

## Neutral vs. Non-Neutral Multi-Tech Wall Switch Sensors

**Product:** OSSMD and OSSMT  
Multi-Tech Wall-Switch Sensors

**Article ID:** 080108-tl-01

**Date:** August 1, 2008

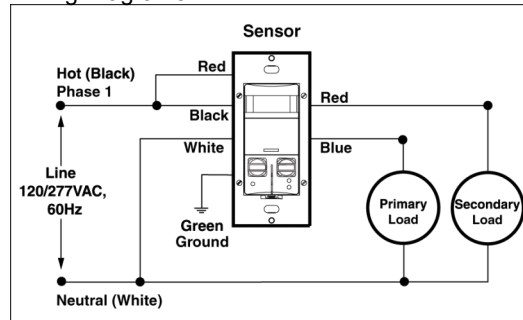
**Summary:** The purpose of this article is to define the application and selection of neutral versus non-neutral versions of multi-technology occupancy sensors.

**Information:** Leviton multi- technology occupancy sensors employ heavy duty switching relays. A neutral wire is typically required for operation of the relay circuit. However, some existing switch locations do not have a neutral wire present. For these applications, Leviton offers dedicated non-neutral models. These units contain a specialized power supply designed to generate the current necessary to operate the device. These versions use the ground connection to complete the relay circuit while producing a minimal amount of ground leakage.

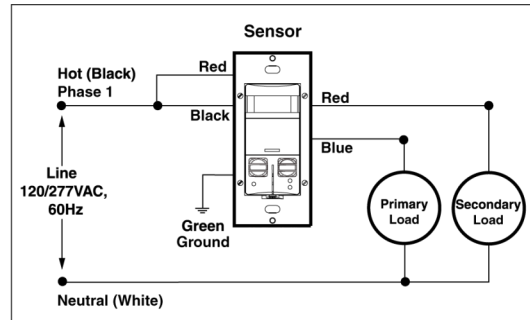
While either version may be used, it is recommended that for new construction or locations with a neutral, the standard, neutral versions should be selected. The non- neutral versions may be used in retrofit applications where no neutral is readily available.

Below is the wiring diagram for both neutral and non-neutral models, as well as available models of each.

### Wiring Diagrams



OSSMX-MD/OSSMD-FT



OSSMX-GD

Cat. No.*	Description
OSSMD-MDx	Dual Relay Multi-Tech Wall Switch Occupancy Sensor
OSSMD-GDx	Dual Relay Multi-Tech Wall Switch Occupancy Sensor, No Neutral
OSSMD-FTx	Dual Relay Multi-Tech Wall Switch Occupancy Sensor, Fan Version
OSSMT-MDx	Multi-Tech Wall-Switch Occupancy Sensor
OSSMT-GDx	Multi-Tech Wall Switch Occupancy Sensor, No Neutral

\* X = White (W), Ivory (I), Almond (A), Light Almond (T), Gray (G), Ebony (B)

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

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