

Power Post™ Monitoring System

Pump Connection Center | Demand Dose, Integrated Alarm
 15 Amp, 120/240VAC | Models: PPMS-01 and PPMS-02
 Alderon Industries™ | Patent Pending



QUICK START GUIDE

CSC00437_Rev01_PPMS_Power Post Monitoring System | May 10, 2023 4:03 PM

Safety Guidelines



WARNING

Before proceeding with the installation or operation of this product, read all instructions thoroughly, as well as complying with all federal, state and local codes, regulations, and practices. This product must be installed by qualified personnel familiar with all applicable local electrical and mechanical codes. Refer to the National Electrical Code (NFPA 70). Failure to properly install and test this product can result in personal injury or equipment malfunction.

Step 1: Install Post

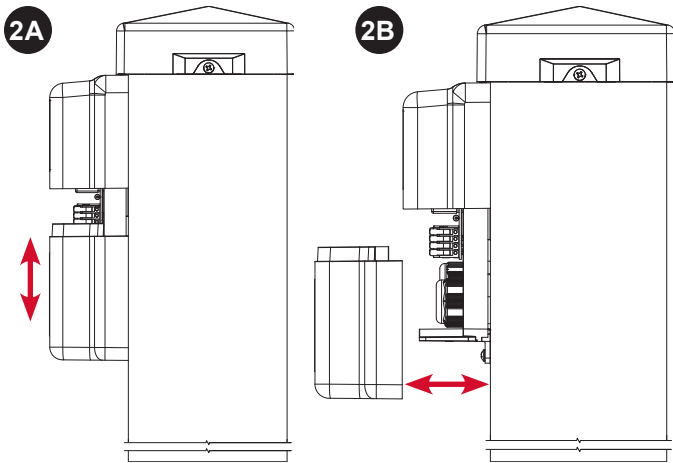


Determine location for the post in the ground near a tank and drill access holes for the float switch cables using the customer supplied conduit/fittings or Alderon's riser connection kit. Route the cables through access holes and wire as described in step 5. Run the direct burial power wires underneath the bottom of the post as shown in the diagram.

Note: Seal all conduits to prevent moisture and gases from entering the post per local codes.

Step 2: Remove / Install Bottom Cover

To remove cover, first remove the screw, then slide directly downward (2A) and pull directly away (2B). To install cover, line up the bottom enclosure cover with the grooves (2B), then slide directly upward (2A) until it meets the top of enclosure and replace the screw.



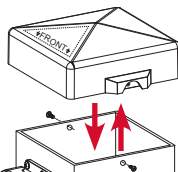
Step 3: Remove / Install Post Cap

Remove Post Cap:

- 1) Remove Screws and Lift Cap Upwards

Install Post Cap:

- 1) Position text FRONT (with arrows) Forward
- 3) Align Fastener Holes
- 4) Fasten Screws to Secure Cap to Post



Step 4: Installing Wire into WAGO

Before making wire connections and terminations, carefully read this step for proper functions of both types of WAGO connectors.

WARNING: Improper use of the connectors will cause damage, DO NOT use mechanical tools to open or close, hand usage only.

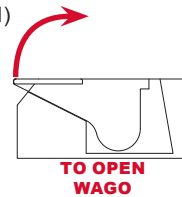
Wire Termination - Splice Connector WAGO (Fig. 1):

- 1) Lift tab(s) upward.
- 2) Insert wire(s) into slot.
- 3) Press tab(s) downward.
- 4) Make sure wire(s) are secured.

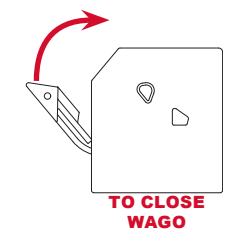
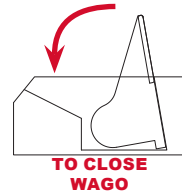
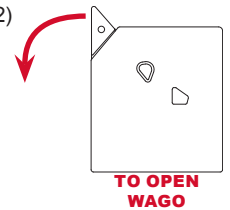
Wire Connection - Quick Snap Terminal WAGO (Fig. 2):

- 1) Press tab(s) outward. DO NOT open past 40° angle.
- 2) Insert wire(s) into slot.
- 3) Press tab(s) inward.
- 4) Make sure wire(s) are secured.

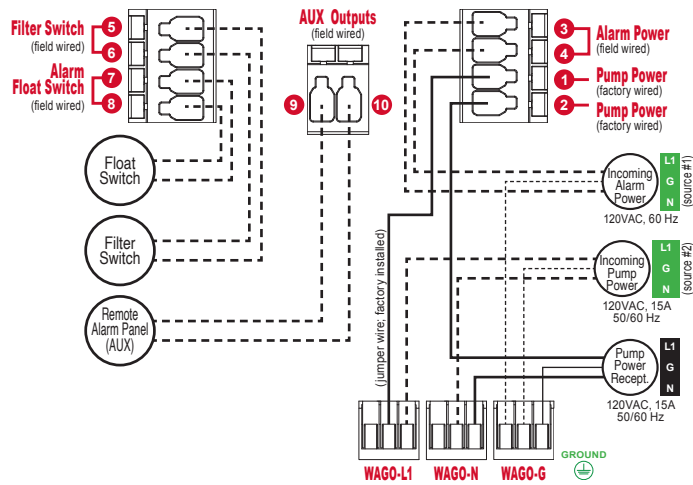
(Fig. 1)



(Fig. 2)



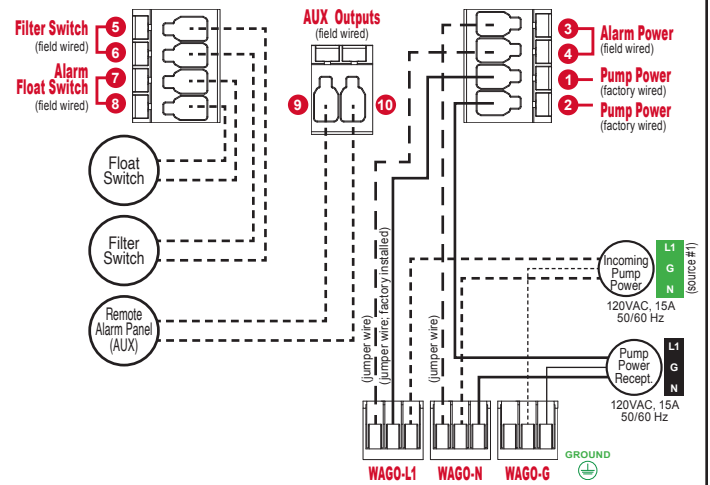
Step 5.1: Wiring | (2) Power Sources



Note: The installation example shown is for 120VAC pump power, for 240VAC pump power installation, the neutral (N) wire would be replaced by the line connection (L2) and white wire would include a red band to indicate the wire is hot.

- 1) The female pump power receptacle comes pre-wired from the factory, line (L1) is connected to TB2 and neutral (N) is connected to WAGO-N.
- 2) The incoming pump power, line (L1) is connected to WAGO-L1 and neutral (N) is connected to WAGO-N. A factory installed jumper wire is connected from WAGO-L1 to TB1.
- 3) The incoming alarm power, line (L1) is connected to TB4 and neutral (N) is connected to TB3.
- 4) The filter switch is connected to TB5/TB6, alarm float switch is connected to TB7/TB8, and the remote alarm panel is connected to TB9/TB10.
- 5) NEVER leave ground wire(s) exposed, use provided Wago connector for wire termination.

Step 5.2: Wiring | (1) Power Source



Note: The installation example shown is for a single power source, 120VAC pump power, for 240VAC pump power installation, the neutral (N) wire would be replaced by the line connection (L2) and white wire would include a red band to indicate the wire is hot. Preferred installation when connecting an indoor alarm that is powered on a separate alarm circuit.

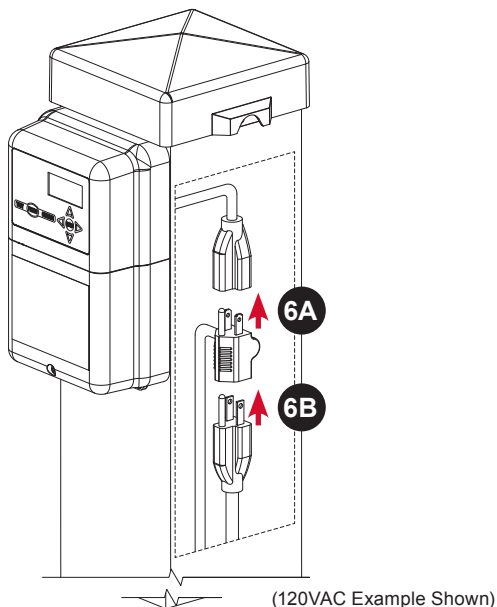
- 1) The female pump power receptacle comes pre-wired from the factory, line (L1) is connected to TB2 and neutral (N) is connected to WAGO-N.
- 2) The incoming pump power, line (L1) is connected to WAGO-L1 and neutral (N) is connected to WAGO-N.
- 3) Add white jumper wire from WAGO-N to TB3. Add black jumper wire from WAGO-L1 to TB4. A factory installed jumper wire is connected from WAGO-L1 to TB1 (white/black field installed jumper wires are provided).
- 4) The filter switch is connected to TB5/TB6, alarm float switch is connected to TB7/TB8, and the remote alarm panel is connected to TB9/TB10.
- 5) NEVER leave ground wire(s) exposed, use provided Wago connector for wire termination.

Step 6: Power Connections (inside post)

After all steps of the installation and wiring are complete, make the power connections inside the post prior to testing and backfill around the riser/post. Installation shown is for 120VAC, use the same process when connecting 240VAC power connections.

PIGGYBACK PLUG CONNECTIONS

- 1) Plug the male end of the piggyback plug on the pump switch power cable into the pre-installed female power receptacle inside the post (6A).
- 2) Plug the male end of the pump power cable into the female end of the piggyback plug on the pump switch power cable (6B) from step #1.



Step 7: Testing and Backfill

Make sure all steps of the installation and wiring process is completed and there is power to the product.

1) TEST ALARM LEDs and BUZZER

Press the test/silence pushbutton, lifetime pump run event counter statistic should display, then alarm LEDs should illuminate while cycling between red, green, blue, and off. The OLED screen should display a TESTING (COLOR) event for respective LEDs after the event statistic is displayed. Last, the buzzer should annunciate and OLED screen should display a TESTING BUZZER event.

2) TEST ALARM FLOAT SWITCH

Activate the alarm float switch, the red LEDs should illuminate, flashing and the buzzer should annunciate. The OLED screen should display a HIGH LEVEL ALARM event.

3) TEST ALARM SILENCE

Press the test/silence pushbutton on the front of the enclosure while the alarm float switch is activated. The red LEDs should keep flashing and the buzzer should silence.

4) TEST FILTER SWITCH

Activate the filter switch, the amber LEDs should illuminate, flashing and the buzzer should annunciate. The OLED screen should display a FILTER ALARM event.

5) TEST PUMP AND PUMP FLOAT SWITCH

Make sure the tank has water to perform the testing. Activate the pump float switch, the blue LEDs should illuminate and the OLED screen should display a PUMP RUN event and the pump amps are displayed.

6) RECOMMENDED SYSTEM SETTINGS

Alderon™ recommends changing the factory settings for: high amp level, extended pump run time, and gallons per minute.

7) TEST WEEKLY

To ensure the product is functioning properly, test once a week.

BACKFILL: After installation and testing, backfill with dirt/soil.

Menu System - Main Menu

MAIN MENU - Blank or System Normal
From SYSTEM NORMAL screen, press the MENU button to access main menu.

MAIN MENU - Reset Alarm(s)
Only appears during an alarm event, press right arrow key to view a list of active alarms to reset.

1.0 | Quick Stats
View the pump run total time and total count statistics without entering history menus and view the pump count calendar statistics.

2.0 | Control
Press right arrow key to access the auxiliary override feature and then press menu to manually activate the auxiliary contacts for testing the alarm system.

3.0 | Resettable History
Press right arrow key for menu. Press down arrow key to view system statistics. These are resettable to zero.

4.0 | Settings
Press right arrow key, enter password (factory set; 1919) and view or change system settings.

5.0 | Lifetime History
Press right arrow key for menu. Press down arrow key to view system statistics. These are non-resettable.

6.0 | Model/Firmware
Product model number and firmware version.

7.0 | Config Code
Snapshot of the current system settings.

Note: The down arrow key will cycle through the menu options until a specific option is selected using the right arrow key.



Main Menu - Quick Stats

The main menu system includes a QUICK STATS feature to provide quick access to pump run total time and total count statistics without entering the history menus and view the pump count calendar.

From the QUICK STATS screen, press right arrow key to access PUMP RUN QCKSTAT, press right arrow key and then press down arrow key for available statistics.

Once inside the QUICK STATS menu, press down arrow key to access the PMPCOUNT CALENDAR, press right arrow key and then press down arrow key for available statistics.

1.0.0 Quick Stats

1.1.0 Pump Run Quick Stats

- 1.1.1 Pump Run Total Time (hhhh:mm)
- 1.1.2 Pump Run Total Count (0-99999999)

1.2.0 Pump Count Calendar

- 1.2.1 Current Week
- 1.2.2 Last Week
- 1.2.3 Current Month
- 1.2.4 Last Month
- 1.2.5 Months 1-6
- 1.2.6 Months 7-12
- 1.2.7 Time Left (hh:mm:ss)

Note: The down arrow key will cycle through both menu options until a specific option is selected using the right arrow key as displayed on the screen. Press the left arrow key to exit from any screen. Press the test/silence pushbutton to exit the menu system.



Main Menu - Control

The main menu system includes a CONTROL feature to provide a quick test of the system auxiliary contacts.

From the CONTROL screen, press right arrow key to access AUXILIARY OVRRIE, press right arrow key to access PRESS TO RUN AUX, then press and hold MENU pushbutton and test will activate the auxiliary contacts until the pushbutton is released and AUX CLOSED is displayed on the screen.

2.0.0 Control

- 2.1.1 Auxiliary Override
- 2.1.2 Press to Run Auxiliary Contacts (MENU pushbutton)
- 2.1.3 Auxiliary Contacts Closed (displayed when active)

Note: The down arrow key will cycle through the menu options until a specific option is selected using the right arrow key as displayed on the screen. Press the left arrow key to exit from any screen. Press the test/silence pushbutton to exit the menu system.



Settings - System Set Up

The main menu system includes a SETTINGS feature to provide a password protected list of settings to customize the application and can only be accessed by the password (factory set to 1919).

From the SETTINGS screen, press right arrow key and the system prompts to enter the password. Enter the four-digit code to access SYSTEM SET UP and PUMP SET UP. If the wrong password is entered, INCORRECT PASSWORD is displayed on the screen.

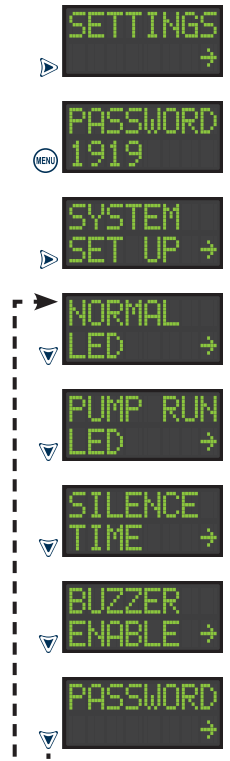
4.0.0 Settings

4.1.0 System Set Up

- 4.1.1 Normal LED (high, medium, low, off)
- 4.1.2 Pump Run LED (high, medium, low, off)
- 4.1.3 Silence Time (24-hour clock) (modify each digit; hh:mm:ss)
- 4.1.4 Buzzer Enabled/Disabled
- 4.1.5 Password (factory set, 1919)

4.2.0 Pump Set Up (see next section)

Note: The down arrow key will cycle through the menu options until a specific option is selected using the right arrow key as displayed on the screen. Press the left arrow key to exit from any screen. Press the test/silence pushbutton to exit the menu system.



Settings - Pump Set Up

The main menu system includes a SETTINGS feature to provide a password protected list of settings to customize the application and can only be accessed by the password (factory set to 1919).

From the SETTINGS screen, press right arrow key and the system prompts to enter the password. Enter the four-digit code to access SYSTEM SET UP and PUMP SET UP. If the wrong password is entered, INCORRECT PASSWORD is displayed on the screen.

4.0.0 Settings

4.1.0 System Set Up

(see previous section)

4.2.0 Pump Set Up

4.2.1 Gallons Per Minute (000.0)

(modify each digit)

4.2.2 High Amp Level (00.0 - 17.0 A)

(modify each digit)

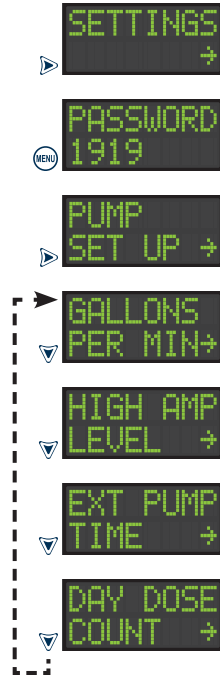
4.2.3 Extended Pump Time (00:00:00)

(modify each digit; hh:mm:ss)

4.2.4 Daily Dose Count (0-99)

(activates alarm at value set; default 99)

Note: The down arrow key will cycle through the menu options until a specific option is selected using the right arrow key as displayed on the screen. Press the left arrow key to exit from any screen. Press the test/silence pushbutton to exit the menu system.



Included with Product

- (1) Power Post™; junction box and cable grips pre-installed on post
- (1) Pre-installed, female, 15A, pump power receptacle (120VAC or 240VAC, voltage depends on model/part number)
- (3) Wago connectors
- (2) Jumper Wires (white and black; 1-power source + indoor alarm models)

Customer Support

Online
alderonind.com

Email
info@alderonind.com

QR Code
Scan code for full product details

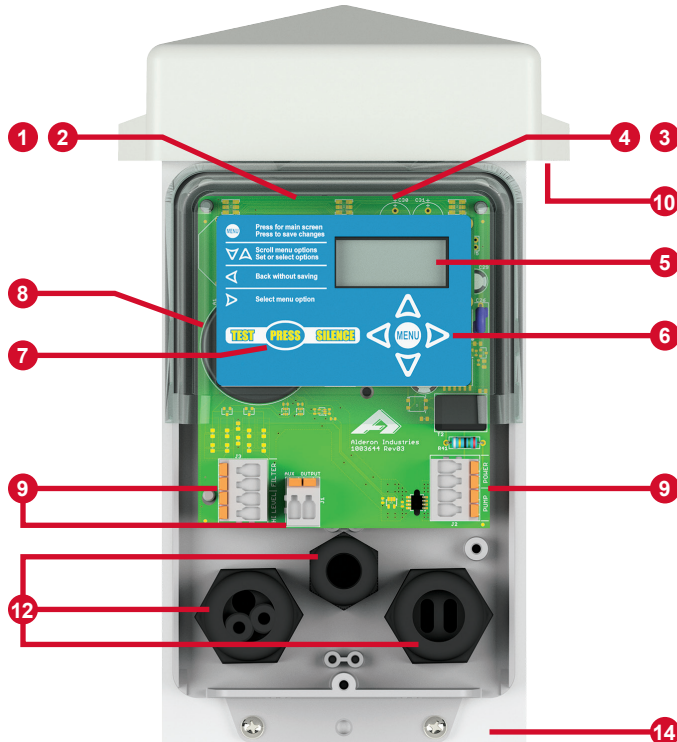


Specifications

Pump Power Receptacle:	120VAC or 240VAC, 15A, 60Hz
Pump Power:	120VAC or 240VAC, 13A or 15A, 60Hz <small>(voltage/amperage depends on model/part number)</small>
Alarm Power:	120VAC, 60Hz <small>(240VAC, 60 Hz available; consult factory)</small>
Power Consumption:	14 Watts maximum (alarm condition)
Enclosure:	Outdoor, rated Type 3R
Certifications:	FCC Part 15 (US/Canada), CSA (US/Canada)

FCC Part 15: NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures: increase the separation between the equipment and receiver, connect the equipment into an outlet on a circuit different from that to which the receiver is connected, consult the dealer or an experienced radio/TV technician for help. Caution: changes / modifications not approved by Alderon Industries could void the user's authority to operate the equipment.

Power Post™ Monitoring System - Features



- Power On Indicator** - Green LEDs illuminate inside top cover of enclosure cover, power on indicators can be disabled in system settings
- Alarm Beacon** - Alarm LEDs (various colors) illuminate inside the top cover of enclosure cover
- Pump Run Indicator** - Blue LEDs illuminate inside top cover of enclosure cover, pump run indicators can be disabled in system settings
- System LED Indicators** - Multiple color indicators will illuminate inside top cover of enclosure cover for visual indication of various system events and/or alarm conditions
- OLED Display Screen** - Displays system functions in addition to LED indicators
- Menu Keypad** - Toggle for system functions, program settings, and view statistics
- Test/Silence Pushbutton** - Quick access to lifetime pump run event counter statistic, test or silence the alarm, or exit the menu system
- Alarm Buzzer** - Annunciates to indicate an alarm event
- Quick Snap Terminal Blocks** - Fast and easy connections for system wiring
- Vented Post Cap** - Allows airflow, prevents build up of gases/condensation inside post
- QR Code (not shown)** - Scan for additional product information (alderonind.com)
- Cable Grips** - Pre-installed for easy installation
- Pump Power Receptacle (not shown)** - Pre-installed, female, 15A, available in either 120VAC or 240VAC (voltage depends on model/part number)
- Post** - Provides wire routing access for system power, pump power, float switch, and sensor cables while protecting from water intrusion

SYSTEM Model Number Nomenclature

PPMDS12152

1 2 3 4 5 6

1 Base Model (Power Post™ Monitoring, Demand Dose)

2 Pump Voltage (120VAC Pump)

3 Remote Alarm Options

(1-Zone Indoor Alarm, WiFi)

4 Alarm Sensor Options

(20" Alarm Float)

5 Pump Switch Options (15A, 20' Wide Angle)

6 Riser Kit/Access Panel Options

(2.5" Riser Connection Kit)