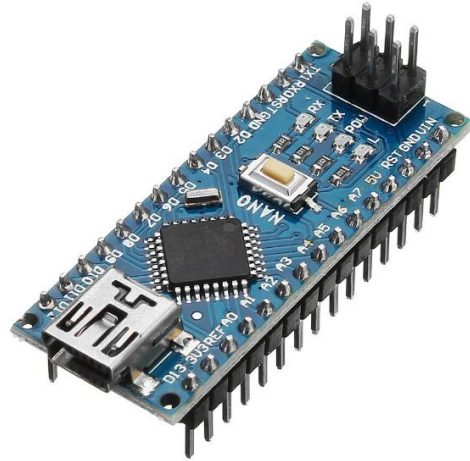


Arduino Nano
(you can find
information
about this
device easily)



1602 LCD
display

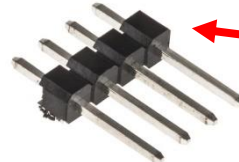
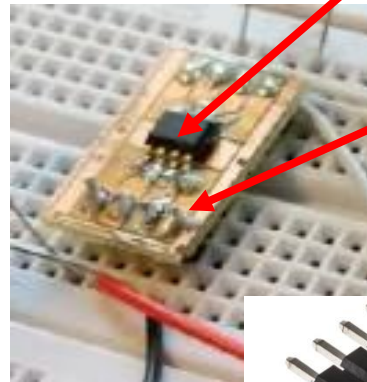
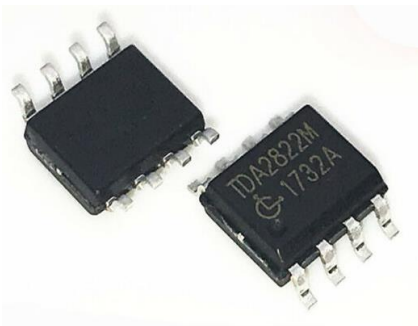
16 characters
2 lines



Spec:

<https://www.amazon.co.uk/AZDelivery-HD44780-Display-Characters-including/dp/B08216LXVQ>

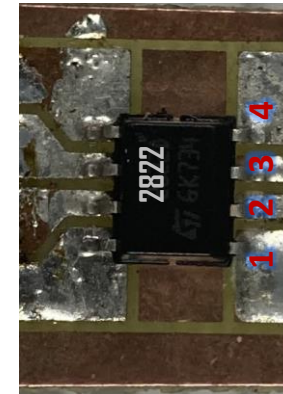
TDA2822 amplifier
(Surface mount device)



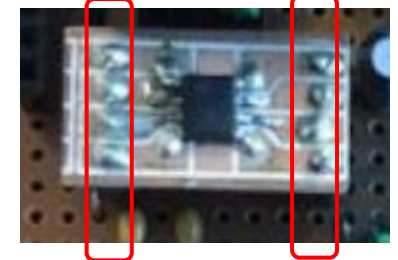
TDA2822
(to mount on a breakout
board for easy handling)

Breakout board
(to be given, you need to
do the soldering work)

4-pin straight pin header
(to be given to solder on each
side of the breakout board)



Orientation

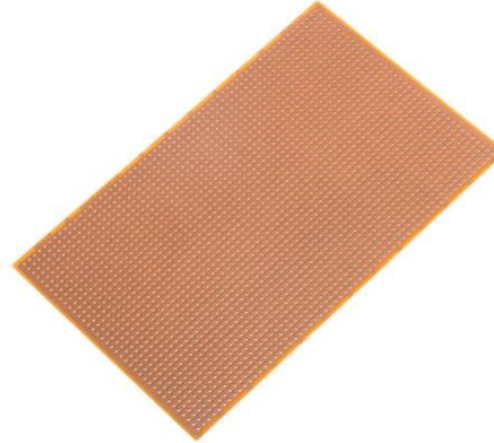


Top view
& design

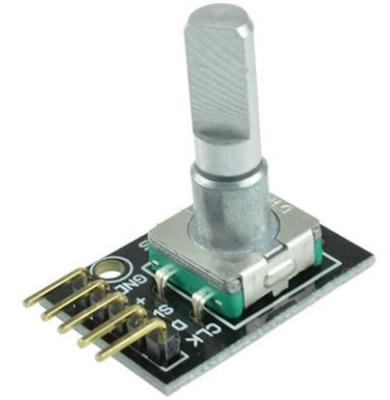
Veroboard (Single-sided Stripboard)
It should be large enough for your project. You can cut to the size you want. If you prefer to use dotted veroboard instead, please check with lab officer.

Spec:

<https://uk.rs-online.com/web/p/stripboards/2065841/>



KY-040
Rotary
Encoder



Spec:

<https://www.amazon.co.uk/DollaTek-KY-040-Encoder-Development-Arduino/dp/B07DK7QRLJ>

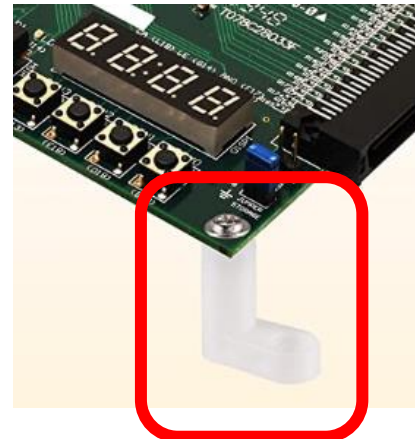
Circuit Board Stands
L-Shape



Spec:

<https://www.amazon.co.uk/sourcing-map-Insulated-Mounting-Supporting/dp/B09DYJ1D4B>

Please request



FM chip



Spec:

<https://www.mouser.co.uk/ProductDetail/SparkFun/BOB-11083?qs=WyAARYrbSnb3J%2FPLD8%2F%2FpQ%3D%3D>

9V Battery & cap



Mini FM Antenna with 3.5mm Plug



Spec:

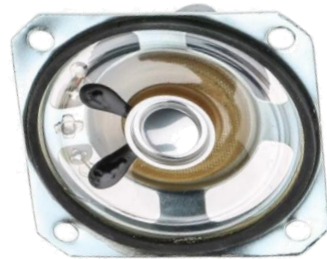
https://www.amazon.co.uk/Bingfu-Telescopic-Sections-Reception-Engineering/dp/B07ML77Y63/ref=sr_1_2

3.5mm audio socket (panel mount)



Note: Available in the lab (self service). **Use 1 socket** for both audio & antenna, you need to find out how to wire it to serve both purposes

Speaker (1W 8 Ohm)

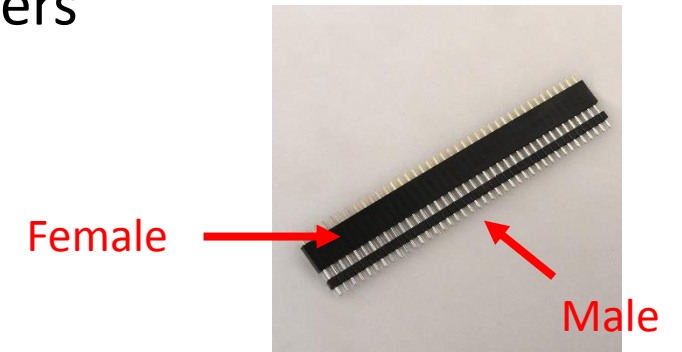


Spec:

<https://uk.rs-online.com/web/p/speaker-drivers/6284715>

Note: use **1 speaker** (either left or right channel), as it can be difficult to fit 2 speakers. Please request if you really want 2 speakers & you must deliver.

2.54mm Pin Headers (male & female)



Spec:

<https://www.amazon.co.uk/Headers-Breakaway-Connector-Arduino-Prototype/dp/B07CC4V9ZY>

Note: Please request the amount you need based on your design.

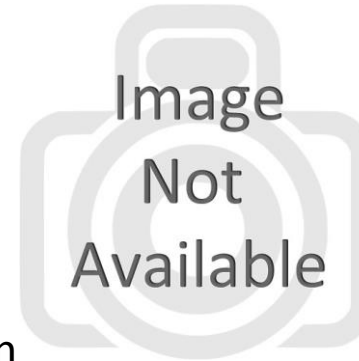
ON/OFF Switch
(panel mount)

Note: Available
in the lab (self
service)



Push buttons
(panel mount)

Note: Available in
the lab (self service)



Screws & Nuts



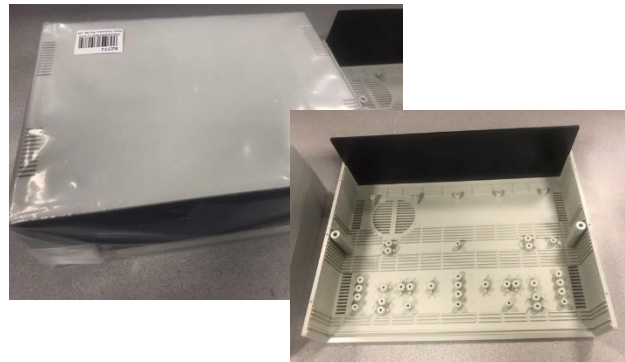
Note: Available in the lab
(self service)

Enclosure Options

DIY using
acrylic sheet



Plastic box
(Front panel = 75mmx245mm)



3D printed
enclosure

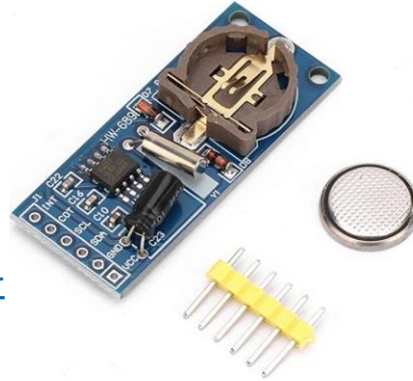
Please ask John

Note: Available in the lab. Please ask

PCF8563 Real Time Clock Module

Spec:

https://www.amazon.co.uk/AJMAKER-Real-time-clock-RTC-PCF8563/dp/B0CKLBQ8TN/ref=sr_1_6



HC-SR04 Distance Sensor

Spec:

<https://www.amazon.co.uk/Ultrasonic-Distance-Mounting-Compatible-Raspberry/dp/B092MB14PH>



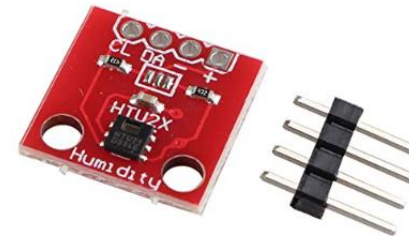
Infrared Receiver Module



Spec:

https://www.amazon.co.uk/UMTMedia%C2%AE-Infrared-Transmitter-Receiver-Raspberry/dp/B09989KDJJ/ref=sr_1_37

HTU21D Humidity and Temperature Sensor (breakout board may vary)



Spec:

<https://www.amazon.co.uk/AZDelivey-Humidity-Temperature-Interface-Raspberry/dp/B07VF8Q7G5?th=1>

USB mini cable (for development)

