

1.Arduino toolkit set /Arduino 套装

数量：15（每人一份）

2.Arduino Leonardo /Arduino莱昂纳多板（用于键盘控制）

<http://www.dfrobot.com.cn/goods-552.html>

数量：5

2.万用表／剥线钳／剪线钳／卷状导电线（红黑蓝黄）若干

3.面包板／跳线若干

4.General sensors／常用感应器：

这些会让学生做练习时候使用，数量每种15个：

From seeedstudio/矽递科技：

water sensor／水感应

http://www.seeedstudio.com/depot/Grove-Water-Sensor-p-748.html?cPath=25_27

touch sensor／触摸感应

http://www.seeedstudio.com/depot/Grove-Touch-Sensor-p-747.html?cPath=85_94

temp&humi sensor／温度&湿度感应

<http://www.seeedstudio.com/depot/Grove-TempHumi-Sensor-p-745.html>

ultrasonic sensor／超声波测距感应

<http://www.seeedstudio.com/depot/Grove-Ultrasonic-Ranger-p-960.html>

moisture sensor／湿度感应

http://www.seeedstudio.com/depot/Grove-Moisture-Sensor-p-955.html?cPath=25_27

From DFrobot／智位机器人：

Analog sound sensor／声音感应（模拟信号）

[http://wiki.dfrobot.com.cn/index.php?title=\(SKU:DFR0034\)%E6%A8%A1%E6%8B%9F%E5%A3%B0%E9%9F%B3%E4%BC%A0%E6%84%9F%E5%99%A8](http://wiki.dfrobot.com.cn/index.php?title=(SKU:DFR0034)%E6%A8%A1%E6%8B%9F%E5%A3%B0%E9%9F%B3%E4%BC%A0%E6%84%9F%E5%99%A8)

vibration sensor／震动感应

[http://wiki.dfrobot.com.cn/index.php?title=\(SKU:DFR0027\)%E6%95%B0%E5%AD%97%E9%9C%87%E5%8A%A8%E4%BC%A0%E6%84%9F%E5%99%A8](http://wiki.dfrobot.com.cn/index.php?title=(SKU:DFR0027)%E6%95%B0%E5%AD%97%E9%9C%87%E5%8A%A8%E4%BC%A0%E6%84%9F%E5%99%A8)

distance sensor (10-80cm)／距离感应（区间：10-80厘米）

[http://wiki.dfrobot.com.cn/index.php?title=\(SKU:SEN0014\)Sharp_GP2Y0A21_%E7%BA%A2%E5%A4%96%E6%B5%8B%E8%B7%9D%E4%BC%A0%E6%84%9F%E5%99%A8\(10~80cm\)](http://wiki.dfrobot.com.cn/index.php?title=(SKU:SEN0014)Sharp_GP2Y0A21_%E7%BA%A2%E5%A4%96%E6%B5%8B%E8%B7%9D%E4%BC%A0%E6%84%9F%E5%99%A8(10~80cm))

distance sensor(100-500cm)／距离感应（区间：20-150厘米）

[http://wiki.dfrobot.com.cn/index.php?title=\(SKU:SEN0013\)Sharp_GP2Y0A02YK_%E7%BA%A2%E5%A4%96%E6%B5%8B%E8%B7%9D%E4%BC%A0%E6%84%9F%E5%99%A8\(20~150cm\)](http://wiki.dfrobot.com.cn/index.php?title=(SKU:SEN0013)Sharp_GP2Y0A02YK_%E7%BA%A2%E5%A4%96%E6%B5%8B%E8%B7%9D%E4%BC%A0%E6%84%9F%E5%99%A8(20~150cm))

这些学生做project，依照nyu的经验，使用频率极高，数量每种3个：

From seeedstudio/矽递科技：

ear clip heart rate sensor／夹耳式心率感应

http://www.seeedstudio.com/depot/Grove-Earclip-Heart-Rate-Sensor-p-1116.html?cPath=25_29

PIR motion sensor／动作感应

http://www.seeedstudio.com/depot/Grove-PIR-Motion-Sensor-p-802.html?cPath=25_31

color sensor／颜色感应

<http://www.seeedstudio.com/depot/Grove-I2C-Color-Sensor-p-854.html>

air quality sensor／空气质量感应

http://www.seeedstudio.com/depot/Grove-Air-quality-sensor-p-1065.html?cPath=25_127

dust sensor／粉尘感应

<http://www.seeedstudio.com/depot/Grove-Dust-Sensor-p-1050.html>

electricity sensor／电力感应

http://www.seeedstudio.com/depot/Grove-Electricity-Sensor-p-777.html?cPath=25_28

luminace sensor／照度感应

<http://www.seeedstudio.com/depot/Grove-Luminance-Sensor-p-1941.html>

rotary angle sensor / 扭转角度感应

http://www.seeedstudio.com/depot/Grove-Rotary-Angle-Sensor-p-770.html?cPath=85_52

5. Lab materials / 工作营材料 :

lab 01 / 工作营01:

1. AC DC charger / 交流转直流充电器

<https://item.taobao.com/item.htm?spm=a230r.1.14.6.P1i1bZ&id=45015320456&ns=1&abbucket=2#detail>

数量 : 15

2. voltage regulator / 稳压器

<https://item.taobao.com/item.htm?spm=2013.1.20141003.8.qjNumw&scm=1007.10011.21135.100200300000004&id=521446134151&pvid=7f41c8f3-9702-4a03-b87d-dae7e5542acc>

数量 : 15

3. resistor (Included in Arduino kit)
4. buzzer (Included in Arduino kit)
5. potentiometer (Included in Arduino kit)
6. LED (Included in Arduino kit)
7. switch (Included in Arduino kit)

Motor demo :

数字舵机Arduino扩展板

<http://www.dfrobot.com.cn/goods-763.html>

数量 : 1

机械手套装

<https://item.taobao.com/item.htm?spm=a230r.1.14.54.LTg4ks&id=43947845708&ns=1&abbucket=2#detail> [套餐五 (6数码舵机+全套支架)]

数量 : 1

lab 02-04: N/A (coding project)

lab 05 / 工作营05:

8. lamp / 台灯

<https://item.taobao.com/item.htm?spm=a230r.1.14.18.k6O8x1&id=520930215095&ns=1&abbucket=2#detail>

数量 : 3

9. relay / 继电器

http://www.seeedstudio.com/depot/Grove-Relay-p-769.html?cPath=39_42

数量 : 15

lab 06: leapmotion / 手势感应器

<http://store-world.leapmotion.com/products/leap-motion-controller>

数量 : 5 (人手一个也是可以的)

xbox kinect / xbox动作捕捉感应器

数量 : 3 (这个我不确定是否必需, 操作复杂, 学生project不确定是否会用上, 上课做demo可以用我自己的)