

SPIDER

DATA ACQUISITION



STEP 1: RUN CABLES

Plug the power cable into any 110-230v AC outlet. Switch the unit on.

Plug the network cable into a network port or directly into your computers Ethernet port.

STEP 2: LAPTOP

Open your laptop and connect to the same network. The default IP is 192.168.1.10 and Subnet is 255.255.255.0. Launch your browser. Type into the address bar <http://spider.local> and wait a few seconds for the home page to appear. The numeric values will update every second.

To zero totals left click on the numbers and when prompt appears press ok.

To reset relays left click the pressure reading for that relay channel and press ok when the prompt appears.

The Reset button on the front panel if held for 3 seconds will zero all the totals and reset both relays.

STEP 3: CALIBRATION

Enter in calibration figures for sensors.

For example if a 15K PSI 4-20mA pressure transducer is connected then the span for the analogue channels will be: $937 = 15000/(20-4)$. The offset will be whatever the sensor reads at atmospheric. If it reads 10 PSI then the offset will be -10 to give you a zero value.

The relays are activated by setting a trigger point in either KO A or B. Channels 1&3 will activate relay 1 and channels 2&4 will activate relay 2.

The frequency channels calibration figures will read whatever is on the **calibration tag**. For example a 2" flow meter would have a value of around 55.

The total can be used to either zero the volume or save a stage total.

SPIDER

CHANNEL CALIBRATION

Changes will not take effect unless SAVE button is pressed.

Chan1	Chan2	Chan3	Chan4	Chan5	Chan6
Span: 937	Span: 937	Span: 937	Span: 937	MF: 55	MF: 55
Offset: 0	Offset: 0	Offset: 0	Offset: 0	Total: 0	Total: 0
KO A: 10000	KO A: 500	KO A: 500	KO A: 500		
On	On	On	On		

SAVE

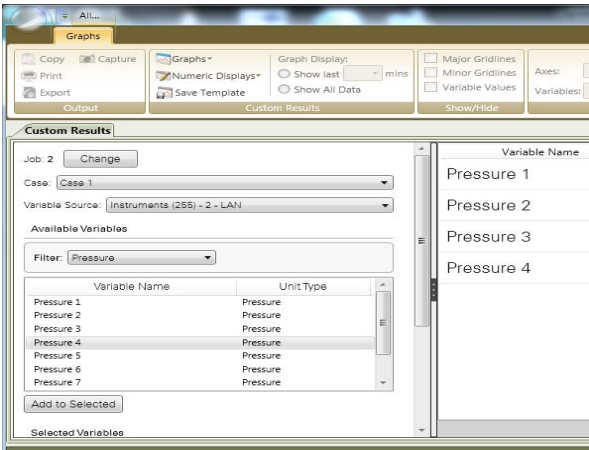
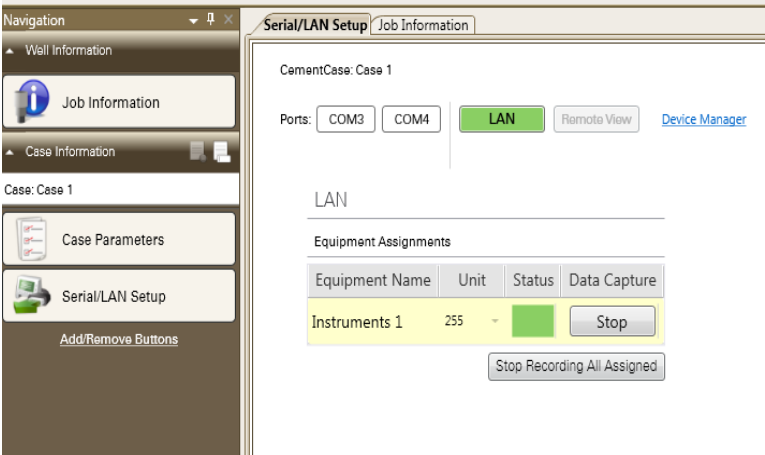
You must press SAVE for changes to take effect!

STEP 4: RECEIVING DATA

To receive data from the Spider ensure your laptop is plugged into the network via the Ethernet port and **not your WIFI**.

To connect with iCem, start a new job then go to Serial/LAN. If the LAN button is still greyed out wait a minute for the programme to detect the packets as some versions of iCem will take longer than others to see the equipment.

The Spider will show up as an instrument and the unit number will be 255. Click record and status colour will change from yellow to green. All Spider channels are now being recorded.



STEP 5: SELECTING VARIABLES

Open graphs and charts. Under variable source select instruments 255. Available variables breakdown as follows:

Spider	iCem
Chan 1-4	Pressure 1-4
Chan 5-8	Flow Rate 1-4
Chan 9-12	Stage Total 1-4