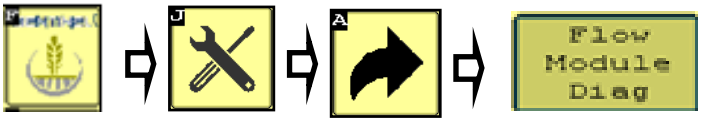
Sentinel Flow Module Setup and Configuration

Addressing Sentinel Flow Modules



Flow Module Diagnostics

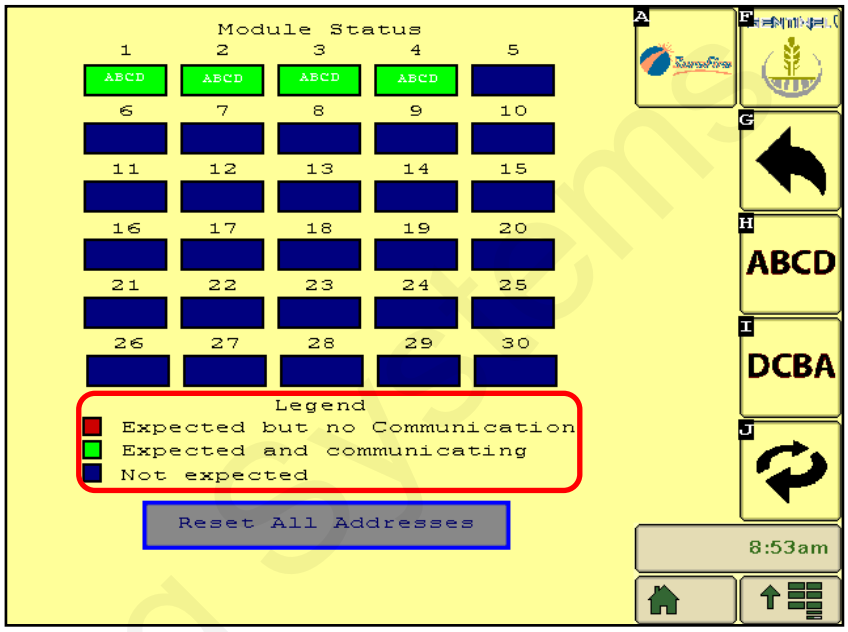
To address the Sentinel flow modules, start by having all the modules plugged in. From this screen, push **Reset All Addresses**. This sends a message to the modules to erase their address. All modules for Product 1 are then unplugged and then plugged back in, in order across the machine. As each module is plugged in, Sentinel identifies its location on the machine and the module is then given its new address and it will turn green on the screen. *Have someone watch this screen to be sure each module is recognized as it is plugged in.*

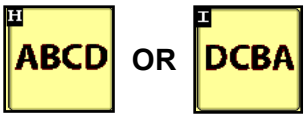
If there is a problem with modules not addressing, be sure the tractor is running to keep the voltage up.

Once all modules are addressed, choose the proper **orientation** as described below.

Repeat for each Product.

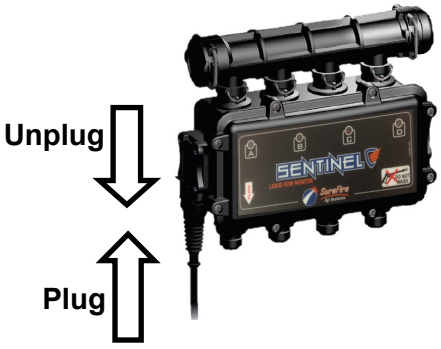
Flow Module Diagnostics Screen



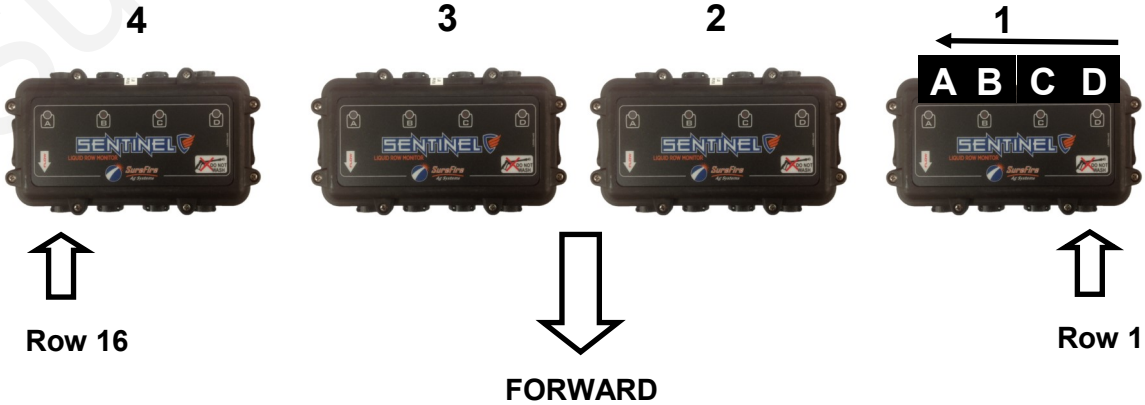


Most machines will have the modules mounted facing forward, causing Row 1 to correspond with row D on the module. Therefore, the orientation DCBA must be selected. Likewise, if the modules are mounted rear-facing, the orientation ABCD will be selected.

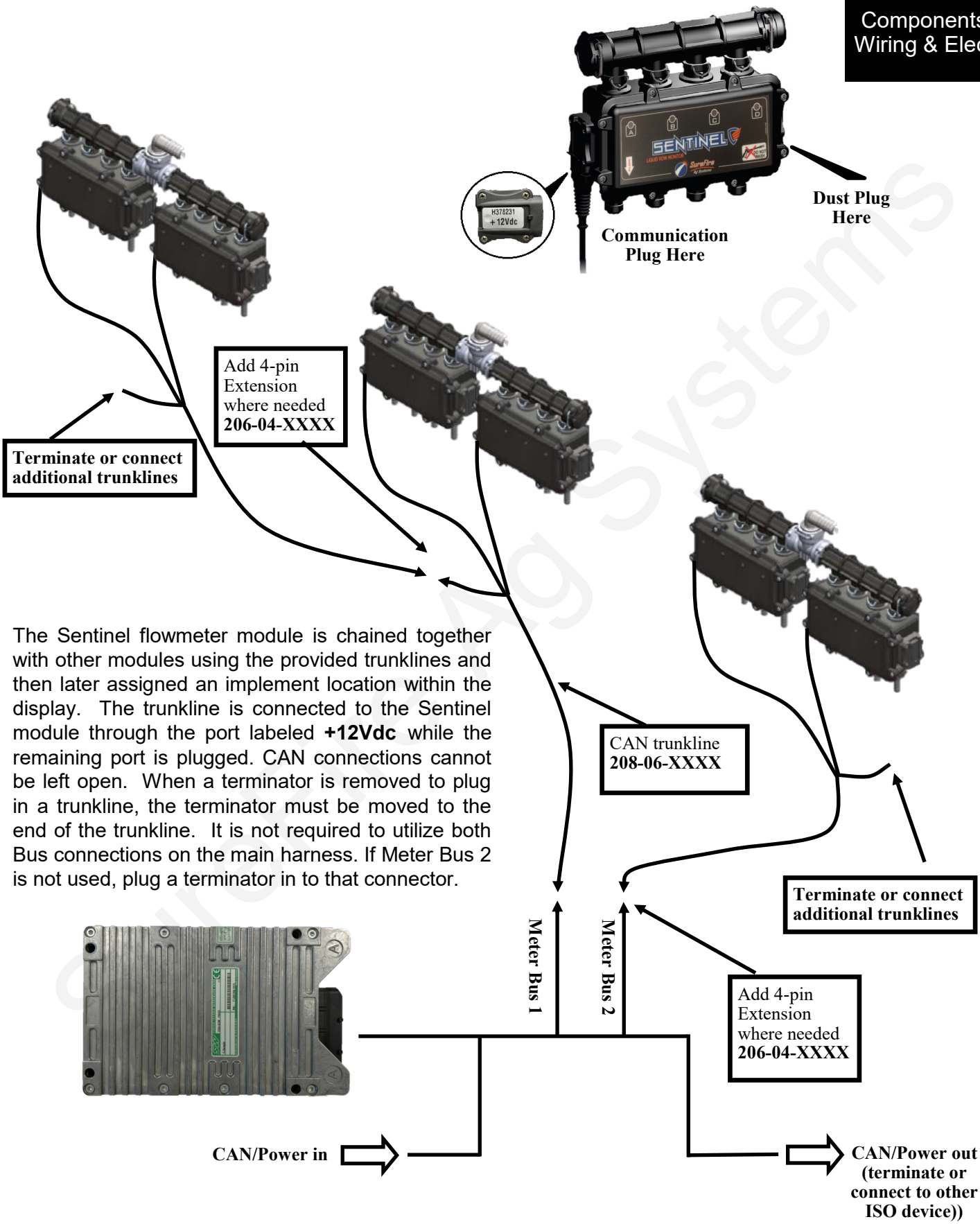
Press the toggle button to go to the next page of modules if needed.



Example 16-Row—D C B A Orientation



SureFire Harness Layout for ISO Sentinel



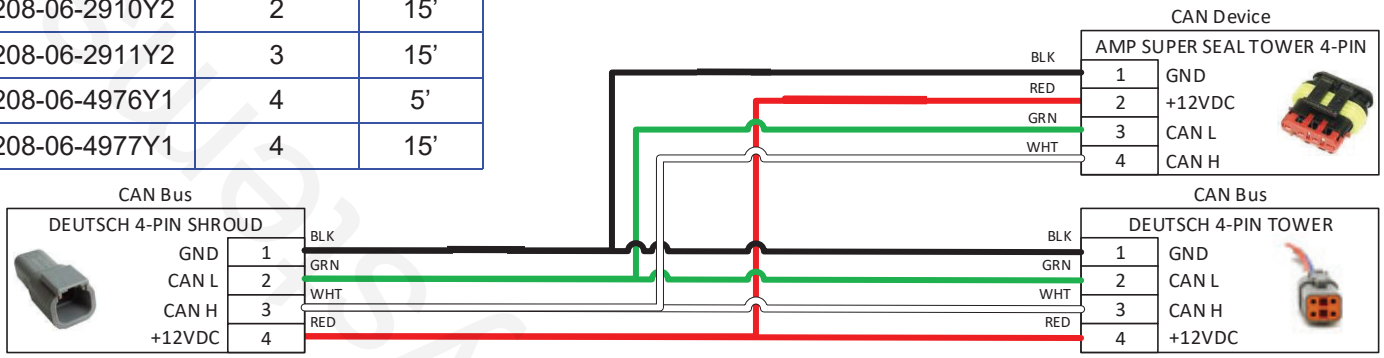
The Sentinel flowmeter module is chained together with other modules using the provided trunklines and then later assigned an implement location within the display. The trunkline is connected to the Sentinel module through the port labeled **+12Vdc** while the remaining port is plugged. CAN connections cannot be left open. When a terminator is removed to plug in a trunkline, the terminator must be moved to the end of the trunkline. It is not required to utilize both Bus connections on the main harness. If Meter Bus 2 is not used, plug a terminator in to that connector.

4-Pin Deutsch CAN Trunklines to 4-Pin AMP SuperSeal to connect Sentinel Flowmeter Modules

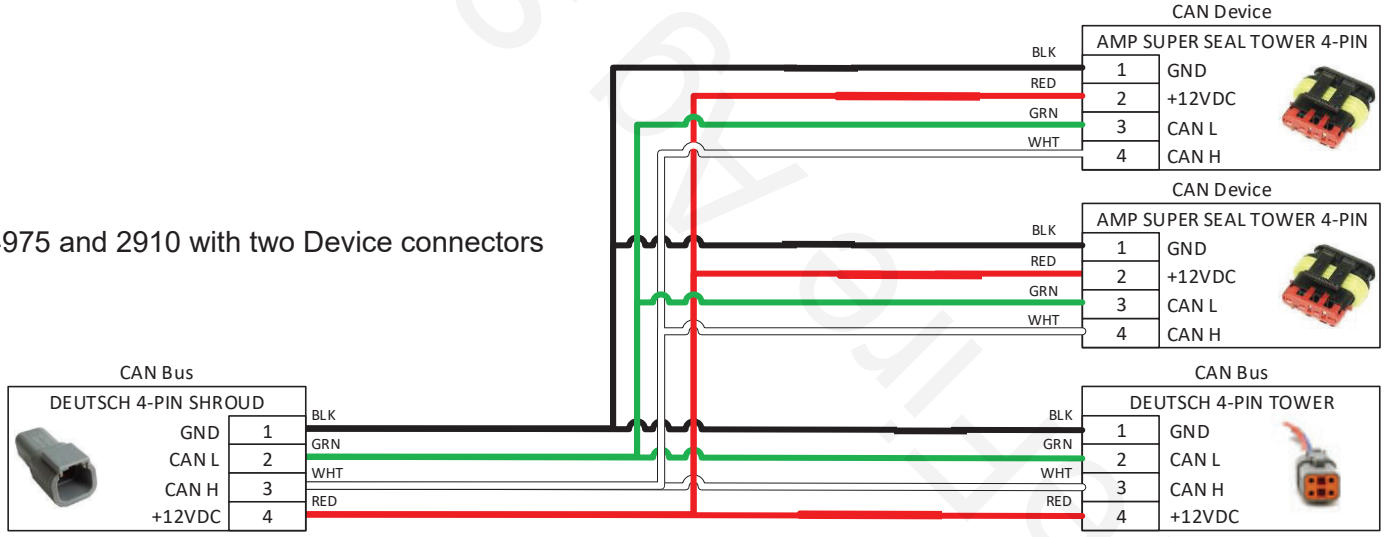
Part #	Number of flowmeter connectors	Length
208-06-2908Y2	1	5’
208-06-2909Y2	1	15’
208-06-4975Y1	2	5’
208-06-2910Y2	2	15’
208-06-2911Y2	3	15’
208-06-4976Y1	4	5’
208-06-4977Y1	4	15’

CAN Device
+ 12v between 2&1.
1.5 to 2.5 v between 3&1.
+2.5 to 3.5v between 4&1.

2908 and 2909 with one Device connector



4975 and 2910 with two Device connectors



CAN Bus
+ 12v between 4&1.
+2.5 to 3.5v between 3&1.
+1.5 to 2.5v between 2&1.

2911 is similar to the above, but with three Device connectors.

4976 and 4977 are similar to the above, but with four Device connectors.

The Deutsch 4-pin Tower CAN Bus connector (bottom right of each drawing above) is plugged into another trunkline or, if it is the last trunkline, it is plugged into a Terminator.

SureFire Ag Systems

Sentinel Startup Light Sequence to identify Sentinel Multiflow Modules

After the Sentinel has been set up, when the Sentinel is turned on there will be some lights that light up on the flowmeter units. The Sentinel Multiflow unit that contains Rows 1-4 (Multiflow 1) should have an alternate flashing of lights A-B and C-D. (A-B, C-D, A-B, C-D,A-B, C-D, A-B, C-D, A-B, C-D). While these lights are flashing on Multiflow 1, Multiflow 2 (Rows 5-8) should have light B lit. Multiflow 3 (Rows 9-12) should have lights A & B on. Multiflow 4 (Rows 13-16) should have light C on.

The address of any module can be confirmed by unplugging it and watching the light pattern as it is plugged in.

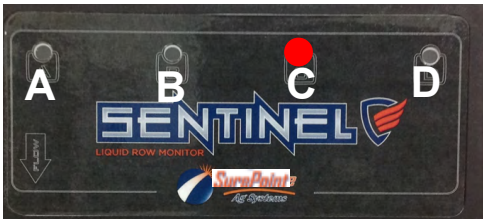
Multiflow Module 1 will alternately flash A-B, C-D several times when the Sentinel is turned on.

Multiflow Module 2 will show light B when the Sentinel is turned on.

Multiflow Module 3 will show lights A & B when the Sentinel is turned on.

Multiflow Module 4 will show light C when the Sentinel is turned on.

6 = 2 + 4 7 = 1 + 2 + 4
9 = 1 + 8 10 = 2 + 8 11 = 1 + 2 + 8
12 = 4 + 8 13 = 1 + 4 + 8 14 = 2 + 4 + 8
15 = 1 + 2 + 4 + 8



Module 5 should have lights A & C (1 + 4) come on for 3 seconds when it is plugged in. Unplug the module, watch the lights as you plug it back in.

Other LED Signals

When liquid is flowing, there will be a flashing of LEDs on the channels with flowing liquid, with the frequency proportional to the flowrate.

When liquid is not flowing, the LED on each channel will be lit to indicate there is liquid in the unit. (These lights will blink off shortly once every 3 seconds.)

When liquid is not flowing but is present in the flowmeter, if the LED is OFF (with a short blink every 3 seconds), that indicates the flowmeter on that row is not detecting any liquid. If all rows are like this, it could indicate a low conductivity fluid that the units will not read. If one or two rows are like this, it could be a marginally conductive liquid or faulty flowmeter on that channel. Clean the inside tube with a soft cloth.