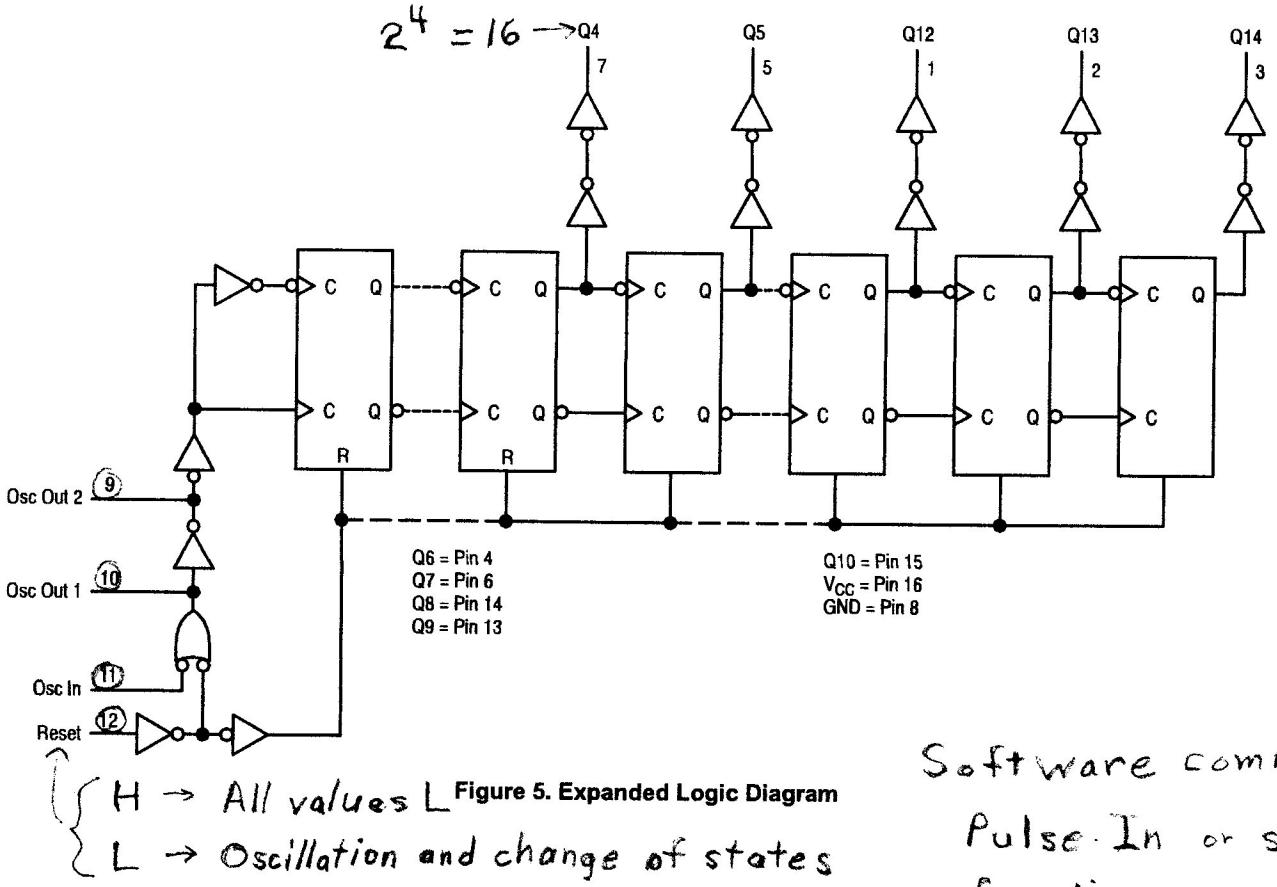
CD4060 5-15V MC74HC4060A 5V



H → All values L
L → Oscillation and change of states

Figure 5. Expanded Logic Diagram

Software command: Pulse In or similar function

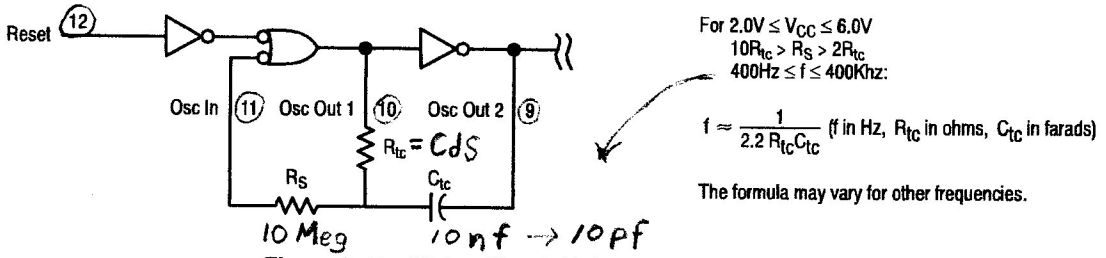


Figure 6. Oscillator Circuit Using RC Configuration

This visual light sensor has a working range of over 100. And by shifting values or output pins the range can be over 1000. As light into a sensor varies as the size of the viewing angle (the size the viewed image), you can chose the period of time you want to measure to get the number of digits wanted.

When the area is swept with a red laser used with a very small viewing angle sensor, a large change in sensor signal will occur when the laser hits the retro reflectors that are used in navigation. When a narrowed beamed light is used instead of the laser you get presence or object detection with the intensity indicating the closeness of the object.

For those of who want to try out the sensor, e-mail me and I will give you all the parts at the next meeting..

Ron Rose