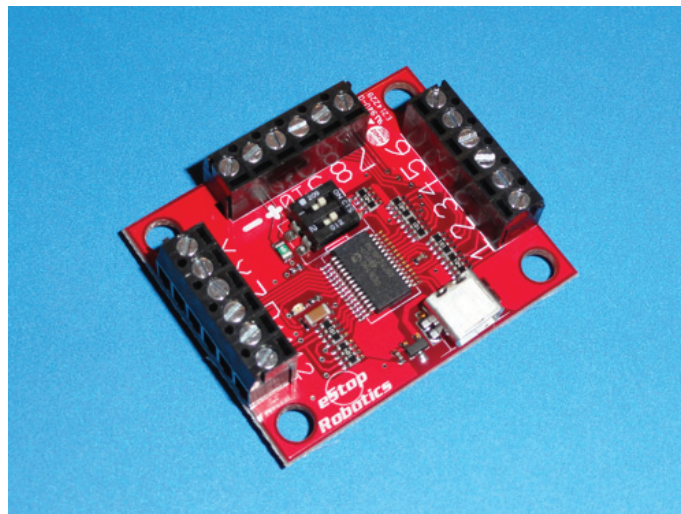




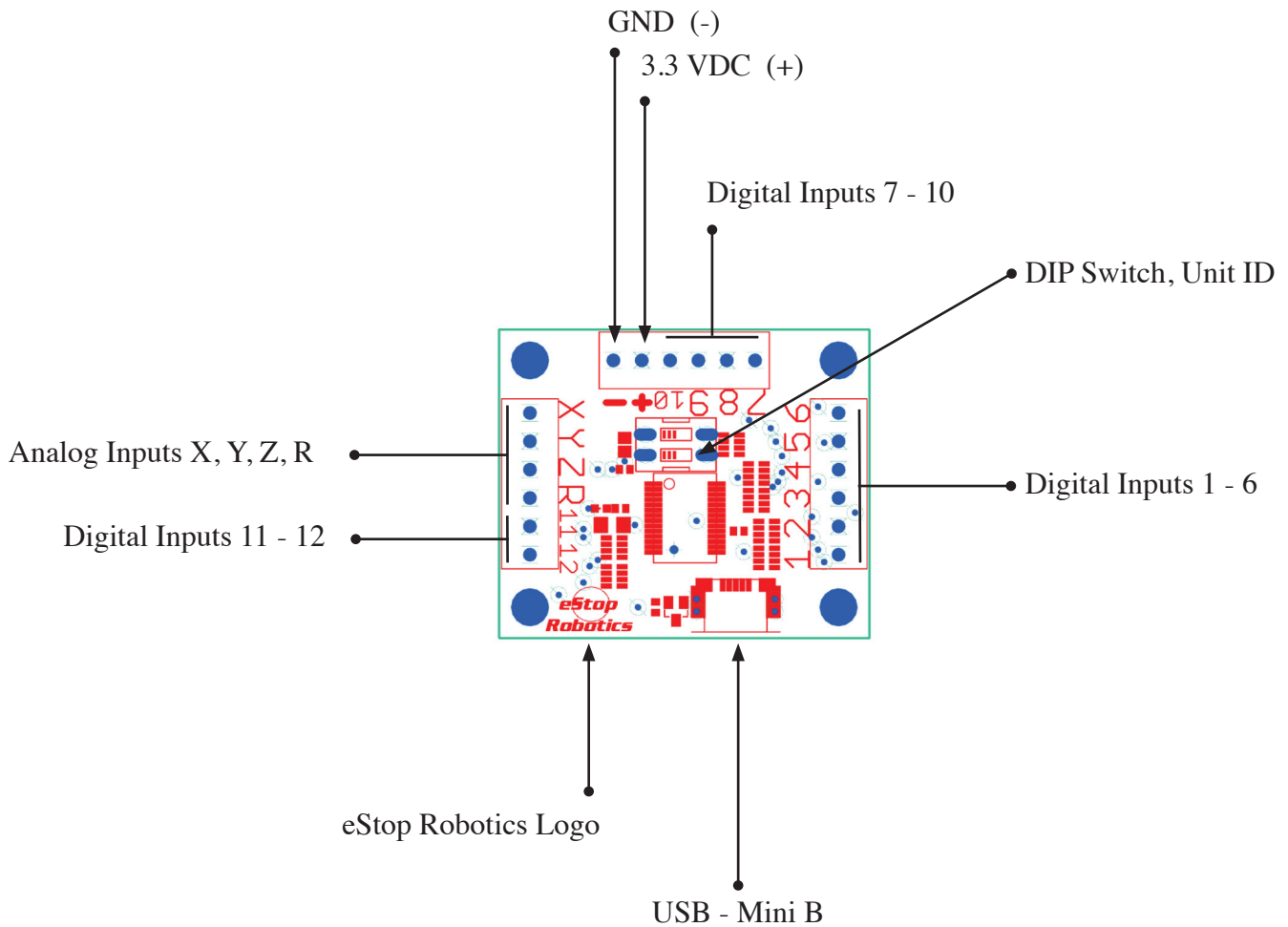
Custom Control Interface - CCI

Basic Layout & Connection Guide v1.2



eStop Robotics LLC
507 Maine Ave
Aldan PA 19018
610•6229969
www.estoprobotics.com

Basic Layout



General Notes:

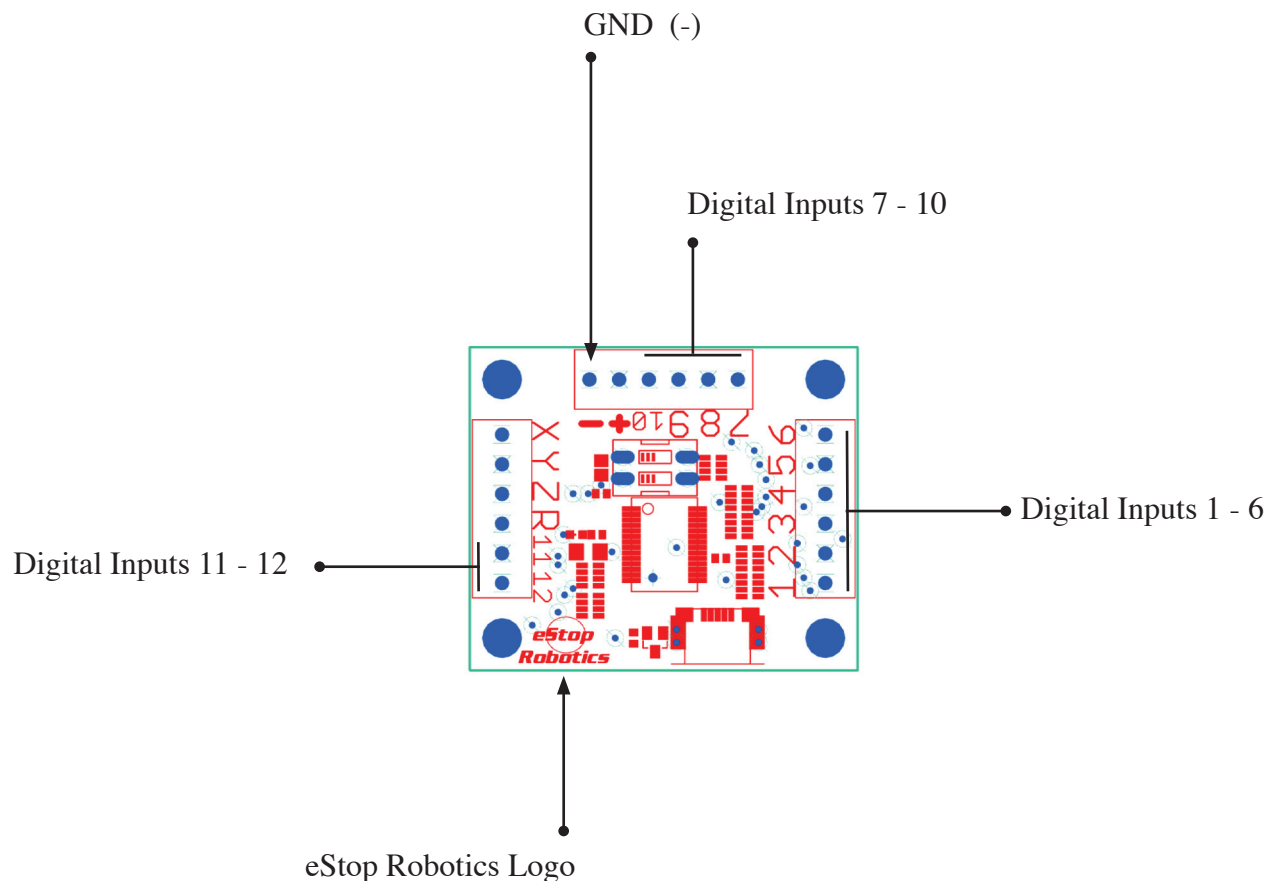
- The Custom Control Interface (CCI) is USB plug and play compatible in Windows XP and Windows 7.
- The CCI is powered completely by the USB connection.
- The 3.3 VDC (+) connection is an output and is for use with analog input connections.
- The DIP Switch controls the unit ID for the CCI, up to four CCIs can be used at one time.
- The digital inputs have pull up resistors.
- The CCI is supplied with a USB Type-A to Mini-B cable.

DIP Switch Unit ID:

- The DIP switches allow the user to set up to four unique IDs

SW1	SW2
ON	ON
ON	OFF
OFF	ON
OFF	OFF

Connection Guide - Digital Inputs

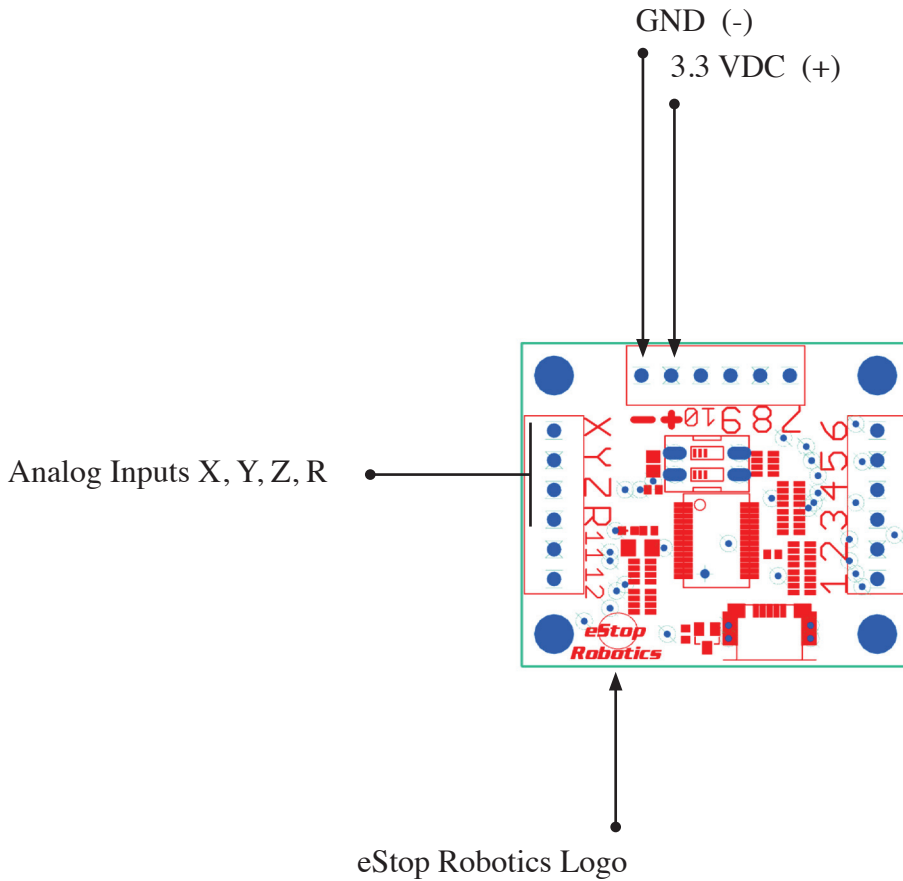


Connecting Digital Inputs (1-12)

- The digital inputs already have a “pull up” resistor and should be wired to the GND terminal to create a switched connection.
- A typical switch would be wired from the “common” terminal of the switch to the GND terminal on the CCI and from the “switched” terminal to one of the 12 digital input terminals on the CCI.
- A good wiring practice for the CCI would be to “daisy chain” all the “common” switch terminal connections back to the GND terminal as a single connection.

CAUTION: The positive terminal (+) on the CCI should never be connected a digital input device.

Connection Guide - Analog Inputs



Connecting Analog Inputs (X, Y, Z, R)

- The analog inputs are expecting a voltage divider circuit from a potentiometer .
- A typical potentiometer would be wired as follows:
 - Orient the potentiometer such that it is sitting on the back of its case, with the shaft pointed upward, and the three terminals of the potentiometer facing you.
 - Wire the left terminal to GND (-).
 - Wire the center terminal (referred to as the “wiper”) to one of the available analog inputs (X, Y, Z, or R).
 - Wire the right terminal to 3.3 VDC (+).
- The values for the potentiometer should be 50-100k

CAUTION: Do not exceed 100mA total current draw of the GND (-) and 3.3 VDC (+) pins.