

Changing the power up state of the digital IO on the USB-1208FS and USB-1408FS

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With your USB-1408FS unplugged, and the unit lying on its back, unscrew the 3 screws using a #1 Philips head screw driver, and lift off the rear cover.

Hold the unit so that the USB connector is on the LEFT side and you can read the pin numbers 21 to 40 at the bottom, in front of you.

About 1/2 inch (1.25 cm) above the pins of the inverted screw terminal, you will see two, vertical thick film resistors. There are green with white piping on the edges, and are labeled RN2 and RN3. These are the pull up/down resistor networks for the digital ports. RN2 is for PortA, RN3 is for PortB.

Just below RN2 is R4. This is a 0 Ohm shunt resistor which has printing on the board for HI and LO. The default position is set to HI, or pull up, so that when the USB-1408FS powers up, the digital bits all power up to +5VDC. To set the bits to power up to 0VDC, you must move the 0 Ohm shunt to the LO position. You do this by carefully moving the 0 Ohm shunt with a soldering iron from the HI position to the LO position.

To change the power up state of PortB, you move the 0 Ohm shunt, R5.