

01

MIGNON Game kit 1.0

+ creative

www.olafval.de/mignon

02

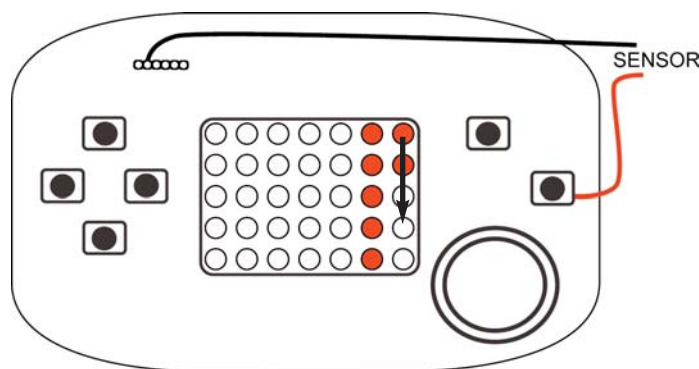
Sensors

A sensor replaces the "Function B" button so that it not only provides on/off information, but it also, for example, is able to detect a range between 0-1000. It's recommended to begin with a Potentiometer (an adjustable resistor) as it's the most basic "sensor".

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It can be directly connected to Pin C5 of the ATmega8 Chip. The MigSensorTest programme should be installed with the Game Kit for use. If resistance is increased with the Potentiometer, then the display dots in the last two rows light up. The detected value will also be displayed in the serial port. See instructions for Serial Communication.

04

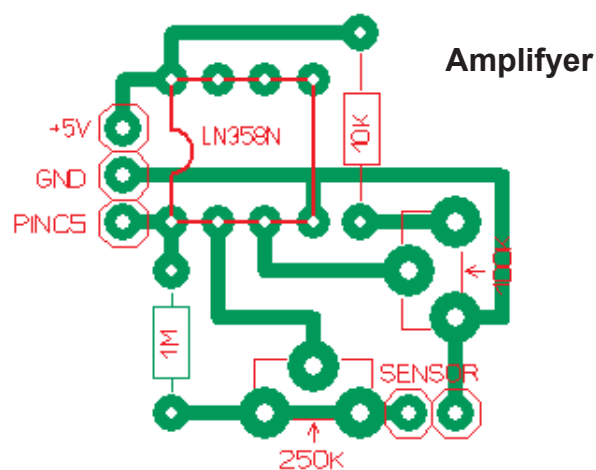


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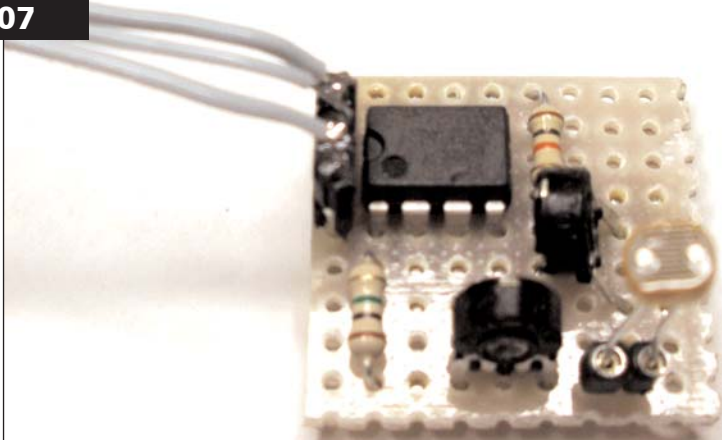
Other sensors, like a pressure or light sensor, can be similarly connected.

A basic amplifying switch is needed for the use of temperature sensors or microphones. A breadboard circuit board can be used in this case. Advanced users are able to build the amplifier in the corner of the Mignon Board (by drilling the solder pads partially).

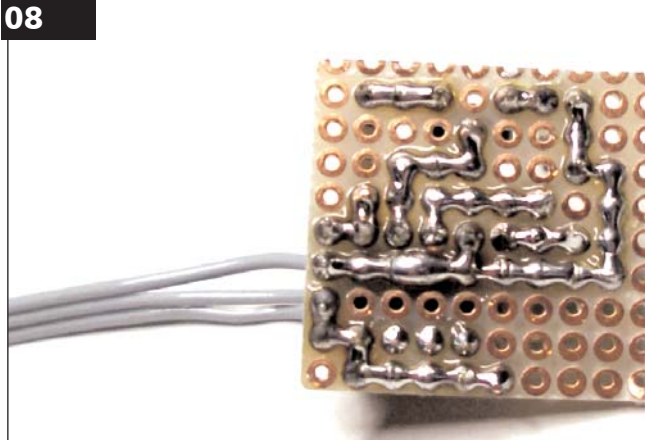
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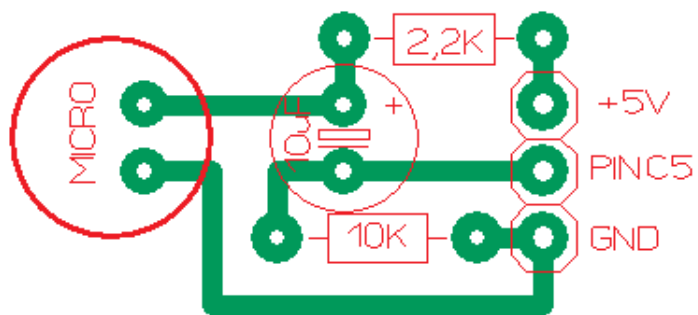


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Microphone circuit



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The amplifier is adjusted with two time controls.

The 250k Trimmer regulates the amplification (x3 - x100).

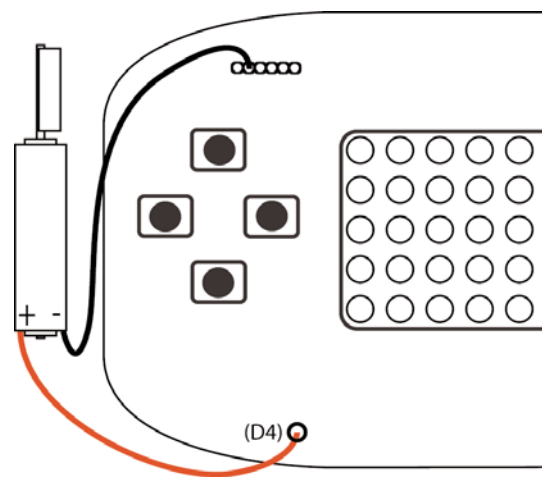
The 100k Trimmer resets the zero point.

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Vibration motor

The vibration motor is connected to Pin D4. It can also be used to create an additional effect when programming a game.

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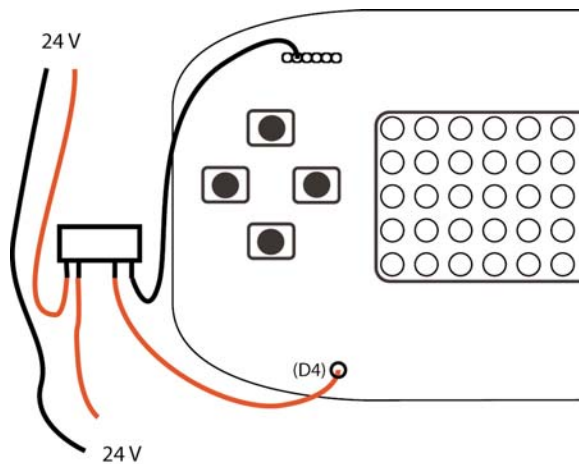


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Reed relays

This relay supplies on/off information. Such relays are typically used so that higher voltages (12-24 V) can be used. In accordance with relevant safety precautions, up to 220 V can be used. The relays can also function as a switch between two sensors, or two video or audio signals.

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2in1_sensitive

As an illustration, data in these games has been modified:

In Maze Diver, the vibration motor switches on during "diving".

In Min Pong, the right-hand player's peg is controlled with the respective sensor.