

Specifications

Main Power / amperage

Power receptacles (2)

Maximum HID wattage

PXM-1

15-amps @ 120-volt AC

120 volt Nema 5-15

1200 watts (on 120-volt)

PXM-2

Main Power / amperage

Power receptacles (2)

Maximum HID wattage

15-amps @ 240-volt AC

240 volt Nema 6-15

2000 watts (on 240-volt)

PXM-1&2

Trigger power supply (PXM-1&2)

Weight / Dimensions

Life Expectancy

120-volt, Nema 1-15 /

12-volt DC output

3 lbs / 8" x 4" x 3"

> 10 years

All Sentinel Timers and controllers offer a **3-year** warranty.

Ask your retailer for details.



Sentinel products are distributed by:

GPS / Global Product Solutions LLC.



www.growgps.com



Instruction Manual

PXM-1&2

Power Expansion Module



Introduction

When you need to control larger equipment with higher amperage, the PXM is the answer. Power Expansion Modules increase the number OR size of the lights, fans, air conditioners and pumps in your growing area that can be “automated”. The PXMs have been designed to expand the capabilities of the Sentinel controllers and timers. You install the PXM by connecting the pre-wired “trigger” cable into any controller or timer that is 120 volt. Then locate a suitable circuit and plug in the pre-wired **#14 AWG** cable into the power outlet of your choice. Plug the devices that are to be controlled into the PXM and you are ready to go.

* The PXMs come in a 120 volt (PXM-1) and a 240 volt (PXM-2) version. Each has 2 receptacles to connect to.

* PXMs are able to control up to **15-amps** of power.

* The PXMs are pre-wired and ready to use right out of the box, **NO WIRING REQUIRED.**

The PXMs are housed in a high impact plastic enclosure.

The PXMs are completely “pre-wired” and requires only connecting the devices to the unit, and then to plug the power cable into the power outlet of your choice.

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WARNING: Installation must be done in accordance with state and local electrical codes.

Troubleshooting

Some of the more common questions and problems are listed here.

Problem: The controller is turning On the relay and green LEDs but there is not power coming from the receptacles.

Verify the circuit breaker on the bottom of the unit is turned ON. Check the main power source that the PXM is connected to.

Problem: The green LEDs and relays do not turn ON.

Check the timeclock or controller that the trigger power supply is connected to. The trigger cable provides a 120-volt “signal” to the PXM that turns ON the relays. Try plugging the trigger power supply into a known 120-volt power source. If it works, then the problem is with the timeclock or controller you are using to turn the PXM ON.

Problem: The circuit breaker for the main power keeps shutting OFF.

The circuit breaker is protecting the circuit from overloading. The amperage of the devices connected may be too much for the PXM. It is also possible that one or more of the ballasts have failed (shorted out) or the device connected to the PXM is having a problem. Try unplugging each ballast one at a time to determine which ballast has a problem. Verify the device connected is working properly by connecting it directly to a power source. Verify the total amperage connected to the PXM does not exceed 15-amps.

Problem: The green LEDs and relay are OFF but the receptacles on the PXM still have power.

It is possible that something is wrong with the heavy-duty relays. If the trigger cable is unplugged and the receptacles still have power, take the unit out of operation and contact the factory.

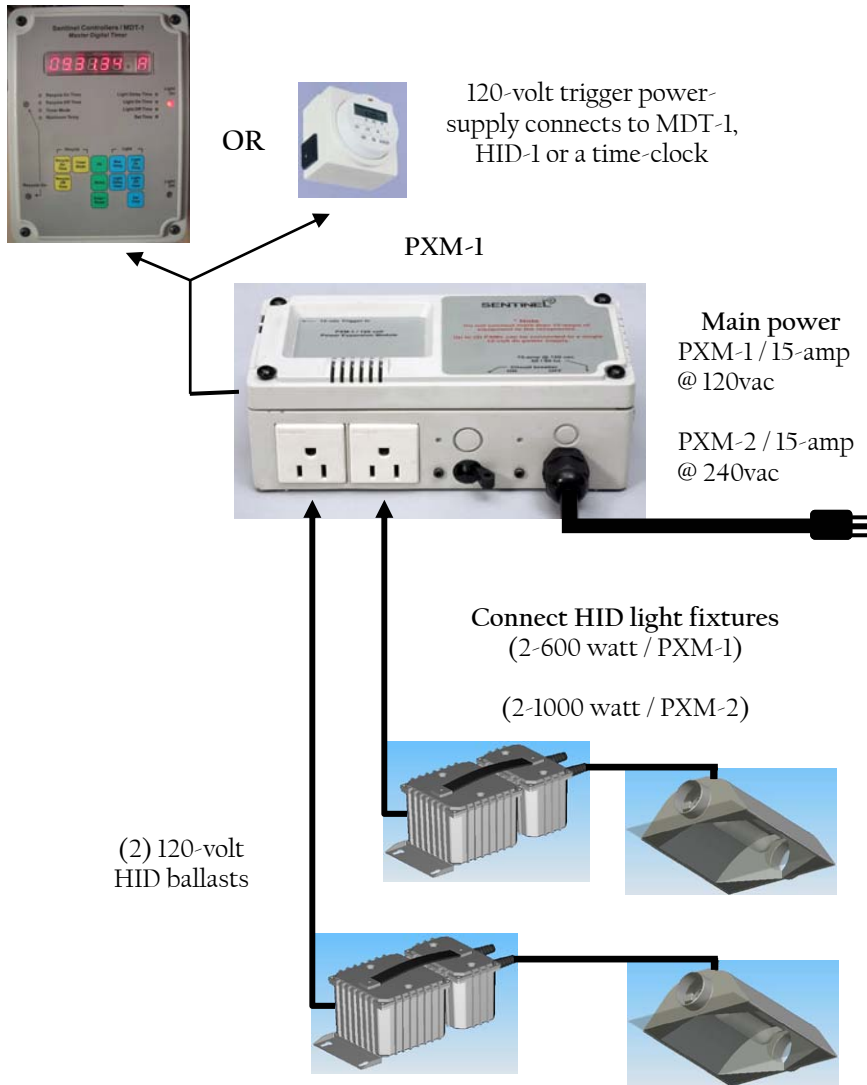
Problem: The green LEDs are ON but I do not hear the relays turning ON. The device connected to the PXM does not turn ON.

It is possible that something is wrong with the heavy-duty relays. If the green LEDs are ON, and the receptacles do not have power after verifying the main power supply is working, contact the factory.

Problem: I want to connect a second PXM to be activated at the same time.

The interconnect cable allows up to (2) PXMs to be connected to a single power supply. Connect the cable from 1 PXM to another PXM.

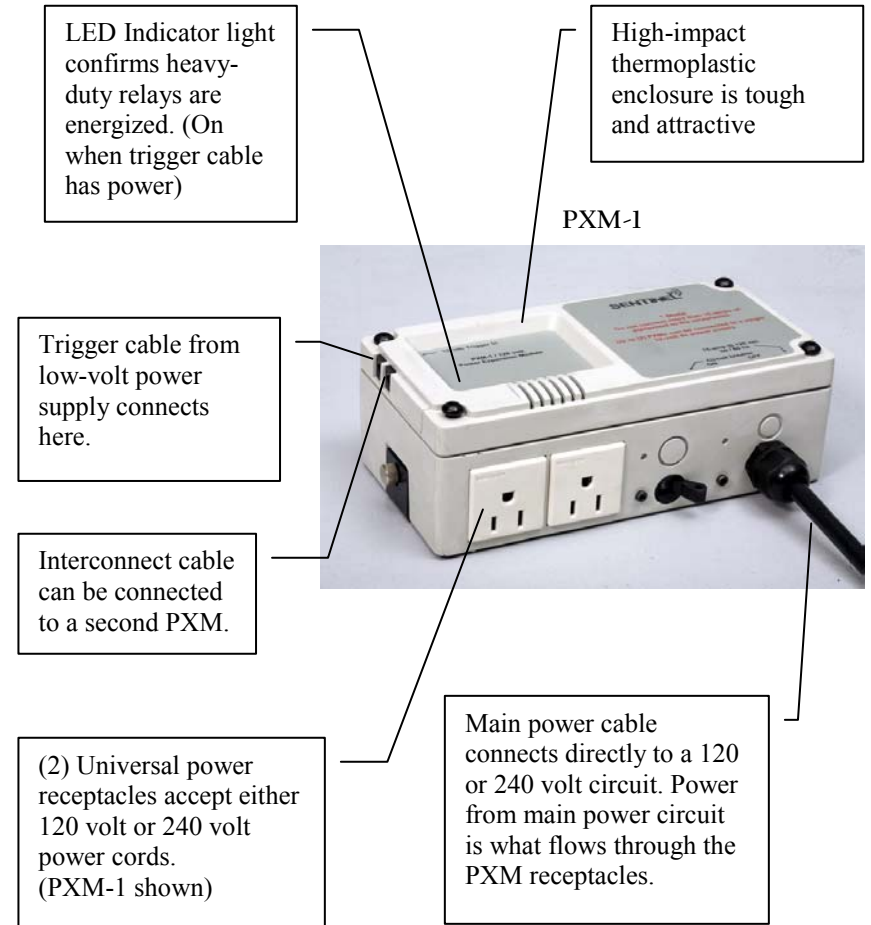
HID lighting example



* If you are using the PXM-2, it may be necessary to open the HID ballast enclosure and physically change the power connection inside the ballast to 240 volt. It is usually as simple as disconnecting the wire coming from the ballast transformer marked (120) , and connecting the wire marked (240) to the ballast's power cord.

NOTE: Do not exceed the ratings of the PXM. (Refer to specs.)

A quick look at the PXM-1&2...



NOTE: Locate the PXMs away from other sensitive electronics. DO NOT spray the unit with water... especially the receptacles. It is best to provide a dedicated circuit to the PXM. (15-amp @ 120 & 240 volt)

Installing the PXM-1&2

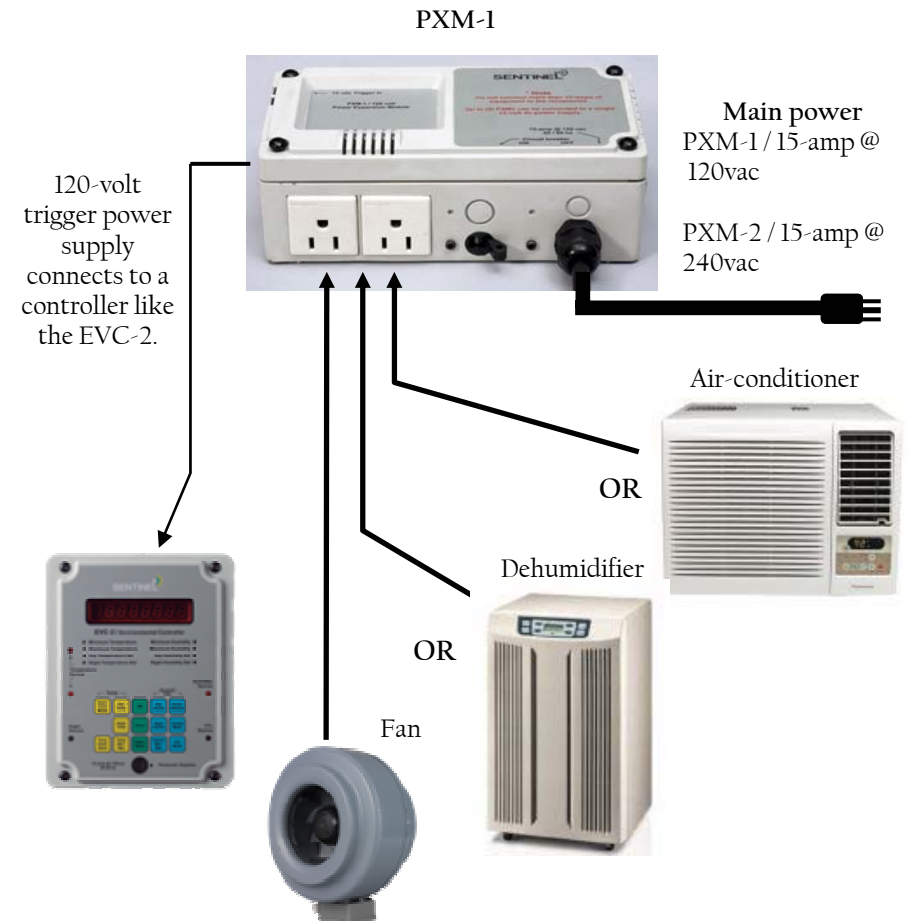
In order to ensure a safe and proper installation of the PXMs, follow the steps below.

- 1) Select the location for the device to be used. Keep the PXM away from water. Determine where the main power supply will be connected to the PXM and ensure the main power cable will reach.
- 2) Secure the wall mount bracket using the screws included.
- 3) The PXM can then be mounted to the wall bracket using the supplied thumb screws.
- 4) DO NOT turn connect the power cable yet.
- 5) Connect the 120 volt trigger cable to the time-clock or controller that will be turning the PXM ON & OFF. Either of the (2) low-volt power jacks on the left side can be used. Up to (2) PXMs can be connected to a single low-volt trigger power supply.
- 6) Energize (over-ride) the time-clock or controller and verify the RED indicator light and the relay are energized on the PXM.
- 7) Once the trigger cable is tested, disconnect the low volt trigger cable from the PXM.
- 8) Connect the device(s) that will be controlled by the PXM to the (2) power receptacles on the bottom of the PXM.
- 9) Verify that the circuit breaker on the bottom of the unit is in the OFF position.
- 10) The main power cable can now be connected to the power source. Select a dedicated 15-20 amp @ 120 volt circuit to draw power from and plug the power cable into the wall outlet.
- 11) Now turn ON the circuit breaker.
- 12) Ensure that the time-clock / controller that will be activating the PXM is set to turn ON & OFF at the correct times. Reconnecting the low-volt trigger cable will complete the installation.

Important: Make sure devices connected to the receptacles on the PXM are the correct voltages. **DO NOT** connect devices more than 15-amps.

Large load devices example

The most common use for the PXM-1&2 is to be able to control larger equipment and additional lights. The PXMs have high-power relays inside that turn the devices connected to it ON and OFF. A trigger power supply activates the relays. The trigger power supply is connected to any 120 volt controller or timer. When the controller or timer activates the trigger power supply, the PXM is “remotely” controlled by the controller or the timer.



WARNING: Verify the equipment you are connecting to the PXM does not exceed the ratings of the PXM. (Refer to specifications)