

# Multi-Input Wiring & Installation

The kit is intended to be mounted on a 10' x 2" conduit pole.

## Solar Panel

1. Mount the solar panel to the 2" pole using the provided 2" U-bolts.
2. Make sure the panel is facing south and has an unobstructed view of the sky to allow for maximum charging.
3. Use zip ties to secure the excess wire to the pole.
4. Run the solar panel wire into one of the enclosure's side cord grips.



## Enclosure

1. Mount the enclosure beneath the solar panel onto the 2" pole, at eye level, using the provided hose clamps.

## Antenna

1. Install the MIMO antenna by peeling the protective cover off the self-adhesive backing, place it on top of the enclosure, and push down to ensure a secure bond.
2. Run the antenna wires into one of the enclosure's side cord grips.
3. One coax cable labeled "Main" will be screwed onto the connector labeled "Cell."
4. The other coax cable labeled "Aux" will be screwed into the connector labeled "Diversity."

## Field Wiring

The Multi Input Kit supports up to 5 end devices. Wiring between the modem and the terminal strip has been prewired for you and is as follows:

- Input #1 – Green DI/AI/DO top terminal strip 5
- Input #2 – Gray DI/AI top terminal strip 6
- Input #3 – Yellow DI/AI/RS485 top terminal strip 7
- Input #4 – Purple DI top terminal strip 8
- Input #5 – Orange DI/RS485 top terminal strip 9

## Pressure Transmitters

When using the kit for pressure monitoring with the included transmitters:

1. Install pressure transmitter 1 and transmitter 2 at the points you want to monitor pressure such as valve on pipeline or valve riser.
2. Use Teflon tape on port threads to ensure sealed connections.
3. After the transmitters are installed, open the valves and check for leaks.
4. Run the wiring from the pressure transmitters into the enclosure via a 1/2" cord grip.
5. Wire Transmitter 1
  - a. Connect the black wire from the transmitter to bottom terminal strip load (-).
  - b. Connect the Signal wire from the transmitter to bottom terminal strip #5.
  - c. Connect the 12V+ red wire from transmitter to bottom terminal strip load (+).
6. Wire Transmitter 2
  - a. Connect the black wire from the transmitter to bottom terminal strip load (-).
  - b. Connect the Signal wire from the transmitter to bottom terminal strip #6.
  - c. Connect the 12V+ red wire from transmitter to bottom terminal strip load (+).

## General Wiring

Each end device will use two conductors and a signal wire. All wiring will then be run into the enclosure through the ½” cord grip.

### 1. Input 1 DI/AI/DO

- a. Signal wire bottom terminal strip 5.
- b. Black negative wire bottom terminal strip in an open (-) slot.
- c. Red positive wire bottom terminal strip in an open (+) slot.

### 2. Input 2 DI/AI

- a. Signal wire bottom terminal strip 6.
- b. Black negative wire bottom terminal strip in an open (-) slot.
- c. Red positive wire bottom terminal strip in an open (+) slot.

### 3. Input 3 DI/AI

- a. Signal wire bottom terminal strip 7.
- b. Black negative wire bottom terminal strip in an open (-) slot.
- c. Red positive wire bottom terminal strip in an open (+) slot.

### 4. Input 4 DI

- a. Signal wire bottom terminal strip 8.
- b. Black negative wire bottom terminal strip in an open (-) slot.
- c. Red positive wire bottom terminal strip in an open (+) slot.

### 5. Input 5 DI

- a. Signal wire bottom terminal strip 9.
- b. Black negative wire bottom terminal strip in an open (-) slot.
- c. Red positive wire bottom terminal strip in an open (+) slot.

For additional wiring configurations, please consult eLynx Field Services.

## Power

### Battery

The battery will be placed in the bottom of the enclosure.

1. Connect the red wire from the bottom of terminal strip #3 to the positive battery terminal.

2. Connect the black wire from the bottom of terminal strip #4 to the negative battery terminal.

### Solar Panel

1. Connect black or blue wire to match negative on bottom terminal strip #2.
3. Connect red or brown wire to match positive on bottom terminal strip #1.

### Solar Charge Controller

The wiring between the controller and the terminal strip has been prewired for you.

**WARNING:** When wiring the battery and solar panel to the terminal blocks, always connect the battery first, then the solar panel. When removing wires from the terminal blocks, reverse the above action and disconnect the solar panel then the battery. Connecting the solar panel to the terminal blocks with no battery load can possibly damage the solar charge controller.

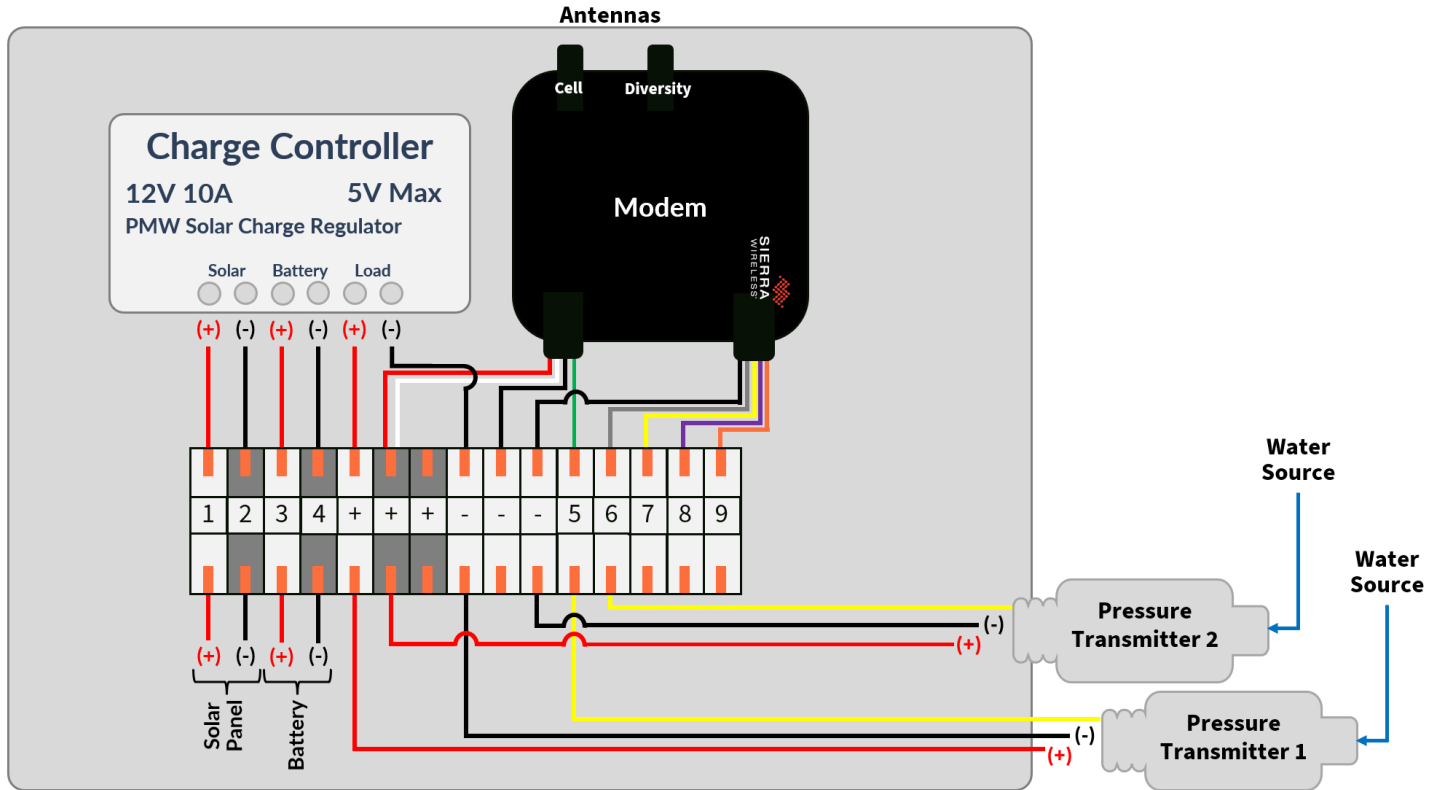
### Modem

The wiring between the modem and the terminal strip has been prewired for you.

When powering up for the first time it can take several minutes for the modem to register to the network.

1. When power is applied the power light will turn red and stay red for up to 30 seconds, it will then turn Green and start searching for available carriers.
2. The Network and Signal lights will then both turn Red and begin flashing indicating its searching.
3. When a Network is found, the LED will turn Green and begin to blink, once locked to a carrier it will turn to a solid Green.
4. The Signal LED will continue to flash and may turn solid.
  - Flashing/solid Green LED indicates very good signal.
  - Flashing/solid Yellow means good/ok signal.
  - If the Signal LED is flashing/solid Red, this means it has a poor/weak signal.

## General Input Layout



## We're Here to Help

Need help or have questions? Call or email eLynx Support at: [support@elynxtech.com](mailto:support@elynxtech.com) or (866) 303-5969.

# elynx Multi Input Kit

## INSTALLATION INSTRUCTIONS

- 1 Conduit Pole**
  - Install the 2" pole 2' in the ground.
- 2 Solar Panel**
  - Mount solar panel with U-bolts, facing south.
  - Run wire into enclosure via cord grip.
- 3 Enclosure**
  - Mount below solar panel at eye level using clamps.
- 4 Antenna**
  - Install MIMO antenna on top of the enclosure.
  - Run wiring into enclosure via cord grip.
- 5 Modern**
  - Connect the antenna wiring to the modern ports
  - Main cable to "Cell"
  - Aux cable to "Diversity"

### 6 Pressure Transmitters & Other Inputs

- Install transmitter 1 using Teflon tape in the desired location.
  - Run wiring into enclosure and connect
    - Black wire to terminal strip Load (-) bottom.
    - Yellow signal wire to terminal strip #5 bottom.
    - Red 12V+ wire to terminal strip Load (+) bottom.
  - Open valve and check for leaks.
  - Install transmitter 2 using Teflon tape in the desired location.
  - Run wiring into enclosure and connect
    - Black wire to terminal strip Load (-) bottom.
    - Yellow signal wire to terminal strip #6 bottom.
    - Red 12V+ wire to terminal strip Load (+) bottom.
  - Open valve and check for leaks.
- For additional wiring configurations please consult with field services.

### 7 Battery

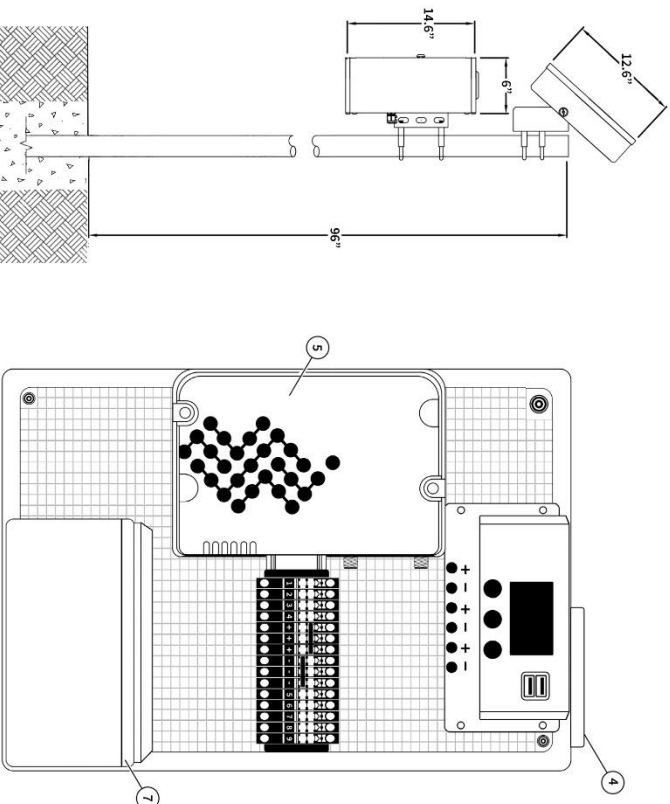
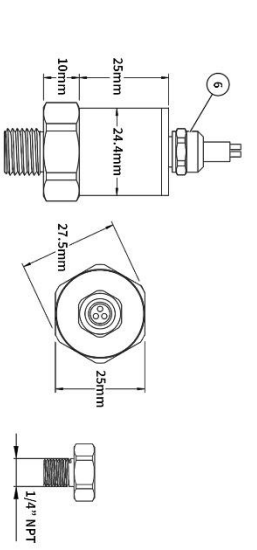
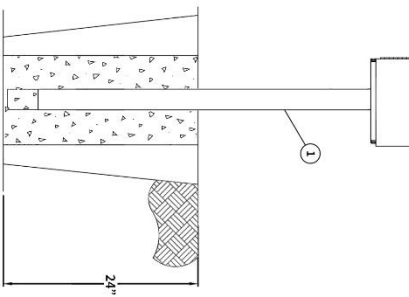
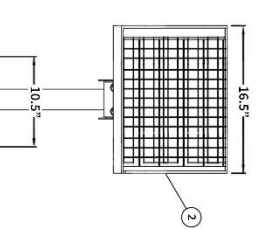
- Place in enclosure.
- Connect black wire to terminal #4 bottom, red wire to terminal #3 bottom.

### 8 Solar Panel Power

- Connect solar panel black or blue wire to terminal #2 bottom, red or brown wire to terminal #1 bottom. **Note** - Connect battery before solar panel.

### Final

- Create drip loops to prevent moisture.
- Secure wires with zip ties.



TOP		CHARGE CONTROLLER		BATTERY		MODERN		CHARGE CONTROLLER		MODERN I/O CABLE		DI/I/O INPUT 1		DI/I/O INPUT 2		DI/I/O INPUT 3		DI/I/O INPUT 4		DI/I/O INPUT 5	
(+) Red	(-) Black	(+) Red	(-) Black	(+) Red	(-) Black	(+) Red & White	(-) Black	(-) Black	(-) Black	(-) Black	(-) Black	DI/I/O Input 1	DI/I/O Input 2	DI/I/O Input 3	DI Input 4	DI Input 5					
* Pre-wired by elynx																					

