order of priority):**

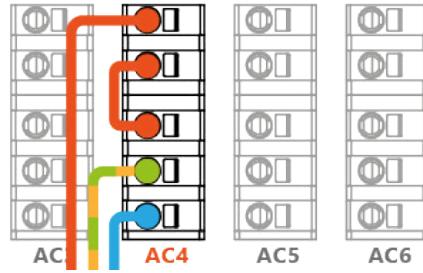
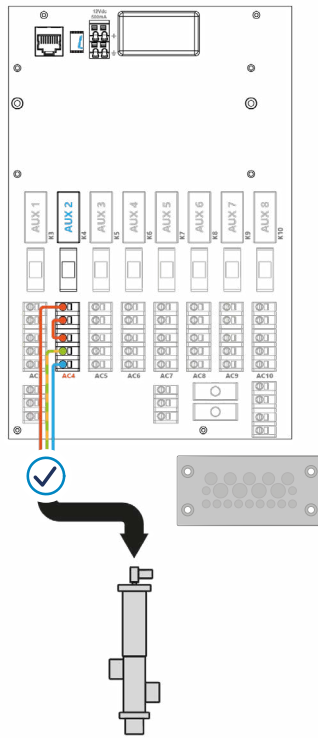
Overflow pools:

1. If the pump is stopped or not primed, from the drain
2. During filter cleaning, position defined for filter cleaning
3. If the water level is low, from the drain
4. If a surface cycle is active, from the surface
5. If the water level is very high, from the surface
6. If a manual overflow was requested, from the surface
7. If a bottom cycle is active, from the drain
8. Otherwise, for pools with covers:
  - If the cover is open, from the surface
  - If the cover is closed:
    - If ECO mode is not active, from the drain
    - If ECO mode is active and the air temperature exceeds its setpoint by 1°C, from the surface

Skimmer pools and spas:

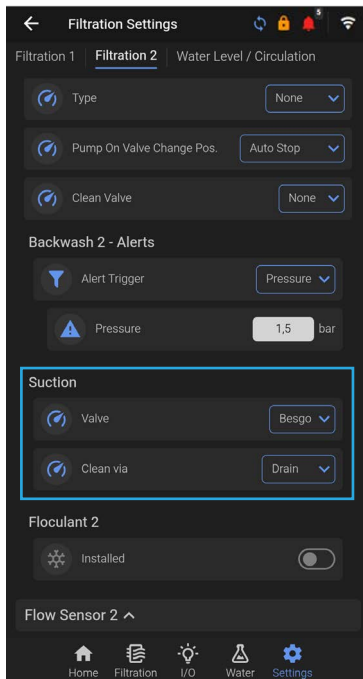
1. During filter cleaning, position set for filter cleaning
2. After filter cleaning, forced from the drain for a period of 15 to 120 minutes
3. If the water level is low, from the drain
4. Otherwise, from the surface

# 4 INSTALLING ADDITIONAL EQUIPMENT



## INSTALLATION NOTES:

- Stop the pump and all hydraulic power sources.
- Ensure the PoolCop unit is switched **OFF** and disconnect the electrical power.
- Route the wire through the adapted entry plate
- Extendable cable
- AUX 2 (AC4) is reserved for the suction valve
- The valve must be appropriately programmed.
- Switch the PoolCop unit ON.



- **Valve Type:** NONE / BESGO

- **Clean via:** DRAIN / SURFACE

If a BESGO 3 Way suction valve is configured, you can choose whether the water used to clean (and rinse) the filter(s) is taken from the surface (skimmer or buffer tank) or directly from the pool drain.

This parameter is the same for filter 1 and filter 2.



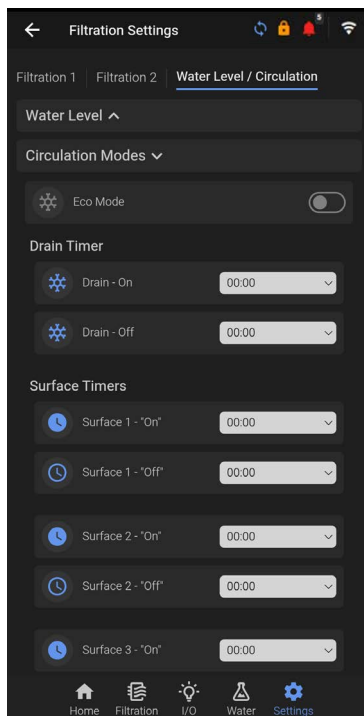
Cleaning via the drain can allow for smaller buffer tanks on rim flow pools and helps prevent loss of pump priming on skimmer pools when the water level drops below the skimmer during a backwash.

# 4 INSTALLING ADDITIONAL EQUIPMENT

## TESTING A SUCTION VALVE (3 WAY BESGO)

1. Disconnect power to the solenoid.
  - For skimmer pools: Confirm that suction is through the skimmers.
  - For rim flow pools: Confirm that suction is from the pool drain.
2. Restore power to the solenoid.
3. Once the valve is programmed, open the FILTRATION SHORTCUT menu and initiate a backwash.
4. During filter cleaning, suction will be drawn either from the pool drain or from the surface (skimmer or buffer tank), according to the programmed settings

## SETTING THE CIRCULATION MODES



### ONLY IN OVERFLOW POOLS

- **ECO Mode:** only available if the pool is equipped with a cover.

**When the pool cover is closed,** water circulation can be switched automatically according to the outside air temperature.

Below a defined **air temperature setpoint**, suction is taken directly from the bottom drain, reducing evaporation and energy losses. If the air temperature rises 1 °C above the setpoint (and if the filtration conditions are met), the pool switches back to overflow mode.

- Fixed **daily circulation cycles** can be configured as follows:
  - **1 DRAIN cycle**, for example to reduce noise during the night.
  - **Up to 4 SURFACE cycles** to optimise control of overflow periods.

**Reminder:** A SURFACE cycle has priority over a DRAIN cycle.

Overflow can also be requested manually from the Filtration SHORTCUT Menu.



### NOTE:

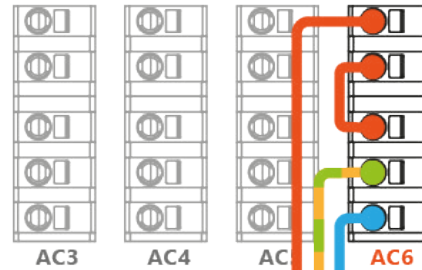
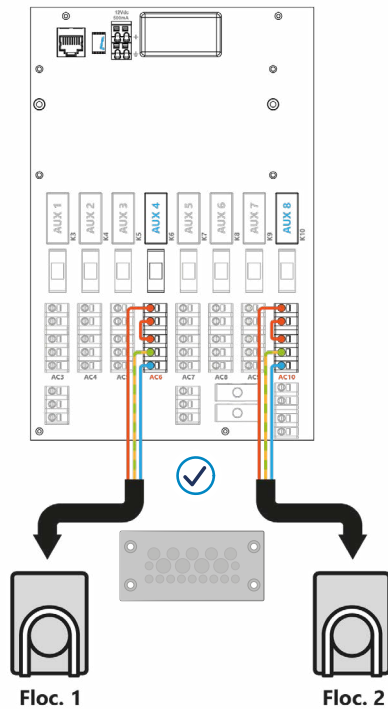
In specific situations such as backwash, water level control or low pressure, the suction valve position may change according to the priority rules.

# 4 INSTALLING ADDITIONAL EQUIPMENT

## 4.1.7 INSTALLING THE FLOCCULANT INJECTION

If installed, Flocculant (APF) will be injected continuously when the filtration is on (pump started and water goes through the filter).

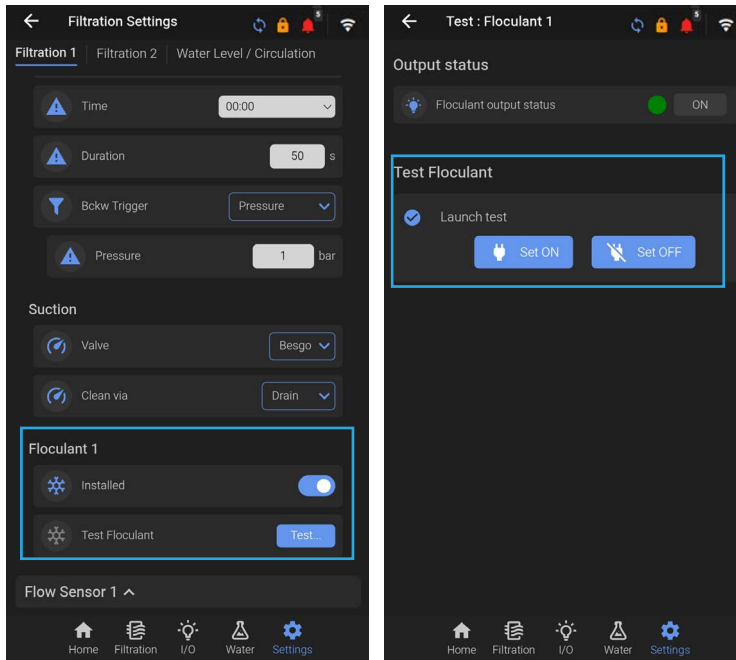
Choose the dosing pump flow according to the flocculant manufacturer's guidelines.



### INSTALLATION NOTES:

- Ensure the PoolCop unit is switched **OFF**
- Route the wire through the adapted entry plate
- Extendable cable
- AUX 4 (AC6) is reserved for the Flocculant injection
- AUX 8 (AC10) is reserved for the flocculant injection on the secondary pump.
- The AC6 and AC10 relays can handle a **maximum of 4 A each**.  
If the dosing pump requires higher current, use the dry contact to control a contactor coil.
- Switch the PoolCop unit ON.

# 4 INSTALLING ADDITIONAL EQUIPMENT



**FLOCCULANT 1 / FLOCCULANT 2 correspond to PUMP 1 and PUMP 2 flocculant injections respectively.**

Once declared as installed, the dosing pump control can be tested.

## 4.1.8 REMNANT INSTALLATION AND SETTINGS

Remnant dosage is **controlled according to pool volume and water temperature**, making it well suited for disinfection using active oxygen or for secondary liquid-chlorine disinfection in addition to a salt system.

This function adjusts the injected disinfectant volume based on:

- Dosing pump flow rate
- Pool volume
- Water temperature

The target dosage is **6 ml/m<sup>3</sup>/day**.

As water temperature increases from 22 °C to 30 °C (71.6 °F to 86 °F), the dosage can be progressively increased up to twice the initial amount.

An additional adjustment allows the dosage to be decreased by 50% or increased by 50% to take the pool environment into account.

The dosing relay is protected (pump-off safety functions, etc.) to ensure safe operation; for example, in the event of loss of priming, injection is stopped.

When possible, Remnant is **injected 1 hour before the end of the last filtration cycle of the day**. If no filtration cycle is long enough, the longest cycle is selected, but the injected volume may not fully meet the requirements.

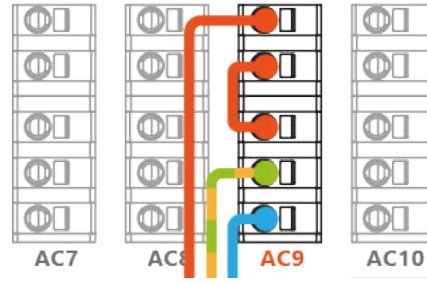
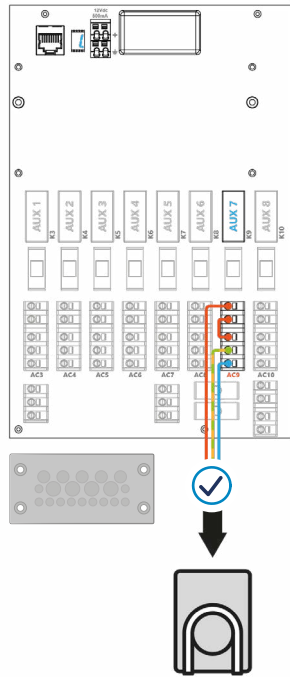
When **Filtration Mode is set to 24/24 or NO PUMP**, injection is scheduled to **finish at 10:00 p.m.** and is recalculated each day at midnight.



### NOTE:

Remnant injection is calculated from the POOL VOLUME value. To ensure correct dosing, the pool volume must be correctly configured in Pool Data.

# 4 INSTALLING ADDITIONAL EQUIPMENT



## NOTES:

- Ensure the PoolCop unit is switched **OFF** and disconnected from the power supply.
- Route the wire through the adapted entry plate.
- Extendable cable
- The remnant dosing pump can be connected to any available Aux.
- Switch the PoolCop unit **ON**

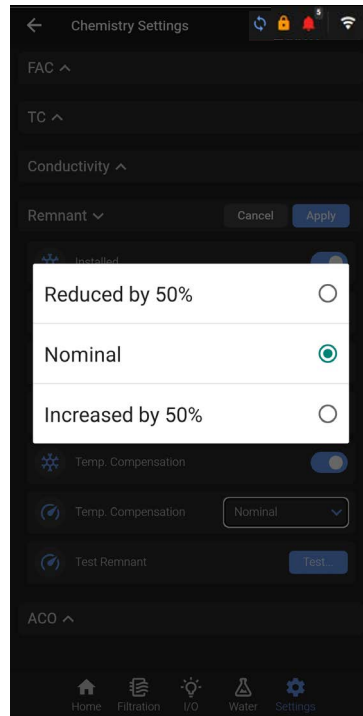
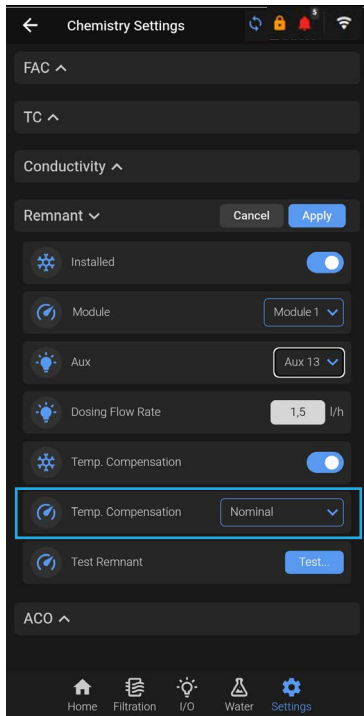


Once declared as installed:

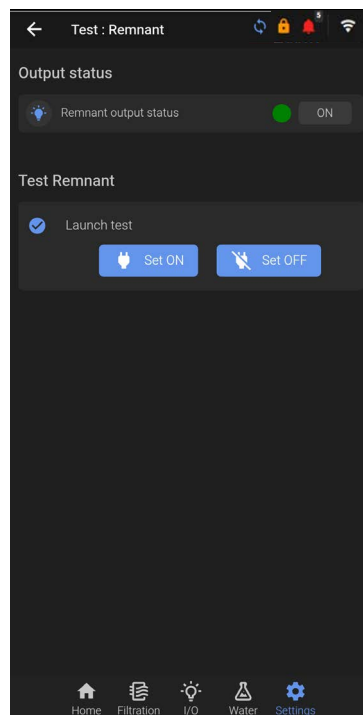
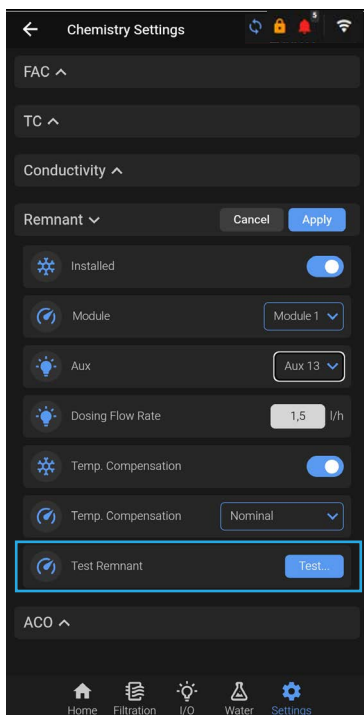
- Select the **Edge Module and auxiliary output** to which the dosing pump is wired.
- Set the **dosing pump injection rate**. Together with the pool volume (POOL DATA menu), this rate is used to calculate the Remnant injection duration
- **Temperature compensation:** select whether the injected volume should be adjusted according to pool water temperature. Between 24 °C and 30 °C (75.2 °F and 86 °F), the injection volume is progressively increased, reaching twice the initial volume at 30 °C (86 °F).

Temperature	Volume injected per day
20°C (68°F)	6 ml/m <sup>3</sup>
26°C (79°F)	9 ml/m <sup>3</sup>
30°C (86°F)	12 ml/m <sup>3</sup>

# 4 INSTALLING ADDITIONAL EQUIPMENT



- **Adjustment coefficient:** The injection volume can be adapted to the pool and season by selecting a **Nominal** (100%), **Reduced by 50%** (50% of the nominal volume), or **Increased by 50%** (150% of the nominal volume) coefficient.



- **Test** the dosing pump control.

# 4 INSTALLING ADDITIONAL EQUIPMENT

## 4.1.9 ACO INSTALLATION AND SETTINGS

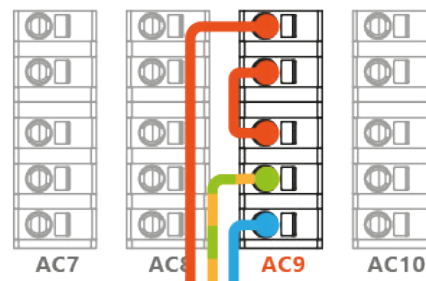
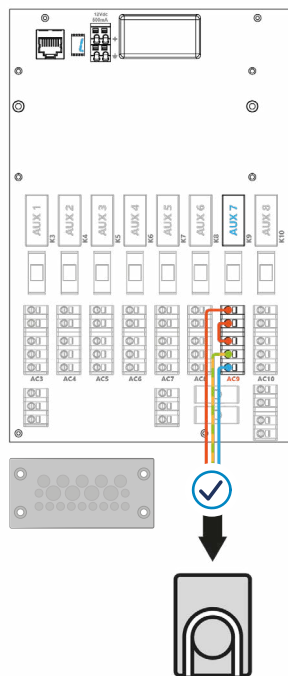
ACO (Active Catalytic Oxidation) is injected **on Fridays during the day**; the exact time depends on the filtration cycles.

- In 24/24 or NO PUMP modes, injection is activated at 1:00 p.m.
- In other modes, injection takes place between 8:00 a.m. and 6:00 p.m., provided there is a filtration period long enough to complete the injection.



### NOTE:

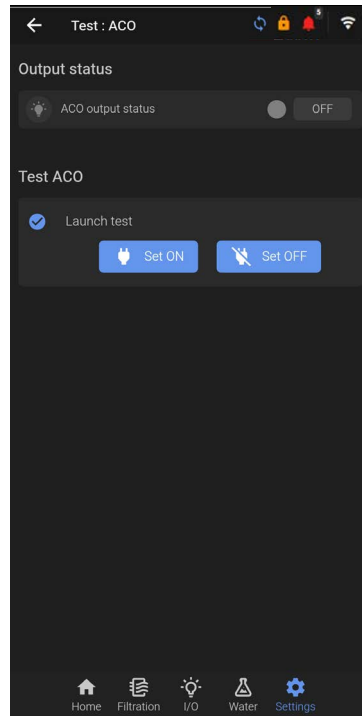
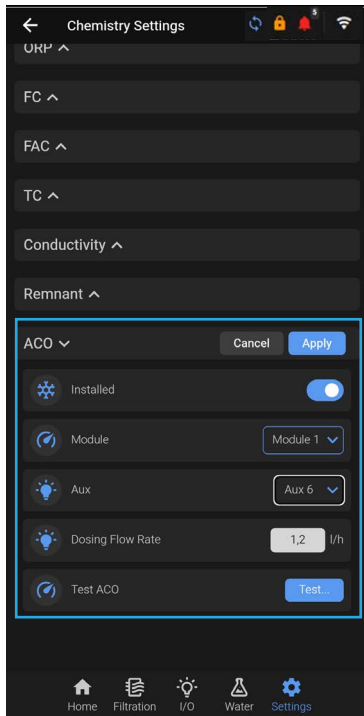
ACO injection is calculated from the POOL VOLUME value. To ensure correct dosing, the pool volume must be correctly configured in Pool Data.



### INSTALLATION NOTES:

- Ensure the PoolCop unit is switched **OFF** and disconnected from the power supply.
- Route the wire through the adapted entry plate.
- Extendable cable
- The ACO dosing pump can be connected to any available Aux.
- Switch the PoolCop unit **ON**

# 4 INSTALLING ADDITIONAL EQUIPMENT

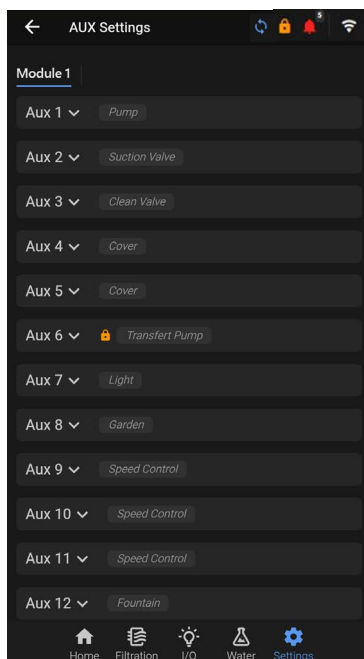


Once declared as installed:

- Select the **Edge Module and auxiliary output** to which the dosing pump is wired.
- Set the **dosing pump injection rate**. Together with the pool volume (POOL DATA menu), this rate is used to calculate the ACO injection duration, based on a dosage of 25 ml/m<sup>3</sup>/week.
- **Test** the dosing pump control.

## 4.2 SETTING UP THE OPTIONAL EQUIPMENT

### 4.2.1 AUXILIARIES



- Slaved and Unlocked
- Locked
- Aux Status ON ● /OFF ●

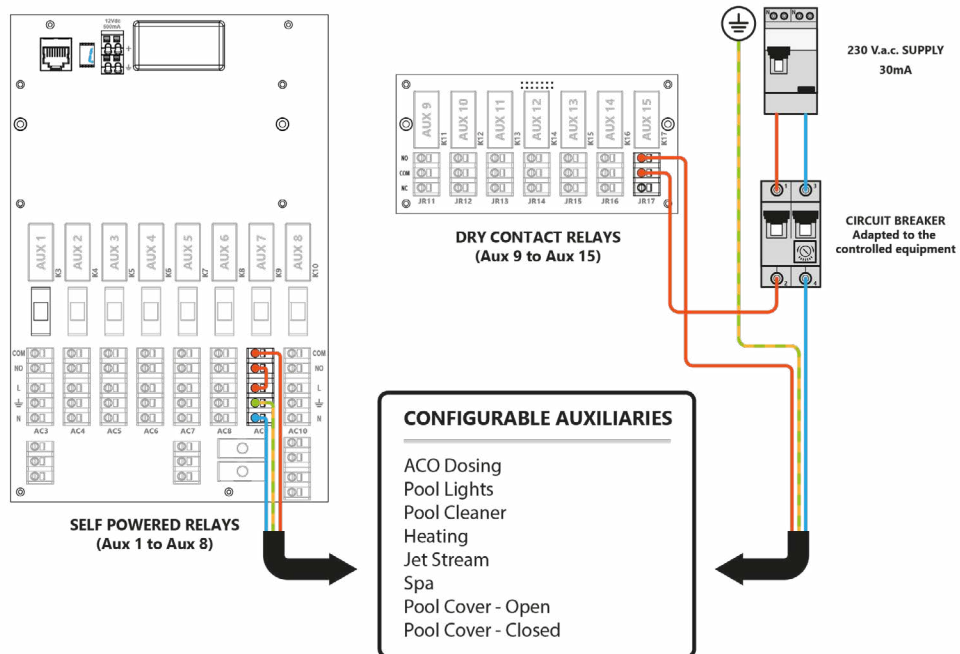
The **pre-defined auxiliaries** will immediately show the equipment when installed.

Additional pool equipment can be configured on any available auxiliary.

# 4 INSTALLING ADDITIONAL EQUIPMENT

PRE-DEFINED AUXILIARIES	CONFIGURABLE POOL EQUIPMENT
<p><b>INFINITY</b></p> <p>Aux 1 - Primary Pump ON/OFF            Aux 2 - Suction Valve            Aux 3 - Cleaning Valve 1            Aux 4 - Floc Dosing 1            Aux 5 - Secondary Pump ON/OFF            Aux 7 - Cleaning Valve 2            Aux 8 - Floc Dosing 2</p> <p><b>EDGE PLUS</b></p> <p>Aux 9 Primary Pump Speed            Aux 10 - Primary Pump Speed            Aux 11 - Primary Pump Speed            Aux 12 - Secondary Pump Speed            Aux 13 - Secondary Pump Speed            Aux 14 - Secondary Pump Speed</p> <p><b>ADDITIONAL EDGE UNIT</b></p> <p>Aux 1 - Rinse Valve 1            Aux 2 - Rinse Valve 2</p>	<p>Garden Irrigation            Pool House            Borehole            Fountain            Spa            UV            Transfer Pump            Remnant            Electrolyser            Disinfection (ACO...)            Heating            Pool Cleaner            Pool Lights            Garden Lights            Pool Cover - Open/Close</p>

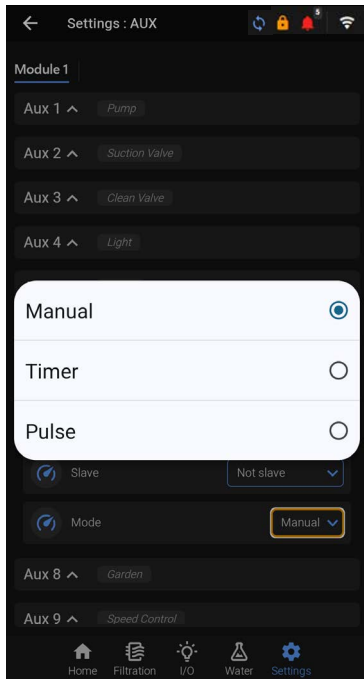
## GENERAL WIRING



Wiring examples for NO (Normally Open) contacts. If NC (Normally Closed) contact is needed, use COM + NC connectors on the EDGE PLUS Auxiliary.

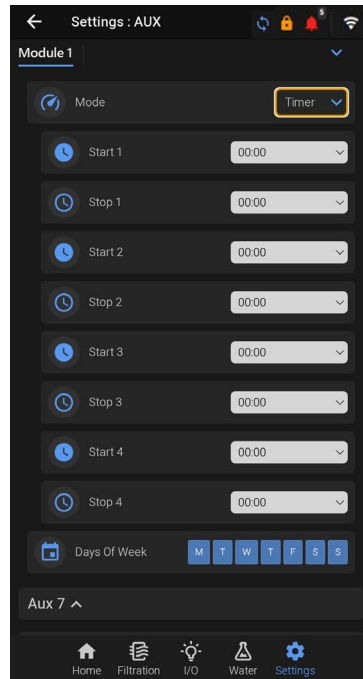
# 4 INSTALLING ADDITIONAL EQUIPMENT

## AUX MODES - MANUAL / TIMER / PULSE



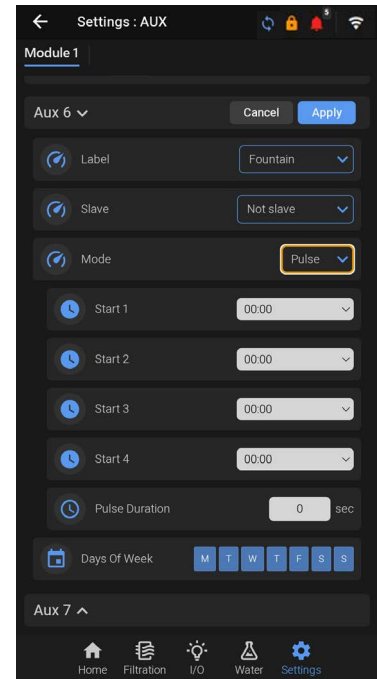
### Manual

Enables direct ON/OFF commands. No automatic control functions are applied in this mode.



### Timer

Allows configuration of up to four scheduled start and stop cycles. Users can specify the exact timing and select which days of the week these cycles will occur.



### Pulse

Provides control over ON duration and allows scheduling up to four activation times per day. Users can also select desired days of the week for programmed pulses.

When the Aux is set ON (manually or automatically) it will revert to OFF after the defined duration.



Certain auxiliary functions may be slaved to the pump(s) or pool cover operations.

All operating modes allow manual control if the conditions are fulfilled.

# 4 INSTALLING ADDITIONAL EQUIPMENT

## CONNECTING A HEATING PUMP

PoolCop's built-in heating algorithm can control any type of heating device, although a heat pump is most commonly used. Heating can be managed using three different control methods and is automatically slaved to filtration.

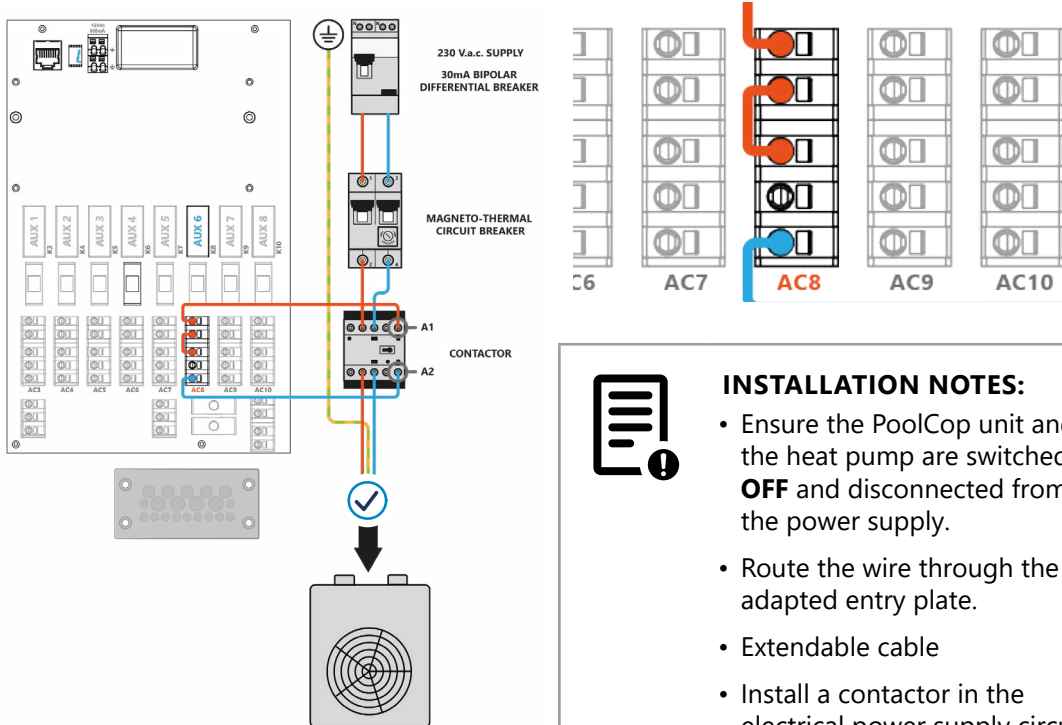


### NOTE:

**NO (Normally Open) dry contacts must be used**

The heat pump temperature setpoint must be set to a **higher value** than the desired water temperature defined in the PoolCop Auxiliary settings.

### Method 1 – Basic power control

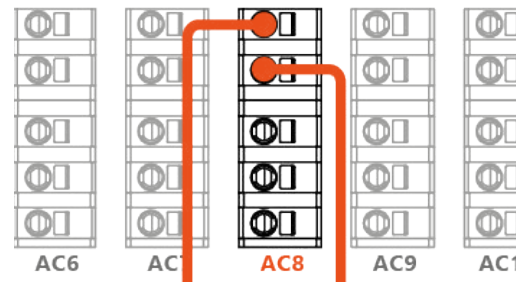
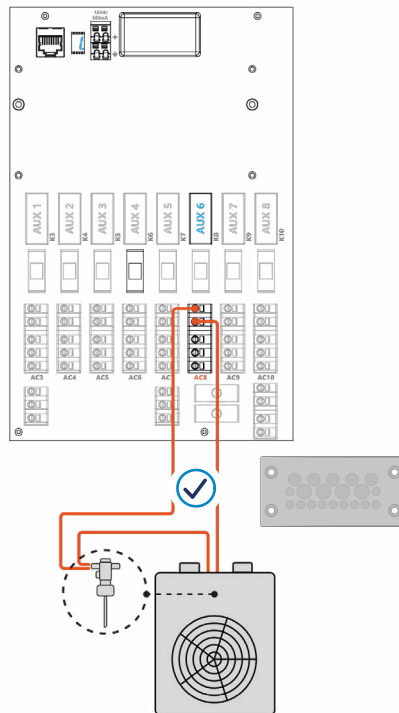


### INSTALLATION NOTES:

- Ensure the PoolCop unit and the heat pump are switched **OFF** and disconnected from the power supply.
- Route the wire through the adapted entry plate.
- Extendable cable
- Install a contactor in the electrical power supply circuit of the heat pump.
- Use the auxiliary configured to heating to control the contactor coil.
- When heating is requested, the heat pump is powered; when no heating is required, the power supply is cut.
- Switch the PoolCop unit and the heat pump ON

# 4 INSTALLING ADDITIONAL EQUIPMENT

## Method 2 – Using the internal flow switch

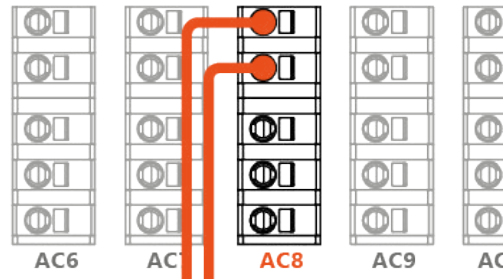
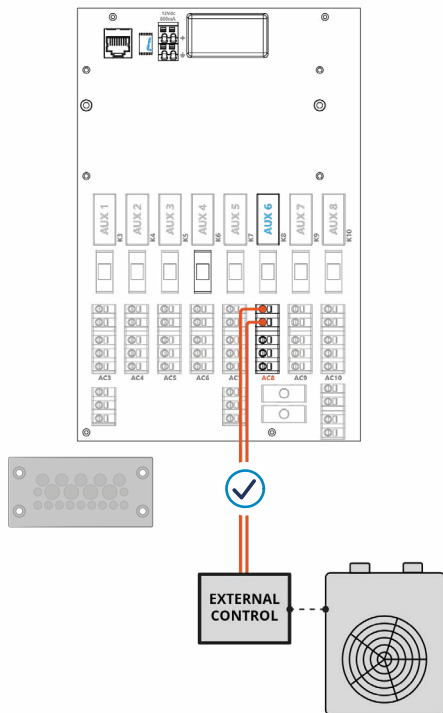


### INSTALLATION NOTES:

- Ensure the PoolCop unit and the heat pump are switched **OFF** and disconnected from the power supply.
- Route the wire through the adapted entry plate.
- Extendable cable
- The heat pump's built-in flow switch prevents heating if there is insufficient water flow.
- If access to the flow switch terminals is possible and this does not void the heat pump warranty, wire the heating auxiliary output in series with the flow switch.
- When heating is requested, the flow-switch signal is enabled; when heating is not requested, the heat pump detects a "No Flow" condition and does not produce heat.
- Switch the PoolCop unit and the heat pump **ON**

# 4 INSTALLING ADDITIONAL EQUIPMENT

## Method 3 –Using the designated remote ON/OFF Control I

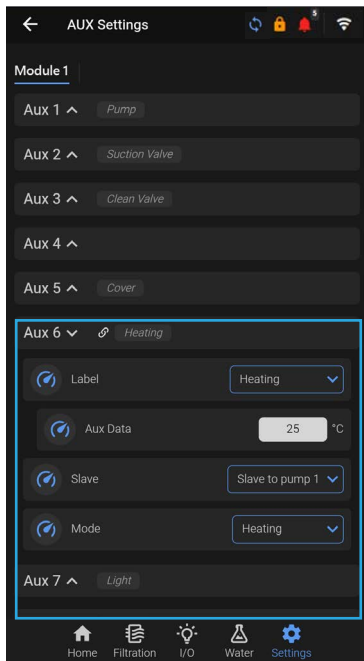


### INSTALLATION NOTES:

- Ensure the PoolCop unit and the heat pump are switched **OFF** and disconnected from the power supply.
- Route the wire through the adapted entry plate.
- Extendable cable
- If the heat pump supports external control, this option is optimal and described in its installer manual.
- In most cases, a factory bridge is fitted on the remote ON/OFF terminals; remove this bridge and connect the heating auxiliary output in its place.
- The system is then switched ON or OFF according to whether heating is requested.
- Switch the PoolCop unit and the heat pump **ON**

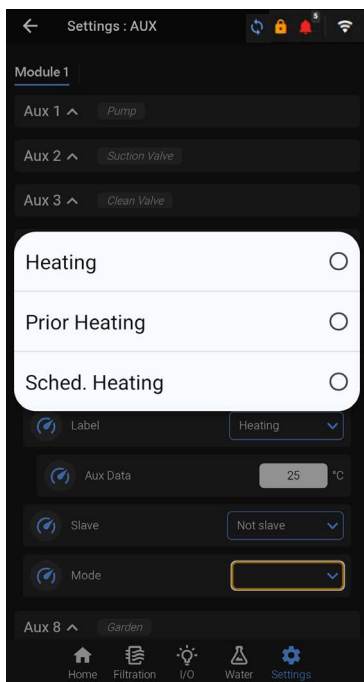
# 4 INSTALLING ADDITIONAL EQUIPMENT

## SETTING UP A HEATING PUMP



Once the correct auxiliary has been declared as dedicated to **heating**, configure the following parameters:

- Set the desired **water temperature setpoint**.
- Specify whether the heating should **slaved to Pump 1, Pump 2, or both**.
- Select the **heating mode** best suited to your installation (*see below*).



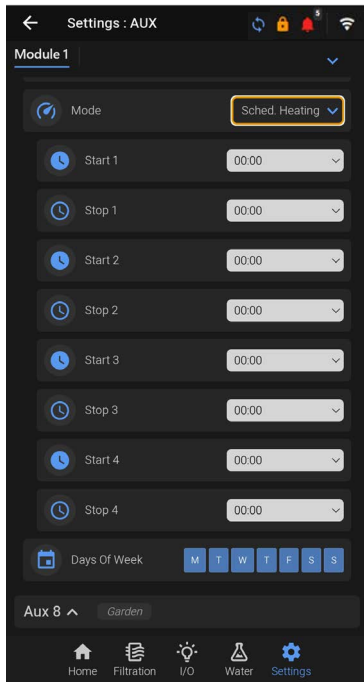
When auxiliary is set as heating, 3 additional modes are available:

In **Filtration** mode, the heater can only operate during programmed filtration hours.

In **Priority** mode, the filtration pump is forced on for priority heating which will accelerate the increase of water temperature.

In **Schedule** the operation of the heater is limited within the period defined by its own timers.

# 4 INSTALLING ADDITIONAL EQUIPMENT

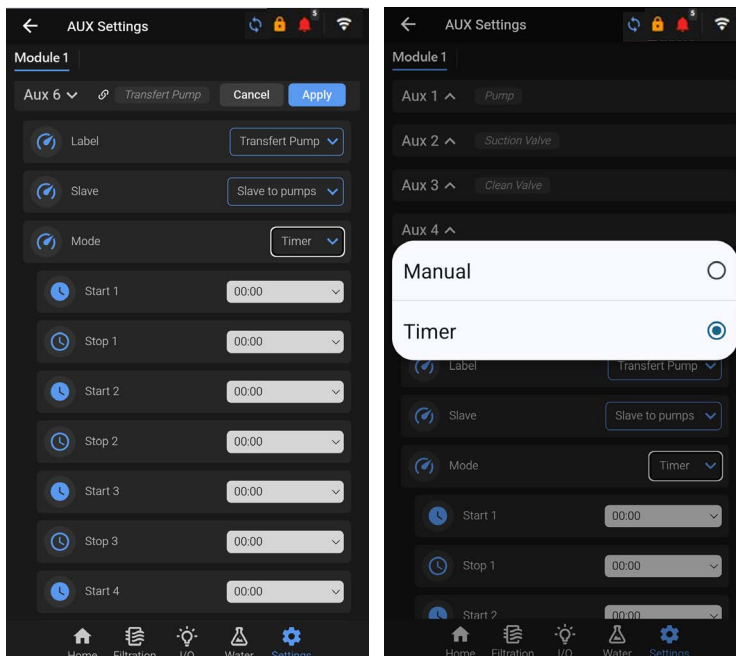


In **Schedule mode**, heater operation is restricted to the time period defined by its dedicated timers.

Heating is therefore only enabled during the programmed ON/OFF time window and only when filtration is running.

## CONNECTING A TRANSFER PUMP

A transfer pump can be connected to any available auxiliary output and set to MANUAL or TIMER mode to create an overflow.



# 4 INSTALLING ADDITIONAL EQUIPMENT



## WARNING:

On rimflow pools, an auxiliary labeled "Transfer Pump" is treated as a device used to move water from the buffer tank to the pool.

If the Water Level function is installed and set to AUTO or Reduction Only, the pump controlled by this auxiliary will be switched ON automatically during control phases in order to modify the water level in the buffer tank.

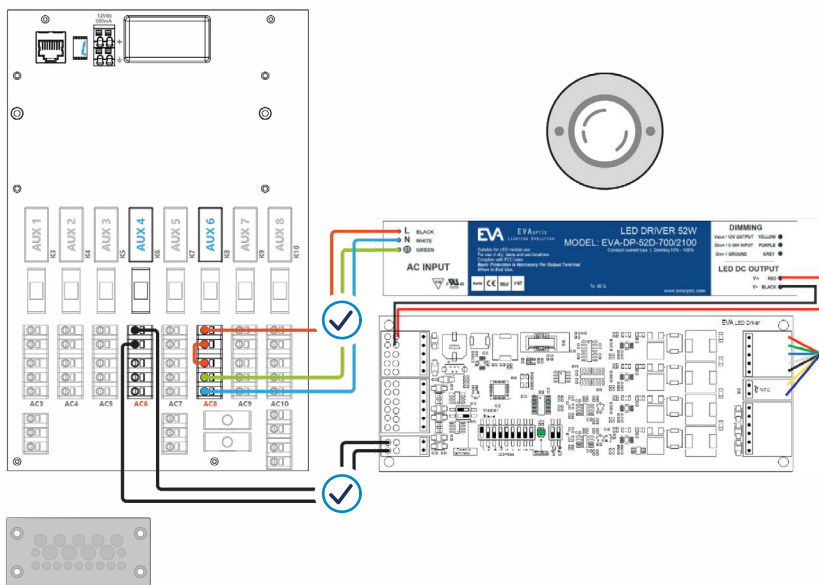
The pump starts immediately when the water level is detected as Very High and will run until one of the following conditions is met:

- The level returns to Normal.
- The level remains Very High for 15 minutes, which triggers a water level reduction.
- The level remains High for 3 hours, which also triggers a water level reduction.

## CONNECTING LIGHTS

Pool lights can be connected to **any available auxiliary** and slaved to the pool cover to ensure they are turned OFF when the cover is closed.

If color change is controlled by a pulse **longer than 1 second**, it can be controlled by using a 2nd auxiliary.



## NOTE:

If color change is controlled by a break in the power supply, an external changeover relay can sometimes be used.

WIRING EXAMPLE FOR EVA OPTIC LIGHTS

# 4 INSTALLING ADDITIONAL EQUIPMENT



## NOTES:

- Ensure the PoolCop unit is switched **OFF** and disconnected from the power supply.
- Route the wire through the adapted entry plate.
- Extendable cable
- One auxiliary is used to switch the light ON and OFF (AUX 6 on the drawing).
- One auxiliary is used to change the color (AUX 4 on the drawing). This auxiliary must be configured in pulse mode with a pulse duration of 2 seconds (see section 5.4.1 - Auxiliaries).
- Auxiliaries can be selected from any available outputs; they do not need to be adjacent.
- Switch the PoolCop unit **ON**

## ADDITIONAL APP FEATURE – POOL LIGHTS

Once installed, a pool light can be set to Automatic Mode via the Remote App (see section 7 - **Internet and Cloud Connection** for more information).

This setting allows the pool lights to operate according to the ephemerides throughout the day or night, or for a defined duration at sunset or sunrise.

The screenshot shows the 'Aux12 - Pool lights (Pool Light)' configuration screen. It features three main sections: 'FUNCTION', 'MODE', and 'NAME FOR POOL LIGHTS'. The 'FUNCTION' dropdown is set to 'Pool lights', 'MODE' is set to 'Auto', and 'NAME FOR POOL LIGHTS' is 'Pool Light'. Below these is an information icon and text: 'The « Auto » mode allows the programming of specific days and the duration for the aux. The times and duration will be based on sunrise and sunset times.' The 'Working days of the week' section shows a calendar with 'Friday' selected. The 'WHEN' section is a dropdown menu with options: 'At sunset', 'All night', 'All day', 'At sunset' (highlighted), and 'At sunrise'.

### 4.2.2 INPUTS

Various types of sensors and devices can be connected to enhance functionality and enable alert triggers.

The installation of a PoolCop Edge unit will allow additional equipment control to a PoolCop Core. Input wiring is done in the PoolCop Core or the PoolCop Infinity unit.

Inputs can be assigned to predefined functions with two modes of operation:

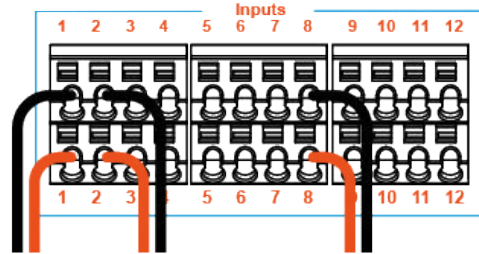
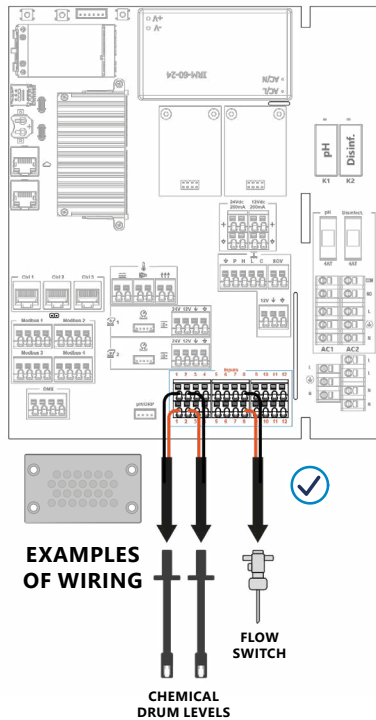
- **Direct action:** Activates the assigned function when the contact is closed.
- **Reverse action:** Activates the assigned function when the contact is open.

# 4 INSTALLING ADDITIONAL EQUIPMENT

**All input connections must use potential-free contacts.**

The role and direction of action is configured in the settings menu (page 47).

## INPUTS WIRING



### NOTES:

- Ensure the PoolCop unit is switched **OFF**.
- Inputs can be wired in any available connectors using a flat-head screwdriver with a maximum 3 mm tip.
- Route the wire through the adapted entry plate.
- If necessary, the wires can be extended.
- Switch the PoolCop unit **ON**.

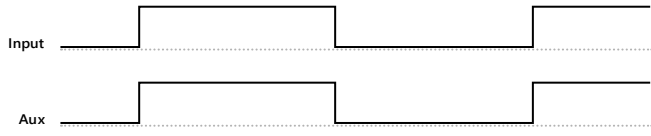
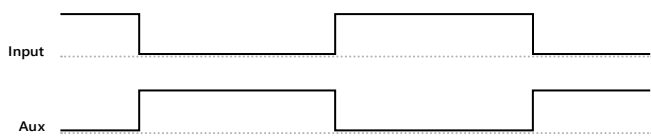
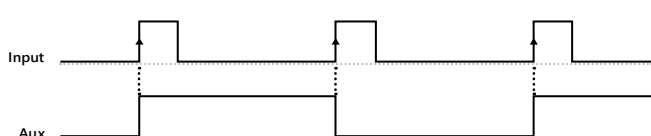
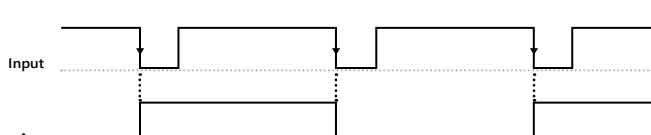
## INPUT DESCRIPTIONS

INPUT TYPE	DELAY BEFORE TRIGGER	INPUT ROLE
<b>NOT USED</b>		Default. The input is inactive
<b>ANTI-FREEZE</b>	5 seconds	Connects to an external antifreeze thermostat for freeze protection. When triggered, and if enabled in the POOL DATA menu, filtration is started and an alert is generated.
<b>CONSUMABLE pH</b>	5 seconds	Connects to a low-level detector (e.g., float switch on a suction wand) for pH control chemicals. Triggers a dedicated alert when low level is detected.
<b>CONSUMABLE DISINFECTION</b>	5 seconds	Connects to a low-level detector for disinfection chemicals. Triggers a dedicated alert when low level is detected.
<b>CONSUMABLE OTHERS</b>	5 seconds	Connects to a low-level detector for other consumables (not pH, Disinfection, ACO, or Flocculant). Triggers a dedicated alert when low level is detected.

# 4 INSTALLING ADDITIONAL EQUIPMENT

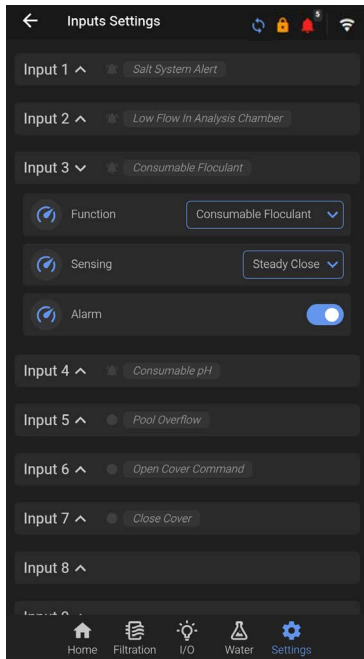
<b>POOL COVER</b>	2 seconds	Triggers an alert <b>if not fully closed</b> . If a variable speed pump is installed, PoolCop activates the configured speed when closed, then restores the operational speed when reopened during a pump cycle. (input ACTIVE)
<b>SALT SYSTEM ALERT</b>	60 seconds	With compatible saltwater chlorine generators, the LOW SALT or SHUTDOWN status will trigger an alert: "Salt System: Intervention Required". <b>Note:</b> Not required for Ocean/DA-Gen/DA SPACE/Aquark, which use Modbus communication for status.
<b>START PUMP 1</b>	2 seconds	Starts filtration pump 1 in response to an external switch/button/automation command. Removing the input command stops the filtration unless it is configured ON in another mode.
<b>START PUMP 2</b>	2 seconds	Starts filtration pump 2 in response to an external switch/button/automation command. Removing the input command stops the filtration unless it is configured ON in another mode.
<b>START ALL PUMPS</b>	2 seconds	Starts both filtration pumps in response to an external switch/button/automation command. Removing the input command stops the filtration unless it is configured ON in another mode.
<b>STOP PUMP 1</b>	2 seconds	Stops pump 1 via an external control. <b>Warning:</b> This overrides all orders, including antifreeze protection. Any active filter cleaning will halt and proceed to rinse.
<b>STOP PUMP 2</b>	2 seconds	Stops pump 2 via an external control. <b>Warning:</b> This overrides all orders, including antifreeze protection. Any active filter cleaning will halt and proceed to rinse.
<b>STOP ALL PUMPS</b>	2 seconds	Stops both pumps via an external control. <b>Warning:</b> This overrides all orders, including antifreeze protection. Any active filter cleaning will halt and proceed to rinse.
<b>FLOW SWITCH 1</b>	2 seconds	Monitors flow on pump 1. In the case of no flow detection, stops pH/disinfectant injection and auxiliaries slaved to the pump. Injection resumes with the return of flow; disinfectant dosing resumes with a 10-minute delay.
<b>FLOW SWITCH 2</b>	2 seconds	Monitors flow on pump 2. In the case of no flow detection, auxiliaries declared slaved to pump 2 will be stopped. Normal situation will resume automatically with the return of flow.
<b>FLOOD</b>	2 seconds	Detects water presence (e.g., in the pump house) and sends an alert.
<b>FLOOD + FILTRATION STOP</b>	2 seconds	Detects water presence (e.g., in the pump house) and sends an alert, but additionally stops filtration, chemical dosing, and slaved auxiliaries.

# 4 INSTALLING ADDITIONAL EQUIPMENT

<b>LOW FLOW IN ANALYSIS CHAMBER</b>	90 seconds	Monitors the flow indicator position in the Free Available Chlorine (FAC) flow cell and alerts if the correct position is lost.
<b>CONSUMABLE ACO</b>	5 seconds	Specifically for ACO (oxidant) dosing. The low-level detector (typically a float switch on a suction wand) triggers an alert when low level is detected.
<b>CONSUMABLE FLOCCULANT</b>	5 seconds	Specifically for Flocculant dosing. The low-level detector (typically a float switch on a suction wand) triggers an alert when low level is detected.
<b>POOL OVERFLOW</b>	2 seconds	User input to activate overflow in infinity pools (if not blocked by another function). <b>Only applies to rimflow pools with suction valve.</b>
<b>OPEN COVER</b>	2 seconds	A key or button to request pool cover to open (if configured). When key/button is released, the cover will stop in its position.
<b>CLOSE COVER</b>	2 seconds	A key or button to request pool cover to close (if configured). When key/button is released, the cover will stop in its position.
<b>ELECTROLYSIS FLOW SWITCH</b>	2 seconds	In chlorinator bypass circuits, stops chlorine production if flow is not detected.
<b>AUX CONTROL</b>	2 seconds	<p>Controls auxiliary equipment via input in four modes:  <b>When closed</b> Aux follows status of input, Aux timer deactivated</p>  <p><b>When open</b> Aux follows opposite status of input, Aux timer deactivated</p>  <p><b>Pulse Closed</b> Aux changes when input goes from OFF to ON, Aux timer possible</p>  <p><b>Pulse Open</b> Aux changes when input goes from ON to OFF, Aux timer possible</p> 

# 4 INSTALLING ADDITIONAL EQUIPMENT

## INPUT SETTINGS



Select the **INPUT function** from the INPUT DESCRIPTION list.

Determine the **sense of action**:

- Steady Close
- Steady Open

If **Aux Control**:

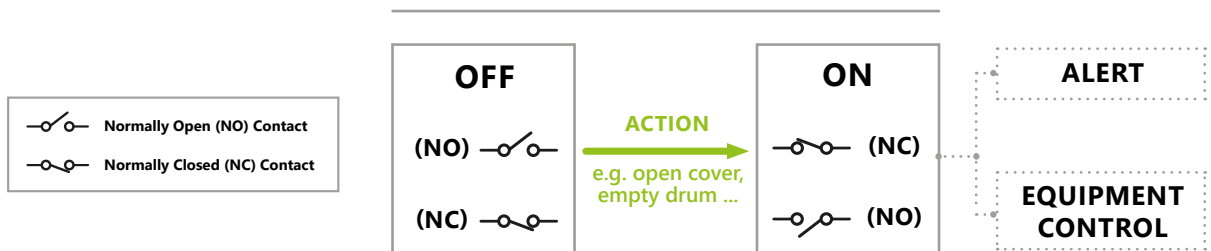
Additional sensing is available (Pulse Close / Pulse Open) and the controlled equipment can be chosen by indicating the Module unit and the Aux it is connected to.

Choose whether an **alarm** should be triggered to alert to the situation.

## SENSE OF ACTION

When an input status changes from OFF to ON, such as when a sensor detects an event (e.g., an open cover or an empty drum), the contacts change state: the Normally Open (NO) contact closes, and the Normally Closed (NC) contact opens. This change of status will either emit an alert, if alert notifications are configured, or it will trigger control of auxiliary equipment.

### INPUT SENSING AND STATUS



### 4.2.3 POOL COVER AND JET STREAM

#### POOL COVER

Pool cover control functionality is available in the Equipment settings. To enable remote control, a compatible pool cover drive unit must be connected to the PoolCop. The pool cover is operated by “pulsing” the Open or Close command to the drive, effectively replacing the original button or key-operated control.

# 4 INSTALLING ADDITIONAL EQUIPMENT



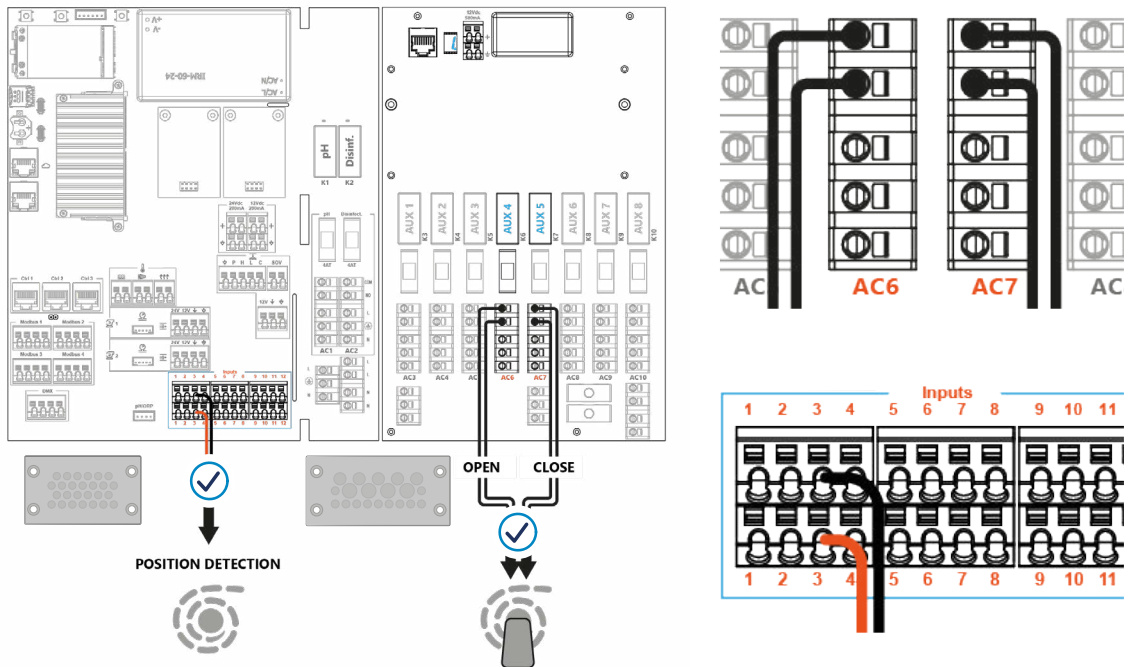
## WARNING:

Remote control of a Pool Cover can cause severe injury. The user must always have the pool in direct view when maneuvering the cover and during opening or closing operations. The pool must be monitored at all times during the operation of the Pool Cover to ensure that no person is in the pool or enters the pool. The remote control of the Pool cover is reserved for maintenance operations carried out by an authorized installer.



## IMPORTANT:

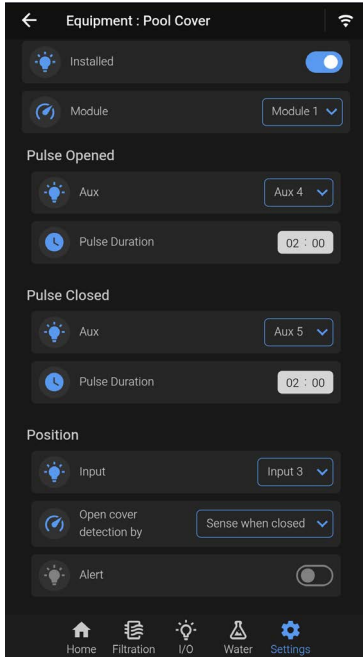
Refer to the pool cover manufacturer's wiring diagrams to connect the control signals correctly.



## NOTES:

- Ensure the PoolCop unit is switched **OFF**.
- Any available auxiliaries can be used, with one auxiliary for the Open command and a second auxiliary for the Close command. They do not need to be adjacent.
- Any available input can be used to detect the pool cover position.
- Route the wires through the adapted entry plates.
- Extendable cables
- Switch the PoolCop unit **ON**.

# 4 INSTALLING ADDITIONAL EQUIPMENT

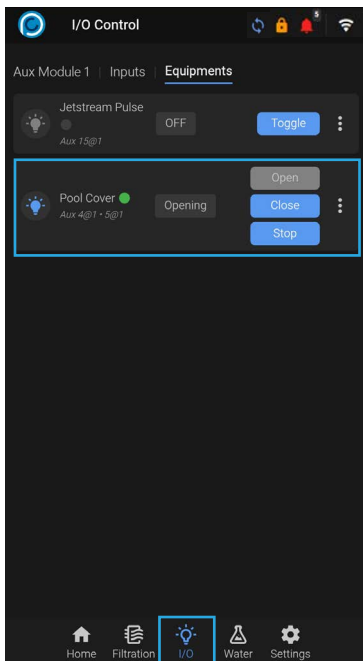


Once the pool cover is declared as installed, set the **Edge Module number** (1 or 2) and assign the **auxiliaries** used for the Open and Close commands.

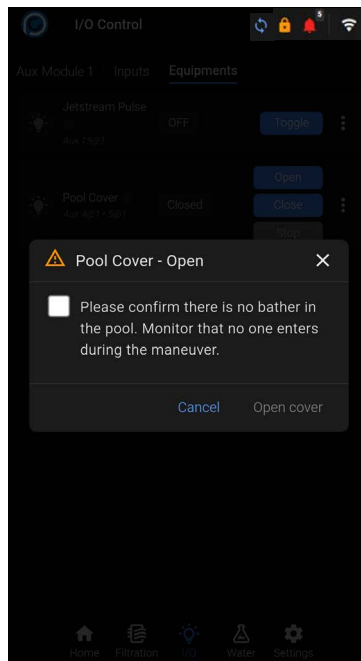
The **pulse duration** must be configured long enough to allow complete cover movement.

Specify which **input** is used to detect the cover position and whether an open cover is detected by an open or closed circuit.

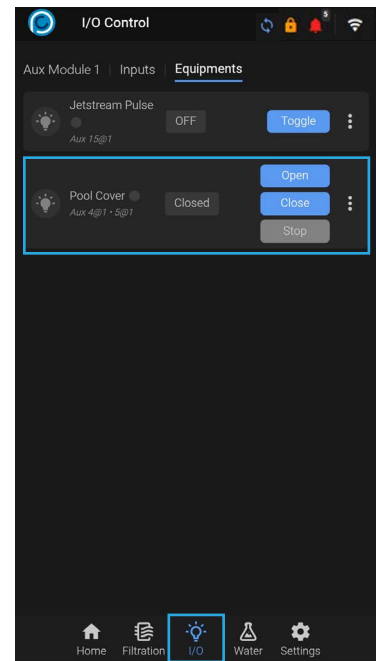
An **alert** can be sent if the cover is open.



The pool cover can be controlled manually from the I/O Shortcut menu.



**NOTE:** Before any movement is authorized, PoolCop will systematically request confirmation that no bather is at risk.



# 4 INSTALLING ADDITIONAL EQUIPMENT

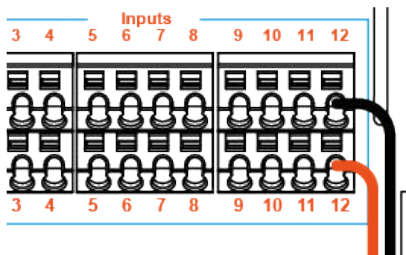
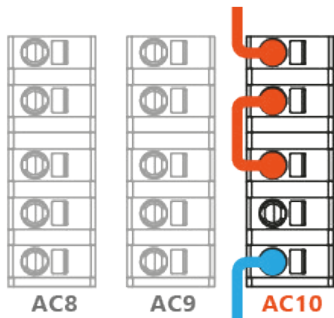
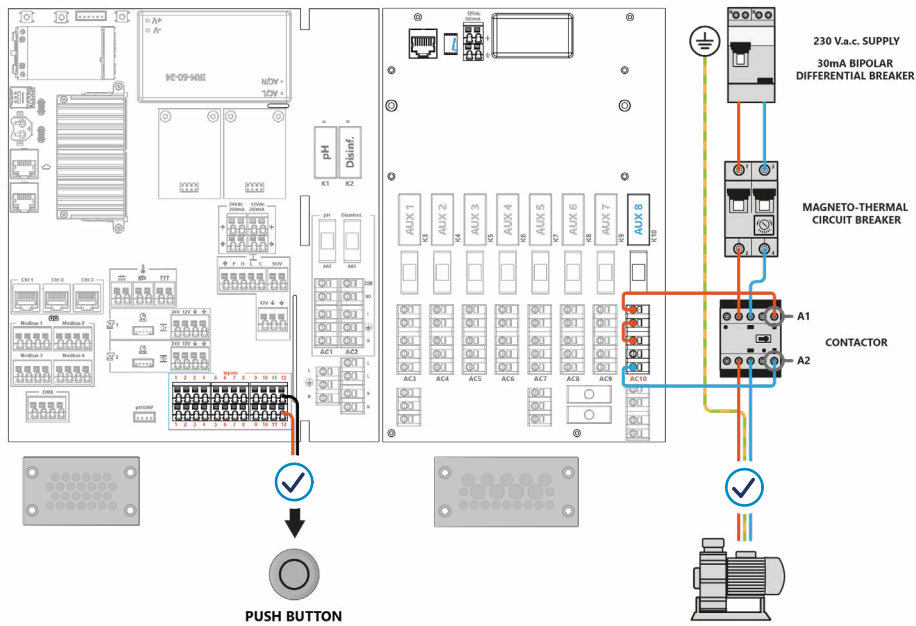
## COUNTER-CURRENT UNIT (JETSTREAM)

A counter-current unit (JetStream type) is usually operated by a pneumatic push button in the pool. When this push button is connected to the PoolCop, the JetStream can also be operated remotely and users can select a running duration.



### IMPORTANT:

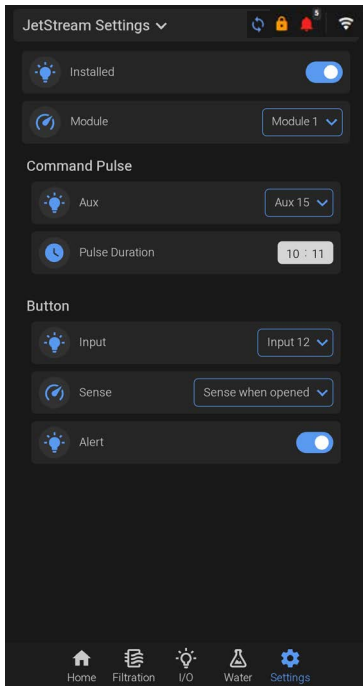
The push button signal must be converted into an ON/OFF contact before being connected to the input, typically by a pneumatic switch inside the JetStream electrical junction box.



### NOTES:

- Ensure the PoolCop unit is switched **OFF**.
- Any available auxiliaries can be used for JetStream pump command
- Any available input can be used for the push button.
- Route the wires through the adapted entry plates.
- Extendable cables
- Switch the PoolCop unit **ON**.

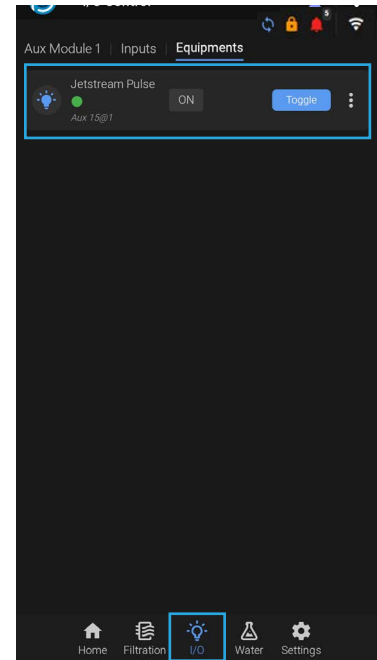
# 4 INSTALLING ADDITIONAL EQUIPMENT



Once the JetStream is declared as installed in the Equipment menu, the Module and auxiliary number for the JetStream command can be selected, and the pulse duration can be set.

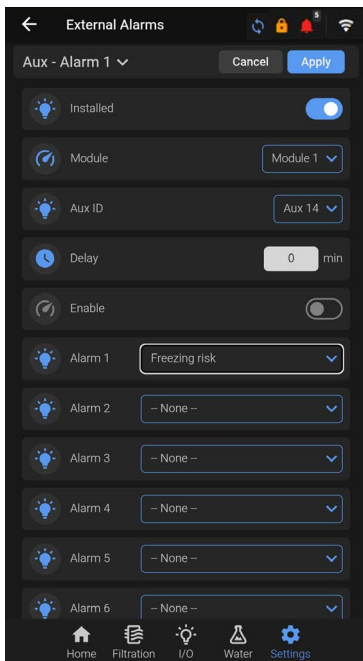
The push button **input** number and the activation detection circuit must be specified, with an option to receive an **alert** if the JetStream has been activated via the push button.

The JetStream can be controlled manually from the I/O Shortcut menu.



## 4.2.4 EXTERNAL ALARMS

Up to two available auxiliary relays can be used for external alarms, and up to six parameters can be configured to trigger each warning. If one or more of the selected parameters are triggered, the associated auxiliary relay closes to activate the external alarm. This can be used, for example, to switch on a warning light or siren.



Once the alarm is declared as installed, set the **Edge number** (1 or 2) and assign the **auxiliary** used.

### Enable the alarm

When the checkbox is ticked, the external alarm function is active.

NOTE: If Enable is not checked, the external alarm for the selected triggers will not activate, even if the triggers are active.

### Triggers

Select one or more triggers from the dropdown list.

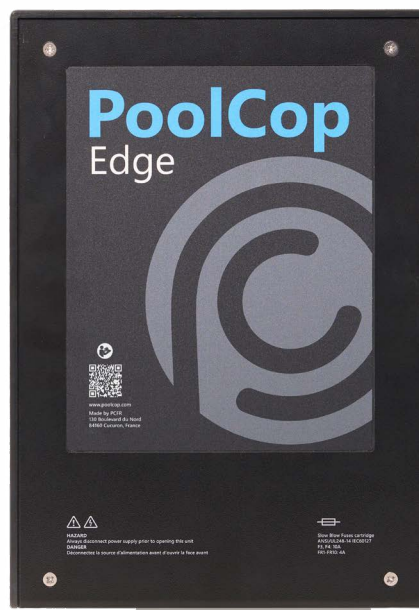
# 5 TECHNICAL SPECIFICATIONS

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## 5 TECHNICAL SPECIFICATIONS

- PoolCop Unit
- Technical Specifications
- Exploded View
- Spare Parts

### 5.1 POOLCOP UNIT



PoolCop Edge is the modular extension unit that transforms your PoolCop Core or Infinity system into a fully automated powerhouse. It is not a standalone controller, but a flexible extension that adds advanced equipment control and scalability for complex or growing installations.

# 5 TECHNICAL SPECIFICATIONS

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## 5.2 TECHNICAL SPECIFICATIONS

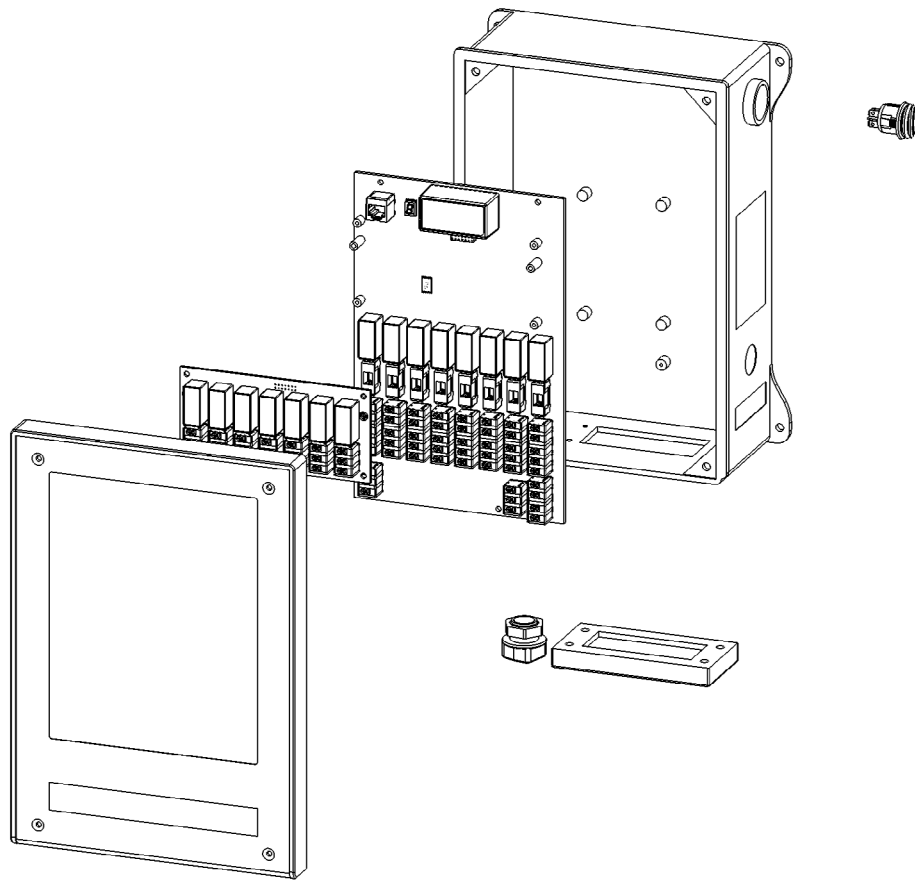
### 5.2.1 POOLCOP EDGE

<b>COMPONENTS</b>	
PoolCop Edge Unit	1
Installer and User Guide	1 (to download online)
<b>TECHNICAL SPECIFICATIONS</b>	
Unit Dimensions	230 x 320 X 110 ( LxHxW) - 2 KG
Power Supply	110 -250 V.a.c. 50Hz-60Hz 10A
Power Supply Fluctuations	+/- 10%
Overvoltage Category	II
Pollution Degree	2
Usage	Indoor
Service Temperature	-5°C - 45°C (23°F - 113°F)
Altitude	2000m
Relative Humidity	80% up to 31°C, linear decrease down to 50% at 45°C
Mains Fuses	10A
Powered Relay Fuses	4A
PoolCop Edge Unit Protection	IP54

# 5 TECHNICAL SPECIFICATIONS

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## 5.3 EXPLODED VIEW



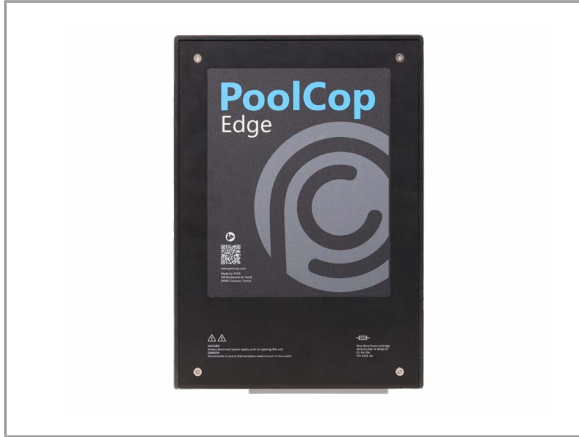
# 6

# COMPLIANCE & WARRANTY

## 6 COMPLIANCE & WARRANTY

### 6.1 CE CONFORMITY

#### EU DECLARATION OF CONFORMITY



**Equipment:** PoolCop  
**Model Name:** PoolCop Edge  
**Manufacturer:** PCFR SAS,  
 La Remise,  
 130 boulevard du Nord,  
 84160 Cucuron (FRANCE)

We guarantee and declare under our sole responsibility that the above referenced equipment meets the requirements of the following European directives and harmonized standards:

DIRECTIVES	TITLES	HARMONIZED STANDARDS
2014/35/EU	Low Voltage Directive	EN 61010-1:2010+A1:2019 EN IEC 62368-1:2020+A11:202 EN 60730-1:2016+A1:2019+A2:2022
2014/30/EU	EMC Directive	EN 55032:2015+A1:2020 EN 55035:2017+A11:2020 IEC 61000-3-2:2019+A2:2024 IEC 61000-3-3:2013+A2:2021+AC:2022-01 IEC 61000-4-2:2008 (EN 55035:2017+A11:2020) IEC 61000-4-3:2006+A1:2007+A2:2010 (EN 55035:2017+A11:2020) IEC 61000-4-4:2012 (EN 55035:2017+A11:2020) IEC 61000-4-5:2014 (EN 55035:2017+A11:2020) IEC 61000-4-6:2008 (EN 55035:2017+A11:2020) IEC 61000-4-8:2010 (EN 55035:2017+A11:2020) IEC 61000-4-11:2004 (EN 55035:2017+A11:2020)
2011/65/EU 2015/863/EU 2018/739/EU	Hazardous Substances (RoHS)	EN IEC 63000:2018

**Sébastien Ettling Coëffier**  
 General Manager

Cucuron, 03/03/2026



# 6

# COMPLIANCE & WARRANTY

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## 6.2 POOLCOP WARRANTY

Before using the product, we recommend that you carefully read the user manual in which you will find all the usual precautions.

This warranty applies only if the defective product is presented within the warranty period, accompanied by the original invoice or receipt (clearly indicating the purchase date, the model of the device and the reseller's name). PCFR reserves the right to refuse warranty service if these documents are not presented or if they are incomplete or illegible. The warranty will not apply if the model name or serial number on the product has been altered, wiped out, deleted, torn, perforated or made illegible.

The warranty is valid for 2 (two) years from the date of delivery (see Conditions). This warranty does not cover consumables or parts with limited lifespan. The warranty is automatically invalidated if the customer does not notify PCFR of the latent defect or the alleged non-compliance within 20 (twenty) days from its discovery. The customer is responsible for proving the date of the discovery. PCFR is only obliged to repair or replace, free of charge, defective or nonconforming parts, at its discretion, and without the customer being entitled to obtain damages for any cause whatsoever. Original spare parts are available from PCFR. The use of other than genuine parts voids the warranty.

### TERMS

- This product is covered by a limited warranty of 2 (two) years, excluding consumables or parts with limited warranty (see below).
- The warranty start date is defined as follows
  - the billing date of the first-level distributor to the first client.
- If the product is not installed by the installer or an authorized reseller, the warranty is limited to 90 days.
- PoolCop provides no warranties (express, implied, statutory or otherwise) for the product, the product software or the software accompanying the product, regarding the accuracy of the information provided or suitability for a particular purpose.

### THE WARRANTY DOES NOT COVER

Defects and deterioration of products due to abnormal conditions of storage, especially in case of an accident of any kind whatsoever, will void the product warranty. The warranty applies only to products that have become the property of the buyer. It applies only to products wholly distributed by PCFR. The warranty is automatically voided should the products be used under conditions for which they were not designed. A design flaw is not a latent defect and customers of PCFR are deemed to have received all the technical information on products sold. PoolCop does not cover damage resulting from wear requiring an adaptation or a special assembly, abnormal or not, of the product unless it was conducted under PCFR's supervision.

Viral infections or the use of the product with software not supplied, or software incorrectly installed.

Neglect.

A loss of water tightness of the PoolCop Edge unit following an assembly error, installation error or a lack of attention on a sealing element or its installation (sensors, electrodes, O-rings, hoses, clamps, etc.).

Accidents, fire, liquids, chemicals other substances, flooding, vibrations, excessive heat, improper ventilation, power surges, excess or inadequate power supply, radiation, electrostatic discharge including lightning, other forces and external influences.

Transportation costs and the risks associated with product replacement or repair.

### EXCLUSIONS AND LIMITATIONS

PoolCop is not responsible for the consequences of action taken in response to a displayed value. The results obtained by the product are not the responsibility of PCFR, whatever the causes and consequences. It is the user's responsibility to verify the displayed values and the proper

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## COMPLIANCE & WARRANTY

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functioning of the unit.

In the context of this warranty, the PCFR's sole obligation is to repair or replace products which meet the conditions of this warranty. PoolCop is not responsible for any loss or damage relating to products, to service, to this warranty or any other, including:

- Loss of use of the pool.
- Financial losses.
- Price paid for the product.
- Loss of profit revenue, data, enjoyment or use of the product or associated products.
- Loss or indirect loss or accidental damage.
- Any direct or any indirect prejudice linked to the unavailability of the product for whatever duration.

# PoolCop

Always. Better. Blue.

## INSTALLER & USER GUIDE



DATE: **March 2026**  
PRODUCT: **PoolCop Edge**  
MANUAL: **EDGE50EN**  
FIRMWARE: **V50**



**PCFR**PoolCop

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