

Intelligent Handle Board Wiring Instructions (IDL-30001)

Doc No. IDL16_0814DS_A0

Figure 1: Input Pins

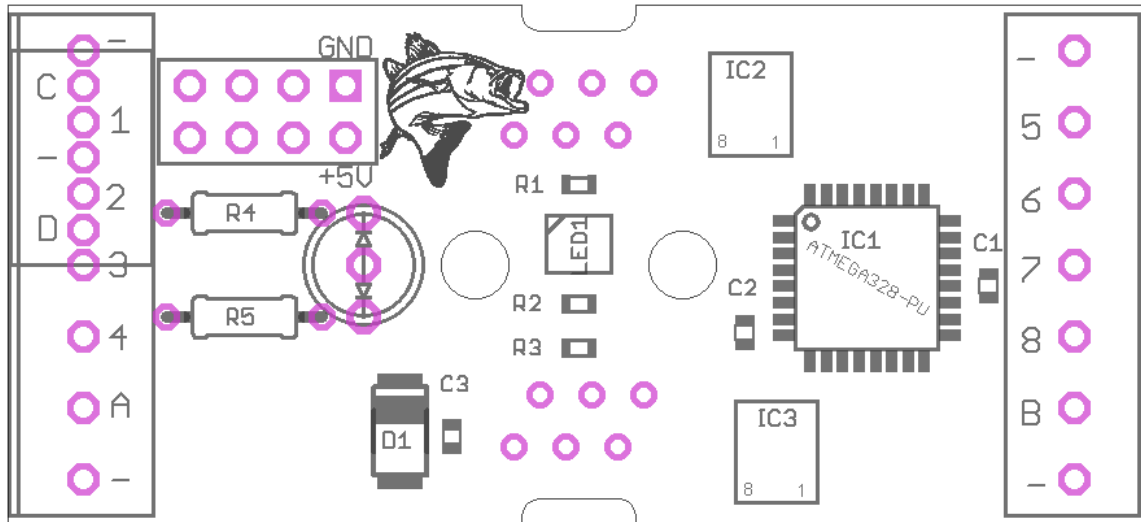
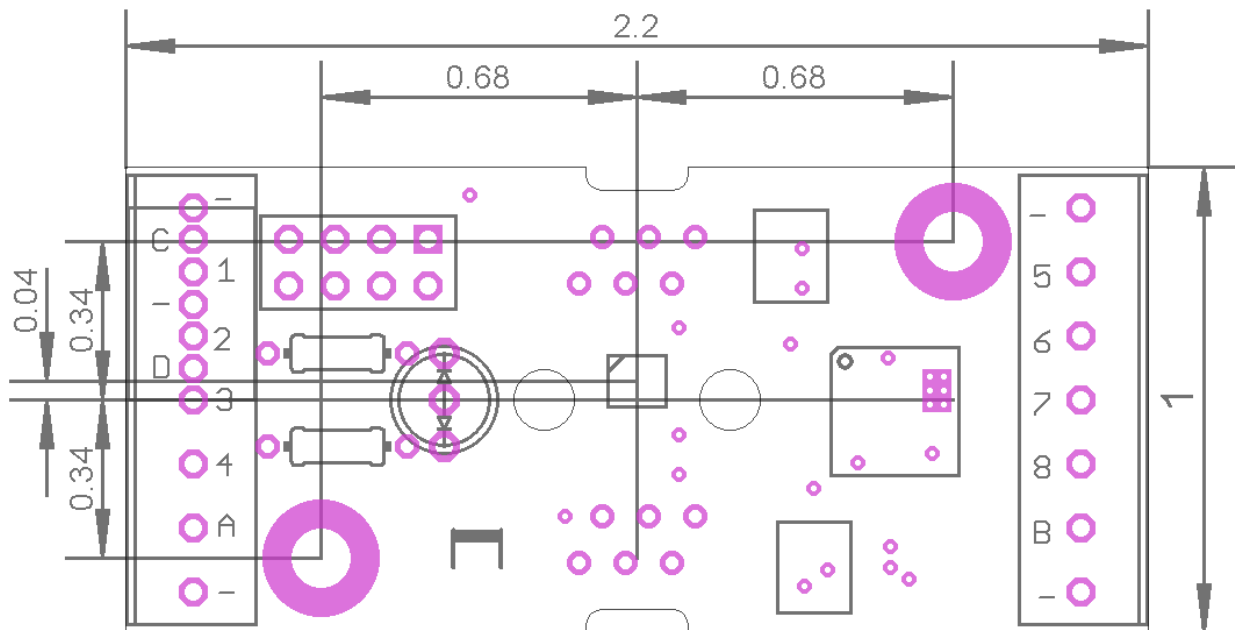


Figure 2: Dimensions



Units in inches

Revision	Author	Date	Change
A0	khagen	2015-01-19	Initial Document



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1. How Buttons Work

When one of the inputs labeled 1-8 is shorted to ground, the handle controller reads a button as being pressed. These inputs are held at a 5V potential by the microcontroller through a ~30 kOhm resistor.

Button inputs A and B are read by both the handle-board microcontroller, as well as the Teensy microcontroller that controls the Yoke. However, these inputs are currently reserved and will not have any noticeable effect on operation. Their state is not current reported on the USB interface.

2. How to Wire Buttons

Connect one lead of each button to a numbered screw terminal, and connect the other lead to a common ground line that ultimately connects to one of outer-most terminals (labeled “-”). Multiple buttons (up to 4) can share the same ground line which can be daisy-chained between them. Avoid forming a loop with this ground – it should start at the screw terminal and end at the furthest button.

The number of the terminal you attach the button lead to determines the button that will be reported on the USB interface when the connection is made between that terminal and ground.

3. Special Buttons

Button 3, when triggered, will perform trim-down on the Yoke’s default forces, as well as register as button 3. Button 4, when triggered, will perform trim-up in the same way. These buttons have no effect on simulator-created effects.

Buttons 5,6,7 and 8 are analog-capable inputs, meaning they can read any voltages between 0 and 5V. These buttons are currently only reporting their digital readings (pushed/not pushed), but analog functionality will be enabled in an upcoming firmware update.

Button A and Button B are not currently supported by firmware and will not have any effect when shorted to ground. These inputs will be also be enabled in an upcoming firmware release.

Buttons C and D are not connected on the Intelligent Handle Board.

4. To make a feature request

Contact Support@irisdynamics.com and we’ll be happy to talk about the possibilities while we continue to develop the USB interface and handle-to-yoke communications.

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