Wi-Fi Network Upgrade Kit

For the AquaRite™+

Owner's Manual

To prevent potential injury and to avoid unnecessary service
calls, read this manual carefully and completely.

SAVE THIS INSTRUCTION MANUAL

WARNING: Electrical hazard.
Failure to comply with these instructions can result in serious injuries or death.

THE EQUIPMENT IS INTENDED TO BE USED ONLY ON PERMANENTLY CONSTRUCTED POOLS AND SPAS

WARNING – Disconnect/isolate the equipment from the electricity supply before any installation/service/repair.

WARNING – All electrical wiring must be performed by a qualified and licensed electrical contractor in accordance with all Local/State/Federal Government electrical regulations and the latest edition of the AS/NZS 3000 Wiring Rules.

WARNING – Ensure that the device is plugged into a power outlet that is protected against short-circuits. The device must also be powered via an isolating transformer or through a residual current device (RCD) with a fixed residual operating current not exceeding 30mA.

WARNING – Check that the supply voltage required by the product corresponds to the voltage of the distribution network.

WARNING – To reduce the risk of electric shock, do not use an extension cord to connect the device to the mains. Use a suitably rated GPO as per the standard AS/NZS 3000.

WARNING – Chemicals can cause internal and external burns. To avoid death, serious injury and/or damage to equipment, wear personal protective equipment (gloves, goggles, mask, etc.) when servicing or maintaining this device. This device must be installed in an adequately ventilated place when equipped with the chemical feed options.

WARNING – Carefully read the instructions that appear in this manual and on the device. Failure to comply with the instructions can cause injuries. This document must be given to the pool owner, who should keep it in a safe place.

WARNING – The appliance can be used by children aged from 8 years and above and persons with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, if they have been given supervision or instruction concerning use of the appliance in a safe way and understand the hazards involved.

WARNING – Use only genuine Hayward replacement parts.

WARNING – If the power supply cord is damaged the device must not be used. The power supply cord must be replaced by the manufacturer or similarly qualified persons to avoid any danger.

USE ONLY HAYWARD® GENUINE REPLACEMENT PARTS

INTRODUCTION

The Wi-Fi Network Upgrade Kit is an optional accessory to the Hayward AquaRite+ Chlorinator. The Wi-Fi module connects the AquaRite+ to the Vista Pool server and app which allows you to remotely control the AquaRite+ via the Internet.

COMPONENTS

Wi-Fi Network Upgrade Kit

Wi-Fi Module	Cable Gland	Cable Tie

INSTALLATION

Outline

The Wi-Fi Module must be installed on a wall in a dry (out of the rain), temperate and ventilated location, and must be able to communicate with the Wi-Fi network at the premises where it is installed. A field survey with a mobile telephone can be conducted to see if the premises Wi-Fi signal is strong enough to connect to.

The Wi-Fi range is approximate 50 metres line of site with no obstacles in between the Wi-Fi Module and the router/modem. Having walls, fences, buildings, etc in between the Wi-Fi Module and the router/modem will also impede the ability to hold a reliable signal and will dramatically reduce the range of the unit.
The connection cable that comes in the kit is 9.5 metres long and and can be shortened by following the instructions on page 5 of this manual. Disconnect the power supply to the AquaRite+ unit before connecting the module. Below is an outline of the installation process, with detailed instructions on the pages following.

- » Remove the Dead Front Panel
- » Release the cable from the Wi-Fi Module
- » Plug the Wi-Fi Module connector into the RF / Wi-Fi terminal on the AquaRite+ PCB
- » Reconnect and reassemble the Wi-Fi Module
- » Secure cable to AquaRite+ with Cable Gland
- » Mount on flat surface

INSTALLATION
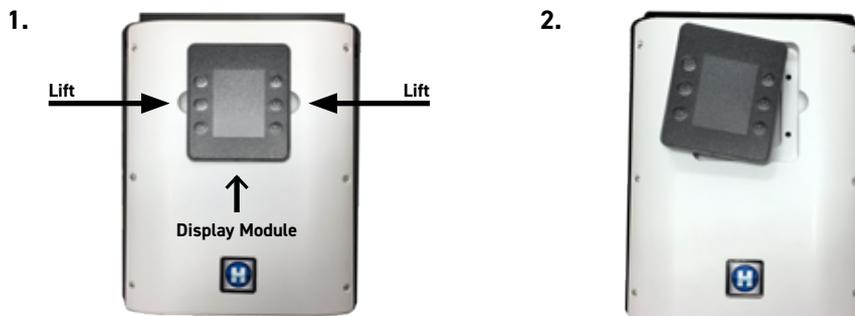
Removing the Dead Front Panel

In order to connect the Wi-Fi Module to the AquaRite+ circuitry, the Dead Front Panel needs to be carefully removed. Follow the instructions below to avoid damaging the device and/or its casing.

⚠ Caution - Risk of Electric Shock.

Ensure that the unit has been disconnected from all power supplies before removing the Display and Dead Front Panel. Only a suitably qualified person should remove the Dead Front Panel in accordance with Local/State/Federal Government regulations and the latest edition of the AS/NZS 3000 Wiring Rules.
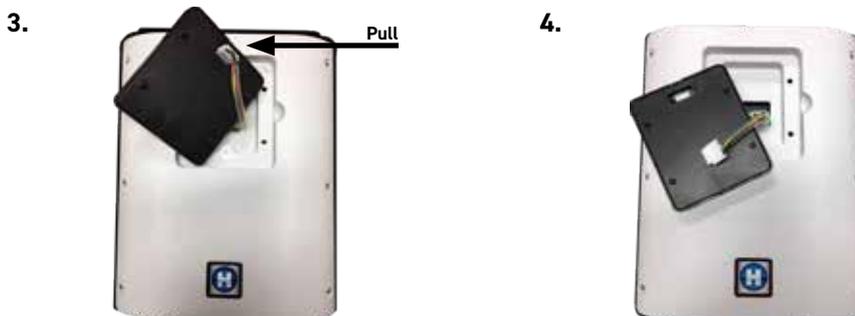
Lift Out Interactive Display Module:

Remove display module from its compartment. Use the grooves on either side to pry it out by hand. Take care to not use excessive force as the module is still wired to the PCB at this stage.

1.
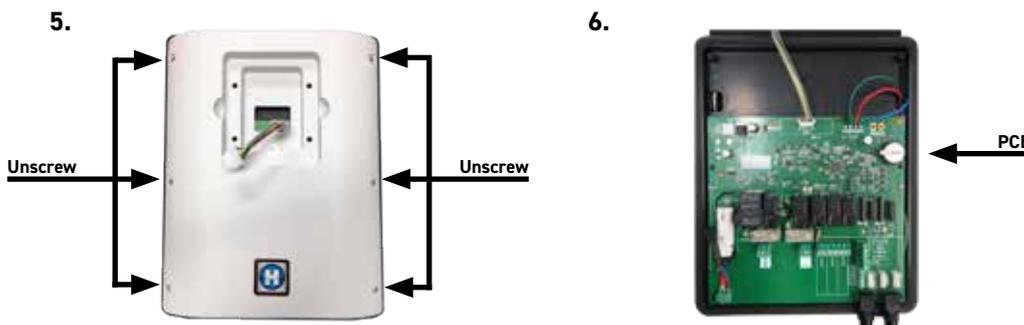
Lift → ← Lift

↑
Display Module

2.

Detach Interactive Display Module:

Turn over the display module and remove the wired plug from the port on the back of the unit. Store the Display Module where it will not get damaged until it is re-installed.
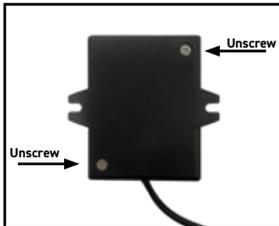
3.

Pull →

4.

Unscrew Dead Front Panel:

Remove the six (6) screws fastening the panel to the unit. Once all loose, lift the panel off the unit to access the PCB.

5.

Unscrew → ← Unscrew

6.

PCB ←

USE ONLY HAYWARD® GENUINE REPLACEMENT PARTS

INSTALLATION
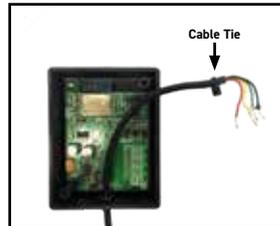
Accessing the Wi-Fi Module Wiring

The Wi-Fi Module needs to be opened so that the cable can be physically connected to the AquaRite+ and trimmed to length.

1.
Unscrew the backing plate and remove to reveal the module's circuitry. Put the backing and screws aside.

2.
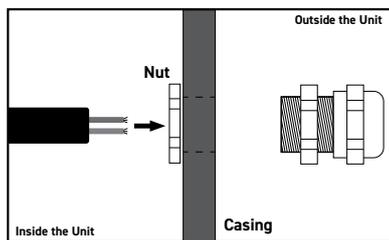Release the 4 wires by loosening the terminal screws.

3.
Pull the cable through to allow enough room to be able to slide the cable tie off. If the tie is too tight, carefully remove with side cutters.
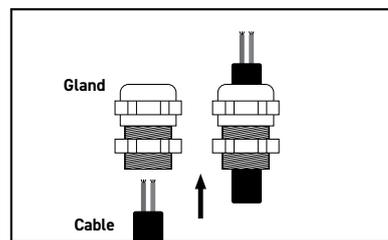
4.
Discard the old cable tie and pull the cable out through hole. Keep the circuitry exposed, as the cable will need to be rewired back into place.
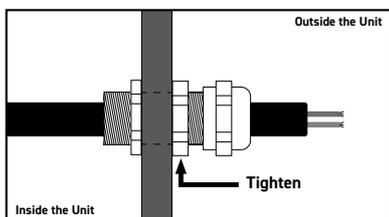
Cable Gland Installation

In order to ensure watertight wire connections to the PCB through the AquaRite+ housing, wire cables are to be secured with the black cable glands supplied. With the Wi-Fi cable plugged in, follow the instructions below to thread the free end of the cable through the housing for it to be re-wired to the Wi-Fi module.
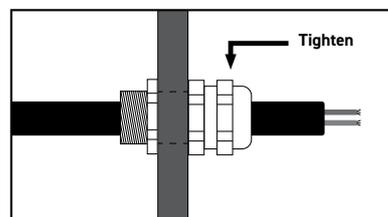
1.
Hold the nut against the hole on the inside of the casing. Push the cable through the nut and hole, from the inside of the unit.

2.
Insert the cable into the flat/thread end of the gland and pull through.

3.
Push the cable gland into the hole whilst simultaneously rotating to screw the nut on to the thread.
Tighten gland with a spanner whilst still holding the nut to secure the gland in place.

4.
Pull the cord through the gland. Be sure to leave enough cable for the plug to reach the Wi-Fi input. Secure and seal the cord in place by tightening the domed cap with a spanner until firm.
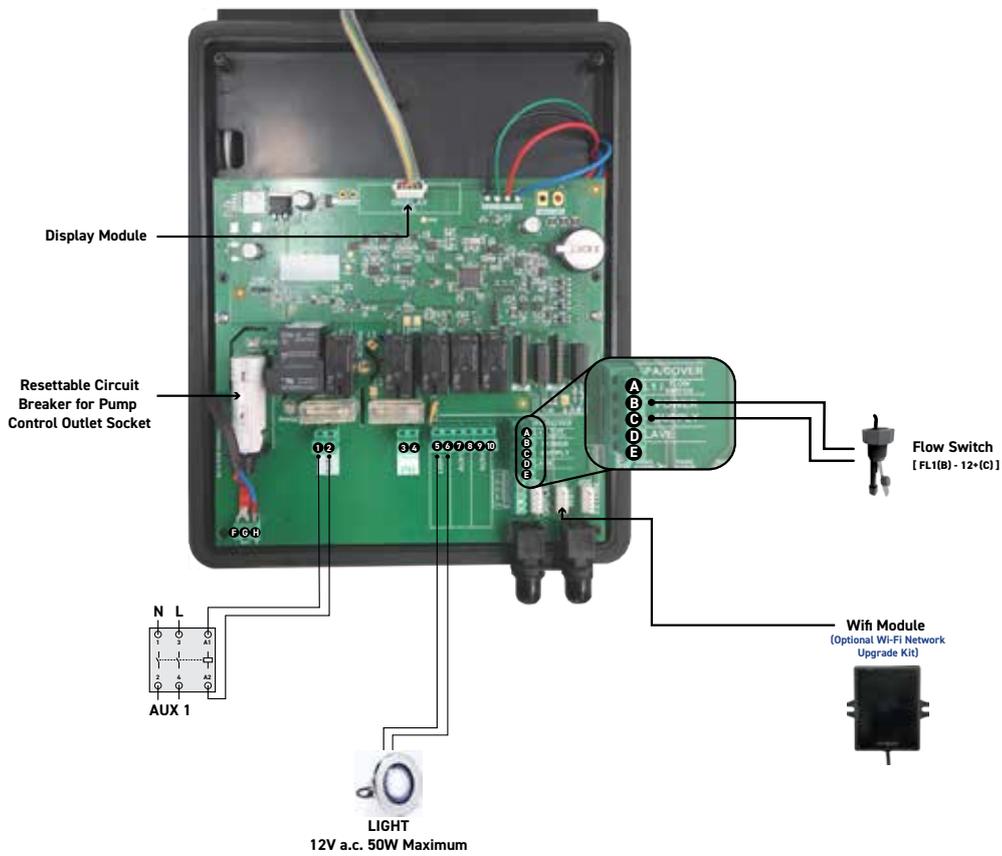
Note: **Use the gland location holes in the bottom of the unit before the sides to ensure all cables are pointing downward.**

INSTALLATION

Wiring to the AquaRite+

Connect the AquaRite+ to a GPO with a permanent power supply only.

⚠️ **CAUTION -** This circuit must be protected by a residual current device (RCD) with a fixed residual operating current not exceeding 30 mA.
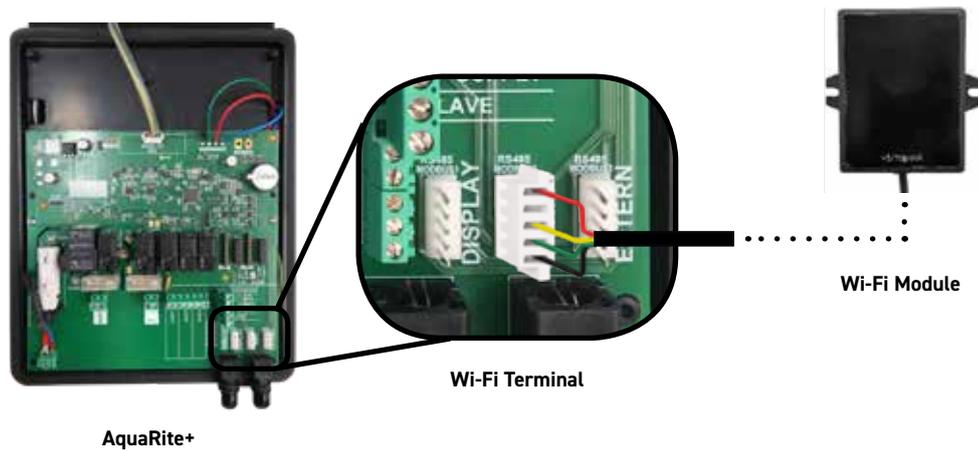

Display Module

Resettable Circuit Breaker for Pump Control Outlet Socket

Flow Switch
[FL1(B) - 12+(C)]

Wifi Module
(Optional Wi-Fi Network Upgrade Kit)

N L
AUX 1

LIGHT
12V a.c. 50W Maximum

Wiring Schematic

Description of Outgoing Relays

Name	Description	Terminals	Type of output	Max Load
Filter Pump	Filtration pump control	Socket Outlet	240 V a.c.	7 A
Aux 1	Auxiliary voltage output (for contactor switching control)	1 - 2	240 V a.c.	1 A
pH	Peristaltic acid pump	3 - 4	SELV 24 V a.c.	1 A
Light	Lighting control (One {1} LED light only)	5 - 6	SELV 12 V a.c.	50 W
Aux 3	Auxiliary dry contact	7 - 8	Dry contact	1 A
Aux 4	Auxiliary dry contact (or heating control)	9 - 10	Dry contact	1 A

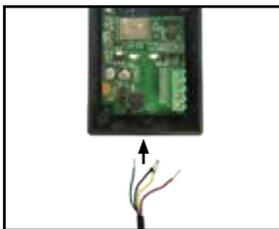USE ONLY HAYWARD® GENUINE REPLACEMENT PARTS

INSTALLATION

Plug Cable into AquaRite+ PCB

Take the plug end of the Wi-Fi Module cable and connect it to the terminal on the AquaRite+ PCB labeled 'Wi-Fi'. The free end of the cable needs to now be pulled through the cable gland that you just installed leaving minimal cable inside the unit. Remember to tighten the cable gland to hold the cable firm.

Wi-Fi Module

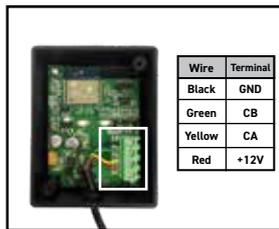**Wi-Fi Terminal**

AquaRite+

Re-Wiring the Cable to the Wi-Fi Module

Once the cable is correctly installed to the AquaRite+, the cable needs to be reconnected to the Wi-Fi module PCB. Ensure that the cable is trimmed from the end that was originally connected to the Wi-Fi module. **Do not cut from the plug end!** There are metal tabs that connect the wires to the plug that cannot be replaced.
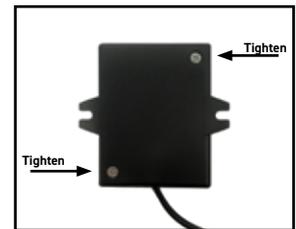

Wire	Terminal
Black	GND
Green	CB
Yellow	CA
Red	+12V

Cable Tie

Tighten

Tighten

1.
Trim the cable to a suitable length that reaches the planned installation location, then insert the cable into the hole at the bottom of the module.

2.
Connect the wires to the terminal, screwing them in place.
The wire-terminal connection must correspond with the diagram above.

3.
Gently pull any slack back through the hole and secure the cable tightly in place with the cable tie.

4.
Screw the backing plate back onto the module and proceed to mount it in the planned location.

OPERATION

Plugging in the Wi-Fi cable automatically allows the AquaRite+ to discover it and open menu options within the interface. The existing set up instructions detailed in the AquaRite+ Owner's Manual still stand, just more settings options appear that are specific to the Wi-Fi Kit function. Below are instructions on configuring the Wi-Fi settings now available.

Home Screen Configuration

BUTTONS KEY

Button	Function
OK	Enter Main Menu/ Select & Save
↩	Go Back
△ ▽	Navigate Up & Down Through Lists
+ −	Make Adjustments/ Scroll Through Options

State of auxiliary relays (On/Off)

Time

Chlorine production rate in gr/h

Displays manual salt level measurement

Filtration relay state
- man Manual
- aut Automatic
- smt Smart

Communication
Red = Communication fault

Current water temperature

Pol 1 Polarity 1   Pol 2 Polarity 2
SPA Production automatically reduced to % selected (20% by default)
--- Wait time
LOW Insufficient salt / cell scaled up or the water temperature is very low (<15°C)
Flow Filtration stopped or insufficient flow

Lighting relay state
- man Manual   aut Automatic

15/01/16 Date of the last salinity measurement
25°C Water temperature (when measurement taken)
3.2 Salt concentration

Establishing the Wi-Fi Module Connection

1. **Internet:** Once the module is connected, switch on the device. A Network menu appears in the Settings menu.
2. **Wi-Fi:** Select the Wi-Fi menu to start an automatic search for available networks.
3. Choose the relevant available network.
4. Enter the password for this network via the keyboard. Use the up/down arrows to move the cursor vertically and the +/- buttons to move the cursor horizontally and press OK to select. When complete, highlight 'OK' and then press the 'OK' button.
5. **Configuration:** If you want to configure your connection manually or if automatic configuration fails, you can change the network parameters in this menu.
7. **Status:** Displays information about your current connection.

» When the Wi-Fi connection is established, two green LED lights on the Wi-Fi module will turn on and remain solidly lit. Once connected, you can then register at www.vistapool.es or download the app for Android or Apple devices and register via the app.
» Get your ID Node (see right) and follow the registration process.
» Once you have registered, you can monitor and adjust all of your AquaRite+ parameters remotely using a PC or the app.

USE ONLY HAYWARD® GENUINE REPLACEMENT PARTS