

## Emergency ventilator design toolbox

# Circuit Diagram

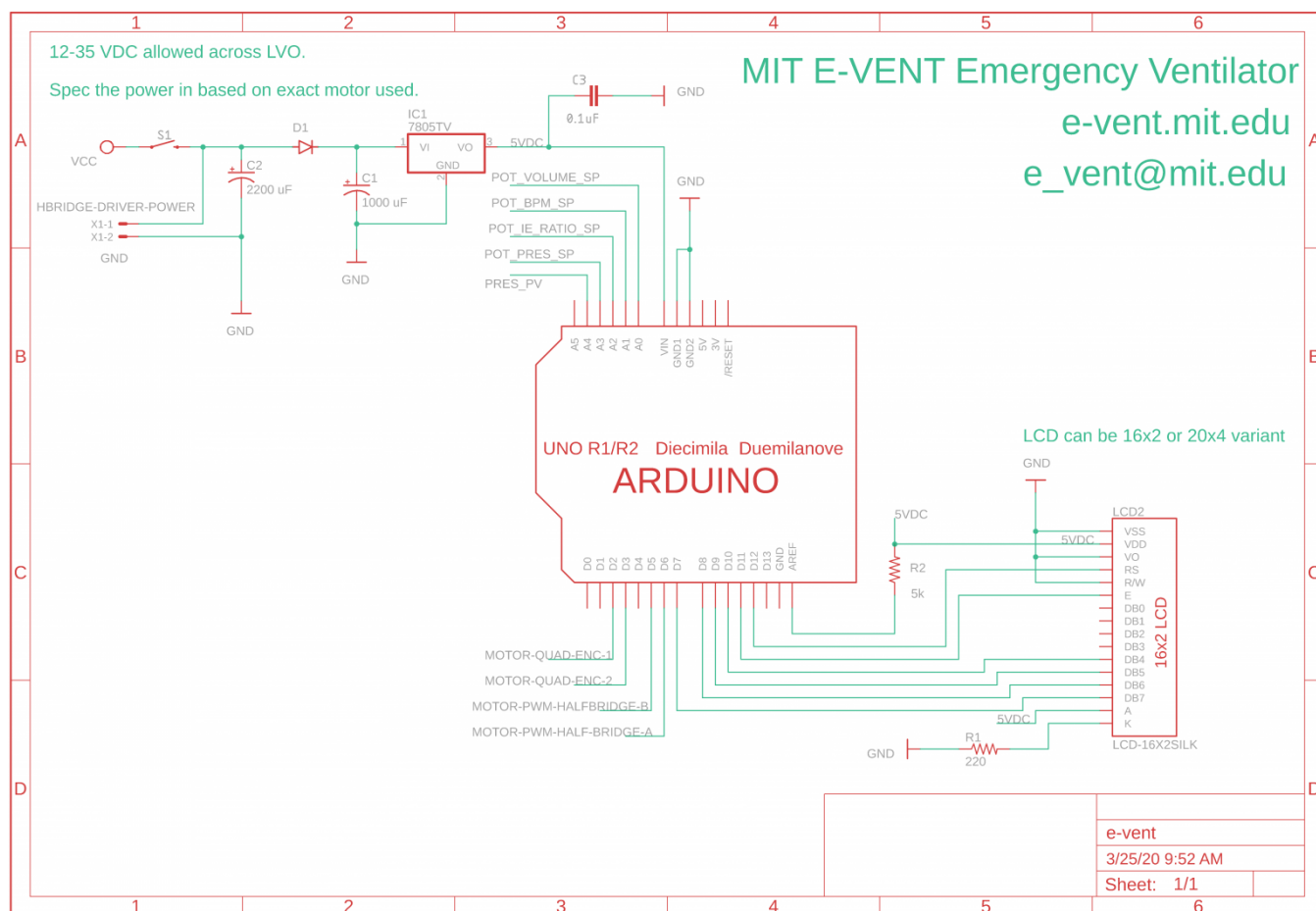
Updated 25 March 2020

This page provides a reference design for an Arduino based circuit showing the simplest device embodiment, including pressure sensing. Other industry validated controllers are applicable.

Notice: Any circuit must fulfill the requirements described in **Key Ventilation Specifications**.

## Arduino-Based Prototype Circuit

*Caution: This circuit does not contain the alarms necessary for alerting clinicians of failures! This circuit diagram does not contain the 12V supply, the motor, the encoder, or the buzzers necessary. Additionally, mass-manufactured designs should be made without development boards such as Arduinos and motor shields. This diagram is for reference only.*



In this design, the logic is fed from a 5V linear regulator from the 12V supply. This 5V feeds both the Arduino, LCD Screen, and Encoder power. The key functions that this circuit must fulfill are described in our [Key Ventilation Specs page](#).

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