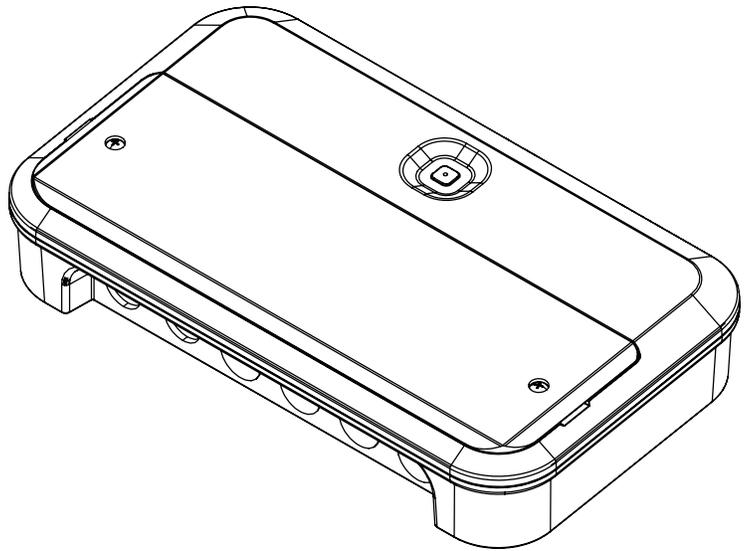# PENTAIR POOL

INTELLIVIBE™
POOL AND SPA LIGHT CONTROLLER

INSTALLATION AND USER GUIDE

IMPORTANT SAFETY INSTRUCTIONS
READ AND FOLLOW ALL INSTRUCTIONS
SAVE THESE INSTRUCTIONS

Digital copies of all IntelliVibe manuals can be found at www.pentair.com, or by scanning the provided QR code.

Se pueden encontrar copias digitales de todos los manuales de IntelliVibe en www.pentair.com, o escaneando el código QR proporcionado.

Des copies numériques de tous les manuels IntelliVibe peuvent être trouvées sur www.pentair.com, ou en scannant le code QR fourni.

IMPORTANT SAFETY INSTRUCTIONS

IMPORTANT NOTICE

This guide provides installation and operation instructions for this equipment. Consult Pentair with any questions regarding this equipment.

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

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

READ AND FOLLOW ALL INSTRUCTIONS
SAVE THESE INSTRUCTIONS

This is the safety alert symbol. When you see this symbol on your system or in this manual, look for one of the following signal words and be alert to the potential for personal injury.

⚠ DANGER Warns about hazards that will cause death, serious personal injury, or major property damage if ignored.

⚠ WARNING Warns about hazards that can cause death, serious personal injury, or major property damage if ignored.

⚠ CAUTION Warns about hazards that can cause minor personal injury or property damage if ignored.

NOTE Indicates special instructions not related to hazards.

Carefully read and follow all safety instructions in this manual and on equipment. Keep safety labels in good condition; replace if missing or damaged.

⚠ WARNING Before installing this product, read and understand all included warning notices and instructions. Failure to follow safety warnings and instructions can result in severe injury, death, or property damage. Call (800) 831-7133 for additional free copies of these instructions, or obtain a copy of these instructions at www.pentair.com.

⚠ WARNING Do not permit children to use this product.

⚠ WARNING This equipment should only be installed and/or serviced by a qualified professional.

⚠ WARNING Most states and local codes regulate the construction, installation, and operation of public pools and spas, and the construction of residential pools and spas. It is important to comply with these codes, many of which directly regulate the installation and use of this product. Consult your local building and health codes for more information.

⚠ WARNING RISK OF ELECTRICAL SHOCK OR ELECTROCUTION! Always disconnect power at the circuit breaker before installing or servicing this equipment. Failure to do so could result in death or serious injury due to electrical shock.

This product must be installed by a licensed or certified electrician or other qualified professional in accordance with the current National Electrical Code (NEC), NFPA 70 or the Canadian Electrical Code (CEC), CSA C22.1. All applicable local installation codes and ordinances must also be adhered to. Improper installation will create an electrical hazard which could result in death or serious injury due to electrical shock, and may also cause damage to property.

⚠ CAUTION FOR INSTALLATION OF SYSTEM CONTROLS AT EQUIPMENT PAD (ON/OFF SWITCHES, TIMERS, AUTOMATION CONTROLLERS, VALVES, ETC.): Install all system controls at equipment pad in a way that allows the user to service or operate the system without placing any portion of their body over or near the pump strainer lid, filter lid or valve closures. This installation should allow the user enough space to stand clear of the filter and filter pump during system start-up, shut down or servicing.

General Installation Information

1. All work must be performed by a qualified professional, and must conform to all applicable national, state, and local codes.

2. Ensure install location provides proper drainage around electrical components.

3. This equipment is not provided with integral Ground Fault Circuit Interrupters (GFCI) protection. When this equipment is used to power or switch an underwater luminaire, suitable GFCI protection shall be provided in the field. Luminaire circuit conductors shall not occupy the conduit, boxes or enclosures with other circuits unless the other circuits are also GFCI protected.

4. The electrical supply for this product must include a suitably rated switch or circuit breaker to open all ungrounded supply conductors to comply with in accordance with the current National Electrical Code (NEC), NFPA 70 or the Canadian Electrical Code (CEC), CSA C22.1. All applicable local installation codes and ordinances must also be adhered to. The disconnecting means must be readily accessible to the user but installed at least 10 ft. [3.1 m] from the inside wall of the pool.

IMPORTANT SAFETY INSTRUCTIONS

Ensure the pool electrical system meets all requirements of the National Electrical Code (NEC), and all local codes and ordinances. A licensed or certified electrician must install the electrical system to meet or exceed those requirements before the controller is installed. The electrician should also consult the local building department regarding local codes. Some of the NEC requirements are listed below:

- The controller must be installed by a qualified electrician, according to the National Electrical Code (including article 680) or Canadian Electrical Code (including section 68) and, local code requirements. For Canadian installations, supply circuit must be protected by a ground fault circuit interrupter.

- The controller must be provided with a fail-proof ground as required by NEC, Article 680 and any applicable local codes For Canadian installations, the supply circuit must be protected by a ground fault circuit interrupter.

- Do not install the controller within 5 feet [1.5 meters] in the United States, or within 10 feet [3 meters] in Canada, of any body of water. USE COPPER CONDUCTORS ONLY.

- The controller should be mounted at least 1 foot [0.3 meters] above the water and ground level.

- Do not exceed the maximum ratings of individual components, wiring devices, and current carrying capacity of conductors.

- For grounding and bonding the controller and the installation, refer to section 680 of the National Electrical Code or section 68 of the Canadian Electrical Code.

- The lighting circuit must have a Ground Fault Circuit Interrupter (GFCI), and an appropriately rated circuit breaker.

- Do not submerge the controller.

FCC Standard - 47 CFR Part 15, Subpart C (Section 15.247). This version is limited to chapter 1 to chapter 11 by specified firmware controlled in the USA.

Instruction to user - This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

In order to maintain compliance with FCC regulations, shielded cables must be used with this equipment. Operation with non-approved equipment or unshielded cables is likely to result in interference to radio and TV reception. The user is cautioned that changes and modifications made to the equipment without the approval of the manufacturer could void the user's authority to operate this equipment.

Canada - Industry Canada (IC) Regulatory Notice: - This device complies with RSS210 of Industry Canada. (1999).

Under Industry Canada regulations, this radio transmitter may only operate using an antenna of a type and maximum (or lesser) gain approved for the transmitter by Industry Canada. To reduce potential radio interference to other users, the antenna type and its gain should be so chosen that the equivalent isotropically radiated power (e.i.r.p.) is not more than that necessary for successful communication. This device complies with Industry Canada licence-exempt RSS standard(s). Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.

Conformément à la réglementation d'Industrie Canada, le présent émetteur radio peut fonctionner avec une antenne d'un type et d'un gain maximal (ou inférieur) approuvé pour l'émetteur par Industrie Canada. Dans le but de réduire les risques de brouillage radioélectrique à l'intention des autres utilisateurs, il faut choisir le type d'antenne et son gain de sorte que la puissance isotrope rayonnée équivalente (p.i.r.e.) ne dépasse pas l'intensité nécessaire à l'établissement d'une communication satisfaisante. Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes : (1) l'appareil ne doit pas produire de brouillage, et (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

CUSTOMER SERVICE / TECHNICAL SUPPORT

Hours: 9:00AM to 7:00PM EST (6:00AM - 4:00PM PST)

Call: (800) 831-7133

Visit: www.pentair.com

Fax: (800) 284-4151
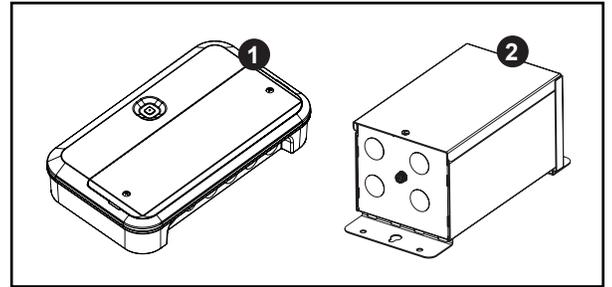
TABLE OF CONTENTS

GENERAL FEATURES

- Supports up to four outputs.
- The Pentair Pool app allows independent control and customization of up to four light "zones".
- Bluetooth® and WiFi connectivity.
- 14 VAC, 50/60 Hz Input from PS300 Transformer.
- Controller is rated for a maximum of 200 Watts. Individual outputs are rated for a maximum of 100 Watts.
    Note: **Do NOT exceed the controller max load of 200 Watts.**

REQUIRED COMPONENTS

1. **IntelliVibe Light Controller:** Wiring hub for up to four light junction boxes.
   The controller communicates with smart devices via a Bluetooth wireless connection and Pentair Pool app, allowing control and programming of up to four light zones.
2. **PS300 Light Transformer** *(P/N 619963)*: Low voltage transformer designed to supply 14 VAC power to the controller.
    Note: Refer to the *PS100/PS300 Installation Guide (P/N 619965)* for specific transformer installation and wiring instructions.
3. **IntelliCenter Pool Control System:** An IntelliCenter control system is required to install and operate an IntelliVibe controller. Before IntelliVibe can be added to a Pentair Pool app account, it must first detect an IntelliCenter on the same account.
4. **Junction Boxes:** Joins all lights within a desired zone into one outgoing cable.
5. **Mounting Hardware:** Screws, anchors, and other mounting hardware are not provided with the controller or transformer.
6. **Electrical Conduit and Fittings:** IntelliVibe Controller and PS300 are sized for 1/2-inch trade size electrical conduit.

COMPATIBLE LIGHTS

The IntelliVibe Controller is only compatible with IntelliVibe Micro, IntelliVibe Nano and IntelliVibe Mezzo LED lights. Refer to the **TABLE 1** below for light part numbers.

TABLE 1	
602278	IntelliVibe Micro, 50 ft. cable
620279	IntelliVibe Micro, 100 ft. cable
620280	IntelliVibe Micro, 150 ft. cable
602281	IntelliVibe Mezzo, 50 ft. cable
602282	IntelliVibe Mezzo, 100 ft. cable
602283	IntelliVibe Mezzo, 150 ft. cable
602268	IntelliVibe Nano, 50 ft. cable
602269	IntelliVibe Nano, 100 ft. cable
602270	IntelliVibe Nano, 150 ft. cable

INSTALLATION

This section describes IntelliVibe Controller installation and wiring. For specific light installation and wiring instructions, refer to the appropriate light installation manual(s).

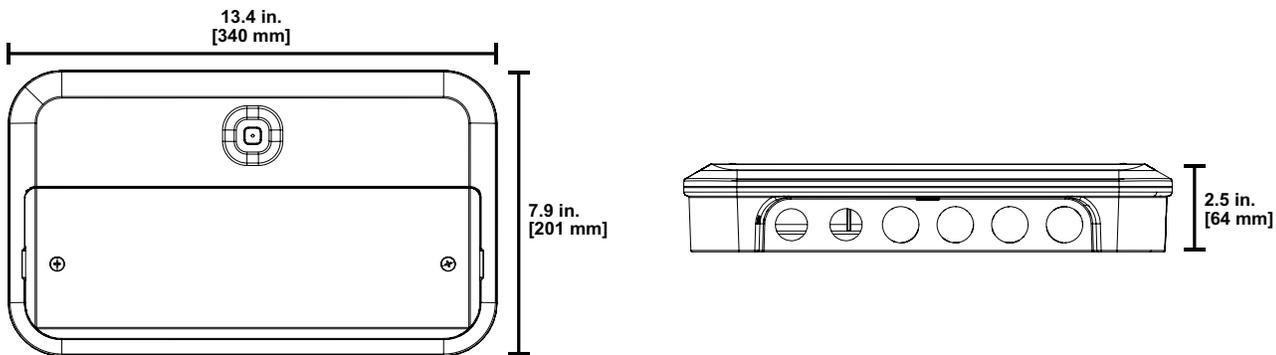|	
⚠️ **WARNING**	**RISK OF ELECTRIC SHOCK, WHICH CAN RESULT IN SERIOUS INJURY OR DEATH.** Before attempting installation or service, ensure that all power to the circuit is disconnected at the main breaker panel.
⚠️ **CAUTION**	**FOR INSTALLATION OF SYSTEM CONTROLS AT EQUIPMENT PAD (ON/OFF SWITCHES, TIMERS, AUTOMATION CONTROLLERS, VALVES, ETC.):** Install all system controls at equipment pad in a way that allows the user to service or operate the system without placing any portion of their body over or near the pump strainer lid, filter lid, or valve closures. This installation should allow the user enough space to stand clear of the filter and filter pump during system start-up, shut down or servicing.

GENERAL INSTALLATION GUIDELINES

- Read and understand all instructions and safety information before installing the controller.
- Before installing the controller, ensure power to the transformer is disconnected at the main breaker panel.
- Installation should only be performed by a qualified professional.
- The controller must be installed on a flat, vertical surface. Installing the controller horizontally or on a sloped surface may result in damage to the control board.
- Ensure the controller is installed so that power and light knockouts are facing downwards. Installing the controller upside down or at an angle may result in damage to the control board.
- Always reinstall the wiring cover before leaving the controller unsupervised for any amount of time.
- Ensure the provided knockout plugs are installed in any unused wiring knockouts.

CONTROLLER DIMENSIONS

13.4 in. [340 mm]

7.9 in. [201 mm]

2.5 in. [64 mm]

CHOOSING AN INSTALL LOCATION

Before permanently installing the controller, ensure the desired install location meets the following requirements:
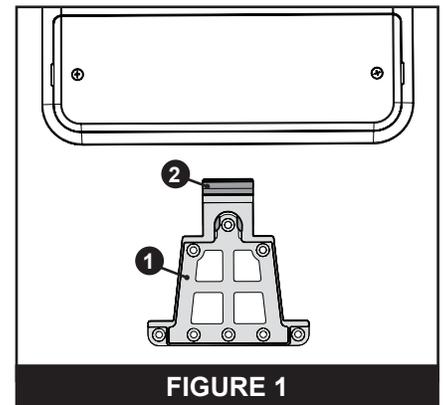
- The *Mounting Bracket (1)* will be installed so that controller wiring knockouts are facing downwards. Refer to **FIGURE 1** for correct bracket orientation.
- Controller will receive an adequate 2.4 GHz WiFi signal. To help ensure adequate signal strength;
    a. Reposition the home router as close to the controller, and with as few obstructions, as possible.
    b. Install a WiFi signal extender or mesh node as close to the controller as possible.
- Light and power cables can reach the controller.
- Controller will be no further than 150 feet [45.7 m] from the farthest light.
- There will be sufficient room for servicing or maintenance.
- Controller will be a minimum of 5 feet [1.5 m] from the nearest edge of the pool or spa.

MOUNTING THE CONTROLLER

The controller includes a separate mounting bracket that must be installed onto a solid wall that fully covers the backside of the controller.

1. Using at least two 1/4-inch pan-head or flat-head screws 3/16-inch maximum head thickness, secure the *Mounting Bracket (1)* to the mounting surface.

    Note: Mounting hardware is not provided with the controller and must be provided by the installer.

2. Place the controller onto the *Mounting Bracket (1)*.

3. Push the *Locking Wedge (2)* downwards until it clicks into place. The locking wedge secures the controller to the mounting bracket.

FIGURE 1

WIRING POWER TO THE CONTROLLER

⚠️ **WARNING** | **RISK OF ELECTRIC SHOCK, WHICH CAN RESULT IN SERIOUS INJURY OR DEATH.** Before attempting installation or service, ensure that all power to the circuit is disconnected at the main breaker panel.

The controller requires 14 VAC to power the controller and connected lights. Follow the instructions and wiring diagram below to properly connect power to the controller.

FIGURE 2

1. **Ensure all power to the transformer is disconnected at the main breaker panel.**

2. Loosen the two Philips-head *Wiring Cover Screws (1)*. Refer to **FIGURE 2**.

3. Gently insert a flathead screwdriver into one of the *Reliefs (2)* in the *Wiring Cover (3)* and remove the cover. Refer to **FIGURE 2**.

4. Connect 120 VAC power from the main breaker panel to a PS300 Transformer.
   Refer to the *PS100/PS300 Transformer Installation Guide (P/N 619965)* for specific wiring instructions.

5. Using 12 AWG 2-wire cable, route 14 VAC power through 1/2-inch PVC electrical conduit and into the controller. Refer to **TABLE 2** for maximum run distances.

    Note: 10 AWG wiring may be used, but a ring or fork terminal must be installed.

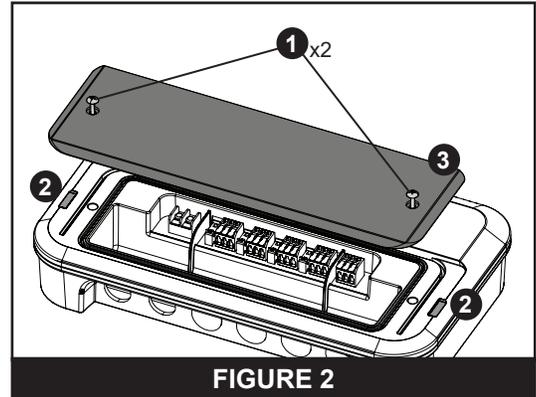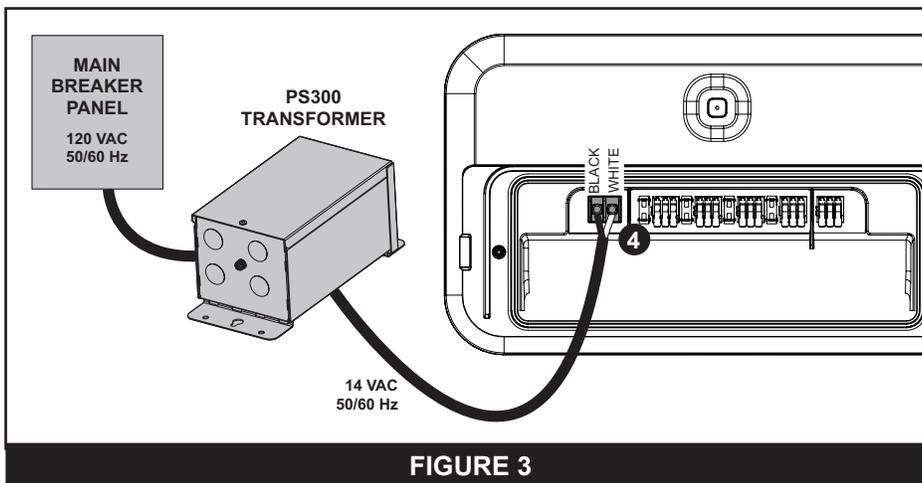6. Connect power to the *Main Power Terminal (4)* according to **FIGURE 3**.

FIGURE 3

TABLE 2	
WIRE SIZE	**MAXIMUM DISTANCE**
12 AWG	15 ft.
10 AWG	25 ft

WIRING LIGHTS TO THE CONTROLLER

> **⚠ WARNING** **RISK OF ELECTRIC SHOCK, WHICH CAN RESULT IN SERIOUS INJURY OR DEATH.** Before attempting installation or service, ensure that all power to the circuit is disconnected at the main breaker panel.

The controller features four Output Terminals. Only one set of wires can be wired to each output terminal. This means that before a group of lights can be connected to an output terminal at the controller, the lights must be joined together at a junction box.
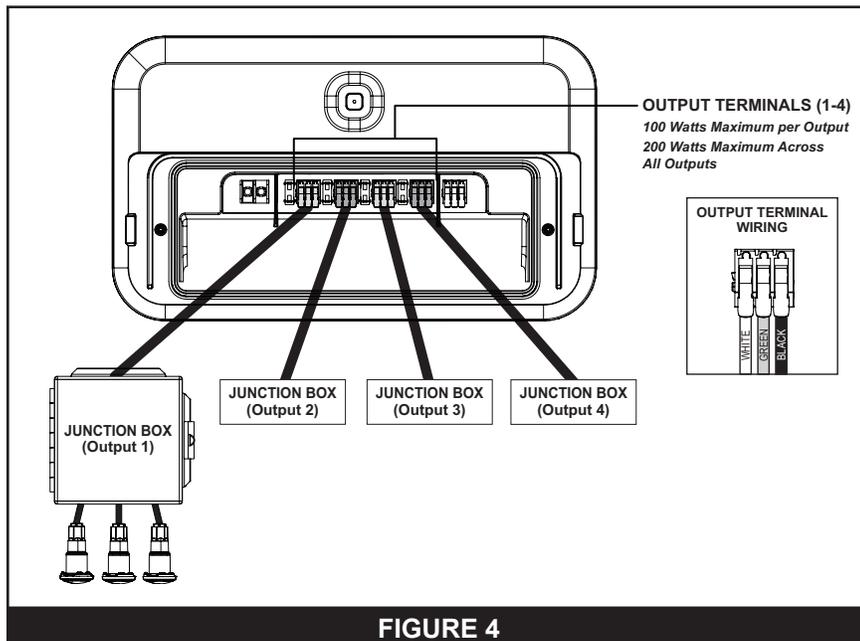
BEFORE WIRING THE CONTROLLER:

1. Calculate total wattage of lights on each output and ensure is does not exceed the 100 watt max load of an output terminal. Refer to **TABLE 3** light wattages.

2. Calculate total wattage of lights across all outputs and ensure it does exceed the 200 watt max load of the controller. Refer to **TABLE 3** light wattages.

TABLE 3			
LIGHT MODEL	**WATTAGE**	**LIGHTS PER OUTPUT (100 W MAX)**	**LIGHTS PER CONTROLLER (200 W MAX)**
Nano	2 W	40	100
Micro	12 W	8	16
Mezzo	24 W	4	8

WIRING OUTPUT 1 TO THE CONTROLLER (FIGURE 4):

1. **Ensure all power to the transformer is disconnected at the main breaker panel.**

2. **If connecting multiple lights to Output 1:** Join all lights inside a junction box.

    If connecting a single light to Output 1: Run light cable into the controller and skip to Step 4.

    Note: The green wire is a communication wire and is not intended for grounding. All three wires must be connected to the controller output.

3. Run 12 AWG 3-wire cable from the junction box and through the appropriate knockout in the bottom of the controller.

    Note: The maximum wire size for output terminals is 12 AWG solid or stranded wire.

    Note: Ensure knockout plugs are installed into any unused knockouts.

4. Strip 1-1/2 inches [38 mm] of the outer jacket from the cable.

5. Strip 3/8 inch [9.5 mm] from the end of each wire.

6. Lift the three orange levers on Output Terminal 1.

7. Following the wiring scheme shown in **FIGURE 4**, insert each wire into Output Terminal 1 and press down the orange levers to secure the wires in place.

8. Lightly pull on each wire to confirm they are properly secured

9. If necessary, repeat the steps above for additional outputs.

10. Reinstall the wiring cover and reestablish power to the controller.

FIGURE 4

LIGHT MANUALS

Nano

Micro

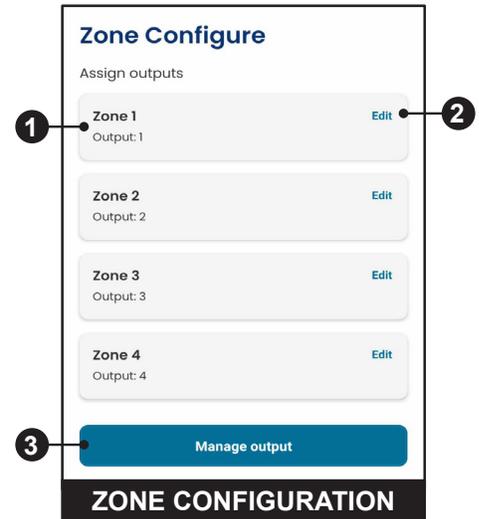Mezzo

PAIRING CONTROLLER TO PENTAIR POOL APP

1. Sign into the Pentair Pool app.

2. The Home Dashboard screen will display.
   Tap the POOLS icon (🐊) at the bottom of the screen.

3. The Pools screen will display.
   Tap the ADD DEVICE icon (⊕).

4. The Device Setup screen will display.
   Tap INTELLIVIBE and follow the on-screen instructions to complete Bluetooth® pairing, WiFi pairing and initial controller setup.

ZONE CONFIGURATION

A Zone is a group of lights from one or more controller outputs that will react in unison to a command given in the Pentair Pool app.

Tap the Settings icon (⚙) in the top-right corner of any Color Mode screen. This will open the Device Settings screen. Then tap ZONE CONFIGURE to open the Zone Configuration screen.

1. **ZONE OUTPUTS:** Lists outputs paired to each light zone. When a zone is activated in the app, lights wired to these outputs will activate.

2. **EDIT:** Change the name of a zone or add/remove outputs to a zone.

3. **MANAGE OUTPUTS:** Select which outputs appear in the various app screens. Use this feature to remove any unused outputs.

Zone Configure

Assign outputs

① Zone 1 — Output: 1 — Edit **②**

Zone 2 — Output: 2 — Edit

Zone 3 — Output: 3 — Edit

Zone 4 — Output: 4 — Edit

③ Manage output

ZONE CONFIGURATION

BUTTON FUNCTIONS AND LED BEHAVIOR

The button on the front of the controller can be used to manually give several basic commands. The command that is given depends on how long the button is held down. Refer to **TABLE 4** for a list of these functions.

The button's LED backlight indicates various controller statuses and conditions. Refer to **TABLE 5** to determine what specific LED behaviors indicate.
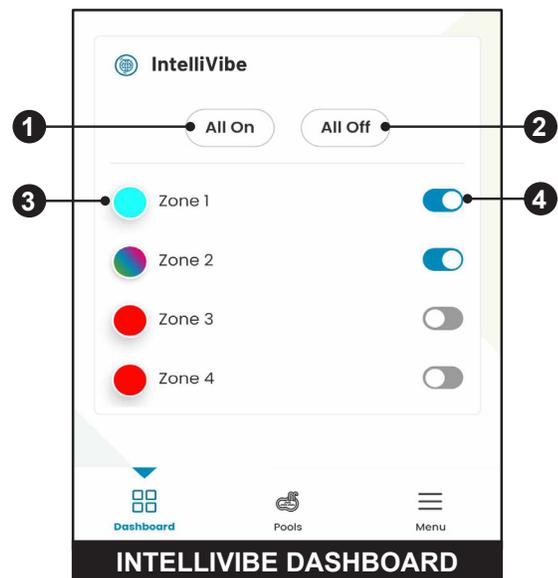
TABLE 4		
FUNCTION	**ACTION**	**LED COLOR**
LIGHTS ON/OFF	**Quick Press**	Cyan
WIFI / BLUETOOTH PAIRING	**Press and Hold** (1-10 Seconds)	Yellow
SYSTEM REBOOT	**Press and Hold** (11-15 Seconds)	Cyan
FACTORY RESET*	**Press and Hold** (16+ Seconds)	Yellow

Note: After a factory reset, IntelliVibe must be removed your smartphone's connected devices list, then re-paired.

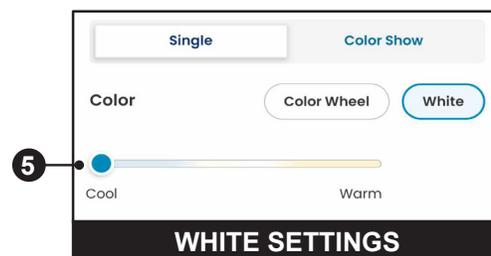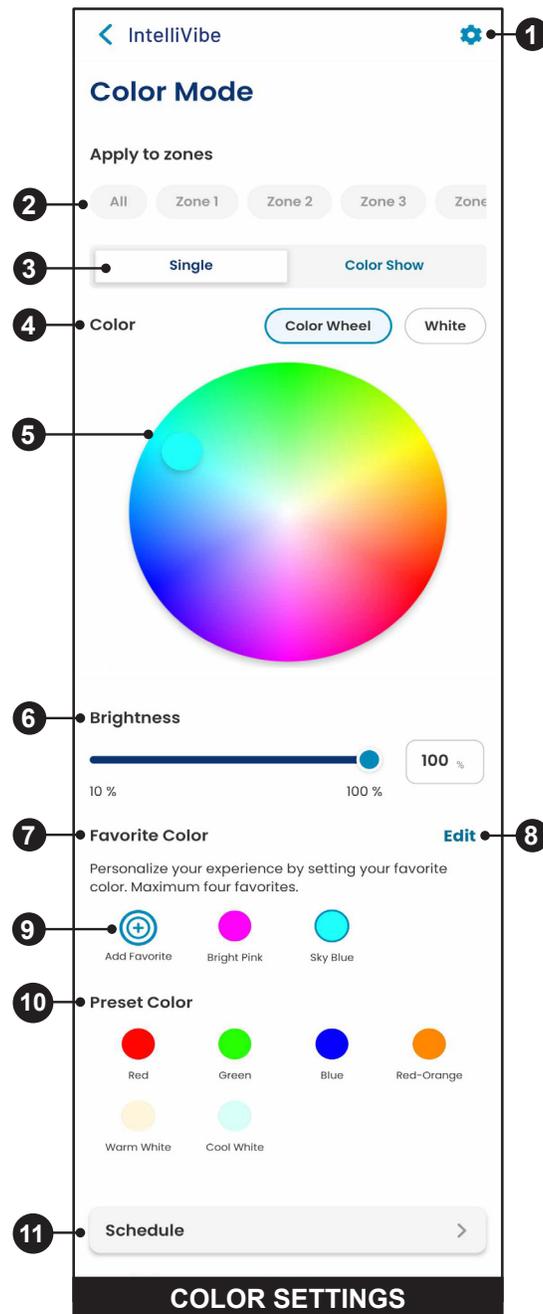| TABLE 5		
COLOR	**BEHAVIOR**	**INDICATES**
RED	**SOLID**	Controller is operating normally.
	BLINKING	Controller fault or error. Refer to *Troubleshooting Chart, page 15*.
BLUE	**BLINKING**	Controller is in Bluetooth pairing mode and searching for a Bluetooth device.
	SOLID	Controller is connected to a Bluetooth device.
BLUE>GREEN	**BLINKING**	Controller is connecting to a WiFi network.
GREEN	**SOLID + 5 BLINKS**	Controller has disconnected from the WiFi network.
	SOLID + 2 BLINKS	Controller is connected to Internet.
	SOLID	Controller is connected to the Pentair Pool app.
GREEN>RED	**BLINKING**	Over-the-air update is in progress.

CONTROLLER DASHBOARD

1. **ALL ON Button:** Tap to turn ON all configured zones.

2. **ALL OFF Button:** Tap to turn OFF all configured zones.

3. **COLOR MODE Buttons (Zones 1-4):** Displays the fixed color or color show currently set for a zone.
Tap to open a Color Mode screen and edit settings for a particular zone. Refer to *Color Modes* on pages 11 and 12 for programming instructions.

4. **ZONE ON/OFF Toggle:** Tap to turn individual light zones on and off. Blue indicates an active zone and grey indicates a deactivated zone.
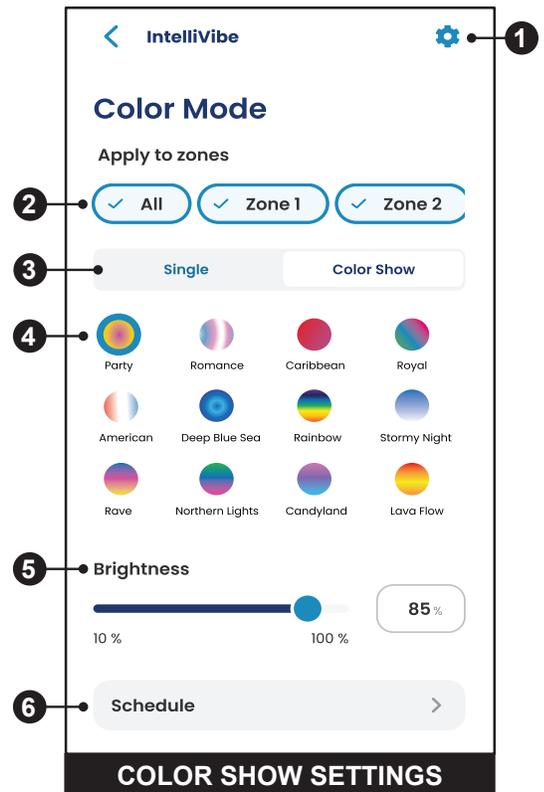

INTELLIVIBE DASHBOARD

COLOR MODES (SINGLE COLOR)

1. **SETTINGS Icon:** Open the Device Settings screen. *Zone Configuration (page 9)*, WiFi Settings, and *Energy Saving Mode (page 13)* can be accessed from this screen.

2. **APPLY TO ZONE Buttons:** Select which zones to assign the new color setting to.

3. **SINGLE / COLOR SHOW Toggle:** Display either the Single Color or Color Show mode screen.

    • **To select a Single Color:** Refer to the following instructions.

    • **To select a Color Show:** Refer to *Color Modes (Color Show), page 12.*

4. **COLOR MODE Buttons:** Display either the Color or White mode screen.

5. **COLOR WHEEL:** Tap inside the Color Wheel to choose a color. Zone lights will display this color in real time.

    WHITE COLOR-TEMPERATURE Slider: Set the desired color temperature. Zone lights will display this color in real time.

6. **BRIGHTNESS Slider:** Set brightness level.

7. **FAVORITE COLOR Buttons:** Custom colors selected from the color wheel and saved as favorites. Tap a specific color to activate that color for the selected zones.

8. **EDIT FAVORITES:** Delete or modify favorite colors.

9. **ADD FAVORITE Button:** Tap to add the currently selected color to the list of favorite colors. This color will now display under Favorite Color on each Color Mode page.

10. **PRESET COLOR Buttons:** Tap a color to activate a default preset setting.

11. **SCHEDULE Button:** Tap to create a weekly or one-time zone schedule.
    Refer to *Creating Schedules, page 13* for specific instructions.

COLOR SETTINGS

WHITE SETTINGS

COLOR MODES (COLOR SHOW)

1. **SETTINGS Icon:** Tap to open the Device Settings screen. Zone configuration, WiFi settings and Energy Saving Mode can be accessed from this screen.

2. **APPLY TO ZONE Buttons:** Select which zones to assign the new color show to.

3. **SINGLE / COLOR SHOW Toggle:** Display either the Single Color or Color Show mode screen.
   - **To choose a Color Show:** Refer to the following instructions.
   - **To choose a Single Color:** Refer to *Color Modes (Single Color), page 11.*

4. **COLOR SHOW Buttons:** Choose a color show.
   - **Party:** Rapid color changing building energy and excitement
   - **Romance:** Slow transition through shades of yellow and pink
   - **Caribbean:** Transition through a variety of blues and greens
   - **American:** Transition through red, white, and blue
   - **Royal:** Richer, deeper color tones
   - **Deep Blue Sea:** Slow transition through shades of blue
   - **Rainbow:** Cycle of red, orange, yellow, green, blue, indigo and violet
   - **Stormy Night:** Deep blue with random flashes of white
   - **Rave:** Rapidly changing magenta, blue, and yellow
   - **Northern Lights:** Slow transition through green, blue, and magenta
   - **Candyland:** Transition through pink, purple, and blue
   - **Lava Flow:** Transition through red, orange, and yellow

5. **BRIGHTNESS Slider:** Set brightness level.

6. **SCHEDULE Button:** Tap to create a weekly or one-time zone schedule.
   Refer to *Creating Schedules, page 13* for specific instructions.

COLOR SHOW SETTINGS

CREATING SCHEDULES

Tap the SCHEDULE button at the bottom of any Color Mode screen to open the SCHEDULE LIST screen.

Designate whether to create a Regular Schedule or Vacation Schedule, then tap the CREATE SCHEDULE icon (⊕) at the top right of the screen. The CREATE SCHEDULE screen will display.

1. **WEEKLY Button:** Program one or more zones to follow a single or multi-day schedule that will repeat weekly.

2. **ONE TIME ONLY Button:** Program one or more light zones to activate on a defined date and for a defined duration.

3. **NICKNAME:** Enter a name for the schedule, as it will appear in the schedule list.

4. **SELECT DAY (Weekly):** Set which days of the week the repeating schedule will activate defined light zones.

   SCHEDULE DATE (One Time Only): Program a future date that defined light zones will be activated.

5. **START/STOP TIME:** Set the time each day that the schedule activates and deactivates defined light zones.

6. **APPLY TO ZONE Buttons:** Apply the programmed schedule to multiple zones at once.

7. **SAVE Button:** Save the programmed schedule.

VACATION MODE

Operating the controller in Vacation Mode will activate a temporary schedule that will override all other schedules. During the programmed *Vacation Mode Duration (8)*, vacation or regular schedules will be disabled.
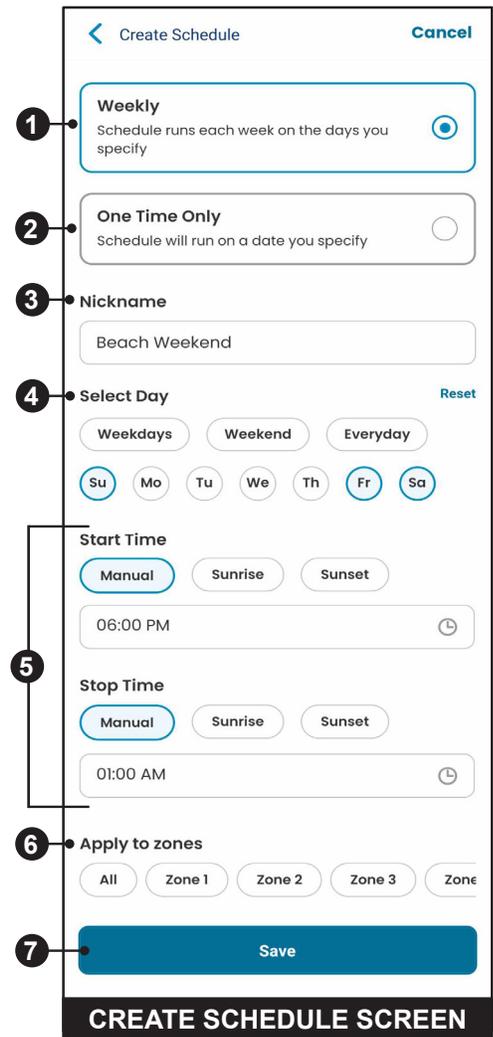
Vacation Mode can be activated, deactivated, and programmed from the Vacation Schedule screen.
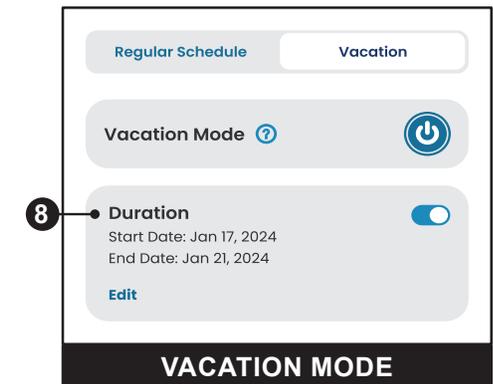
ENERGY SAVING MODE

When lights are turned on manually using the button on the controller, Energy Saving Mode will automatically turn off the lights after a set number of hours, as long as there are no active overriding schedules.

The Pentair Pool app will send a notification to your paired mobile device 10 minutes before turning off the lights.

Energy Saving Mode settings can be enabled or disabled by tapping the Settings icon (⚙) in the top-right corner of any Color Mode screen, then selecting ENERGY SAVING MODE.

CREATE SCHEDULE SCREEN

VACATION MODE

DISASSEMBLING THE CONTROLLER

⚠ WARNING | **RISK OF ELECTRIC SHOCK, WHICH CAN RESULT IN SERIOUS INJURY OR DEATH.** Before attempting installation or service, ensure that all power to the circuit is disconnected at the main breaker panel.

1. **Disconnect all power to the transformer at the main breaker panel.**

2. Loosen the two *Philips-head Wiring Cover Screws (1)* and remove the *Wiring Cover (2)* from the controller.

3. **If replacing an *Output Terminal Fuse (3*):** Carefully remove the fuse to the left of the affected terminal. Install a replacement fuse and reinstall the *Wiring Cover (2).*

4. Disconnect power and output wiring from the controller terminals.

5. Unfasten electrical conduit and pull power and output wiring out of the controller.

6. Remove the controller from the mounting bracket.

7. Remove the *Philips-head Screw (4)* from the back side of the controller.

8. Remove the five *T20 Enclosure Screws (5)* from the back side of the controller.

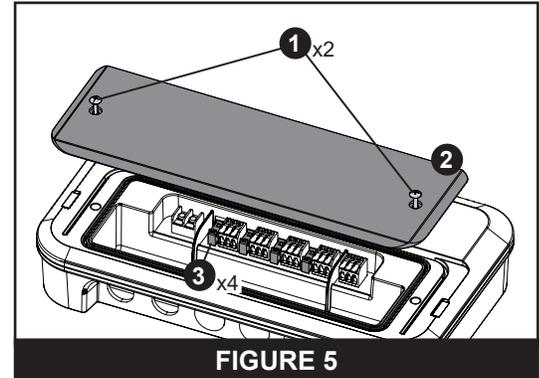9. Separate the *Top Half (6)* of the enclosure from the *Bottom Half (7)*.
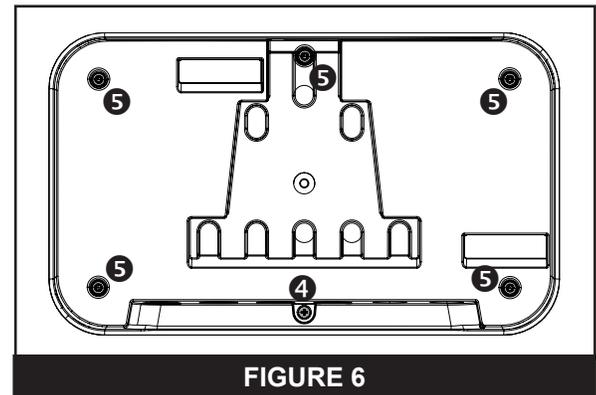

FIGURE 5

REASSEMBLING THE CONTROLLER

1. Remove the *Wiring Compartment Gasket (8)* from the *Top Half (6)* of the enclosure and inspect for damage or debris. Clean or replace the gasket if necessary.

2. Reinstall the gasket in the groove along the edge of the wiring compartment.

3. Remove the *Enclosure Gasket (9)* from the *Bottom Half (7)* of the enclosure and inspect for damage or debris. Clean or replace the gasket if necessary.

4. Reinstall the gasket into the groove along the edge of the enclosure.

5. Place the *Top Half (4)* of the controller onto the *Bottom Half (3)* and reinstall the *T20 Enclosure Screws (5)*.

6. Reinstall the *Phillips-head Screw (4).*

7. Reinstall the controller onto the mounting bracket.

8. Route power and output wiring into the controller and secure electrical conduit.

9. Reconnect wiring and reinstall the *Wiring Cover (2)*.
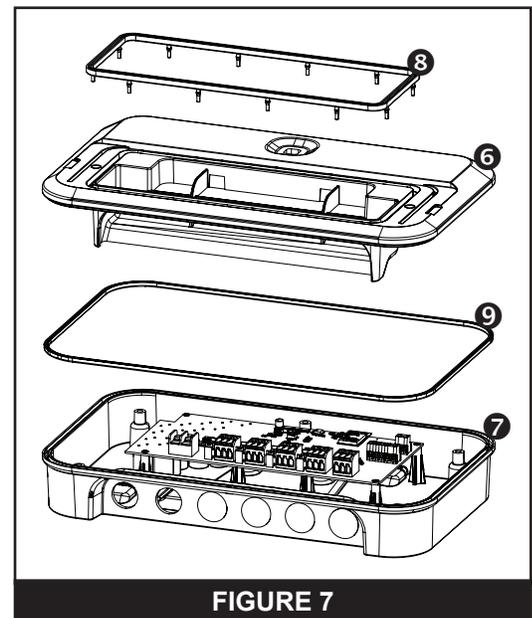
10. Reestablish power at the main breaker panel.

FIGURE 6

FIGURE 7

TROUBLESHOOTING

> ⚠️ **WARNING**   **RISK OF ELECTRIC SHOCK, WHICH CAN RESULT IN SERIOUS INJURY OR DEATH.** Before attempting installation or service, ensure that all power to the circuit is disconnected at the main breaker panel.
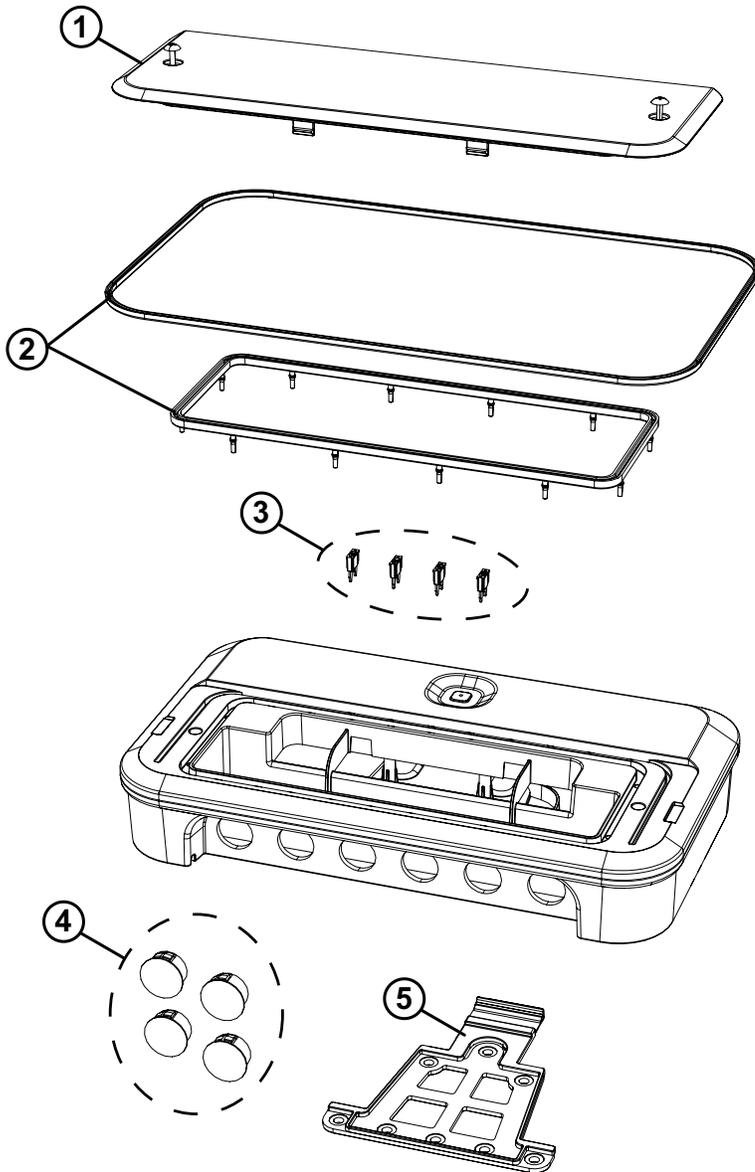
TROUBLESHOOTING CHART

PROBLEM	POSSIBLE CAUSE	CORRECTIVE ACTIONS
Pool lights do not illuminate. *(Controller LED is OFF)*	Controller is not receiving power.	Ensure the circuit breaker supplying the transformer is open.
		Verify the transformer is supplying 14 VAC to the controller. Refer to *Wiring Power to the Controller, page 7*.
Pool lights do not illuminate. *(Controller LED is ON)*	Improper wiring at the controller or junction box.	Verify proper wiring at the controller and necessary junction box(s). Refer to *Wiring Power to the Controller, page 7*.
	Controller is not supplying sufficient power to the lights.	Verify 15-20 VDC is being supplied to output terminals and 14 VAC is being supplied to the controller. Replace the controller and/or transformer as necessary.
	Transformer is not supplying sufficient power to the controller.	Verify the transformer is supplying 14 VAC to the controller. Refer to *Wiring Power to the Controller, page 7*.
	Output fuse has blown.	Refer to *TABLE 3, page 8* and ensure connected lights are not exceeding max output capacity. **If connected lights are well under max output capacity:** 1. Disconnect lights or junction box from output. 2. Replace fuse. 3. Reconnect a single light and ensure if light is operating and fuse does not blow. 4. Repeat this process with one light at a time to determine if a defective light is blowing the output fuse. 5. Replace defective light as needed.
Desired WiFi network does not display in the Pentair Pool app.	Weak WiFi signal.	Install a WiFi signal extender or mesh node as close to the controller as possible.
		Reposition the home router and/or controller as close to each other, and with as few obstructions between them, as possible.
	Incompatible WiFi frequency.	Ensure the desired network 2.4 GHz frequency. The Pentair Pool app is not compatible with 5 GHz networks
Controller frequently disconnects from WiFi network.	Weak WiFi signal.	Install a WiFi signal extender or mesh node as close to the controller as possible.
		Reposition the home router and/or controller as close to each other, and with as few obstructions between them, as possible.

TROUBLESHOOTING CHART (CONT.)

PROBLEM	POSSIBLE CAUSE	CORRECTIVE ACTIONS
Light remains dim when set to maximum brightness.	Wire size is too small	Verify junction box is connected to controller with 12 AWG wiring.
		Verify controller power wiring meets size requirements listed in *TABLE 2, page 7*.
	Loose wiring connections.	Ensure tight connections at the transformer, controller, and junction boxes.
Light color shows or colors do not match settings in the Pentair Pool app.	Zones are incorrectly configured in the Pentair Pool app.	Ensure the correct outputs are assigned to the desired zone. Refer to *Zone Configuration, page 9*.
Light responds slowly (more than 2 seconds) to commands from the Pentair Pool app.	Weak WiFi signal.	Install a WiFi signal extender or mesh node as close to the controller as possible.
		Reposition the home router and/or controller as close to each other, and with as few obstructions between them, as possible.
Controller will not connect to mobile device during Bluetooth pairing.	Mobile device is already paired to controller.	In your mobile device's *Bluetooth*® settings, remove the controller (displayed as PNR.....) from the list of connected devices. Then re-pair the controller and mobile device.

REPLACEMENT PARTS

ITEM	P/N	DESCRIPTION
1	602265	Wiring Compartment Cover (includes cover screws)
2	602264	Gasket Kit
3	602263	Output Terminal Fuses (Qty. 4)
4	602261	Knockout Plugs (Qty. 4)
5	602262	Mounting Bracket and Wedge
-	602266	Hardware/Fastener Kit

NOTES

PENTAIR POOL

P/N 619140 REV. A 2/3/25