

Rover Camera Mount Assembly
Jackson State University MARRS STEM Workshop
February 27, 2021

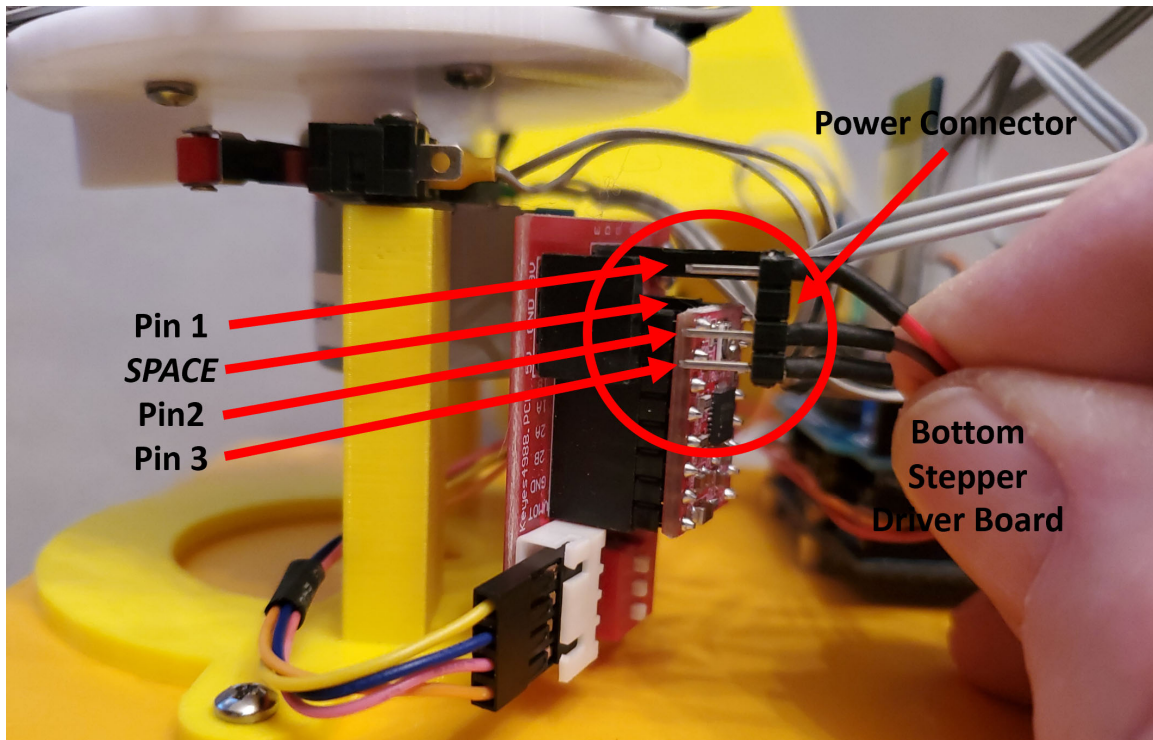
Objective: Complete the Camera Mount assembly and process successfully.

Tools and materials: Needle nose pliers, Phillip's screwdriver, camera parts kit.

10. Bottom Stepper Interface Connections

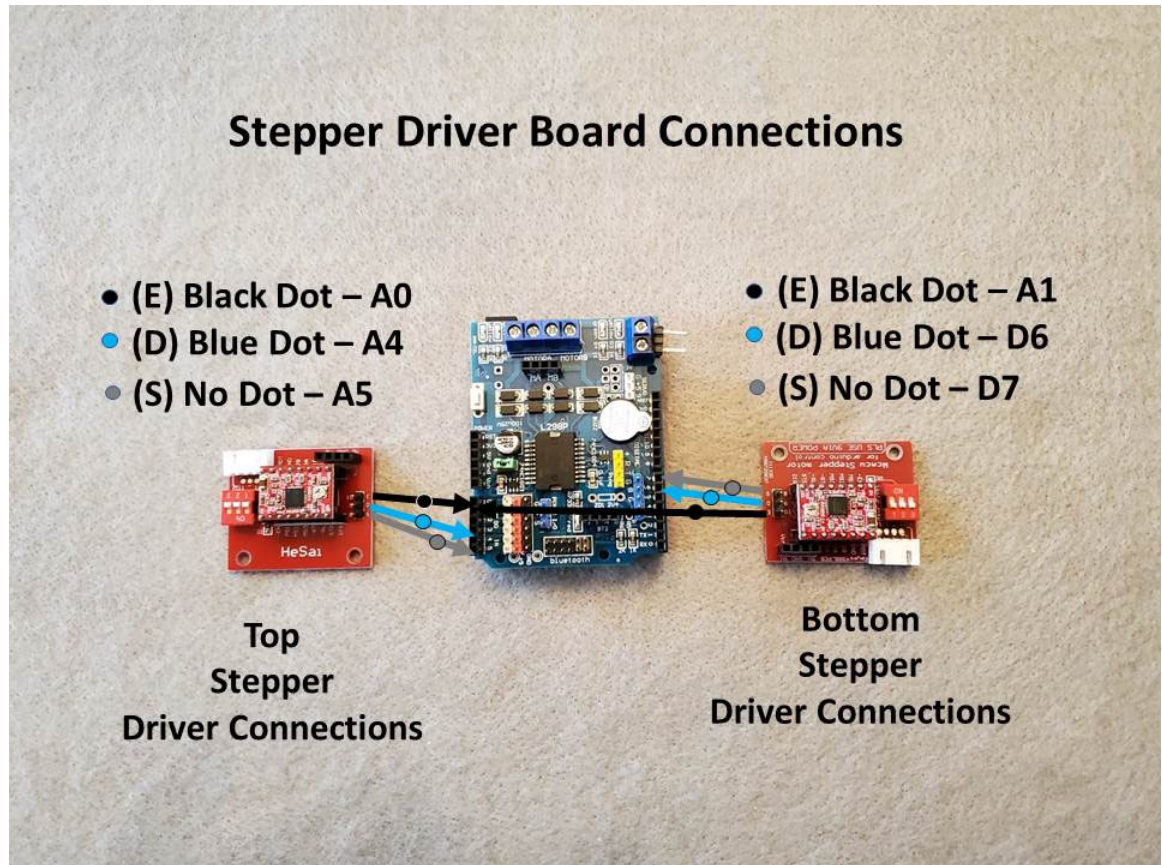
(1) The bottom stepper motor wires are oriented upward. The **RED** lead goes to **Pin#1**, **Brown** lead goes to **Pin#2**, & the **Orange** lead goes to **Pin#3**.

Note: A stepper motor is a special type of motor that moves in steps rather than freely rotating. The number of steps can be controlled using electrical control circuits.



Caution! Please observe the plug orientation and wires color placement.

(2) Top Stepper interface on header pin connections is labeled as **S, D, E** to **NO Dot, Blue Dot, & Black Dot** wires. The following photo shows the identification of the interface between two Stepper Control Boards and Rover Motor Control Boards:



(3) The photo below demonstrates the wire connections to the Bottom Stepper Motor Control board. The black “Dot” marked wire is plugged into to the left. Summary left –to-right is **“Black Dot, Blue Dot and NO Dot.”**

Note: The markings are the wires – “NO dot,” “Blue dot,” and “Black dot.” The “Black dot” is connected to the pin labeled “E” (Enable) pin.

