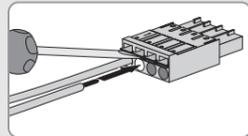




## Connecting Energy Meter with SO Interface

- Strip the cable by 4 cm.
- If applicable, shorten the cable shield to 5 mm. Fold the surplus cable shield back onto the cable sheath.
- Shorten unused insulated conductors flush with the cable sheath.
- Strip off the conductor insulation by 6 mm.
- Release the pin connectors of the four-pole plug with a screwdriver and insert the insulated conductors into pins 1 and 2 of the plug.

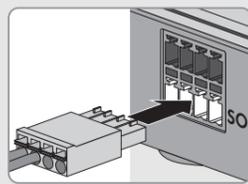


- Write down the color of the insulated conductors.

Pin	Purchased electricity meter	4-pole plug for	
		Feed-in meter	PV production meter
1 (SO-)			
2 (SO+)			

- Connect the four-pole plug to the pin connector assigned to the corresponding energy meter. Insert the four-pole plug into the lower pin row.

Energy meter	Pin connector
Purchased electricity meter	<b>Meter 1</b>
Feed-in meter	<b>Meter 2</b>
PV production meter	<b>Meter 3</b>



- Connect the end of the cable to the energy meter. Observe the polarity of the insulated conductors.
- Use the labels provided to mark each cable with the pin connector and energy meter to which it is assigned.
- Make a note of the SO pulses per kWh of each energy meter. This will facilitate the meter configuration in Sunny Portal.

## 6 COMMISSIONING

### Requirements:

- If Plugwise devices are installed: All Plugwise devices must be commissioned and registered in the Plugwise app (see manufacturer's manual).
- The PV system must be commissioned:
  - The same NetID must be configured for all BLUETOOTH devices, and the BLUETOOTH devices must be commissioned.
  - The Speedwire devices must be connected to the Sunny Home Manager via a router/network switch and must be commissioned.
  - NetID **0** must be set for Speedwire devices which also have an integrated BLUETOOTH interface.
- Smart appliances with direct data connection must be connected to the router in the same local network as the Sunny Home Manager.
- DHCP must be active for the router (see router manual). If your router does not support DHCP, use the Sunny Home Manager Assistant (see Section 8 "TROUBLESHOOTING", page 2).
- The routers and network switches with router function must forward the Multicast telegrams (telegrams with destination address 239.0.0.0 to 239.255.255.255) required for the Speedwire connection to all nodes of the Speedwire network. Therefore, all network components must support the IGMP protocol, minimum Version 3 (IGMPv3).

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For registration, you will need the following data from the type label of the Sunny Home Manager:

- Registration ID of the Sunny Home Manager ("Registration ID") (RID)
- Serial number of the Sunny Home Manager ("Serial Number") (PIC)

### Starting the PV System Setup Assistant

The PV System Setup Assistant will guide you through the registration of your Sunny Home Manager system in Sunny Portal.

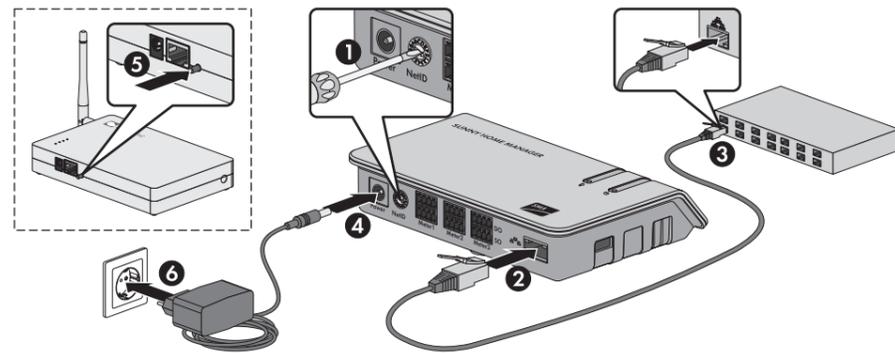
#### Procedure:

- Open [www.SunnyPortal.com](http://www.SunnyPortal.com) and select [**PV System Setup Assistant**].  
or  
Go to [www.SunnyPortal.com/Register](http://www.SunnyPortal.com/Register).  
 The PV System Setup Assistant opens.
- Select [**Next**].  
 The page **User registration** opens.
- Follow the instructions of the PV System Setup Assistant. Mark all the SMA radio-controlled sockets that you want to add to the Sunny Home Manager system.
- After completion of registration, configure further settings in Sunny Portal (see the Sunny Home Manager user manual at [www.SMA-Solar.com](http://www.SMA-Solar.com)):
  - Configure radio-controlled sockets and loads
  - Enter string properties
  - Set optimization target
  - Configure settings for PV system monitoring

## 8 TROUBLESHOOTING

Error	Cause and corrective measure
The status LED on the Sunny Home Manager is flashing red continuously.	It is possible that DHCP is not activated in your router, DHCP is not supported by the router, or there is a proxy server in your network. <b>Corrective measures:</b> <ul style="list-style-type: none"> <li>• If possible, activate DHCP in the router.</li> </ul> If the router does not support DHCP or there is a proxy server in your network, use the Sunny Home Manager Assistant (see page 2).
The PV System Setup Assistant does not detect the Sunny Home Manager, although you have entered the serial number correctly.	It is possible that the Sunny Home Manager is not properly connected to the router. <b>Corrective measures:</b> <ul style="list-style-type: none"> <li>• Ensure that the Sunny Home Manager is properly connected to the router.</li> </ul> It is possible that the Sunny Home Manager is not connected to the voltage supply. In this case, all LEDs on the Sunny Home Manager will be off. <b>Corrective measures:</b> <ul style="list-style-type: none"> <li>• Connect the Sunny Home Manager to the voltage supply (see Section 6 "COMMISSIONING", page 2).</li> </ul> It is possible that the registration procedure was previously initiated but not completed. <b>Corrective measures:</b> <ul style="list-style-type: none"> <li>• Perform a complete reset of the Sunny Home Manager (see the Sunny Home Manager installation manual at <a href="http://www.SMA-Solar.com">www.SMA-Solar.com</a>).</li> </ul>

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#### Procedure:

- On the Sunny Home Manager, use a screwdriver to turn the arrow of the rotary switch **NetID** to the NetID of the PV system (blade width of the screwdriver: 2.5 mm).
- Connect the network cable to the network terminal of the Sunny Home Manager.
- Connect the other end of the network cable to the router.
- Connect the DC plug of the plug-in power supply unit to the **Power** socket of the Sunny Home Manager.
- If a Plugwise Stretch with registered Plugwise radio-controlled sockets is installed:
  - On the front panel of the Plugwise Stretch hold the button pressed until the status LED flashes twice, and then release the button.
  - The status LED on the Plugwise Stretch flashes green.  
The detection mode of the Plugwise Stretch is active for 5 minutes. Within these 5 minutes you must perform a power cycle for the Sunny Home Manager (power off, power on). This will establish a stable data connection between Sunny Home Manager and the Plugwise Stretch. The Sunny Home Manager is connected to the Plugwise radio-controlled sockets via the Plugwise Stretch.
- Plug the plug-in power supply of the Sunny Home Manager into the outlet.
- The status LED of the Sunny Home Manager first glows red, and then flashes red. After approximately two minutes, the status LED intermittently flashes green and orange.
- The Sunny Home Manager's status LED is flashing red continuously.
  - See Troubleshooting (see Section 8, page 2).
- Once the Sunny Home Manager has booted the status LED of the Plugwise Stretch stops flashing. The Sunny Home Manager and the Plugwise Stretch are now connected. Now, the Sunny Home Manager can detect the Plugwise radio-controlled sockets and use them for energy management.

## 7 REGISTRATION IN SUNNY PORTAL

Sunny Portal serves as the user interface of the Sunny Home Manager. Therefore, you must register the Sunny Home Manager in Sunny Portal.

#### Requirements:

- If Plugwise devices are installed: All Plugwise devices must be commissioned and registered in the Plugwise app (see manufacturer's manual).
- If you are using SMA radio-controlled sockets, these must be plugged into outlets and the NetID of the PV system must be correctly configured (see the Sunny Home Manager installation manual at [www.SMA-Solar.com](http://www.SMA-Solar.com)).
- The PV system must be commissioned (see Section 6, page 2).
- The status LED of the Sunny Home Manager is flashing intermittently green and orange.

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### Using the Sunny Home Manager Assistant

The Sunny Home Manager Assistant will help you configure the Sunny Home Manager for your network if the Sunny Home Manager does not automatically connect to Sunny Portal. In addition, you can use the Sunny Home Manager Assistant to display the latest connection status to Sunny Portal, the network settings and the connected SMA BLUETOOTH devices, and to save these as a log file. If a service assignment should be necessary, Service can use this log file to analyze the problem.

#### Procedure:

- Use a network cable to connect the computer to the router to which the Sunny Home Manager is also connected.
- Download the Sunny Home Manager Assistant for the operating system of your computer (you will find the installation file at [www.SMA-Solar.com](http://www.SMA-Solar.com)).
- Start the Sunny Home Manager Assistant with a double click.
- Follow the instructions of the Sunny Home Manager Assistant.

## 9 CONTACT

If you have technical problems with our products, please contact the SMA Service Line. We require the following information in order to provide you with the necessary assistance:

- Serial numbers and software packages of the Sunny Home Manager and SMA radio-controlled sockets
- Type of energy meters
- Type of optical probes

If you encounter technical problems with Plugwise radio-controlled sockets used in the Sunny Home Manager system, please contact the SMA Service Line.

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