Instructions for integrating

AC•THOR / AC•THOR 9s / AC ELWA 2

with

SolaX G4, X3 Ultra (Modbus RTU)

or

SolaX G4, X3 Ultra + Pocket Dongle

Contents

1. Default settings on my-PV device

Before commissioning, read the assembly instructions delivered with the device and the operating instructions available online.

The AC•THOR operating instructions can be found **here.**

The AC ELWA 2 operating instructions can be found **here.**

2. Communication with SolaX

Two control types are available for SolaX:

SolaX (Modbus RTU)	Communication takes place via RS485 connection to the inverter.
SolaX Manual	Communication takes place via a network connection to the router.

SolaX Manual (Pocket Dongle)

The communication parameters are preset from AC-THOR firmware version a0021002, for the AC ELWA 2 from firmware e0001103.

Modbus communication is only possible with the following dongle: Pocket Wi-Fi + 4GM, Pocket Wi-Fi + LAN, Pocket Wi-Fi V3.0-P

AC-THOR or AC ELWA 2 are connected to the SolaX inverter in the network via a router. Within this network, the my-PV device receives information on how much photovoltaic surplus is available.

Note!

- Do not connect the my-PV device directly to the inverter or battery system!
- When communicating with the device via the network, it is important that the IP address of the signal source does not change during operation (e.g. due to a DHCP router). Otherwise, the AC•THOR or AC ELWA 2 will lose the control signal.
- When controlled by querying an inverter, a feed-in meter is required in the system. Otherwise, querying the inverter will not provide any data!

SolaX (Modbus RTU)

Note!

- If the RS485 communication connection on the inverter is still being used by other devices, communication with my-PV is not reliably possible!
- A connection with the AC ELWA-E is not possible as it does not have Modbus RTU (RS485) communication!
- The combination with SolaX has been tested with the SolaX X1-Hybrid5.0-G4, Baudrate 115200.
- The communication parameters are preset from AC•THOR firmware a0020607, for AC ELWA 2 from firmware e0000202.

3. Connection to the my-PV device (Modbus RTU)

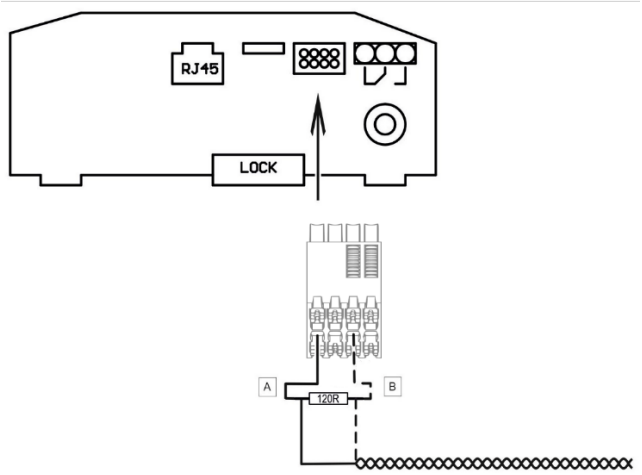
The my-PV device is connected directly to the SolaX inverter via shielded twisted-pair cable (for example CAT-Cable).

Note!

- Use a shielded cable with twisted wires (e.g. CAT cable) and connect the shield to earth (GND) at one end!
- Fit the RTU-BUS with a 120 Ohm terminating resistor!
- When controlled via Modbus RTU, the M7 operating mode cannot be used with the AC•THOR!
- If control is via data from an inverter, a feed-in meter is required in the system. Otherwise, the inverter query will not provide any data.

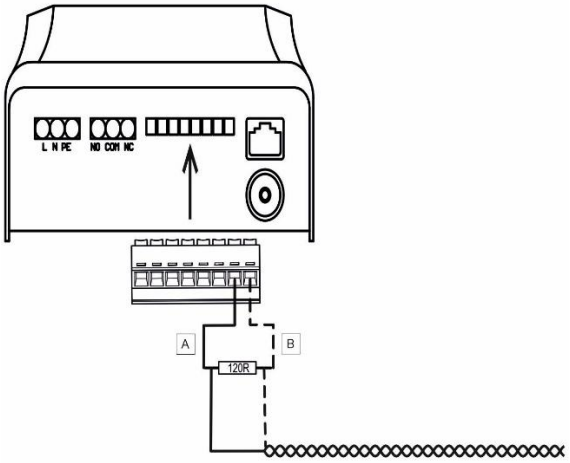
AC•THOR / AC•THOR 9s

Three pins on the 8-pin connector of the AC•THOR are the Modbus RTU communication connection. The 120-ohm terminating resistor is not included in the scope of delivery and must be purchased separately.



AC ELWA 2

On the AC ELWA 2, the connection is labelled RS485, A, B, GND.
The 120 Ohm terminating resistor is included in the scope of delivery of the AC ELWA 2



4. Connection to Growatt inverter (Modbus RTU)

In accordance with the instructions provided by SolaX, the communication connection (COM POL) to the inverter must be assigned as follows.

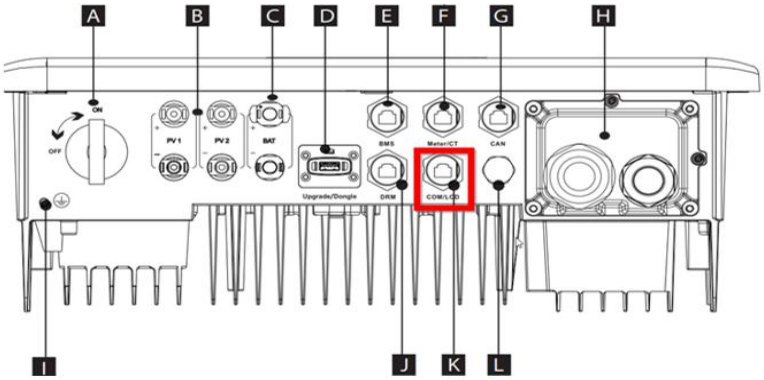
Hybrid G4 series

- COM port connection

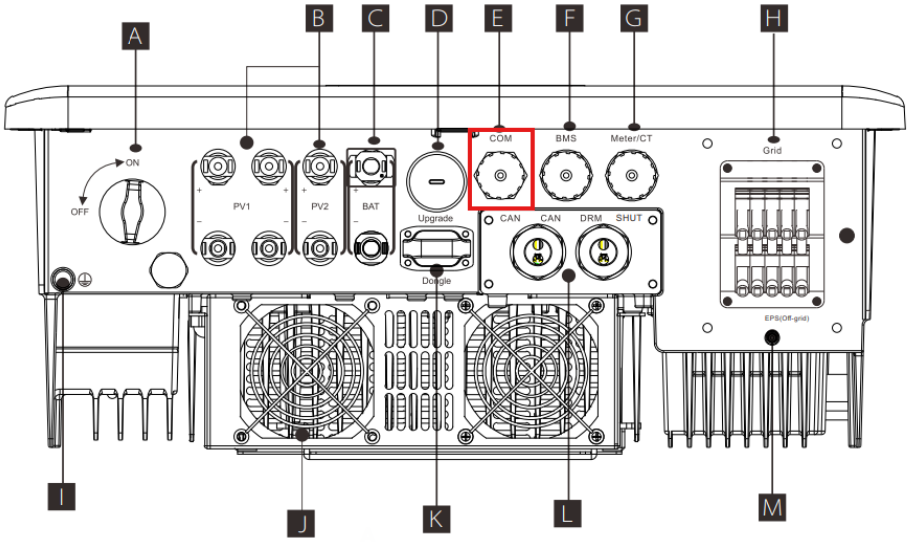
1. Pin definition for COM

Item	COM							
Pin	1	2	3	4	5	6	7	8
Pin Definition	Drycontact _A(in)	Drycontact _B(in)	+13V	485A	485B	GND	Drycontact _A(out)	Drycontact _B(out)

Communication port on the X1 Hybrid G4 (red marking).

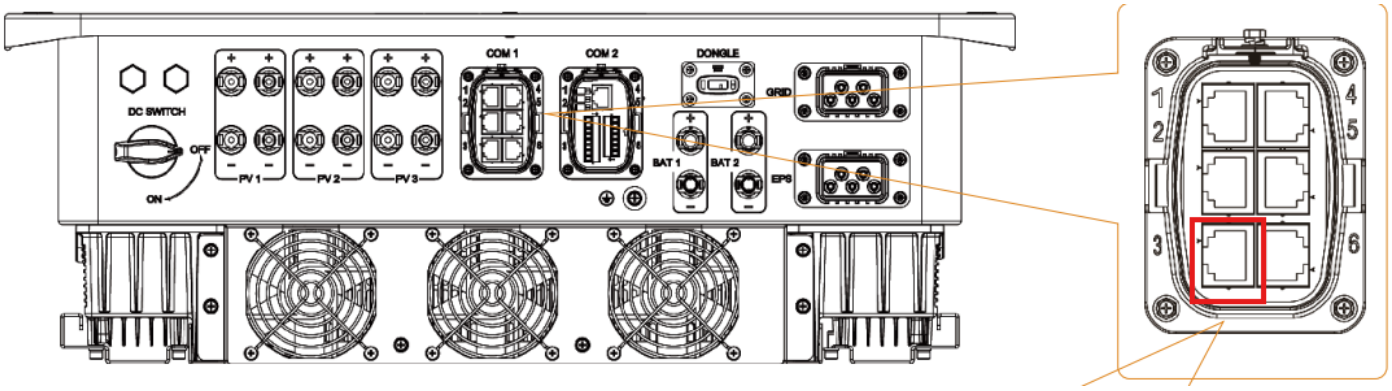


Communication connection on the X3 Hybrid G4 (red marking).

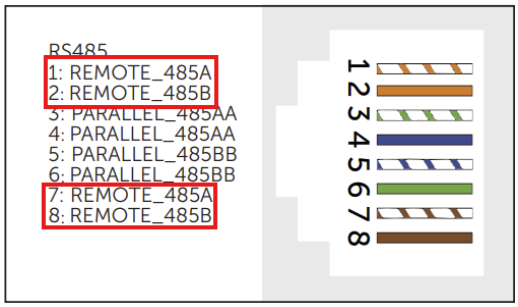


X3 Ultra series

Communication connection on the X3 Ultra Series (red marking)



Use Pin 1,2 **or** 7,8

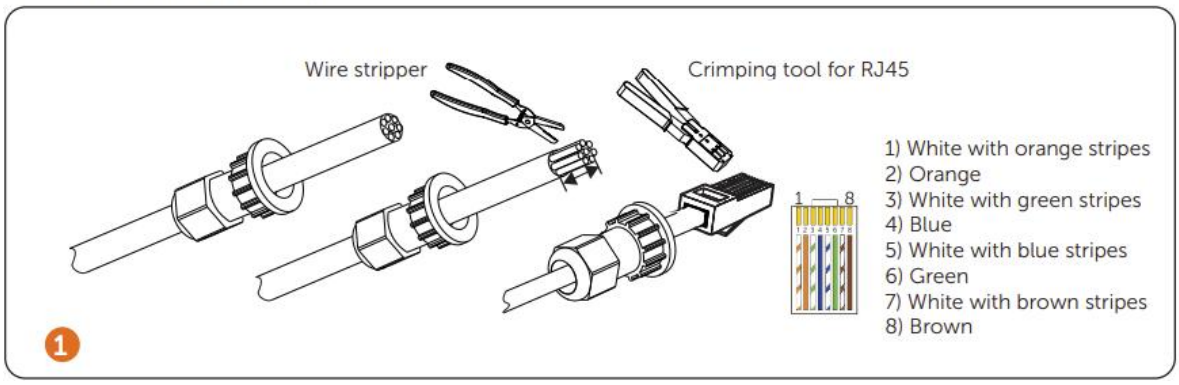


Note!

The communication cabling must be assembled in accordance with the SolaX instructions! Using a standard CAT cable may result in damage to the device!

This is also noted in the SolaX instructions.

3. Cable connection steps



5. Settings on the my-PV device

Modbus RTU

Select **"SolaX (Modbus RTU)"** or "**SolaX manual**" on the display.

Alternatively, these settings can also be done on the web interface. To do this, the my-PV device must also be integrated into the local network.

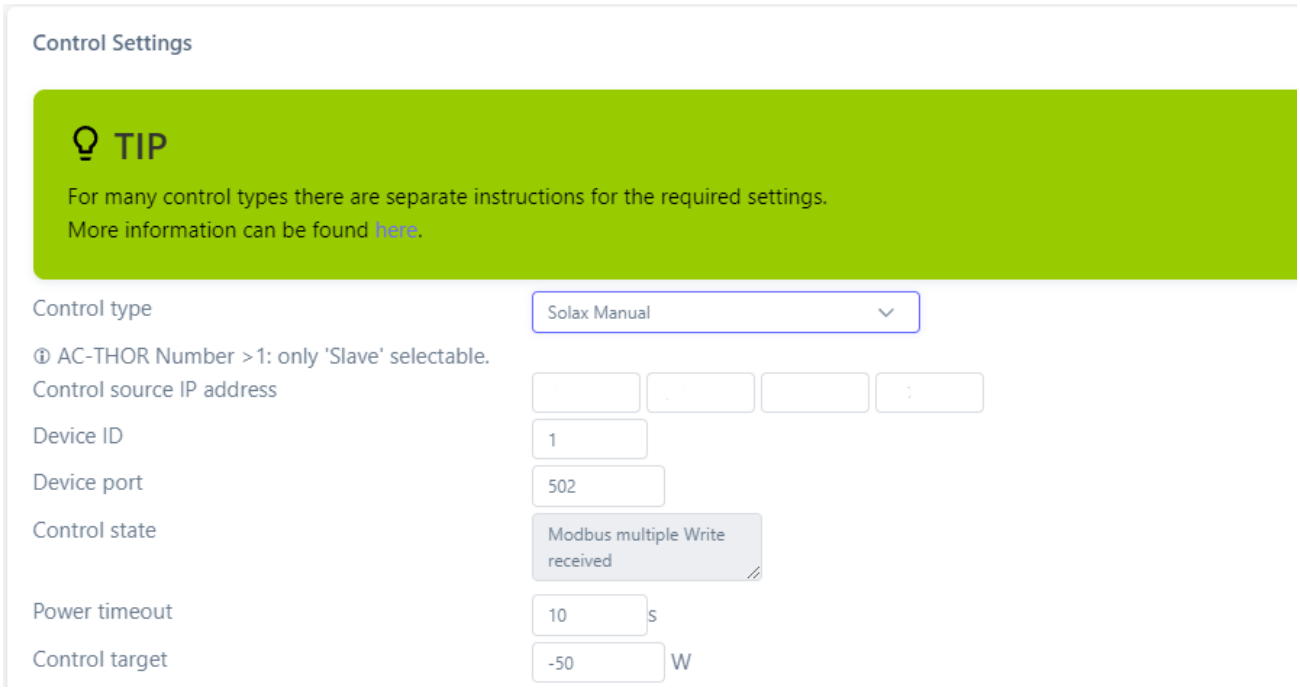
If there is a battery storage unit in the system and this is to be charged first, then the 'Target value of the control' should be set to -150 W. Otherwise, we recommend leaving it at -50 W.

Modbus TCP

Select "SolaX Manual" as the control type on the display or in the web interface. Then enter the IP address of the signal source as a static value under "Ctrl IP" on the display.

Alternatively, these settings can also be done on the web interface. In the web interface, the parameters "Device ID" and "Device Port" from SolaX can also be set.

The "SolaX Manual" control is preset to Device ID 1 and Device Port 502.



The "Power timeout" must not be changed.

If there is a battery storage unit in the system and this is to be charged first, the "Control target" value should be set to -150 W. Otherwise, we recommend leaving it at -50 W.

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Subject to change without notice.

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