

PWM

Learning Material for Sensor Technology.

AnalogWrite_PWM

Basic examples which use PWM on digital pins:

- `example01 pcm01`

Source: <http://playground.arduino.cc/Code/PCMAudio>

- `example02 auduino5`

You'll need 5 potentiometers and a little speaker/piezo/jack connection to amplifier. On a speaker you'll hear more difference when changing the sound than on the piezo disk. Remember the digital pins can only provide 40mA – so don't try to connect a big speaker unless you amplified the signal.

Source: <https://code.google.com/p/tinkerit/downloads/list>

- `example_03 polysynth`

Use the code and experiment with the sounds. You'll need 4 potentiometers and a speaker/piezo/jack to amplifier.

You connect the pots in the usual way, they go into the analogue pins. Get the sounds signal out of digital pins 2-3-4-5 and forge them into one. Use a resistor. The website suggests a 100K resistor if you connect it to a jack/amplify it.

Source: <http://little-scale.blogspot.co.uk/2008/02/simple-polyphonic-synth-with-just.html>

- `example_04 arduinoise`

Use 6 potentiometers (or sensors) with the 6 analogue input pins. Connect a speaker/jack (with resistors) to digital pin 9.

Source: <http://www.blackkat.org/Arduinoise/Arduinoise.html>

Experiment with these too:

<http://playground.arduino.cc/Main/Freqout>