1 x Circuit Diagram (Schematic – EasyEDA)

1 x PCB Arduino Shield v3

1 x Microphone Preamp Module GY-MAX4466

Eg: <https://www.ebay.co.uk/itm/GY-MAX4466-Electret-Microphone-Amplifier-Sensor-with-Adjustable-Gain-G6M6-/332754864316>

**Capacitors**

C1 1µF

C2 1µF

C3 1µF

**Resistors**

R1 100K ¼ watt resistor

R2 120 ohm

R3 1k resistor

R4 180 ohm

R5 180 ohm

R6 1k

**Semiconductors**

Q1 IRLZ44N MOSFET (Mount under board)

D1 IN5817 Shottky Diode

LED1 3mm RED

LED2 3mm GREEN

LED3 3mm WHITE or BLUE

**Other Hardware**

2-pin header pin (for ultrasonic unit)

3-pin header socket (for microphone unit)

Ultrasonic Generator Kemo M071N

Mounting hardware (I used two smoked grey acrylic coasters from eBay about £1 each)

Plastic spacers (stand offs) & bolts for mounting the acrylic coasters:

<https://www.banggood.com/Suleve-M3NH5-180Pcs-M3-Nylon-Screw-Black-Hex-Screw-Nut-PCB-Standoff-Spacer-Column-Assortment-Kit-p-1000806.html?rmmds=search&cur_warehouse=CN&p=FQ040729393382015118&utm_campaign=25129675&utm_content=3897>

For more information see

<https://github.com/RalphBacon/Barking-Mad-Ultrasonic-Detector>