

FarmerGPS - Interface ON/OFF / 3-boom box

April 2008 for FarmerGPS version 4.x

5-pin = Sprayer/Seeder ON/OFF

Pin 1 = DCD	Master ON/OFF
Pin 2 = DSR	Boom3 ON/OFF (only used on 3-boom box)
Pin 3 = CTS	Boom1 ON/OFF (only used on 3-boom box)
Pin 4 = RI	Boom2 ON/OFF (only used on 3-boom box)
Pin 5 = Ground	

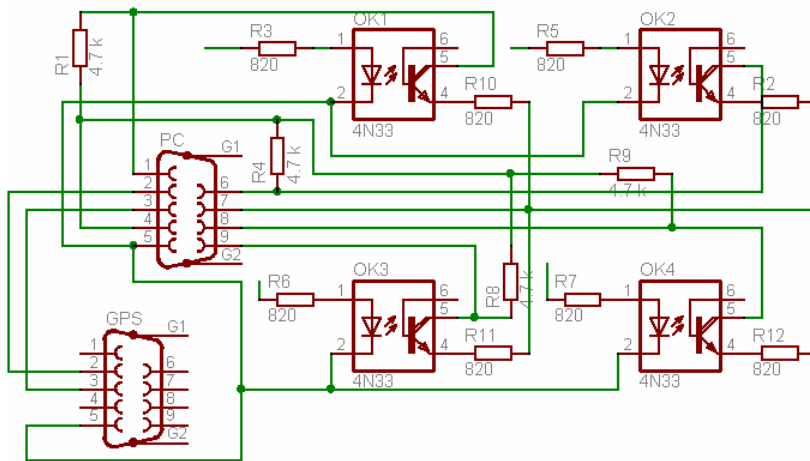
Pin 1 of the 5-pin connector goes to your sprayer/seedler ON/OFF switch. Any 12 V signal indicating ON/OFF may be used. This may be signal wires going from your controller to the solenoids, on air seeders this may be a work switch or any other switch which toggles 12V and ground. It does not matter if 12 V indicates ON or OFF, since the meaning can be reversed in the FarmerGPS setup.

Pin1 goes to the main ON/OFF.

Pin2 – Pin4 go to your boom switches, see above (only used on 3-boom box). When testing the boom switches you can use the GPS-info menu as the first test. Alternatively you can also use the “test” button in the FarmerGPS/Setup.

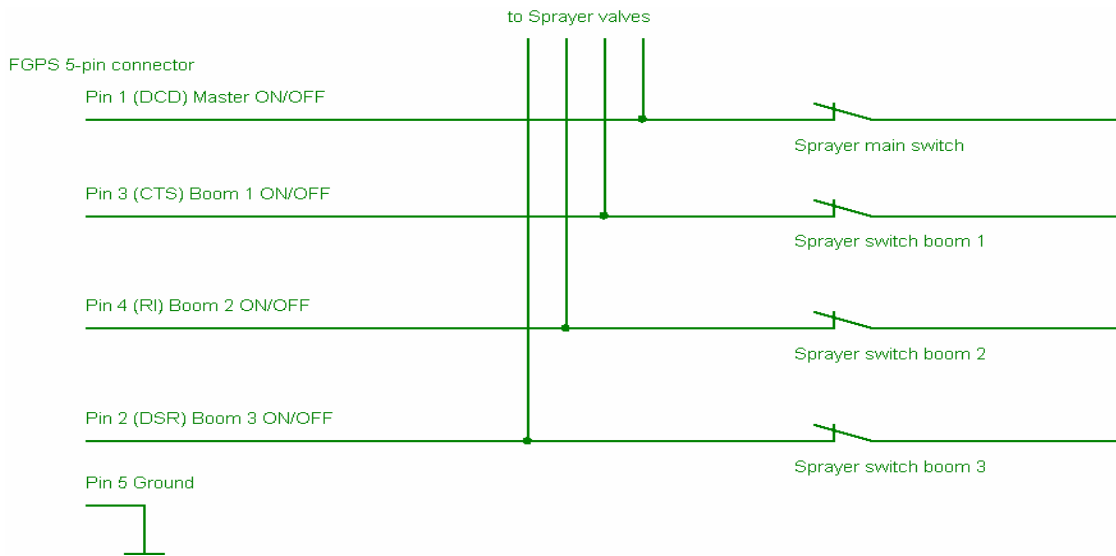
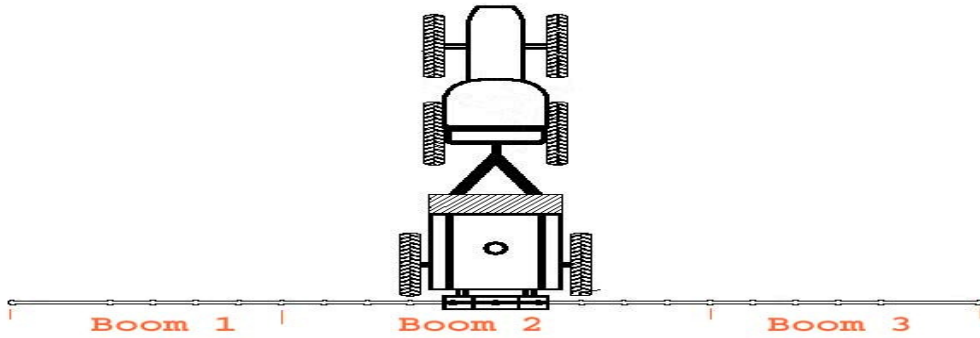
Test 1: GPS-info indicates false/true values for DSR, CTS, RI and DCD. If these values change based on your boom settings, 12 V values are recognized with FarmerGPS.

Test 2: Use the Setup/Equipment screen and configure your equipment with the interface box selected. Use the test button and check change in ON/OFF.



PC 9-pin D-sub female

Pin	Name	Function	Source
1	DCD	Data Carrier Detect	DCE
2	DTE	RXD Received Data	DCE
3	TXD	Transmitted Data	DTE
4	DTR	Data Terminal Ready	DTE
5	GND	Signal Ground	---
6	DSR	Data Set Ready	DCE
7	RTS	Request To Send (= DTE ready)	DTE
8	CTS	Clear To Send (= DCE ready)	DCE
9	RI	Ring Indicator	DCE



The sprayer switches should have 12V values, please check with a voltmeter.

In Setup/Equipment select the "Interface box" for the integration.

Interface box

Wired for Main ON/OFF Main 12 Volt is OFF

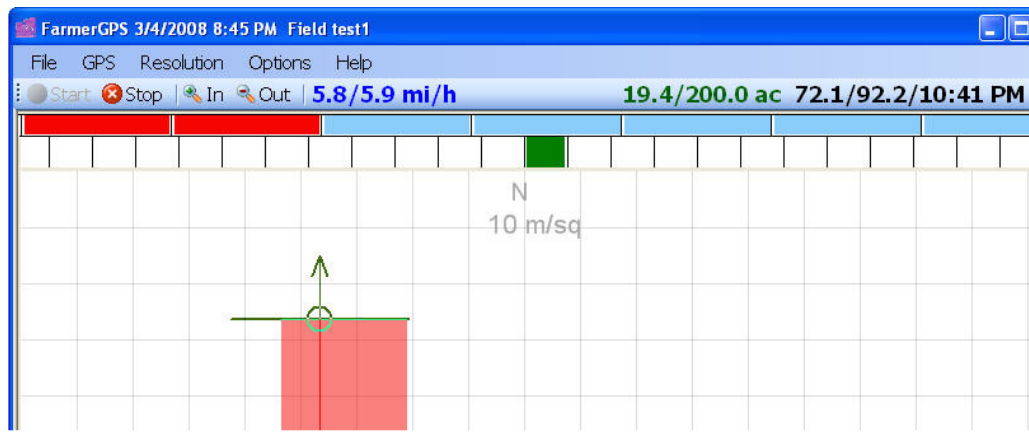
No of booms: Booms 12 Volt is OFF

Boom 1: inch

Show Boom ON/OFF bar

1. For equipment which is wired with the main ON/OFF, please check the "Wired for Main ON/OFF" option. This is the only required setting for simple ON/OFF equipment such as drills. For sprayer this setting may be used, however often it is not necessary as the boom signal go to OFF once the main switch is turned OFF. IN this case you can skip the wiring of Pin 1 AND leave the "Wired for Main" unchecked!

- For equipment with individual sections such as sprayers you need to specify the number of booms/sections and their set the respective size. Make sure the total size of boom values matches your total equipment size!
- The “Main 12 V is OFF” allows you to invert the logic. So if your equipment provides 12V as OFF instead of 12 V as ON, please check this option. The “Booms 12V is OFF” also inverts logic, but only for boom sections.
- The “Show Boom ON/OFF bar” allows you to display the boom settings on the main screen.



- The “test” button (1) allows you to check your wiring. Before you test, please make sure the correct COM-port is selected in the GPS tab! Since the interface device is checking values on the COM-port, an incorrect setting for result in incorrect readings for your ON/OFF values and no change will be shown! A “test” form indication ON or OFF allows you to verify your wiring. If you turned your booms ON and it shows as a OFF, simply check “Booms 12 Volt is OFF”. Close the Test form with the “x” in the upper right corner.

