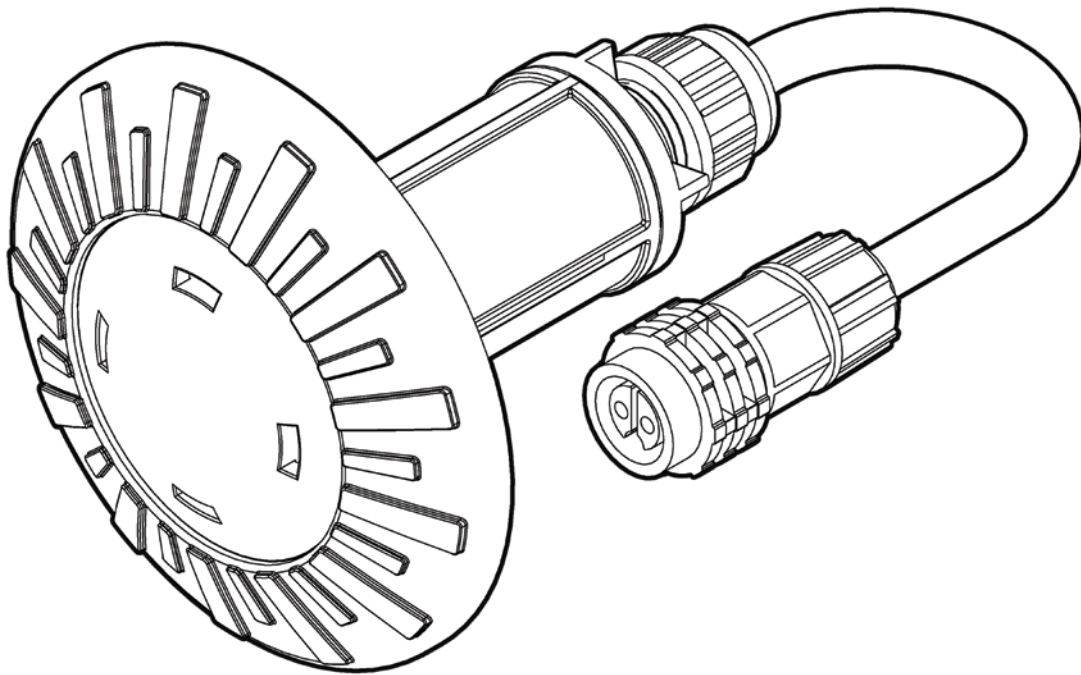# CMP

BRILLIANT WONDERS® 1.5" LED LIGHT
INSTALLATION INSTRUCTIONS & PRODUCT MANUAL

25503-500-000
25503-520-000 (P-Style and H-Style)
25503-560-000 (P-Style and H-Style)

Cord Lengths Available:
25', 50', 100', 150'

Brilliant
Wonders®
LED LIGHTING

ETL LISTED
C US
Intertek
4006147

LED WATERFALL | LED BUBBLER | LED LIGHTS | LED LAMINAR

CMP DOCUMENT 11120-000-000

2. IMPORTANT WARNINGS & SAFETY INSTRUCTIONS

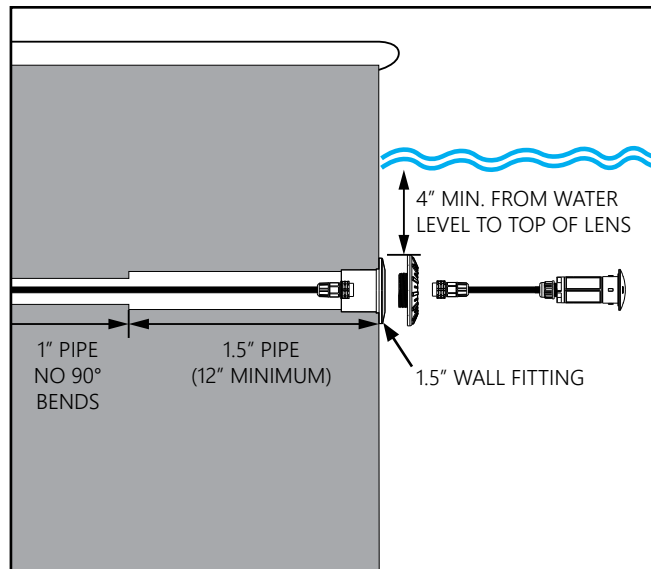| ⚠ **DANGER**	Serious bodily injury or death can result if these lights are not installed and used correctly.
⚠ **WARNING**	Installers, pool operators, and pool owners must read these warning and all instructions before using these lights.
⚠ **WARNING**	Before installing this product, read and follow all warning notices and instructions in this guide. Failure to follow warnings and instructions can result in severe bodily injury, death, or property damage.
⚠ **WARNING**	These underwater swimming pool lights must be installed by a licensed or certified electrician or a qualified pool professional in accordance with the National Electric Code (NEC) or Canadian Electric Code (CEC), CSA C22.1.
⚠ **CAUTION**	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 to pool users, installers, or others due to electric shock. Always disconnect power to the pool lights before servicing.
⚠ **WARNING**	Turn off power to light before installation/service. CMP Brilliant Wonders 1.5" LED Light is a low voltage light and should never be electrically connected to a power source other than an approved pool "Safety Rated," UL listed, outdoor rated, 12 VAC transformer. Failure to comply will either damage or destroy the light and will void the warranty.
NOTICE	No separate ground or bonding wire is required for the Brilliant Wonders 1.5" LED Lights which have no exposed metal. They do not require a niche.
NOTICE	Save these instructions. This installation and user guide contains important information about the installation, operation, and safe use of this swimming pool/spa light. This guide should be given to the owner and/or operator of this equipment.

3. INSTALLATION INSTRUCTIONS

STEP 1

The light must be installed in or on a wall of the pool (or water feature) with the top of the lens opening no less than 4 inches (10.16 cm) below normal water level of the pool. For vertical installations on benches, swim outs and fountains the depth of the light underwater must still be no less than 4 inches.

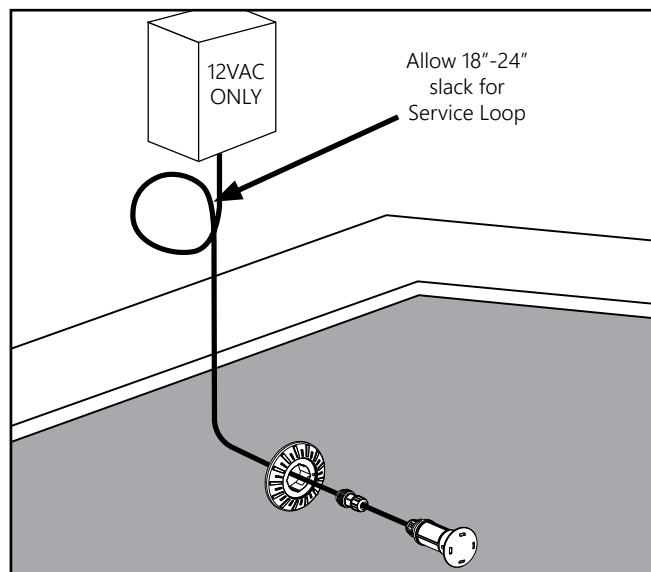**NOTE:** Requires the use of a 1.5" threaded wall fitting.
NOTE: 12" minimum of 1.5" pipe to accommodate the LED Light. Then 1" pipe to control box with sweeps only, no 90° bends.

4" MIN. FROM WATER LEVEL TO TOP OF LENS

1" PIPE NO 90° BENDS

1.5" PIPE (12" MINIMUM)

1.5" WALL FITTING

STEP 2

Install supplied 2-conductor electric cord through the conduit outlet of the wall into the conduit and up to the location of the 12VAC pool/spa transformer. Cut off excess cord installing appropriate service length.
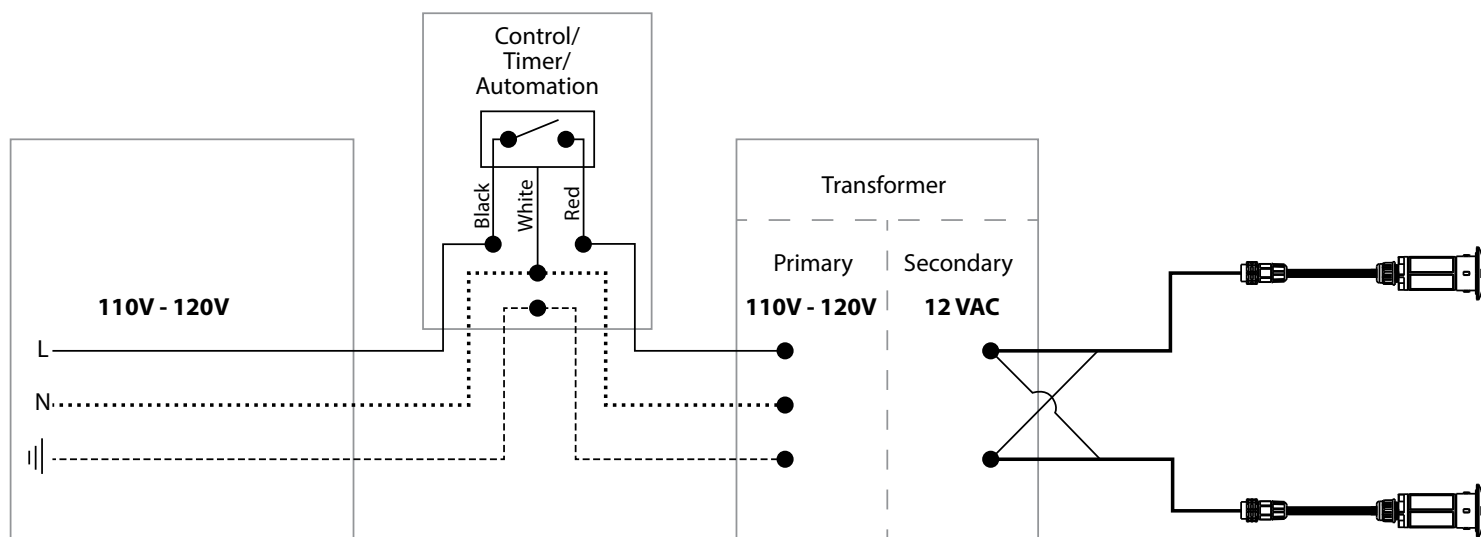
NOTICE   Allow 18"-24" extra slack in the cord on the 12VAC pool transformer end for future service of the LED light.

12VAC ONLY

Allow 18"-24" slack for Service Loop

An example of an approved pool transformer is the Intermatic model PX-100 or PX-300. Refer to Wire Gauge and Wire Length guide for proper wire gauge size in reference to the use of Junction Box installations.

NOTE: Brilliant Wonders 1.5" LED Light can be used with any UL Listed, outdoor rated, 12VAC transformer provided the wattage and amperage is not exceeded by the total wattage and amperage in use.

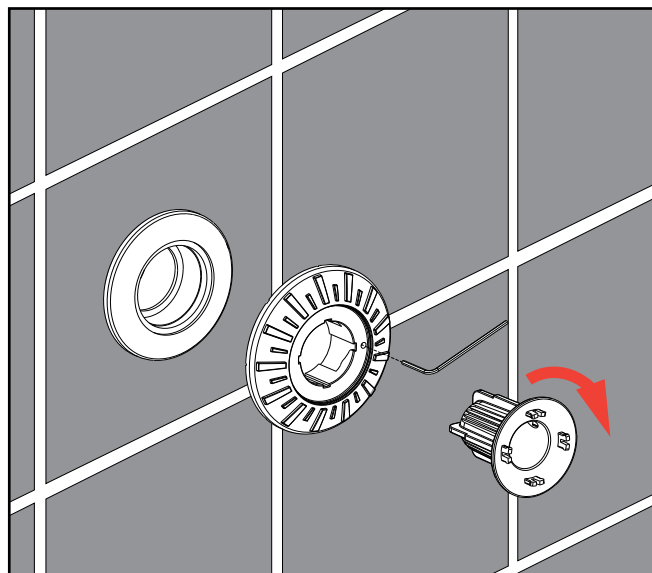

WIRING CONNECTION TO TRANSFORMER

A Red wire is used with the Brilliant Wonders Controller. If another timer or switch is installed, there may not be a red wire. If this is the case, follow this wiring structure:

Black = Hot
White = Neutral
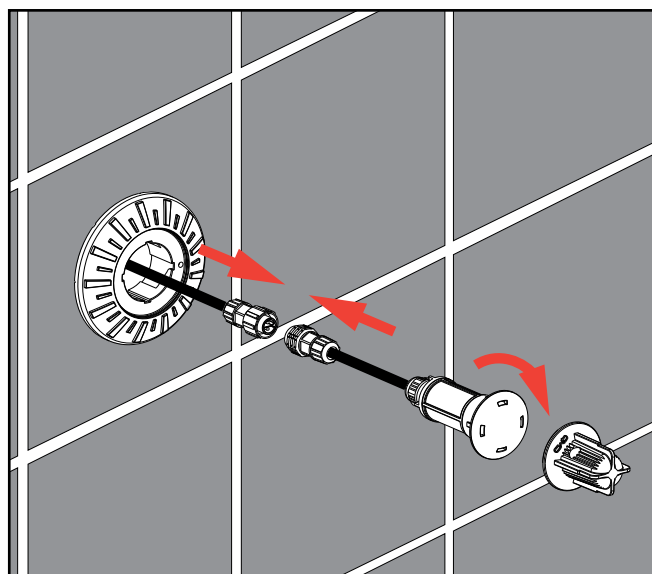Green = Ground

3. INSTALLATION INSTRUCTIONS [CONTINUED]

STEP 3

Thread the Faceplate into the 1.5" Threaded Wall Fitting using the included Installation Tool until snug (do not over tighten). Tighten set screw using a 2mm Allen wrench (not included).

STEP 4

Connect male and female electrical cord connections and thread together until snug. Install light into Faceplate by snapping included Installation Tool into the 4 rectangle holes in the LED Lens and then gently pushing in the LED Light while twisting the Installation Tool clockwise until it clicks into place. Pull Installation Tool straight out to disconnect it from the LED lens.

WINTERIZATION CLAUSE

Pool water level must be drained 12" below light(s) position in pool wall. It is recommend that the lights be loosened from their Wall Fittings to allow drainage of water that might have accumulated inside the conduit. It is recommended to disconnect cord connections and remove the 1.5" LED Light completely for the winter. Consult your local swimming pool professional for proper local area winterization processes.

LIGHT IS SERVICEABLE

Do not disassemble any part of the Brilliant Wonders 1.5″ LED Light body. Only remove cord at connection between male and female connectors.

4. OPERATION INSTRUCTIONS

When syncing multiple LED light products, color shows will match but cycle timings may vary.

CMP/J-STYLE COLOR SELECTION AND SYNC INSTRUCTIONS

The CMP/J-STYLE Brilliant Wonders 1.5" LED Light is preprogrammed with the following color sequence:

SEQUENCE ORDER	COLOR MODE
1	Alpine White
2	Sky Blue
3	Cobalt Blue
4	Caribbean Blue
5	Spring Green
6	Emerald Green
7	Emerald Rose
8	Magenta
9	Violet
10	Slow Color Splash
11	Fast Color Splash
12	America the Beautiful
13	Fat Tuesday
14	Disco Tech

To operate the light and change colors:
- Turn the light ON. The first time the light is turned on, the color sequence will begin with Alpine White. To change color, turn light OFF then back ON within three (3) seconds. Continue turning OFF and ON until the desired light color mode is reached.
- When the light is turned off for more than seven (7) seconds, it will remain in the color mode that was currently active when the light was turned off.
- To RESET the light to the beginning color sequence (Alpine White), turn the light OFF, wait four (4) to six (6) seconds, then turn the light ON.

H-STYLE COLOR SELECTION AND SYNC INSTRUCTIONS

The H-STYLE Brilliant Wonders 1.5" LED Light is preprogrammed with seventeen light modes:

SEQUENCE ORDER	COLOR MODE
1	Voodoo Lounge
2	Deep Blue Sea
3	Royal Blue
4	Afternoon Skies
5	Aqua Green
6	Emerald
7	Cloud White
8	Warm Red
9	Flamingo
10	Vivid Violet
11	Sangria
12	Twilight
13	Tranquility
14	Gemstone
15	USA!
16	Mardi Gras
17	Cool Cabaret

To operate the light and change colors:
- The H-STYLE Brilliant Wonders 1.5" LED Light is operated through power-cycling; a method of changing modes which requires no special controller or interface. To activate the light simply turn the power switch ON. To advance to the next programmed light mode, turn the switch OFF then back ON within ten (10) seconds. Whenever the light has been off for more than sixty (60) seconds, and it is first turned on, it will come on white for 15 seconds, then go back to the last programmed light mode it was running before being powered off.

To sync the light with additional H-STYLE lights:
- The H-STYLE Brilliant Wonders 1.5" LED Light can easily be synced with additional H-STYLE lights. All lights should be wired to the same switch, this should automatically sync the lights. If the lights get out of sync on the same switch: turn the switch OFF, then wait between eleven (11) and fourteen (14) seconds and turn the switch back ON. When the lights come back on, they should enter program mode number one (1) and be synchronized.

P-STYLE COLOR SELECTION AND SYNC INSTRUCTIONS

The P-STYLE Brilliant Wonders 1.5" LED Lights can be controlled using a standard wall-mount light switch. Multiple lights can be connected via a junction box to a single switch so that all lights can be switched ON and OFF together. P-STYLE Lights are controlled by cycling the AC power from a standard wall switch. By turning the switch ON and OFF a specific number of times, the light activates one of the seven (7) light show modes, fixed colors, and enables the "Hold" and "Recall" feature.

The P-STYLE Brilliant Wonders 1.5" LED Light is preprogrammed with seven light show modes (1-7) and five fixed color modes (8-12). For saving color effects during the "show" modes the light also includes and "Hold" and "Recall" feature (13-14).

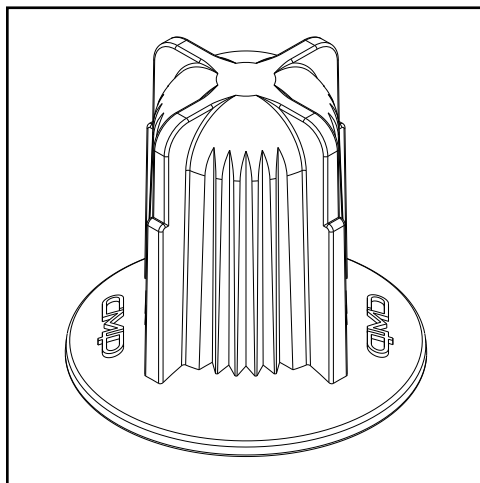| SEQUENCE ORDER	COLOR MODE
1	SAm® Mode
2	Party Mode
3	Romance Mode
4	Caribbean Mode
5	American Mode
6	California Sunset Mode
7	Royal Mode
8	Blue
9	Green
10	Red
11	White
12	Magenta
13	Hold
14	Recall

Example to operate the light and change to "California Sunset" show mode:
- Turn the light switch ON and OFF six (6) times.
- During the ON/OFF switching process, no illumination will occur, then a white light will momentarily illuminate.
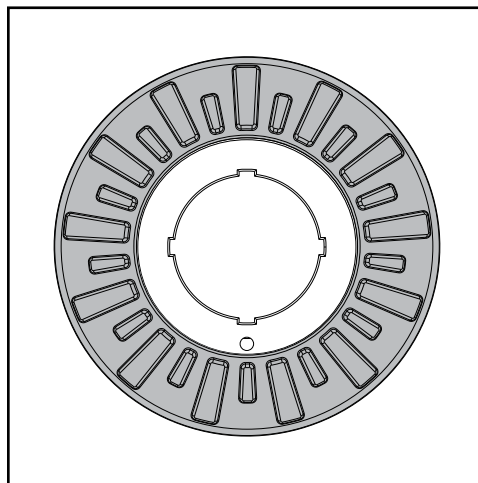- The white light will immediately be followed by the selected "California Sunset" mode.

Hold and Recall Features Example:
- Use the "Hold" feature to capture a unique color effect while "Romance Mode" is active.
- Turn switch on and off thirteen (13) times.
- Saved color effect is displayed.
- From any light show or fixed color mode...
- Turn switch ON and OFF fourteen (14) times to activate last saved color effect.
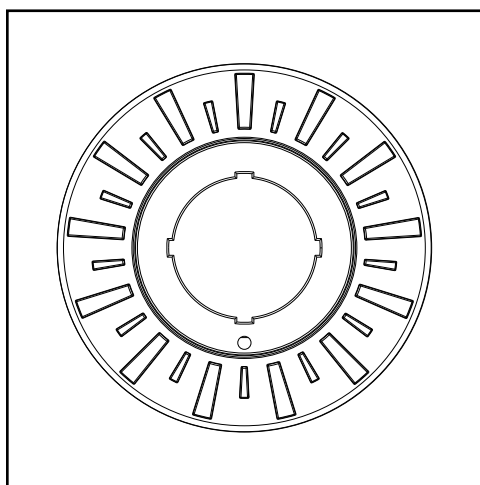- Saved color effect is displayed.

5. AVAILABLE ACCESSORIES

25500-104-007
(Included)
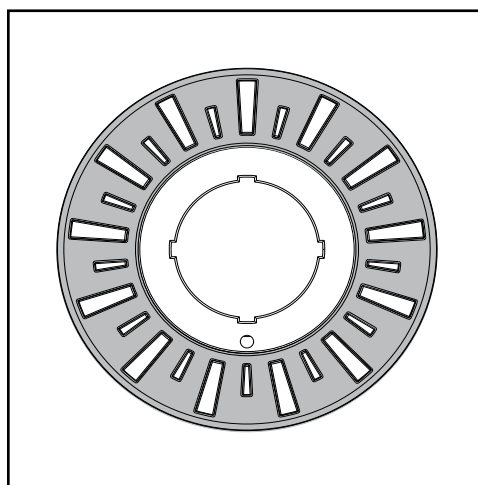Brilliant Wonders 1.5" LED Light
Installation Tool

25500-510-200

Brilliant Wonders 1.5" LED Light
Stainless Steel Faceplate

25503-510-000	White (Included)
25503-511-000	Gray
25503-514-000	Black
25503-517-000	Dark Gray
25503-559-000	Light Blue
25503-569-000	Dark Blue
25503-519-000	Tan

25503-510-220	SS-White
25503-511-220	SS-Gray
25503-514-220	SS-Black
25503-517-220	SS-Dark Gray
25503-559-220	SS-Light Blue
25503-569-220	SS-Dark Blue
25503-519-220	SS-Tan

Brilliant Wonders 1.5" LED Light
Plastic Faceplate

Brilliant Wonders 1.5" LED Light
Color Accent Faceplate

For the most recent instructions, videos and product information visit www.c-m-p.com

Brilliant Wonders

LED LIGHTING

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