INSTRUCTION MANUAL

OASIS
POOL & SPA CONTROL

waterway™

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Designed,
Engineered &
Manufactured
in the USA.

OASIS POOL & SPA CONTROL

⚠ WARNING! Qualified Technician Required for Service and Installation

FOR YOUR SAFETY

This product must be installed and serviced by a contractor who is licensed and qualified in pool equipment by the jurisdiction in which the product will be installed, where such state or local requirements exist. In the event no such state or local requirement exists, the maintainer must be a professional with sufficient experience in pool equipment installation and maintenance, so that all of the instructions in this manual can be followed exactly. Before installing this product, read and follow all warning notices and instructions that accompany this product. 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.

Section 1. Important Safety Instructions

READ AND FOLLOW ALL INSTRUCTIONS

All electrical work must be performed by a licensed electrician and conform to all national, state, and local codes. When installing and using this electrical equipment, basic safety precautions should always be followed, including the following:

⚠ DANGER

To reduce the risk of severe injury or death, do not remove the suction fittings of your spa or hot tub. Never operate a spa or hot tub if the suction fittings are broken or missing. Never replace a suction fitting with one rated less than the flow rate marked on the equipment assembly.

⚠ WARNING

Prolonged immersion in hot water may induce hypothermia. Hypothermia occurs when the internal temperature of the body reaches a level several degrees above the normal body temperature of 98.6°F (37°C). The symptoms of hypothermia include dizziness, fainting, drowsiness, lethargy, and an increase in the internal temperature of the body. The effects of hypothermia include: 1) unawareness of impending danger; 2) failure to perceive heat; 3) failure to recognize the need to exit spa; 4) physical inability to exit spa; 5) fetal damage in pregnant women; 6) unconsciousness resulting in a danger of drowning.

⚠ WARNING

To Reduce the Risk of Injury:

a) The water in a spa should never exceed 104°F (40°C). Water temperatures between 100°F (38°C) and 104°F (40°C) are considered safe for a healthy adult. Lower water temperatures are recommended for young children and when spa use exceeds 10 minutes.

b) Since excessive water temperatures have a high potential for causing fetal damage during the early months of pregnancy, pregnant or possibly pregnant women should consult a physician before using a spa or hot tub, and should limit spa water temperatures to 100°F (38°C). Water temperature in excess of 38° C (100° F) may be injurious to your health.

c) Before entering a spa or hot tub, the user should measure the water temperature with an accurate thermometer since the tolerance of water temperature-regulating devices varies.

d) The use of alcohol, drugs, or medication before or during spa or hot tub use may lead to unconsciousness with the possibility of drowning.

e) Obese persons and persons with a history of heart disease, low or high blood pressure, circulatory system problems, or diabetes should consult a physician before using a spa.

f) Persons using medication should consult a physician before using a spa or hot tub since some medication may induce drowsiness while other medication may affect heart rate, blood pressure, and circulation.

⚠ DANGER

Risk of electric shock:

Install the controller at least five (5) feet (1.52m) from the inside wall of the pool and/or spa/hot tub using non-metallic plumbing. Canadian installations must be at least three (3) meters from the water. Children should not use spas or hot tubs without adult supervision. Do not use spas or hot tubs unless all suction guards are installed to prevent body and hair entrapment. People using medications and/or having an adverse medical history should consult a physician before using a spa or hot tub.

⚠ WARNING

To avoid injury ensure that you use this control system to control only packaged pool/spa heaters which have built-in operating and high limit controls to limit water temperature for pool/spa applications. This device should not be relied upon as a safety limit control.

⚠ WARNING

- People with infectious diseases should not use a spa or hot tub.

- To avoid injury, exercise care when entering or exiting the spa or hot tub.

- Do not use drugs or alcohol before or during the use of a spa or hot tub to avoid unconsciousness and possible drowning.

- Before entering a spa or hot tub, measure the water temperature with an accurate thermometer.

- Do not use a spa or hot tub immediately following strenuous exercise.

- Prolonged immersion in a spa or hot tub may be injurious to your health.

- Do not permit any electric appliance (such as a light, telephone, radio, or television) within five (5) feet (1.52m) of a spa or hot tub.

- The use of alcohol, drugs or medication can greatly increase the risk of fatal hypothermia in hot tubs and spas.

- Water temperature in excess of 100°F (38°C) may be hazardous to your health.

⚠ WARNING

A terminal bar marked "GROUND" is provided within the controller. To reduce the risk of electrical shock which can cause serious injury or death, connect this terminal bar to the grounding terminal of your electric service or supply panel with a continuous copper conductor having green insulation and one that is equivalent in size to the circuit conductors supplying this equipment, but no smaller than no. 12 AWG (3.3mm2). In addition, a second wire connector should be bonded with a no. 8 AWG (8.4mm2) copper wire to any metal ladders, water pipes, or other metal within five (5) feet (1.52m) of the pool/spa. In Canada the bonding wire must be minimum 6 AWG (13.3mm2).

⚠ CAUTION

A ground-fault circuit-interrupter must be provided if this device is used to control underwater lighting fixtures. The conductors on the load side of the ground-fault circuit-interrupter shall not occupy conduit, boxes, or enclosures containing other conductors unless the additional conductors are also protected by a ground-fault circuit interrupter. Refer to local codes for complete details.

Attention Installer:

Installer to provide drainage of compartment for electrical components.

WARRANTY
For product registration visit: www.waterwayplastics.com.
For Warranty questions or claims please contact point of purchase.

# SAVE THESE INSTRUCTIONS

Section 2. System Overview

2.1 Package Contents

Package contents will vary depending on which OASIS configuration you are installing.

OASIS - 770-1006-PSW2	OASIS - 770-1002-PS2
• Six Function Controller with removable User Interface (UI) • OASIS WIFI • Waterway Valve Actuators (2) • Water Temperature Sensor Kit • Mounting Hardware • Mounting Bracket • Mounting Bracket for remotely installing UI • Cover plate for UI housing • Instruction Manual	• Six Function Controller with removable User Interface (UI) • Waterway Valve Actuators (2) • Water Temperature Sensor Kit • Mounting Hardware • Mounting bracket • Mounting Bracket for remotely installing UI • Cover plate for UI housing • Instruction Manual
OASIS - 770-1004-PSW	OASIS - 770-1000-PS
• Six Function Controller with removable User Interface (UI) • OASIS WIFI • Water Temperature Sensor Kit • Mounting Hardware • Mounting bracket • Mounting Bracket for remotely installing UI • Cover plate for UI housing • Instruction Manual	• Six Function Controller with removable User Interface (UI) • Water Temperature Sensor Kit • Mounting Hardware • Mounting bracket • Mounting Bracket for remotely installing UI • Cover plate for UI housing • Instruction Manual

2.2 Electrical Specifications

Power Supply   **120 VAC or 240 VAC; 60 Hz; 1.67 A**

Contact Rating   **High voltage - 25 A; 3HP @ 240 VAC 1½ HP @120 VAC 1500 Watts Incandescent**

Low Voltage - Class 2, 1 A @ 24 VAC
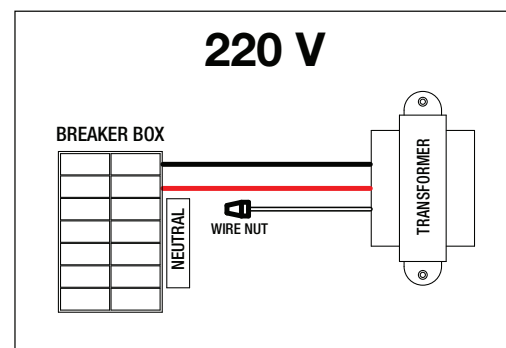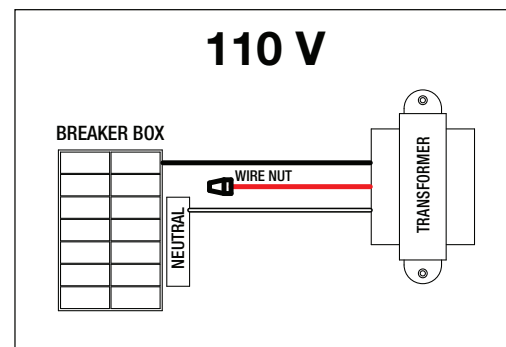
2.3 Materials and Tools

Package contents will vary depending on which OASIS configuration you are installing.

Installation Materials Furnished
• Screw Set (includes Plastic Anchors)
• Metal Mounting Bracket

Tools Needed for Installation
• Power Drill
• 3/16" Drill Bit - Hammer Drill Bit (only necessary to drill into brick or concrete)
• Conduit Fittings
• Wire Nuts
• Wire Crimping Pliers
• Pencil or Marking Pen
• Flat Head Screwdriver
• Phillips Head Screwdriver
• Small Flathead or Slotted Screwdriver

Section 3. Install Controller Box

⚠ **WARNING**

FOR YOUR SAFETY: This product must be serviced by a professional pool/spa service technician as described on the front cover of this manual. The procedures in this manual must be followed exactly. Failure to follow warning notices and instructions may result in property damage, serious injury, or death. Improper installation and/or operation will void the warranty.

When mounting the controller box in the equipment pad, instructions must be followed exactly. Read through the Important Safety Information section completely before beginning installation and before operating the equipment.

Before you begin installation, make sure you have the necessary tools and a suitable location to install the OASIS.

NOTE: The controller should be located at or near the equipment pad.

Locate the controller at least five (5) feet or more away from pool/spa and five (5) feet off the ground. All national, state, and local codes are applicable.

NOTE: For Canadian installations, the controller must be at least three (3) meters (9.8 feet) away from the pool/spa.

3.1 Mount the Controller Enclosure

1. Using a flat screwdriver, rotate door latch to unlock the front cover of the controller.

2. Open the front cover door and remove the mounting hardware kit.

3. Using the holes in the bracket as a guide, mark four (4) dots on the surface where the controller will be mounted. The four (4) mounting holes are 3-15/16" (10 cm) apart center to center.

NOTE: Make sure to mark out the four (4) holes as accurately as possible.

4. Drill four (4) holes in the mounting surface.

5. Press the four (4) plastic anchors firmly into holes.

6. Screw the mounting bracket onto the mounting surface with the four (4) screws provided.

7. Open the front cover of the controller and locate the fastening hole under the ground bar. Drill a 3/16" hole through the plastic enclosure.

8. Line up the slot in the controller enclosure with the guide in the mounting bracket and hook on to mount.

9. Secure the controller enclosure to the mounting bracket with the single fine thread Phillips screw provided.
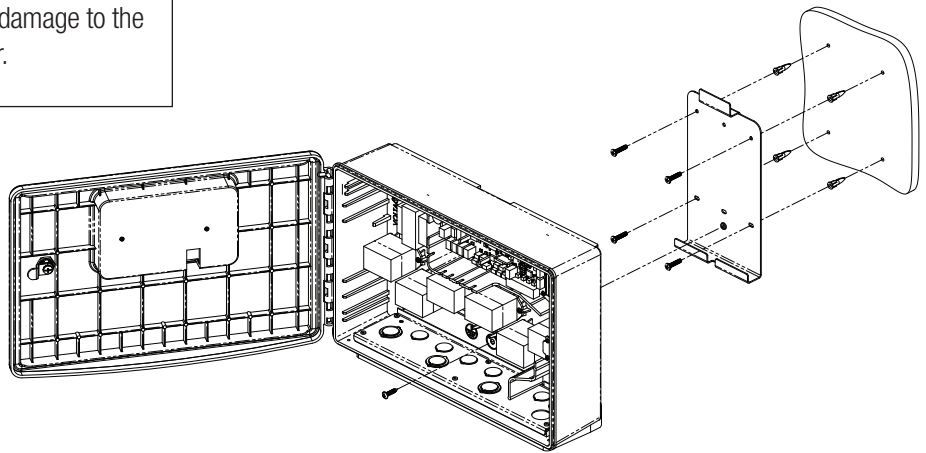
Figure 1. Mounting the Controller Enclosure

3.2 Mount the User Interface for Remote Access

The user interface (UI) may be installed in a more convenient location away from the equipment pad.

To set up the UI remotely, you will need to purchase a CAT 5 cable the length of the remote distance to connect the UI to the controller unit.

NOTE: The UI MUST be mounted OUTDOORS where a pool service technician may conveniently access it.

1. Using the holes in the plastic bracket as a guide, drill two (2) holes on the surface where the UI will be mounted.

2. Screw the bracket to the surface using two (2) screws.

3. Remove the UI from the front of the controller enclosure and attach to the mounting plastic bracket. Secure with set screws on the sides.

4. Use the blank plastic face plate provided to cover the UI housing when UI is removed. Attach face plate to enclosure door with the two screws originally used to fasten the UI to the door.

Section 4. High Voltage Wiring

All high voltage wiring must be done by a licensed electrical contractor.

NOTE: See Figure 10.4 OASIS Electrical Wiring Diagram on page 10 for specific wire locations and connections.

4.1 Ground Fault Circuit Interrupter

> ## ⚠️ WARNING
>
> When using electrical products, basic precautions should always be followed, including the following:
>
> - **DANGER: RISK OF ELECTRIC SHOCK WHICH CAN RESULT IN SERIOUS INJURY OR DEATH.** Before attempting installation or service, ensure that all power to the device is disconnected/turned off at the circuit breaker. Connect only to a circuit protected by a ground fault circuit-interrupter (GFCI).
>
> - Grounding is required. The unit should be installed by a qualified service representative and should be properly grounded and bonded.
>
> - Install to permit access for servicing.
>
> - Please read all cautions and safety instructions in the Important Safety Instructions section.
>   **Before attempting any electrical wiring, be sure to read and follow safety instructions. Wiring should only be attempted by a qualified professional.**

4.2 Connect Grounding Wires and Transformer Wires

The National Electrical Code® (NEC®) requires pool equipment to be bonded to each other. Check your local codes to determine if the NEC and/or other local installation codes are enforced by the Authority Having Jurisdiction (AHJ).

A solid, copper wire minimum 8 AWG (8.37 mm2) wire is recommended, per the NEC, for bonding the controller to a permanent bonding connection that is acceptable to the local AHJ. Refer to your locally enforced codes for the acceptable bonding wire gauge.

Each piece of non-related pool equipment requiring a ground should also be bonded to the common, approved bonding point. There should be one bonding connection to the controller. In Canada, the Canadian Electrical Code (CEC®) dictates that the bonding conductor be a minimum of 6 AWG (13.3 mm2).
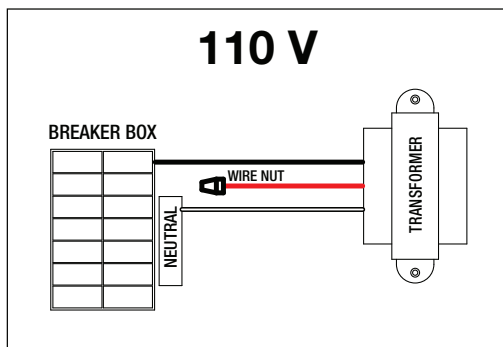
4.3 Connect Line Power and Load Filter Pump to Relay

As marked in the controller enclosure, Relay 1 is the dedicated Filter Pump relay.
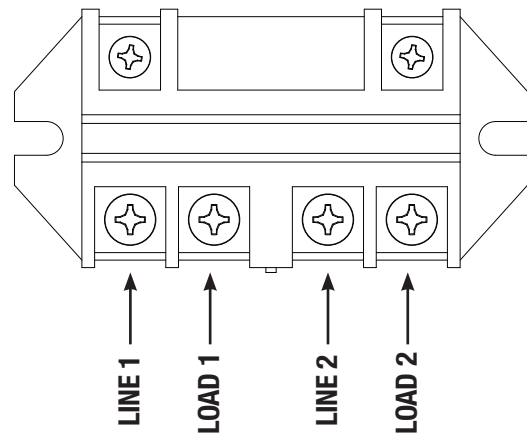

Figure 3. Filter Pump Relay

1. Connect main power wires to Line 1 and Line 2.

4.4 Connect Additional Equipment to AUX Relays

Use the five (5) additional AUX relays to wire additional high voltage equipment, such as Pool Light, Spa Light, Booster Pump, etc. Connect only one device per relay.

For each device:

1. Connect ground wire to ground bar.
2. Connect line power to Line 1 and Line 2.
3. Connect equipment power to Load 1 and Load 2.
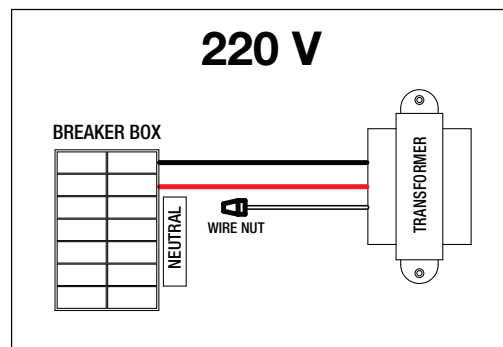
Section 5. Low Voltage Wiring

All low voltage wiring should be run through the knockouts in the low voltage compartment (right side of controller enclosure). See Figure 4.

IMPORTANT

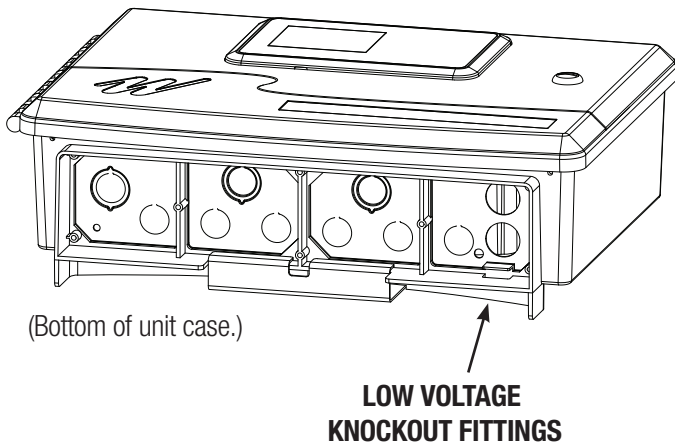Never run high voltage and low voltage in the same conduit.

(Bottom of unit case.)

**LOW VOLTAGE
KNOCKOUT FITTINGS**

Figure 4. Knockouts for low voltage wiring

SENSOR CONNECTION

LOW VOLT HEATER   SOLAR TEMP   WATER TEMP   AIR TEMP   SPARE
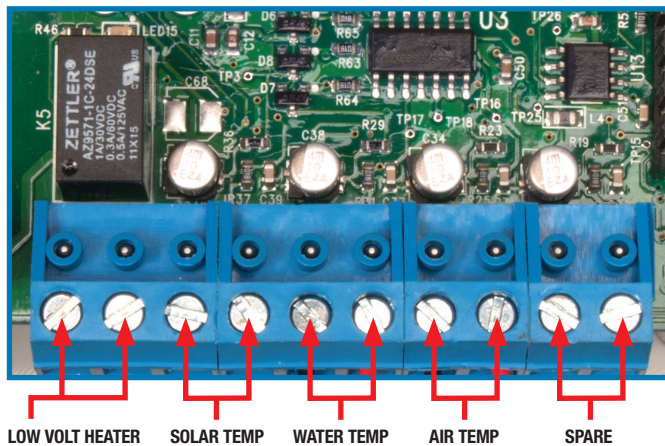
Figure 5. Sensor Connection

5.1   Wire the Temperature Sensors

Wire the temperature sensors on the 10-pin blue connector (see Figure 10.4 Wiring Diagram). The air temperature sensor is factory-installed on the 10-pin blue connector (#7 & #8). The water temperature sensor and necessary installation hardware is included.

5.1.1 Install the Water Temperature Sensor

1. Drill a hole for mounting the water temperature sensor line in the pipe between the pump and the filter (before the heater).
2. Install the O-ring on the sensor and insert the sensor into the hole. Wrap and tighten metal clamp around the pipe to secure sensor.
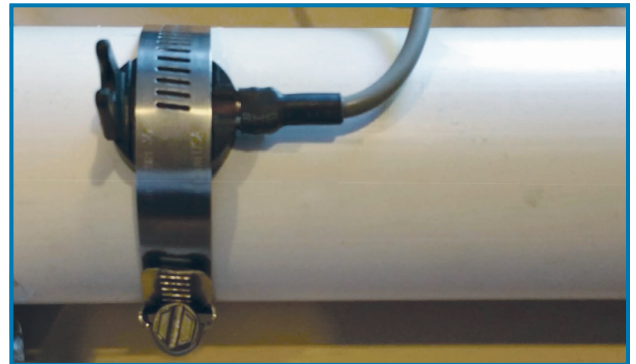
WATER TEMP SENSOR

Figure 5.1. Sensor Connection

3. Feed the sensor wire through the black low voltage wiring knockout.
4. Strip 1/4" of insulation and separate the wires.
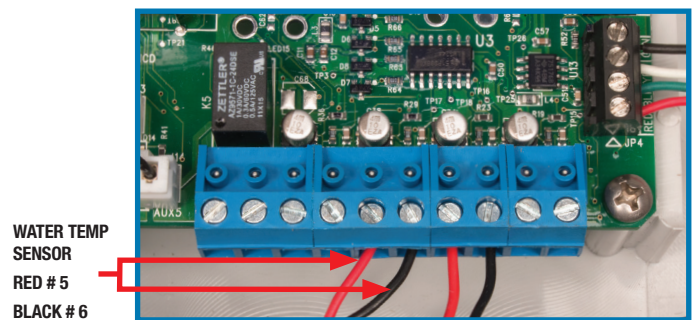5. Connect sensor wires to pins #5 and #6 of the 10-pin blue connector.

SENSOR CONNECTION

WATER TEMP
SENSOR
RED # 5
BLACK # 6

Figure 5.1.1. Sensor Connection

5.1.2 **Replacing Air Sensor**

The Air Sensor comes pre-installed in the OASIS Controller.
To replace the Air Sensor;

1. Remove nut located on the air sensor probe, remove probe.

2. On the 10 pin sensor connector loosen the screws & remove wires on pin #7 & #8.

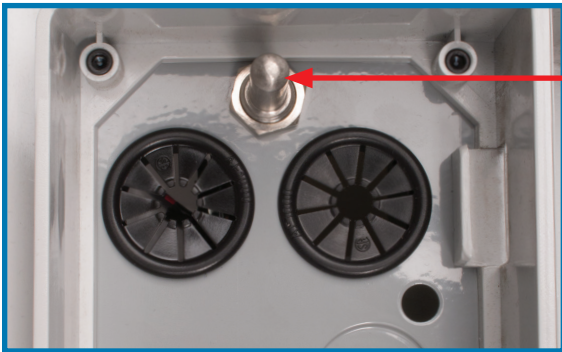3. Install new air sensor and reattach red wire to pin #7 and black wire to pin #8.

AIR TEMP SENSOR

AIR TEMP SENSOR PROBE

Figure 6. Air Temp Sensor

SENSOR CONNECTION

AIR TEMP SENSOR
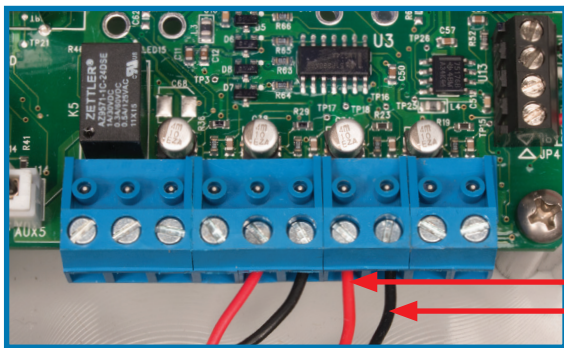**RED # 7**
BLACK # 8

Figure 7. Sensor Connection

5.1.3 **Install a Solar Sensor (if applicable)**

If there is solar, wire the solar panel temperature sensor to the 10-pin blue connector.
The solar sensor should be installed adjacent to the solar panel so it will read the same temperature as the solar panels. Do not install in the pipe.

1. Feed the sensor wire through the black low voltage wiring knockout.

2. Strip 1/4" of insulation and separate the wires.

3. Connect Solar sensor wires to pins #3 and #4. (See Figure 5. Sensor Connection).

5.1.4 **Install Additional Low Voltage Equipment (i.e., Heater Connection)**

If there is additional low voltage equipment installed, such as low voltage heating.

1. Feed the sensor wire through the black low voltage wiring knockout.

2. Strip 1/4" of insulation and separate the wires.

3. Connect sensor wires to pins #1 and #2.

(See Figure 5. Sensor Connection).

5.2 **Install OASIS WiFi (if applicable)**

NOTE: For complete OASIS Pool Control App instructions and information, refer to the OASIS WiFi instruction manual.

5.2.1 **Mount the OASIS WiFi**

Mount the OASIS WiFi at least 6 feet off the ground and at least 8 feet from motors, such as pumps or blowers, and other electrical equipment.

5.2.2 **Wire the OASIS WIFI**

Connect the OASIS Wifi to the 'JP4' RS-485 connector (See Figure 10.4 Wiring Diagram).

1. Feed wire through the black low voltage wiring knockout.

2. Connect the Black, White, Green, and Red wires as shown in (Figure 8).

WIFI CONNECTION
Left to Right Wiring
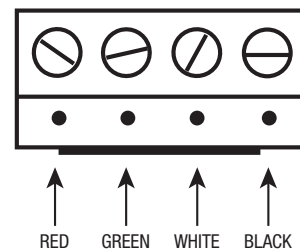

RED   GREEN   WHITE   BLACK

Figure 8. OASIS Wifi Wiring

⚠ Make sure the wires are connected in the right order. Wires should be connected black, white, green, red from the top down.
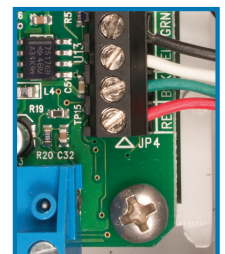
NOTE: Wire only one Wifi to 'JP4'.

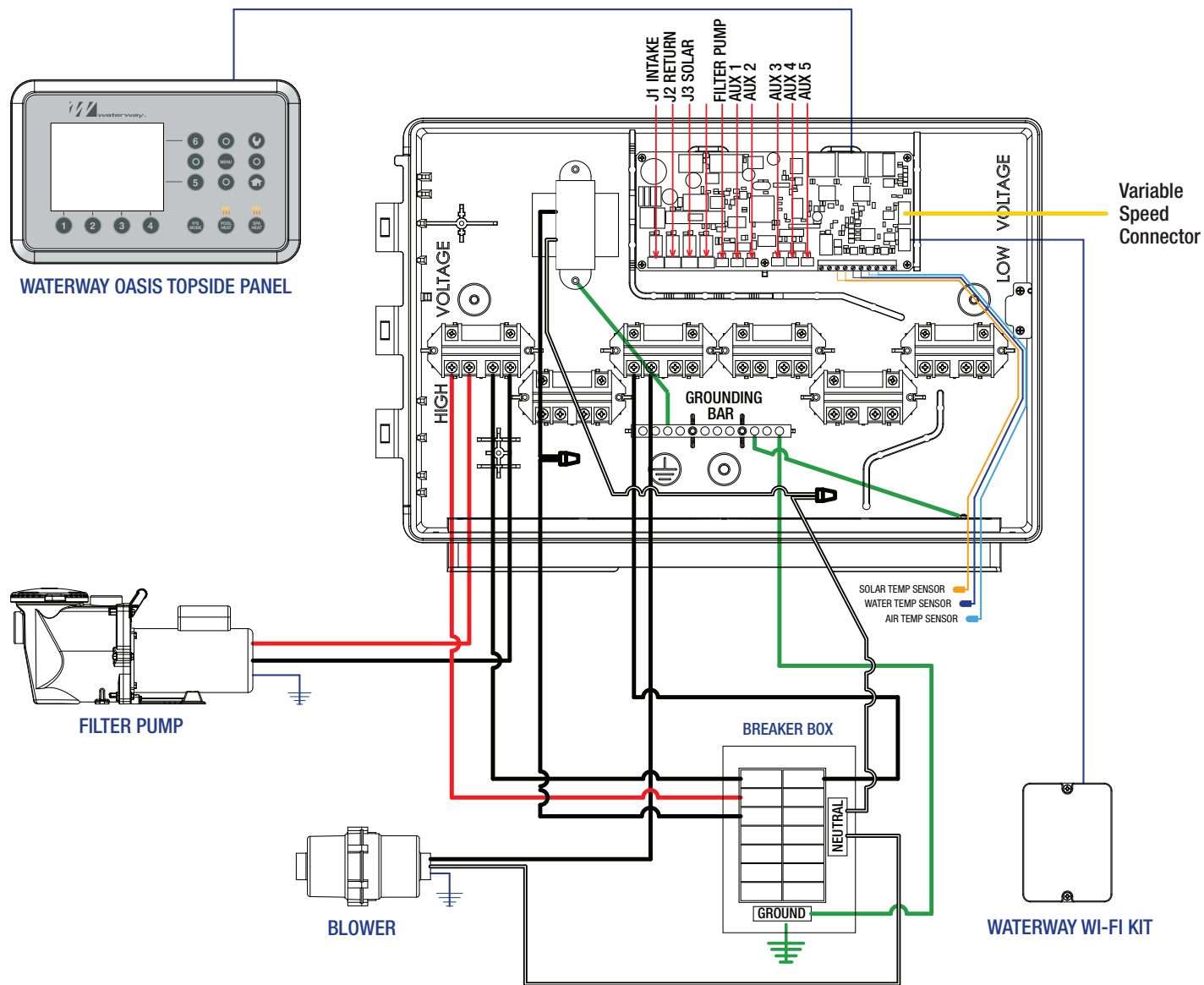

Figure 8.1. OASIS Wifi Connector

WATERWAY OASIS TOPSIDE PANEL

FILTER PUMP

BLOWER

BREAKER BOX

WATERWAY WI-FI KIT

J1 INTAKE
J2 RETURN
J3 SOLAR
FILTER PUMP
AUX 1
AUX 2
AUX 3
AUX 4
AUX 5

HIGH VOLTAGE

LOW VOLTAGE

Variable Speed Connector

GROUNDING BAR

NEUTRAL

GROUND

SOLAR TEMP SENSOR
WATER TEMP SENSOR
AIR TEMP SENSOR

Figure 10.4 OASIS Controller Electrical Wiring Diagram

WATERWAY OASIS TOPSIDE PANEL

Filter Pump-High

Filter Pump-Low

J1 INTAKE
J2 RETURN
J3 SOLAR
FILTER PUMP
AUX 1
AUX 2
AUX 3
AUX 4
AUX 5

Variable
Speed
Connector

HIGH VOLTAGE

LOW VOLTAGE

GROUNDING BAR

SOLAR TEMP SENSOR
WATER TEMP SENSOR
AIR TEMP SENSOR

FILTER PUMP

BREAKER BOX

NEUTRAL

GROUND

WiFi

BLOWER

WATERWAY WI-FI KIT
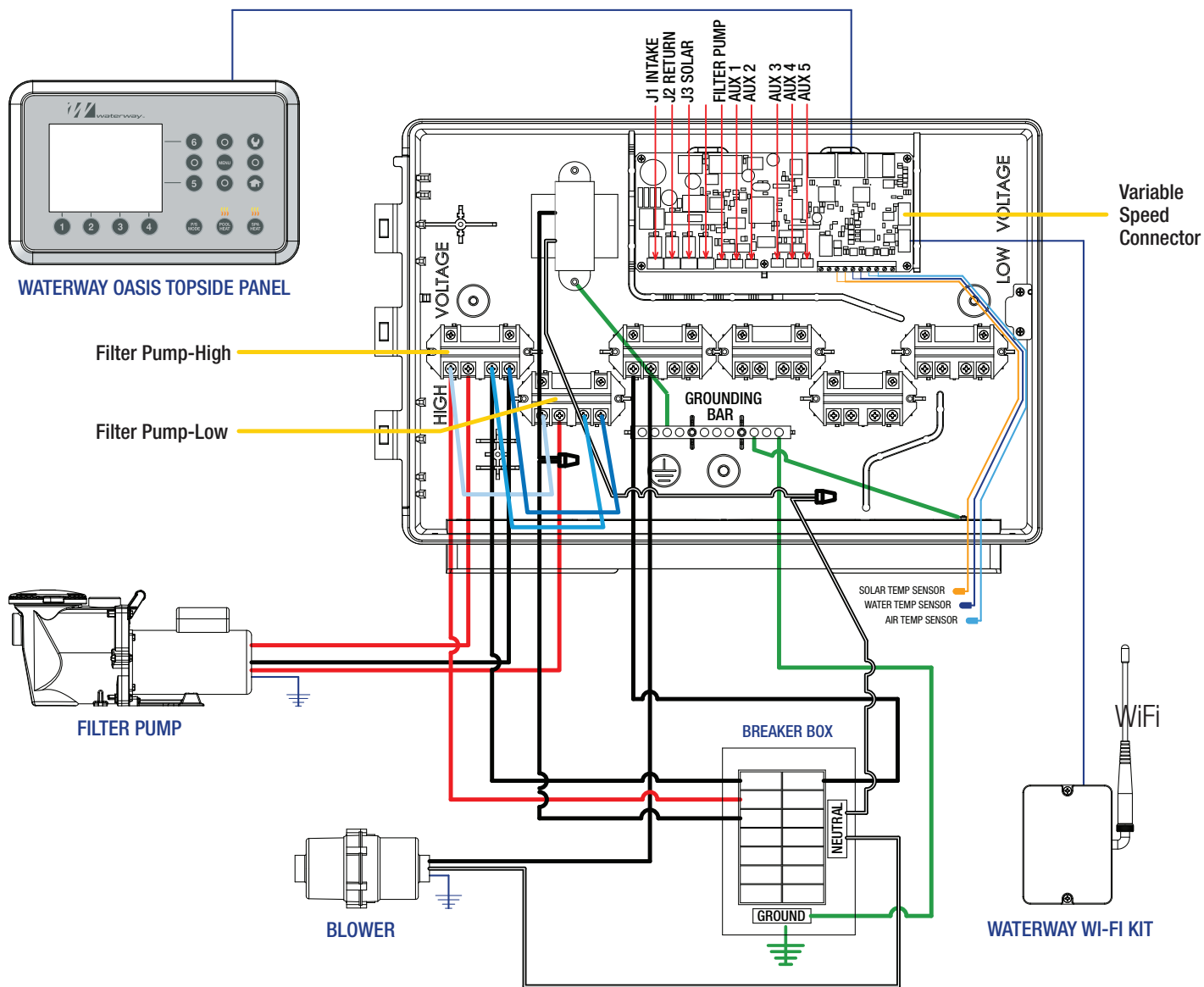
Figure 10.1. OASIS Controller Electrical Wiring Diagram for 2-Speed Pump

5.3 Install Filter Pump

RELAY PLUG-IN
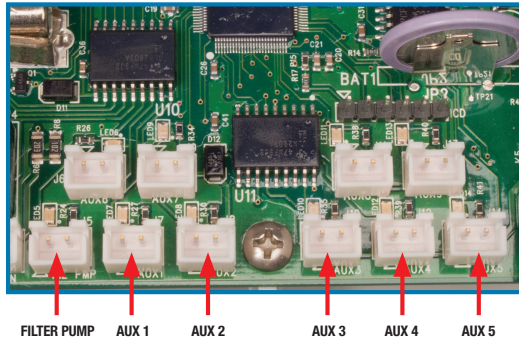
Figure 9. Relay Connections

5.3.1 Installing a 1-Speed Filter Pump

Install Single Speed Pump – relay 1 plug into the connector labeled "Filter Pump" (see Figure 9)

- For 240V from power source connect "Lines" to Relay 1 Line 1 and Relay 1 Line 2.

- Connect "Load" to Relay 1 Load 1 and Relay 1 Load 2 (see Figure 3).

For wiring diagram refer to Figure 10)
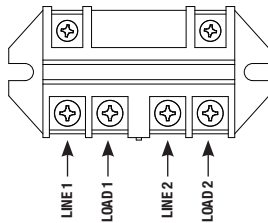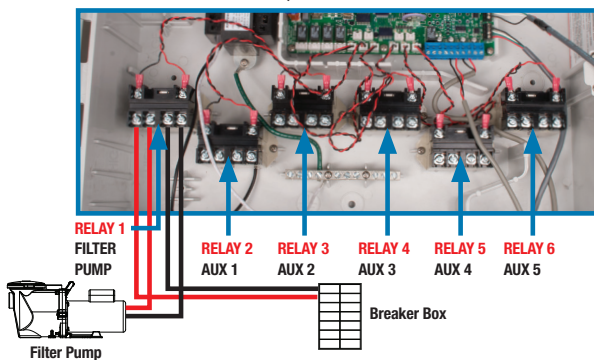

RELAY SEQUENCE AND PLUG-IN

Figure 10. Relay Sequence & Plug-In

5.3.2 Installing a 2-Speed Filter Pump

Install Two Speed pump – Pump High needs to plug into relay connector label "Filter Pump" and Low needs to plug relay into connector labeled "Aux 1"

- For 240V from power source connect "Lines" to Relay 1, Line 1 and Relay 1, Line 2 on. Aux 1 relay connect power source to line 1

(See Figure 3 and Figure 10.1 – page 11)

RELAY SEQUENCE AND PLUG-IN
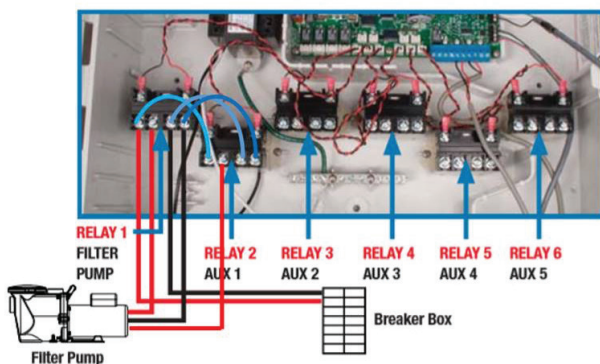
Installing Jumpers for a 2-Speed Pump

To install a 2 speed pump you must use the left two relays. Three jumpers need to be installed:
Jumper 1 – Line 1 from Relay 1 to Line 1 of Relay 2.
Jumper 2 – Line 2 from Relay 1 to Line 2 of Relay 2.
Jumper 3 – Load 2 from Relay 1 to Load 2 of Relay 2.

5.3.3 Installing Variable Speed Filter Pump

Connect power to the "Filter Pump" relay 1 (see Figure 10.2)

NOTE: Variable Speed Pumps not manufactured by Waterway Plastics should be connected directly to the breaker.

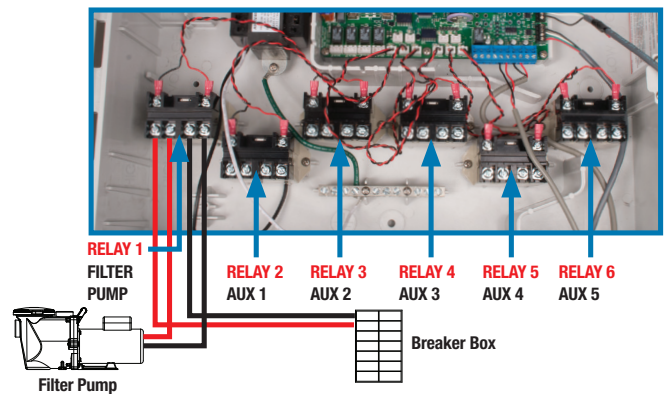**RELAY SEQUENCE AND PLUG-IN**

Figure 10.2. Relay Sequence & Plug-In

5.3.3.1 Installing Communication Cable for Variable Speed Pump

Select the correct pump manufacturer and model from Installer Setup. Connect the Communication cable to the OASIS variable speed connection terminal as shown below. (Figure 10.3)

When using Installer Setup to configure the OASIS Pool Controller for a Variable Speed pump it is important to select the correct pump.

WWVSP = PD-VSC165, PD-VSC270
WWVSP2 = PD-165, PD-225, PD-270, PD-300
Intel VSP = Pentair IntelliFlo pumps
Hayward VSP = select Hayward EcoStar VS pumps
Jandy VSP = select Jandy Pro Series VS pumps

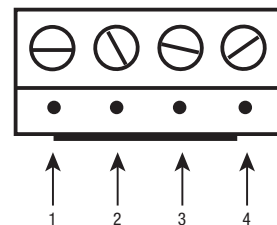**VARIABLE SPEED CONNECTION**
Left to Right Wiring

Figure 10.3

Refer to Figure 11- Figure 13 for specific wiring information
The color code and order of connections varies based on the pump manufacturer and model as shown in the following pictures.
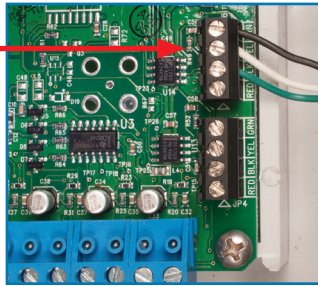
NOTE: Waterway does not assume responsibility for software changes by other pump manufacturers.

WATERWAY VARIABLE SPEED CONNECTION TO OASIS

Figure 11

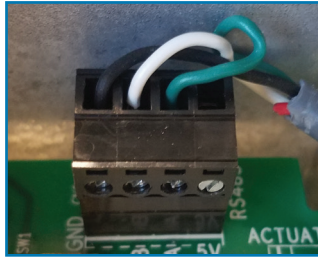**WATERWAY VSP & VSP2 CONNECTION TO OASIS**

- BLACK - NUMBER 4
- WHITE - NUMBER 3
- GREEN - NUMBER 2

OASIS WWVSP2 CONNECTION TO POWER DEFENDER 140 PUMP

Figure 11.1
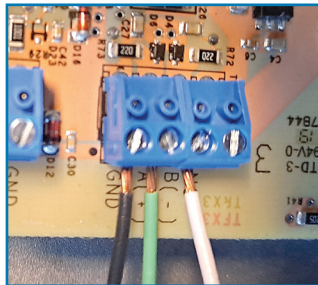
- BLACK - COM
- WHITE - B
- GREEN - A

⚠ **NOTE:** PD 140, PD 165 and PD 270 must be in 'Remote Mode' to communicate with the OASIS Pool Controller.

OASIS WWVSP2 CONNECTION TO POWER DEFENDER 165/225/270 PUMP

Figure 11.2
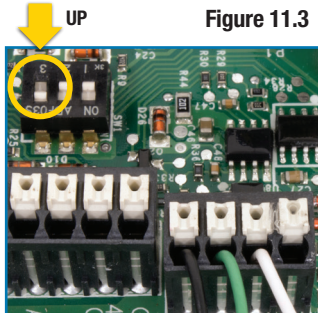
- BLACK - COM
- GREEN - A
- WHITE - B

OASIS WWVSP2 CONNECTION TO POWER DEFENDER 300 PUMP

Figure 11.3

NOTE: Switch 3 must be moved to UP position before connection to the OASIS.

- BLACK - COM
- GREEN - A
- WHITE - B

OASIS WWVSP CONNECTION TO PD-VSC165 PUMP

Figure 11.4

• BLACK - COM   • WHITE - B   • GREEN - A

OASIS WWVSP CONNECTION TO PD-VSC270 PUMP

NOTE: All DIP switches should be in off position

Figure 11.5

• GREEN - #2   • WHITE - #3   • BLACK - #4

5.3.3.2 *Installing Communication Port for Jandy Pro Series VS pump

⚠ **NOTE:** For Jandy Pro Variable Speed pumps - Please connect High Voltage from pump directly to the breaker.

JANDY PRO SERIES VSP CONNECTION

JANDY VSP CONNECTION

LEFT TO RIGHT WIRING

- BLACK - NUMBER 2
- YELLOW - NUMBER 3
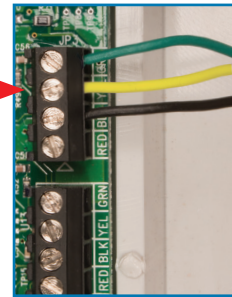- GREEN - NUMBER 4

Figure 12. Jandy Pro Series VSP Connection to Pump

5.3.3.3 *Installing Communication Port for Pentair IntelliFlo® & Hayward EcoStar®

- Be sure to turn off or disable all pump priming and timer schedules before connecting the pump to Waterway OASIS.

⚠ **NOTE:** For Pentair & Hayward Variable Speed pumps - Please connect High Voltage from pump directly to the breaker.

PENTAIR INTELLIFLO® & HAYWARD ECOSTAR® VSP CONNECTION

HAYWARD PUMP SIDE CONNECTION

PENTAIR & HAYWARD CONNECTION

LEFT TO RIGHT

- YELLOW - NUMBER 2
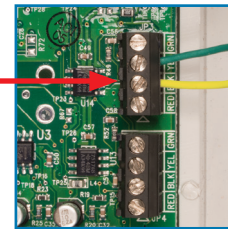- GREEN - NUMBER 3

Figure 13. Pentair IntelliFlo/Hayward EcoStar Connection to Pump

* Other pump models with the same name may be connected in the same way.

5.4 Install Waterway Valve Actuators (WVAs) (if applicable)

You may wire up to four WVAs on the OASIS. Two (2) WVAs are included in optional PS2 and PSW2 Pool/Spa kits. Additional WVAs may be required on a pool/spa configuration to control a water feature or solar panel.

NOTE: Read and follow complete installation instructions and safety information in the Waterway Valve Actuator owner's manual (included in the WVA packaging).

1. Install intake WVA and return WVA on equipment lines according to installation instructions in the owner's manual.
2. Feed intake WVA wire through the black low voltage wiring knockout.
3. Connect Intake WVA to 'J1 Intake' as shown in Figure 10.4 above.
4. Feed return WVA wire through the black low voltage wiring knockout.
5. Connect Return WVA to 'J2 Return' as shown in Figure 10.4 above.

Section 6. System Setup, Programming and Testing

All system programming and installation setup is performed through the OASIS user interface.
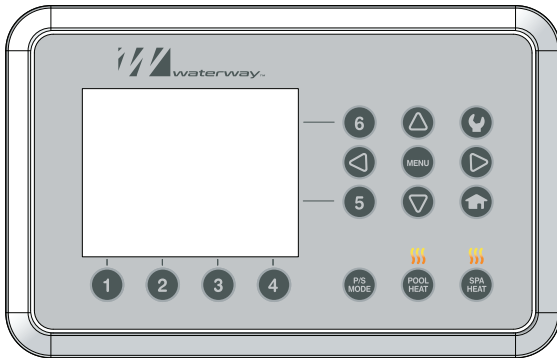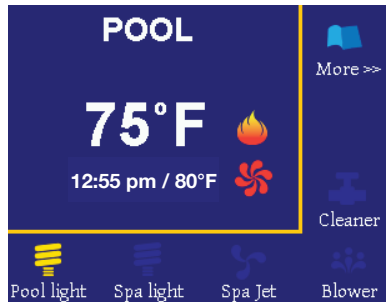

Figure 6. User Interface

Main Screen:

The main screen displays the current mode of the system, time, water temperature, air temperature, and the status of accessories (Pool Light, Blower, Booster Pump, etc).

Operation:

- **Buttons 1 to 6:** Turn accessories ON and OFF by pushing buttons 1 - 6 around the LCD display. The accessories are shown above buttons 1 - 4, and on the right of buttons 5 and 6. If there are more than 6 accessories, Button 6 will show "More>>" and when pushed, will display a new list of accessories for buttons 1 to 5.

- **P/S mode** will cycle system between "POOL – OFF" and "POOL" for a pool only system. For a Pool/Spa combo, it will cycle system between "POOL – OFF"; "POOL"; "SPILLOVER"; "SPA"; and then return to "POOL – OFF". The valves will turn and a message "Please wait 40s" will display on the panel. This message is updated every 5 seconds and it will clear when the valves completely stop in the correct position. Then the Filter pump will turn ON if the OASIS is not in "POOL – OFF" mode.

- **POOL HEAT** will cycle system between "POOL – OFF" and

"POOL" with heater enabled. Heater will turn ON one minute after Filter pump ON and if the water temperature is less than Pool Set temperature.

SPA HEAT will cycle system between "POOL – OFF" and "SPA" with heater enabled. Heater will turn ON one minute after Filter pump ON and if the water temperature is less than Spa Set temperature.

- **Up and DOWN buttons** are used to set water temperature in POOL mode. The screen will display "Pool Set Temp" with the current pool set temp. In "SPA" mode, it will display "Spa Set Temp" with the current spa set temp. After 5 seconds without any change to the set temperature, the screen will reverse back to the Main screen with current water temperature displayed.
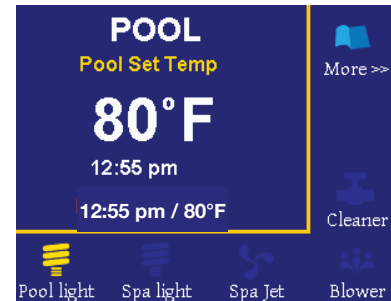
- **SERV button** will cycle the system between "Service Timeout", "Service Mode", and normal mode. "Service Timeout" immediately turns off all equipment, disables all Timers, and lasts for 3 hours. "Service Mode" turns off all equipment, disables all Timers, and lasts for 24 hours. Press a fourth time to cancel "Service Mode".

- **HOME button** return to Main screen from any other screen.

- **MENU button** used to enter the Menu setting screen and navigate between fields.

- **LEFT/RIGHT button** used to navigate under Menu screens.

Panel Timeout:

- If the user is in a menu and no button is pushed within 60 seconds, the screen will timeout, current screen settings will be lost and panel reverts back to MAIN screen.

- In MAIN screen, if no buttons are pushed within 30 minutes, the display will switch to display the Waterway Logo screen. Any button pushed during this time will reverse to MAIN screen. In Logo screen, if no buttons are pushed within 60 minutes, all LCD lights will turn off and the panel goes to sleep. Any button pushed during this time will wake the panel up and LCD lights will turn back on.

Menu Navigation:

- MENU button: used to enter settings menu and sub-menu screens. For screens with several settable fields, MENU can be used to navigate between different fields within the screen. For screens with the choice to enable or disable devices like the PARTY Mode device selection screen, MENU will be used to select or deselect the device.

- RIGHT button: most of the time this will function like the MENU

button, used to enter the settings menu and sub-menu screens. For screens with several settable fields, RIGHT can be used to navigate between different fields within the screen.

- **LEFT button:** used to go BACK to the previous screen most of the time. For screens with several fields, LEFT can be used to navigate to the previous fields within the screen or BACK to the previous screen if it is at the first field of the screen.

- **UP or DOWN button:** used to navigate between different options or change the values of a field.

- **HOME button:** used to go BACK to MAIN screen in any settings screens. All settings are saved when this button is pushed.

Enter Settings screens:

Pressing "MENU" will display: User Control, Timers, and Installer Set-up. A new system will default to the Pool only with a 1-speed pump and no accessories. Users can change these settings by entering Installer Setup.
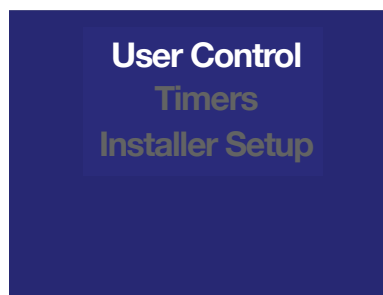
> User Control
> Timers
> **Installer Setup**
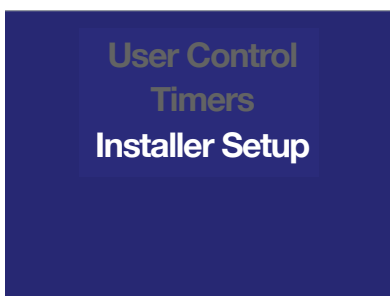
- **Installer Setup:** used for the system installer to configure the OASIS. Use UP or DOWN buttons to highlight "Installer Setup" option. After highlighting "Installer Setup", press the MENU button, then UP button, then DOWN button, to show the "Installer Setup" screen with the following options:

> **Assign Output:** use MENU or RIGHT buttons to enter the "Assign Output" screen. This screen will display two columns of information. The left column shows the physical connection label in the hardware board. The right column is the name of the accessory in the system.

- Filter Pump can be set to: 1-Speed, 2-Speed, WWVSP, Jandy VSP, Intel VSP, Hayward VSP, or WW VSP2.

- For a system with Pool/Spa, the intake and return valves must use the "J1 INTAKE" and "J2 RETURN" connector in the main board. 'J1 Intake' should be set to 'Intake' and 'J2 Return' should be set to 'Return'. For a Pool only system, these two valves can be assigned to any option.

- If the system has Solar, the solar valve must use "J3 SOLAR" and be configured for 'Solar', otherwise this valve can be assigned to any option.

- Move between items in the left column with UP and DOWN.

- Use the MENU or RIGHT button to navigate between columns.

- By default the right column shows 'Not Used'. To change this setting, use MENU or RIGHT to select the field and UP or DOWN to change the value. Example: to assign "AUX2" to "BBQ Light", navigate to "AUX2" and press RIGHT to 'Not Used'. Use UP to scroll to "BBQ Light" and then MENU or RIGHT to move to the next setting. Now "BBQ Light" will show in the Main screen and Timers menu.

- Some devices will show a secondary screen for the type of device (i.e. Pool Light or Spa Light) or the mode for that device (Pool, Spa, Spillover). Use the UP/DOWN buttons to highlight and select the option. Use the LEFT/RIGHT/MENU buttons to exit the screen.

- If any changes are made in the "Assign Output" screen, when the user exits this screen, the system will reset after 2 seconds and apply the new settings.

> **Freeze Protection:** this screen will allow the user to enable or disable Freeze Protection and set the temperature for Freeze Protection. With "Freeze Protection" highlighted, press the MENU or RIGHT button to enter the "Freeze Protection" screen. In this screen, use the LEFT/RIGHT/MENU buttons to navigate between the fields and the UP/DOWN buttons to change the values.

> **Clear All Settings:** this will clear all settings to factory default. With "Clear All Settings" highlighted, press MENU or RIGHT buttons to select the choice, then press LEFT or HOME buttons to execute. If user selects YES, the system will reset after 2 seconds to restore factory defaults.

> **Board Test:** used at Factory only. Do not execute with devices connected to the board

> User Control
> Timers
> Installer Setup

- **User Control:** settings that the user can change. Highlight "User Control" and press the MENU/RIGHT button to enter. In this screen, use the UP/DOWN buttons to highlight the desired option, then press the MENU or RIGHT button to enter. LEFT button goes back to the previous screen. There are several options under this screen:

⚠️ **NOTE:** 'Installer Setup' is necessary to configure the OASIS Pool Controller for each specific installation. Please pay special attention to the instructions above.

User Control

Vspeed Setting	**>>**
Party Mode	>>
Date-Time	>>
General Information	>>
Degree F/C	Fahrenheit
Time Display	am / pm
Heat Source	Gas

> **Vspeed Setting:** this option is selectable if the system is setup for variable speed pump. These are the speeds if the user manually presses the button. Use the MENU/LEFT/RIGHT buttons to navigate to the appropriate field, then use the UP/DOWN buttons to change the value. In this screen, "Prime" is for the start up speed of the pump from OFF stage. Set the Prime duration to zero minutes if prime is not needed.

> **Party Mode:** this is used to set up one button push that will turn on multiple devices. In this screen use the UP/DOWN buttons to select the pool mode, then press the MENU/RIGHT button to enter the accessories selection menu. In the accessories selection menu use the UP/DOWN buttons to navigate to an accessory then use the MENU/RIGHT button to select or deselect the accessory. LEFT button will go back to the previous screen.

> **Date-Time:** set up the date and time for the pool. With Date-Time highlighted, press MENU/RIGHT to enter the Date-Time setting. In this screen, pressing MENU/RIGHT will move and highlight fields that the user can change; UP/DOWN to change the values and LEFT to go back to the previous field or screen.

> **General Information:** displays general information of the pool. With General Information highlighted, press MENU/RIGHT to enter the General Information menu. Use LEFT to go back to the previous screen.

> **Degree F/C:** Select to display the pool temperature in Celsius or Fahrenheit. With Degree F/C highlighted, press MENU/RIGHT to toggle the selection between Celsius or Fahrenheit.

> **Time Display:** display pool time in am/pm or 24-hour mode. With Time Display highlighted, press MENU/RIGHT to toggle the selection between am/pm or 24-hour selection.

> **Heat Source:** this option can only be changed if a Solar valve or Heat Pump is selected in 'Assign Output', as shown below:

Assign Output		Assign Output	
Filter Pump	WW VSP2	Aux 3	Pool light
J1 Intake	Intake	Aux 4	Spa light
J2 Return	Return	Aux 5	**Heat Pump**
J4 Solar	**Solar val**	Aux 6	Not used
J4 Option	Not used	Aux 7	Not used
Aux 1	Spa Pump	Aux 8	Not used
Aux 2	Wfeat pmp	Aux 9	Not used

Then Heat Source can be configured for Gas, Solar, or Heat Pump depending on which devices are configured in 'User Control'.

User Control

Vspeed Setting	>>
Party Mode	>>
Date-Time	>>
General Information	>>
Degree F/C	Fahrenheit
Time Display	am / pm
Heat Source	**Gas**

With Heat Source highlighted, press MENU/RIGHT to choose the heat source.

> **Languages:** to select the language for the pool display. With Languages highlighted, press MENU/RIGHT to select a specific language.

> **Reset Network:** this option clears the OASIS Wifi setting. With "Reset Network" highlighted, press MENU or RIGHT buttons to select the choice, then press LEFT or HOME buttons to execute.

User Control
Timers
Installer Setup

• **Timers:** set up schedules to turn devices ON/OFF. The number of functions shown in this screen is dependent on the number of accessories that are used in the system. Highlight the "Timers" selection and press the MENU/RIGHT button to enter the setting. In this screen, use the UP/DOWN buttons to highlight the desired function, then press the MENU/RIGHT button to enter. LEFT button will go back to the previous screen.

There are four schedules for each function that the user can set, MENU/RIGHT will move to the next field, LEFT will move to previous field or previous screen, and UP/DOWN will change the value of a highlighted field.

All schedules are defaulted to OFF and changed to ON if the schedule duration is set to a non-zero time and with a date selected. Any function that requires the main pump to turn on will show the Speed setting for the pump in the schedule.
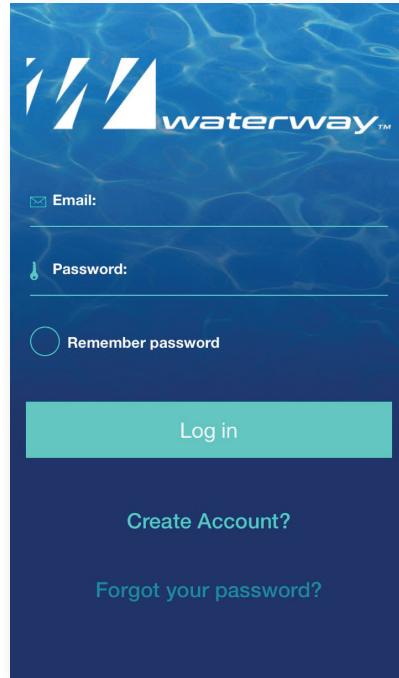
waterway™

2200 East Sturgis Road, Oxnard CA 93030 • **Phone 805.981.0262** • Fax 805.981.9403
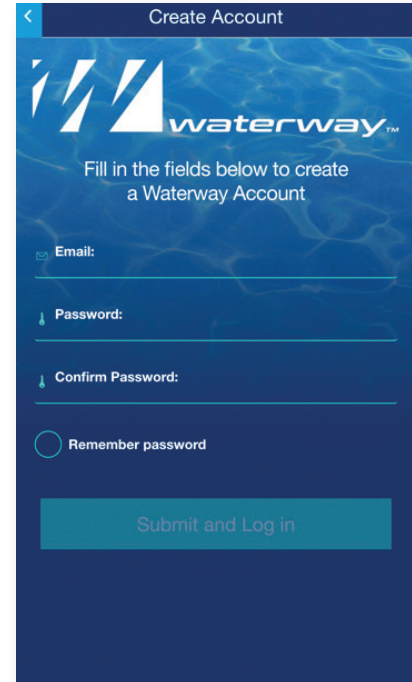waterway@waterwayplastics.com • **www.waterwayplastics.com**

Designed,
Engineered &
Manufactured
in the USA.

Waterway OASIS Pool Control Wi-Fi Operation Instruction
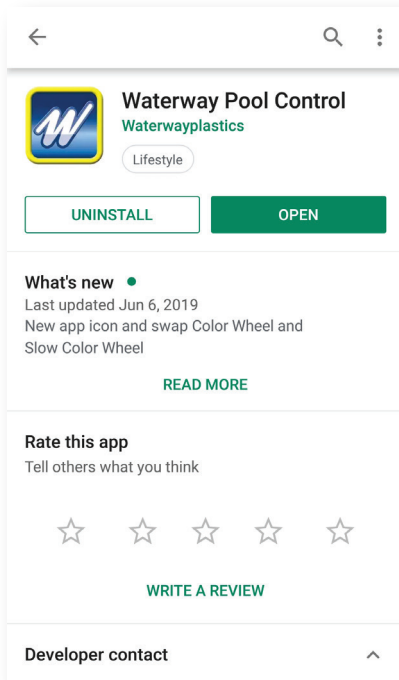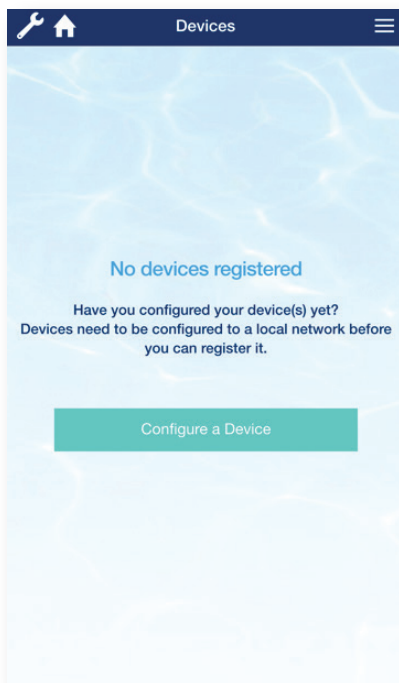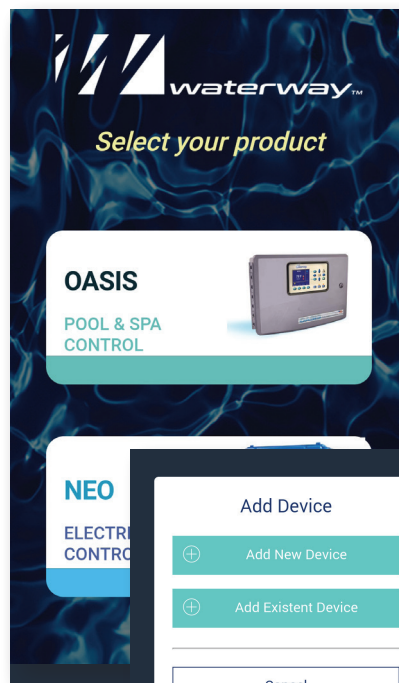

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For Homeowner/Installer

1. Download and install the app from the App Store or Google Play.

   Note: Any users who want to control this same pool need to login with this same email address and password.

2. Select **Create Account**.

3. Enter your email address, password, confirm your password and select **Submit**.

4. Select on **Configure Device**.

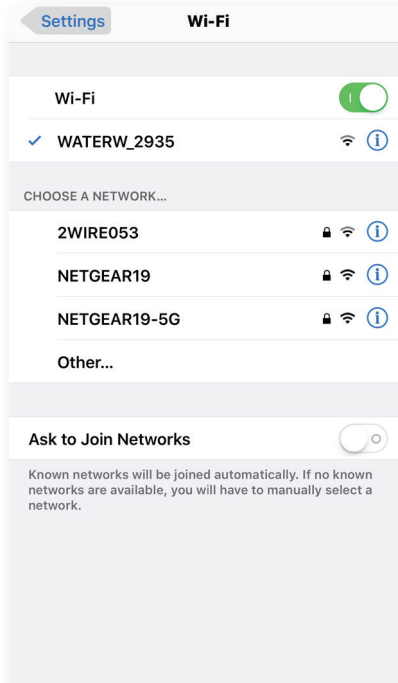5. Select OASIS, then select **Add New Device**.

NOTE: If a new network has recently been installed, delete the current Device and reconfigure using 'Add New Device' to connect to the new network.

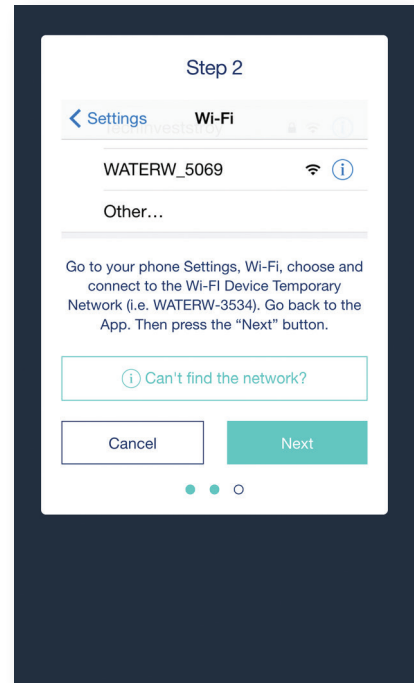# Waterway OASIS Pool Control Wi-Fi Operation Instruction
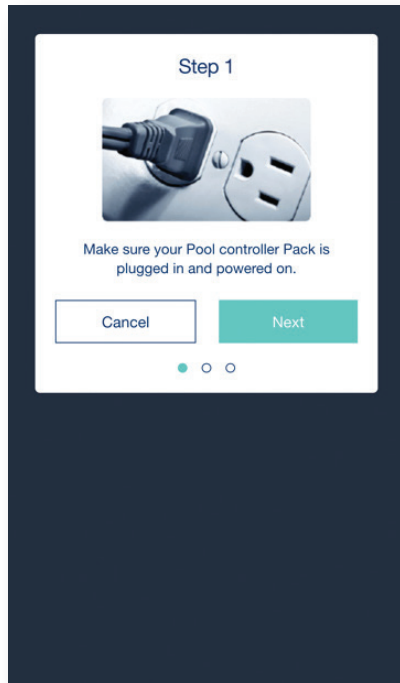
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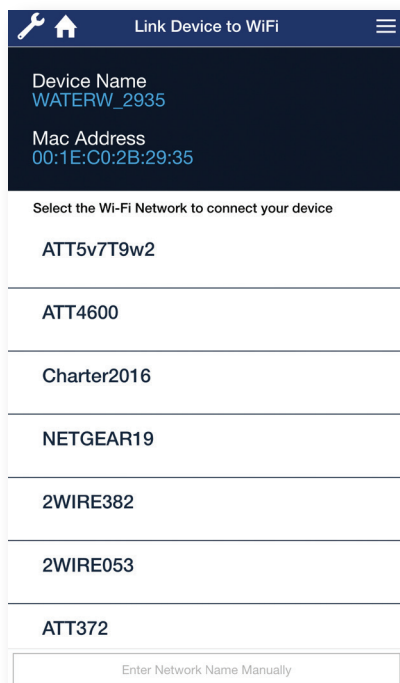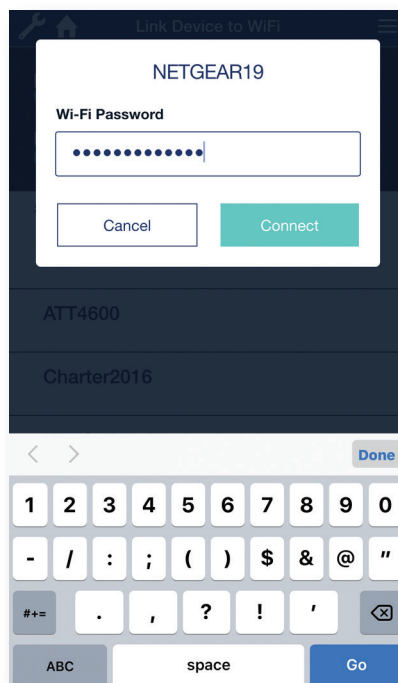

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6. Make sure your Pool Control is powered on and select **Next**.

7. Go to your phone setting, **Wi-Fi**, and connect to the **Waterway Wi-Fi network**. For example: 'WATERW-XXXX'.

8. Go back to the app, select **Next**.

9. Select your 2.4 Ghz home network from the list (if your network name is not listed, it can be entered manually).

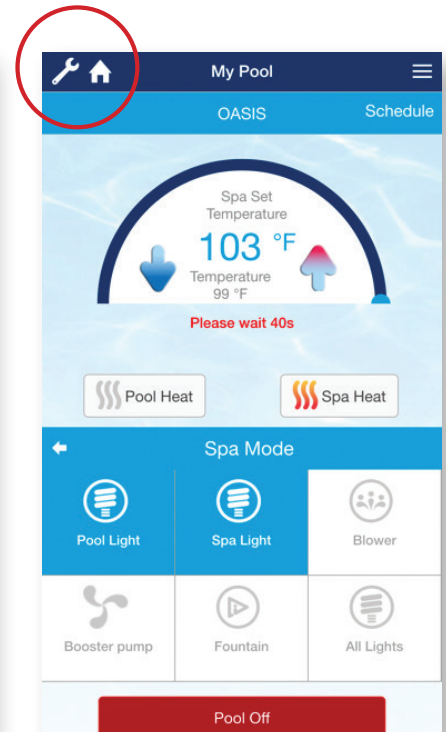**10.** Enter your home network password and select **Connect**.

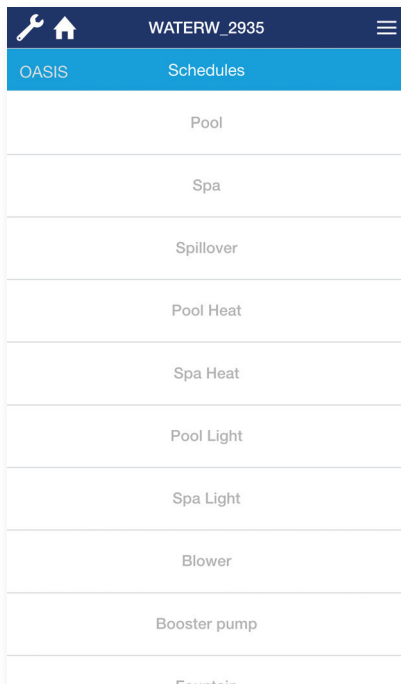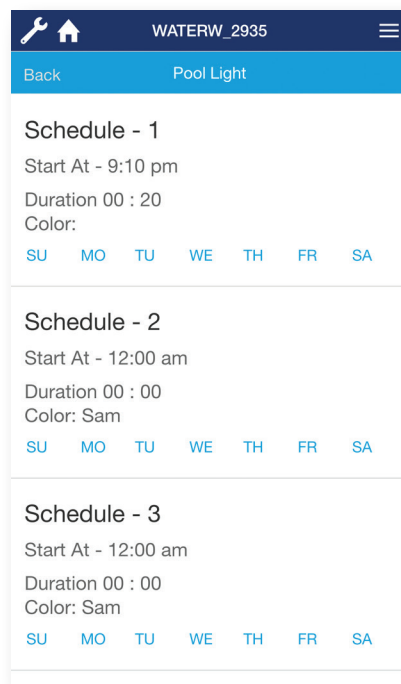# Waterway OASIS Pool Control Wi-Fi Operation Instruction
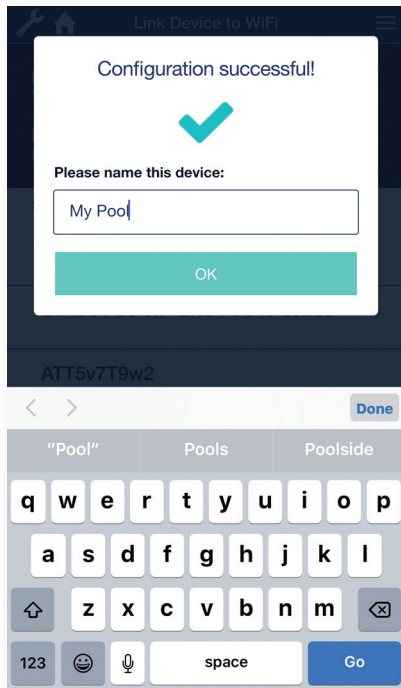
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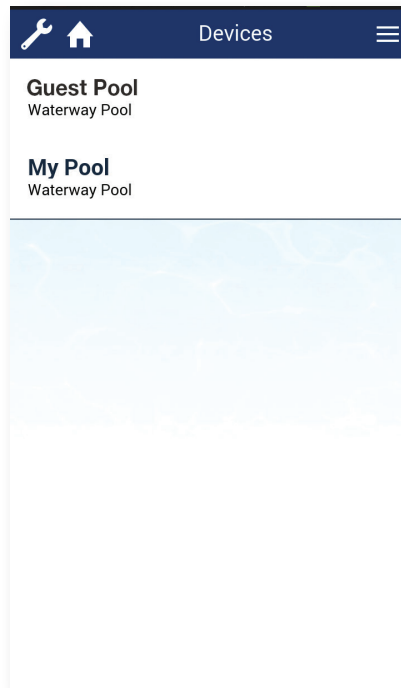
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11. Then the device will configure and connect to your 2.4 Ghz home Wi-Fi network and the Web. Type a name for the device and select **OK**.

12. Select a device from the list, for example: **My Pool**

13. Now you can control your pool from anywhere in the world using your smart phone. You can set the temperature, heating operation mode and turn the light ON/OFF.
In order to access the application menu select the **wrench icon** in top left corner.

14. To access Scheduling select **Schedules**. Select pool function that you would like to schedule, for example: **Pool Light**.
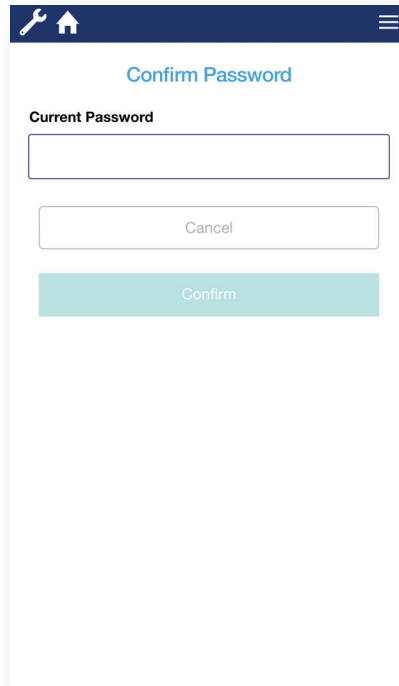
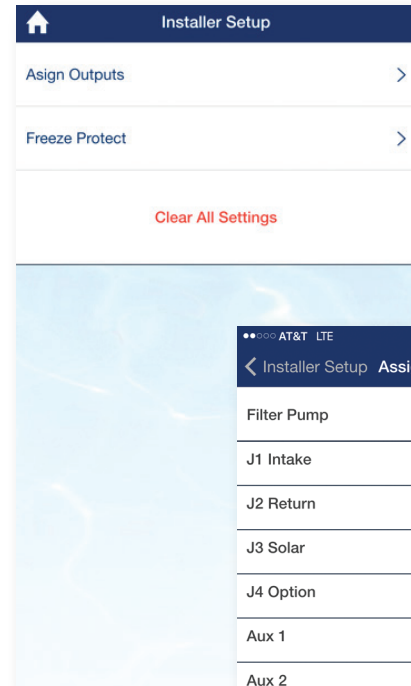**15.** You may program up to 4 schedules for selected functions.
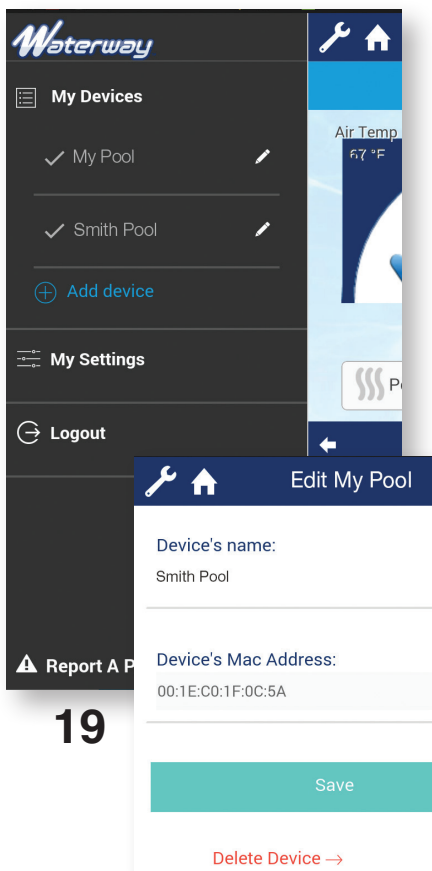
Waterway OASIS Pool Control Wi-Fi Operation Instruction

Device Settings

Vspeed
Setup for variable speed pump

Party Mode
Set one button to turn on multiple out...

Date-Time
Set the date and time of the pool

Other Settings
Setup Degrees, Time Display, Heat a...

General Information

Schedule · Spa Heat · Blower · All Lights · Installer Setup

16

Confirm Password

Current Password

Cancel

Confirm

17

Installer Setup

Assign Outputs

Freeze Protect

Clear All Settings

●●○○○ AT&T LTE   2:42 PM
‹ Installer Setup **Assign Outputs**

Filter Pump	Intel VSP
J1 Intake	Intake
J2 Return	Return
J3 Solar	Solar valve
J4 Option	Not used
Aux 1	Pool Light
Aux 2	Spa Light
Aux 3	Blower
Aux 4	Booster pump

18

Waterway

My Devices

✓ My Pool
✓ Smith Pool
⊕ Add device

Air Temp
67 °F

My Settings

Logout

⚠ Report A P...

Edit My Pool

Device's name:
Smith Pool

Device's Mac Address:
00:1E:C0:1F:0C:5A

Save

Delete Device →

19

Enter Device's Name:

Enter Device's Mac Address:

☐ : ☐ : ☐ : ☐ : ☐ : ☐

Enter Device's Owner Email :
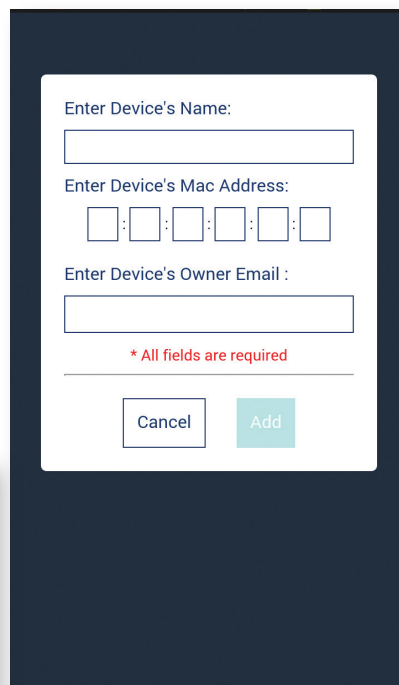
* All fields are required

Cancel   Add

20

For the Installer

16. To access device settings select the **menu icon** in the top right corner. To access **Installer Setup** select the icon at the bottom of the screen.

17. Enter password: **waterway2016** in the **Current Password** box.

18. Installer Setup. Select **Assign Output** to configure output.

To Monitor Client Pool

19. Start the Waterway app from the installer phone. Select the **wrench icon**. Select **Add Device** and **Add Existent Device (**See #5**).** You will need the MAC Address of the client pool. From the client mobile app select the **pencil icon** next to the selected device to see MAC address.

20. Enter the new device's name, the MAC address and Device Owner Email. Select **Add.**

OASIS Wi-Fi Configuration Guide

Installation Guidelines:

- The OASIS Wifi module should be at least 10 feet away from any motors or other heavy duty electrical devices.
- For the most reliable operation, the distance between the router in the pool owner's residence and the Waterway Wi-Fi module should not exceed 100 feet.
- If the distance above is greater than 100 feet, a Wi-Fi repeater can be installed in the pool owner's residence at a convenient location nearest the pool area.
- **Please make certain you use a 2.4 Ghz network and not a 5 Ghz network.**

Troubleshooting Tips:

If you have a new router or are getting a 'No Internet Connection' error, please use the guidance below to reconnect the Waterway Pool Control App to the OASIS Pool Controller.

1. If the App is not starting, try using Mobile Internet instead of Wifi

2. If the App is not connecting, try closing the App completely, then relaunching the App.

3. If the App is still not working, try Logging Out of the App, then logging back in. (If you do not remember your password select the 'Forgot Password' link and enter your email address. An email will be sent to you with instructions.)

4. If there is still no connection - Turn Off the OASIS at the breaker. Wait 1 minute. Turn On the OASIS at the breaker. Wait 1 minute. Test the connection to the App.

5. If Step 4 does not work, try turning off your home Router, turn it back on, wait 5 minutes, the test the connection to the App. If none of the above work, it may be necessary to reconfigure the Wifi for the OASIS. In order to do so, please follow these steps.

6. There are five main steps to re-connect the OASIS to Wifi.

a. Delete Device
- Select the pencil to the right of the name of your pool.
- Select and confirm Delete Devices.

b. Configure a New Device
- Configure a Device
- Add New Device
- At Step 3, stop and open network settings on your phone.

c. Reset Network
- On the OASIS
- Press MENU
- Select User Control
- Press RIGHT
- Press UP
- Press RIGHT to change Reset Wifi to Yes
- Press LEFT three time slowly to return to the main screen

d. Connect to the 'WaterW_…' network
- In the Wifi settings of your phone, select the WaterW network
- Allow it a few moments to completely connect

e. Return to the Waterway App
- Press Next
- Select your home network.
- Carefully type in the password for your home network.
- Wait patiently for the App to configure the Wifi of the OASIS

After configuration is successful, you can rename the Pool Controller if you would like.

Waterway OASIS Pool Control Wi-Fi Troubleshooting Guide

1. Install the Waterway Wi-Fi module at least 10 feet away from any motors or other heavy duty electrical devices near the pool.

2. For the most reliable operation, the distance between the router in the pool owner's residence and the Waterway Wi-Fi module should not exceed 100 feet.

3. If the distance above is greater than 100 feet, a Wi-Fi repeater can be installed in the pool owner's residence at a convenient location nearest the pool area.

4. Cables may be available from Waterway to allow the Waterway Wi-Fi module to be installed closer to the router in the pool owner's residence.

5. Use only 2.4 GHz networks. DO NOT use 5 GHz Networks.

6. If the initial setup process on the customer's phones is not successful, do the following, and wait approximately 60 seconds before trying again.
   From the pool control's topside main menu, select in succession:
   a. User Controls
   b. Reset Network
   c. Yes
   d. Press HOME button