

Vocabulary

from: **HyperDuino Ideas** by Dr. Nancy Smith and Aunt Goodiebags
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HyperDuino

(pronounced: Hyper-Dweeno)

A “piggyback” board (also called a “shield”) that attaches to the Arduino (Funduino).

Arduino

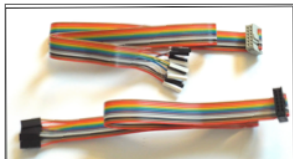
A tiny micro-controller board.
Also the name of the company that makes the board.



Rainbow Ribbon Cables

Touchpoint Rainbow Cable
12 sockets

Gray Connector Block



LED Rainbow Cable
6 socket pairs

Black Connector Block



Gray Block (12 Single Sockets)
for connecting to the **WHITE** box
(Touchpoints)
or the **BLUE** box (Analog)
on the HyperDuino.

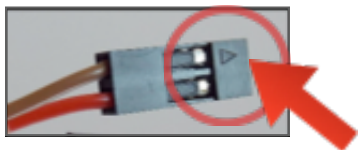
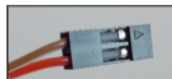
Black Block (6 PAIRS of sockets)
for connecting to the **BLACK** boxes
(LEDs, light sensors and buttons)
on the HyperDuino.





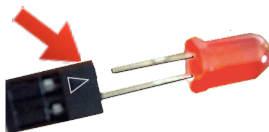
The single sockets of the Gray Touch Rainbow Connector are used for Touchpoint Sensors.

The socket pairs of the Black Block Connector are used for LEDs and light sensors.



Be sure to notice the teeny triangle on the socket pair.

The **SHORT leg of an LED** goes in the socket with the raised triangle!



The **Gray** Block plugs into the **WHITE BOX** on the Hyperduino.

The **Black** Rainbow Connector Cables can be inserted into either of the **BLACK BOXES** or the **BLUE BOX** of the Hyperduino.

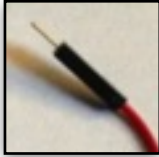
NOTE: THE ACTUAL NAME OF THE BOX IS "IDC 2 X 6 SHROUDED HEADER BOX" BUT WE WILL JUST CALL IT THE WHITE BOX.

Individual wires

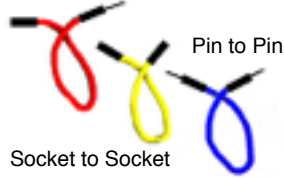
SOCKET



PIN



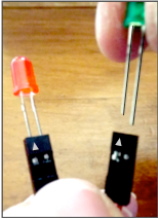
Socket to Pin



Socket to Socket

LEDs (Light Emitting Diodes)

The SHORT leg of the LED goes into the socket that has a teeny raised triangle on the side. The short leg is the GROUND.



NOTE: The triangle is a gray color here in the photo so that you can see it! If your LED does not light when you set up your project— try reversing the legs of the LED!

You have color LEDs, multicolor flashing LEDs and an RGB (RedGreenBlue, which uses 3 socket pairs) LED in your kit. You insert these special LEDs into your project just like the color LEDs -- try them!

Touchpoints

The Touchpoints in your kit look like tiny thumbtacks (actually they are backs for pierced earrings!). They fit into the single sockets of the GRAY Touch Rainbow Cable.



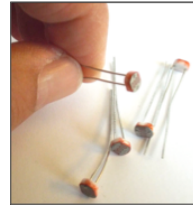
Buttons

This is a tiny 2-pin tactile push button switch. It can be inserted into the BLACK Rainbow Cable.



Photocells (Light Sensors)

The tiny Light Sensors plug into the Double Sockets of the BLACK Rainbow Cable. It does not matter which leg of the sensor goes into the GROUND socket.



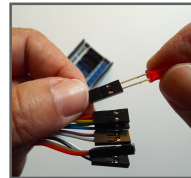
Sockets

The GRAY Rainbow Cable has 12 single sockets. Use these sockets for Touchpoints and sensors.



Pins

The BLACK Rainbow Cable has 6 double sockets for LEDs. The legs of the LEDs fit into the sockets.



9-volt battery with battery clip and wire

The HyperDuino comes with a 9-Volt battery and a clip that allows you to connect it to the HyperDuino.

Attach the battery **after** you have inserted the LEDs and Touchpoints.

