Rev. 2

Application Note AN012

Afore RS485 Wiring Guide

Connecting the Levelise Hub to the Afore ASL Series All-In-One battery using RS485

Overview

The Afore ASL Series uses a different RS485 pinout to the RS485 cable included in the box with Hub 2, requiring a custom cable configuration.

This note explains how to modify the Hub 2-Inverter RS485 cable included with Hub 2.

What You'll Need

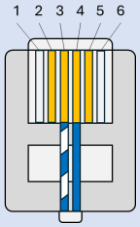
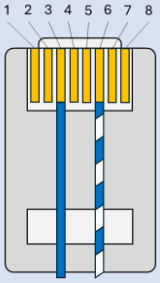
- Hub 2-Inverter RS485 cable (included in the box)
- 1x RJ45 connector
- RJ45 crimping tool
- Wire strippers
- Cable tester

Compatibility

- Levelise Hub 2
- Afore ASL series inverter

Quick Summary for Experienced Users

If you're confident, use the following pinout reference table to re-terminate the RJ45 (inverter) end of the Hub 2-Inverter RS485 cable supplied in the box. **Do not modify the RJ11 (Hub) end:**

Pin	**Hub End** (RJ11 Connector – do not modify)	**ASL Series End** (RJ45 Connector)
		
1	Not present	Unused by Hub
2	Unused by Hub	Unused by Hub
3	**Blue & white (RS485 B)**	**Blue (RS485 A)**
4	**Blue (RS485 A)**	Unused by Hub
5	Unused by Hub	Unused by Hub
6	Not present	**Blue & white (RS485 B)**
7	Not present	Unused by Hub
8	Not present	Unused by Hub

Otherwise, follow the detailed step-by-step instructions below to modify the Hub 2-Inverter RS485 cable provided.

Detailed Steps-by-Step Guide

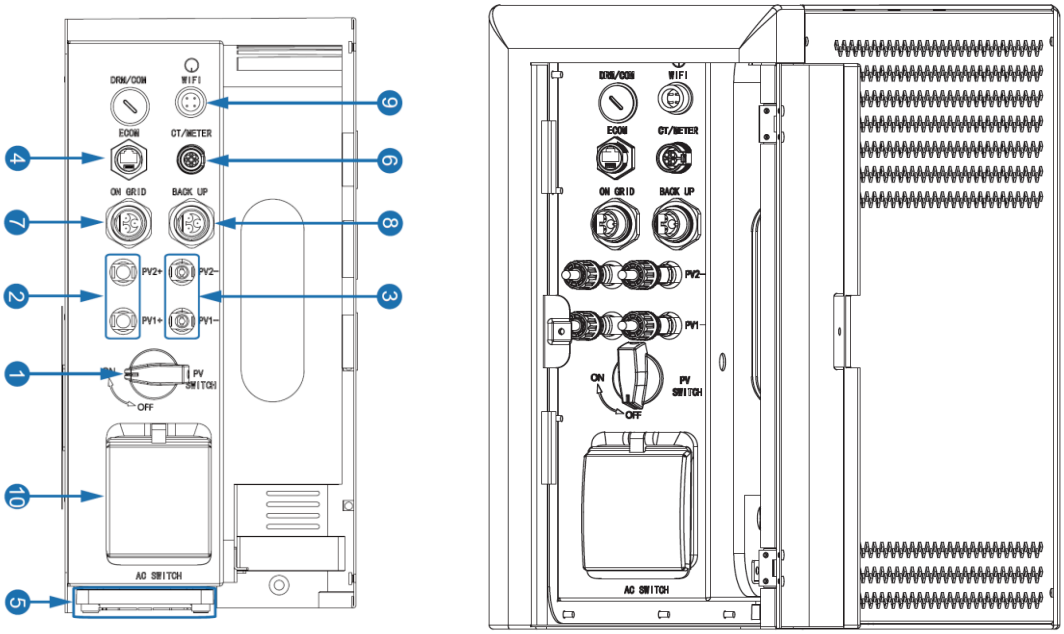
1. **Prepare the Cable**
   - Cut off the RJ45 connector from the Hub 2-Inverter RS485 cable using wire cutters.
     Important: Only modify the RJ45 (inverter) end of the cable. Never cut, re-terminate or replace the RJ11 (Hub) end – poorly re-terminated RJ11 connectors cause unreliable communication with Hub 2. If the cable needs extending, make the extension at the RJ45 end.
   - Strip ~25mm of the outer sheath from the cut end.
   - Untwist and straighten the wire pairs.

2. **Rearrange the Wires**
   - Align wires from left to according to the ASL Series pinout table above.
   - Ensure:
     - **Blue wire (RS485 A)** is in **position 3**; and
     - **Blue & white wire (RS485 B)** is in **position 6**

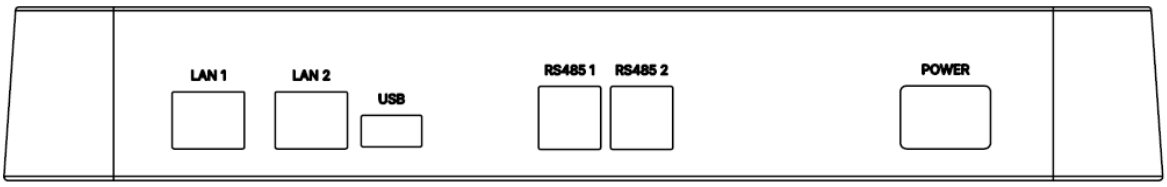
3. **Terminate the Cable**
   - Trim wires evenly, leaving ~12mm exposed.
   - Insert wires into the RJ45 plug, ensuring full insertion and correct alignment as shown below.
     Important: Ensure the cable sheath also enters the plug slightly for strain relief.
   - Crimp the connector securely.
   - Use a cable tester to verify continuity and pinout (Recommended).

4. **Connect the Cable***
   - Plug the modified RJ45 end into the ECOM port (4) in the cabinet on the ASL inverter's right hand side*.

* IMPORTANT: Where these steps differ from or conflict with the manufacturer instructions, the manufacturer's instructions take precedence



- Plug the unmodified RJ11 end into the port marked ‘RS485 1’ on Hub 2.



- If using the Outdoor Kit, ensure all cable glands are properly sealed.

Additional Resources

For more details on the Afore ASL Series, refer to Afore documentation at https://www.aforenergy.com/