

# CEM120 USB3.0 CMS Upgrade

Nov. 1, 2021

## Parts included in the package



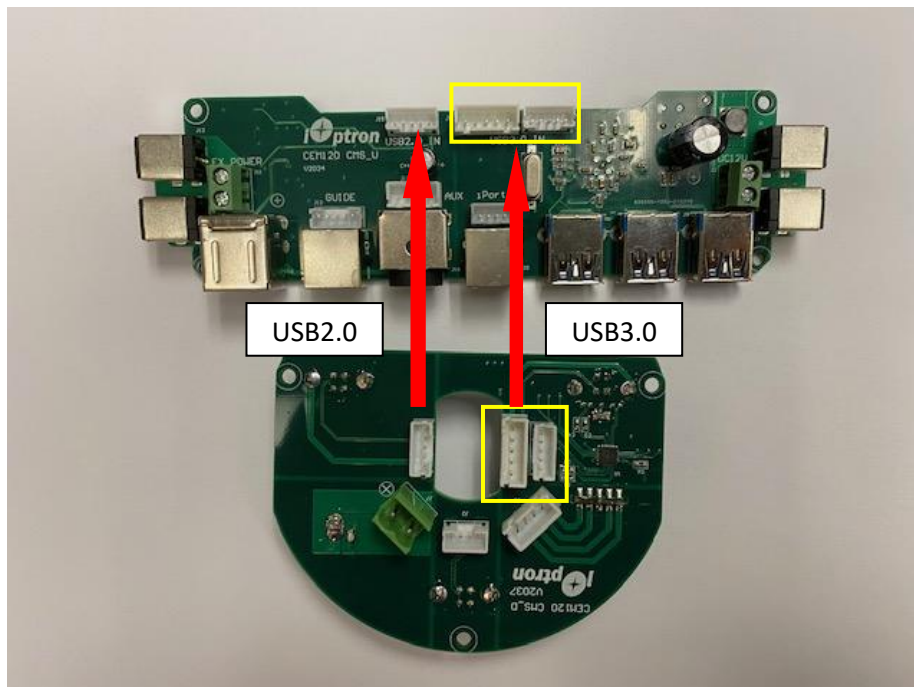
- 1X CMS output board with 3X USB3.0 and 2X USB2.0
- 1X Output board compartment
- 1X CMS input panel
- 1X USB3.0 internal connection cable (10-wires)
- 1X USB2.0 internal connection cable (5-wire)

## Tool needed

Metric Allen wrench

**Warning:** Before connecting power, double check 2 sets of DC power cables to make sure they are wired correctly.

## Cable Connection



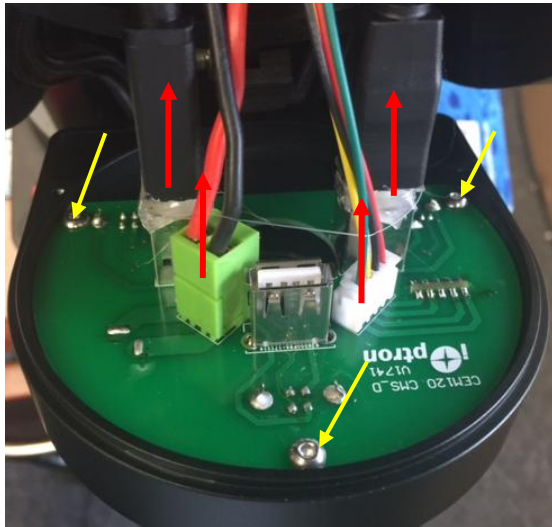
## Replacement Procedure

**Warning:** Before connecting power, double check 2 sets of DC power cables to make sure they are wired correctly.

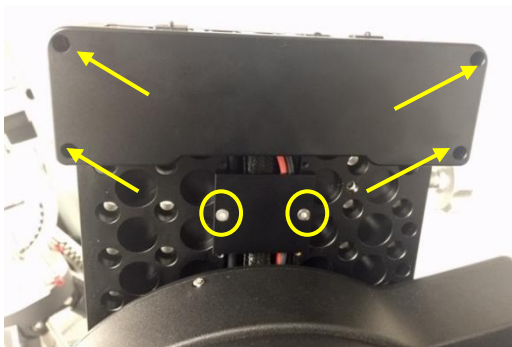
1. Remove two screws that hold the Cable Management System (CMS) panel using a 2.5mm hex wrench.



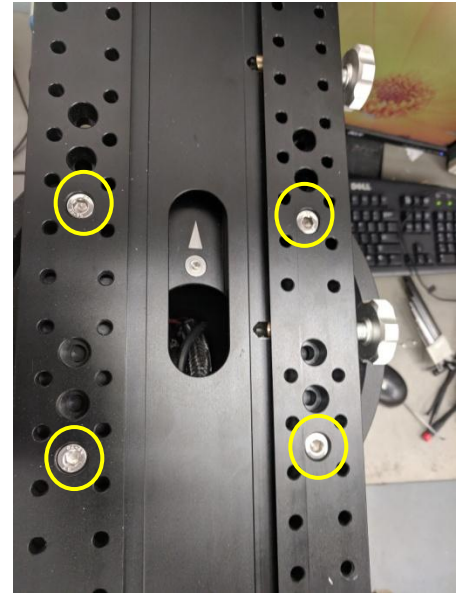
2. Pull the panel open. Disconnect the cables. Remove 3 screws with a 2mm wrench.



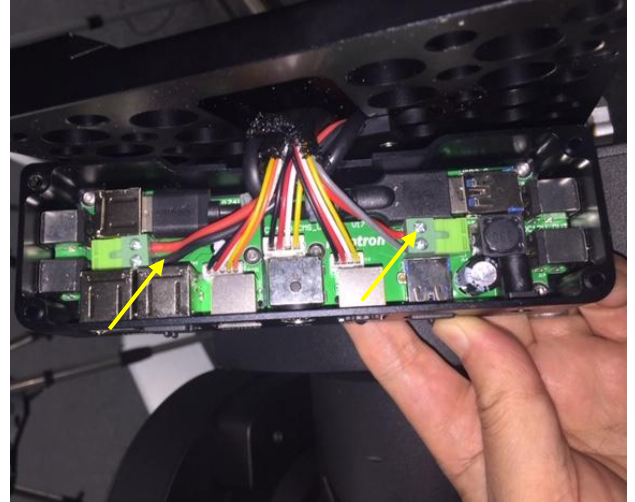
3. Replace the circuit board.
4. Slew the mount so you have a easy access to the bottom of the dovetail saddle
5. Remove 4 screws that hold the CMS circuit box. You may also remove the cable clamp.



6. Remove four screws that hold the dovetail saddle onto DEC axle. Remove the dovetail saddle plate.



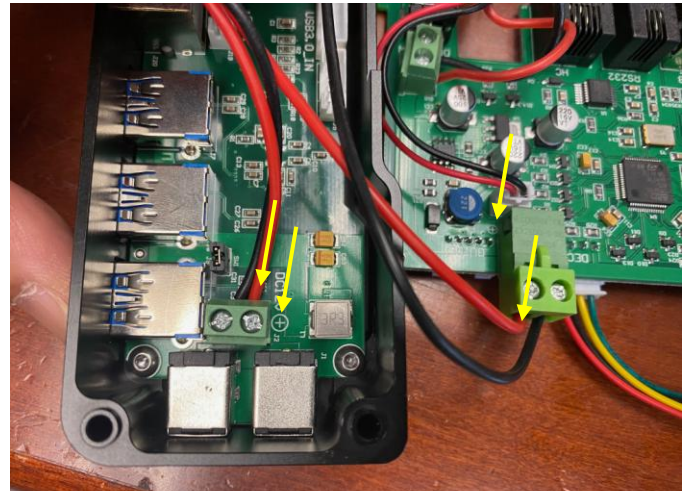
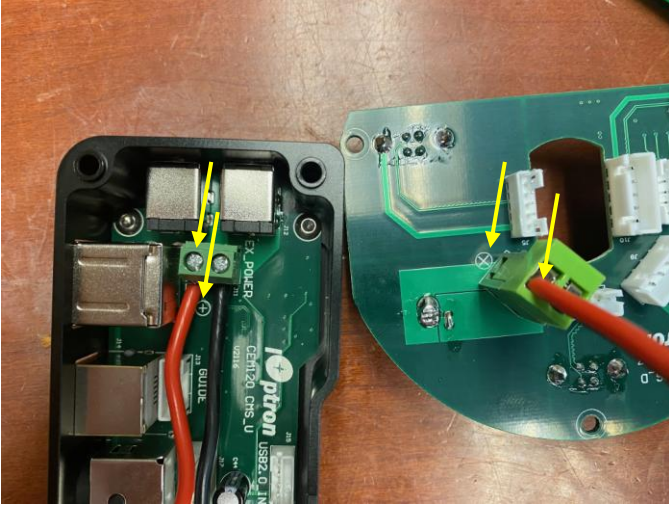
7. Unplug all the cables. Remove two sets of DC power cable and make them clearly which one goes to left side (DC OUT 5A) and which one goes to right side (DC 12V).



8. The cable from iPort, GUIDE and DC 12V go to the main board. Other cables go to CMS input panel. Mark the cables and unplug them from the old USB hub. Check 2 sets of DC power cable plugs (thick red and white cables on green plugs). **Make sure** that the red is on top of the plus sign on the board. Pull the 2X USB cables out from the mount. Replace them with the supplied cables coming with the new kit.

9. Replace the CMS output panel with the housing. Remove two sets of DC power wires from the green plugs. Insert them into the new board. Make sure the RED wire goes into the hole marked with “+” sign on the circuit board.

Double check two pairs of power cables make sure the wires are connected correctly.



10. After plug all the wires into the socket, put the dovetail saddle back in position first. Then connect the CMS input.