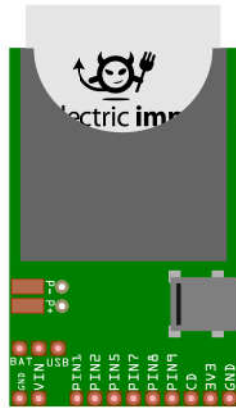Wire color legend
Black - Gnd
Red - +5VDC
Yellow - Trigger
Blue - Echo
Orange - Relay
Wires shown here as if
on component side

April breakout board
12-pin male-straight-
header soldered with
pins on bottom side

April breakout board
Pin Assignments
1 - Gnd
2 - +5VDC out
3 - no pin
4 - GPIO 1 - Trigger
5 - GPIO 2 local Echo
6 - GPIO 5 remote Echo
7 - GPIO 7 local Relay
8 - GPIO 8 remote Relay
9 - GPIO 9 - no connection
10 - Card detect - no connection
11- 3VC - no connection
12 - Gnd

Electric Imp April Breakout-1
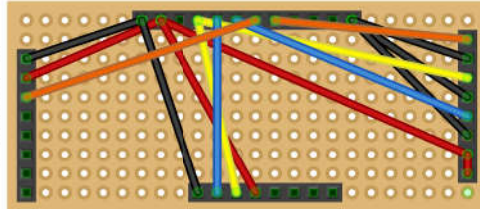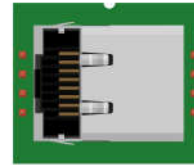
12-pin female-straight
header with sockets
on component side
pin 3 blocked

RELAY
3-pin female-right-
angle-header with
sockets facing out

Perfboard 24 x 10   12-Header-1

RJ45-1

RJ45 Breakout
8-pin male-straight
header pins on bottom
side

3-Header-1

8-Header-1

4-header-1

Relay-1

ULTRASONIC SENSOR
4-pin female-right-
angle-header with
sockets facing out
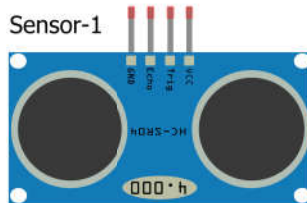
Sensor-1

RJ45 header
8-pin female-straight
header with sockets
on component side

RJ45 pinout
1 - Remote Relay
2 - Gnd
3 - remote Trigger
4 - Gnd
5 - remote Echo
6 - Gnd
7 - +5VDC
8 - +5VDC

Assume straight-thru
cable, no-crossover

Jumper for board 2
Gnd - pin 1 to pin 12
Vcc - no connection
Trigger - no connection
Echo - pin 5 to pin 6
Relay - pin 7 to pin 8
remove pin 3 as key

Bd 2 Jumper-1

fritzing