



- [backside-battery-connection.jpg](#)

Those black thick wires are coming from the 48V battery pack... + and -at the end of these wires.. I inserted on the wires this kind of connector...



[connector-for-battery-wires.jpg](#)

I dont know in english how it calls :)

So it perfectly fits in the anderson connector

As you said, I did not find the compatible anderson plug for this, so I improvised

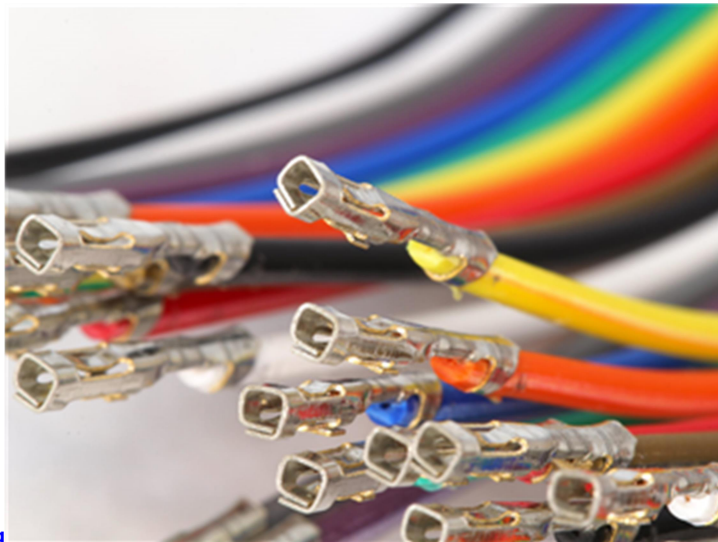
so, in the middle of the anderson plug, as you can see in the picture, there are two thin terminals

these terminals are used for communication with the battery pack, in a very simple, "hackabel" way:)

you can use dupont female connectors for this



[dupont-female-connector.jpg](#)



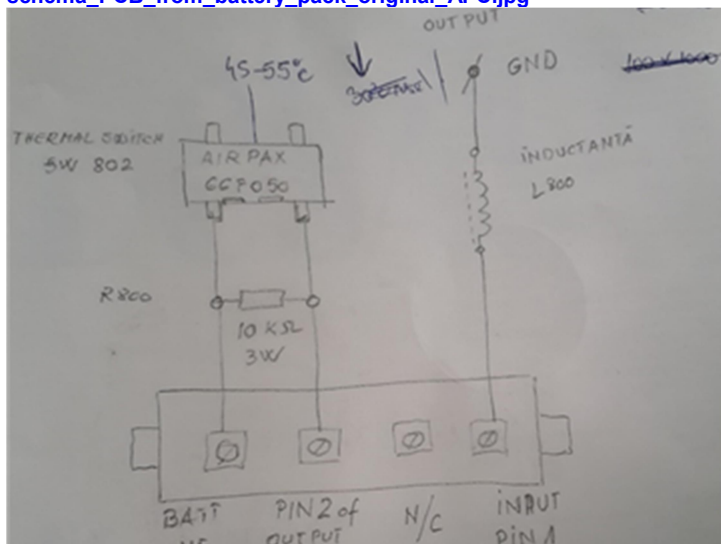
[dupont-female-connector2.jpg](#)

10:17 AM

this dupont connectors fits there, but you have to be careful because it comes out slightly

Next part, is the interesting part, and simple at the same time... I don't know if you have electronics skills or not

[schema_PCB_from_battery_pack_original_APC.jpg](#)



here, you have a schematic of how the system works and how it must be connected

basically the most important wire in the whole system is just a single one (from those anderson thin terminals)

I forgot wich one is, but you can test it, with no harm to the unit

So, there is an AIRPAX thermal switch,(optional) inside the pack, so if the internal battery pack temperature is greater than 50 degree C, the switch ties together two wires (one from - (minus) connector of the battery pack, and the other from one of those thin terminals from anderson connector) This triggers an alarm on the UPS.

The most important, is the battery pack counter. You see it has a 10Kohm resistor between - ((minus) from battery) and the same thin terminal from anderson connector.

So, the UPS knows how many packs you have by this resistor.

One 10k resistor is for 1 pack. 8k resistor is for 2 packs, 6k resistor for 3... and so on, until 2kOhm (witch counts as 5 - exactly what you want)

so if you put there a 2Kohm rezistor, the UPS should count 5 batt packs.

I used a 10k trimmer pot, so I can easily change the nr of packs by turning the pot left and right.

Hope this will clear all your questions :)

Wish you Succes! and send me some pictures with your sistem :)

Feel free to ask if you have more questions.

Best regards, Adrian