**K8 Parts List:**

· Devastator chassis (ROB0112) <https://www.dfrobot.com/product-1219.html>

· Motors with encoders (FIT0458) <https://www.dfrobot.com/product-1458.html>

· Raspberry Pi 3B

· Arduino Mega 2560

· USB Battery pack (20000mAh with pass through charging)

· L298D H-bridge chip – Any off the shelf motor driver shield will be fine

· 2 small pieces of Vero stripboard – for the L298D, and the SR04 sensors – don’t combine - as motor noise is a problem

· Google AIY voice kit –or a microphone and a sound card for the Pi

· Simple voltage step up converter – the lidar unit is very fussy about voltage (4.5V is not enough)

· 2 X 9g metal gear micro servos <https://www.dfrobot.com/product-1338.html>

· Pan / Tilt kit DFRobot / Robotshop <https://www.dfrobot.com/product-1271.html>

· TF-Mini LiDAR <https://www.dfrobot.com/product-1702.html>

· 3 X HC-SR04 ultrasonic rangefinders

· Raspberry Pi camera

· MPU6050 gyro & IMU <https://www.sparkfun.com/products/11028>

· Arduino Uno prototyping shield (Uno one fits the Mega)

· Lots of capacitors & ferrite beads to suppress electrical noise from the motors

· Wire ties to hold the battery pack to the underside

· 1 DPDT switch (came with the chassis kit)

· Lots of hookup wire, USB cables and connectors