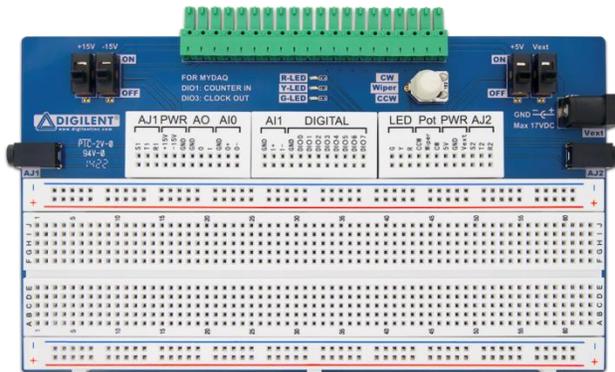# myProto™ Reference Manual

Revised November 14, 2014
This manual applies to the myProto rev. A

Overview

The Digilent myProto accessory board for NI myDAQ attaches directly to the myDAQ and brings all myDAQ signals to breadboard connections where they can be easily accessed using simple jumper wires. The myProto also includes several additional useful I/O devices. Signal names on the myProto breadboards indicate which myDAQ signals and onboard devices are attached to which breadboard pins. All Ground connections on the myProto breadboards are connected into a single Ground node on the myProto device.

The Digilent myProto board.

- Solderless Breadboard
- All myDAQ signals accessible from breadboards
- 3 onboard user LEDs
- 1 10K Potentiometer
- 2 Audio Jacks
- External power connector for breadboard circuits
- Switches on all power supplies

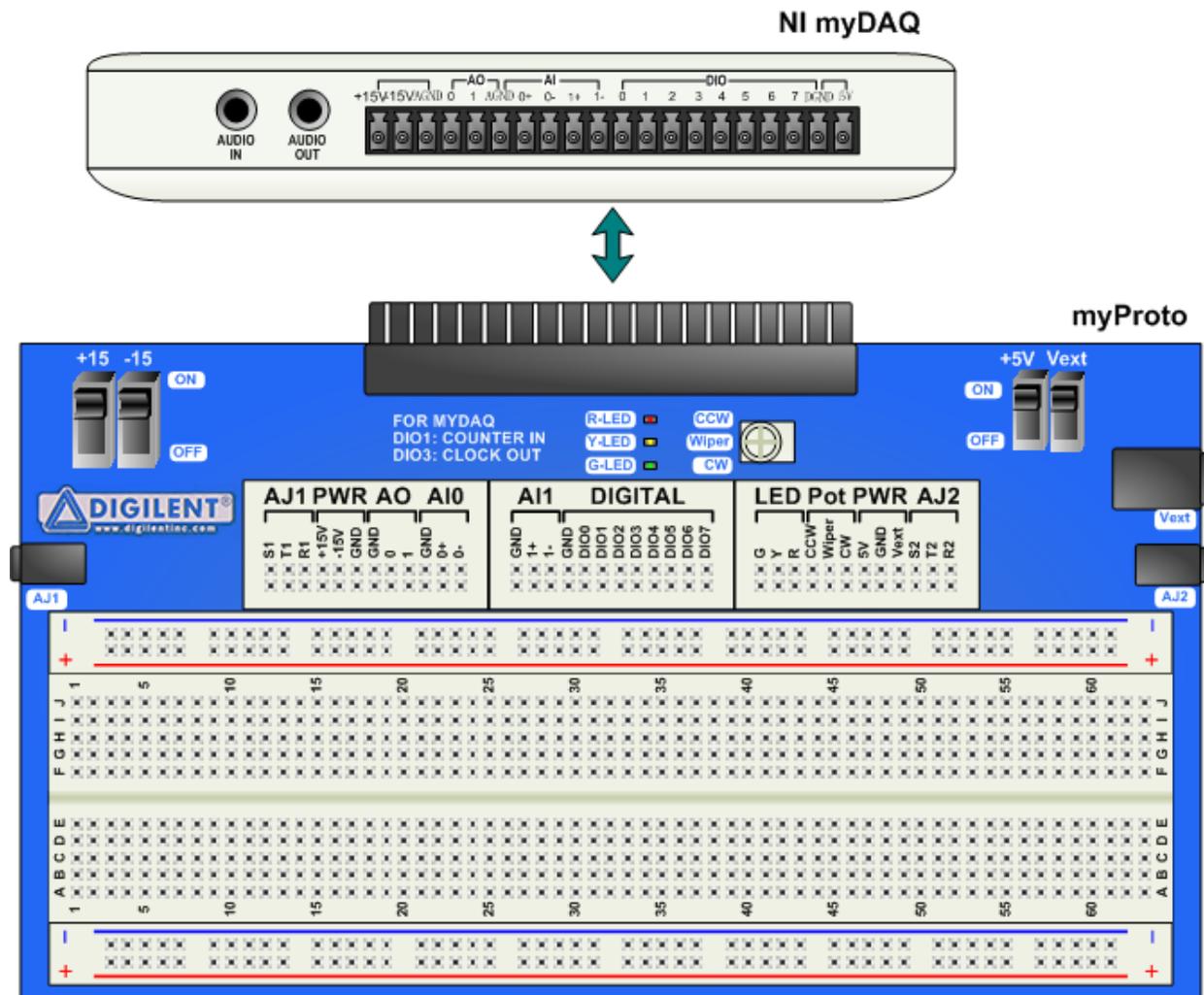| Pin	Function	Pin	Function	Pin	Function
AJ1 S1	Audio Jack 1 Sleeve	AJ2 T2	Audio Jack 2 Tip	AO 1	Analog Out Pin 1
AJ1 T1	Audio Jack 1 Tip	AJ2 R2	Audio Jack 2 Ring	AI0 GND	Analog In Ground
AJ1 R1	Audio Jack 1 Ring	PWR 5V	myDAQ +5V supply	AI0 0+	Analog In Ch0+
PWR +15V	myDAQ +15V supply	PWR GND	Ground	AI0 0-	Analog In Ch0-
PWR -15V	myDAQ -15V supply	PWR Vext	From Vext Jack	AI1 GND	Analog In Ground
PWR GND	Ground	AO GND	Ground	AI1 1+	Analog In Ch1+
AJ2 S2	Audio Jack 2 Sleeve	AO 0	Analog Out Pin 0	AI1 1-	Analog In Ch1-
DIG GND	Digital GND	DIG DIO4	Digital I/O 4	LED Y	Yellow LED
DIG DIO0	Digital I/O 0	DIG DIO5	Digital I/O 5	LED R	Red LED
DIG DIO1	Digital I/O 1	DIG DIO6	Digital I/O 6	Pot CCW	Pot Counter-CW
DIG DIO2	Digital I/O 2	DIG DIO7	Digital I/O 7	Pot Wiper	Pot Wiper
DIG DIO3	Digital I/O 3	LED G	Green LED	Pot CW	Pot CW

Table 1. Digilent myProto signals.

Figure 1. Connecting Digilent myProto to the NI myDAQ.

LED G, Y, R

390 Ω

LED Circuit

CCW

10KΩ

Wiper

CW

When Pot turned CCW, wiper approaches CCW pin; R_{W-CCW} decreases and R_{W-CW} increases

When Pot turned CW, wiper approaches CW pin; R_{W-CW} decreases and R_{W-CCW} increases

Potentiometer Circuit

(**S**) Sleve (Ground)

(**R**) Ring (Right)
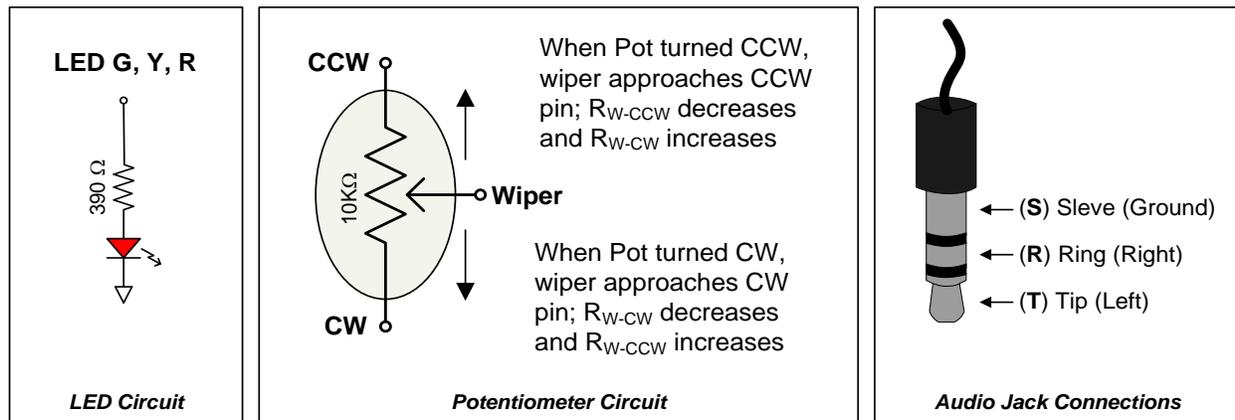
(**T**) Tip (Left)

Audio Jack Connections

Figure 2. Digilent myProto circuits and breadboard device connections.