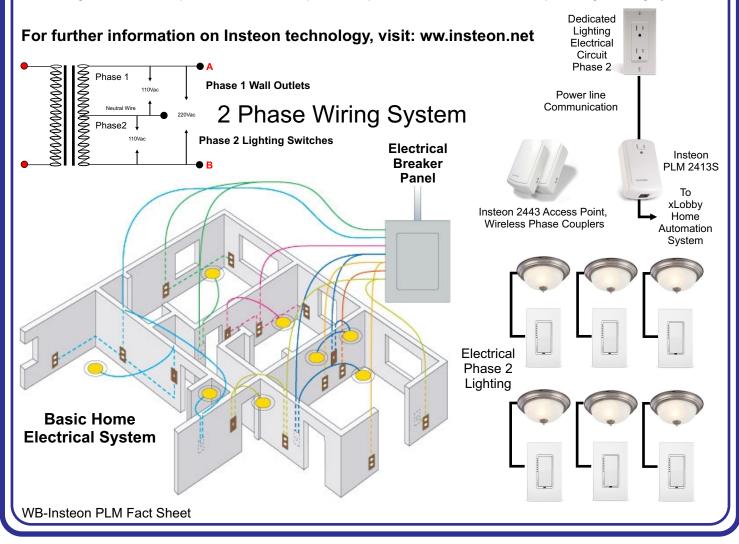


There are many automated lighting products on the market today using several different types of technologies over existing electrical wiring to perform power line communication for transmitting signals. These types of products can offer some challenges when installed in a home with other electrical equipment on the same phase. Various home electronics and appliances can create noise on the electrical line preventing reliable data communication between some of the devices. Power line communication is not always dependable and messages can be lost, even with an acknowledgment and retry scheme. Power line communication reliability can be hampered by frequencies near those used by Insteon communication (131.65 kHz). This makes it necessary to purchase additional products to repeat signals and filter noise. When using the insteon PLM interface module It's very important to install the PLM "**away from Audio-Video equipment racks**", the preferred method would be to install a separate electrical outlet that is on the same phase as the lighting systems used in the home, since this is where the majority of devices you are controlling reside. Insteon passive and wireless phase couplers are available that can improve signal integrity.



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