Application note-How to Crimp your Luminous Battery to Inverter BMS Cable

CRIMPING BMS CABLE

Confirm the Required Pinout Before cutting or crimping:

- ❑ Identify the battery communication port.
- ❑ Identify the inverter BMS/COM port.
- ❑ Confirm whether the cable should be:
  - Straight-through, or
  - Cross-pinned
- ❑ Verify the communication type:
  - **CAN**
  - **RS485**
  - **RS232**
- ❑ Battery and inverter communication ports:

  - ❑ Battery BMS/CAN/RS485 communication port.
  - ❑ Inverter BMS/COM/CAN port.
  - ❑ Port labels visible

Luminous Inverter-Battery Compatibility List

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LOW VOLTAGE INVERTER CAN /BMS				
 RJ45	CAN TERMINAL	Inverter Terminal Type	Inverter SIDE (PIN Number)	Battery SIDE RJ45 (PIN Number)
Goodwe	CAN- H	RJ45	4	4
	CAN- L		5	5
Deye	CAN- H	RJ45	4	4
	CAN- L		5	5
Luxpower	CAN- H	RJ45	4	4
	CAN- L		3	5
Megarevo	CAN- H	RJ45	4	4
	CAN- L		5	5
Sorotec	CAN- H	RJ45	3	4
	CAN- L		5	5
Inhenergy	CAN- H	RJ45	4	4
	CAN- L		5	5
MUST	CAN- H	RJ45	6	4
	CAN- L		5	5
SUNGROW	CAN- H	RJ45	4	4
	CAN- L		5	5
Afore	CAN- H	RJ45	4	4
	CAN- L		5	5
Felicity	CANL1	RJ45	7	5
	CANH1		8	4

LOW VOLTAGE INVERTER RS485				
 RJ45	RS485 TERMINAL	Inverter Terminal Type	Inverter SIDE (PIN Number)	Battery SIDE RJ45 (PIN Number)
Growatt	RS485-B	RJ45	1	1, 8
	RS485-A		2	2, 7
SRNE	RS485-B	RJ45	8	1, 8
	RS485-A		7	2, 7
Voltronic power	RS485-B	RJ45	3	1, 8
	RS485-A		5	2, 7
SAKO	RS485-B	RJ45	3	1, 8
	RS485-A		5	2, 7
Frecon	RS485-B	RJ45	1	1, 8
	RS485-A		2	2, 7
SMK Solar	RS485-B	RJ45	1	1, 8
	RS485-A		2	2, 7
Solis	RS485-B	RJ45	1	1, 8
	RS485-A		2	2, 7

INFORMATION

Regarding the communication between the battery and the inverter, the battery side needs to maintain the original configuration, but inverters of different brands and models may have different communication pins. If in doubt, refer to the inverter manual.

LUMINOUS

CRIMPING BMS CABLE

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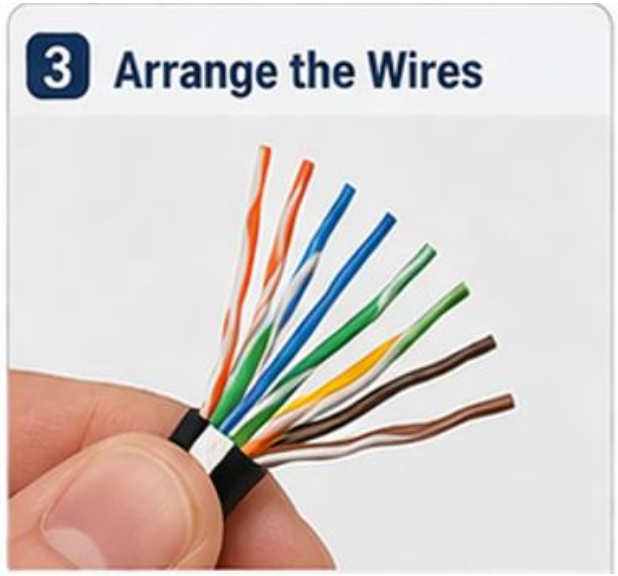
- ❑ Cut the cable to the desired length.
- ❑ Use a cable cutter for a clean cut

- ❑ Strip off the outer jacket



- ❑ Un-twist the pairs and arrange the wires in the correct order(See image)

- ❑ Trim the wires straight across.
- ❑ Luminous to luminous com interface (Inverter: RS485-A -2&7, Battery: RS485-B-1&7)

CRIMPING BMS CABLE

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- ❑ Insert the wires into the RJ45 connector until they reach the end.
- ❑ The outer jacket should go inside the connector.

- ❑ Add a boot to the connector to avoid loose connection.

- ❑ Verify the wires are in the correct order and fully seated at the front.

- ❑ Place the connector into the crimping tool (8P slot) with contacts facing up.

- ❑ Squeeze the handles firmly until fully crimped.

CRIMPING BMS CABLE

9 Inspect the Crimp

- ❑ Check that the contacts are evenly crimped and the cable jackets is secured inside the connector.

10 Repeat for the Other End

- ❑ Repeat step 1-9 for the other end of the cable.

11 Test the Cable

- ❑ Use a cable tester to verify continuity and correct pin out.

12 Finished Cable

- ❑ Your BMS communication cable is ready to use