Elliott Tech, LLC

HUB Assembly Manual

HUB

New Centurion Solutions

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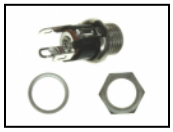

B. Hub Enclosure - Top (1)

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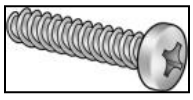

P. AC/DC 5V Power Adapter (1)

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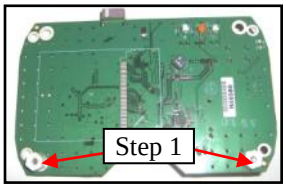
2. ASSEMBLY INSTRUCTIONS

To begin, check the parts available against the equipment list, identifying any missing parts. If all parts are accounted for, proceed to the instructions below to begin assembling the HUB.

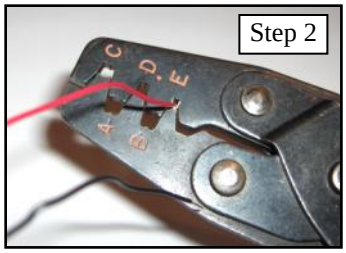


Step 1: Identify the two stand-offs (M) and four Phillips screws (H). Place the two standoffs beneath the PCB (J), lining up the holes on the board with the holes in the stand-offs. Insert a screw into both corners, effectively attaching the stand-offs to the bottom of the board. Flip the PCB over and line up the other two corners to the existing screw holes on the bottom enclosure.

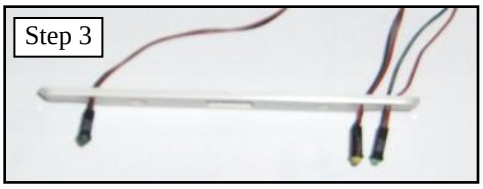
Follow the instructions on the Epoxy (Q) to mix the resin and hardener. Place the mixed adhesive solution along the base of the stand-offs and press against the bottom enclosure making a firm seal. When the adhesive is dry, unscrew the PCB from the two stand-offs, which should now be firmly attached to the bottom enclosure. After verifying, line up the four corners so that each has a screw hole and insert the four Phillips screws attaching the PCB to the bottom enclosure.

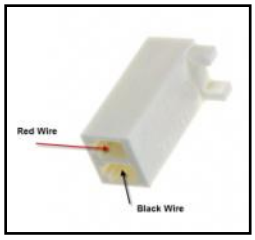
Note that the stand-offs can be offset (do not need to make a square in respect to the existing screw holes on the bottom enclosure) as there are two holes in each corner of the board.

Step 2: Identify the three panel indicators, there should be two dark green LEDs (L) and one light green/yellow LED (N). Although not necessary, the respective panel indicator wires (red and black) can be cut to around half the length and re-stripped in order to prevent against excessive folding of the wires inside the enclosure as the wires are much longer than required. Take the first indicator (order does not matter) and place a crimp terminal (**L**) on the end of one of the wires. Using a crimp tool, crimp the terminal into place on the end of the wire. Repeat for all six wires attached to the three panel indicators.

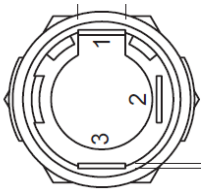


Step 3: Take the front enclosure (F) and identify the rough side as opposed to the smooth side. Feed the three panel indicators into the **rough side**, wires first. The front enclosure has three small identical holes seperated into a single hole on one side, and two holes on the other. Looking at the rough side of the enclosure, the first dark green panel indicator should be fed into the rightmost isolated hole. The light green/yellow panel indicator should be fed into the closest of the two holes to the middle. The other dark green indicator should be fed into the farther of the two holes from the middle. The panel indicators will snap into place when they are pushed all the way into the holes. Next, feed the crimp terminals into the 2 position connector header (C). The terminals should be inserted into the end with the larger openings. Be sure to take careful note of the positions of the wires. As indicated in the figure, with the connector ears on the right, the red crimp wire should be inserted into the top position while the black crimp wire should be inserted into the bottom position.



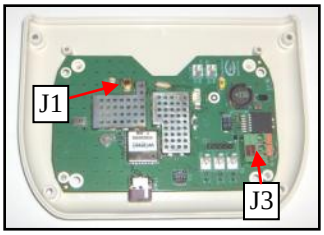


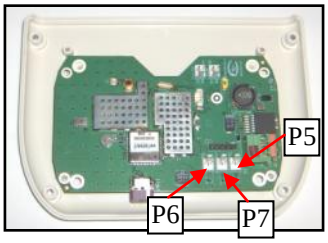
Step 4: Aquire the barrel jack connector (A), coaxial cable jack (G), and the 5 pin USB panel mount cable (K). For both the barrel jack connector and the coaxial cable jack, feed the connector ends through the **smooth side** of the front enclosure so that the connector ends are facing out similar to the panel indicator LEDs. Additionally, be sure to fasten the respective washer and nut (color matched) to the connector end so that both parts are firmly attached to the front panel. For the USB cable, align the panel mount face with the front enclosure, matching up the screw holes accordingly. Take the included screws and insert them into the two holes on both sides of the face. Using a Phillips head screwdriver, fasten both nuts to the other side of front enclosure holding the USB cable into place.



Next, take a red and a black wire, and strip both ends around a quarter inch (1/4”). Facing the three pins on the barrel jack with no pin on top, the red wire should be soldered to the rightmost pin (pin 1). The black wire should be soldered to the bottom pin (pin 2) and no wire should be soldered to the leftmost pin (pin 3). At this point six components should be firmly entrenches in the six holes on the front enclosure. Please refer to the figure below and verify that all parts have been placed correctly in the space provided for it.

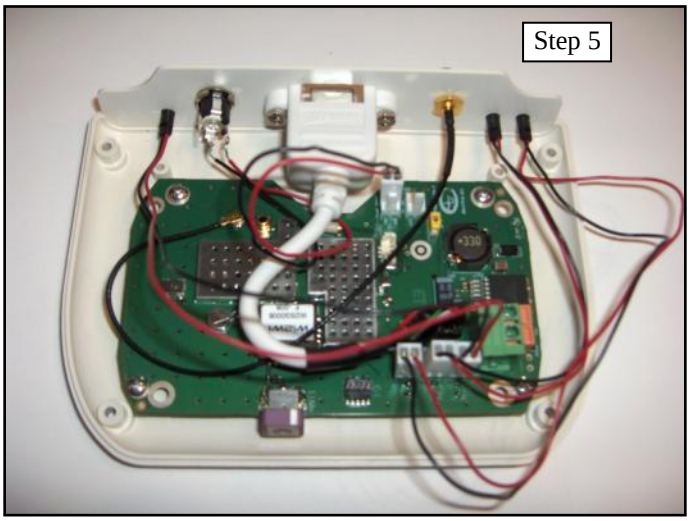
Step 5: Now that the front enclosure has been assembled, each respective part can be attached to the PCB. The coaxial cable jack attaches to the coaxial cable plug notated J1 on the board silkscreen. The 5 pin USB panel mount cable attaches to the black 5 pin header notated J3. When connecting the cable to the header it is important to take note of the arrow designators on both components. The arrows must match up on the same pin. Failure to do so may result in damaged circuitry.



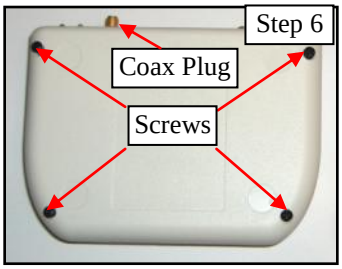


The barrel jack adapter attaches to the white 2 pin header designated as P4. As a check, it should be verified that the red wire is assigned to the +5V pin and the black wire is assigned to the GND pin. The isolated dark green panel indicator attaches to the 2 pin header labeled P5. The light green/yellow indicator nearest to the middle attaches to the middle header labeled P7. The last dark green indicator attaches to the header labeled P6.

All components should be attached to the board as indicated in the figure below.



Step 6: The last step left to do is assemble the HUB enclosure. First, place the front enclosure into the space provided as demonstrated in the previous illustration. The front enclosure should fit right into this space between the two protruding edges. Fold any excessive wires down so that they will all fit securely when the assemblies are put together. Place the top enclosure over the front and bottom enclosures so that all edges fit firmly together and are flush. Screw the long black screws into the openings on the bottom to complete assembling the HUB.



Finally, attach the dipole antenna to the coaxial cable plug by placing the antenna over the plug and screwing in a clockwise direction. The antenna is sufficiently secured when it is flush with the HUB enclosure.

3. FCC NOTIFICATION

NOTE: THE MANUFACTURER IS NOT RESPONSIBLE FOR ANY RADIO OR TV INTERFERENCE CAUSED BY UNAUTHORIZED MODIFICATIONS TO THIS EQUIPMENT. SUCH MODIFICATIONS COULD VOID THE USER'S AUTHORITY TO OPERATE THE EQUIPMENT.

THIS DEVICE COMPLIES WITH PART 15 OF THE FCC RULES. OPERATION IS SUBJECT TO THE FOLLOWING TWO CONDITIONS: (1) THIS DEVICE MAY NOT CAUSE HARMFUL INTERFERENCE, AND (2) THIS DEVICE MUST ACCEPT ANY INTERFERENCE RECEIVED, INCLUDING INTERFERENCE THAT MAY CAUSE UNDESIRED OPERATION.