



# Tild+

## Automation system for pool and spa

### Technical Manual



Ref: PF10T002

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# 1. Important Warnings and Safety Instructions

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## Warning

When installing and using this electrical equipment, basic safety precautions should always be followed, including the following:

1. READ AND FOLLOW ALL INSTRUCTIONS.
  2. WARNING - To reduce the risk of injury, do not permit children to use this product unless they are closely supervised at all times.
  3. Remove and immediately recycle or dispose of used batteries according to local regulations and keep away from children. Do NOT dispose of batteries in household trash or incinerate.
  4. Even used batteries may cause severe injury or death.
  5. Call a local poison control center for treatment information.
  6. This product uses a CR1220 battery type.
  7. The battery is operating at 3V.
  8. Non-rechargeable batteries are not to be recharged.
  9. Do not force discharge, recharge, disassemble, heat above 85°C or incinerate. Doing so may result in injury due to venting, leakage or explosion resulting in chemical burns.
  10. This product contains a non-replaceable battery.
  11. SAVE THESE INSTRUCTIONS.
- 



## Warning

INCORRECT INSTALLATION OR USE OF THIS PRODUCT MAY RESULT IN SERIOUS INJURY OR DEATH.

INSTALLERS, POOL OPERATORS AND POOL OWNERS MUST READ THESE WARNINGS AND ALL INSTRUCTIONS BEFORE USING THIS PRODUCT.

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## Important

This guide provides installation and operation instructions for the Tild+. Consult CCEI with any questions regarding this equipment.

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Attention Installer: This guide contains important information about the installation, operation and safe use of this product. This information should be given to the owner and/or operator of this equipment after installation.

Attention User: This manual contains important information that will help you in operating and maintaining this product. Please retain it for future reference.

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## 2. Packing Contents

One Tild+ with:

- One temperature sensor (Ref: SF130004)
- One probe mounting clamp for 2" piping (Ref: COPV0001)
- One probe mounting clamp for 1.5" piping (Ref: COPV0002)
- 3 screws and 3 dowels for wall mounting (Ref: SF10AC004)
- One wall mount (Ref: MPBT1261)
- One communication cable for variable speed pumps

### 3. Technical Specifications

|                    |                                                                                                                                                                                                       |
|--------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Sizes (L x H x D)  | 325 x 250 x 83 mm (12.8" x 9.8" x 3.3")                                                                                                                                                               |
| Weight             | 6.7 lbs- 3 kg (enclosure only)                                                                                                                                                                        |
| Installation       | Indoor and outdoor - vertically on a wall                                                                                                                                                             |
| Power supply       | 120 VAC 50 / 60 Hz                                                                                                                                                                                    |
| Power consumed     | 60 VA                                                                                                                                                                                                 |
| Protection Index   | IP-55                                                                                                                                                                                                 |
| Pump 1             | Max 240 VAC / 20 A<br><br><i>(Note: Variable-speed pumps can be connected; the Tild+ will control their speeds via the included communication cable. Not all variable-speed pumps are compatible)</i> |
| Auxiliary 2        | Max 240 VAC / 12 A                                                                                                                                                                                    |
| Lights             | Max 30 V / 20 A<br><br>CCEI, Pentair®, Hayward®, Jandy®, and Carvin® lights (the maximum number of lights depends on the power supply's capacity)                                                     |
| Auxiliary 1        | Max 30 V / 1 A                                                                                                                                                                                        |
| Valve 1 & 2        | 24 VAC - Max 1 A per valve / Max 1.67 A cumulated                                                                                                                                                     |
| Temperature sensor | NTC probe<br><br>30 V max - 0.1 A max                                                                                                                                                                 |
| Bluetooth®         | Low energy (V4.x)<br><br>Conform R&TTE Directive 1999/5/EC<br><br>60 meter range in line of sight                                                                                                     |
| Wi-Fi              | 802.11 b/g/n and "dual band" (2.4 Ghz only)                                                                                                                                                           |

## 4. Wall Mounting



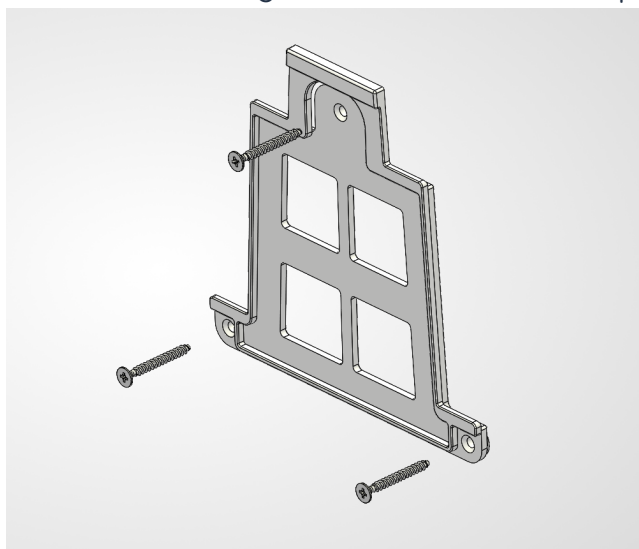
### Important

For safety reasons and in accordance with the local directives and NEC, the case must be installed in either:

- more than 3.5 m (11.5 ft) away (or even further if so required by the local legislation) from the edge of the pool. This distance is measured taking into account any workaround obstacles. If the case is installed behind a wall, the necessary distance would be measured by the distance to go around the wall and reach the box
- or in an underground room in close proximity to the pool. In this case, the room must be accessible by a trap door which requires the use of a tool to be opened

Before proceeding to the mounting, verify the Wi-Fi signal presence where the product will be placed.

Attach the wall mount to the wall using the 3 screws/anchors provided:



### Tip

Before screwing the Tild+ wall mount into place, check the position of the mount with the box to make sure it fits properly in the intended location.

Place the Tild+ on the wall mount by sliding it down from the top.

## 5. Electrical Wiring



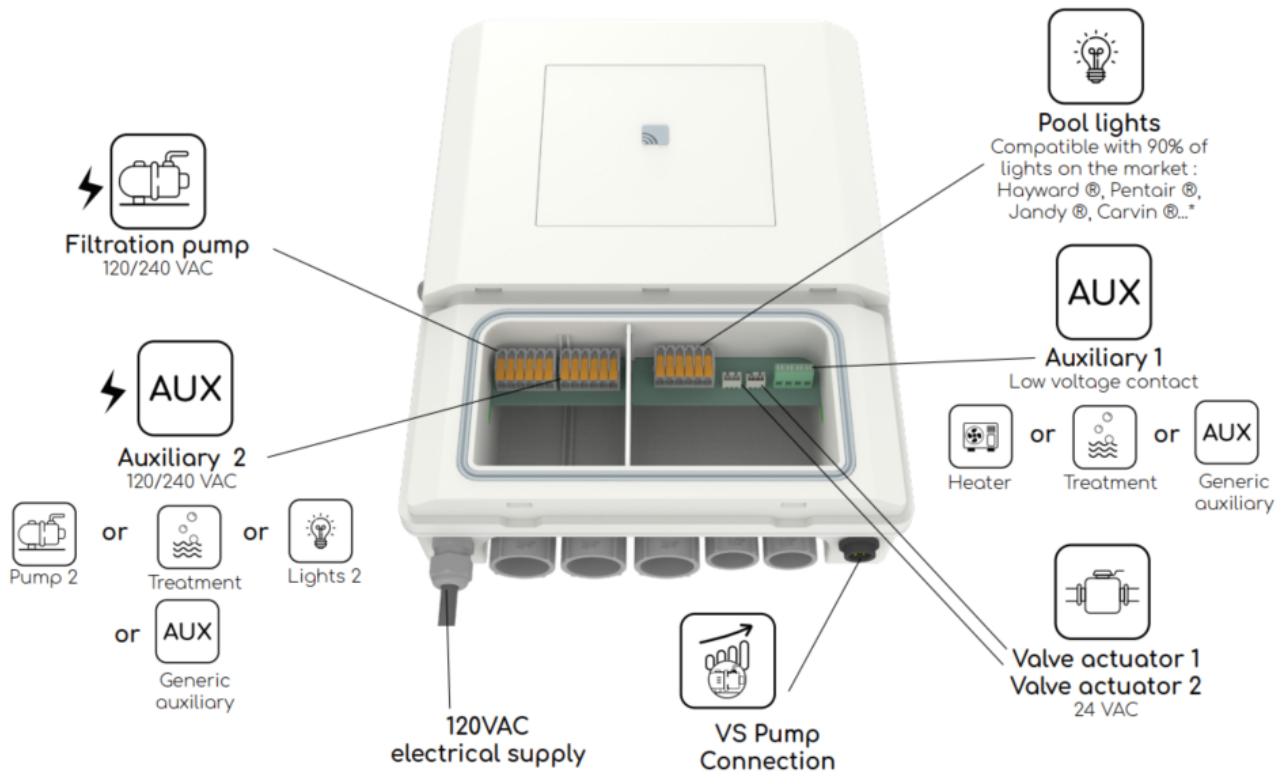
### Important

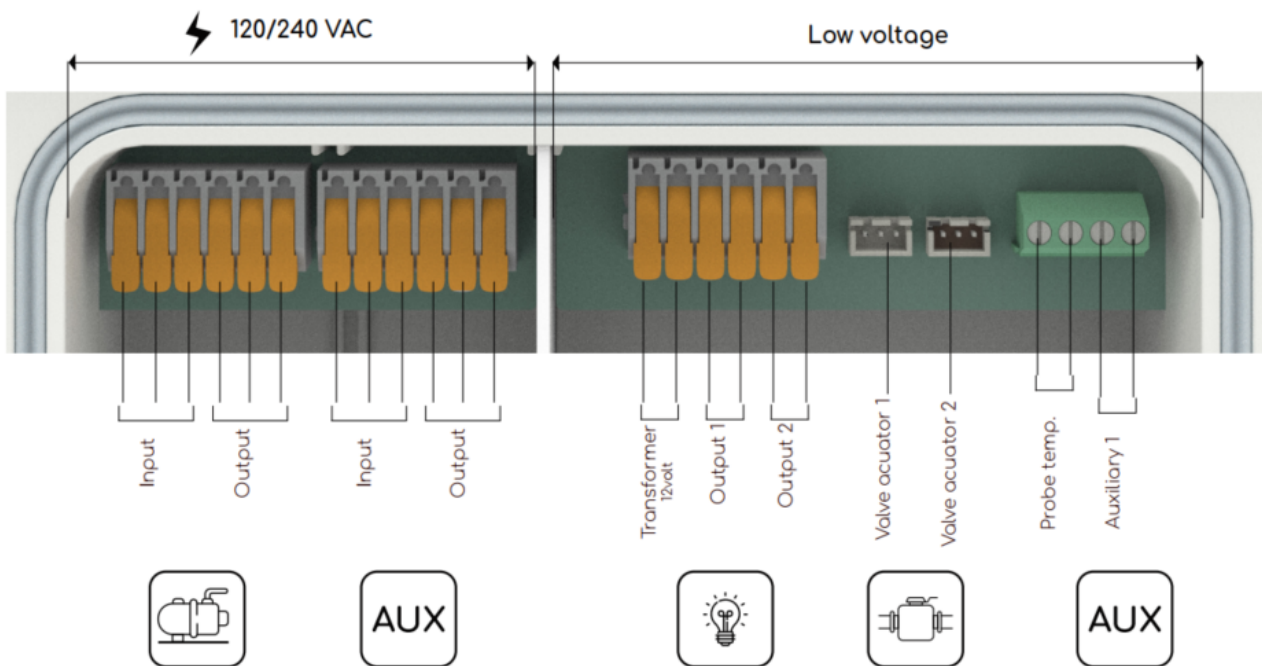
Installation of this product involves a hazard of electric shock. We strongly recommend you contract a professional installer. Incorrect installation places you in danger and may irreversibly damaged the product and the equipment connected to it.

Turn off the power supply at the main switch before working on the electrical system.

Use a flathead screwdriver to unclip the lower cover of the enclosure to gain access to the terminal blocks.

Once the lower cover is removed, you will have access to the following terminal blocks:

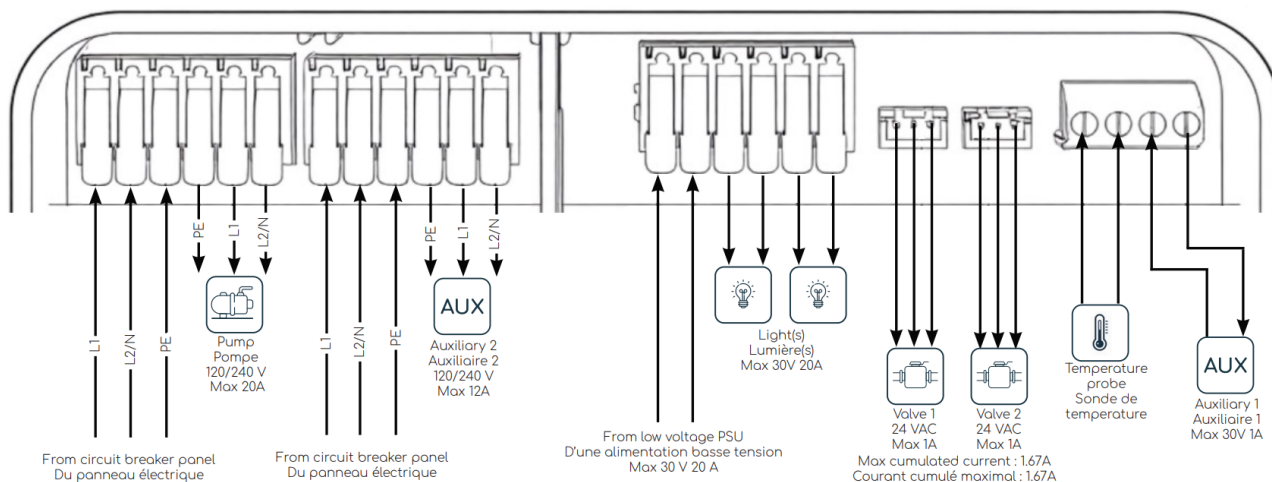




|                           |                                                                                                              |
|---------------------------|--------------------------------------------------------------------------------------------------------------|
| Filtration pump           | Terminal block for the main filter pump                                                                      |
| Auxiliary 2               | Terminal block for auxiliary device 2 (second pump, second lighting zone, water treatment equipment or else) |
| 120 VAC electrical supply | 120 VAC wall outlet for powering the Tild+                                                                   |
| Pool lights               | Output for connecting lights (compatible with CCEI, Pentair®, Hayward®, Jandy®, Carvin® and other lights)    |
| Valve actuator 1 & 2      | Standard connectors for 24 VAC solenoid valves for swimming pools                                            |
| Temperature probe         | Terminal block for the supplied temperature sensor (no electrical polarity)                                  |
| Auxiliary 1               | Terminal block for auxiliary device 1 (heating, processing, or other)                                        |
| VS pump connection        | Connector for the communication cable used to control a variable-speed pump (see Section 6)                  |

Route the cables from the equipment to be connected through the designated conduits and connect each device to its terminal block.

Example of a complete wiring diagram:



After making the electrical connections, replace the lower cover.



### Warning

Never perform electrical connections while the device is powered on.

## 6. Wiring of a Variable-Speed Pump

Using the communication cable supplied with the Tild+ allows you to control variable-speed pumps.

Here is a non-exhaustive list of compatible pumps:

- Hayward® (Super Pump VS/THP VS)
- Pentair® (Superflo VS/Whisperflo VS/StaRite IntellifloVS/StaRite SuperMax VS)
- Speck® (Badu Eco Touch/Prime Eco VS)
- Zodiac® FloPro VS
- Carvin® Magnum Force V

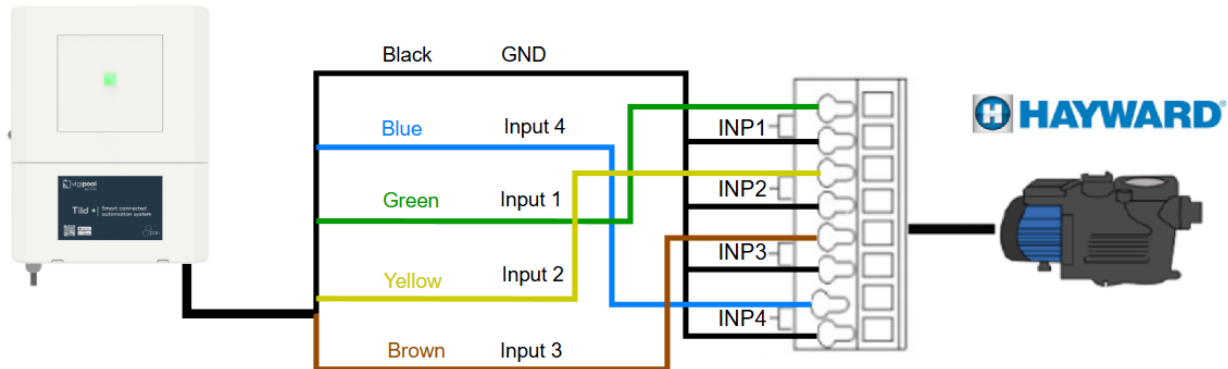


### Important

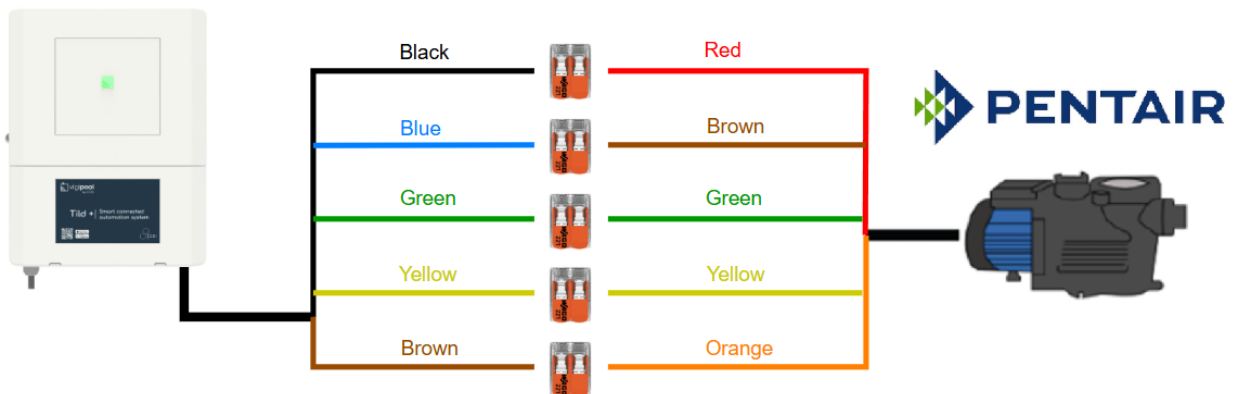
Turn off the power to your pump before servicing it.

Depending on the pump model, the connection can be made in several ways:

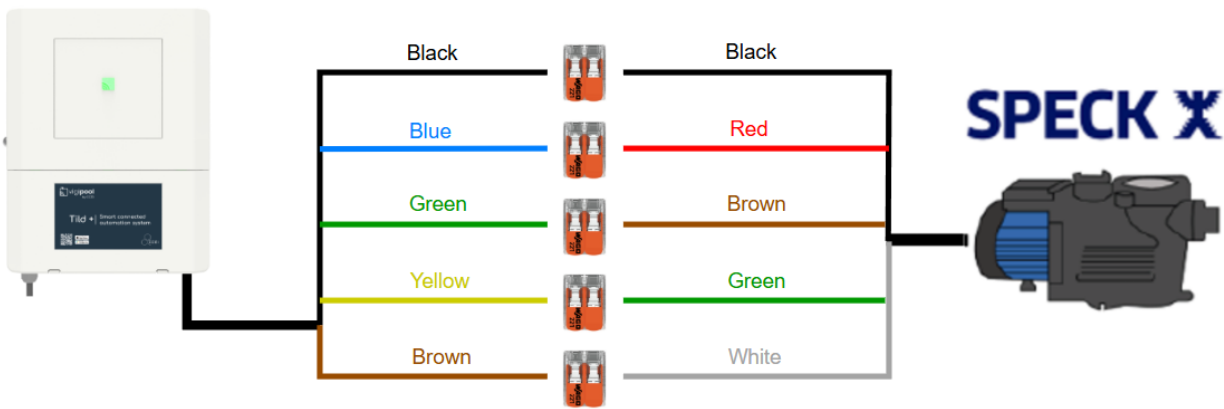
- Hayward® (Super Pump VSTD)



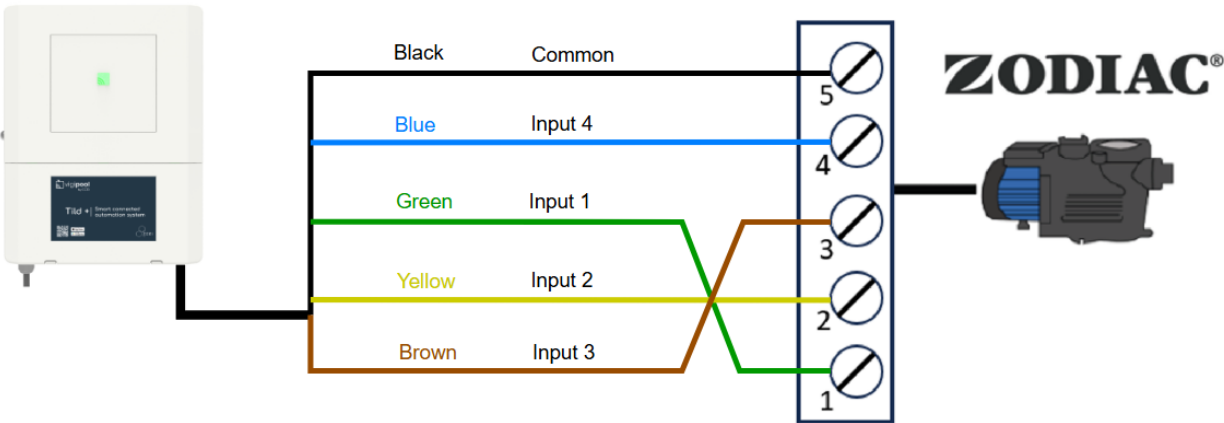
- Pentair® (Superflo VS2/Challenger VS2/Whisperflo VS2/StaRite Intelliflo VS2)  
For Pentair pumps, an additional cable is required. (Pentair Part No. 356324Z / CCEI Part No. PNPR0160). In addition, you must set the pump speeds so that  $V1 < V2 < V3$  and enable “External Control Only” mode. Refer to your pump's manual.



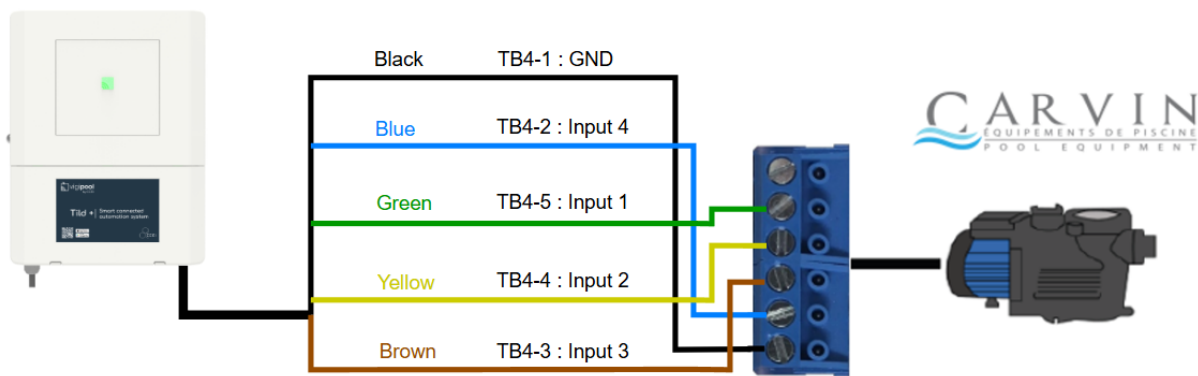
- Speck® (Badu Eco Touch/Prime Eco VS)



• Zodiac® FloPro VS

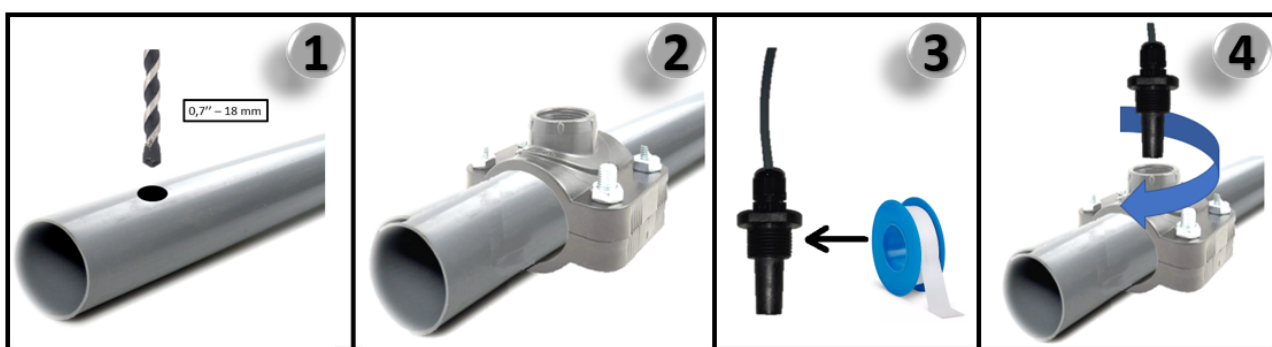


• Carvin® Magnum Force V



## 7. Temperature Probe Mounting

1. On your piping, drill a 0.7 " (18 mm) diameter hole on the high point of the pipe
2. Fit the collar supplied with the product (select the collar with the appropriate diameter)
3. On the temperature probe, put Teflon on the thread of the probe
4. Screw the probe into the upper hole of the collar



## 8. Heater Wiring (Auxiliary 1)



### Caution

Before wiring the heater, read carefully the section dedicated to remote controlling into the heater manual. Process can be different from one heater to another.

Most water heaters can be controlled by an external device and are compatible with the Tild+ via Auxiliary 1. When using your water heater with the Tild+, the included temperature sensor must be installed right before the heater (between the filter and the heater).

Usually, on the heater motherboard, you will be able to find a contact named "POOL" and "SPA". Using a 2 wires 22 AWG cable, connect the heater terminal block from the Tild+ to the "POOL" and "SPA" entry.

Into the Heater parameters, set "POOL" to minimum temperature and "SPA" to 104°F (40°C).

Depending model, other parameters must set ON or OFF, please refer to the heater manual.

## 9. Description of the Product's Switches and Buttons

On the front panel and sides of the Tild+, you can manually control a few devices without needing to use the app:

- If the switch is in the down position (=), the connected device is in automatic mode, meaning it is controlled by the Tild+. The connected device will then be controlled by the app according to the settings configured within it.
- In the middle position (0), the device is turned off and cannot be in operation.
- When set in the up position (-), the device is forced to operate and bypasses the app's controls for that device.

There is also a thermal circuit breaker on the left side of the product. See Section 13 for more information.



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## 10. First Start-Up

### 10.1. Powering On

The system turns on as soon as the ON/OFF switch is activated, provided the 120 V plug is connected to the power outlet.

When the system starts up, the Vigipool button on the front panel flashes during the startup sequence.

### 10.2. Choosing the Vigipool “Central” Unit



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#### Tip

Please refer to the dedicated “Vigipool” brochure for further information accessible on CCEI’s website on the Tild+ page.

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At the end of the start-up phase (Red–White–Red sequence), the Vigipool button flashes white. This corresponds to the selection of the device that will perform the Vigipool “Central” function:

- If this is the only device in the system, press the Vigipool button. The device will then be configured as the Vigipool “Central,” and you can add other devices to the system later if needed.
- If the installation has multiple Vigipool-compatible devices:
  - And if a device is already configured as a Vigipool “Central,” press the button on the “Central” device if it has been powered on for more than one minute. (If it has been powered on for less than one minute, you do not need to press its button.) Your Tild+ will then connect to the Vigipool “Central”: it will stop flashing white and switch to normal operating mode.
  - And if no other device is already configured as the Vigipool “Central,” turn on all the devices and press the button on the device you want to use as the Vigipool “Central.” The other devices will then connect to the device you have designated as the “Central,” stop flashing white, and switch to normal operating mode.



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#### Tip

If you want to change the selected Vigipool “Central” unit, you must reset the system (see 14. Factory Reset section)

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## 10.3. iOS/Android Apps

To download the Vigipool app, scan the QR code below. You can also search for "Vigipool NA" in the App Store or Play Store search bar:



## 10.4. Bluetooth® Connection

When connecting for the first time (via Bluetooth), after selecting your device from the list and to pair your smartphone with the Tild+, you must bring the smartphone close enough to touch the device **when the app instructs you to do so** and the device's indicator light is flashing blue rapidly.



### Tip

Pairing is done exclusively through the Vigipool app. Do not attempt to pair the device through your smartphone's Bluetooth settings.

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## 10.5. Adding New Vigipool Devices

When the Tild+ is configured in Vigipool "Central" mode and you want to add other Vigipool-compatible devices to your system, the Tild+ must be set to accept new devices. To do this, follow these steps:

- After pressing the Vigipool button, the Tild+ configured in "Central" mode accepts new devices.
- During the first 5 minutes after power-up, the Tild+ configured in "Central" mode accepts new devices



### Tip

When the Tild+ is ready to accept new equipment, the Vigipool button flashes green.

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## 11. Configuring a 2nd light output (Auxiliary 2)

In the Vigipool app, the Tild+ Auxiliary 2 can be configured as a second pump, a second light output, a treatment device, etc... However, when Auxiliary 2 is configured as a second light output, special attention must be paid to the electrical connections for the lights.

### 11.1. 120 V lights



#### Warning

Never perform electrical connections while the device is powered on.

If the lights connected to Auxiliary 2 are powered by 120 V, they can be connected directly to the terminal block for that output. The wiring diagram for this configuration is shown in the wiring example in Section 5.

### 11.2. Low voltage lights

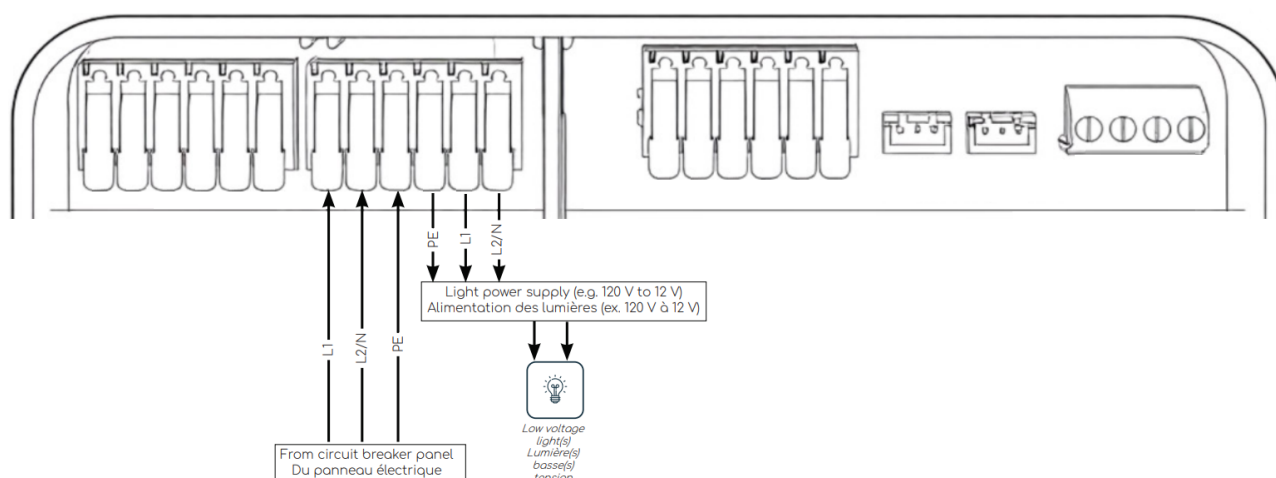


#### Warning

Never perform electrical connections while the device is powered on.

If the lights connected to Auxiliary 2 are powered by low voltage (typically 12-14 VAC), they must be connected to the output of Auxiliary 2, and then the lights must be connected to the output of their power supply. This connection method will ensure that the primary circuit (120/240 V) remains isolated from the low-voltage secondary circuit.

Below is a diagram illustrating this scenario:



## 12. Configuring an Output for Water Treatment (Auxiliary 1 & 2)

In the Vigipool app, you can configure one of the auxiliary outputs (1 or 2) as “Treatment.”

When configured in this mode, the auxiliary output will activate the device connected via the Vigipool app and set a minimum operating temperature. If this temperature is not met, the equipment connected to the “Treatment” output will be automatically deactivated.

If an Oxeo or Oxeo LT is present in the Tild+ Vigipool environment — a CCEI device that measures ORP and injects liquid chlorine, the option to select an ORP value for activating the “Treatment” output will also be available in the output settings. More details on ORP measurement can be found in the Oxeo user manual.

## 13. Thermal Circuit Breaker

The Tild+ is equipped with a thermal circuit breaker that protects the unit in the event of an overcurrent event. If this occurs, the circuit breaker trips and cuts off power to the control panel. It can be reset by pressing it.



### Caution

The thermal circuit breaker may have tripped due to an external event (e.g., a lightning strike or a power surge in the electrical grid).

## 14. Factory Reset

If you are installing a new Vigipool product and wish to change the “Central” unit, or for any other reason, you can perform a factory reset by following these steps:

- Turn off the device (using the switch on the side of the enclosure) and wait about ten seconds,
- Press and hold the Vigipool button,
- Turn on the device while holding down the button,
- Wait until the Vigipool button starts flashing,
- Release the button. **All settings are reset to their factory defaults..**

Another way to reset the device is through the app: When connected to the device in the “My Devices” tab, tapping the product image repeatedly will reveal the reset option.



### Warning

Performing a factory reset on the product will erase all settings stored in memory (calibration, setpoint, Wi-Fi configuration, pool volume, pairings with phones and other devices in the Vigipool Universe, etc.). You must therefore repeat the setup procedure after performing a factory reset.

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## 15. Wintering

The Tild+ does not need to be removed for the winter or if the system is winterized. It can be turned off for the winter and turned back on when the system is restarted.

USA: [na.ccei-pool.com/us/](http://na.ccei-pool.com/us/) Tel: +1 424 800 2191

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|                                                                                                                                                                                                                            |                                                                                   |                                               |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------|
| CCEI Inc. (Quebec 1170122155) declares that the product Tild+ is compliant with the safety and electromagnetic compatibility requirements FCC Part 15 Subpart B / ISED ICES-003 and is UL listed under the number E517110. |                                                                                   |                                               |
|                                                                                                                                           |  | Pierre-Yves Flattot<br>Montreal, on 9/22/2026 |
| Distributor's stamp                                                                                                                                                                                                        |                                                                                   |                                               |
| Date of sale: ..... Batch N°: .....                                                                                                                                                                                        |                                                                                   |                                               |