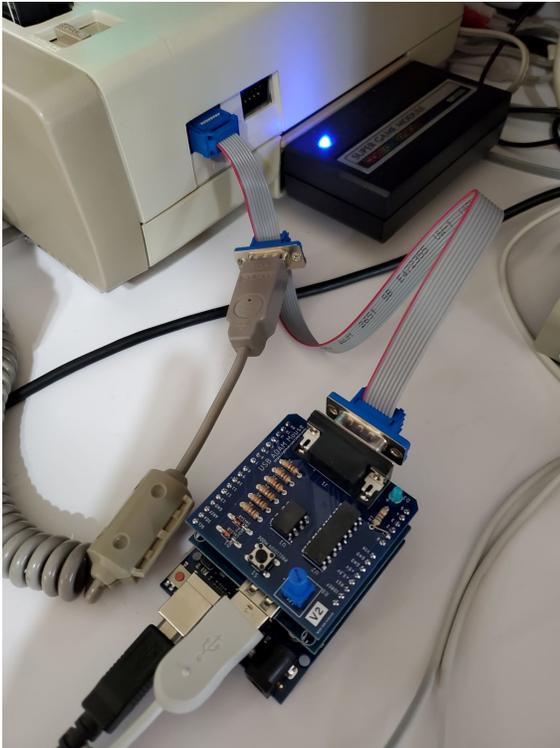


DB-9 Controller Splitter How-to:

After I designed the ADAM USB mouse project (<https://github.com/JohnLundy/Coleco-ADAM-USB-Mouse-UNO-Shield>), joystick Y splitter cable sources have dried up. I needed to come up with an alternate solution to the problem so the controller keypad can be used at the same time as the mouse.

My solution was to use DB-9 IDC connectors and ribbon cable.



What parts are needed

- (1) DB-9 female IDC connector
- (2) DB-9 male IDC connectors
- 10-pin ribbon cable (pull the last gray wire off for 9 wires)

Tools needed

- Small bench vise or official IDC ribbon cable press tool
- Drill and drill bit (I used a step bit)
- Flush cutting diagonal pliers

Procedure

- Cut a length of ribbon cable that fits your setup. I chose a one foot length for my needs. Strip away the last gray wire from the ribbon cable so only nine wires are left. The single wire is no longer needed and can be thrown away.
- Modify the female DB-9 IDC connector to allow it to fit the ADAM controller port. Use a drill and bit to drill out both pressed metal screw holes to allow the metal housing to be removed. Carefully cut off both tabs of the connector with diagonal pliers. *See Figures 1 and 2.*
- Press the modified female DB-9 connector to the ribbon cable using the vise/press. Carefully observe the orientation of how the connector is pressed on to the ribbon cable and install the strain relief when done. *See figures 3, 4, and 5.*

- Press the first male DB-9 connector to the ribbon cable using the vise/press. Carefully observe the orientation of how the connector is pressed on to the ribbon cable. It is easy to crush the metal housing of male DB-9 connectors and it is recommended to use a gender bender or an unneeded female connector to insert into the connector to prevent accidental damage while pressing. See figures 6 and 7. I chose to press my first connector two inches from the female connector.
- Finish the cable by installing the second male DB-9 connector doing the same process. See figure 8.
- Carefully double check your work and verify connector orientations are correct before use.

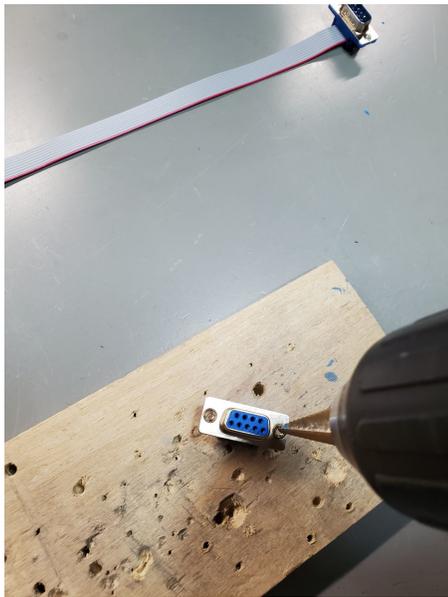


Figure 1



Figure 2

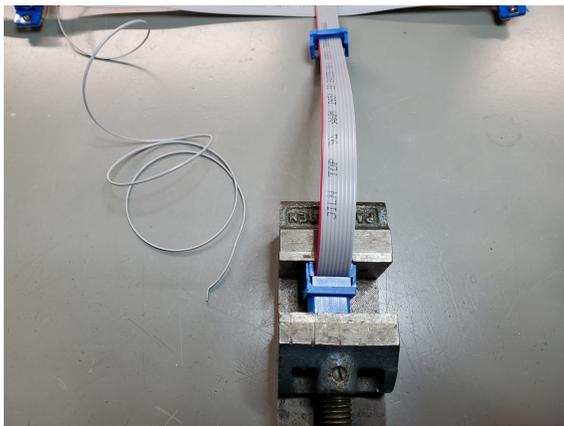


Figure 3

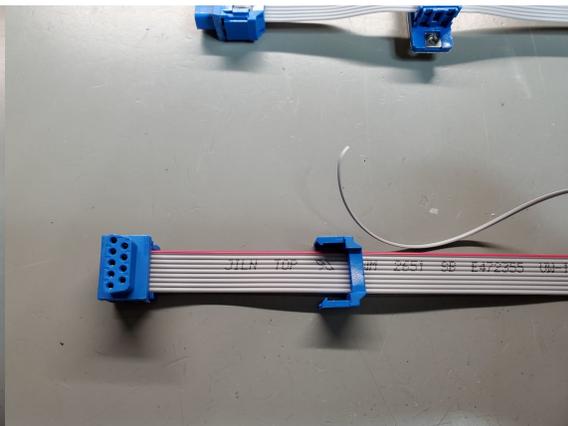


Figure 4

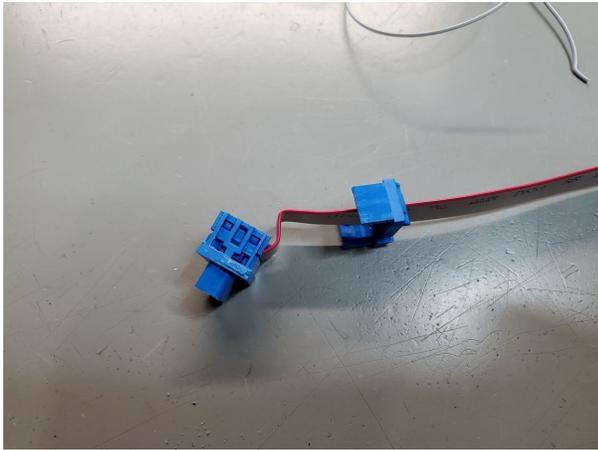


Figure 5

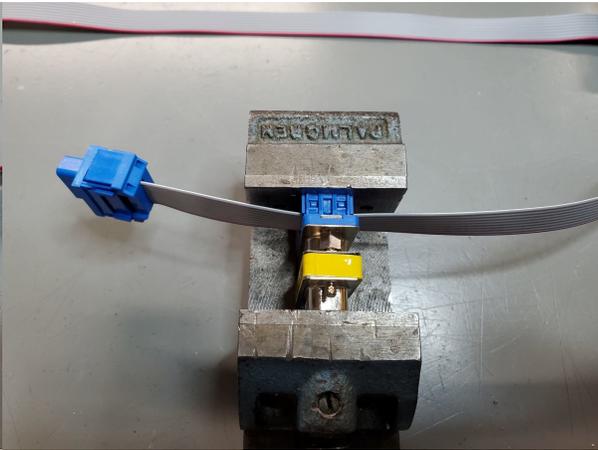


Figure 6

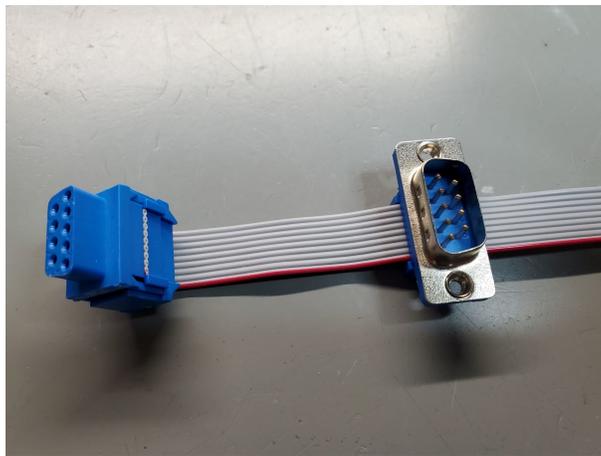


Figure 7



Figure 8

Additional information

I purchased the parts for this project from Amazon. These links will become obsolete at some point and are just for reference. None of these parts come with official part numbers that will work for Mouser or DigiKey.

Male DB-9 IDC - [amazon.com/gp/product/B00YM419DW](https://www.amazon.com/gp/product/B00YM419DW)

Female DB-9 IDC - [amazon.com/gp/product/B00YM41NTW](https://www.amazon.com/gp/product/B00YM41NTW)

10-pin ribbon cable - [amazon.com/gp/product/B07P77YRB2](https://www.amazon.com/gp/product/B07P77YRB2)