## WIRING INSTRUCTIONS

# 2017-18

# **Crop Link Lite/Pro**

# 4-20mA INPUTS and SCALED VOLTAGE INPUTS

## **Items Covered In This Manual:**

**Page 1: Crop Link Device Overview** 

**Page 2: Connecting DC Power/Solar Panel** 

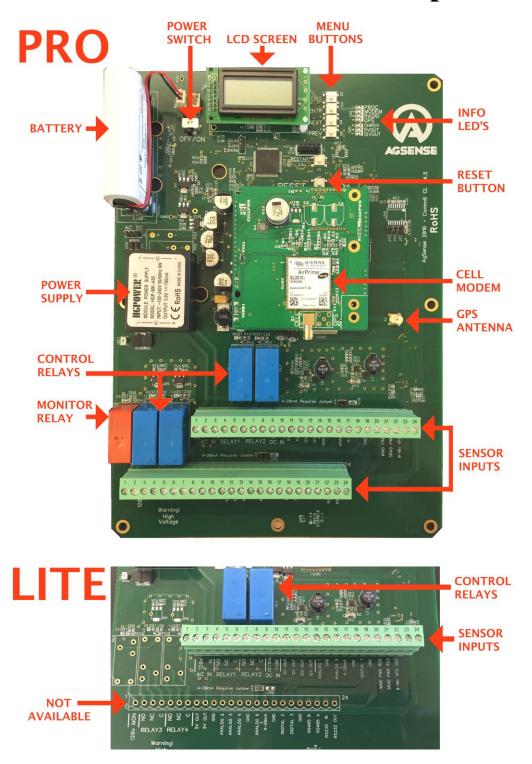
Page 3: Connecting 120v AC Power

Page 4: Generic 4-20mA Sensor Wiring

**Page 5: Scaled Voltage Input Wiring** 

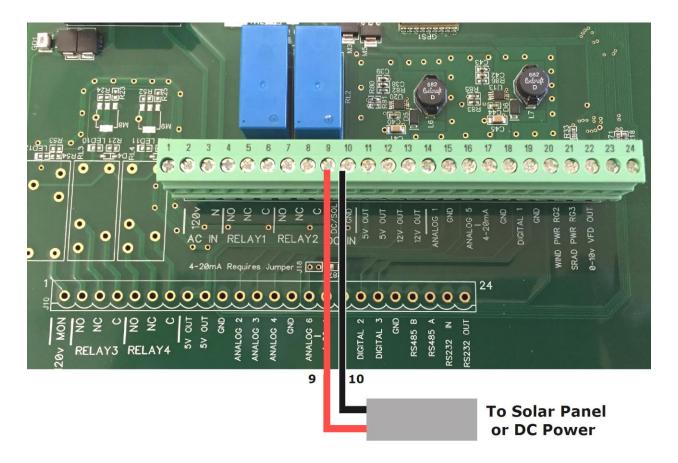
**Page 6-7: Specs and Warranty Information** 

## General Overview of the Crop Link Unit



Note: Once all sensors are connected and unit is ready to run, contact your AgSense Dealer to finish setup, and configure this unit to read the sensors that you have installed.

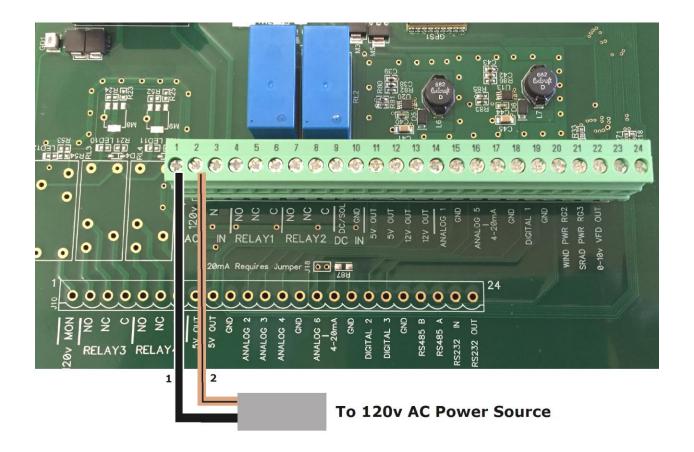
# Wiring the DC Power or Solar Panel to the Crop Link Unit



Wiring the solar panel or 7-30v DC power Source: Find the last two terminals on the large terminal strip labeled DC/SOL and GND

- 1. Connect the Black or Negative Wire (-) from the solar panel to the terminal marked GND as shown above.
- 2. Connect the Red or Positive Wire (+) from the solar panel to the terminal marked DC/SOL as shown above.

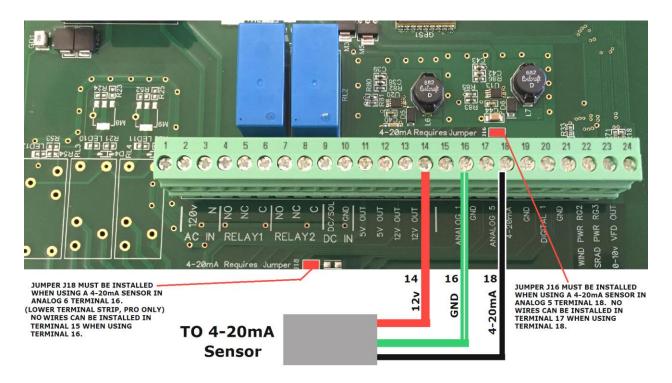
### Wiring 120v AC Power to the Crop Link Unit



If you are not using DC power or Solar Power: how to wire 120v AC to the Crop Link.

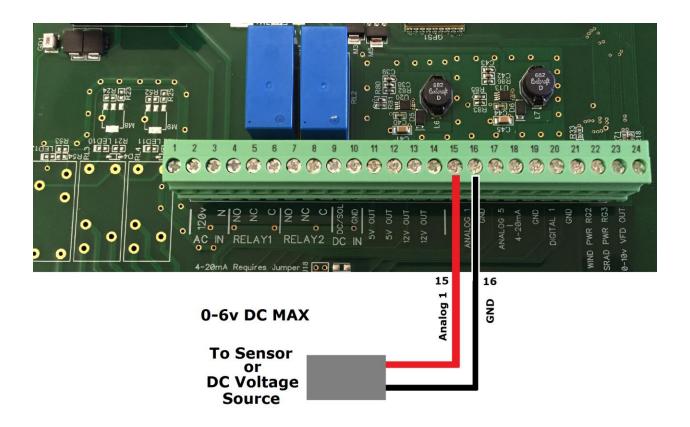
- 1. Connect 120v AC to the terminal marked 120v units pre-wired with a cable from AgSense use a Black wire. Cable added by the customer should use the Black wire here.
- 2. Connect the Neutral wire to the terminal marked N. units pre-wired with cables from AgSense use either a Brown/Black Stripe or a White wire. Cable added by the customer should use the white wire.

#### **Generic 4-20mA Sensor Wiring:**



- 1. Wire colors likely will be different in your application, please compare your sensor colors to the sensor functions listed below, and do not solely rely on the colors shown above!
- 2. 4-20mA Sensor must be 12v compatible.
- 3. Install the Sensor Power wire into the 12v Out terminal as shown with the red wire example above.
- 4. Install the Sensor Ground and Sheild wires (if your sensor has them) into the GND terminal as shown with the green wire example above
- 5. Install the Sensor 4-20mA Signal wire into input Analog5 4-20mA terminal (or Analog 6 4-20mA terminal) as shown with the black wire example above.
- 6. Make sure a jumper is installed as shown above (J16 if using Analog 5, or J18 if using Analog 16) or the 4-20mA input will not work.
- 7. Remember to log into the user website, and select the 4-20mA Input from the dropdown in the Config page for this unit, and fill in the values this sensor will have at 4mA and 20mA, enter the units this reflects, and then save the settings.

#### **Scaled Voltage Input Wiring**



- 1. Wire colors likely will be different in your application, please compare your sensor colors to the sensor functions listed below, and do not solely rely on the colors shown above!
- 2. The sensor or voltage source connected must not exceed 6v DC Max!
- 3. Install the Signal / DC Voltage wire into the Analog input as shown with the red wire example above (can use Analog 1, 2, 3 or 4).
- 4. Install the Ground wire from the Sensor / Voltage Source into the GND terminal as shown with the black wire example above.
- 5. Remember to log into the user website, and select the Scaled Voltage Input from the dropdown in the Config page for this unit, and fill in the min/max voltages this Sensor/Voltage source will have, and what the scaled value and units this reflects, and then save the settings.

Power Requirements for the Crop Link unit:

#### **SOLAR/DC Powered Unit 7-34V DC:**

At 12v DC: 1.0A MAX

0.1A - 0.5A during normal operation

Recommended Solar panel – Must be a minimum of 10 watt @ 17v Solar panel.

Specs of solar panels that ship from AgSense:

10 watt

Operating Voltage 17v DC
Operating Current 0.59A
Open Circuit Voltage 21.2v DC
Short Circuit Current 0.69A

#### **Warranty Information:**

All warranty service provided by the AgSense service center, or an authorized technician.

## Warranty repairs require a Return Merchandise Authorization Number (RMA); Have your dealer contact AgSense to obtain this RMA number.

For the Period of:	AgSense will:		
60 Days	Money back Guarantee if not satisfied with		
	product.		
2 Years	Repair on any unit that fails due to defect		
	in materials or workmanship. AgSense		
	labor and parts would be provided free of		
	charge during the warranty period. (This		
	does not include dealer labor.)		

#### What is not covered:

- Service trips to your home to teach you how to use the product.
- Improper installation, delivery or maintenance. If you have an installation problem contact your dealer or installer.
- Failure of product resulting from modification to product or due to unreasonable failure to provide reasonable and necessary maintenance.
- Labor necessary to move device from one location to another.
- Improper installation of battery.
- Failure due to corrosion or water damage.
  - Units installed in direct contact with sprinklers require a tower box or other watertight protection.
- Damage to the product caused by improper power supply voltage, accident, fire, floods or acts of God.
- Damage caused after delivery.

Exclusion of implied warranties – Your sole and exclusive remedy is product repair as provided in this Limited Warranty. Any implied warranties, including the implied warranties of merchantability or fitness for a particular purpose, are limited to two years or the shortest period allowed by law.

This warranty is extended to the original purchaser and any succeeding owner for the products purchased for use within the USA.

Some states do not allow the exclusion or limitation of incidental or consequential damages. This warranty gives you specific legal rights, and you may also have the other rights which vary from state to state. To know what your legal rights are, consult your local or state consumer affairs office or your state's Attorney General.

DISCLAIMER: The use of Field Commander/Crop Link/Aqua Trac shall not be utilized by customer as a substitute for the Customer's personal observation of the manner in which Customer's irrigation equipment is functioning. AgSense specifically advises Customer that this product is designed to enhance Customer's ability to control existing irrigation equipment and to provide the Customer with additional information about existing irrigation equipment. Field Commander/Crop Link/Aqua Trac relies upon GPS, Satellite and Internet technology which not always functions properly, accordingly, AgSense disclaims any and all responsibility for the reliability of this technology. Customer acknowledges that AgSense does not have the ability to control the reliability of GPS, Satellite and Internet Technology. AgSense specifically disclaims any and all liability for Customer's failure to personally determine whether or not the irrigation equipment that belongs to Customer is functioning properly. AgSense, its agents, members or officers will not be liable for Customer's loss of profits, business interruption, or any other type of consequential damages arising because of the failure to Customer's equipment, GPS, Satellite or Internet to function properly.

<u>CUSTOMER'S RESPONSIBILITIES:</u> Customer agrees to keep the irrigation equipment upon which Field Commander/Crop Link/Aqua Trac is installed in good repair and maintenance. Customer acknowledges the importance of and agrees to keep all safety devices which came with Customer's irrigation equipment in working order. Customer agrees to keep an end field stop and barricades in place to prevent damage to the irrigation equipment in the event that Field Commander/Crop Link/Aqua Trac malfunctions. Customer agrees that Field Commander/Crop Link/Aqua Trac cannot solely replace the personal monitoring of the operation of irrigation equipment.

**REMEDY:** Customer acknowledges that Field Commander/Crop Link/Aqua Trac's sole obligation and Customer's exclusive remedy in the event of any material and continuing nonconformity, defect, or error in the information service shall be to take reasonable corrective actions upon discovery of the problem.

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