

Pump Master Wiring:

7-40v DC Pump Master system:

Typical Install of DC Master unit: Black wire connects to Ground. Red wire connects to 7-40vDC power source that is only on when the irrigation system is running. The switch on the bottom of the Master box can be turned off to run your pivot dry.

Black Wire – Ground

Red Wire – 7-40v DC – only has power when the pivot is running

120v AC Pump Master system

Typical AC unit install: Orange wire connects to the white Neutral wires in the irrigation panel. Black wire connects to 120v source that is only on when irrigation pivot is running. (usually the Safety or End Gun wire on most pivots) The switch on the bottom of the Master box can be turned off to run your pivot dry.

Orange Wire – Neutral

Black Wire – 120v AC – only has power when the pivot is running

Pump Slave Wiring:

7-40v DC Pump Slave system:

Typical Install of DC powered Slave: Black wire and Brown wire connect to Ground. Yellow wire connects to the “S” terminal of the Murphy Switch
Red wire connects to the 12v that powers the Ignition Coil on the gas engine – or – connects to the 12v that goes to the fuel shutoff solenoid on diesel engines.

Black Wire – Ground

Red Wire – 7-40v DC

Pump Control Wires From AgSense Slave Unit:

Brown – Relay Common

Yellow – Relay Normally Closed

Blue – Relay Normally Open

120v AC Pump Slave system:

Make sure wiring is connected so the Pump Slave has power all the time.

Orange Wire – Neutral

Black Wire – 120v AC

Pump Control Wires From AgSense Slave Unit:

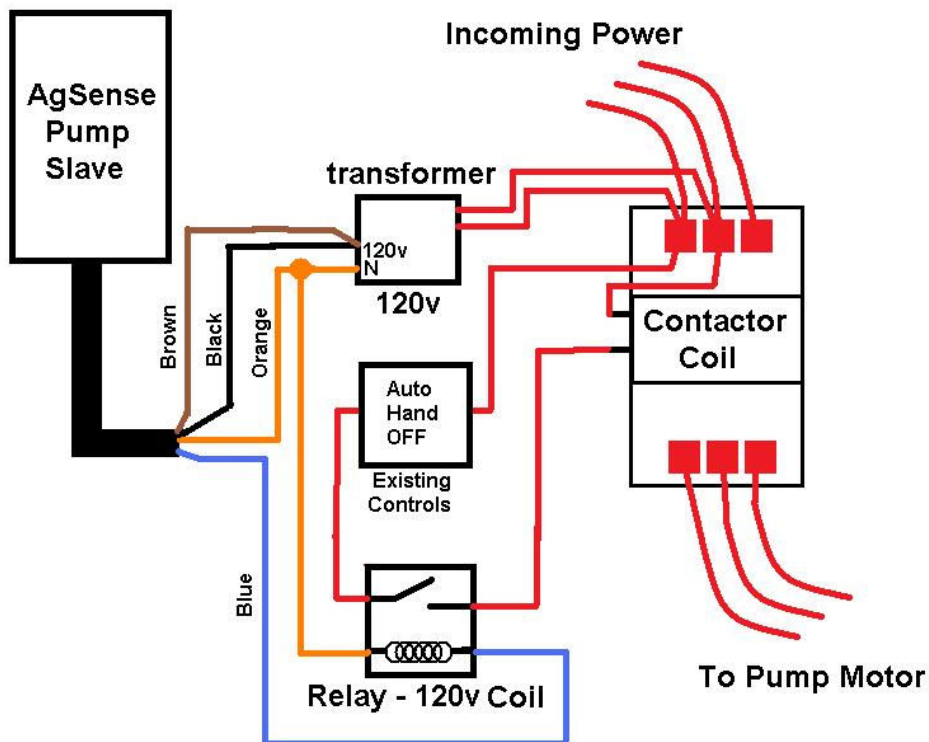
Brown – Relay Common

Yellow – Relay Normally Closed

Blue – Relay Normally Open

NOTE: On most AC installs you will need to add a 120v transformer and a 120v coil relay with contacts that can handle 480v – see picture below

TYPICAL AC UNIT INSTALL:



Pump Master Info:

The default screen displays the status of the slave units that communicate with it.

```
12345678 Slave ID: 1 through 8.  
WW D X Slave State: W – Wet, D – Dry, X – Communication Timeout,  
[Blank] – Never Communicated
```

The top button selects the current page view since the master supports up to 16 slaves.

```
90123456 Slave ID: 9 through 16  
Slave State: Same as above, but here none have communicated.
```

The middle button temporarily displays the serial number.

Pump Slave Info:

The default screen displays the current state, signal strength, and time since communication (or startup if never communicated with master).

```
P: WET Slave State: WET, DRY, or (DRY)  
13, 18s Slave Communication: Signal Strength – 1-35 (35 being best),  
Time since communication  
Notes: (DRY) means communication timeout (default until communication).  
The slave unit shuts off the pump if it doesn't communicate in 10 minutes.
```

The top button temporarily displays the slave ID.

The middle button temporarily displays the serial number.

Note: Both types of units will display previous information if they haven't had their settings erased. This can be accomplished by pressing the RESET while the LCD displays: Settings RESET? Press the RESET button to have it display this message, then press it again to erase settings.

Power Requirements for these units:

DC Powered Unit 7-40V DC:

At 12v DC: 1.0A MAX
0.1A - 0.5A during normal operation

120vAC Powered Unit:

At 120v AC: 0.25A MAX
0.05A - 0.15A during normal operation

The above numbers are the current required for our unit to operate. Below is the current the relays in our box can control:

On both AC and DC units, each relay can handle a peak max of 10A, 5A constant (at a max voltage of 120vAC, or 30vDC).

the relay shown in the pump master/slave instructions is a relay like our ice cube relay (782XBXC 120 with base 70-459-1)
any similar relays of that type will work as long as its contacts are able to take 277v or above and has Normally Open contacts - the coil on our relay only draws 0.01A at 120vac