



Weather station
USB output

Raspberry Pi
Microcomputer

Router
Local network

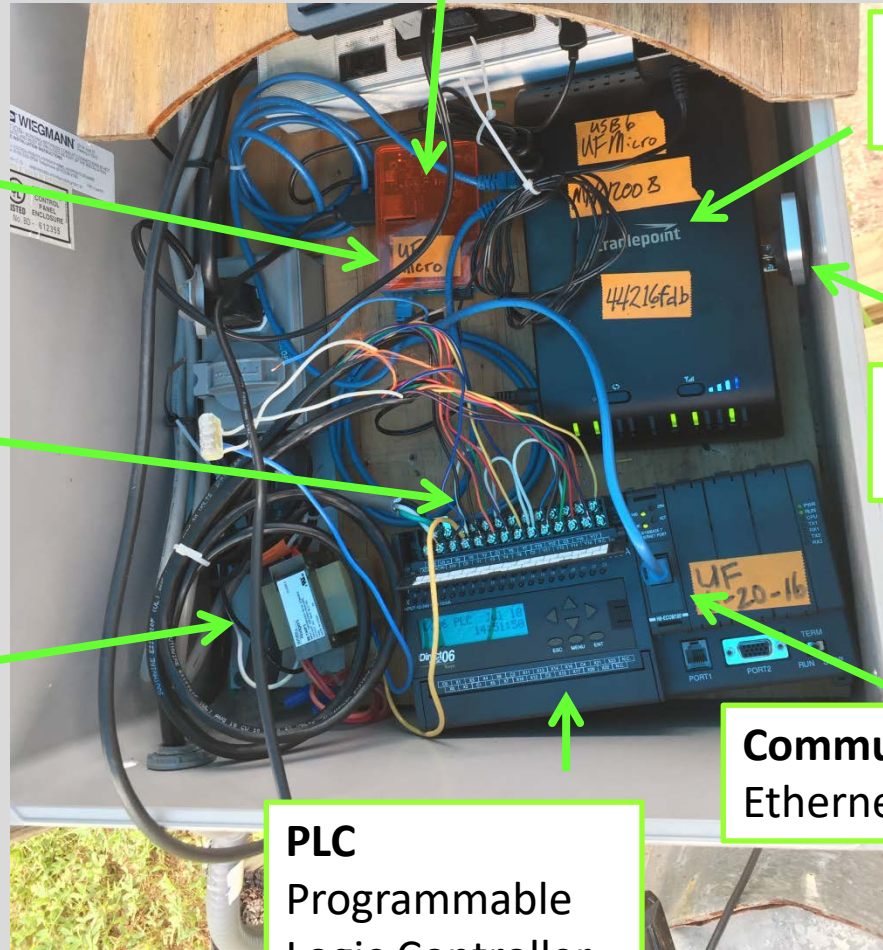
Switch outlets
Solenoid wires

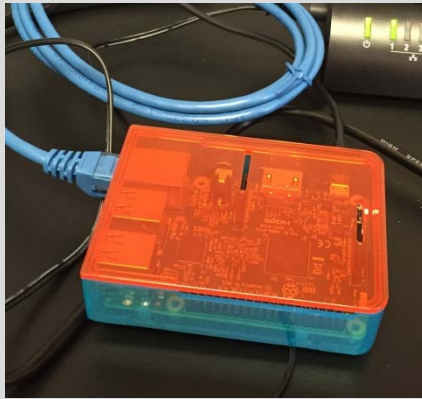
USB cell modem
Internet connection

Transformer
24VAC

Communications module
Ethernet

PLC
Programmable
Logic Controller





Local Microprocessor (Raspberry pi)

WEEWX - weather data acquisition for Davis Station

CIRRIG agents to acquire output

PLC programs

Data storage – PLC logs, CIRRIG inputs

IRRIG Irrigation for Nov 28, 2017

- Create a new zone
- Manage My Zones

Zone Type: ☐ ET ☒ LF

Past day's weather for **HN** at '2017-11-28 08:00:00'

Solar radiation: 168.4 W/m² 14.5 MJ/m²
 Min temperature: 50.2 F 10.1 C
 Max temperature: 75.9 F 24.4 C
 Rainfall: 0.00 inches 0.00 cm

Zone	NAME	PLANT	SCHED	TIME	IRRIG (INCH)	RUN TIME (MIN)	DEFICIT (INCH)	RT _{LP} (MIN)	ET _d (IN)
1	Y12-13W	#NRS	daily	08:00:00	1.79	3.8 x 2	0.00	6.6	0.3
2	Y16-17West	#15 Eagleston Holly	daily	08:00:00	0.61	1.8 x 2	0.00	6.9	0.5
3	W1	#7 Ligustrum	daily	08:00:00	1.67	7.4 x 2	0.00	12.8	0.3
4	W2	#7 NRS	daily	08:00:00	1.26	5.5 x 2	0.00	9.6	0.3
5	W3	#7 NRS	daily	08:00:00	1.26	5.5 x 2	0.00	9.6	0.3

CIRRIG (UF server)

Weather data management

Irrigation zone management - inputs and outputs

CingitC 0.3.5.9/2016
 File Options Units Help
 Login 192.168.0.120 192.168.0.135

Options W 7GALLON NRS Y16 Y17 15 GALLON LEYLAND Y12-13C Cripes

Zone Group 2: W 7GALLON NRS

Zone	NAME	PLANT	SCHED	TIME	IRRIG (INCH)	RUN TIME (MIN)	DEFICIT (INCH)	RT _{LP} (MIN)	ET _d (IN)
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Group Preferences

Max Simultaneous: 5 N cycles: 2 Cycle 1 Time: 8 Cycle 2 Time: 14
 Free Outlets: Y00 Cycle Mode: continuous Mode: remote

Apply Abort Clear Init PLC Status: Connected Delete Irrigator Change IP

Heartbeat: 1511893220 Health: GOOD Status: Idle
 Host: 166.159.21.250 SUCCESS FREE_OUTLETS: 192.168.0.135:Y00,Y03,Y13,Y104,Y105,Y106,Y107

Computer (remote or local network)

PLC graphical user interface – manage and monitor PLC