




SAVI POOL LIGHT & SAVI SPA LIGHT INSTALLATION INSTRUCTIONS & OWNERS MANUAL

 **IMPORTANT NOTICE**
SUBMERGE BEFORE OPERATING LIGHT.
Serious and permanent damage may occur to the unit if light is not submerged during operation.

This manual is for the following models:

SAVI-PL-12-50
SAVI-PL-12-100
SAVI-PL-120-100



SAVI-SL-12-100
SAVI-SL-120-100

 **NOTE TO INSTALLER**
GIVE THIS MANUAL TO THE OWNER/ OPERATOR AFTER INSTALLATION.



Pictured: SAVI-PL-120 - SAVI Pool Light (120V) with beauty plate.

RISK OF ELECTRICAL SHOCK OR INJURY

  This underwater light must be installed by a licensed or certified electrician in accordance with the National Electrical Code and applicable local codes and ordinances. Improper installation will create an electrical hazard, which could result in death or serious injury to pool or spa users, installers, or others due to electrical shock, and may also cause damage to property. Read and follow the specific instructions below.

PRODUCT INFORMATION



SAVI Spa Light with beauty plate removed.



SAVI Pool Light with beauty plate removed.

SAVI SPA LIGHT MODEL NUMBERS

- SAVI-SL-12-100
- SAVI-SL-120-100

SAVI POOL LIGHT MODEL NUMBERS

- SAVI-PL-12-50
- SAVI-PL-12-100
- SAVI-PL-120-100

SAVI POOL/SPA LIGHT -- NICHE COMPATIBILITY TABLE					
Niche Type	Niche Size	Pool/Spa Construction	Hayward	Pentair	
			Plastic	Plastic	Stain. Steel
Pool/Spa	Small	Concrete	SP0601U	79206600 ¹	78244300 ²
		Vinyl	-	-	78242300 ^{1,3}
		Fiberglass	-	-	
Pool	Large ⁴	Concrete	SP0600U	79206700	78210600
		Vinyl	SP0607U	620004	78232500
		Fiberglass		-	

Notes:

- 1 Additional room for excess cable only on 12VAC models
- 2 For use only with 12VAC models
- 3 Use SAVI Fiberglass/Vinyl Adapter Ring (SAVI-Plate-FB-W, -G, or -B) for 120 VAC models
- 4 Use SAVI Retrofit Adapter Kit (SAVI-Plate-W, -G, or -B)

WARNING - NEVER ATTEMPT TO OPEN THIS LIGHT FIXTURE!



NEVER ATTEMPT TO OPEN THE LIGHT FIXTURE – THERE ARE NO SERVICEABLE PARTS IN THE FIXTURE AND ANY ATTEMPTS TO OPEN THE FIXTURE MAY RESULT IN PERMANENT AND IRREPARABLE DAMAGE AND MAY CAUSE A SAFETY HAZARD IF RE-INSTALLED IN A POOL OR SPA.

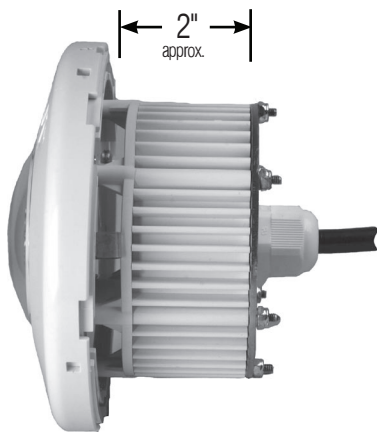
DETAILED PRODUCT DESCRIPTION

Product	Description	Cord Length (feet)	Min. Voltage Required (Volt AC)	Wattage Draw Nominal/Max (Watts) ¹	Recommended Pool/Spa Transformer		
					Output (VAC)	Min. Rating (VA)	Example Intermatic P/N
SAVI-PL-12-50	Pool Light	50	13	60/80	13	100	PX-100 or
SAVI-PL-12-100	Pool Light	100	14	60/80	14	100	PX-300 ²
SAVI-PL-120-100	Pool Light	100	120	95/120	N/A	N/A	N/A
SAVI-SL-12-100	Spa Light	100	13	26/32	13	50	PX-100
SAVI-SL-120-100	Spa Light	100	120	36/44	N/A	N/A	N/A

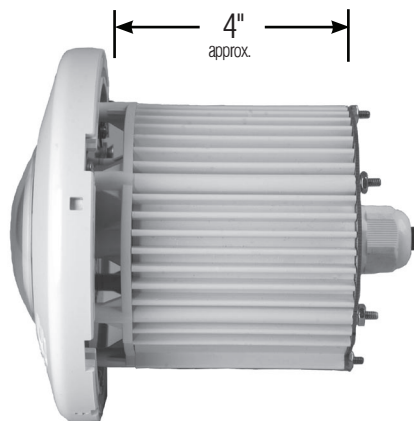
Notes:

1 Maximum wattage is on white light only. Other colors will draw less current.

2 PX-300 is recommended for long cable lengths and/or multiple parallel fixtures on a single transformer.



12 Volt **POOL** Fixture
12 Volt **SPA** Fixture



120 Volt **POOL** Fixture
120 Volt **SPA** Fixture



SAVI **POOL** Fixture
with Beauty Plate





SAVI **SPA** Fixture
with Beauty Plate

GENERAL & SAFETY INFORMATION - SAVE THESE INSTRUCTIONS


The underwater lighting fixture you have purchased is ETL Listed under file number 3089958CHI and must be used with an appropriate ETL or UL Listed fixture housing (niche). Installation of light and niche must be in accordance with Article 680 of the National Electrical Code (NEC) and any applicable local codes. If non-metallic conduit is used a # 8 AWG grounding conductor must be run through conduit and connected to grounding connector on inside of niche. This connection must be encapsulated using a listed potting compound in accordance with NEC Article 680.23B2 (3M Inc. Scotch Cast Wet Niche Potting Compound No. 2135 (UL File E130394 or equivalent)). The integral external connection is for the # 8 AWG bonding conductor also required by the NEC.

This fixture is equipped with an Automatic Shutdown Mode to protect the light fixture if it is operated while not submerged in water. If operating temperatures exceed the normal design temperatures expected with standard submerged installations, the light will enter the "Shutdown Mode" where the light will power down to a lower setting and glow light red or pink. Once the light has cooled down it will resume normal operation. If the light does not resume normal operation try resetting the light (turn the light off for 6-8 seconds before turning back on) to see if the over-heated condition has cleared.

RISK OF ELECTRICAL SHOCK OR INJURY

	<p>This underwater light must be installed by a licensed or certified electrician in accordance with the National Electrical Code and applicable local codes and ordinances. Improper installation will create an electrical hazard, which could result in death or serious injury to pool or spa users, installers, or others due to electrical shock, and may also cause damage to property. Read and follow the specific instructions below.</p>
	

IMPORTANT SAFETY INSTRUCTIONS

	<p>When installing and using this electrical equipment, basic safety precautions should always be followed, including the following: Failure to follow instructions may result in injury.</p>
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READ AND FOLLOW ALL INSTRUCTIONS

1. Warning - To reduce risk of injury, do not permit children to use this product unless they are closely supervised at all times.
2. Caution - This swimming pool / spa light is ETL listed for permanently installed pools or spas. It is not listed for storable pools or spas. Permanently installed pools are those constructed in, or partially in the ground, and all others capable of holding water in a depth greater than 42 in. (1.07m). Storable pools are those constructed on or above the ground and capable of holding water to a maximum depth of 42 in. (1.07 m).
3. This light fixture must be installed by qualified personnel in compliance with the National Electrical Code (NEC) and any applicable local codes.
4. Disconnect electrical power before installation.
5. Improper installation may result in death or serious injury to bathers or service personnel or others by way of electrical shock. Read and follow the instructions below.

CAUTION: We highly recommend having a qualified professional install this product. Be sure the power supply has been shut off or disconnected. Failure to do so could result in severe personal injury.

INSTALLATION INSTRUCTIONS

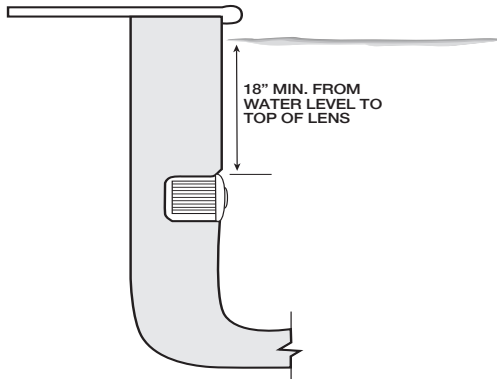


Diagram for Step 1

STEP 1

The light fixture must be installed in or on a wall of the pool with the top of the lens opening not less than 18 inches (457mm) below the normal water level of the pool.

NOTE: Except when the luminaire is installed in an area of the swimming pool that is not used for swimming and the lens is adequately guarded to keep any person from contacting it, the luminaire shall be installed in or on a wall of the pool, with the top of the lens opening not less than 457 mm (18 inches) below the normal water level of the pool.

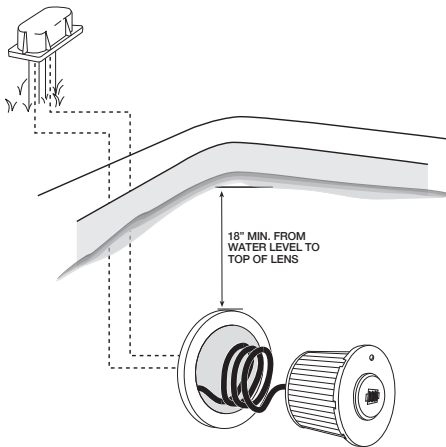


Diagram for Step 2

STEP 2

Snake the 3-conductor electric cord and a #8 AWG ground wire (when non-metallic conduit is used) through the conduit outlet of the fixture housing (niche), into the conduit and up to the junction box. **DO NOT CUT EXCESS CORD.** Leave adequate cord in niche (Do NOT wrap cord around fixture) so that fixture will be able to be raised to deck if required. Cut off extra cord after allowing for service, and the length of the run to the junction box.

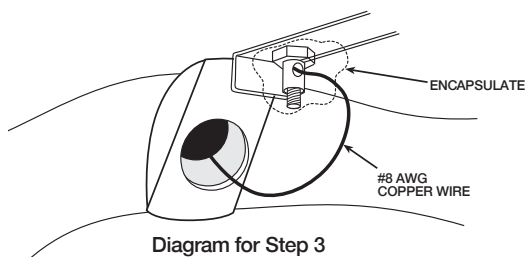


Diagram for Step 3

STEP 3

If non-metallic conduit is used, connect the #8 AWG ground wire through the conduit to the connector on the inside of the fixture housing (niche). This termination must be encapsulated using a listed potting compound* to a thickness of at least 1/8 inch in accordance with article 680 of the NEC.

* 3M Inc. Scotch Cast Wet Niche Potting Compound No. 2135 (UL File E130394) or equivalent.

INSTALLATION INSTRUCTIONS (cont.)

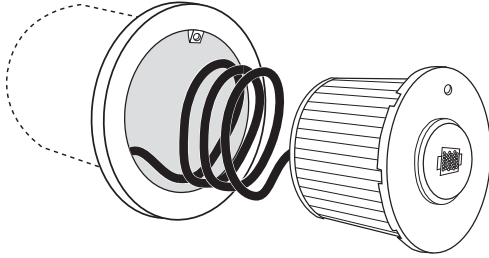


Diagram for Step 4

STEP 4

Coil the extra electric cord into the niche so it fits behind the lighting fixture (see diagram). Place the fixture into the niche with face rim lock-screw at top (12 o'clock). Snap the spring clip at the bottom of the face rim onto the notch in the bracket at the lower edge of the niche. Be sure it catches. Secure the fixture by threading the lock-screw into the mounting bracket at the top of the niche. Unthread lock-screw to remove fixture from niche.

Check the bushing space for the appropriate niche manufacturer.

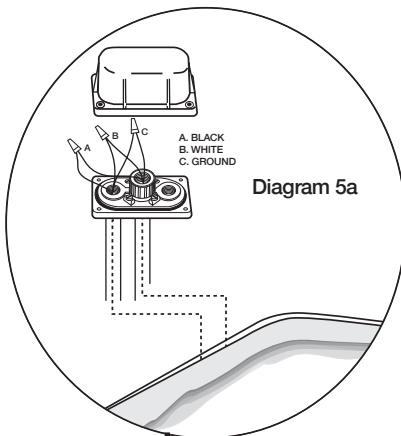
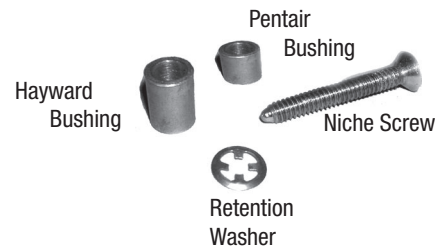


Diagram 5a

STEP 5

Connect the light fixture cordset to power within a listed junction box for swimming pool lighting fixtures (See Diagram 5a).

NOTE: Only a licensed electrician should perform wiring, splicing and grounding within the junction box.

Select a suitable location for the junction box not less than 48 inches (1.22 m) from the edge of the pool or spa. Run conduit from the niche up to the junction box such that the junction box is not less than 8 inches (20 cm) above the maximum pool or spa water level, or not less than 4 inches (10 cm) above the ground, whichever is greater (see Diagram 5b). Additional conduit should be run from the junction box to the power supply, switch panel, pool/spa controller, etc.

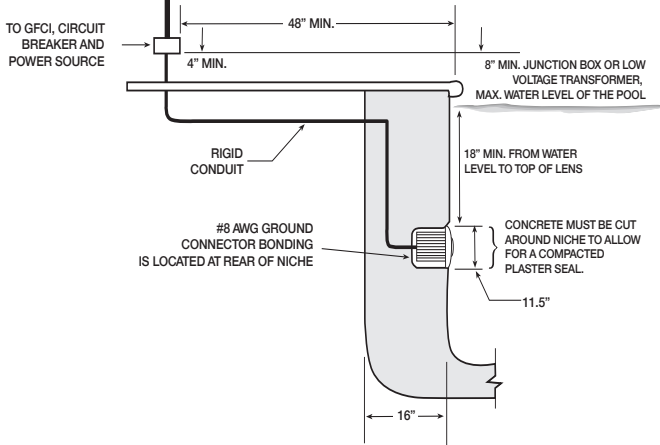


Diagram 5b

NOTE: See additional wiring diagrams for more detail on wiring 12V and 120V SAVI Pool and Spa Lights to Jandy Controllers and for wiring SAVI Pool and Spa Lights to a Time Clock.



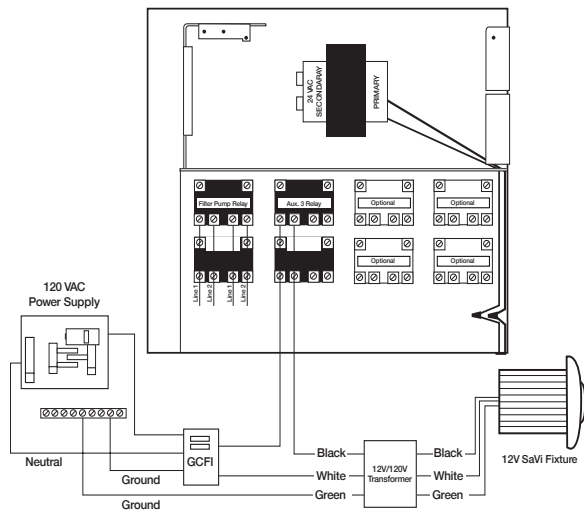
IMPORTANT NOTICE

SUBMERGE BEFORE OPERATING LIGHT.

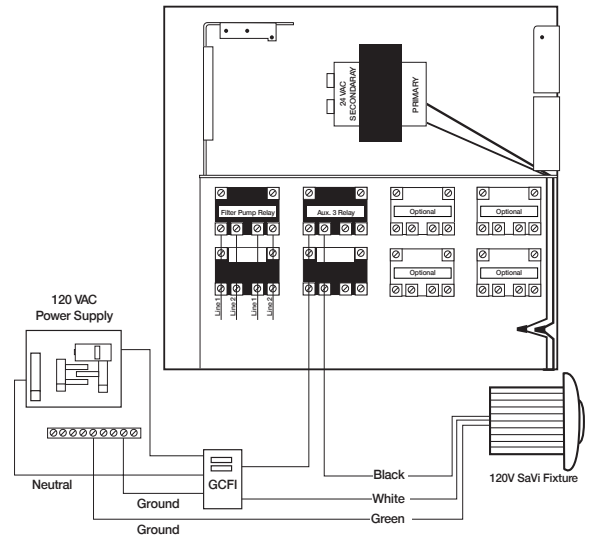
Serious and permanent damage may occur to the unit if light is not submerged during operation.

ADDITIONAL WIRING DIAGRAMS

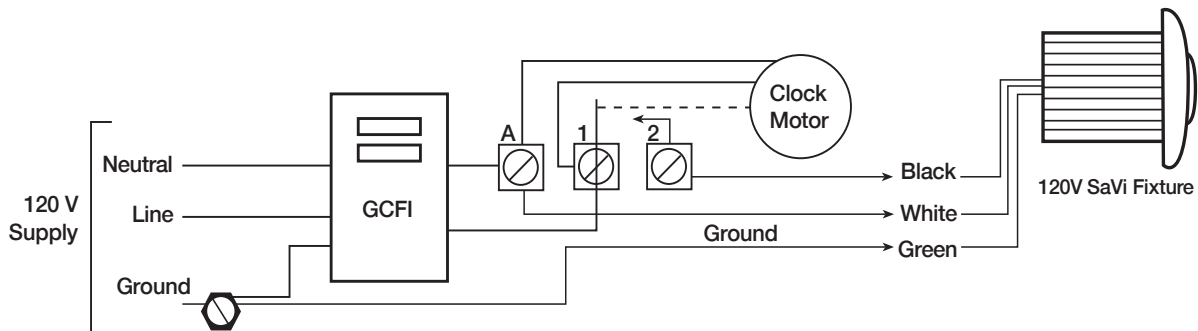
12 Volt Pool & Spa Light Wiring Diagram for Jandy Controller



120 Volt Pool & Spa Light Wiring Diagram for Jandy Controller



Wiring the SAVI Pool & Spa Light to a Time Clock



OPERATING INSTRUCTIONS -Changing the color modes of the light.

PROGRAM GUIDE

1. Treasure Island	smooth color transition
2. Moonlight White	fixed color
3. SAVI Blue	fixed color - dark blue
4. Sargassion Sea	fixed color - green
5. Blue Lagoon	fixed color - light blue
6. Passion Pink	fixed color
7. Caribbean Hues	blue - green fades
8. Copacabana	medium fast color changes
9. Dance Party	fast color changes

I. OPERATING INSTRUCTIONS FOR POOL LIGHTS ONLY

(SAVI-PL-12/120 - for pools without a spa)

NOTE: Your SAVI Pool & Spa Light will always come **ON** as white light for 13 seconds before initiating the “memory feature.” **DO NOT ATTEMPT TO CHANGE MODES DURING THIS TIME.**

How to ADVANCE the light(s) to the next color mode:

1. With the light(s) turned **ON**, turn the light switch to the **OFF** position.
2. Hold the light switch at the **OFF** position for 1-2 seconds and then turn the light switch back **ON**.
3. This will advance the light(s) to the next color mode. You may continue steps 1-2 in order to cycle through all the color options.

NOTE: If the light is **OFF** for 3-5 seconds and turned back **ON**, it will **NOT** change color modes. This is a design feature for SAVI Pool Lights combined with SAVI Spa Lights, so the lights can be unsynchronized.

Pool Light Only (SAVI-PL-12/120)	
Time held at OFF position	Result
1-2 seconds	ADVANCE light one color mode.
3-5 seconds	NO change (This is a design feature for Pools with SAVI Spa Lights).
6-9 seconds	RESET light(s) to first color mode (Treasure Island).
10 seconds or more	“MEMORY FEATURE” (remembers last color used).

How to RESET the light to the first color mode (Treasure Island):

1. With the light(s) turned **ON**, turn the light to the **OFF** position.
2. Hold the light switch at the **OFF** position for 6-9 seconds and then turn the light back **ON**.
3. The light(s) will flash green, blue & red before initiating first color mode (Treasure Island).

MEMORY FEATURE:

If the light is **OFF** for 10 seconds or more and turned back **ON**, it will return to the last color mode used.

NOTE: The light will always come **ON** as white light for 13 seconds for safety purposes before initiating the “memory feature”. **DO NOT ATTEMPT TO CHANGE MODES DURING THIS TIME.**

IMPORTANT NOTICE



SUBMERGE BEFORE OPERATING LIGHT. SERIOUS AND PERMANENT DAMAGE MAY OCCUR TO THE UNIT IF LIGHT IS NOT SUBMERGED DURING OPERATION.

OPERATING INSTRUCTIONS (cont.)

II. OPERATING INSTRUCTIONS FOR SPA LIGHTS ONLY

(SAVI-SL-12/120 - for spas without a pool)

NOTE: Your SAVI Pool & Spa Light will always come **ON** as white light for 13 seconds before initiating the “memory feature.” **DO NOT ATTEMPT TO CHANGE MODES DURING THIS TIME.**

How to ADVANCE the light to the next color mode:

1. With the light(s) turned **ON**, turn the switch to the **OFF** position.
2. Hold the light switch at the **OFF** position for 1-5 seconds and then turn the switch back **ON**.
3. This will advance the light(s) to the next color mode. You may continue steps 1-2 in order to cycle through all the color options.

Spa Light Only (SAVI-SL-12/120)	
Time held at OFF position	Result
1-5 seconds	ADVANCE light one color mode.
6-9 seconds	RESET light(s) to first color mode (Treasure Island).
10 seconds or more	“MEMORY FEATURE” (remembers last color used).

How to RESET the light to the first color mode (Treasure Island):

1. With the light(s) turned **ON**, turn the light to the **OFF** position.
2. Hold the light switch at the **OFF** position for 6-9 seconds and then turn the light back **ON**.
3. The light(s) will flash green, blue & red before initiating first color mode (Treasure Island).

MEMORY FEATURE:

If the light is **OFF** for 10 seconds or more and turned back **ON**, it will return to the last color mode used.

NOTE: The light will always come on as white light for 13 seconds for safety purposes before initiating the “memory feature”. **DO NOT ATTEMPT TO CHANGE MODES DURING THIS TIME.**

III. OPERATING INSTRUCTIONS FOR POOL & SPA LIGHT COMBINATIONS

(SAVI-PL-12/120 & SAVI-SL-12/120 lights on common power circuit)

NOTE: Your SAVI Pool & Spa Lights will always come **ON** as white light for 13 seconds before initiating the “memory feature.” **DO NOT ATTEMPT TO CHANGE MODES DURING THIS TIME.**

How to ADVANCE both lights to the next color mode:

1. With the light(s) turned **ON**, turn the light switch to the **OFF** position.
2. Hold the light switch at the **OFF** position for 1-2 seconds and then turn the switch back **ON**.
3. This will **ADVANCE** both lights to the next color mode. You may continue steps 1-2 in order to cycle both lights through all the color options together.

Pool & Spa Light Combination (SAVI-PL-12/120 & SAVI-SL-12/120)	
Time held at OFF position	Result
1-2 seconds	ADVANCE <u>all</u> Lights one color mode.
3-5 seconds	ADVANCE Spa Light, FREEZE Pool Light.
6-9 seconds	RESET lights to first color mode (Treasure Island).
10 seconds or more	“MEMORY FEATURE” (remembers last color used).

IMPORTANT NOTICE

	SUBMERGE BEFORE OPERATING LIGHT. SERIOUS AND PERMANENT DAMAGE MAY OCCUR TO THE UNIT IF LIGHT IS NOT SUBMERGED DURING OPERATION.
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OPERATING INSTRUCTIONS (cont.)

How to ADVANCE only the Spa Light(s) one mode and FREEZE the Pool Light(s):

1. With the light(s) turned **ON**, turn the light switch to the **OFF** position.
2. Hold the light switch at the **off** position for 3-5 seconds and then turn the switch back **ON**.
3. This will **ADVANCE** the Spa Light(s) to the next color mode while keeping the Pool Light **FROZEN**.

Here are two approaches to get multiple color and color mode combinations:

1. Continue to use the 3-5 second approach after the Pool and Spa lights are “out of sync” – in other words: keep the pool light(s) **FROZEN** and continue to **ADVANCE** the spa light(s) to an interesting color mode of your liking.

OR

2. Once the pool and spa lights are “out of sync” use the 1-2 second lapse to **ADVANCE** both the pool and Spa lights together one position at a time.

How to RESET the lights to the first color mode (Treasure Island):

1. With the light(s) turned **ON**, turn the light switch to the **OFF** position.
2. Hold the light switch at the **OFF** position for 6-9 seconds and then turn the light switch back **ON**.
3. The light(s) will flash green, blue & red before initiating first color mode (Treasure Island).

MEMORY FEATURE:

If the light is **OFF** for 10 seconds or more and turned back **ON**, it will return to the last color mode used. **NOTE:** The light will always come **ON** as white light for 13 seconds for safety purposes before initiating the “memory feature”. **DO NOT ATTEMPT TO CHANGE MODES DURING THIS TIME.**

FAQ / TROUBLESHOOTING:

1. **The light is white for around 13 seconds then goes to the last color used.** This is a safety feature built into the “Memory Feature.” Nothing is wrong with the light. **NOTE: YOU CANNOT CHANGE MODES DURING THE FIRST 13 SECONDS OF TURNING ON THE LIGHT.**
2. **Nothing happens when I turn the switch off and back on to change color modes on my SAVI Pool Light (applies to pool lights ONLY, SAVI-PL-12/120).** Try shortening the amount of time you have the switch in the off position. If you have the switch off for 3-5 seconds, no change will occur. You must have the switch off for no more than 2 seconds to change color modes for the SAVI Pool Light. Refer to the operating instructions for the time delay (in seconds) that the light switch should be off.
3. **My light is glowing a reddish color.** This fixture is equipped with an Automatic Shutdown Mode to protect the light fixture if it is operated while not submerged in water. If operating temperatures exceed the normal design temperatures expected with standard submerged installations, the light will enter the “Shutdown Mode” where the light will power down to a lower setting and glow red. Once the light has cooled down it will resume normal operation. If the light does not resume normal operation try resetting the light (turn the light off for 6-9 seconds before turning back on) to see if the over-heated condition has cleared. If this does not resolve the problem contact a service professional.
4. **My light is not working.** Check the circuit breaker and /or GFI circuit breaker. You may also keep the light off overnight to allow all electrical charges to dissipate before turning it back on. If the light continues to not function correctly, contact a service professional.

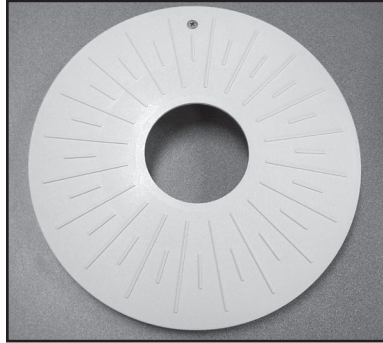
WARNING



SERIOUS AND PERMANENT DAMAGE MAY OCCUR IF LIGHT IS NOT SUBMERGED DURING OPERATION. NEVER ATTEMPT TO OPEN THE LIGHT FIXTURE – THERE ARE NO SERVICEABLE PARTS IN THE FIXTURE AND ANY ATTEMPTS TO OPEN THE FIXTURE MAY RESULT IN PERMANENT /IRREPARABLE DAMAGE AND MAY CAUSE A SAFETY HAZARD IF RE-INSTALLED IN A POOL OR SPA.

SAVI POOL LIGHT & SAVI SPA LIGHT ACCESSORIES

Adaptor for Pool Niche SAVI Pool or Spa Light

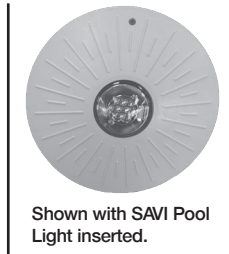


ORDERING INFORMATION

SAVI-PLATE-W (SHOWN)
WHITE ADAPTOR PLATE (KIT)

SAVI-PLATE-B
BLACK ADAPTOR PLATE (KIT)

SAVI-PLATE-G
GREY ADAPTOR PLATE (KIT)



Shown with SAVI Pool Light inserted.

ALLOWS SAVI POOL LIGHT TO FIT INTO A STANDARD SIZE POOL NICHE

Adaptor for Fiberglass Spa Niche



ORDERING INFORMATION

SAVI-PLATE-FB-W (SHOWN)
WHITE FIBERGLASS ADAPTOR PLATE

SAVI-PLATE-FB-B
BLACK FIBERGLASS ADAPTOR PLATE

SAVI-PLATE-FB-G
GREY FIBERGLASS ADAPTOR PLATE

ALLOWS 120VAC SAVI POOL LIGHT TO FIT INTO A SPA SIZED NICHE FOR FIBERGLASS POOLS (NOT REQUIRED FOR 12VAC)

Beauty Plate Accessory/Replacement for SAVI Pool or Spa Light



ORDERING INFORMATION

SAVI-BP-B - BLACK BEAUTY PLATE

SAVI-BP-G - GREY BEAUTY PLATE

NOTE: Your SAVI Pool & Spa Light comes with the default White Beauty Plate (shown left).



WARRANTY INFORMATION

LIMITED WARRANTY

Nexus Lighting, Inc. warrants its products, excluding lamps, to be free from defects in material and/or workmanship, under normal condition, use and service, for a period of two (2) years from the original invoice date (Five (5) Years for Red, Amber and Orange FlexLED and Border Light LED products and one (1) Year for Non-UL Listed Power Supplies). If proof of purchase is provided, Nexus Lighting will warranty the product for two (2) years from date of the purchase (Five (5) Years for Red, Amber and Orange FlexLED and Border Light products and one (1) Year for Non-UL Listed Power Supplies).

TERMS AND CONDITIONS:

This warranty only applies when Nexus Lighting products are properly wired and installed together as a system; and operated within the electrical values shown on the Nexus Lighting specification sheets; used in lighting equipment designed and approved for the application and environmental conditions (temperature, humidity) within the normal specified operating range of the system. This warranty does not apply to any abnormal use in violation of any applicable standard, code or instructions for use in installations including those contained in the latest National Electrical Code (NEC), the Standards for Safety of Underwriters Laboratory, Inc. (UL), Standards for the American National Standards Institute (ANSI), in Canada, the Canadian Standards Association (CSA), Europe (CE), Australia (C-Tick). This warranty will not apply in the event of conditions demonstrating abnormal use or stress, including under/over voltage conditions, excessive switching cycles, excessive operating hours, alterations, accident, theft, misuse, abuse and damaged caused by negligent installation, improper maintenance or where adequate care has not been taken to prevent damage to the lighting system. Replacement of Nexus Lighting components with any other manufacturer will void the entire warranty.

WARRANTY SERVICE CLAIMS:

Nexus Lighting must issue a Return Material Authorization (RMA) number for all requests for warranty review. To expedite service, please contact Nexus Lighting Customer Representative: 407-857-9900. If you are unsure whether a situation exists that is covered by this warranty, please contact Nexus Lighting Customer Service for assistance. In the event of a defect in material or workmanship during the warranty period, Nexus Lighting will repair or replace (at its own discretion) its products under the conditions of the warranty.

RETURN OF DEFECTIVE PRODUCT:

After contacting Nexus Lighting and receiving the RMA#, the purchaser / user shall promptly return the product after receiving instructions regarding if, when and where to ship product. Product must be returned within 30 days of receiving RMA#, Shipping box must be clearly marked with RMA#. Failure to follow this procedure shall void this warranty. Nexus Lighting will cover expenses for material but will not cover shipping costs. Products returned without an RMA# will be refused and returned to sender at the senders expense.

REPLACEMENT OF PRODUCT, LIMITS OF LIABILITY:

The foregoing shall constitute the exclusive remedy of the purchaser and the sole liability of Nexus Lighting regarding its products and component warranty. NO WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE IS MADE OR IS TO BE IMPLIED. In no event shall Nexus Lighting be liable for any other costs or damages including labor charges, lost profits or revenues, incidental, special or consequential damages. Total liability shall not exceed the total extended purchase price for the product. Nexus Lighting reserves the right to examine all failed Nexus Lighting products and components to determine the cause of failure and patterns of usage and reserves the right to be the sole judge as to whether any product or component is defective and covered under this warranty.