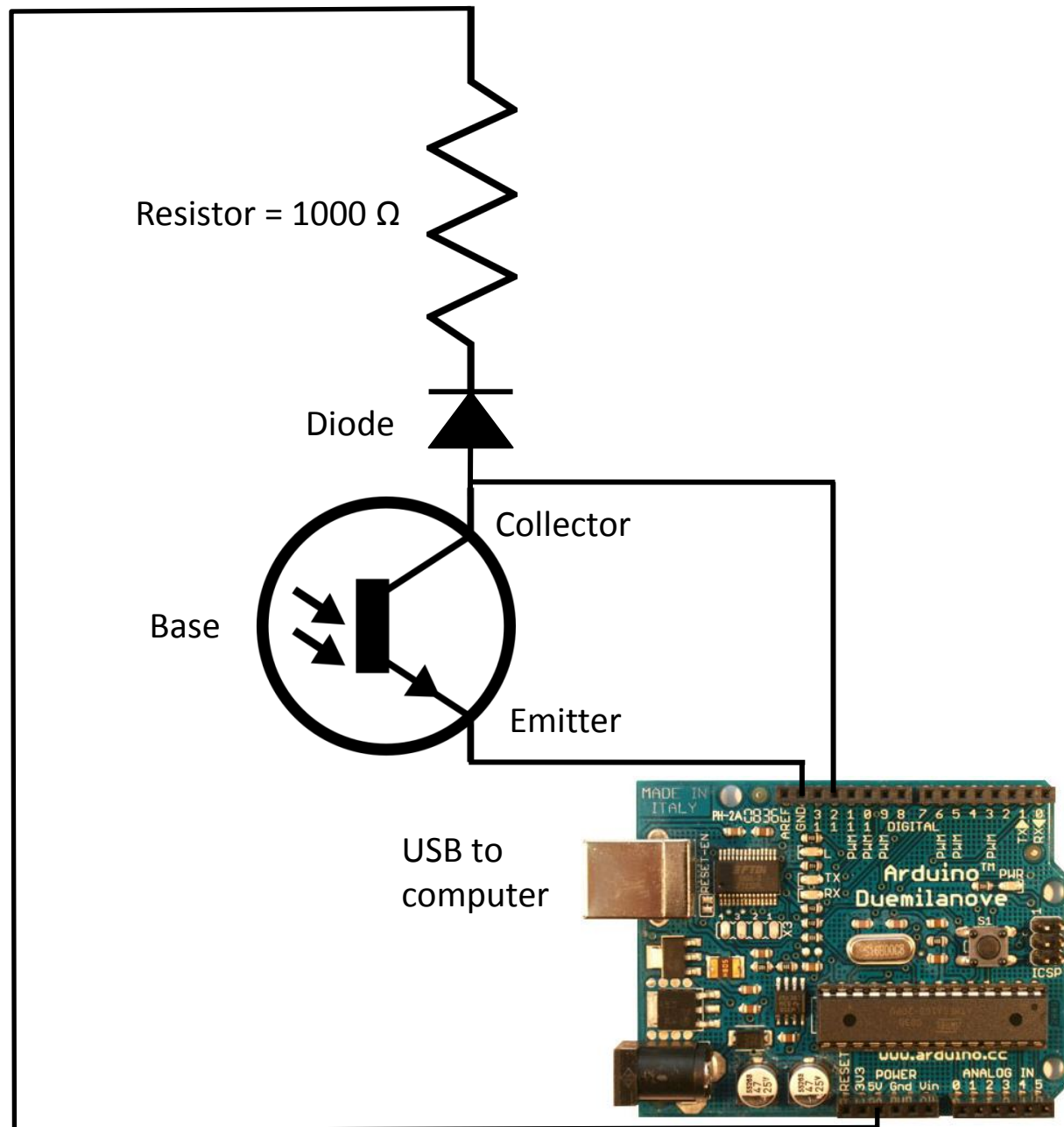


Slide 1

t12

Circuit components, photos and circuit diagram equivalents

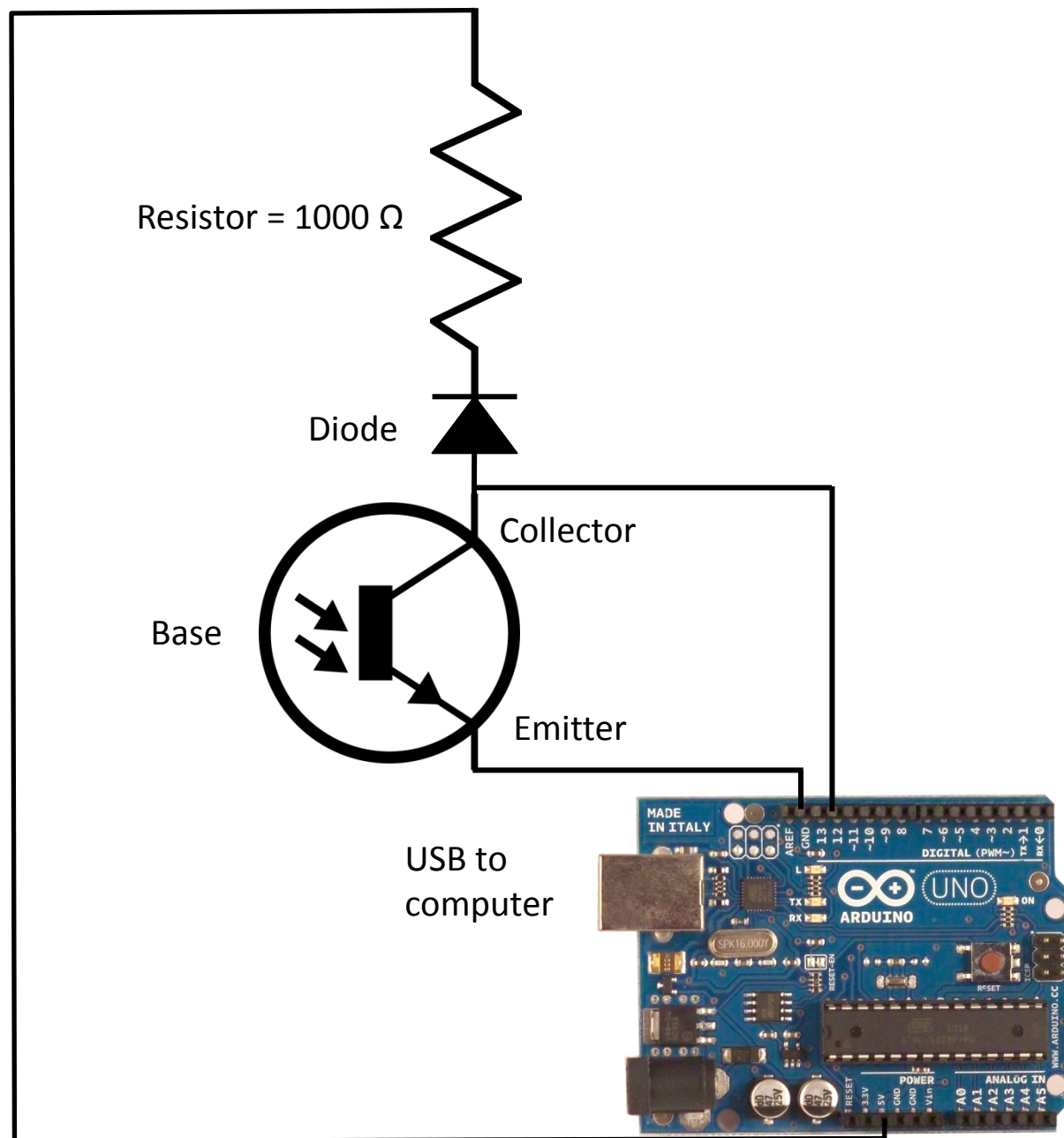
tmessina, 8/23/2011



Slide 2

t11

Photosensing circuit shown with Arduino duemilanove
tmessina, 8/23/2011

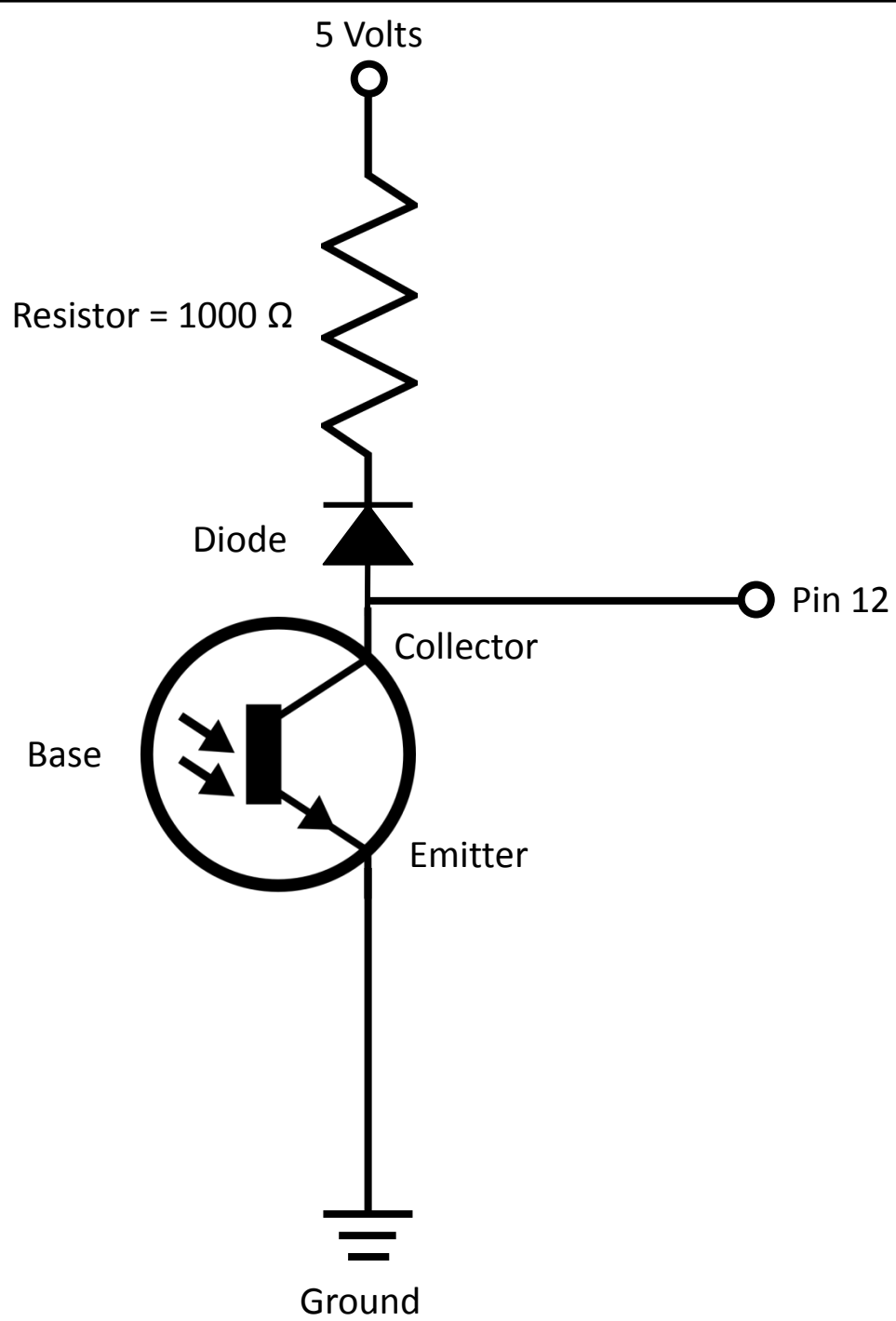


Slide 3

t10

Photosensing circuit shown with Arduino Uno

tmessina, 8/23/2011

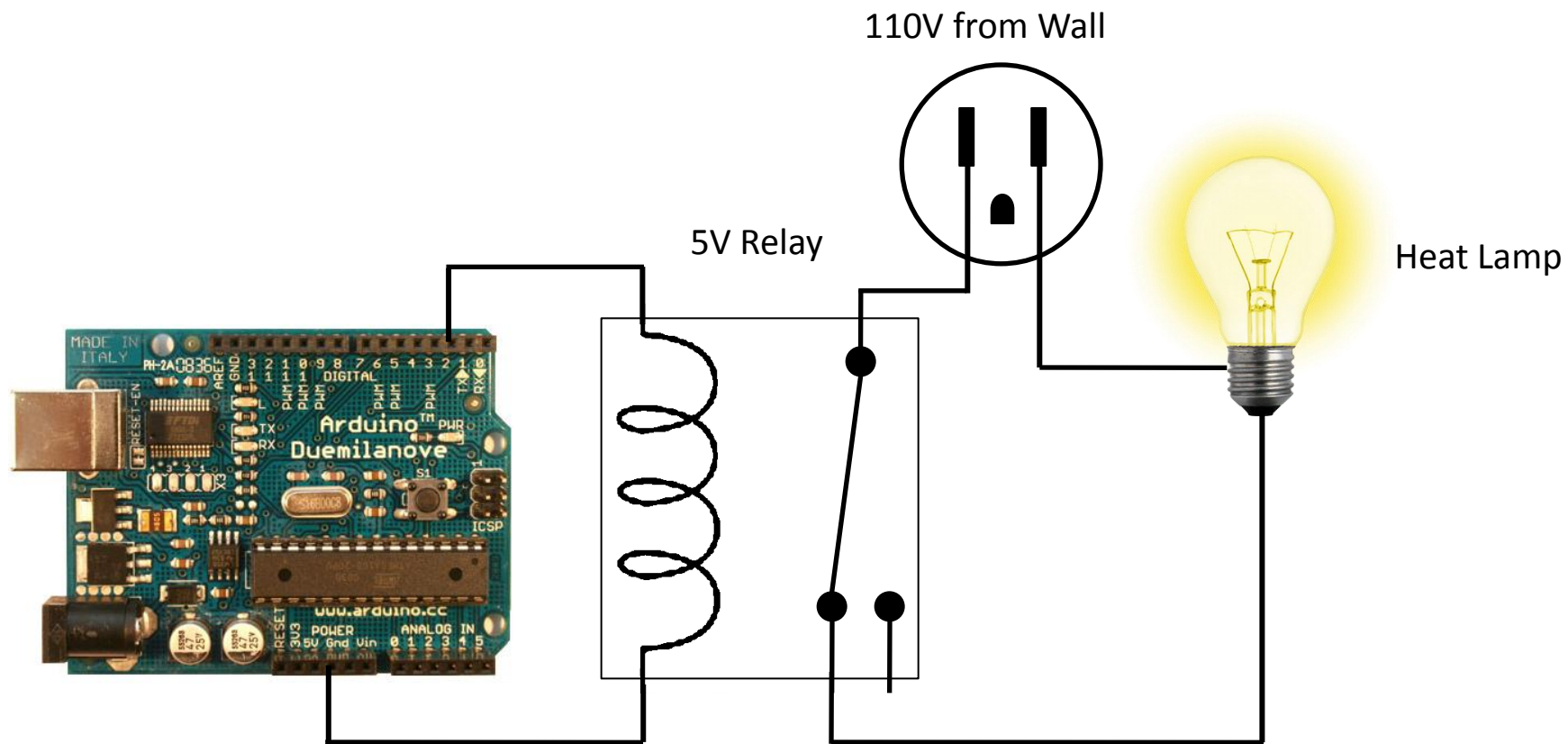


Slide 4

t9

Photosensing circuit

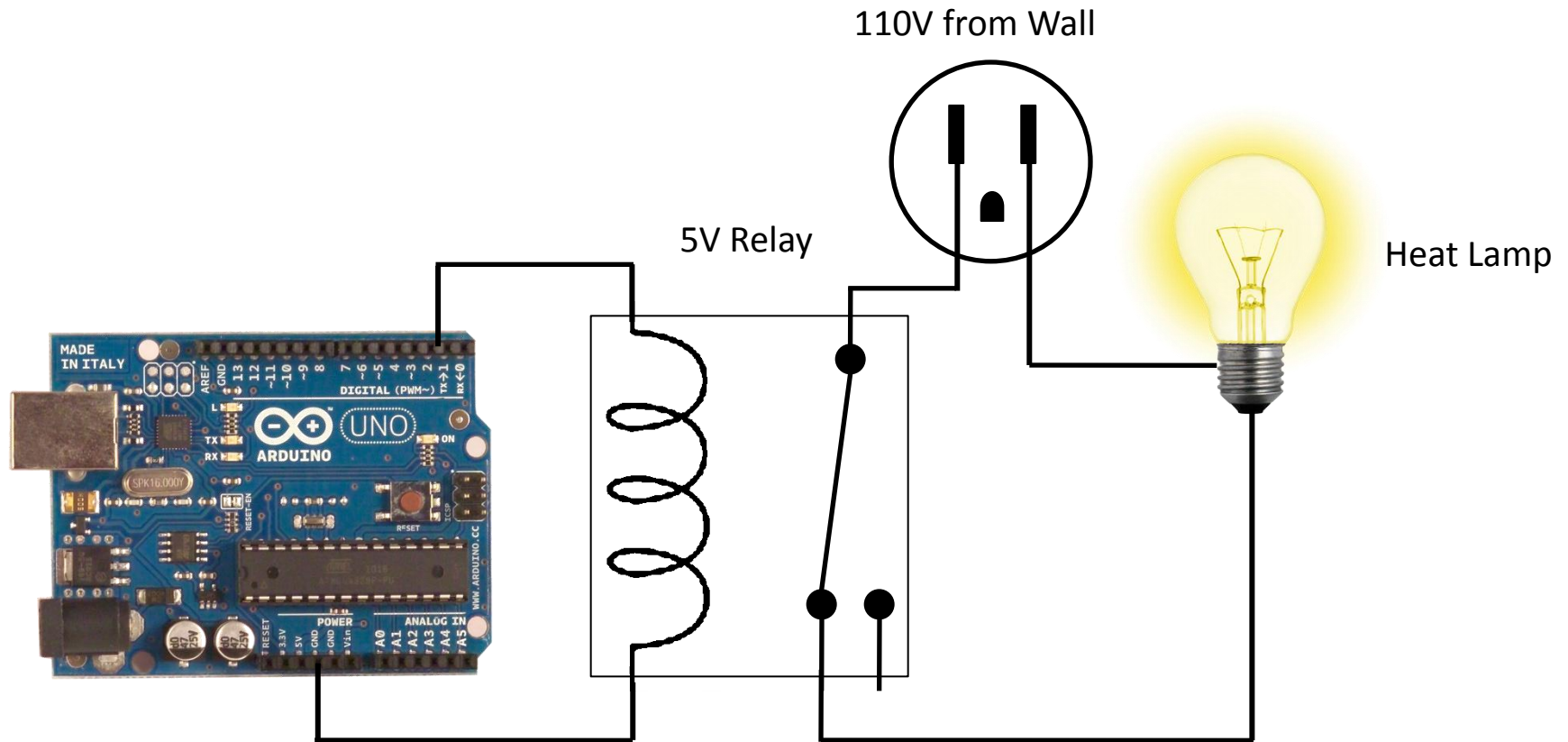
tmessina, 8/23/2011



Slide 5

t8

Heat lamp operating circuit shown with Arduino duemilanove
tmessina, 8/23/2011

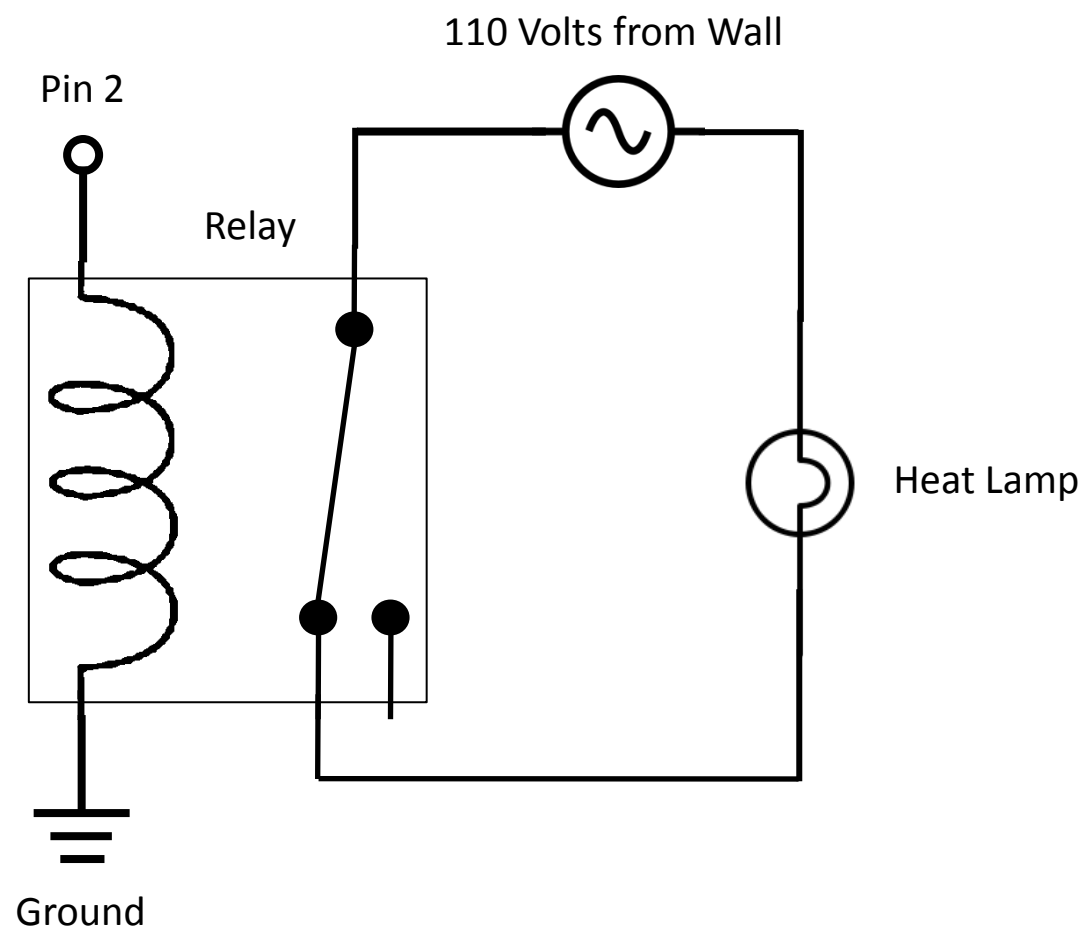


Slide 6

t7

Heat lamp operating circuit shown with Arduino Uno

tmessina, 8/23/2011



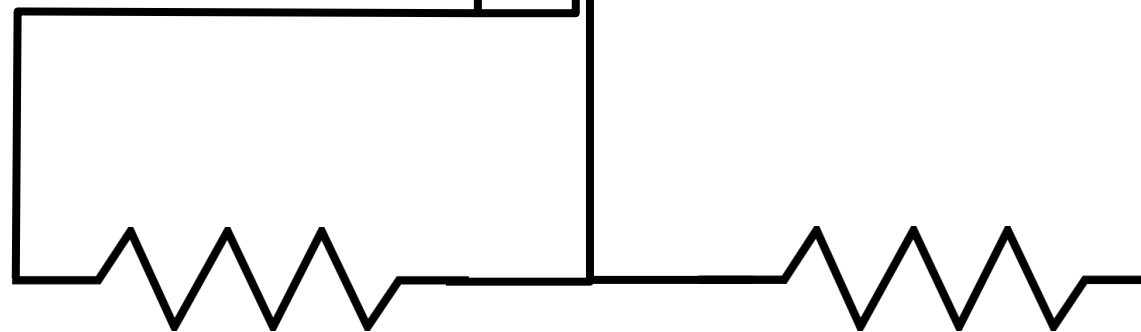
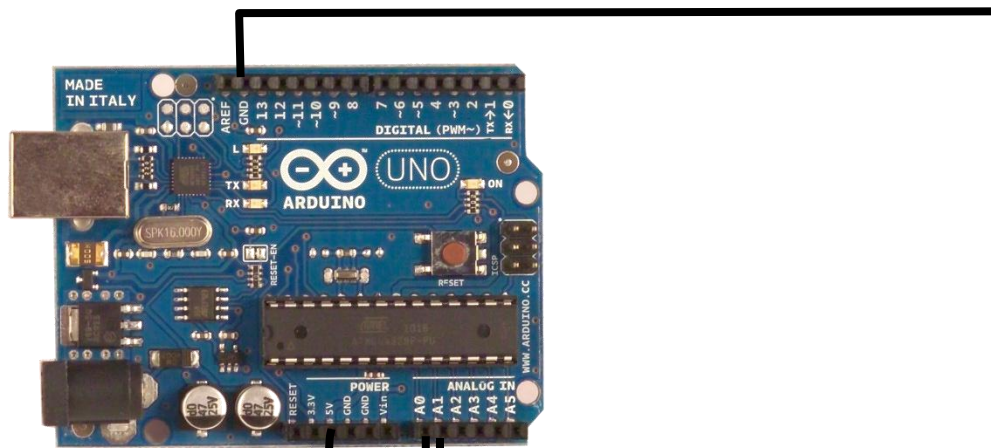
Slide 7

t6

Heat lamp operating circuit

tmessina, 8/23/2011

USB to
computer



Thermistor
 $R(25^{\circ}\text{C}) = 10,000\ \Omega$

Resistor
 $R = 10,000\ \Omega$

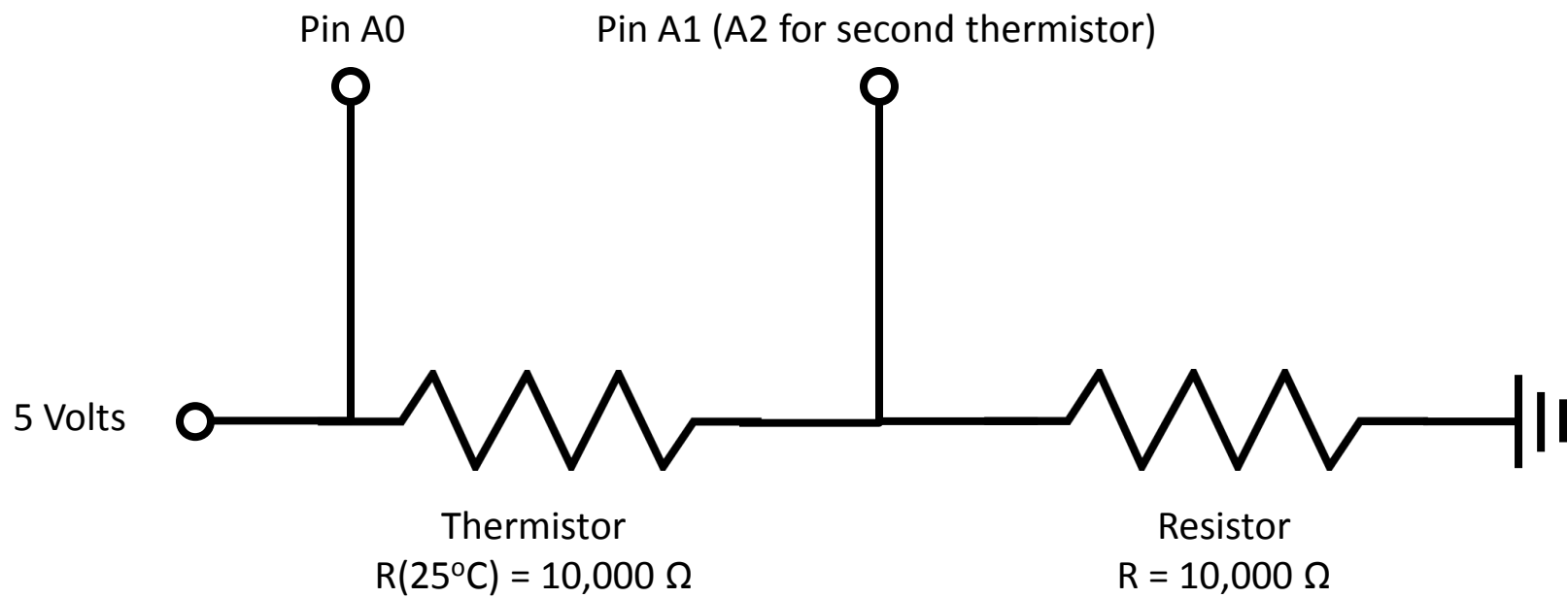


Slide 8

t5

Thermistor circuit for monitoring a single temperature shown with Arduino duemilanove. To measure a second temperature set up the same circuit using A2 instead of A1, do not make a second connection to A0.

tmessina, 8/23/2011



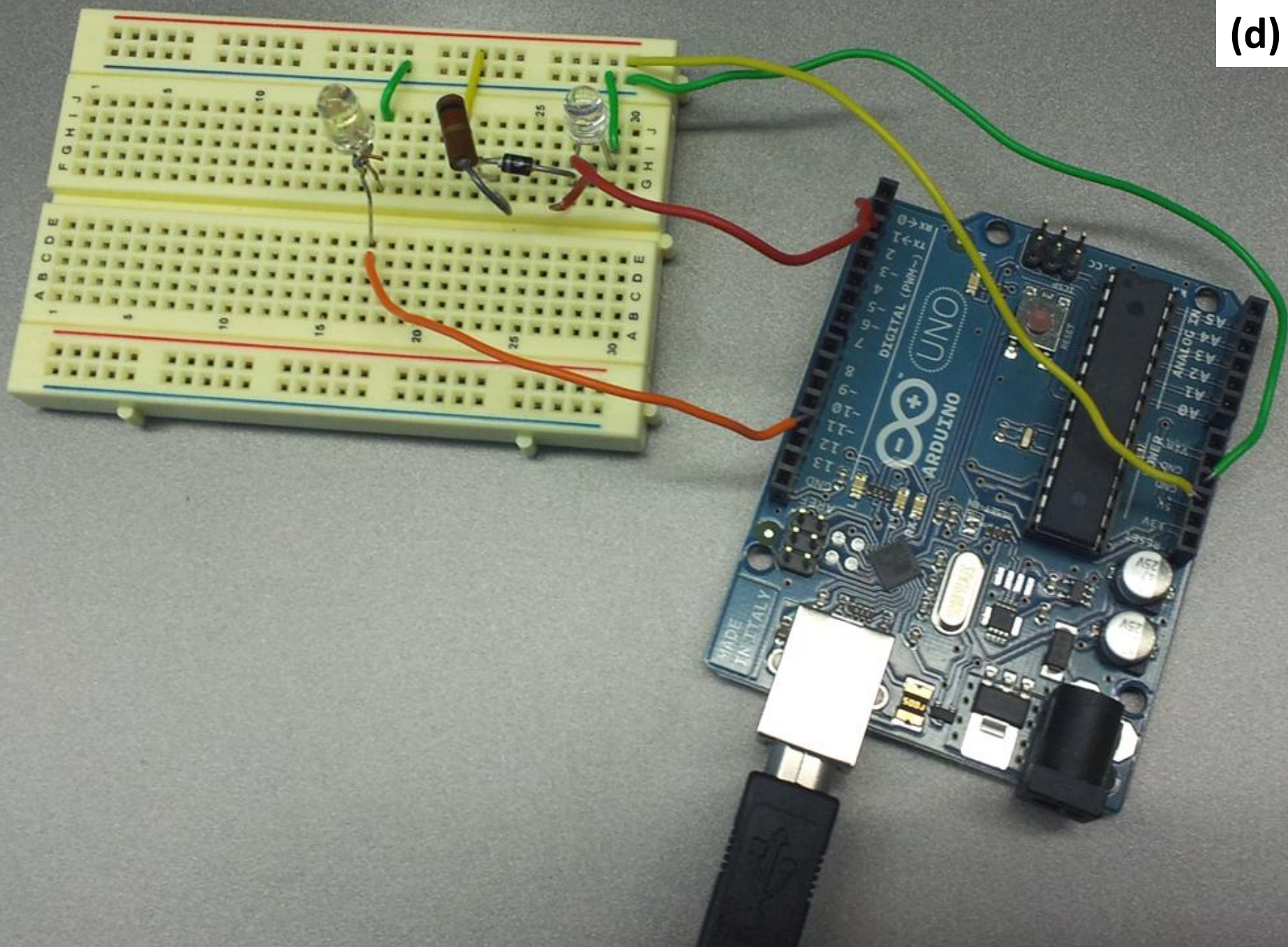
Slide 9

t4

Thermistor circuit for monitoring a single temperature. To measure a second temperature set up the same circuit using A2 instead of A1, do not make a second connection to A0.

tmessina, 8/23/2011

(d)

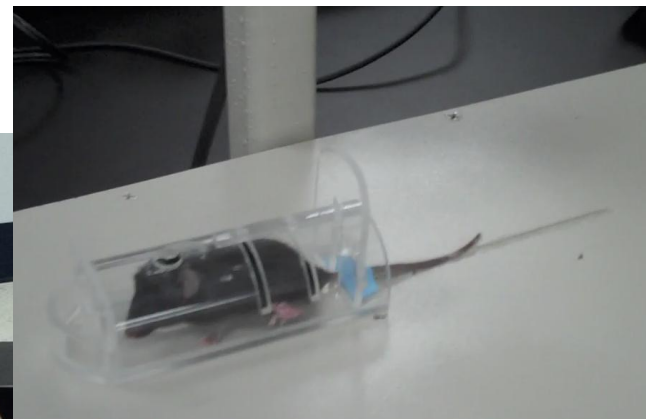


Slide 10

t3

Photo of the photosensing and heat lamp operating circuit. An LED is in place of the relay.

tmessina, 8/23/2011

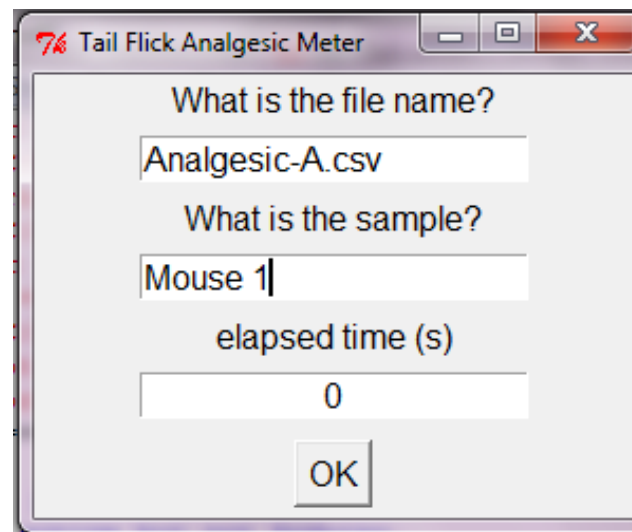


Slide 11

t2

A photo of the entire apparatus and a mouse in a rodent immobilizer.

tmessina, 8/23/2011



A screenshot of a software dialog box titled "Tail Flick Analgesic Meter". The dialog box has a standard Windows-style title bar with minimize, maximize, and close buttons. The main content area contains three input fields and an "OK" button. The first input field is labeled "What is the file name?" and contains the text "Analgesic-A.csv". The second input field is labeled "What is the sample?" and contains the text "Mouse 1". The third input field is labeled "elapsed time (s)" and contains the text "0". The "OK" button is located at the bottom center of the dialog box.

Tail Flick Analgesic Meter

What is the file name?

Analgesic-A.csv

What is the sample?

Mouse 1

elapsed time (s)

0

OK

Slide 12

t1

The GUI interface created by Python program
tmessina, 8/23/2011