How to setup communication between Protec battery and Deye or Luxpower Inverter

Step 1: First we need to make sure the BMS of the battery is on. This done by holding in the Reset button on the battery for 5 seconds. The Reset button can be found at (1), marked on the image. After doing this the lights will start to flash on the battery and the LED's on the SOC indicator will stabilize usually at half of the full set of LED's. This indicates that the battery is half State Of Charge (SOC).

Figure 1: Battery Face

Step 2: Secondly the dipswitches need to be set for the batteries. These dipswitches can be found on Figure 1 at (2). This is done by pressing the dipswitches either up or down in order to count in binary, please see figure 2 below.
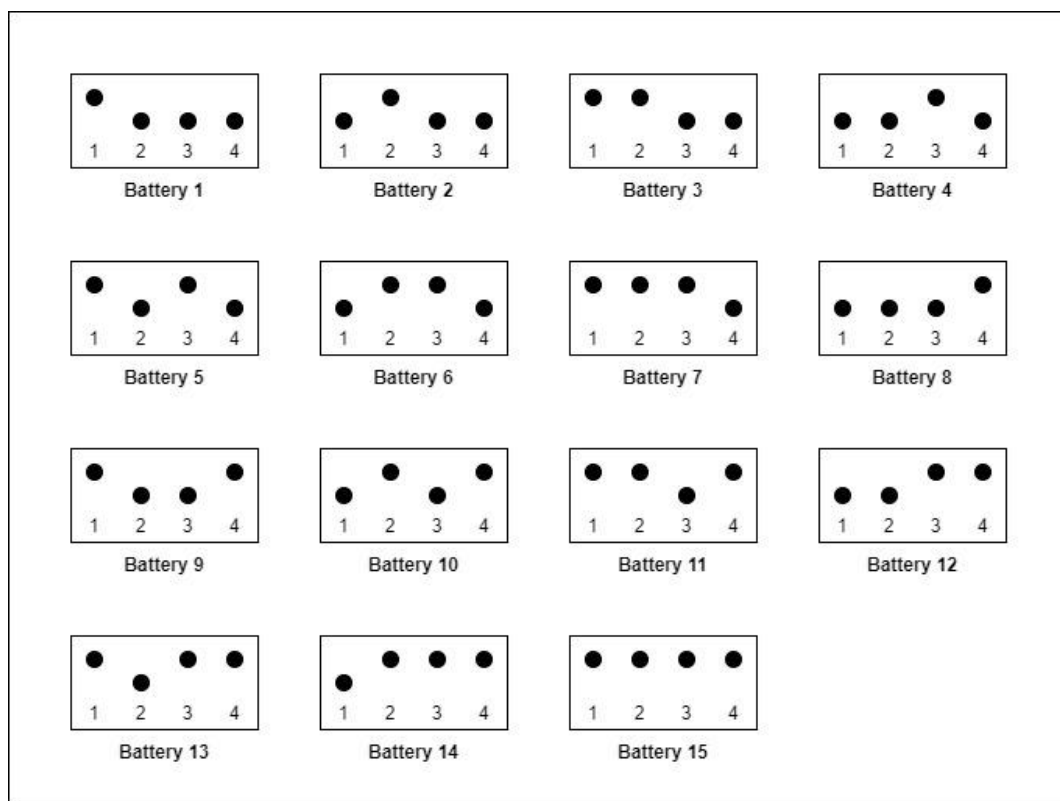

Figure 2: Dipswitch Diagram Multi-Battery Setup

Step 3: Thirdly we need to insert the communication cable at the CAN port on the battery, to the communication port on the inverter. The CAN port can be at (3) on Figure 1. A straight 8-pin RJ45 cable is used as our communication cable. The pinout is as follows:
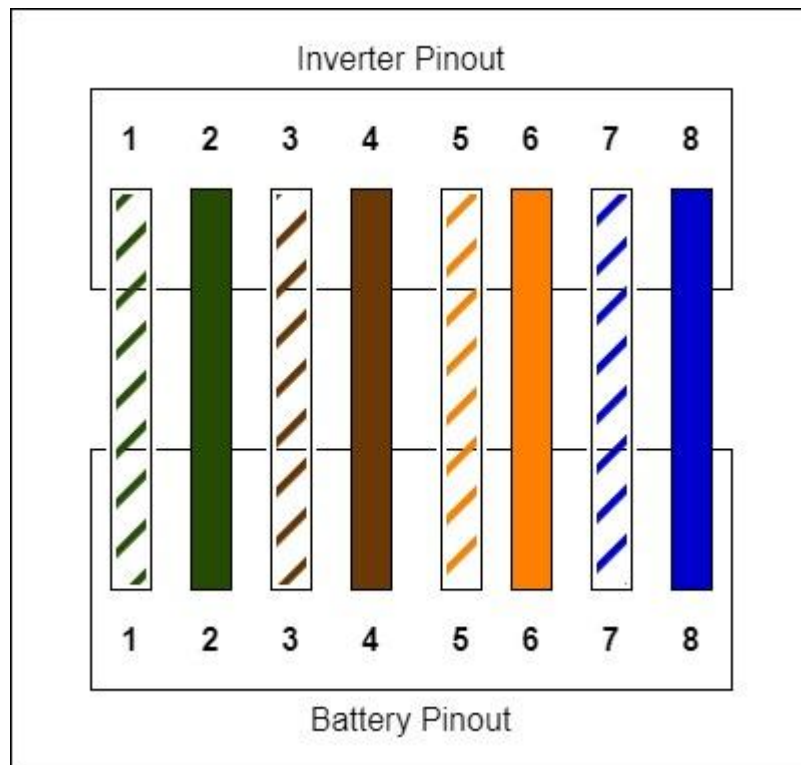

Figure 3: Communication Cable Pinout

Step 4: The final step is to set the different communication protocols for the battery. We have 2 different inverters we are using at present. Thee inverters are Luxpower and Deye inverters respectively.

- **Luxpower:** For the Luxpower inverter we go to setting number 3, on the main LCD display. For setting number 3, select Lithium type battery, then select 2 - for Pylon battery type. Go back to the main LCD display, and press the up button, this should cycle through the parameters of the battery and give an Ah rating which signifies that the inverter and battery is communicating.
- **Deye:** For the Deye inverter, go to the battery settings page, ensure that the Battery Mode is set to Lithium and the Lithium Mode is set to 00. To ensure that the battery is communicating, press on the battery symbol and the on the Li-BMS symbol. The charge and discharge parameters should be visible from this screen.