



**WARNING**

Maximum Cable Lengths for VIVID 360 LED Pool Lights					
POOL VOLTAGE	Vivid 360 - 30VA			Vivid 360 MAX - 60VA	
	16AWG	14AWG	12AWG	14AWG	12AWG
12V	80ft	130ft	200ft	60ft	90ft
13V	120ft	190ft	310ft	90ft	135ft
14V	160ft	260ft	400ft	120ft	180ft

**ONLY USE THE CABLE AND PLUG KIT SUPPLIED WITH THE PRODUCT**

If there is insufficient voltage reaching the VIVID 360 LED Pool Lights then they may not perform correctly. Ensure correct operation by following the recommendations in the Cable Length chart.

14AWG Cable is supplied as standard with the VIVID 360 LED Pool Lights. Contact Blue Square Manufacturing if you need to upgrade to 12AWG cable.

**VIVID 360 LED POOL LIGHT – SPECIFICATIONS**

MODEL	DESCRIPTION	COLOR TEMP OR WAVELENGTH	LUMENS	POWER CONSUMPTION	INCANDESCENT EQUIVALENT
<b>ALL LIGHTS OPERATE FROM 12V AC ~ 14V AC POWER SUPPLY</b>					
VLP2004 - WT	Cool White - Vivid 360 Pool Light	6,500K	2950	30VA	> 300 watts
VLP2008 - WT	Cool White - Vivid 360 MAX Pool Light	6,500K	4850	60VA	> 500 watts
VLP2014 - WW	Warm White - Vivid 360 Pool Light	2,850K	2850	30VA	> 300 watts
VLP2018 - WW	Warm White - Vivid 360 MAX Pool Light	2,850K	4700	60VA	> 500 watts
VLP1004 - BL	Blue - Vivid 360 Pool Light	465nm	580	30VA	N/A
VLP1008 - BL	Blue - Vivid 360 MAX Pool Light	465nm	950	60VA	N/A
VLP3000 - T	Amber (Turtle Friendly) - Vivid 360 Pool Light	> 560nm	1360	22VA	N/A
VLP3001 - P	Multi-Color PENTAIR - Vivid 360 Pool Light	3,000K	1850*	28VA (31VA max)	>250 watts
VLP3000 - P	Multi-Color PENTAIR - Vivid 360 MAX Pool Light	3,000K	3200*	55VA (60VA max)	> 400 watts
VLP3001 - J	Multi-Color JANDY - Vivid 360 Pool Light	3,800K	1400*	20VA (31VA max)	>150 watts
VLP3000 - J	Multi-Color JANDY - Vivid 360 MAX Pool Light	3,800K	2450*	38VA (60VA max)	> 300 watts
VLP3001 - H	Multi-Color HAYWARD - Vivid 360 Pool Light	>10,000K	1550*	28VA (31VA max)	>200 watts
VLP3000 - H	Multi-Color HAYWARD - Vivid 360 MAX Pool Light	>10,000K	2700*	55VA (60VA max)	> 300 watts

\*Figures apply to multicolor lights set to 'White' color.



*Thank you for purchasing and installing the technically-advanced Vivid 360 LED Pool Light.*

*It has been manufactured with great care, using only the finest materials available – suitable for the demanding underwater environment in which it operates.*

*The unique patented Plug Kit allows for simple connection to the pool light – making installation effortless.*

*The brightness and color-blending is unsurpassed and allows the state-of-the-art LED array to operate efficiently and reliably.*

*Please enjoy!*

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**INSTALLATION INSTRUCTIONS**

**LIGHT INSTALLATION WITH NEW CABLE**



**Danger**  
Electric Shock Risk

**IMPORTANT SAFETY INSTRUCTIONS READ BEFORE STARTING THE INSTALLATION PROCESS**

Hazardous voltage can cause serious injury or death to installer and pool user. Ensure power is turned off at the pool light switch **AND** at the main breaker before attempting to install or service the VIVID 360 LED Pool Light.

The VIVID 360 LED Pool Light's plastic construction and low voltage operation allow for it to be installed without the need for bonding or grounding. For supply connection, use only an isolating low voltage power supply with ungrounded output, evaluated for swimming pool use. Failure to comply with this installation requirement could cause electric shock, resulting in serious injury or death.



**WARNING**

**INSTALLER** — read entire instruction manual. Follow all warning notices and instructions before installing the VIVID 360 LED Pool Light.

VIVID 360 LED Pool Light must be installed in accordance with the National Electric Code by a Certified Electrician or Qualified Pool Technician.

This Installation Manual must be given to the Pool Owner after the new light has been installed.

For use in Fresh Water Pools only (salt water pools with <6,000ppm salt are considered fresh water).

VIVID 360 LED Pool Light operates from a 12 volt ~ 14 volt AC Supply only.

The power supply must be installed by a suitably qualified electrician or pool professional to ensure safety to pool users and to provide the safe operation of the VIVID 360 LED Pool Light.

See back page for recommendations on cable gauge and length.

If connected to a pool automation controller follow the instructions provided with that device.

**WARNING**

**Never stare directly at LED Pool Lights. Prolonged direct exposure can cause eye damage.**

*The VIVID 360 LED Retro-Fit Light utilizes an adjustable locking tab and pilot screw mounting method and therefore will fit into most existing pool niches, including the models listed below.*

Pentair® P/N: 7821XXXX Stainless Steel Niche  
Pentair® P/N: 79206700 Plastic Niche  
Jandy® P/N: SSNICLRG1R Stainless Steel Niche  
Jandy® P/N: PLNICLRG Plastic Niche

Hayward® P/N: SP0609C Stainless Steel Niche  
Hayward® P/N: SP0600U Plastic Niche

Registered brands and names are the property of their respective companies.

**Included in this Kit:**  
VIVID 360 LED Retro-Fit Light

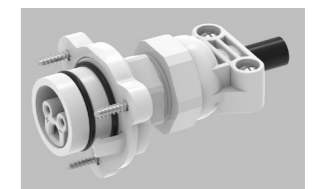


**Additional items required to install the Vivid 360 LED Retro-Fit Light:**



Cable with Plug-Kit factory fitted. See instructions contained within.

OR



Plug-Kit, for field assembly onto existing cable. See instructions included with the Plug Kit.

**VIVID 360 LED POOL LIGHT – INSTALLATION INSTRUCTIONS**



**Step 1:** Confirm that power has been turned off to the existing underwater light that is being replaced.

If you cannot be sure that power has been disconnected, then **DO NOT CONTINUE WITH THE INSTALLATION.**

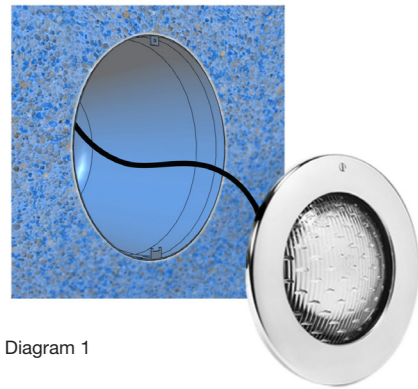


Diagram 1

**Step 2:** Locate the connection point of the existing pool light cable, which is likely to be at a Junction Box or at a Transformer. Disconnect the existing pool light cable from the Junction Box or Transformer.

Pull on the existing cable to determine if it moves freely in the conduit. Removing the cable seal grommet and any sealant from the niche should also make it easier to pull the new cable through.

**Step 3:** Unscrew the existing underwater light and disengage it from the niche, see Diagram 1. Float the light to pool deck and cut the existing pool light cable close to the rear of the existing pool light.

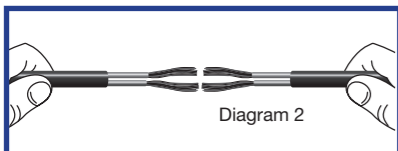


Diagram 2

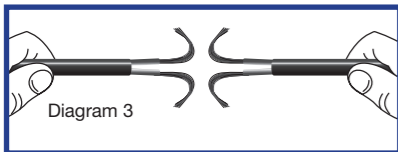


Diagram 3

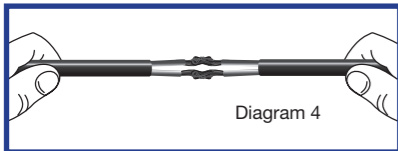


Diagram 4

**Step 4:** Use the existing pool light cable as a draw wire to pull through the cable on the VIVID 360 LED Retro-Fit Light. Refer to Diagrams 2-4. Remove 3” of outer cable sheath on both the existing and new pool light cables. Expose a 2” length of copper conductor, and twist together tightly. Form loops in the copper conductors and join and twist together with loops on the new cable. It is important to then twist firmly to create a firm join. Cover the join with duct tape.

**Step 5:** Pull the existing cable from the Junction Box or Transformer end, so that the VIVID 360 LED Light Cable is pulled through. Leave sufficient extra cable to be coiled in the niche to allow for the light to be floated to pool deck for possible future servicing.

**Step 6:** The VIVID 360 LED Retro-Fit Pool Light fits a variety of existing niches. Refer to diagrams below and chart on Page 3 to determine if the locking tab needs to be located to a different position before installation; Diagram 5 illustrates the locking tab (A) in the factory installed or default position. Relocating the 2 screws to the inner positions allows the tab to lower by a small amount. Turning the locking tab over (B) in Diagram 6 provides two other positioning options. Those options are further extended by the use of up to three “shims” allowing up to 1/4” of additional height adjustment if necessary, see Diagram 7. **Three shims are supplied, attached to the rear of the pool light.**

Note: when the inner screw holes are used, the locking tab moves to its lower position.

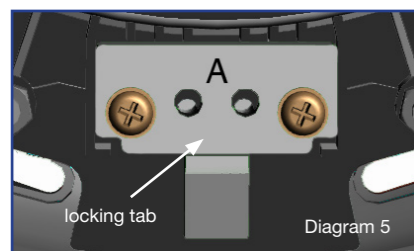


Diagram 5

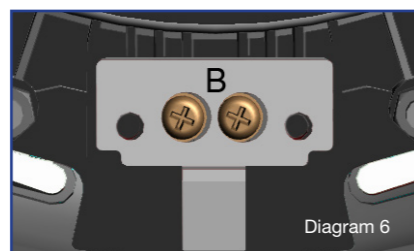


Diagram 6

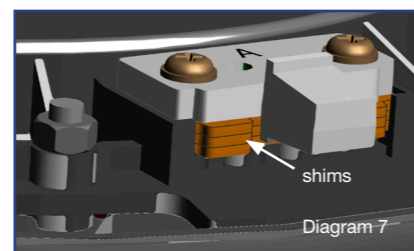


Diagram 7

**Step 7:** The new cable connects to the VIVID 360 LED Retro-Fit Light by following these instructions:

- Unscrew protective Plug Cap from end of new cable and unclip it from the Cable Bracket. **Keep the three screws.** See Diagram 8. Keep Plug Cap for possible future use. To avoid the frustration of losing the screws, we have provided extras attached to this document.
- The two o-rings are factory-lubricated, ensure they are not exposed to dust and grit. If needed, wipe clean.
- Align the plug kit with the exposed metal connector pins at the rear of the pool light, and push into place, ensuring the clips on the Cable Bracket engage properly. Use a #1 Phillips screwdriver and 3 x Stainless Steel screws (saved from earlier) and affix the Cable Bracket into the three screw holes. See Diagrams 9 and 10. Do not overtighten. Leave the pool light on the pool deck.

**Step 8:** At the Junction Box or Transformer, cut excess new cable, leaving enough cable to make the electrical connection. Wire up the new VIVID 360 LED Light Cable in the same manner as the old light.

**Step 9:** Turn the pool light on just long enough to confirm proper functioning. Turn power off. Coil up the extra cable in the niche and then mount the new VIVID 360 LED Retro-Fit Light into the niche by inserting the locking tab on the bottom of the pool light into the mounting slot on the lower part of the niche face ring. Then secure with the pilot screw provided. Installation is now complete. Only operate once the light is fully submerged. If the light does not illuminate, then turn the power off and go back and start from Step 1 to review each installation step.

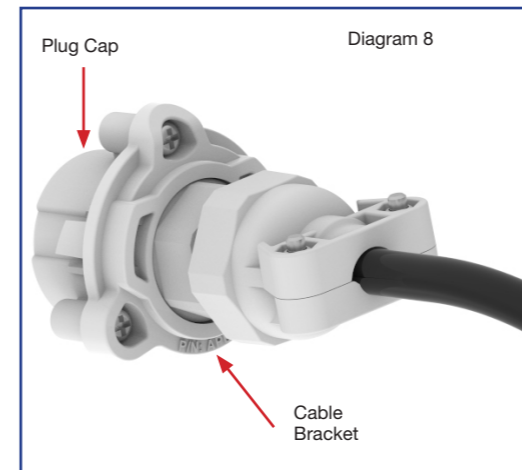


Diagram 8

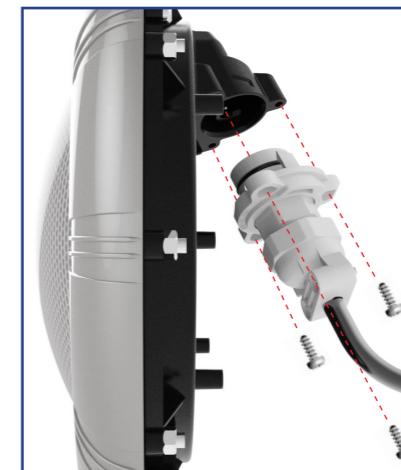


Diagram 9

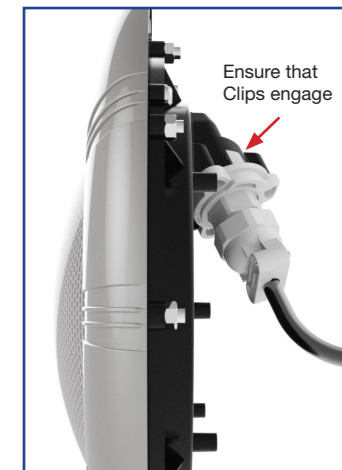


Diagram 10

Niche Model	Locking Tab Side	Locking Tab Position
Pentair P/N: 79206700 Plastic Niche	Side A	Upper (outer holes)
Pentair (Am. Prods.) P/N: 792067 Plastic Niche	Side A	Lower (inner holes)
Jandy P/N: SSNICLRG1R Stainless Steel Niche	Side A	Upper (outer holes)
Jandy P/N: PLNICLRG Plastic Niche	Side A	Upper (outer holes)
Pentair (Am. Prods.) P/N: 7821XXXX Stainless Steel Niche	Side B	Lower (inner holes)
Hayward P/N: SP0609C Stainless Steel Niche	Side B	Lower (inner holes)
Hayward P/N: SP0600U Plastic Niche	Side B	Lower (inner holes)

Shim kit, 3 x spare Plug Kit Screws and a longer Pilot Screw are attached to the rear of the pool light.



Shims (spacers) may be needed when the pool plaster sits proud of the existing installed Niche. If longer Pilot Screws are required, please contact Blue Square Manufacturing.

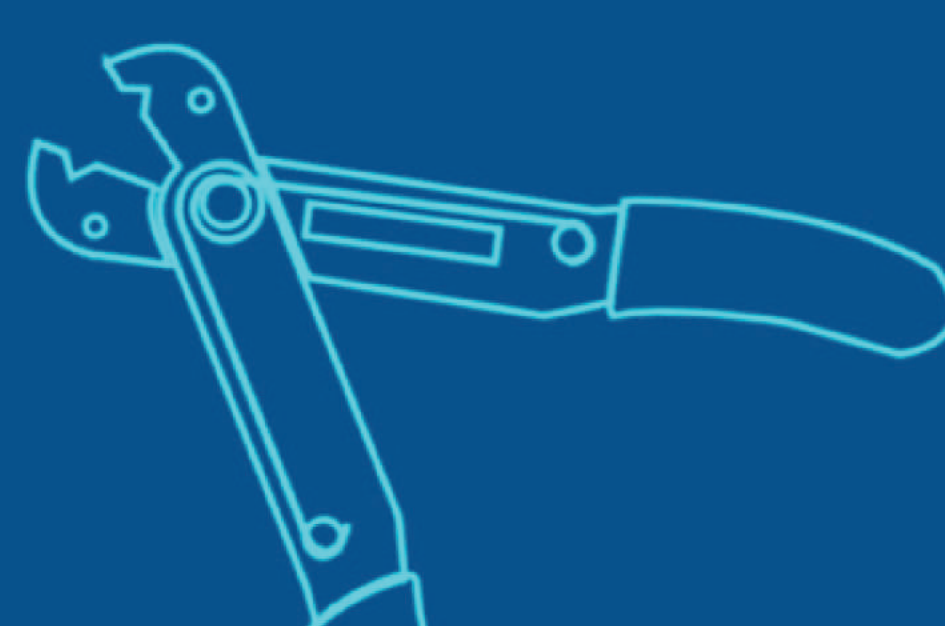




The Vivid Pool Retro Plug Kit is a great option for circumstances where pulling a cable may be difficult or impossible. It is critical, however, to ensure that the existing cable can supply the current necessary to operate the light properly today, and for years to come.

The instructions below describe how to test the resistance of the existing cable. There are multiple ways to test a cable, but the technique described here allows for minimal commitment to the project prior to deciding on the best product for the application.

## Okay, Let's Get Started



### Tools Needed

- Multimeters
- Wire strippers



It is imperative that the proper tool is used to test the cable resistance due to the high conductivity of stranded copper wire. It has very little resistance by nature. Use a multimeter or millivolt meter capable of testing to 1/100th Ohms to accurately test the cable.

## Follow these steps to test the cable:

- 1 Turn off the power to the existing switch or relay.
- 2 Disconnect the cable from the switch or relay.
- 3 Remove the existing light from its niche and cut the cable at the back of the housing.
- 4 Set your multimeter or milliohm meter to test for resistance. Zero out the device and set to the highest sensitivity.
- 5 Be sure to test the entire length of the run from the pool end all the way to where it will connect to the transformer.
- 6 Strip approximately 1/2" of the outer insulation on the cable, and then approximately 1/4" of the inner insulation exposing the copper strands.
- 7 At one end of the cable tie two of the wires together with a wire nut.
- 8 At the other end of the cable connect the alligator clips on the milliohm meter to the same two wires you connected at the other end.
- 9 Record the results and refer to the table.
- 10 Most existing cables will have three conductors (hot, neutral, and ground). It is acceptable to use any two of the three for our low voltage light, so test all three combinations to find the pair that have the least resistance.





## VIVID 360 NICHELESS RETRO LIGHT

Model#	Color	Wattage	Maximum Cable Resistance @12V (Existing Cable)	Plug Kit
300071-WT	White	11 watts	2.1 OHM	300000
300076-WW	Warm White	11 watts	2.1 OHM	300000
300070-BL	Blue	11 watts	2.1 OHM	300000
300077-T	Turtle(Amber)	11 watts	2.1 OHM	300000
300073-P	Pentair	18 watts	1.3 OHM	300000
300074-J	Jandy/Wall Switch	15 watts	1.6 OHM	300000
300075-H	Hayward	19 watts	1.2 OHM	300000

## VIVID 360 SPA RETRO LIGHT

Model#	Color	Wattage	Maximum Cable Resistance @12V (Existing Cable)	Plug Kit
VLS4004-WT	White	25 watts	1.0 OHM	400001
VLS4014-WW	Warm White	25 watts	1.0 OHM	400001
VLS4008-BL	Blue	25 watts	1.0 OHM	400001
	Turtle(Amber)	13 watts	1.8 OHM	400001
VLS4000-P	Pentair	25 watts	1.0 OHM	400001
VLS4000-J	Jandy/Wall Switch	21 watts	1.1 OHM	400001
VLS4000-H	Hayward	16 watts	1.5 OHM	400001

## VIVID 360 POOL RETRO LIGHT

Model#	Color	Wattage	Maximum Cable Resistance @12V (Existing Cable)	Plug Kit
VLP2004-WT	White	30 watts	0.8 OHM	400001
VLP2014-WW	Warm White	30 watts	0.8 OHM	400001
VLP1004-BL	Blue	30 watts	0.8 OHM	400001
	Turtle(Amber)	22 watts	1.0 OHM	400001
VLP3030-P	Pentair	28 watts	0.8 OHM	400001
VLP3030-J	Jandy/Wall Switch	20 watts	1.2 OHM	400001
VLP3030-H	Hayward	28 watts	0.8 OHM	400001