

USB Interface ON/OFF up to 10-booms

15-pin = Sprayer/Seeder ON/OFF

Pin 1	Master ON/OFF
Pin 2	Boom 1
Pin 3	Boom 2
Pin 4	Boom 3
Pin 5	Boom 4
Pin 6	Boom 5
Pin 7	Boom 6
Pin 8	Boom 7
Pin 9	Boom 8
Pin 10	Boom 9
Pin 11	Boom 10
Pin 15	Ground

The USB-interface box may be used for up to 10-booms. Any 12V signal which indicates OFF or ON may be used.

For sprayers this could come directly from the controller, solenoids or even pressure switches. For some other equipment this may again come directly from the controller or, the equipment may work switches which make contact when the unit goes into the “active” position as well.

Please check voltage levels with a voltmeter and verify that there is a change when you turn your equipment ON and OFF. Ideally the change should be 12V, however the interface box was designed to work with smaller values as well (as low as 3V).

If you only require ON/OFF indication for equipment which has no sections, simply use Pin 1 (Master ON/OFF) and check “wired for main” in the equipment setup.

For sprayers or any other equipment with sections use Pin 2 to Pin 11. Example: For a 4-boom sprayer you will use Pin 2- Pin 5.

You may not have to wire Pin 1 as most sprayer controllers will automatically shut off all boom values when the Master switch on the controller is turned OFF.



Metal-box version of USB-IO interface

When the USB-interface is first connected to your laptop, Windows will display a “New hardware found” message. Please follow the instructions and point Windows to your USB-interface driver directory.

Driver installation

The following screen shots are taken on a Windows XP laptop, however other Windows OS work similar and you should be able to apply the same concepts. The wording of the messages may be different!

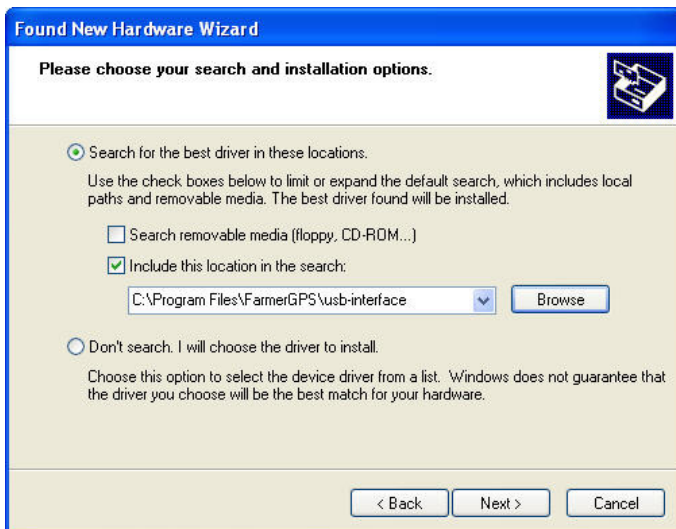
Plug the usb-cable into a free usb port on your laptop. A new Hardware found message will appear.



Select "No, not at this time"



"Install from a list or specific location (Advanced)."



Point to the driver location with the “Browse” button. The driver is located in your program installation folder or in your download folder.



A Warning will appear, please select “Continue Anyway”.



This is the final screen and you have successfully installed the USB-IO driver. You should also see a small message in the bottom left of the main screen:



Configuration of the USB-interface box

Once your wiring is complete you need to configure your equipment. Enter name, size etc. as usual and select "Usb-interface box" for the interface. Make sure you select the correct number of booms and enter their individual sizes.

A screenshot of a software configuration window for a USB-Interface box. The window has a light beige background and a blue sidebar on the left. The main area contains several fields and controls:

- Name:** A text box containing "AB Sprayer".
- Operation:** A text box containing "Spraying".
- Units:** Two radio buttons, "feet" (selected) and "meter".
- Cost:** A text box containing "0.00".
- Size:** A text box containing "32.8".
- Offset:** A text box containing "20.00".
- Offset Side:** A text box containing "0.00".
- Read (IN) / Send (OUT):** Two tabs, with "Send (OUT)" selected.
- Interface:** A dropdown menu showing "USB-Interface box".
- USB-Interface box:** A sub-section containing:
 - Two checkboxes: "Wired for Main ON/OFF" (unchecked) and "Main 12 Volt is OFF" (unchecked).
 - Two checkboxes: "Booms 12 Volt is OFF" (unchecked) and "Show Boom ON/OFF bar" (checked).
 - No of booms:** A spinner box set to "5".
 - Boom:** A spinner box set to "1".
 - 78.70 inch:** A text box containing "78.70" with "inch" to its right.
- Test:** A button located at the bottom right of the sub-section.

When completed make sure you click "Save". You may also want to run a test in the shop. This can easily be done by using the "Test" button.

When the test form is displayed, toggle your boom switches and watch the status change from ON to OFF or vice versa. In the event that OFF is displayed and your sprayer is actually ON, close the test form and simply select the "Booms 12 V is OFF" checkbox. Now test again by clicking the "Test" button.