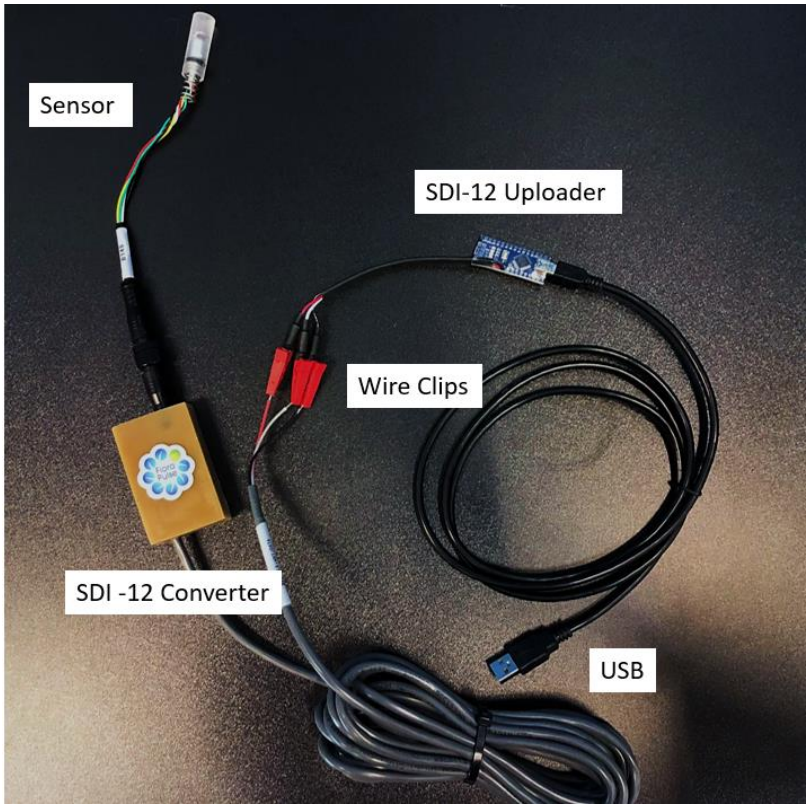
FloraPulse Co
720 Olive Dr Ste E
Davis CA, 95616
(530) 220 – 7668

SDI12 Calibration Uploader Manual



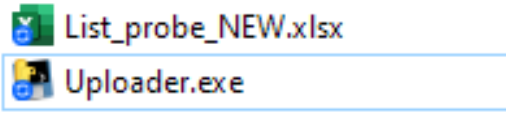
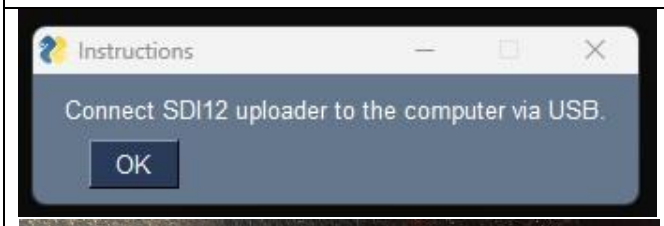
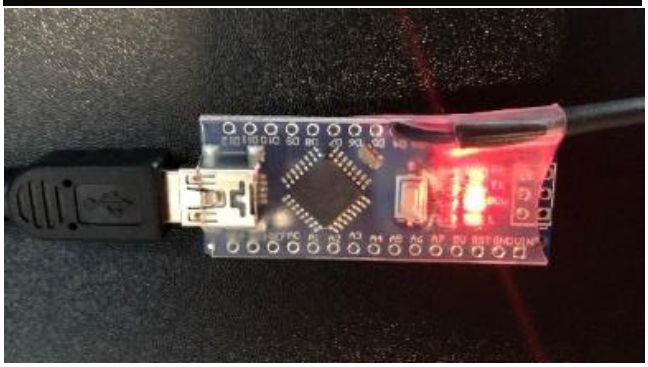
FloraPulse Microtensiometer probes output a raw millivolt signal that must be calibrated to translate it into water potential. Each probe has different calibration coefficients – these can be inputted into your preferred datalogger software (if using the analog probe), or come pre-programmed into our SDI12 converter box (if using the SDI12 probe).

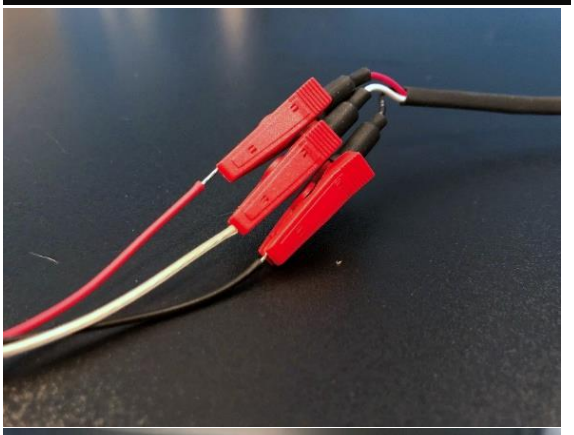
Each SDI12 converter box comes ‘matched’ with the calibration coefficients for a particular probe – the box has a sticker with the matched probe name and comes attached to this probe as well. The SDI12 box thus must only be used with this matched probe.

If necessary, it is possible to re-use an SDI12 box with a different probe. You must first upload new probe’s calibration coefficients. This is possible by applying custom SDI12 commands through an SDI12 communication terminal (see the SDI12 probe manual).

The SDI12 uploader hardware (pictured above) provides an easy way to change the calibration on multiple SDI12 boxes sequentially. Here is how.

Instructions:

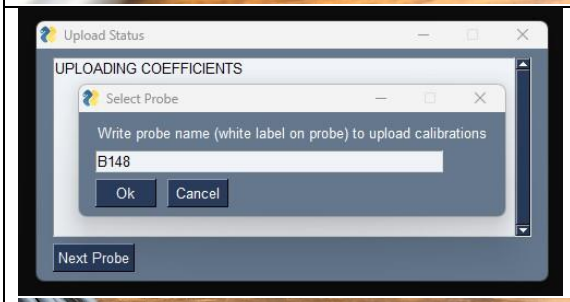
	Download the "SDI12 calibrations uploader" zip file. Unzip it and open Uploader.exe. Follow the instructions.
 	Plug SDI12 uploader into the computer. Ensure that the uploader is connected properly to the computer by confirming there is a red light on the board. Click "OK" to continue.
	Select the COM port the uploader is attached to (it might be the only port shown). Click "Select" to continue.



Connect the SDI12 converter box to the SDI12 uploader by clamping the color-matched wires: red to red, white to white, and black to black.

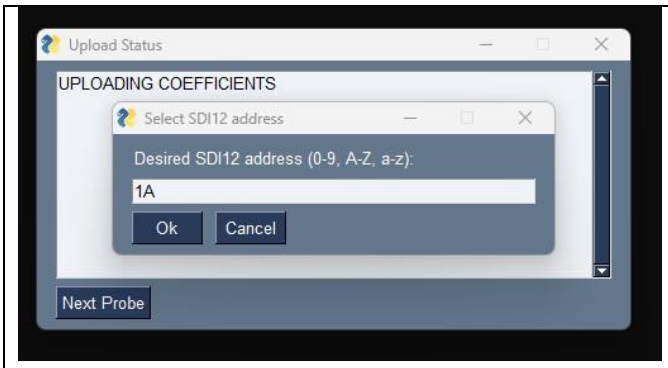
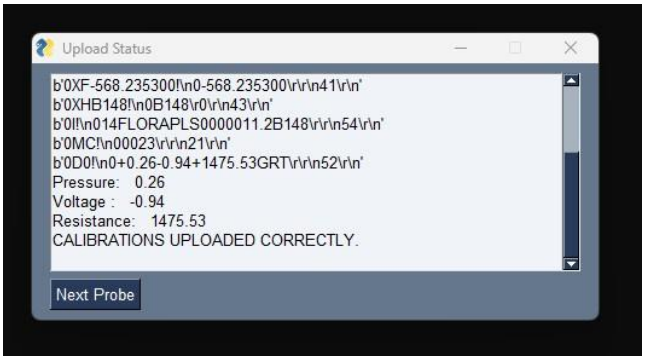
Connect the desired probe to the SDI12 converter box by lining up the arrows on the ports.

Click “OK” to continue.



Type the probe name into the box. This name is written for each probe on a white label near the base.

Click “OK” to continue.

	Set the desired SDI12 address. Address ‘0’ is the default. Click “OK” to continue
	Let the module run. Empty lines may indicate that the wires are not attached correctly. Sensor is good when module reads “CALIBRATIONS UPLOADED CORRECTLY” Click “Next Probe” if you need to match other SDI12 boxes with probes.