Incandescent & Inductive Dimmer - Receiver   XPDI3

Single-Pole Switch

Dials Behind Rocker

Switched Leg to Light — **Blue**

1   A

Red (CONTROL) — No Connection

Neutral (White) — **White**

OFF   ON

Black — HOT (Black)

XPDI3 Master

Power Cutoff Switch
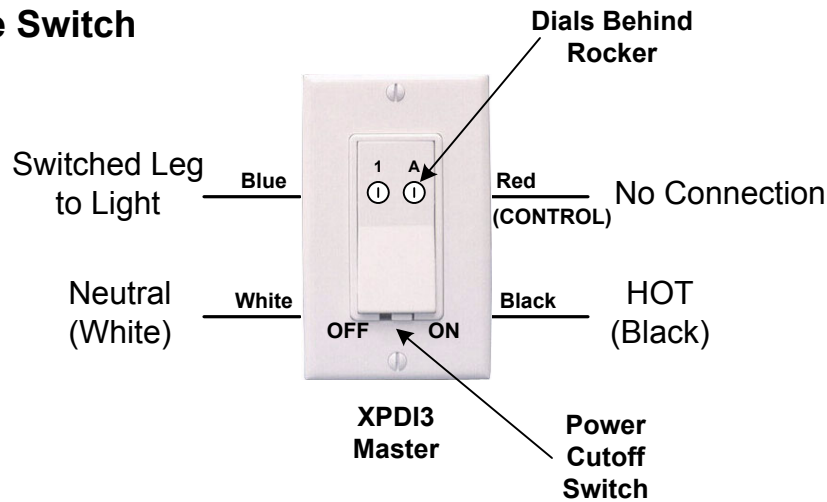
Description:
The XPDI3 is an electronic, decorative-style, dimming, Single-Pole/3-Way Wall Master Switch rated for 40-500watts, 4A Inductive.   It can handle loads as follows: Incandescent (120V Standard or Halogen) Bulbs, Low Voltage Lighting using Inductive Transformers, ceiling fan motors, etc. Its decorative paddle permits local operation of the Switch. The Power Cutoff Switch is provided for bulb changing. The X10 Address Code Dials set the Letter Code and Number Code and are located behind the paddle.

Specific Requirements: 120VAC, 40-500W Incandescent, 4A Inductive.   Lamps rated below 40W may flicker and/or operate erratically.
The Neutral Wire IS required.
The Ground Wire is not used.

Optional / Supplementary Devices & Modules:
XPDP-AL - Almond Rocker in Pkg of 10ea.
XPSS - Slave Switch for existing 3-Way Installations. Uses XPSP-AL Almond rockers.
XPT2D - Alternate Slave Switch (Transmitter) for existing and new 3-Way/4-way Installations.
XPF - Filter to reduce noise, from load, degrading switch operation.

X10 Protocol: House Code Dial -   Letters A-P (default "A")   **Unit Number Dial** -   Numbers 1-16 (default "1")
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.
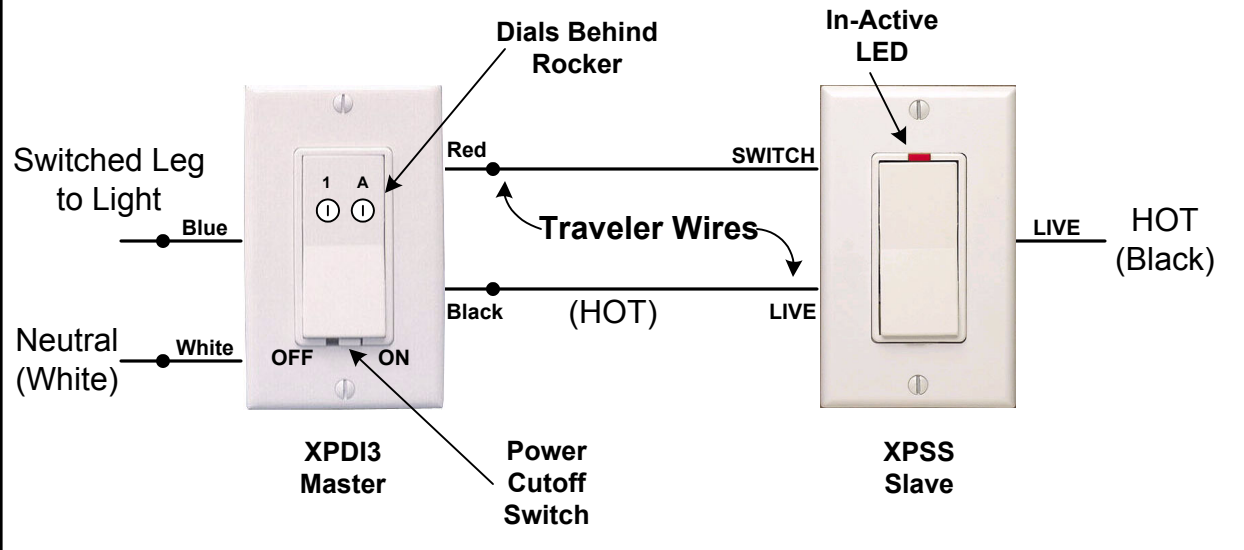See www.x10pro.com, then select Technical Support and PLC Troubleshooting.

Installation: for Single-Pole operation
1. Turn power OFF at Circuit Breaker.
2. Pull-out the existing wall switch from the switch box.
3. Inspect inside the wall switch box for existence of white neutral wire/wires capped together (typically at the back of the box). If no white neutral wires exist, STOP. You CANNOT use the XPDI3 unless you run a neutral wire to this box.
4. On the XPDI3 Cap off the RED wire, it will not be used in this install.
5. Remove the existing wall switch. Two wires remain protruding out of switch box. One is HOT, the other goes to the light/load. They may be the same color.
6. With Breaker ON, determine which protruding wire is HOT. Use a voltmeter and measure between ground and each wire individually. One will read 120V, the other 0V.
7. With Breaker OFF, connect a white neutral wire to the WHITE wire. You may have to tap into a neutral wire bundle with an additional white wire 6-8" long.
8. Connect the HOT wire to the BLACK wire, connect the Light/Load wire to the BLUE wire.
9. Re-check all connections, Turn power ON at Circuit Breaker. Turn the Power Cutoff Switch to ON position.
10. Press switch paddle once, the light should turn ON. Press & Hold to Dim the light/load. Press paddle again, the light should turn OFF.
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 are behind the paddle. Remove the paddle with a small flat screwdriver applied to the side of the paddle at the center fulcrum point. Insert screwdriver in small gap space between switch plate and paddle and flip the paddle up from its side.
12. Attach the switch cover plate.

Note: See Soft Start / Fade Off Dimming information on the bottom of the next page.

3-Way Installation - Existing

Dials Behind Rocker

In-Active LED

Switched Leg to Light — **Blue**

Red — **SWITCH**

Traveler Wires

LIVE — HOT (Black)

Neutral (White) — **White**

Black — (HOT) — **LIVE**

1 A

OFF ON

XPDI3 Master

Power Cutoff Switch

XPSS Slave

Installation: for 3-Way operation - Existing

Note: A 3-Way system, by definition, means two 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 wall switches from the two switch boxes.

3. Remove the common-side wire (by itself) from the two switches. In one switch box, that single wire is HOT, in the other switch box, that single wire goes to the light.

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. With Breaker OFF, mark the single wires as to which one is HOT and which one goes to the light.

5. The Slave Switch is installed in the switch box which has the HOT wire. The Master Switch is installed in the switch box that has the wire that goes to the light.

6. Inspect inside the wall switch box (that has the wire going to the light) for existence of white neutral wire/wires capped together. If no white neutral wires exist, STOP. You CANNOT use the XPDI3 unless you run a neutral wire to this box.

7. 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.

8. With Breaker OFF, install the Slave Switch first. HOT wire goes to LIVE (either screw, they are a common bus), One Traveler wire also goes to LIVE, the second Traveler wire goes to SWITCH.

9. With Breaker OFF, install the Master Switch second. The One HOT Traveler wire goes to BLACK wire, the second Traveler wire goes to RED wire. The Light/Load wire goes to BLUE wire. Connect a white neutral wire to the WHITE wire. You may have to tap into a neutral wire bundle with an additional white wire 6-8" long.

10. Re-check all connections, Turn power ON at Circuit Breaker. Turn the Power Cutoff Switch to ON position.

11. Press Master Switch paddle once, the light should turn ON. Press paddle again, the light should turn OFF. Press the Slave Switch paddle once, and the light should turn ON. Press the Slave Switch paddle again, and the light should turn OFF.

12. 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 are behind the paddle. Remove the paddle with a small flat screwdriver applied to the side of the paddle at the center fulcrum point. Insert screwdriver in small gap space between switch plate and paddle and flip the paddle up from its side.

13. Attach the switch cover plate. 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 paddle press causes the Switch to come **on at full dim and fade up to the full intensity,** another short paddle 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 paddle 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 paddle until the Switch attains full brightness before releasing. Then a short paddle press will fade off.
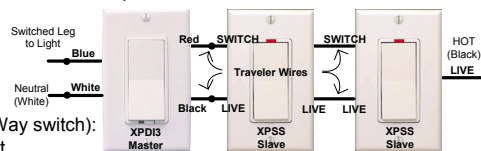Additionally, any X10 Controller can remotely operate the full functions of the Switch..

Note: 4-Way circuits can be replaced using the XPDI3 and two (2) XPSS Slave Switches.
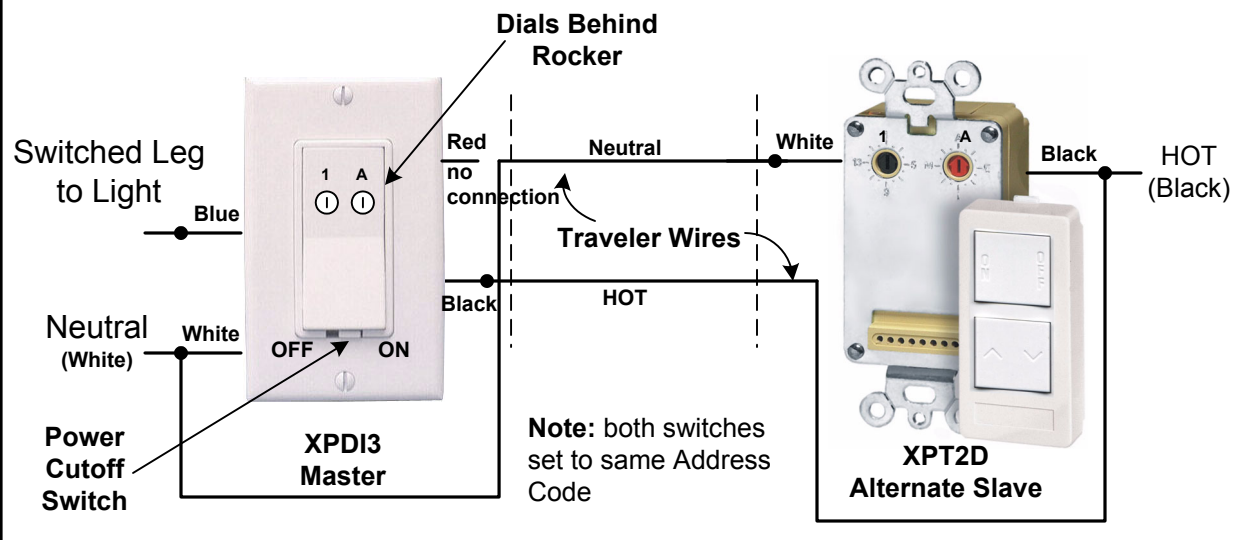This picture represents the switches in a "3-Way - 4-Way - 3-Way" circuit.
Simply connect an XPSS in the middle box (noted by 4 wires removed from the existing 4-Way switch):

1. Connect the 2 traveler wires that make connection from the Switch connection on the first XPSS Slave and the Red wire connection on the XPDI3 Master, both to the Switch terminal on this 4-Way XPSS.

2. Connect the 2 traveler wires that make connection from the Live connection on the first XPSS Slave and the Black wire connection on the XPDI3 Master, both to the Live terminal on this 4-Way XPSS.

3-Way Installation - Existing/Alternate

Dials Behind Rocker

Switched Leg to Light

Blue

Red no connection

Neutral

White

Black

HOT (Black)

Neutral (White)

White

Traveler Wires

OFF   ON

Black

HOT

Power Cutoff Switch

XPDI3 Master

Note: both switches set to same Address Code

XPT2D Alternate Slave

Installation: for 3-Way / 4-Way operation - Existing/Alternate

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). In this alternate installation instruction, the XPSS switch may not work well due to longer traveler wires between multiple switches. The XPT2D Transmitter will work over the longer wires between multiple switches. The XPT2D Transmitter provides ON/OFF and Bright/Dim.

1. Turn power OFF at Circuit Breaker.
2. Pull-out the existing 3-way wall switches from the two switch boxes.
3. Remove the common-side wire (by itself) from the two switches. In one switch box, that single wire is HOT, in the other switch box, that single wire goes to the light.
4. With Breaker ON, determine which wire is HOT. Use a voltmeter and measure between ground and each wire individually. One will read 120V, the other 0V. With Breaker OFF, mark the wires as to which one is HOT and which one goes to the light.
5. The Alternate XPT2D Transmitter is installed in the switch box which has the HOT wire. The Master Switch is installed in the switch box that has the wire that goes to the light.
6. Inspect inside the wall switch box (that has the wire going to the light) for existence of white neutral wire/wires capped together. If no white neutral wires exist, STOP. You CANNOT use the XPDI3 unless you run a neutral wire to this box.
7. 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. They may be the same color, normally they are different colors. At the Master switch box, one is the Light wire, the other two wires are the traveler wires. They may be the same color, normally they are different colors.
8. With Breaker OFF, install the Alternate XPT2D Transmitter first. The HOT wire goes to the XPT2D Transmitter Black wire bundled with one Traveler wire, the second Traveler wire goes to the XPT2D Transmitter White wire (this traveler will supply neutral to the Transmitter from the Master box).
9. With Breaker OFF, install the Master Switch second. The One HOT Traveler wire goes to BLACK wire, the second Traveler wire goes to WHITE wire. Connect a white neutral wire to the WHITE wire bundled together with the second traveler wire, as previously mentioned. You may have to tap into a neutral wire bundle with an additional white wire 6-8" long. The Light/Load wire goes to BLUE wire.
10. Re-check all connections, Turn power ON at Circuit Breaker. Turn the Power Cutoff Switch to ON position.
11. Press Master Switch paddle once, the light should turn ON. Press paddle again, the light should turn OFF. Press the alternate XPT2D Transmitter "ON" position once, and the light should turn ON. Press the alternate XPT2D Transmitter "OFF" position once, and the light should turn OFF.
12. 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" for both switches. If you wish to change the Address Code, the Code Dials are behind the paddle on the Master and the Keypad on the Transmitter. Remove the paddle with a small flat screwdriver applied to the side of the paddle at the center fulcrum point. Insert screwdriver in small gap space between switch plate and paddle and flip the paddle up from its side. Remove the Keypad, with fingers pulling from bottom, to change the XPT2D Address Code.
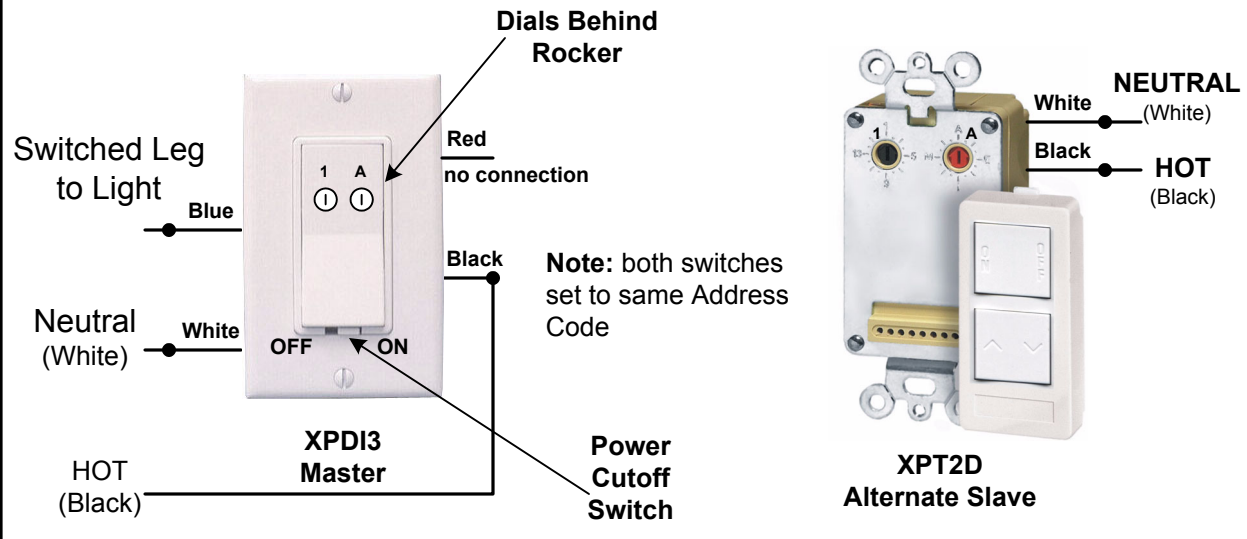13. Attach the switch cover plate.

Note: Soft Start On and Fade Off plus Bright / Dim Control:
On/Off - A short paddle press causes the Switch to come **on at full dim and fade up to the full intensity,** another short paddle 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 paddle 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: You can use additional XPT2D Wall Transmitter Switches to augment EXISTING 4-Way or greater systems. Continue using the existing traveler wires to carry HOT and Neutral to the additional existing Switch Box locations. Then install the XPT2D in those additional boxes with traveler wires, connecting to HOT and Neutral.

3-Way Installation - Create New (when there are no traveler wires available between boxes)

Dials Behind Rocker

Switched Leg to Light

Blue

Red — no connection

1 **A**

Black

Neutral (White)

White

OFF **ON**

Note: both switches set to same Address Code

XPDI3 Master

HOT (Black)

Power Cutoff Switch

NEUTRAL (White)

White

Black

HOT (Black)

1 **A**

XPT2D Alternate Slave

Installation: for 3-Way operation - Create New (when there are no traveler wires available between boxes)

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). In this Create NEW installation instruction, there are no traveler wires between switches.
The XPT2D Transmitter will be connected to HOT and NEUTRAL only. It will communicate with the Master Switch via existing power wires. The XPT2D provides ON/OFF and Bright/Dim.

1. Turn power OFF at Circuit Breaker.
2. Pull-out the existing single-pole wall switch from the switch box.
3. Inspect inside the wall switch box for existence of white neutral wire/wires capped together. If no white neutral wires exist, STOP. You CANNOT use the XPDI3 unless you run a neutral wire to this box.
4. With Breaker OFF, remove the existing wall switch. Two wires remain protruding out of switch box. One is HOT, the other goes to the Light/Load. They may be the same color.
5. With Breaker ON, determine which wire is HOT. Use a voltmeter and measure between ground and each wire individually. One will read 120V, the other 0V.
6. Connect a white neutral wire to the WHITE wire. You may have to tap into a neutral wire bundle with an additional white wire 6-8" long.
7. With Breaker OFF, connect the HOT wire to the Black wire, connect the Light/Load wire to the BLUE wire.
8. Re-check all connections, Turn power ON at Circuit Breaker. Turn the Power Cutoff Switch to ON position.
9. Press switch paddle once, the light should turn ON. Press paddle again, the light should turn OFF.
10. 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 are behind the paddle. Remove the paddle with a small flat screwdriver applied to the side of the paddle at the center fulcrum point. Insert screwdriver in small gap space between switch plate and paddle and flip the paddle up from its side.
11. Install the XPT2D Wall Transmitter Switch. You will need an existing or new switch box which has power run to it.
12. With Breaker OFF, connect the XPT2D Black wire to HOT, connect the XPT2D white wire to Neutral. Turn Breaker ON.
13. Press the XPT2D Switch "ON" position once, and the light should turn ON. Press the XPT2D Switch "OFF" position once, and the light should turn OFF.
14. To change the XPT2D Address Code, remove the Keypad, with fingers pulling from bottom, then turn the dials with small flat screwdriver to the desired Address Code. Keep the XPDI3 and XPT2D Address Codes identical.
15. Attach the switch cover plates.

Note: Soft Start On and Fade Off plus Bright / Dim Control:
On/Off - A short paddle press causes the Switch to come **on at full dim and fade up to the full intensity,** another short paddle 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 paddle 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: You can use additional XPT2D Wall Transmitter Switches to augment EXISTING 4-Way or greater systems. Continue using the existing traveler wires to carry HOT and Neutral to the additional existing Switch Box locations. Then install the XPT2D in those additional boxes with traveler wires, connecting to HOT and Neutral.

Note: You can use additional XPT2D Wall Transmitter Switches to augment NEW 4-Way or greater systems (when there are no traveler wires available between boxes). You will need additional wall switch boxes with power run to them. Then install the XPT2D, connecting HOT and Neutral.