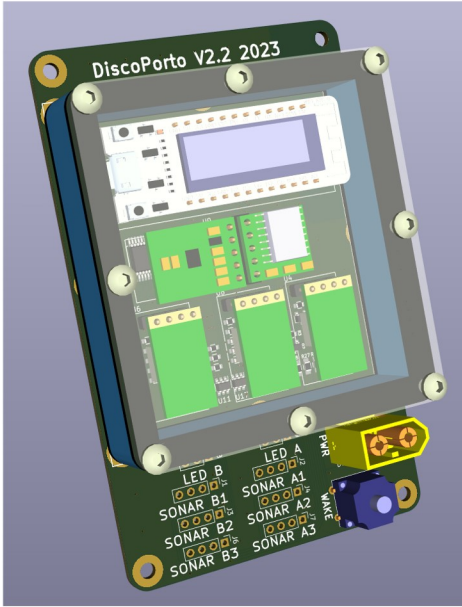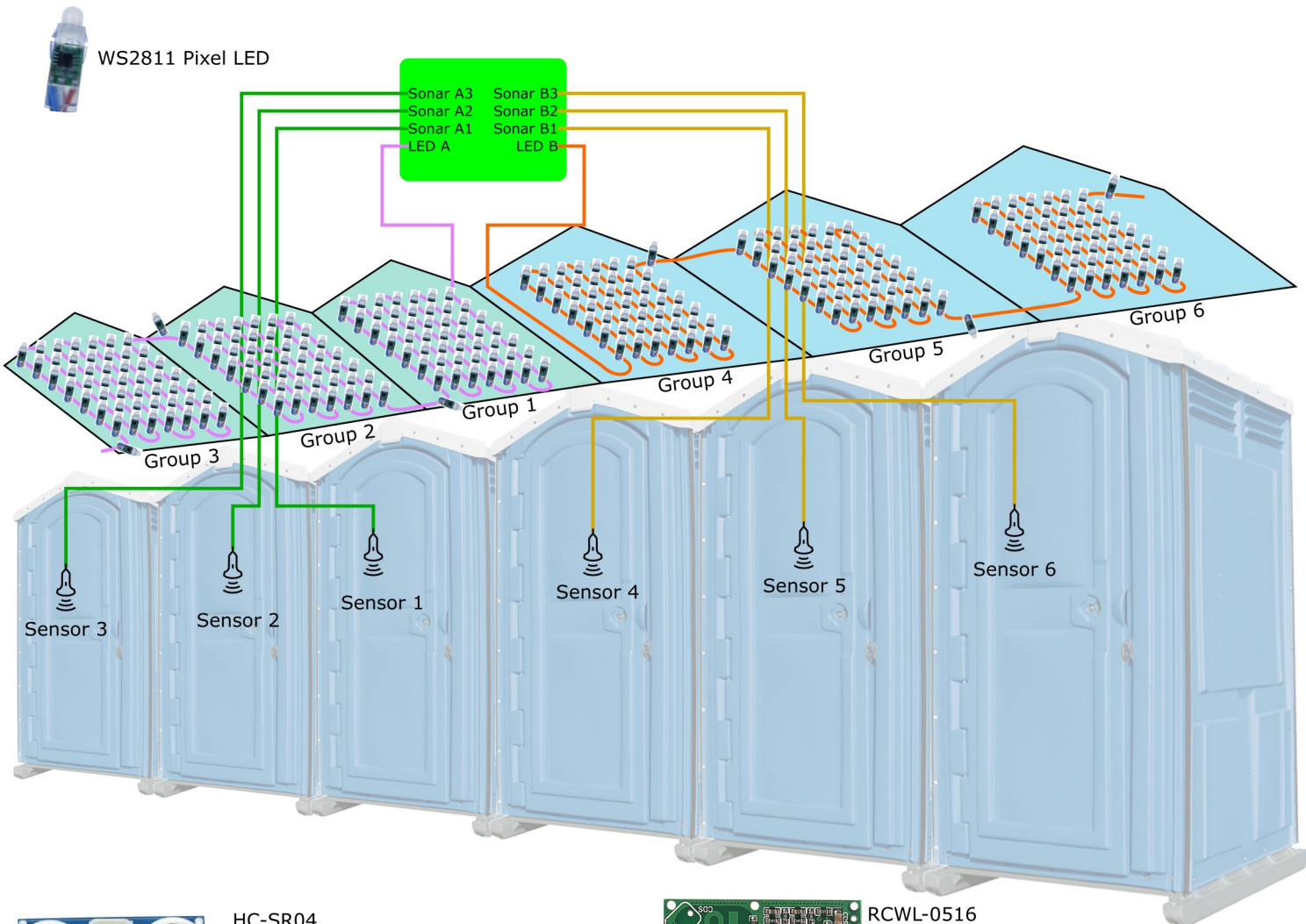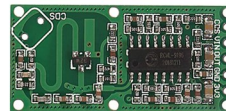# DiscoPorto V2.2

PortoParty: Dance it out!

- Battery protection, undervoltage disconnect controllable, 6-24V.
- OLED screen provides battery and diag information at setup.
- Wifi provides remote administration without a ladder. Possible improvements in communication and use statistics.
- Light sensor detects day/night. Lights are only run at night to conserve energy.
- A Real Time Clock (RTC) knows the time, so active hours can be limited
- Porto's are fitted with Ultrasonic or RF motion sensors to detect occupants.
- Sensors activate lighting sequeces in the corresponding porto.
- WS2811 LED Pixel strands are made into 7x7 nets are draped accross porto roofs.
- Sensors and LED nets are grouped into sets of (up to) 3 portos.

WS2811 Pixel LED

Group 1
Group 2
Group 3
Group 4
Group 5
Group 6

Sensor 1
Sensor 2
Sensor 3
Sensor 4
Sensor 5
Sensor 6

Sonar A3   Sonar B3
Sonar A2   Sonar B2
Sonar A1   Sonar B1
LED A   LED B

HC-SR04
Ultrasonic Sensor
Measures 40kHz Chirp time of flight
Range: 15' (4m)

RCWL-0516
Radio Doppler Sensor
Measures 10Ghz relections for motion
Range: 20' (5-7m)