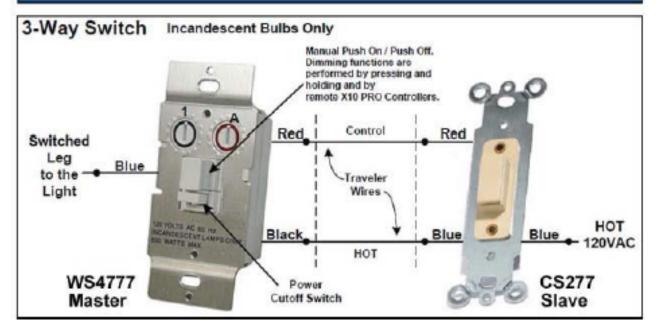
## 3-Way Wall Dimmer Switch - Receiver WS4777



**Description:** The WS4777 3-Way Toggle Style Wall Dimmer Switch Kit is designed to control incandescent bulbs (only) with a rating of 40 to 500W. A pushbutton is provided for local On/Off and Bright/Dim control on the Master and a single push button on the Slave Switch provides the same (see dimming section on back page). A Power Cutoff Switch located directly below the Local On/Off Pushbutton on the Master Switch is provided for bulb changing. Both switches should line-up for normal operation.

Note: A 3-Way / 4-Way system, by definition, means two or more existing wall switches which operate one single light (can be multiple lights if all come on together).

DO NOT USE WITH: APPLIANCES, MOTORS, LOW VOLTAGE LIGHTS OR FLUORESCENT LIGHTS Specific Requirements: 120VAC, 40-500W. Incandescent Bulbs Only, Bulbs rated below 40W may flicker and/or operate erratically.

## Optional / Supplementary Devices & Modules:

CS277 - add this switch for 4-Way setup, see next page. XPT2D - Use this Wall Controller to add additional switch locations when no traveler wires exist. See XPT Installation Instructions.

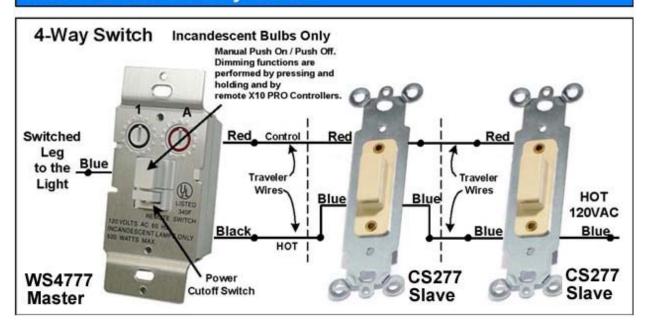
X10 Protocol: House Code Dial - Letters A-P Unit Number Dial - Numbers 1-16 Each X10 Receiver Module is set to a unique Unit Number or to an identical Unit Number as desired. Each X10 Controller operating a specific set of Receiver Modules must be set to the same Letter Code as the Receivers they are controlling. Responds to ALL LIGHTS ON command.

## **Electrical Protocol:**

Nearly all residential homes are wired SPLIT-PHASE. Each 120V Phase is NOT directly connected with the other 120V phase. If after installation, an X10 Receiver does not respond to a remote Controller, then check to ensure that the breaker serving the X10 Receiver is on the same phase as the Controller. If not, the breaker can be changed to the opposite phase. An alternative solution is recommended, to install a Phase Coupler for improving remote communications throughout the home. See www.x10pro.com, then select Technical Support and PLC Troubleshooting.

## Installation:

- 1. Turn power OFF at Circuit Breaker.
- 2. Pull-out the existing 3-way wall switches from the two switch boxes.
- Remove the common-side wire (by itself) from the two switches. In one switch box, that single wire is HOT (Line), in the other switch box, that single wire goes to the light (Switched Leg).
- 4. With Breaker ON, determine which wire is HOT. Use a voltmeter and measure between ground and each single wire individually. One will read 120V, the other 0V. Mark the single wires as to which one is HOT and which one goes to the light.
- 5. The Slave Switch (CS277) is installed in the switch box which has the HOT wire. The Master Switch (WS4777) is installed in the switch box that has the wire that goes to the light.
- 6. With Breaker OFF, remove the existing two wall switches. Three wires (minimum) remain protruding out of each switch box. At the Slave Switch box, one is HOT, the other two wires are the traveler wires. At the Master switch box, one is the Light wire; the other two wires are the traveler wires.
- Install the Slave Switch first. HOT wire goes to either one of the two BLUE wires and one Traveler wire goes to the other BLUE wire, the second Traveler wire goes to RED wire.
- 8. Install the Master Switch second. The One HOT Traveler wire goes to BLACK wire, the second Traveler wire goes to RED wire. The Light wire goes to BLUE wire.
- 9. Re-check all connections, Turn power ON at Circuit Breaker. Turn the Power Cutoff Switch to ON position.
- 10. Press switch button once, the light should turn ON. Press button again, the light should turn OFF (See dimming section on back page).
- 11. You are now ready to control the switch with an X10 Remote Control Module: Desktop, Wireless Handheld, Security Panel, etc. The default address is "A1". If you wish to change the Address Code, the Code Dials require a small flat screwdriver to turn.
- 12. Attach switch cover plates. Full On/Off and Bright/Dim functions are operated from all the Switches in the circuit.



**Description:** The WS4777 3-Way Toggle Style Wall Dimmer Switch Kit is designed to control incandescent bulbs (only) with a rating of 40 to 500W. A pushbutton is provided for local On/Off and Bright/Dim control on the Master and a single push button on the Slave Switches provide the same (see dimming section below). A Power Cutoff Switch located directly below the Local On/Off Pushbutton on the Master Switch is provided for bulb changing. Both switches should line-up for normal operation.

Add one CS277 Slave Switch as a 4-way Switch in conjunction with the WS4777 3-Way Wall Switch Kit. Note: A 3-Way / 4-Way system, by definition, means two or more existing wall switches which operate one single light (can be multiple lights if all come on together).

- 1. Turn power OFF at Circuit Breaker.
- 2. Pull-out the existing 3-way and 4-way wall switches from the three switch boxes.
- 3. Remove the common-side wire (by itself) from the two 3-way switches. In one switch box, that single wire is HOT (Line), in the other switch box that single wire goes to the light (Switched Leg). The 4-way switch box will have 4 wires.
- 4. With Breaker ON, determine which wire is HOT. Use a voltmeter and measure between ground and each single wire individually. One will read 120V, the other 0V. Mark the single wires as to which one is HOT and which one goes to the light.
- 5. The Slave Switch (CS277) is installed in the switch box which has the HOT wire. The Master Switch (WS4777) is installed in the switch box that has the wire that goes to the light.
- 6. With Breaker OFF, remove the existing three wall switches. Three wires (minimum) remain protruding out of each switch box except in the middle box which will have 4 wires. At the first Slave Switch box, one is HOT, the other two wires are the traveler wires. At the Master switch box, one is the Light wire, the other two wires are the traveler wires.
- 7. Install the Slave Switch first. HOT wire goes to either one of the two BLUE wires and one Traveler wire goes to the other BLUE wire, the second Traveler wire goes to RFD wire
- 8. The middle box between the Master and the last Slave is identified by have two each of the same color traveler wires, (i.e. two blacks and two reds, but can be any combination of similar colored wires).
- 9. Identify which color you have designated as the HOT traveler from the first slave box, and attach both BLUE wires to each of the same colored HOT travelers. The last two similar colored wires need to be attached together to the RED wire on the Switch.
- 10. Install the Master Switch last. The One HOT Traveler wire goes to BLACK wire, the second Traveler wire goes to RED wire. The Light wire goes to BLUE wire.
- 11. Re-check all connections, Turn power ON at Circuit Breaker. Turn the Power Cutoff Switch to ON position.
- 12. Press switch button once, the light should turn ON. Press button again, the light should turn OFF. (See dimming section below).
- 13. You are now ready to control the switch with an X10 Remote Control Module: Desktop, Wireless Handheld, Security Panel, etc. The default address is "A1". If you wish to change the Address Code, the Code Dials require a small flat screwdriver to turn.
- 14. Attach switch cover plates. Full On/Off and Bright/Dim functions are operated from all the Switches in the circuit.

Soft Start On and Fade Off plus Bright / Dim Control: On/Off - A short key press causes the Switch to come on at full dim and fade up to the full intensity, another short key press causes the Switch to fade off (brightening to full intensity and fading to full off takes approx 3 seconds each direction). Dimming from ON - Press and hold to achieve the dim level desired then release. When released, the direction of dimming is toggled, (i.e. next press and hold will cause the switch to brighten). A short key press from any dimmed level will fade off the Switch. A dimmed Switch will resume the level of intensity when turned back on (i.e. if dimmed to 50% then turned off, the Switch will resume at 50% when turned back on).

**Note:** If you would like the Switch to always resume full intensity when turned on, then press and hold the key until the Switch attains full brightness before releasing. Then a short key press will fade off. Additionally, any X10 Controller can remotely operate the full functions of the Switch.

30 DAY LIMITED WARRANTY x10pro-usa.com (X10PRO-USA), a division of Authinx Inc., warrants this product to be free from defective material and workmanship for a period of 30 days from the original date of purchase at retail. X10PRO-USA agrees to repair or replace, at its sole discretion, a defective product if returned to X10PRO-USA within the warranty period and with proof of purchase. If service is required under this warranty:

Call 1-888-384-0969, visit <a href="mailto:www.x10pro-usa.com">www.x10pro-usa.com</a>, or email <a href="mailto:support@x10pro-usa.com">support@x10pro-usa.com</a>