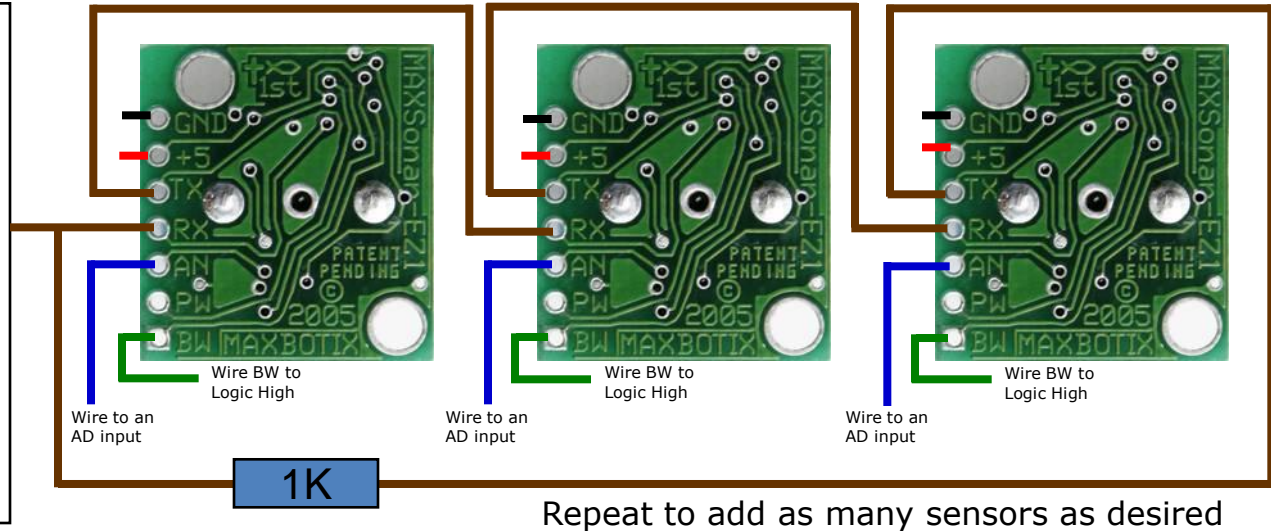


Chaining MaxSonar Sensors, (AN Output)

Daisy Chaining with Constantly Looping

Pull the RX pin high on the first sensor for at least 20uS. Then the micro controller will have to return it's pin to a high impedance state so that the next time around the TX output from the last sensor will make it's way to the RX of the first sensor.



Repeat to add as many sensors as desired

Daisy Chaining with Constantly Looping

If you want them to keep running and constantly loop and always provide the latest range reading you will have to do two things.

First, add a resistor between the last sensor's TX back to the Rx of the first unit through a 1K resistor.

Second, then you will have to "kick start" them, (at least 250mS or more after power is applied to the sensors to give the sensors this time to boot-up). To do this, pull the RX pin high on the first sensor for at least 20uS. Then the micro controller will have to return it's pin to a high impedance state so that the next time around the TX output from the last sensor will make it's way to the RX of the first sensor. Then all of the sensors in the chain will run in sequence. This "ring of sensors" will cycle around and around, constantly maintaining the validity of their analog values.

You can then read the latest range reading (i.e. the analog value) at any time. This is the easiest way to use them. After pulling the RX pin low, you can read the analog pin about 50mS (100mS if this is the first time reading the sensor as it calibrates upon the first commanded range cycle after power up, i.e. the sensor must complete a range cycle). In addition, the most recent range reading is always ready to be read on the analog voltage pin, so once you start the chain, and if you are using it in continuous mode, you can read the values at any time.