

INSTALLATION AND OPERATING INSTRUCTIONS

SPLASHME AUTOMATION CONTROLLER 2.0 (SM-AC-2.0)



Designed and manufactured in Australia splashmepool.com.au

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Patent Pending PCXT/AU2018/050995 Approval SAA-192316-EA



Auxiliary Inputs:

- Auxiliary inputs to be connected to a separate 16A circuit and circuit breaker
 Outputs:
- Total power consumption of AUX 1, 2 & 3 should not exceed 10A
- Total power consumption of AUX 4 should not exceed 10A
- Power consumption of AUX 5, 6, 7 & 8 should not exceed 12VDC 1.5A
- AUX 9 -11 is for the connection of Safety Isolated (SELV) Supply / Loads only
- All output cables and sockets must be disconnected when not in use

Installation and connections:

- All plumbing to be done by qualified persons
- All electrical connections and installations to be done by a licenced electrician
- Ensure the device is not mounted near pool chemicals as fumes may damage or corrode some components.
- Always store chemicals in a cool, dry and well-ventilated space always from other hazardous chemicals in accordance with the product safety data sheets
- Protective equipment must be worn when handling chemicals
- Do not over tighten locking nut as this may cause damage to the sensitive multiprobe
- Before removing the front cover, ensure that the mains power has been removed from the Primary Input as well as the Auxiliary Inputs
- Auxiliary inputs to be connected to a separate 16A circuit and circuit breaker
- If the supply cord is damaged, it shall be replaced by the manufacturer or its service agent or similarly qualified person in order to avoid a hazard.

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Patent pending PCT/AU2018/050995

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Section 1: Safety instructions

1.1 Read and follow all instructions

Attention Installer: This manual 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.

WARNING - Before installing this product, read and follow all warning notices and instructions which are included.

It is recommended that the installer should be a person with sufficient experience in pool equipment installation and be approved to install the SplashMe Automation Controller, so that all the instructions in this manual can be followed exactly.

Failure to follow warning notices and instructions may result in property damage, personal injury, or death. Improper installation and/or operation will void the warranty.

Improper installation and/or operation can create unwanted electrical hazard which can cause serious injury, property damage, or death.

All electrical work must be performed by a licenced electrician and conform to all national, state, and local codes.

When installing and using this electrical equipment, basic safety precautions should always be followed.

SAVE THESE INSTRUCTIONS

1.2 Introduction to the SplashMe Automation Controller

SplashMe is the clever automation system that keeps water clean, sanitised and at the perfect temperature. It really puts the fun back into owning a pool — all you need to do is jump in!

Designed and made in Australia, SplashMe has set the new standard for pool and spa maintenance, taking care of the complex so you can keep it simple. SplashMe is perfect for new builds or easily retrofits to existing systems. No rules, no restrictions – it's the perfect partner for pool owners.

Controlled by an easy-to-use app, SplashMe short cuts maintenance without compromising on quality. Technically advanced, energy-efficient, and hassle-free, SplashMe is the investment paying you back from the day it's installed. The simple yet powerful App offers the freedom to create scenes and schedules that work for you. Powered by science and smart technology to deliver fuss-free maintenance and cost savings and a pool and spa that's healthy and swim-ready every time you jump in!

The SplashMe Automation Controller automates and monitors

- Water turnover and flow
- System pressure
- Solar and water temperature
- Water quality and chemistry (pH & ORP)

Owners have complete control to set automatic schedules or operate manually

- Single, multi and variable speed filter pumps*
- All water sanitization systems minerals, chlorine, ozone, ionizer, UV and more
- Multiple heaters, cleaners
- Spa actuators and jets**
- Lights, water features

*Single speed filter pump will convert to efficient variable speed pumps with the SplashMe VSD add on

**Using the SplashMe Power Expander

Download SplashMe App

The SplashMe app is available on iOS and Android mobile platforms. Download the app to continue with installation and setup.

Google Play Store

https://play.google.com/store/apps/details?id=au.com.nymet.splashme

Apple App Store

https://apps.apple.com/au/app/splashme/id1374275908

1.3 Symbols

Take note of the following symbols as they will ensure successful installation and operation of the SplashMe Automation Controller



Information

INFORMATION indicates additional information, important contents or tips that will assist with the installation and setup process.



NOTE indicates something of importance that should be acknowledged during the installation process



WARNING indicates a hazard which, if not avoided, could result in damage to the SplashMe Automation Controller, it not functioning properly, and/or physical human

1.4 List of connected equipment

Outlet ID#	Connected Appliance
Filter Pump	
AUX 1	
AUX 2	
AUX 3	
AUX 4	
AUX 5	
AUX 6	
AUX 7	
AUX 8	
AUX 9	
AUX 10	
AUX 11	

Notes:

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Section 2 – System Overview

2.1 - How it works

The SplashMe system includes this Automation Controller as a smart integration device, streamlining pool maintenance for pool owners and professionals. SplashMe monitors and controls all connected pool equipment via the simple, intuitive SplashMe App.

Featuring a unique multi-probe that measures pH, ORP and temperature, the SplashMe Automation Controller operates connected dosing equipment to automatically dose pool water with both acid (via a standard peristaltic pump) and chlorine (via a salt water chlorinator or peristaltic pump) to maintain the desired chemical balance.

By connecting a solar heating pump, gas heater or electric heat pump, the SplashMe Automation Controller also allows you to control the water temperature using either single or a combination of heating sources.

The SplashMe Automation Controller pressure sensor will connect to the pool filter and accurately monitor pressure within the system and alert you when a backwash or filter clean is required via the App. Users are able to set the alert pressure level to suit their individual requirements. A clear system will use less electricity to maintain pool cleanliness.

Users can schedule equipment to run automatically via the App. Multiples schedules can be created to manage all of your connected devices.

When adding the optional Variable pump speed controller, the SplashMe system converts any single phase/single speed pump (up to 2.2 kW) into a variable speed pump. Using the pool size entered during setup and the information detected by the flow sensor, the SplashMe Automation Controller will efficiently run the filter pump whilst maintaining water cleanliness.

Key features

- Automates any brand of equipment
 - Single, multi and variable speed filter pumps*
 - All water sanitization systems minerals, chlorine, ozone, ionizer, UV and more
 - Automate water temperature via gas and/or solar heaters to maintain desired temperature
 - Operate and schedule cleaners
 - Control spa actuators to divert water from pool to spa[#]
 - Operate spa equipment including blowers and jets
 - Automate lights and water features
- Advanced connectivity and control
 - o 3.5-inch colour display on the unit for local control on the unit
 - Longer range wireless communication
 - Ethernet connectivity*
 - Provision for 4G sim card for remote locations
 - Real-time system notifications including system pressure for filter backwash needs.
- Faster, more responsive control
 - Latest dual-core microcontroller
 - o Rock-solid reliability and connectivity
 - Long-range wireless sub 1 GHz communications unit is primed and to connect with any future wireless equipment
- Provision for SplashMe add on's ^
 - Wireless connectivity to power expander
 - Wireless poolside 4-button switch allows operation of any connected equipment poolside via touch button
 - Simple installation perfect for any new build or retrofit
 - No need to redirect plumbing
 - Separate flow sensor to be plumbed in anywhere, any direction
- * Available with the optional SplashMe VSD add-on

Actuator control via Power Expander

^ SplashMe Power Expander and Poolside Switch are add-ons sold separately

2.2 – What's in the box

Only use the equipment supplied by Nymet Innovations. Use of non-approved components may result in damage to SplashMe Automation Controller and void warranty

Item #	Description	QTY
1	SplashMe Controller	1
2	Flow sensor assembly with 5m cable	1
3	Row tube assembly	1
4	Multiprobe assembly with 5m cable	1
5	12v peristaltic dosing pump with 2m cable	1
6	Stainless steel controller mounting bracket	1
7	1/4 inch BSP to 4mm line adaptor	1
8	10A IEC power lead	2
9	Doser pump filter and weight assembly	1
10	Doser feed tube nipple	1
11	Doser feed tube nipple seal	1
12	Doster feed tube nipple securing clamp	1
13	Doster pump transfer tubing	5m
14	Pressure measure tubing	2m
15	Mounting screws	3
16	50mm barrel unions	2
17	Temperature sensor with 5m cable	1



2.3 – Technical specifications



Power Inputs

- Inputs 1-3: 240V~, 50Hz, 10A Max
- Input 4: 240V~50Hz, 10A Max

WARNING: Auxiliary inputs to be connected to a sperate 16A circuit and circuit breaker

Power Outputs

- 2.2 kW Filter pump outlet
- 4 x 240V assignable outputs
 - Total of AUX 1, 2 and 3 should not exceed 10A)
- 4 x assignable 12Vdc outputs (AUX 5 -8)
 - AUX 5, 6, 7 and 8 is for the connection of 12Vdc equipment such as dosing pumps, Auto filling equipment
- 3 x assignable voltage free inputs (Aux 9-11)
 - AUX 9,10,11 to be used for the connection of safety isolated (SELV) supply/loads only

WARNING: All output cables and sockets must be disconnected when not in use

Data Inputs

- RS485 used to control multi speed pumps
- 3 x Auxiliary Analog inputs (0 5V)

Physical Dimensions

- Overall Weight 5.4 kg (approx..)
- Dimensions 240 (w) x 400 (h) x 130 (d) mm

IPX4 rated

System Requirements

FILTER PUMP

- Variable and multi-speed pump compatible SplashMe Controller (Standard) OR
- Single speed filter pump (max. 2.2 kW / 3 HP) with SplashMe VSD add-on

ELECTRICAL SUPPLY

• 3 x 10A socket outlets

CONNECTIVITY

- WIFI Internet (preferred) Direct Mode also available on all devices
- Local control on unit 3.5inch LED screen

EQUIPMENT

• Compatible with most popular brands of pool and spa equipment

SPECIFICATIONS

- Pool size for correct filtration and dosing calculations
- Electricity tariffs to calculate cost savings (optional)

pH sensor

- Operating temperature: 0-60degC
- pH Range: 0-14 pH
- Slope: >98%
- pH sensor: Glass Bullet
- Accuracy: +- 0.1 pH unit

ORP sensor

- Operating Temperature: 0-60degC
- ORP Range: +-2000mV
- ORP Sensor: 99.9% Pure Gold 4mm x1mm Pin
- Accuracy: +-50mV

Temperature sensor

- Operating Temperature: -20 +80degC
- Temp Sensor: 316 Marine grade stainless steel
- Accuracy: +/- 2 degree C

Flow sensor

- Operating Temperature: 0-80degC
- Flow Range: 20-600 Lpm
- Bearing Material: Zirconium
- Accuracy: +/- 10 Lpm

Pressure sensor

- Operating Temperature: -40 +125degC
- Pressure Range: 0-500 kPa
- Sensor Type: Monolithic
- Sensor Material: Ceramic
- Accuracy: +/- 8 kPa

2.4 - Electrical specification

Primary input

240V~, 50Hz, 9.2A, 2000W

Auxiliary inputs

Input 1-3: 240V~, 50Hz, 10A Max Input 4: 240V~, 50Hz, 10A Max

Outputs

Main Pump:	240V~, 9.0A Max
AUX 1-3:	240V~, 50Hz, 10A Max
AUX 4:	240V~, 50Hz, 10A Max
AUX 5-8:	12VDC, 1.5A Each
AUX 9-11:	Voltage free outputs



2.5 - Preparation for installation

Sanitisation – Water Balance

One of the main requirements to keeping pool water looking crystal clear is to ensure chlorine levels maintained. Failure to maintain correct chlorine levels may lead to the water looking green, and in severe cases cause people to become ill.

ORP (Oxidation reduction potential) is a measure of the oxidizing capacity in water or, more simply put, the cleanliness of the water and its ability to break down contaminants. It is used to test the swimming pool water to determine how effective oxidizers are in the water, and therefore how safe the pool is to bathe in.

The SplashMe Automation Controller has an inbuilt ORP sensor. It works by measuring the dissolved oxygen in the water. More contaminants in the water result in less dissolved oxygen because the organics are consuming the oxygen and therefore a lower ORP level. The higher the ORP level, the more ability the water has to destroy foreign contaminants such as microbes, or carbon-based contaminants.

To ensure that the in-built sensors read correctly, it is essential that the pool water is clean and free from contaminants such as plant or other foreign matter. Water chemistry must be checked by a professional prior to installation of the SplashMe Automation Controller. Water must be balanced prior to installation and setup for water chemistry management functions to operate correctly.

Water that is balanced has proper levels as outlined below

- pH: 7.2 7.7 pH
- Total Alkalinity: 80 150 ppm
- Calcium Hardness: 90 250 ppm
- Cyanuric Acid (Stabiliser): 0 50 ppm
- Chlorine: 1 3 ppm

Before proceeding, ensure following items are available to successfully install and connect the SplashMe Automation Controller.

Item	Description	Desirable	Essential
Android/iOS Smart phone	Data charges may apply		~
Wi-Fi Internet	Wi-Fi modem connected to the network and in range to location of the SplashMe Automation Controller	~	
Single, multi or variable speed filter pump Max 2 kw / 2.5 HP	Main pump to filter pool water		~
Hand Saw	Hand saw suitable for cutting PVC pipe		~
PVC Priming fluid	Used to clean and prepare pipe ready for gluing		~
PVC Glue (Type P)	Ensure PVC glue is Type P which is suitable for pressure pipe		~
50mm Barrel Unions	Required to attach to the SplashMe Automation Controller to allow for easy removal/installation		~
50mm Pressure PVC Pipe	Required to divert existing plumbing through the SplashMe Automation Controller.		~
50mm 90 degree elbows	Required to divert existing plumbing through the SplashMe Automation Controller.		~
Screw driver (3mm Blade Flat Head)	Connecting wires to the SplashMe Automation Controller		~
Screw Driver (Phillips Head #2)	Mounting the SplashMe Automation Controller to a wall		~

Section 3 – Installation

3.1 – Selecting suitable mounting location

The body and casing of the SplashMe Automation Controller are made from highly durable engineering plastic making it resistant to normal weather and UV conditions. The SplashMe Controller may be mounted either indoors or outdoors.

It is recommended that the SplashMe Automation Controller be mounted under cover protecting it from harsh weather conditions. This will ensure a greater service life. Choose a location that best allows for the next three requirements.

Plumbing requirements:

The SplashMe flow Sensor tube must be plumbed inline directly after the sand filter or cartridge filter outlet.

Electrical requirements:

The SplashMe Automation Controller must be mounted within 1.5 m from the power supply.

Wi-Fi requirements:

The SplashMe Automation Controller must be in range of the home Wi-Fi network if the device is to be controlled remotely. The home network may need to be extended to reach to selected mounting location.



- All plumbing to be done by qualified persons
- Ensure the device is not mounted near pool chemicals as fumes may damage or corrode some components.

3.2 - Mounting to wall

Hollow wall / timber installation

- 1. Position the *Mounting bracket* in the desired location on the wall with the hanging hooks pointing up.
- 2. Ensure wall bracket is level and mark the two
- 3. outer holes with a pencil
- 4. For masonry wall installation drill holes with a masonry drill bit and install wall plugs (8mm recommended). Ensure the wall plugs are flush.
- 5. Ensure the bracket is level and then secure to the wall using the 2 x 50mm 316 stainless steel countersunk screws provided. *See Fig below*





3.3 – Fixing the SplashMe Automation Controller to the wall bracket

- 1. Remove SplashMe Automation Controller from the box and line up the 2 slots in the rear bracket with the 2 hooks on the wall bracket
- 2. Allow the SplashMe Automation Controller to swivel until it lies flat on the wall
- 3. With a Philips head screwdriver, install the supplied 316 stainless locking screw into the bottom of the bracket. This will completely secure the SplashMe Automation Controller





3.4 – Plumbing

The SplashMe Automation Controller comes complete with a flow sensor to monitor exactly how long a filter pump needs to run to maintain a clean pool.

For the flow sensor to operate, it is essential that the SplashMe Automation Controller be plumbed in line with the pool filtration equipment.

There are 2 x 50mm barrel unions supplied as part of the installation kit. These barrel unions are useful if future maintenance is required.

- 1. Glue the barrel unions using normal PVC glue (type P) and primer fluid onto the clear flow tube assembly
- 2. Install the flow tube with a minimum of 500mm of straight pipe on either side wherever possible to minimise any turbulence which can affect the accuracy of the flow reading
- 3. Be aware of excessive loading of the flow sensor assembly with other nearby equipment. Other equipment should be mounted firmly and independently to avoid any possible failure of the flow assembly





Warning

• All plumbing to be done by qualified persons

3.5 - Installing the multi-probe

The multi-probe comes with a protective cap which seals the probe elements in a storage solution. This storage solution keeps the pH probe glass hydrated and ensures the probe will be ready to use as soon as soon as it is installed.

- Unscrew the black locking nut anti clockwise to remove the protective cap
- Discard the storage solution, rinse the cap in water and then dry the cap with a soft paper towel. Keep the cap in a safe place in case it is needed in the future.
- Line up the groove on the multi-probe with the tongue on the housing, slide into position and then hand tighten the black locking nut.





3.7 - Installing the flow sensor

Install the flow sensor into the aperture marked "Flow" in the Flow housing Assembly.

Line up the groove on the flow sensor with the tongue on the housing, slide into position and then hand tighten the black locking nut



3.6- Installation of the pressure sensor line

The SplashMe Automation Controller comes complete with a built-in pressure sensor. This allows for real-time monitoring of the main pool filter condition. Whether you have a sand filter or cartridge filter, once connected the SplashMe App will alert you when the filter needs to be cleaned or a backwash needs to be performed.

- Locate the existing pressure gauge on the sand filter/cartridge filter body and remove.
- Remove the existing pressure gauge and in its place screw the supplied 4mm fitting.



- Locate the 4mm line fitting at the rear of the unit
- Insert one end of the 4mm piping supplied into the 4mm fitting ensuring the line has been firmly pressed into the fitting to avoid leaks
- Feed the other end of the line through the small opening in the SplashMe Controller
- Insert into the adapter that has been fitted into the sand filter/ cartridge filter body





3.7 - Installing pH acid dosing / peristaltic pump

The SplashMe Automation Controller comes with a 12VDC pH Acid dosing peristaltic pump. Before connecting the pump to the SplashMe Automation Controller, the pump will need to be installed as per below instructions.

Mounting the device

Instructions

- 1. Choose a location where the dose pump wire can reach and connect into the SplashMe pH Doser terminals.
- 2. Remove the 6 screws holding the dose pump to the base
- 3. Mount the base to a wall using the 3 mounting holes and screws provided
- 4. Position the dose pump onto the base and fasten the 6 screws





mounting holes

Injection point installation

The injection point is the last connection before the pipe work returns back to the pool meaning it must be installed inline, after the SplashMe Automation Controller, heaters and solar booster pumps.

- 1. Drill a 12mm hole into the 40mm or 50mm pipe
- 2. Insert the supplied rubber grommet so the contour follows the pipe curve
- 3. Push in the supplied nipple into the grommet until it is flush with pipe
- 4. Loosen the supplied stainless-steel clamp completely and wrap around the pipe and while passing the barbed side of the nipple through the 8mm hole in the clamp
- 5. Bring the ends of the clamp together and feed the end through the worm screw
- 6. Tighten the clamp until the small gap between the nipple and pipework closes



3.8 Filter Basket, Check Valve and Feed tube installation

Next, connect the acid drum to the dose pump.

A concentration of 110g/L hydrochloric acid is required for the dosing system.

Most hydrochloric acid is sold at a concentration of 330g/L. To achieve correct concentration, dilute 1 litre of hydrochloric acid with 2 litres of tap water.

- 1. Place container away from pool equipment in a well-ventilated area
- 2. Drill a 10mm hole into the lid of the acid container
- 3. Feed through the supplied clear feed tube into the hole on the lid
- 4. Feed on the tube clamp, round end first
- 5. Push on the supplied filter basket to the end of the feed tube. Ensure the tube is pushed all the way on the tapered nipple.
- 6. Align the two locking tabs on the filter basket with the slots in the clamp and then press the two together until the locking tabs engage
- 7. Feed the filter basket into the acid container and tighten the lid
- 8. Push in the tube so the filter basket touches the bottom of the acid container
- 9. Run the feed tube from the acid container to the input of the dose pump (left side) and cut tube to length. Push the tube all the way on to the barbed nipple
- 10. Connect another length of feed tube onto the outlet of the dose pump (right side) and connect to the inlet of the check valve (See arrow for direction)
- 11. Connect another length of feed tube onto the outlet of the check valve to the injection point

Note

Direction arrow on the check valve indicates the flow direction

Warning

- Always store chemicals in a cool, dry and well-ventilated space always from other hazardous chemicals in accordance with the product safety data sheets
- Protective equipment must be worn when handling chemicals



Section 4 – Equipment Installation

4.1 – Power requirements

To utilise full functionality of all the auxiliary outputs, the SplashMe Automation Controller requires a total of 3 x 10A RCD protected socket outlets each connected to a separate 16A circuit and circuit breaker.

The socket outlets need to be mounted within 1.5 m of the SplashMe Automation Controller to ensure the supplied plugs will reach.

4.2 - How to connect equipment

4.2.1 - Removing and refitting the front access cover

Removal

 Remove the 4 screws (see diagram) and remove the front cover by pulling it towards you

Refitting

- Replace cover ensuring the o-ring located in the main cover is fitted correctly and free of debris
- Fit the cover neatly over the main cover
- Please ensure the cover fitment is aligned correctly
- Insert the 4 screws and hand tighten (over tightening may result in irreparable damage to the access cover).



4.2.2 SplashMe Sensor Installation

Prior to installing electrical cables for all equipment, remove the front access panel by removing the 4 securing screws as detailed in section 4.2.1. This will expose the cable installation area.

- All cables are to enter from the rectangular opening at the bottom of the controller as shown
- Remove the foam plug whilst performing cabling operations
- Make a small incision in the foam and reinsert around the cables as best as possible to help avoid ingress of foreign obstacles such as dirt, moisture or ants.



- Install the multiprobe cable, flow sensor cable and doser cable/s into the appropriate connectors as follows
 - Install flow sensor into connector marked "FLOW"
 - o Install the probe sensor into connector marked "PROBE"
 - Install the supplied roof temperature sensor into connector marked "ROOF TEMP"
 - Install the supplied Doser pump into connector marked "AUX 5"
 - If you have purchasedan additional Doser pump for chlorine install the connector into "AUX 6".



4.2.3 General layout

This diagram depicts a typical equipment layout utilising a spa with actuators, gas heater, solar heater, spa jets, salt chlorinator, Ph dosing and liquid chlorine dosing.

NOTE - The diagram is to be used as a guide only and individual installations may vary. Other equipment such as pool lighting, pressure cleaners and water features may also be added.



Section 4 - Main electrical supply

4.1 – Power requirements

To achieve full functionality of all the auxiliary outputs, the SplashMe Automation Controller requires a total of 3 x 10A RCD protected socket outlets each connected to a separate 16A circuit and circuit breaker.

The socket outlets need to be mounted within 1.5 m of the SplashMe Automation Controller to ensure the supplied plugs will reach.



Check local standards/codes for compliance requirements

A Warning

- All electrical connections and installations to be done by a licenced
 electrician
- Auxiliary inputs to be connected to a separate 16A circuit and circuit breaker

Section 5 - Connecting equipment

5.1- Connecting 240V equipment

5.1.1-240V Auxiliary connections

Plug Adapters

The SplashMe Automation Controller is supplied with 5 x 10A plug adapters. These adaptors enable users to connect equipment with an AU/NZ 3 pin plug to any of the 5 x output socket connectors located at the base of the unit.

Primary Input

The primary input lead at the rear of the unit supplies power to the SplashMe Automation Controller. This plug also supplies power to the single speed filter pump (up to 2.2 kW). If you have purchased the optional variable speed drive, plug the power cord of the variable speed drive into this socket.

Refer to the separate installation instructions for the variable speed drive.

Input 1-3

Supplies power to equipment connected to AUX 1-3. This input is required to be connected to an RCD protected socket outlet that is on a dedicated 16A circuit and circuit breaker. Use this plug if you intend on using either AUX 1, AUX 2 or AUX 3. This input will allow a total of 10A to be shared across the three AUX outputs.

Input 4

Supplies power to equipment connected to AUX 4. This input is required to be connected to an RCD protected socket outlet that is on a dedicated 16A circuit and circuit breaker. This input is only required if you intend on using AUX 4. This input will allow a total of 10A to be shared across the three AUX outputs.

Warning

- All electrical connections and installations to be done by a licenced
 electrician
- Auxiliary inputs to be connected to a separate 16A circuit and circuit breaker

5.1.3 Sanitisation equipment

Saltwater / Mineral chlorinator

The SplashMe Automation Controller will automatically maintain a pre-set ORP level entered in the App settings. Whenever the filter pump is functioning, the SplashMe Automation Controller measures the ORP and controls the saltwater chlorinator to achieve the set levels.

Most saltwater chlorinators are equipped with a time clock. Any Chlorinator timeclocks will need to be disable prior to connecting to the SplashMe Automation Controller.

Instructions

- 1. Select any of the auxiliary outputs (AUX 1, 2, 3 and 4) to assigned to control the saltwater chlorinator
- 2. Check the power requirements of the saltwater chlorinator and ensure that the specifications do not exceed the maximum ratings as described in this manual
- 3. Connect, taking note of the connection outlet number so it can be correctly assigned when setting up the SplashMe App.

Liquid chlorine doser

The SplashMe Automation Controller can also control a peristaltic dose pump to accurately dose liquid chlorine to a pool. This is an alternative method to the salt chlorinator system.

Liquid chlorine is typically stored in a container and then pumped to the pool in small doses as required.

- 1. Select any of the auxiliary outputs (AUX 1, 2, 3 and 4) to control the peristaltic dosing pump. Alternatively, if required, a low voltage auxiliary contact could be used (refer to connecting low voltage equipment (hard wired).
- 2. Take note of the connection outlet number so it can be correctly assigned when setting up the SplashMe App.

Note

 If possible, house the hydrochloric acid / Liquid Chlorine container in an isolated area from all other pool equipment. This will ensure greater

A Warning

• Hydrochloric acid / Liquid Chlorine is very corrosive and harmful. Avoid skin and eve contact.

5.1.4 – Solar heating

The SplashMe Automation Controller is a fully functioning solar heating controller.

The SplashMe Automation Controller will automatically maintain the pre-set water temperature entered in the App settings.

The SplashMe Automation Controller periodically measures the water temperature by activating the filter pump for several minutes when the filter pump is typically off.

Whenever the filter pump is functioning, the SplashMe Automation Controller measures the water temperature using the in-built temperature sensor. The SplashMe Automation Controller will then control the solar heating to achieve and maintain the pre-set temperature level.

If no filter pump schedule is running, the SplashMe Automation Controller will periodically measure the water temperature by activating the filter pump for several minutes.

See below for more detail on common solar setups.

Independent – Solar Pump

This type of system is the most common configuration. It uses its own suction and return lines and will have an independent solar pump which works independently of the main filter pump.

Any of the auxiliary outputs (AUX 1, 2, 3 and 4) can be assigned to control a solar pump. Ensure that the pump power requirements do not exceed the maximum ratings of the auxiliary outputs.

Note the connection outlet number so it can be correctly assigned when setting up the SplashMe App.





Instructions

1. Check the power requirements of the solar pump and connect to the most suitable output.

Filter pump – Booster pump

This type of configuration is used when an independent pump cannot be installed. The solar system recirculation is distributed by the existing filter pump. In this case a booster pump is used to pull water from the filter pump suction line and divert it to the roof.

The filter pump will always need to operate in conjunction with the Solar booster pump to operate the solar system.

Any of the auxiliary outputs (AUX 1, 2, 3 and 4) can be assigned to control a booster pump. If connecting a booster pump, ensure that the pump power requirements do not exceed the maximum ratings of the auxiliary outputs.

Note the connection outlet number so it can be correctly assigned when setting up the SplashMe App.

This type of system may incorporate actuator valves. If that is the case please connect the actuator valve/s to any of the voltage free outputs Aux 9, Aux 10, Aux 11. A transformer will also be required to power the actuator.

- 1. Read section 5.2.3 to connect any actuator valves
- 2. If connecting a booster pump, check the power requirements and connect to the most suitable output using the supplied adaptor.



5.1.5 – Connecting additional 240v equipment

Any of the auxiliary outlets (AUX 1, 2, 3 or 4) can be used to control equipment additional to those mentioned above. Examples of additional 240v auxiliary equipment includes but is not limited to water features, spa blowers, pool and garden lighting and pool cleaners.

Instructions

1. Check the power requirements of the equipment to be connected and select to the most suitable output using the supplied adaptor.

5.2 - Connecting low voltage equipment (hard wired)

5.2.1 - Low voltage auxiliary connection

The SplashMe Automation Controller comes with low voltage outputs which can be used to control equipment.

Any of the auxiliary outlets (AUX 9,10, 11) can be used to control equipment additional to those mentioned above. Examples of additional auxiliary equipment includes but is not limited to actuator valves, relays, heater controls, dosing pumps.

Auxiliaries 9, 10 and 11 are voltage free relays. They are generally used to connect with lighter current loads. If required additional capacity can be obtained by installing inline booster relays. Seek advice from a qualified electrician.

Instructions

1. Check the power requirements of the equipment to be connected and select most suitable output using the supplied adaptor.





5.2.2 - Roof temperature sensor (if solar is used)

The SplashMe Automation Controller comes with its own ambient roof temperature sensor. It is generally used by the solar controller to control the solar pump. Even if the solar controller function is not used, it still may be beneficial to install as it will provide a real time reading of the ambient temperature on the app.

Fixing sensor to roof

Choose a location that is close to the solar collectors. This will provide the most accurate temperature conditions of the solar system.

Installing and connecting the sensor

- 1. Attach the stainless-steel temperature sensor to a piece of rubber, silicone or solar collector ensuring it isn't in direct contact with any steel roofing material
- 2. Attach the sensor using a silicone-based adhesive.
- 3. Plug the temperature sensor cable connector into the slot marked "Roof Temp"





5.2.3 - Auxiliary connections (actuator valves, equipment, 15A-3phase)

Actuator valves

For systems utilising actuator valves, it is recommended that the SplashMe Power Expander is incorporated as an add-on.

If using the Power Expander isn't an option, then one or more of the voltage free outputs may be utilised. The SplashMe Automation Controller has 3 x volt-free terminal blocks suitable to control actuator valves. These outputs are AUX9, AUX10, and AUX11

Note the connection outlet number so it can be correctly assigned when setting up the SplashMe App.

Instructions

Obtain a Transformer of the correct voltage and current needed to run the actuators installed with the system.

- 1. Install the actuator valves as per manufactures specification
- 2. Remove the front cover of the SplashMe Automation Controller (section 4.2.1)
- 3. Run the actuator and power supply wires through the rectangular aperture at the bottom
- 4. Group all the (Black/Common) wires and join them together with the negative wire of the transformer.
- 5. Group all the (Red / Open) wires of the actuators that you would like to operate together and connect to the NO terminal of your selected AUX contact
- Group all the (White or Yellow / Close) wires of the actuators that you would like to operate together and connect to the NC terminal of your selected AUX contact
- 7. Connect the positive wire of the power supply to the C terminal of the selected AUX contact



15A – 3phase equipment

In addition to controlling actuator valves, auxiliary terminal blocks can be used to control any device using 1-24V AC/DC that are Safety Isolated (SELV) Supply / Loads only.

When using the SplashMe Automation Controller to control larger equipment such as 15A pumps or 3 phase equipment, a licenced electrician will be required to configure a relay/contactor setup to connect to the auxiliary outputs.

Note the connection outlet number so it can be correctly assigned when setting up the SplashMe App.

Warning All electrical

- All electrical connections and installations to be done by a licenced electrician
- AUX 9-11 is for the connection of Safety Isolated (SELV) Supply / Loads only

5.2.4 - 12VDC peristaltic pump for acid dosing

The SplashMe Automation Controller comes fully equipped with a 12V Peristaltic Acid Pump.

In a typical swimming pool environment, the tendency is for the pH to increase. Dosing the water with hydrochloric acid is the main method used to lower the pH back into balance. This can be done manually or automatically with the assistance of peristaltic pump (doser).

The SplashMe Automation Controller will automatically maintain a pre-set pH level entered in the App settings. Whenever the filter pump is functioning, the SplashMe Automation Controller measures the pH of the water using the in-built pH sensor and will then operate the peristaltic pump to deliver accurate doses of hydrochloric acid to swimming pool water.

The pH doser output has been optimised to control the pH doser pump and will need to be correctly assigned in the SplashMe App set up process.

Instructions

1. Plug the doser in either AUX5, 6, 7 or 8

5.2.5 - Gas heater or electric heat pump

Depending on the model and load requirements of the heater, the 240V outputs (AUX 1, 2, 3 or 4) can be used to operate the heater remotely.

Alternatively, select the low voltage outputs (AUX 9,10 or 11). If the heater requires 15A or 3phase power, a licenced electrician will be required to configure a relay/contactor setup to connect to the auxiliary outputs AUX 9, 10, 11.

Note the connection outlet number so it can be correctly assigned when setting up the SplashMe App.

Once connected, set the temperature on the heater to maximum as the in-built thermostat will replace the heater thermostat.

The SplashMe Automation Controller will automatically maintain a pre-set temperature entered in the App settings. Whenever the filter pump is functioning, the SplashMe Automation Controller measures the water temperature using the in-built temperature sensor. The SplashMe Automation Controller will control the pump to heat the water to achieve and maintain the pre-set pH level.

Instructions

1. Check the power requirements of the heater and connect to the most suitable output.



5.3 Powering up

After installing the physical hardware and equipment the SplashMe Automation Controller will be ready to power up.

At this point the SplashMe Automation Controller should be mounted to wall (see 3.3) and plumbed in (see 3.4). All equipment should also be connected and ready to power up.

Run the main filter pump manually and check the system for any leaks.

Main supply Instructions

- Plug in and switch on the Primary Input lead of the SplashMe Automation Controller. The unit will go through a pre-configuration power-up routine. A SplashMe logo will appear on the LCD screen the first time the unit has been powered up.
- 2. Run through the connection wizard with SplashMe App



 If the supply cord is damaged, it shall be replaced by the manufacturer or its service agent or similarly qualified person in order to avoid a hazard

Section 7 – SplashMe App

Once the SplashMe Automation Controller has been installed, the installer will need to download the SplashMe App from either Apple App or Google Play stores.

Google Play Store https://play.google.com/store/apps/details?id=au.com.nymet.splashme

Apple App Store

https://apps.apple.com/au/app/splashme/id1374275908

Upon initial set up, user will need to

- Create an account
- Follow set up wizard

Further instructions available on the SplashMe website (www.splashmepool.com.au/support)

Section 8 – Maintenance

While the SplashMe Automation Controller will be a key piece of equipment for easy, stressfree maintenance, it is recommended owners follow a regular maintenance schedule to keep the pool clean and healthy.

Water management and maintenance will depend on frequency of use and local environmental conditions.

8.1 Recommended general maintenance

Daily

- Check skimmer basket and clean if required
- Remove any floating or settled debris
- Check water level is in the middle of the skimmer mouth opening for correct pump operation

Weekly (twice weekly for high use periods)

- Check pump and skimmer basket and clean if required
- Check filters, backwash sand filter or clean cartridge filter as necessary
- Check acid supply and fill when necessary

6 monthly

- Check and clean multiprobe (see additional instructions)
- Check all tubing and replace if any are stiff or swollen
- Service any dosing equipment (e.g. clean salt cells of Chlorinator)
- Get water tested by a pool shop and ensure water is balanced

Yearly

- Replace Squeeze tube in chemical dosing pump
- Replace feed tubes if cracked or perished

8.2 Cleaning Multiprobe

It is recommended to clean the multiprobe every 6 months to maintain accurate readings.

Instructions

- 1. Turn off SplashMe Automation Controller
- 2. Close valves if your probe is below water level
- 3. Unscrew the black locking nut and remove the multiprobe from the port at the back of the device
- 4. Holding the probe by the cable, gently swirl the probe in a dilute hydrochloric acid solution for two minutes
- 5. Rinse the probe in clean water and replace into the back of the SplashMe device and hand tighten the black locking nut
- 6. Turn on pump and check for leaks

Note • pH and ORP readings will stabilize 1-2 hours after use

8.3 Peristaltic pump - servicing squeeze tubes

Peristaltic pump squeeze tubing needs to be replaced every 12 months. If the pool has high chlorine demand or is in a semi commercial/commercial application, squeeze tubing may need to be replaced more frequently.

Recommended maintenance

- Lubricate tubing every 3 months with silicone-based lubricant
- Replace tubing every 12 months

- Ensure system is off and close check valves if system is positioned below
 water level
- Disconnect feed tubing from input and output of dosing pump
- Be aware of chemicals present in feed tubing
- Carefully hold or secure feed tubes above injection manifold to allow chemicals to drain away from feed tubing into acid container
- Remove the 6 screws holding on the clear front cover
- Lift barbed nipple from input side of doser housing
- Carefully remove existing black squeeze tube from dosing pump housing
- Clean out old lubricant from dosing pump housing
- Using quality silicone lubricant, generously apply the lubricant into the housing and around each roller cam



- Check replacement squeeze tube has the supplied barbed nipples attached to each end
- Insert replacement squeeze tube assembly (tubing with barbed nipples) from input (left side) to output right side.
- Insert input barbed nipple and align round edge of barbed nipple with locator guides and gently pushing tube past each roller cam one at a time



A Warning

- Be aware of chlorine and acid residue in both squeeze tubes and feed tubes when replacing or servicing
- Don't allow chemicals to mix dangerous and highly corrosive fumes will be produced
- Always wear protective clothing, footwear, gloves and eye protection when handling pool chemicals to avoid injury
- If a spill occurs, wash the affected area with fresh water immediately and seek medical attention

- Insert the output barbed nipple into the locator, round edge first
- Replace cover and 6 screws



Section 9 – Troubleshooting

See SplashMe website (www.splashmepool.com.au/support) for further information

Section 10 – Warranty

Refer to Warranty Policy on the SplashMe website (www.splashmepool.com.au)

Section 11 – Product support

For user product updates, information and support visit <u>www.splashmepool.com.au</u> or email <u>info@splashmepool.com.au</u>.

The contents of this manual will be periodically updated or revised due to product updates.

The latest version of the SplashMe Installation/User Guide will be available at www.splashmepool.com.au/support

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