
UBA4/5 External Temperature Probe Kit

This kit allows you to upgrade your UBA4 or UBA5 to be able to accept temperature probes.

Kit Contents

1. Temperature Probes (two probes on 1 metre length of cable) that you attach to your battery.
2. 10 cm length of ribbon cable with plugs on each end.
3. Probe socket on small PCB (printed circuit board) which mounts on the back of your UBA4 cover.
4. Hardware kit containing two 4-40x1/2" screws, one 4-40 nylon nut, one 4-40 metal nut, one #4 lock washer, two nylon spacers and four 6-32 lock nuts for fan.

Installing External Temperature Probe Connector

Before starting the installation, make sure you have a screw driver that fits the screws on your UBA which hold the cover and the back plate and the screws enclosed in the hardware package that came with your kit.

1. Remove UBA Cover and Fan

Remove the four screws that hold the cover on and remove the cover being careful to unplug the fan plug from the UBA PCB (printed circuit board).

Remove the fan from the cover by removing the four nuts. Remember the orientation of the fan (where the wire comes out). Remove the two screws that hold the cover plate on the back of your UBA. Discard the cover plate and screws.

2. Install Temperature Probe PCB with Connector

Insert the two screws from the hardware bag into the back on your UBA (see fig. 1). Add a spacer over each screw. Now add the temperature probe PCB such that the pin one mark (a triangle) on the socket (J3 - the black socket with 6 straight pins) lines up with the pin one mark printed on the back of your UBA. Fasten the #4-40 metal nut & #4 lock washer on the screw beside the temperature probe connector (the hole with a metal ring around it) and the nylon nut on the other screw.

If not already connected, connect the ribbon cable to the temperature probe PCB paying attention to matching up pin one on the ribbon connector to pin one on the PCB (as shown on fig. 1 and 2).

Warning: failure to connection the ribbon connector correctly will result in damage to your temperature probe PCB.

3. Install Fan and UBA Cover

Now put the fan back on. The fan is placed with the printing against the cover. If your fan didn't come with lock nuts (thread lock might have been used instead) then use the four lock nuts enclosed with the hardware package.

Now install the UBA cover. First connect the ribbon cable to the UBA paying attention to pin one orientation (see fig. 3) (see warning above). Route the ribbon cable such that it doesn't contact the fan blades. Now plug the fan connector into the PCB, note red wire on the fan connects to the positive side ("+") of the connector.

Hint: look into the front of the UBA (looking at the battery input jacks) while closing the cover. You can see the ribbon and fan wires to make sure that they don't come close to the fan blades.

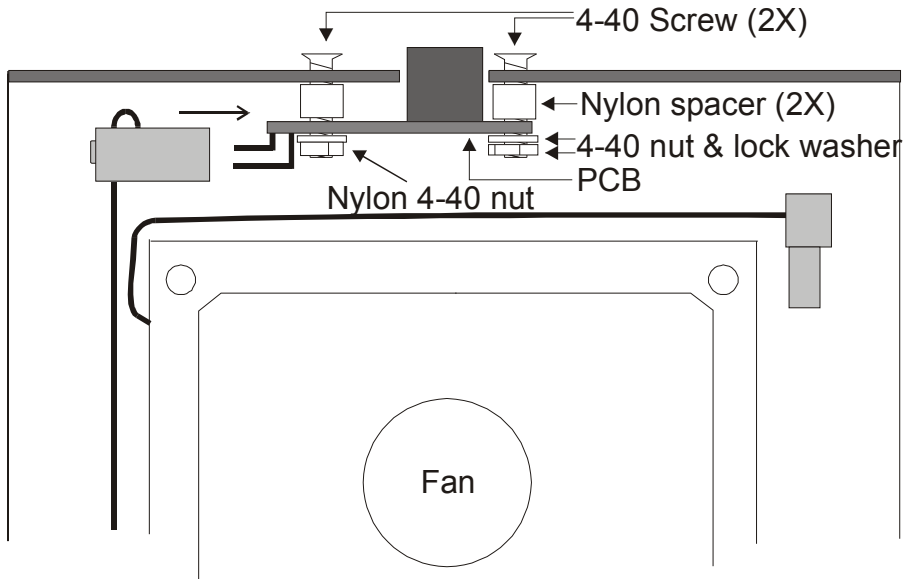


Fig. 1 Bottom View of Cover

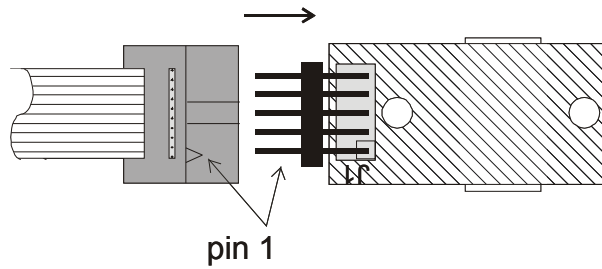


Fig. 2 Attaching ribbon cable to Temperature Probe PCB

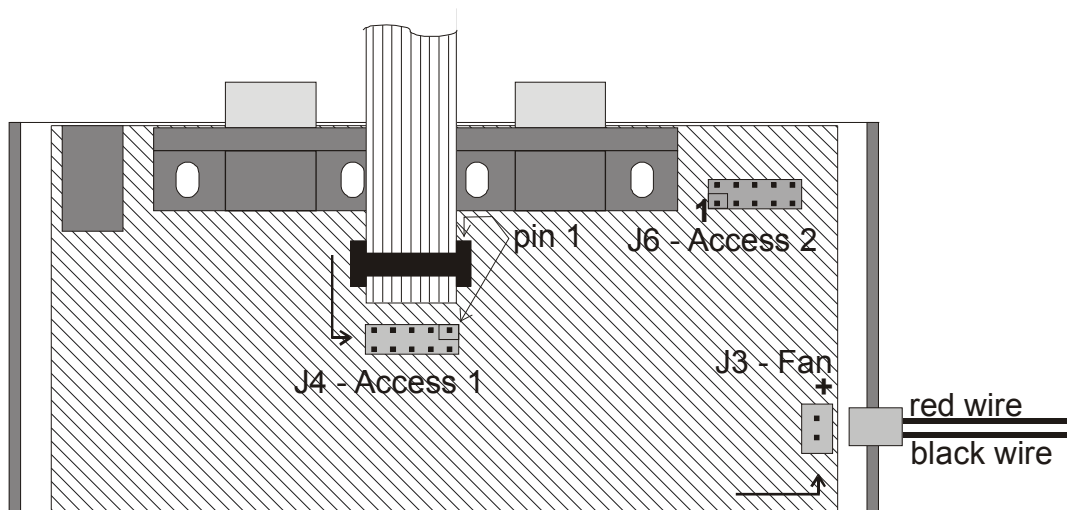


Fig. 3 Top View UBA PCB