



USER GUIDE

AdamONE / RelayONE Development Platform

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Electronic Design, Development and Manufacture
Prototypes to Production
Since 1984

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Introduction

The AdamONE is an Arduino Uno compatible development board that was developed for the purpose of validating in-house equipment while providing a useful sample for our customers. This PCB is not for sale and only provided to customers of Adam Electronics INC. This kit is shipped with a RelayONE Shield.

In the event you receive this PCB and cannot make use of it, please provide it to a student or hobbyist to help promote an interest in the STEM subjects.



Software / Hardware Requirements

- Latest Arduino IDE available at [this link](#).
- USB Micro B Cable to connect to PC

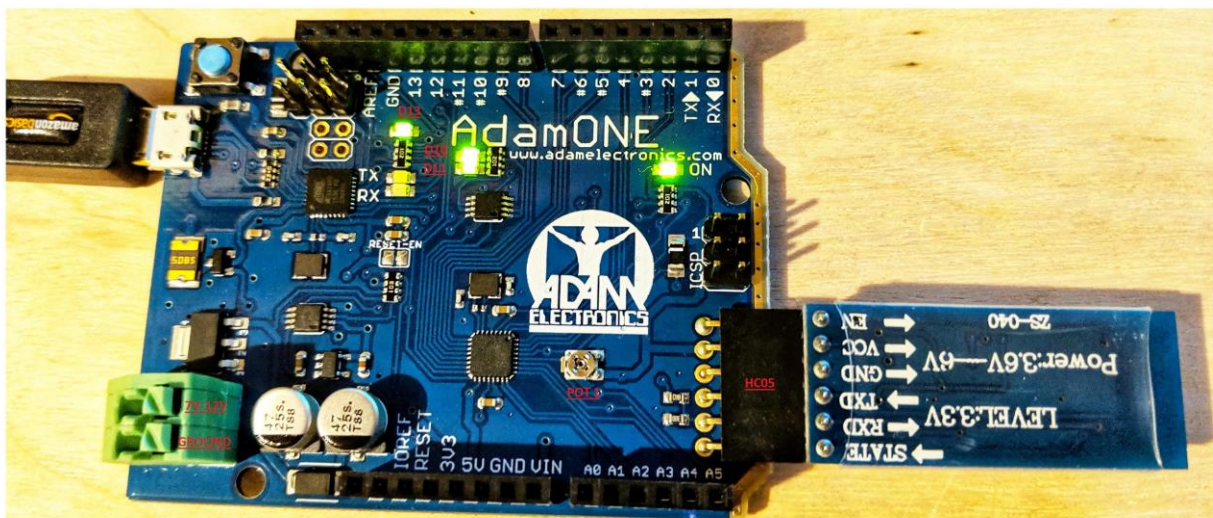
Feature Additions

The AdamONE has some additional features to allow a richer learning experience without the need to develop external circuitry.

HC05 Connector

The AdamONE has a connector easy use of the HC05 Bluetooth module. This is connected directly to the D0/D1 ports and is ready for UART communication. The voltage divider to bring the TX to 3.3V is also in place. This can be used in conjunction with the Serial Monitor through the Arduino IDE.

An example of what to purchase can be found at [this link](#).



Potentiometer 1

The AdamONE has a potentiometer connected to 5V and Ground with the wiper connected to Analog Input A5. If there is a need to use A5 for another reason, the PCB trace can be cut at this location. Place a 0805 zero-ohm jumper on the pads if needed again.

LED 2 and LED 3

In addition to the standard built in LED that is found on an Arduino UNO on D13, the AdamONE has two additional LEDs connected to D10 and D11 by way of an op-amp buffer. These I/O pins can be used for other circuitry with LEDs still populated.

Wire to Board Power Connection

To allow for an easier power connection on a bench setup, wire to board connector X1/X3 was added.

RelayONE Shield

The AdamONE ships with a RelayONE Shield. The sample code makes use of this module. Two relays with the connections brought out to a header are provided. The relays operate with a 12V coil and the reason why special connections to an additional supply are required.

