## MR. PUMPKIN

a light-triggered Hallowe'en kit with LEDs and sound FX

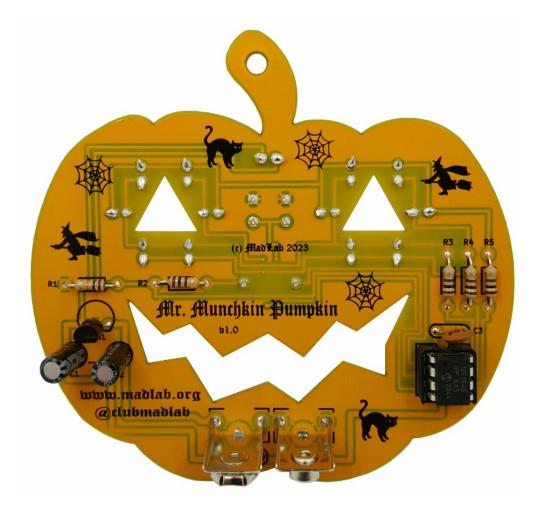


**LFDs** 

- 1 Identify the different components using the spotter chart.
- Fit the resistors (R1 to R5) to the back of the circuit board telling them apart by the coloured bands around their bodies. Solder the resistors to the front of the board then trim their legs. They can be fitted either way around.
- Fit the chip socket (IC1) to the back of the board matching the notch in the socket to the notch in the symbol on the board then solder it to the front of the board. **Do not solder the chip directly to the board.**
- Fit the pushbutton (S1) to the front of the board and solder it to the back.
- (5) Fit the LDR (SENSOR) to the front of the board and solder it to the back.
- 6 Fit the regulator (REG1) to the back of the board matching the half-circle shape of the regulator to the half-circle on the board. Solder it to the front.
- 7 Fit the electrolytic capacitors (C1 and C2) to the back of the board putting the shorter leg into the hole with the sign. The shorter leg also has a stripe on the side of the body. Fit the other capacitor (C3) to the back of the board either way around then solder all the capacitors to the front of the board.
- 8 Fit the 12 LED lights to the front of the board around the eyes putting the shorter leg into the hole with the line. The shorter leg also has a flattened edge on the rim. Bend the legs away from each other then solder them to the back of the board. Clip the legs close to the solder joints.
- (9) Fit the speaker (PIEZO) to the front of the board and solder it to the back.
- Fit the battery connectors (BATT+ and BATT-) to the back of the board matching the shape to the symbol (the hexagonal connector is positive, the circular negative). Make sure the connectors are pushed fully into the board then solder them ensuring all the holes are well filled with solder.
- Carefully bend the legs of the chip inwards a little with your fingers. Fit the chip into its socket matching the small notch in the chip to the notch in the socket.
- Connect a 9V PP3 battery to the battery connectors. The lights should flash and it should beep twice.

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## **HOW TO USE**

Press the pushbutton to change mode. There are 4 modes indicated by the number of LEDs on.

mode 1: triggered by increasing light level, short FX duration

mode 2: triggered by increasing light level, long FX duration

mode 3: triggered by decreasing light level, short FX duration

mode 4: triggered by decreasing light level, long FX duration

modes 1 & 2 - place Mr. Pumpkin in a darkened room, if someone turns the lights on then he's triggered

modes 3 & 4 - place Mr. Pumpkin in a lighted room, if someone turns the lights off then he's triggered