

WPC2-XXXX-T

Rated for use on 110/120VAC 60Hz and 220/240VAC 60Hz applications



Intertek

4008814

ETL LISTED

Conforms to UL STD 379;

Certified to CSA STD C22.2 #218.1

Installation Instructions

Read these instructions in their entirety before performing any installation work

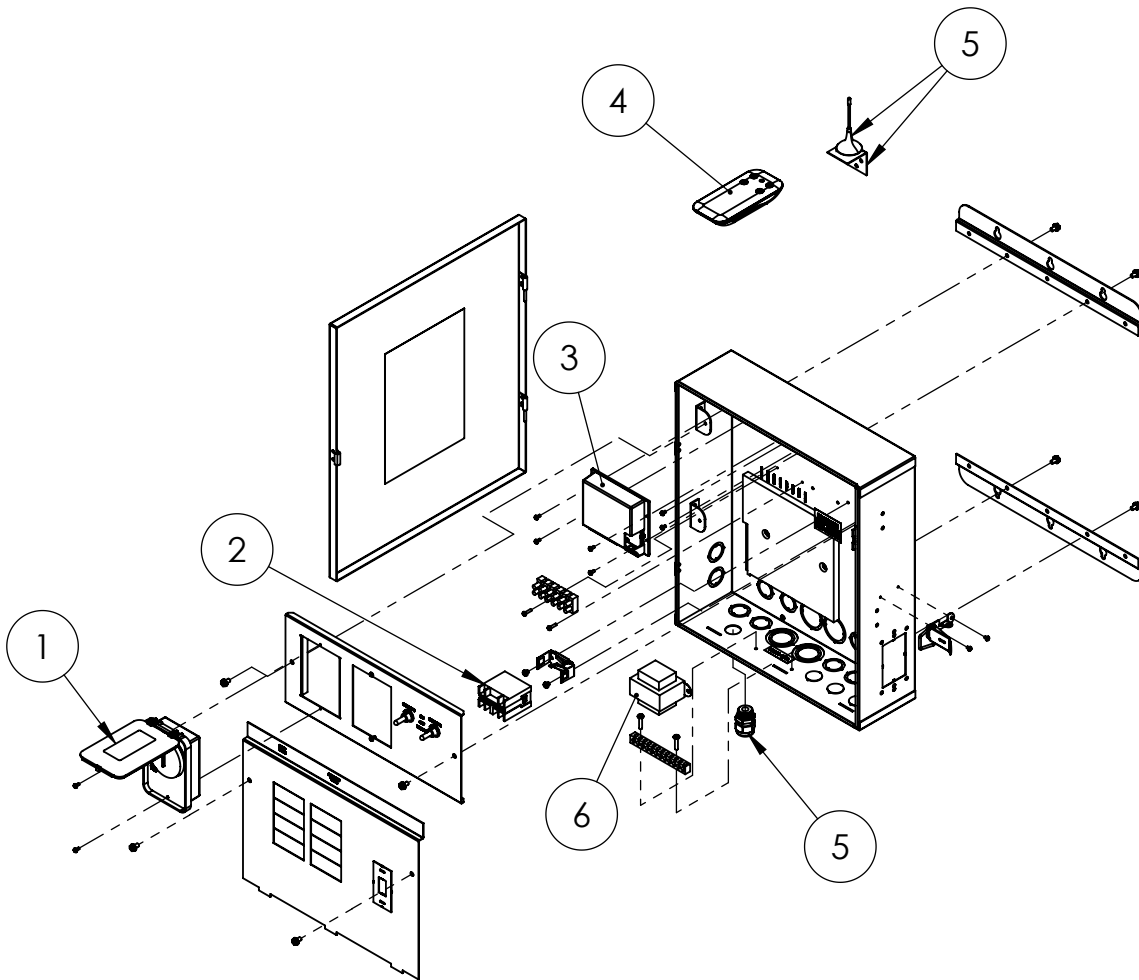
FOR USE WITH POOL AND SPA PRODUCTS

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REPLACEMENT & ACCESSORY ITEMS

ITEM NO.	QTY.	PART #	REPLACEMENT PART DESCRIPTION
1	1	42-15032-00	Timer
2	1	37-15000-00	Relay
3	1	94-15264-00	WPC Receiver, 2-circuit
4	1	94-15263-00	Remote Control 2-circuit (Transmitter)
5	1	PLX-ANTKT-S	3 meter, magnetic mount antenna Kit
6	1	44-15037-00	Transformer, 12V
OPTIONAL / ACCESSORY		PART #	DESCRIPTION
Not shown		FP 1/2	Temperature Freeze Device
Not shown		PLX-ANTKT-L	15 meter, magnetic mount antenna Kit



IMPORTANT SAFETY INFORMATION



ELECTRICAL SHOCK HAZARD – SWITCH DOES NOT TURN OFF INPUT POWER.

Failure to disconnect input power before servicing can lead to serious injury, or death.

Disconnect input power before servicing.

Replace all parts and panels before reconnecting power and operating

DANGER – FAILURE TO FOLLOW THESE WARNINGS, INSTRUCTIONS, AND THE

OWNER'S MANUAL MAY RESULT IN SERIOUS INJURY OR DEATH.

Basic safety precautions should be observed when operating the WPC-2 product and other associated equipment.

1. A qualified electrician must install the WPC-2 in accordance to the National and Local Electrical Codes.
2. The WPC-2 must not be less than 5 feet (3 meters in Canada) from inside edge of pool. ONLY USE COPPER CONDUCTORS.
3. Do not exceed the maximum ratings of individual components, wiring devices, and current carrying capacity of conductors.
4. For the bonding, grounding, installing, and wiring of underwater lights to the WPC-2, refer to Article 680 of the National Electrical Code or Article 68 of the Canadian Electrical Code.
5. This device should never operate equipment that could cause property damage, bodily injury, or death should it be activated unexpectedly.
6. Never allow children to operate the WPC-2 unsupervised.

FCC WARNING

1. This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.
2. Changes or modifications not expressly approved by S.R Smith. could void the user's authority to operate the equipment.

WARNING

- TURN OFF INCOMING POWER BEFORE SERVICING EQUIPMENT.
- ALL INSTALLATION AND MAINTENANCE WORK MUST BE PERFORMED BY QUALIFIED ELECTRICAL PERSONNEL ONLY.
- VERIFY ALL ELECTRICAL RATINGS BEFORE INSTALLATION IS COMPLETE.

LOCATION

Install the WPC-2 enclosure using the mounting plates included with each enclosure.

The WPC-2 is housed in a Type 3R rainproof enclosure and can be mounted anywhere between the pool equipment and the breaker panel.

ELECTRICAL RATINGS

Do not exceed the maximum electrical ratings of the WPC-2. A circuit breaker rated at 20Amps at 120VAC must be installed in the breaker panel to connect to the WPC-2 power input. Circuit 1 is rated for use of up to 2.5 amps @12VAC, and Circuit 2 is rated for use of up to 8 amps @ 120VAC. The Pump Relay is rated at a maximum of 3HP @ 240VAC.

SUITABLE LISTED BREAKERS						
MANUFACTURER	CIRCUIT BREAKER					FILLER PLATE
	SINGLE	DOUBLE	TWIN	QUAD	GFCB	
Thomas & Betts	TB	TB	TBBD	TBBQ	GFB	FP-1C-TB
Cutler-Hammer	BR	BR	BRD	BRD	GFCB	BRFP
Square D	HOM	HOM	HOMT	HOMT	HOM-GFI	HOMFP
Murray	MP-T	MP-T	MH-T	MH-T	MP-GT	LX ₁₀₀ FP
Siemens/ITE	QP	QP	QT	QT	QPF	QF-3
Challenger	C	-	A-CT	-	HAGF	#FC-1C
Westinghouse or Bryant	BR	-	BQ	-	GFCB	FP-1
Crouse-Hinds	MP	-	TRIPLEX	-	MP-GF	-
GE Regular	THOP	-	-	-	THOP-GF	TQLFP-1

WIRING INFORMATION - COPPER CONDUCTORS ONLY							
Wire Size 75°C min. Insulation	Supply Circuit Breaker Rating	Terminal Torque*		Max Motor Load (Continuous Duty)		General Purpose Branch Circuit Breaker Rating	General Purpose Branch Circuit Maximum Current Capacity
		Line and Neutral Main Lugs	Neutral and Ground				
		120V	240V	HP	HP		
AWG	AMP	LB-IN	LB-IN	HP	HP	AMP	AMP
14	15	35	20	1/2	1	15	12
12	20	35	20	1	2	20	16
10	30	35	20	1 1/2	3	30	24
8	50	40	25	2	5	40	32
6	65	45	35	-	-	60	44
4	85	45	35	-	-	-	-
3	100	50	-	-	-	-	-
2	100/125	50	-	-	-	-	-

WIRING INSTRUCTIONS

FOLLOW PROPER WIRING PRACTICES IN ACCORDANCE WITH ALL LOCAL REGULATORY REQUIREMENTS. IF USING WITH LOW VOLTAGE POOL LIGHTING, SEE PAGE 8 FOR ADDITIONAL REQUIREMENTS AND MATERIALS.

Power Connections

To wire the WPC-2 use insulated COPPER wire only, 12 gauge minimum.

Run a ½" to ¾" conduit from the main breaker panel to one of the bottom left or middle knockouts of the WPC-2.

Pull appropriate wires from the main breaker panel to the WPC-2 unit.

To make power connections remove 3/8 inches of insulation from wire ends.

Connect bare wires to the Load Center as illustrated. T

ighten terminal screws firmly (20 lb-in minimum).

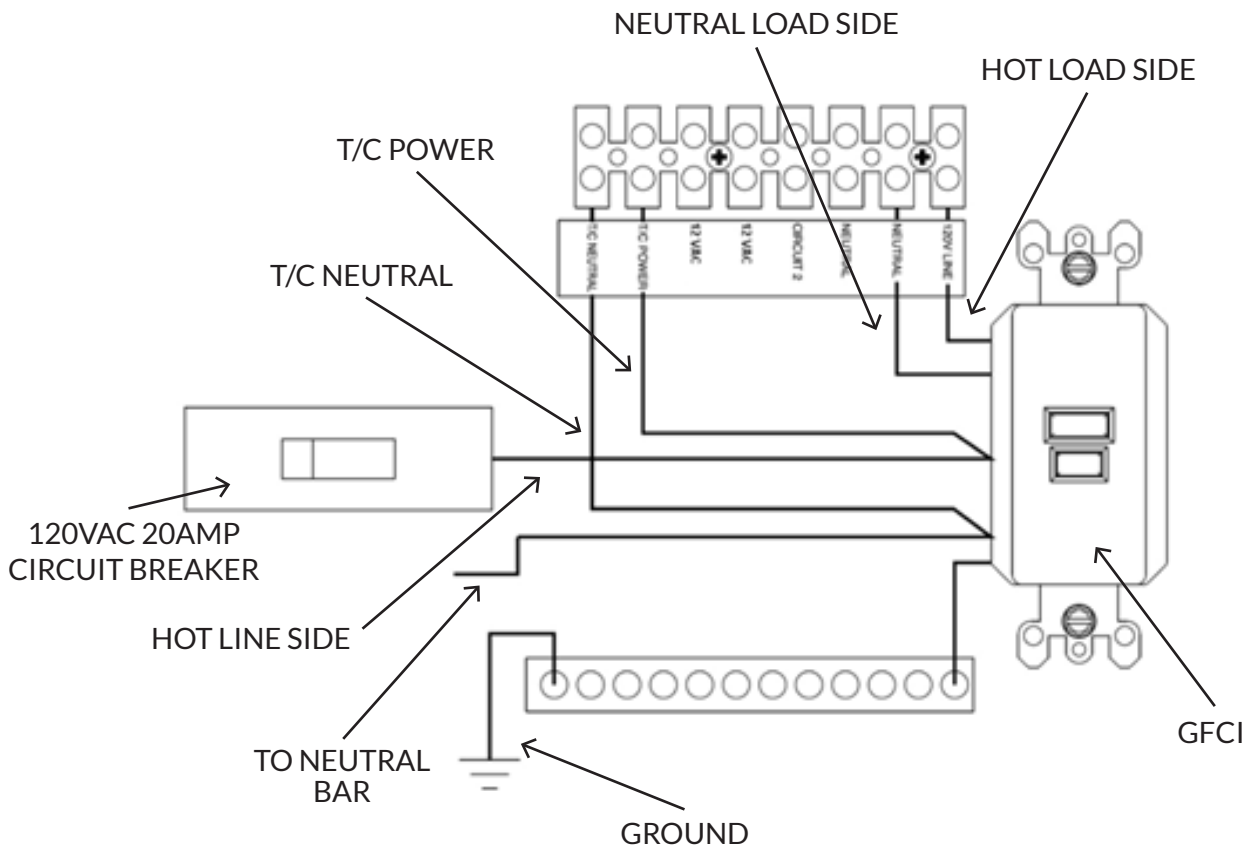
Connect the common to the Neutral bar (tighten to 20 lb-in minimum).

Install a 20 Amp circuit breaker and wire to the 120V LINE and the T/C POWER of the terminal block.

Wire the Neutral and T/C NEUTRAL terminals to the Neutral bar on the Load Center.

For use with an internal GFCI, punch out the GFCI knockout on the Load Center Cover Plate of the WPC.

Install a GFCI with appropriate hardware.

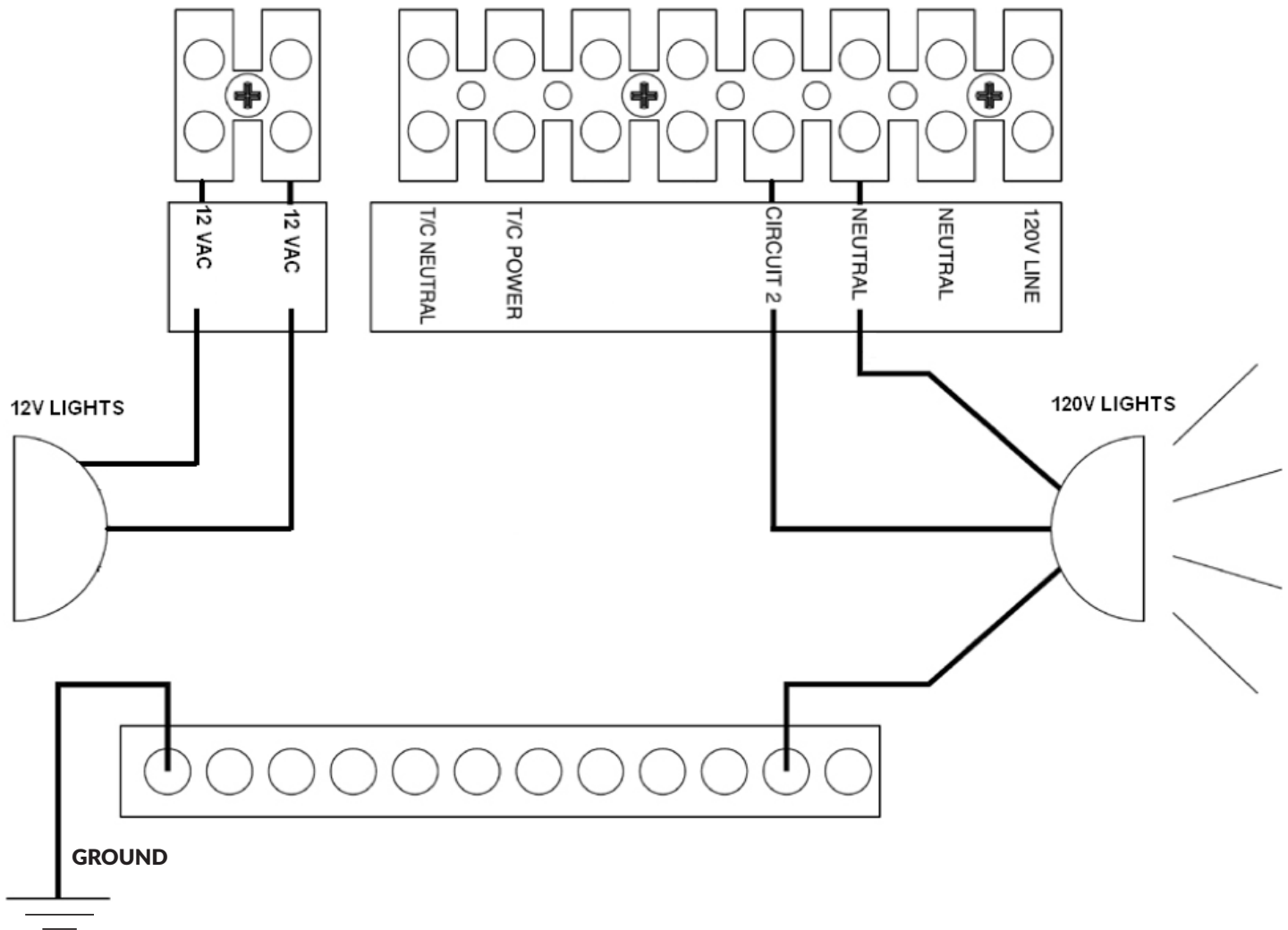


Hooking up Low Voltage Lights to Circuit 1

To connect a Low Voltage lighting product to Circuit 1 (12VAC), an NEC or local jurisdiction approved Pull / Junction / Bell Box must be used to directly connect the conduit from the lighting product, in line with the WPC2-XXXX-T.

This box must be a minimum of 4" above ground level and may also serve as a convenient location to store service loop cable. Use appropriate wire from the separate 12VAC output block (terminals L1, L2) to supply Low Voltage power from the WPC2-XXXX-T to the approved Pull, Junction, or Bell Box.

Use the lower right conduit knockout location(s) and be sure to replace the Isolation Cover using the grounding attachment screw. Lastly - use the supplied cable tie to secure the lighting wiring to the cover.



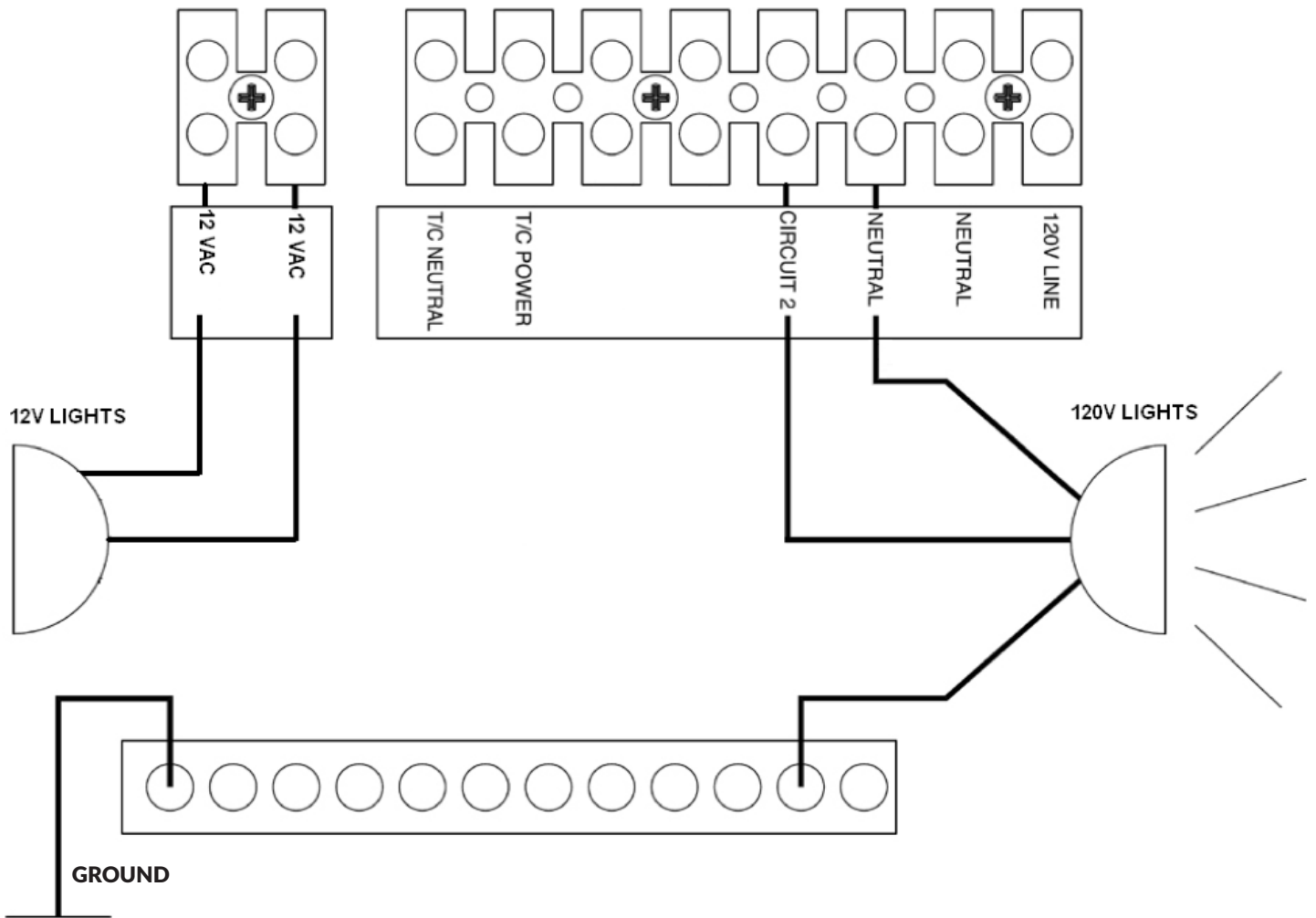
If this product is used to connect 120VAC underwater lights directly, refer to 1999 NEC 680-21(b), 2002 NEC 680-24(b) or CEC 68-060, 062 and 066 for details.

Hooking up Low Voltage Lights to Circuit 2

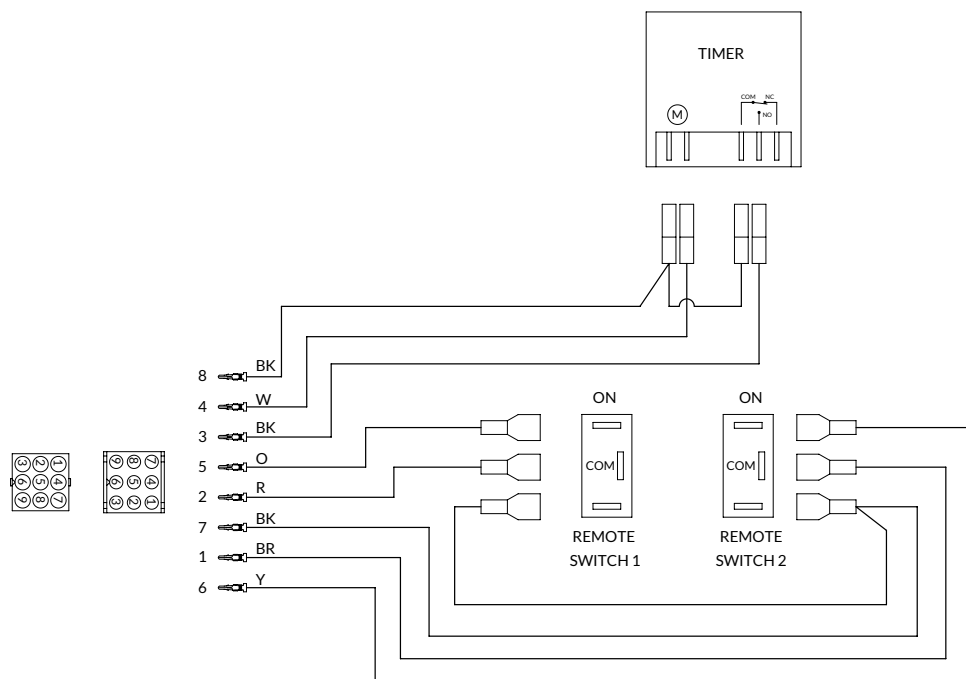
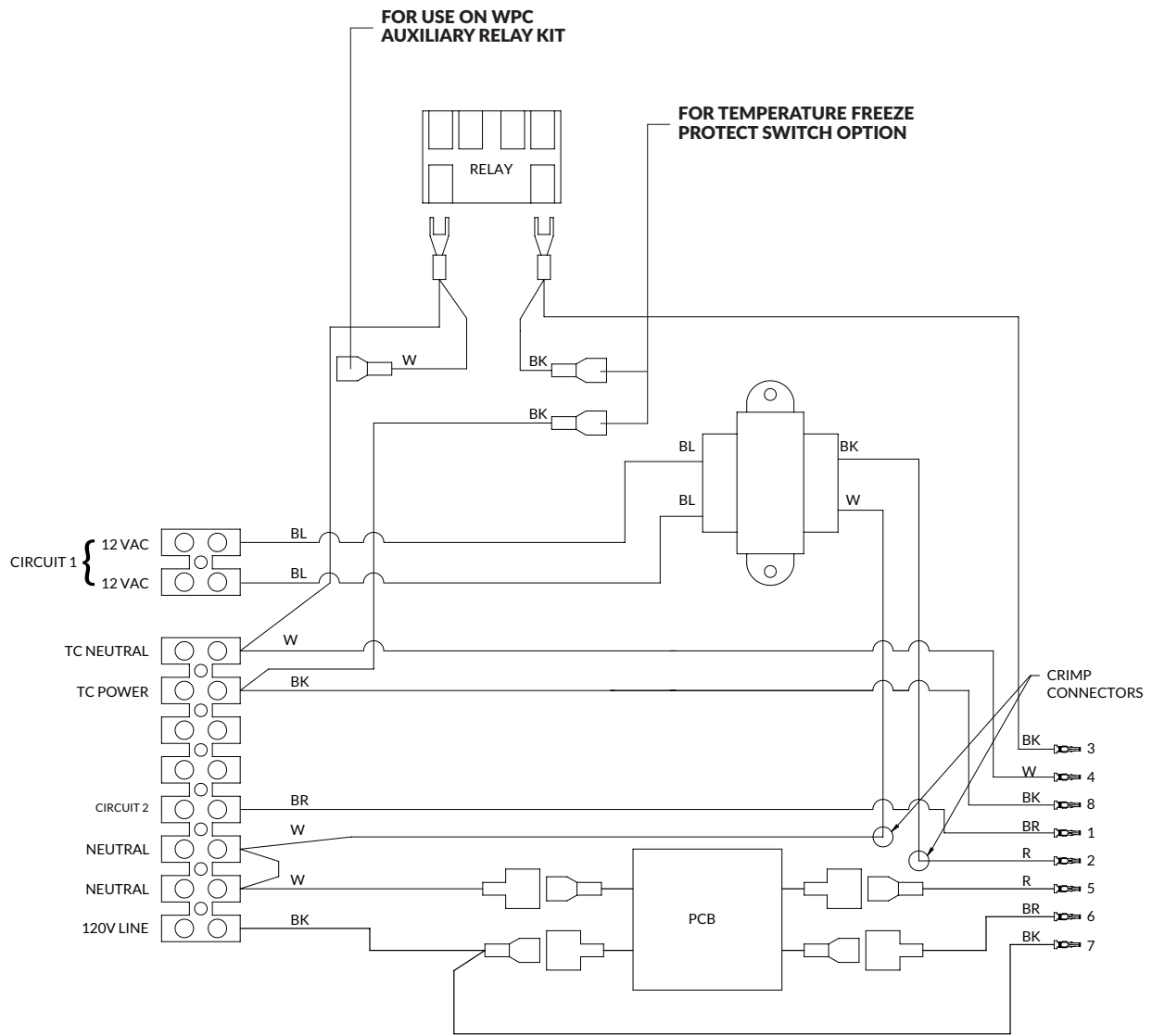
To connect a lighting product to Circuit 2 (120 VAC) switch, pull wires from the products to the WPC-2 through conduits connected to the bottom of the WPC-2.

As illustrated, connect lights that will be operated by the Circuit 2 Switch to the Circuit 2 terminal. Connect the Neutral to the Terminal Block marked Neutral. Connect the Ground to the Equip. GND. bar.

Do not exceed 8 amps for Circuit 2.



If this product is used to connect 120VAC underwater lights directly, refer to 1999 NEC 680-21(b), 2002 NEC 680-24(b) or CEC 68-060, 062 and 066 for details.



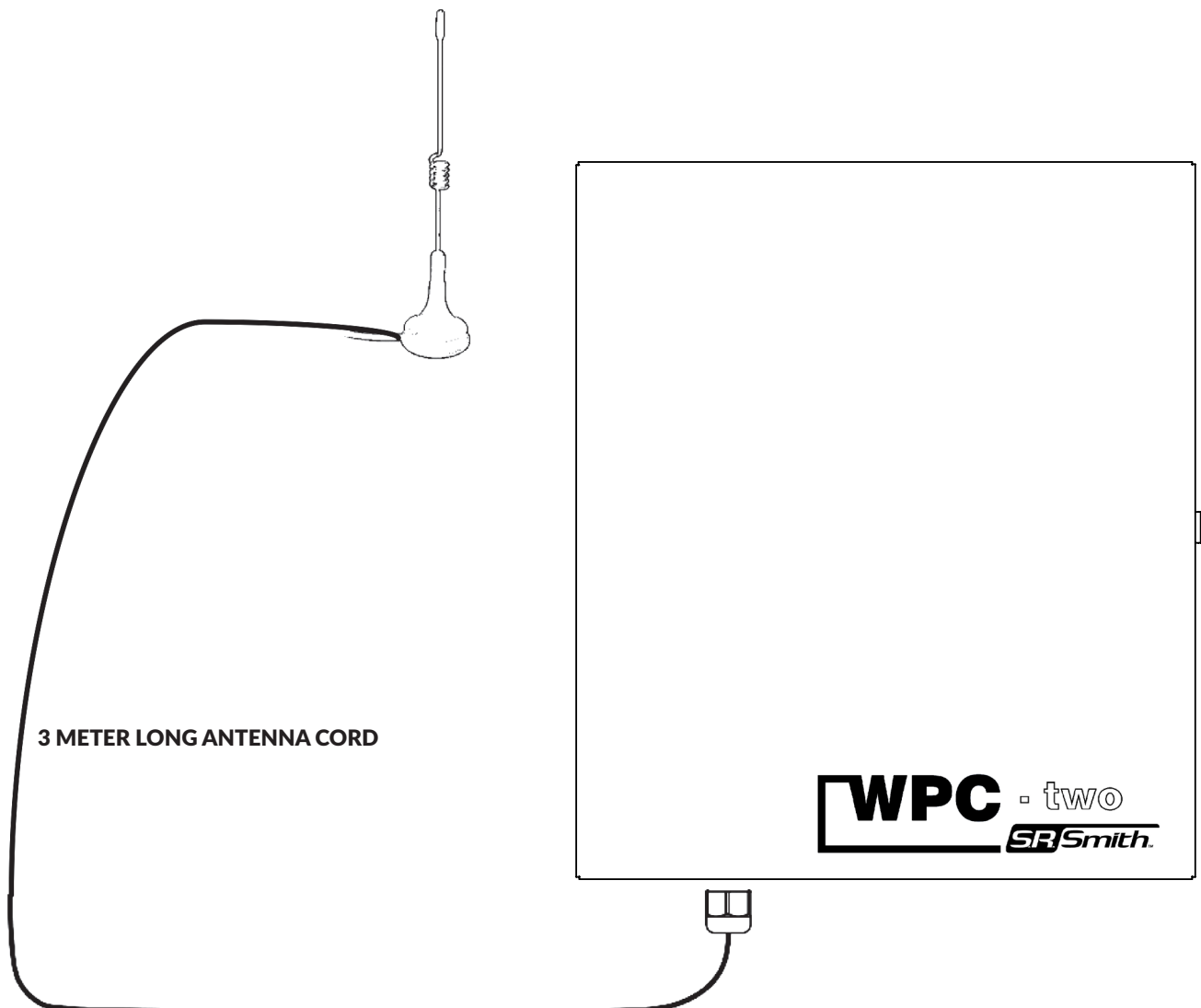
EXTERNAL MAGNETIC ANTENNA MOUNTING

The WPC-2 is equipped with an external antenna that can be mounted up to 3 meters from the WPC-2 unit. The antenna is required as the WPC-2 enclosure is metallic and will block the RF signal from the remote control.

The antenna has a magnetic base and may simply be placed on top of the WPC-2 enclosure.

If moving the antenna elsewhere within 3 meters is desired due to the location of the WPC-2, use the included 90 degree, wall mounting bracket to raise or move the antenna into a clear receiving zone. While not required, best range performance is found when the remote and the antenna are within line of sight and 100' or less.

NOTE: The remote function of this device operates through radio frequency (RF) signals. As with any RF device, this is subject to interference through surroundings and installation location. In the event of an interference issue or if longer range is required, the 3 meter magnetically mounted antenna may be removed and a 15 meter accessory antenna kit may be used to extend the RF antenna towards the use area - part number **pLX-ANTKT-L**. Like any radio device, experimentation may be required to locate the best reception or RF friendly spot.



PUMP CONNECTIONS

NOTE: This model is factory equipped for a Single Speed pump only.

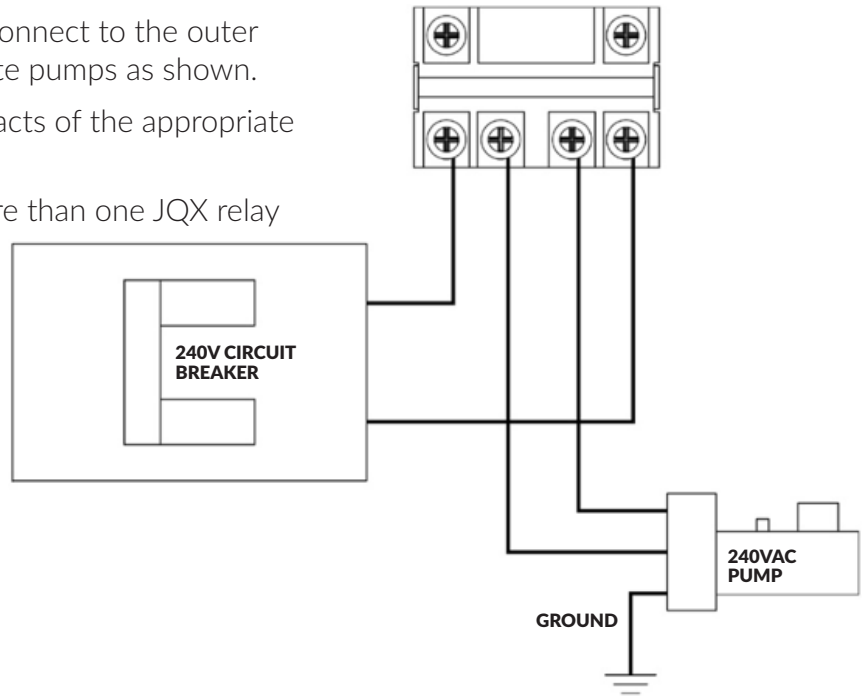
Connecting A 240VAC Pump:

Connect a 240V 30AMP Circuit Breaker for each pump (if this control box is equipped with optional pump relays).

Using an appropriately sized copper wires connect to the outer contacts of the JQX relays of the appropriate pumps as shown.

Run wires from the pump to the inner contacts of the appropriate JQX relay.

NOTE: This unit maybe equipped with more than one JQX relay for pump control



OPERATING INSTRUCTIONS

Timer Operation

Set time to current time. In the example below, the current time is set for 9:00pm.

NOTE: Only turn the Timer dial clockwise or the timer will be damaged.

Once the time has been set to the current time, set the hours of the Pump operation by “snapping” the timer tabs inwards towards the center.

NOTE: Each tab represents 15 minutes of operation and tabs set inwards towards the center is for OFF operations and ON when the tabs are set outwards as illustrated.

In the example below, the Pump will be off from 12:00pm to 11:45pm.

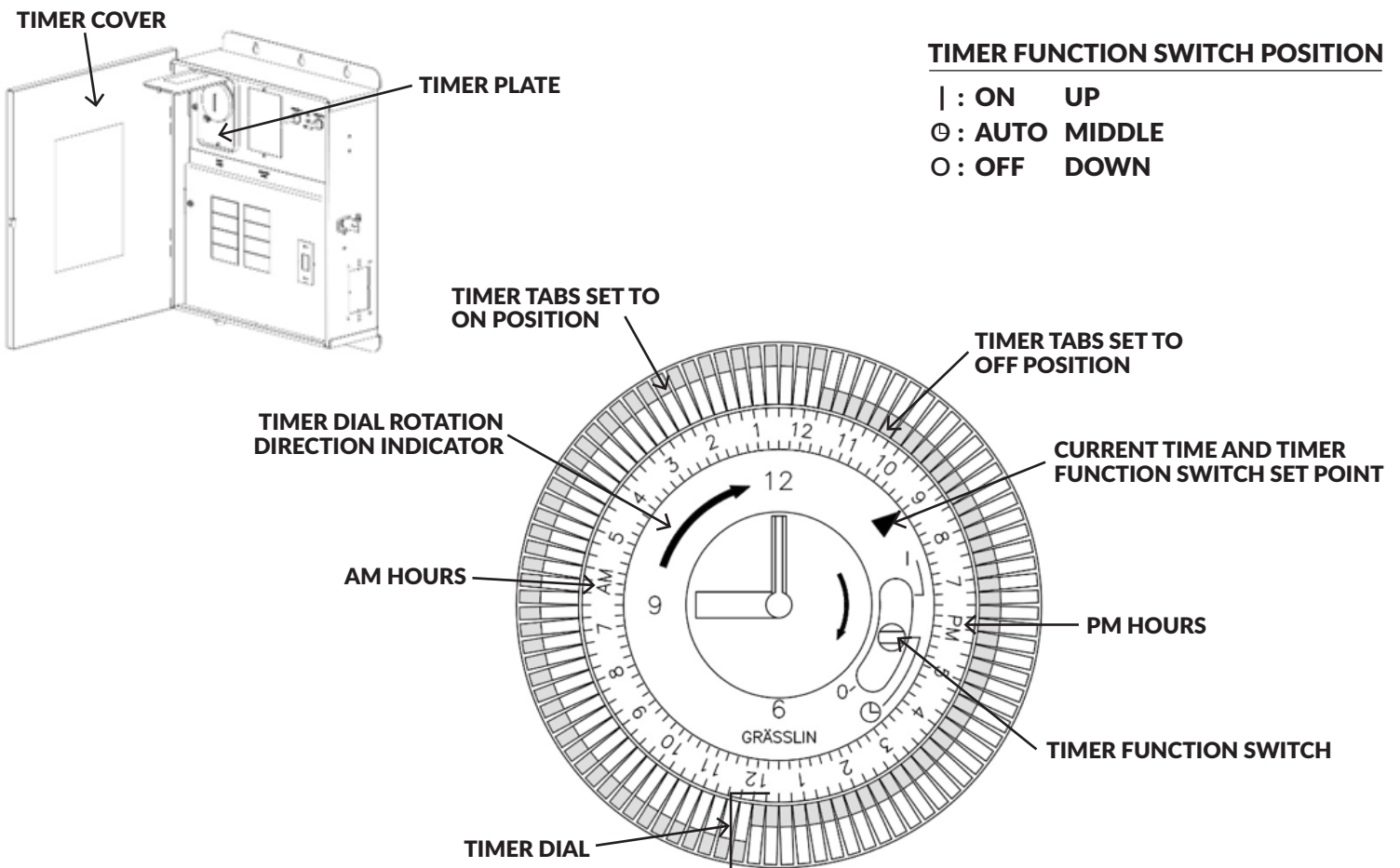
Once the time and time of operation has been set, ensure that the Timer function switch is set to Auto for timer control of the Pump as illustrated below.

To turn off timers automatic functions, set the Timer function switch to OFF.

To manually turn on the Pump, set the Timer function switch to the ON position.

NOTE: When in the ON position, the Pump will continue to run until the Timer function switch is set to Auto where the tabs at the Set Point is in the OFF position or if the Timer function switch is rotated to the OFF position.

Apply the timer label to the timer cover plate. Close the timer cover firmly after timer is set.



WPC-2 Toggle Switch Operation

The WPC-2 receiver box houses two toggle switches. For operation with the wireless transmitter, the toggle switches need to be in the **REMOTE** position.

To manually turn **ON** a device connected to Circuit 1 (12 VAC) or Circuit 2 (120 VAC), flip the switch to the **ON** position.

To manually turn **OFF** a device, flip the switch to the **MIDDLE** or **OFF** position.

NOTE: If a toggle switch is in the **OFF** position, wireless remote operation of the device will be disabled.

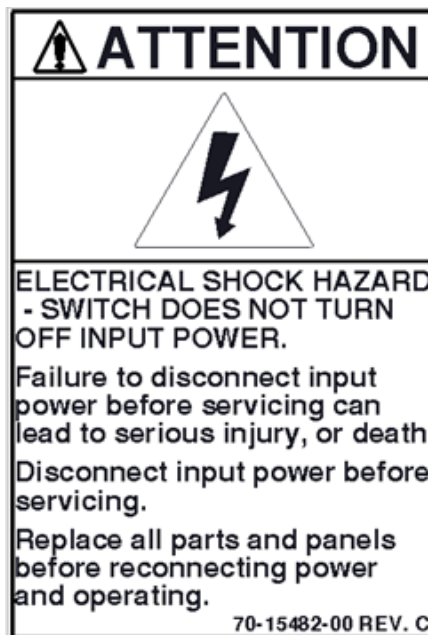
To re-enable wireless remote operation, flip the toggle switch back to the **REMOTE** position.

NOTE: If a device turns **ON** when the toggle switch is set to the **REMOTE** position, turn the wireless remote button **OFF** to turn off the device.

UNITS EQUIPPED WITH TOGGLE SWITCHES



NOTE: CIRCUIT 1 IS IN THE ON POSITION AND CIRCUIT 2 IS IN THE REMOTE POSITION



WARRANTY INFORMATION

For Lighting product warranty information and details, please visit our website: srsmith.com/warranty

Wireless Remote Operation

The RF remote system requires no complex programming and is shipped ready to use. In the event that another WPC unit or similar device is installed nearby and is operating on the same pairing code, that code (A-P) may be easily changed by choosing another via the 4 position DIP switch package found inside the battery compartment of the remote. The receiver board inside the control panel will also need to be changed to match.

Note: The default code as shipped is Code A on both the remote and the receiver.

Sleep Mode

To conserve battery power, the remote will enter standby mode when no function has been selected for 30 seconds or more.

To wake the remote, simply press the '1, 2, S, or M' button momentarily. The indicator will light up solid for 5 seconds indicating that it is ready to transmit. A rapidly flashing indicator indicates that a command signal was sent to the control panel.

To Turn On Using the Wireless Remote Operation

Push the button marked (1) 'ON/OFF - COLOR CHANGE' to toggle on and off the power of Zone 1 on the WPC panel.

Push the button marked (2) 'ON/OFF - COLOR CHANGE' to toggle on and off the power of Zone 2 on the WPC panel.

Color Changing Operation

To change LED pool light colors simply toggle the power OFF, then ON using the button marked '1 or 2' within 1 second. Continue toggling until the desired color or light show is reached. To operate both zones together simultaneously, use the 'M' (master) button on the remote.*

NEW FEATURE

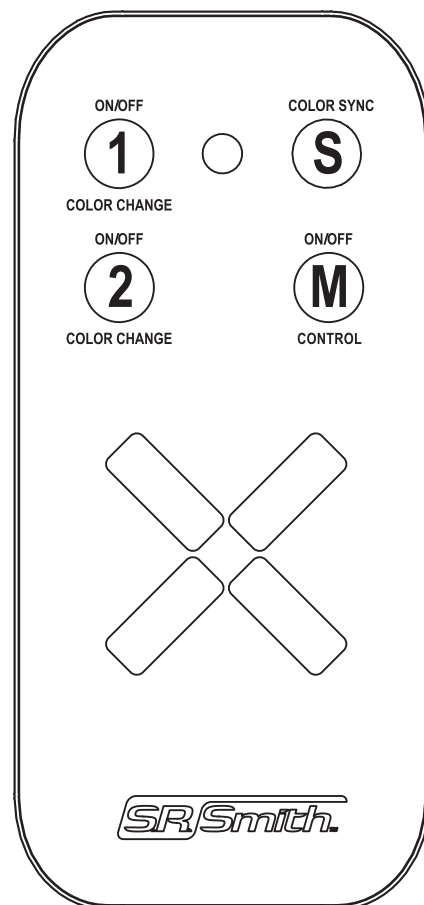
1-Button - Color Sync / Reset Operation

(For use only with SR Smith LED kelo, Treo, FG, Treo Micro & LED water features)

To color synch lights in a multi-light installation (single or dual zone), simply press the "S" button once and wait 15 seconds. During this time, the lights will flash on and off several times, pause in the off mode, then finally resume at color mode 1 (soft color change).

***Note:** Both toggle switches on the WPC unit must be set to REMOTE for wireless operation.

Performance Note: For best results, hold the remote vertically (pointed at the sky) when pressing the command buttons.



PAIRING CODE CHART				
DIP Switch	1	2	3	4
Code A	OFF	OFF	OFF	OFF
Code B	ON	OFF	OFF	OFF
Code D	OFF	ON	OFF	OFF
Code C	ON	ON	OFF	OFF
Code E	OFF	OFF	ON	OFF
Code F	ON	OFF	ON	OFF
Code G	OFF	ON	ON	OFF
Code H	ON	ON	ON	OFF
Code I	OFF	OFF	OFF	ON
Code J	ON	OFF	OFF	ON
Code K	OFF	ON	OFF	ON
Code L	ON	ON	OFF	ON
Code M	OFF	OFF	ON	ON
Code N	ON	OFF	ON	ON
Code O	OFF	ON	ON	ON
Code P	ON	ON	ON	ON

Questions?

Contact One of Our Dedicated Lighting Specialists. **1-800-824-4387** x4012 or x2282



S.R.Smith, LLC
P.O. Box 400 | Canby, OR 97013
P 503.266.2231 **TF** 800.824.4387
srsmith.com