

Caution

Failure to follow these instructions can damage the product or cause a hazardous condition. Disconnect power during the installation of this product. All wiring must conform to local codes and ordinances. We strongly recommend that any installation or servicing be performed by a qualified individual.

System Components

The Power Control Module is comprised of two components. A wireless control box and a power relay module (see Installation Diagram). The wireless control box is intended to be wall mounted in a location which can easily transmit and receive wireless signals. The power relay module must be installed in a properly rated electrical box. The two units communicate with each other via a low voltage 3 wire control interface. The 3 wire control cable can be up to 500 feet long allowing for maximum flexibility in installing the devices.

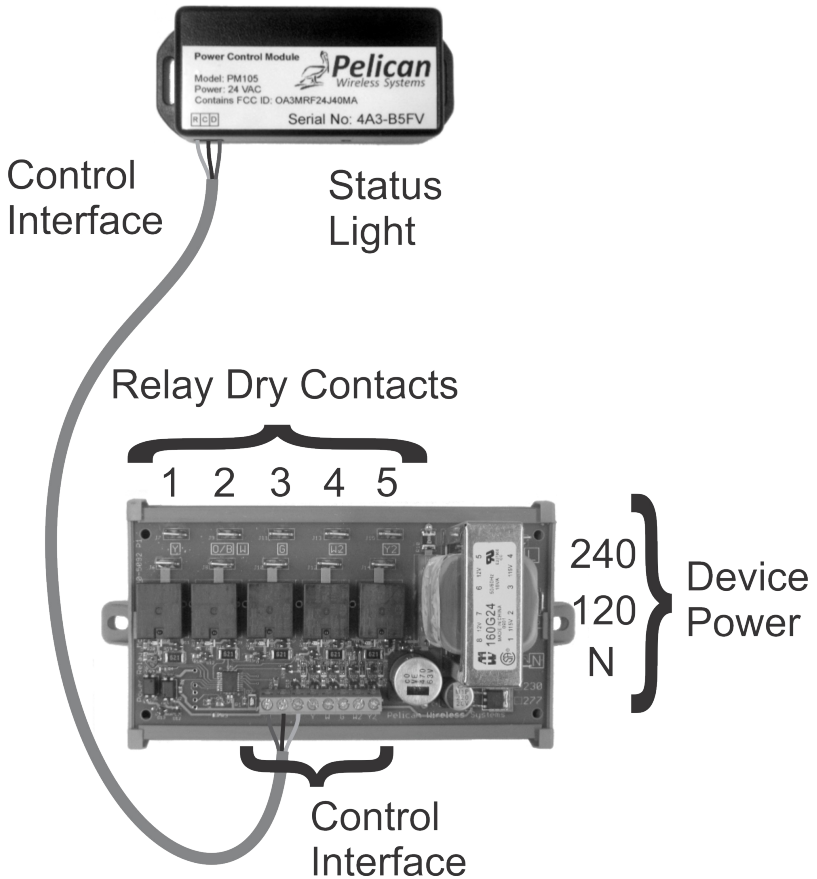
Power Relay Module Installation

The power relay module can either be mounted inside an electrical subpanel with circuit breakers or in its own dedicated electrical box. Mounting tabs are provided on each end of the module. The module should be securely fastened to the inside of the electrical box using the mounting tabs and screws.

Each relay on the module has a green light to indicate when it is active. In addition, a single green status light indicates the status of communications with the wireless control box.

There are 3 sets of connections to the relay module:

1. Device Power – The module can be operated with either 120VAC or 240VAC power. Attach the Neutral line using a quick connect to the “N” terminal. If using 120VAC to power the unit, connect the 120VAC line to the terminal labeled “120”. If using 240VAC to power the unit,



Installation Diagram

connect the 240VAC line to the terminal labeled “L”. The device power is immediately reduced to 24VAC to provide control power for the relays and the wireless module. A built-in automatic reset fuse limits 24VAC current to .5 Amps and provides short circuit protection for the control interface.

2. Relay Dry Contacts – There are 5 sets of relay connections on the power relay module. Each connection is independent and can operate at different voltages and currents. The dry contacts are rated at 120VAC 15AMPS and 240/277VAC 10AMPS. Each relay operates as a mechanical on/off switch and is intended to control the LINE side of the circuit.
3. Control Interface – There are 8 screw terminals on the

relay module which control its functions. The first 3 terminals are used to connect the relay module to the wireless control box. These terminals are labeled D, C, and R. They are wired to the terminals with the same labels on the wireless box (See Diagram). 18-24 gauge wire is recommended for this connection. Their functions are:

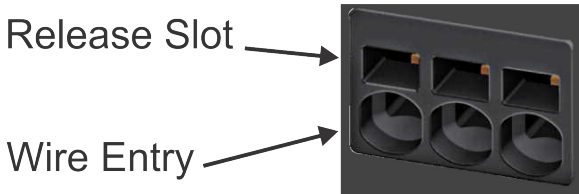
- D - Data Communications
- R - 24VAC supply power
- C - Common Wire

The next 5 terminals are labeled Y, W, G, W2, Y2. These can optionally be connected to external push button switches which will allow the operator to manually turn relay circuits on and off. To use this function, a 2 wire cable is run between the power relay module and the push button switch. The wires should be connected to the "R" terminal and one of the 5 input terminals depending on which relay will be manually switched. The relay will change state between On and Off each time these 2 wires make momentary contact for at least 1 second. These manual inputs operate at 24VAC with very low current. Manual pushbutton switches can be located up to 500 feet from the power relay module and we recommend using 18-24 gauge wire for these connections.

Wireless Control Box Installation

The Power Control Module includes a wireless interface to communicate with the Pelican Wireless Network at the installation site. This links the Power Module to the central Pelican Energy Management System. This module also contains all of the configuration and scheduling information necessary to manage the power relay module. In addition, the Power Control Module has a built-in repeater which will help extend the range of the wireless network. For best results we recommend wall mounting the wireless box in a location where wireless interference is minimized. Mounting it at a height above office equipment and away from metal obstructions is recommended.

Once attached to the wall, run a 3 wire cable between the wireless box and the power relay module using standard thermostat wire or 18-24 gauge wire. The 3 connections are labeled R, C, D and should be connected to the terminals with the same designations on the power relay module. The terminals use spring cage connections. The wires should first be stripped to expose 1/4" of wire. Each terminal has a release slot and a round hole (See Diagram) . Insert the exposed wire end into the round hole and it will be held in place by the internal spring cage.



To remove an already inserted wire, a small (2mm) flat blade screw driver is first inserted into the release slot. This will open the spring cage allowing the wire to be removed.

The wireless box has a green status light which indicates power and wireless network status. When power is correctly applied, the green light will begin blinking on and off. When the device has established wireless connectivity, the light will stop blinking and it will blink momentarily every 15 seconds.

Configuration

All of the configuration settings can be made through the Pelican Site Manager Web Application. These can be found under the *Admin* section. Each Power Module will be listed with its serial number and the label *Power Setup*.

NOTE: To assist in configuring this unit, write down the Serial Number on the front of the wireless control box and make a note of which circuits each relay is connected to. This information will be used during setup using the Pelican Site Manager Application.