PROTOVAPOR

XPV DNA-75C DIY instructions

1. Using FDV V4 UE, solder the atomizer (+) lead to the 510 core with the connector off the mod. Depress the core with an atomizer or install tool to get the pin to extend as far from the insulator as possible. Other 22mm connectors may work but check fitment first, the battery tube top comes very close to the bottom of the core. Recommended atomizer lead length is 25-30mm.
2. Mount the 510 connector in the case back. The battery tube hole allows the use of a socket on an extension to tighten the backing nut. Angle the 510 ground tab toward the atty (-) pad on the board. This case must use a ground tab, it is not designed for case ground.
3. Install the soldered core back into the 510 connector. Solder the atomizer (-) lead to the ground tab.
4. Solder power leads to DNA 75C board. Leave enough length so both leads can reach the top of the battery tube when the tube is installed in the case. General concept is that the power leads will run alongside the board inductors on their respective sides. Tin the atomizer pads.
5. Mount screen and holder to board. Inset buttons and mount board assembly into case front with (3) #0 board screws. Check button function and adjust if necessary.
6. Remove insulator assembly from battey tube and disassemble the battery tube (+) contact assembly.
7. Solder the (+) power lead to the battery tube contact tab. Recommend flattening the tab and cutting off some of the excess length so the connection sits right on top of the insulator and fairly close to the (+) assembly nut. Make sure the lead is on the right side of the tab so as to be able to run on the same side as the (+) pad on the board. Test fit so as to keep the lead length as close to the minimum necessary.
8. With the insulator removed from the tube, insert the tube part way through the hole in the case back. Solder the power (-) lead to a point near the top of the battery tube. Test fit so as to keep the lead length as close to the minimum necessary.
9. Reassemble the insulator/battery (+) contact assembly loosely and re-install in tube. Test fit with battery tube flush to the bottom of the case, and tighten insulator assembly so the (+) power lead and (-) power lead run along side the battery tube in the channels created by the board insulators and the tube. Do not mount the tube yet.
10. Solder the atomizer leads to the board pads (leads exiting toward the top of the board).
11. Mount the battery tube. Insert the (2) short 2-56 screws into the counterbore holes at the bottom of the case back. These screws act as set screws to lock the tube in place within the case back. The tube should be inserted flush with the bottom surface of the case. Be careful not to crush the tube. Optional: Use sleeve locking compound at the bottom “hoop” to secure the tube. Note this will make it very difficult to remove.
12. Place a piece of Kapton or other electrically insulative material over the exposed (+) lead at the top of the tube.
13. Close the case. Tuck the atomizer wires in the spaces around the 510 connector core. Run the board power wires in the channels formed on either side of the board’s inductors. Use (4) flat-top countersunk 2-56 screws.