Technical Article

LEVITON

LevNet RF™ Controlling Multiple Wired LED Dimmers from One 0-10V Wireless Dimmer

Product: LevNet RF Energy Harvesting with Wireless Protocol Solutions (WSS0S, WSD0x)   **Article ID:** 09132012-JE/TB-01

Date: September 13, 2012

Summary: This article outlines how and why to use one 0-10V dimmer to control multiple wired LED dimmers.

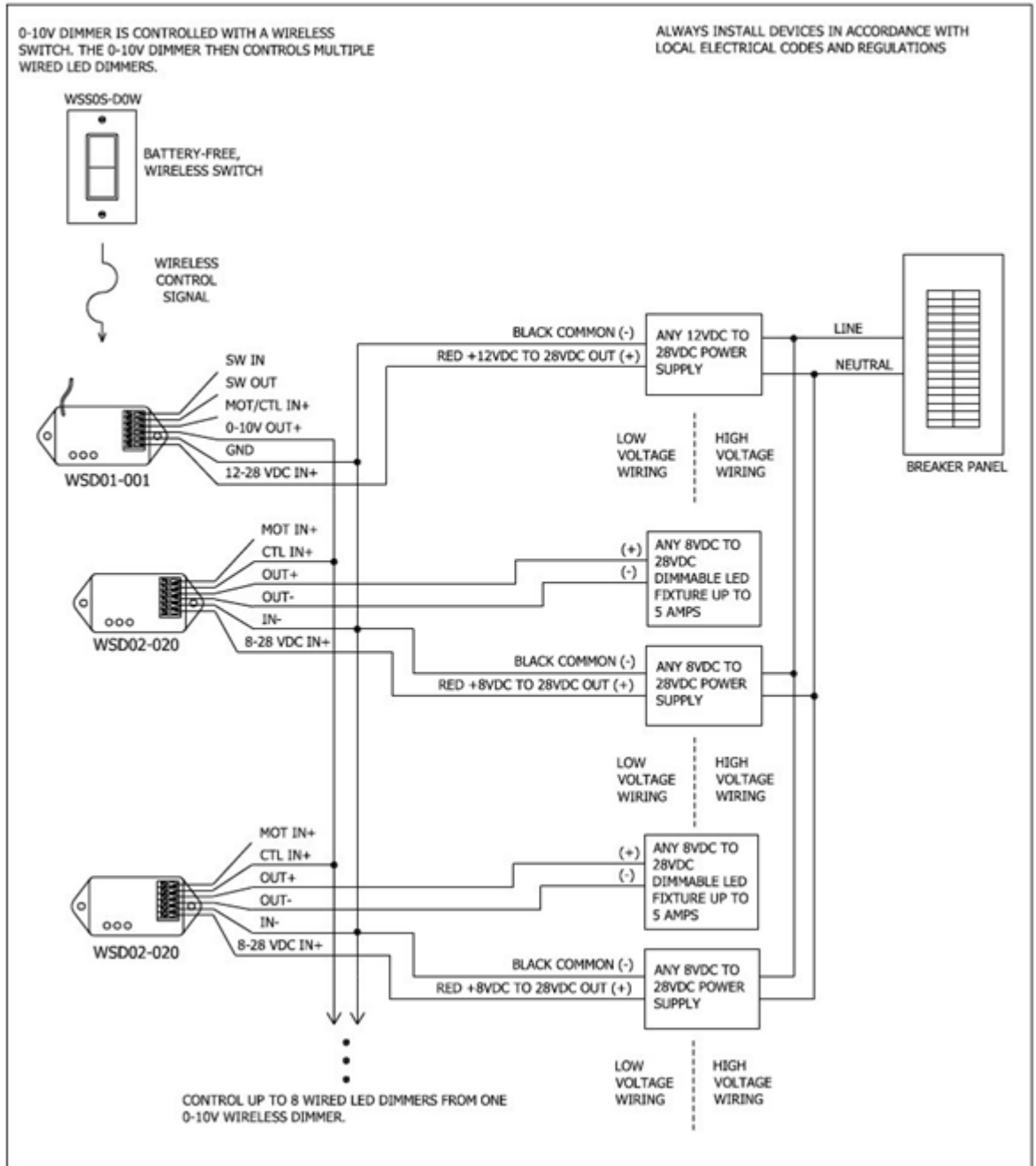**Information:** **Application Explanation:**
In many applications, running control wires from a LED dimmer to the control switch is difficult and costly. LevNet RF Energy Harvesting with Wireless Protocol switches and a 0-10V dimmer simplify installation by eliminating the need to run wires and alleviating placement concerns.

To program for switching signs from an existing circuit, perform the following:
A Wireless Switch (WSS0S-D0W) is used to raise and lower the output of the 0-10V dimmer. This 0-10V output is then wired to the control input of the Wired LED Dimmer. The Wired LED Dimmer dims the LEDs according to the percent of the 0-10V input signal (5V is 5%).

Refer to Figure 1 on page 2 for diagram instructions.

1. Link a Wireless Switch (WSS0S-D0W) to a 0-10V Dimmer (WSD01-001) in mode 1.
2. Wire the 0-10V Dimmer to the Wired LED Dimmers (WSD02-020) as shown in Figure 1.
3. Installation complete. The 0-10V Dimmer can control up to 8 Wired LED Dimmers.

PL-PD-F007 Rev. 2 04/06/2009

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0-10V DIMMER IS CONTROLLED WITH A WIRELESS SWITCH. THE 0-10V DIMMER THEN CONTROLS MULTIPLE WIRED LED DIMMERS.

ALWAYS INSTALL DEVICES IN ACCORDANCE WITH LOCAL ELECTRICAL CODES AND REGULATIONS

WSS0S-D0W

BATTERY-FREE, WIRELESS SWITCH

WIRELESS CONTROL SIGNAL

SW IN
SW OUT
MOT/CTL IN+
0-10V OUT+
GND
12-28 VDC IN+

WSD01-001

BLACK COMMON (-)
RED +12VDC TO 28VDC OUT (+)

ANY 12VDC TO 28VDC POWER SUPPLY

LINE
NEUTRAL

BREAKER PANEL

LOW VOLTAGE WIRING | HIGH VOLTAGE WIRING

MOT IN+
CTL IN+
OUT+
OUT-
IN-
8-28 VDC IN+

WSD02-020

(+) ANY 8VDC TO 28VDC DIMMABLE LED FIXTURE UP TO 5 AMPS
(-)

BLACK COMMON (-)
RED +8VDC TO 28VDC OUT (+)

ANY 8VDC TO 28VDC POWER SUPPLY

LOW VOLTAGE WIRING | HIGH VOLTAGE WIRING

MOT IN+
CTL IN+
OUT+
OUT-
IN-
8-28 VDC IN+

WSD02-020

(+) ANY 8VDC TO 28VDC DIMMABLE LED FIXTURE UP TO 5 AMPS
(-)

BLACK COMMON (-)
RED +8VDC TO 28VDC OUT (+)

ANY 8VDC TO 28VDC POWER SUPPLY

LOW VOLTAGE WIRING | HIGH VOLTAGE WIRING

CONTROL UP TO 8 WIRED LED DIMMERS FROM ONE 0-10V WIRELESS DIMMER.

Contact: If you have any questions or concerns, please call LES technical support at (800) 959-6004.