Operating instructions

JUNG HOME SCHUKO socket
Art. no. BT..1521S..

JUNG HOME SCHUKO socket Energy
Art. no. BT..1521SE..

Table of contents

1 Safety instructions

Serious injuries, fire or property damage are possible. Please read and follow the manual fully.

Installation only by persons with appropriate electrotechnical knowledge and experience in the following areas:

– The "5 safety rules" to be observed are: disconnect; secure against reconnection; determine that no voltage is present; ground and short-circuit; cover or block off adjacent live parts

– Selection of suitable tools, measuring devices and, if necessary, personal protective equipment

– Evaluation of the measurement results

– Selection of the electrical installation material to ensure the shutdown conditions

– IP protection ratings

– Installation of the electrical installation material

– Type of mains supply (TN system, IT system, TT system) and the resulting connection requirements (classic earthing, protective earthing, necessary additional measures, etc.)

Improper installation endangers your own life and the lives of users of the electrical system and there is a risk of serious damage to property, e.g. through fire. You are at risk of personal liability for personal injury and damage to property.
Contact an electrical fitter!

The device must not be used in connection with consumers that could lead to danger to life or limb or damage to property, e.g. heaters or electrical machines.

The device must not be used for applications from the field of safety engineering, such as emergency stop, emergency call or smoke extraction.

Danger of electric shock. If the device exhibits any visible damage, it must not be used any longer. Immediately disconnect device from mains by switching off all associated circuit breakers.

Danger of electric shock. Device is not suitable for disconnection from supply voltage because mains potential even is applied on the load when the device is switched off. Before carrying out work on the device or load, switch off all corresponding circuit breakers.

This manual is an integral part of the product, and must remain with the customer.

ℹ️ You can find more information on JUNG HOME at www.jung.de/JUNGHOME

2 Device components
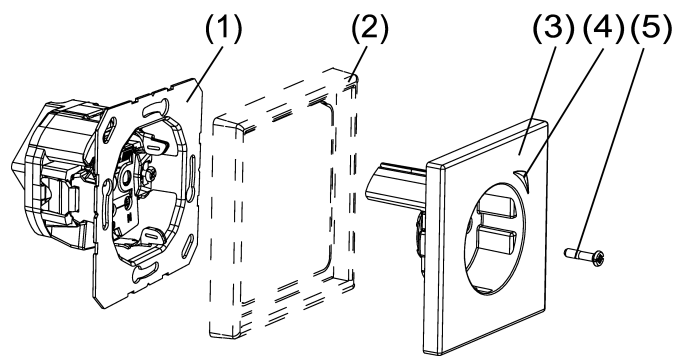

Image 1: Device components

(1)   Insert

(2)   Design frame

(3)   Cover

(4)   Button with status LED

(5)   Central screw

LED indication during operation

Green*	Load is switched on
Orange*	Load is switched off
Red	Disabling function active, e. g. continuously ON/OFF
Blue, triple flashing	Time has not been set, e. g. due to extended power failure
Flashing green/red	Device update is being performed
Red, triple flashing	Error message: - Insert combined with wrong cover. - Overcurrent switch-off, eliminate error and switch on device again with button (4) (JUNG HOME SCHUKO socket Energy).

* Colour adjustable

3 Intended use

– Manual or automatic switching of lighting and common household devices

– Power (W) and energy measurement (kWh) of connected devices, only JUNG HOME SCHUKO socket Energy

– Wireless connection to devices from the JUNG HOME system

– Use in dry interiors

– Mounting in appliance box with dimensions according to DIN 49073

– Use an appliance box with an installation depth of min. 53 mm

4   Product characteristics

- Commissioning and operation using JUNG HOME app on mobile end device (smartphone or tablet) via Bluetooth
- Button for switching
- Multi-colour status indication with optional night mode
- Disabling of local operation
- Up to 16 time programs
- Integration of the load into areas (groups), main functions and scenes
- Activate/deactivate automatic functions with the JUNG HOME app
- Automatic date and time update when connecting with smartphone
- Integrated switch actuator with 16 A
- Bluetooth SIG Mesh for fully encrypted wireless communication and repeater function
- Updating via JUNG HOME app

Additionally for JUNG HOME SCHUKO socket Energy

- Power measurement of 0.1 to 3680 watts and energy measurement (kWh)
- Recording of the energy curve of the last 24 hours and last 31 days (charting)
- Operating hours counter, period of energy measurement
- Power-save function (switch-off of standby consumers)
- Master/slave function (switch on a wirelessly linked consumer depending on the connected consumer)
- Overcurrent protection cut-off

Available by update in the future:

- Disabling function and restraint guidance: continuously ON/OFF or ON/OFF for fixed time
- Time programs with sunrise and sunset (astro timer)
- Time programs with random time
- Supplied power of -0.1 to -3680 watts and supplied energy (kWh)

You can find information on updates and dates at www.jung.de/JUNGHOME

Behaviour after a mains voltage failure

All settings and time programs are retained. Missed switching times are not performed later. The load output is switched off, provided the parameter "Switching state after the mains voltage returns" is set to its default setting.

If the device was not previously added to a Bluetooth Mesh network (project) by means of the JUNG HOME app, it will switch to pairing mode for 2 minutes after the mains voltage returns and the status LED will flash slowly at a regular interval in blue.

Power failure shorter than power reserve (min. 4 hours)

- Time and date are up to date
- The following time programs are performed normally again

Power failure longer than power reserve (min. 4 hours)

- If the LEDs flash three times repeatedly, the time is not up to date and must be updated by connecting to the app.
- The time programs are not executed as long as the time is not set
- No recording of measurement data as long as the time is not set (JUNG HOME SCHUKO socket Energy)

5   Operation

All settings and operations of the socket can be configured individually using the JUNG HOME app.

Switching the socket alternately on and off

- Press button (4) for less than 4 seconds.

Wireless operation

Wireless operation is carried out with linked JUNG HOME devices or via the JUNG HOME App, which is also used to link JUNG HOME devices (see 'Commissioning with app').

6   Mounting and electrical connection

The communication of the JUNG HOME devices and linked mobile end devices is carried out in wireless mode within the range of the Bluetooth Mesh network.

Wireless signals can be affected in their range through:

- Number, thickness, position of ceilings, walls and other objects
- Material type of these objects
- High-frequency interfering signals

Observe the following fitting instructions to maximise the range:

- Plan the positions and number of JUNG HOME devices to keep the number of ceilings and walls between two devices as low as possible
- If JUNG HOME devices are installed on both sides of a solid wall, they should be positioned as close as possible to each other on the opposite sides of the wall. This keeps the attenuation of the wireless signal through the wall as low as possible
- When planning, observe that the number of building materials and objects that attenuate the wireless signal strongly (e. g. concrete, glass, metal, insulated walls, water tanks, pipelines, mirrors, book cabinets, storage rooms and refrigerators) on the connection line between JUNG HOME devices is as low as possible

–   Keep a distance of at least 1 m from devices that emit high-frequency signals (e. g. microwave, motors) or run with wireless signals at 2.4 GHz (e.g. WLAN router, baby monitor, IP cameras, wireless loudspeakers etc.)

⚠ **DANGER!**

Electric shock when live parts are touched.

Electric shocks can be fatal.

Always disconnect before carrying out work on the device or load. For this, switch off all corresponding circuit breakers, secure against being switched on again and check that there is no voltage. Cover up adjacent live parts.
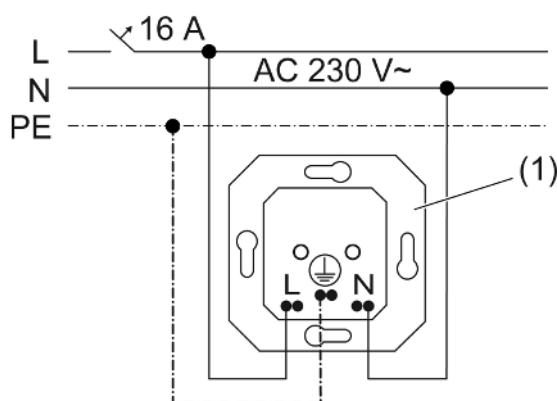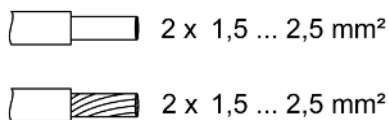

Image 2: Connection

Image 3: Clampable conductor cross-section

- Connect the socket (1) according to connection diagram (see figure 2). Observe the clampable conductor cross-sections (see figure 3).
- Install the socket in the appliance box. Observe the installation depth (see chapter "Technical data" ▶ Page 10).
- Mount the design frame (2) and cover (3) (see figure 1). Observe the correct installation position. Otherwise the socket will not function.

ⓘ   Use Frame 28 mm structure height if you have an existing appliance box with insufficient depth (see accessories)

7   Commissioning with app

Prerequisite: the JUNG HOME device has not yet been made a participant in a Bluetooth Mesh network; otherwise reset the device to factory defaults.

If a Bluetooth Mesh network (project) does not yet exist, start by creating a new project for the first JUNG HOME device in the JUNG HOME app.

If a Bluetooth Mesh network already exists, the project file for this network must be opened in order to pair the new device.

$\boxed{i}$ After switching on the mains voltage, the device is automatically in pairing mode for 2 minutes.
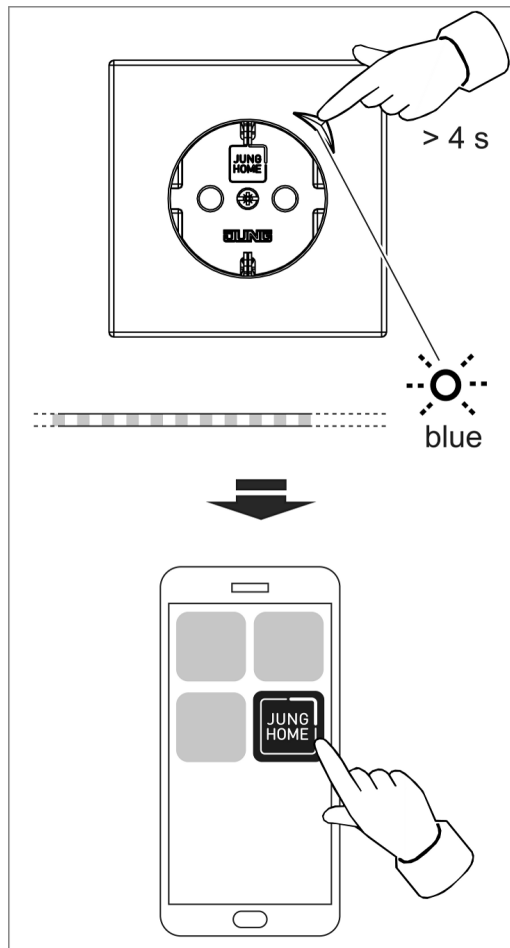
Image 4: Commissioning

- Activate pairing mode manually:
  Press the button (4) for more than 4 seconds.

  The status LED (4) flashes slowly in blue. Pairing mode is active for 2 minutes.

- Start the **JUNG HOME app**.

- The app shows all devices in pairing mode.

- Select a device in the app.

  To identify the selected device, its status LED flashes more quickly in blue.

- Add the device to the project.

  The status LED lights up in blue for 5 seconds to confirm that pairing was successful.

If the status LED flashes red very fast, pairing has failed and needs to be retried.

ⓘ The JUNG HOME app can then be used to link devices wirelessly and configure the parameters and operation (see list of functions and parameters).

ⓘ Once the commissioning of the JUNG HOME project has been completed, hand over the project file to the owner.

Besides basic commissioning, the JUNG HOME app enables device updates and convenient operation of further individual configuration options:

– Link: A button, binary input or motion sensor can be controlled by linking it to a load (e. g. dimmer, socket, switching output, shutter, etc.). Several loads can be controlled together by linking them to an area or scene.

– Area: Different loads (e. g. dimmer, socket, switching output, shutter, etc.) can be grouped in an area to allow them to be controlled together.

– Scene: Different loads (e. g. dimmer, socket, switching output, shutter, etc.) can be grouped in a scene so that, by calling up a scene, each load assumes the load status stored in the scene.

– Automatic function: An automatic function can be used to control the locally connected load (no wireless link) by means of time programs. Depending on the device type, there are further automatic functions in JUNG HOME, such as hotel function, night light function, holiday program or switching thresholds.

8 Resetting the device to the factory setting

ⓘ If the button (4) is disabled with the operating lock parameter, you can reset to the default setting only within two minutes after switching on the mains voltage.

ⓘ If the device has already been added to a project with the JUNG HOME app, it can be deleted from the app with the "delete device" function and simultaneously reset to the default setting.

If the device cannot be reset to the default settings with the app, reset the device as follows:
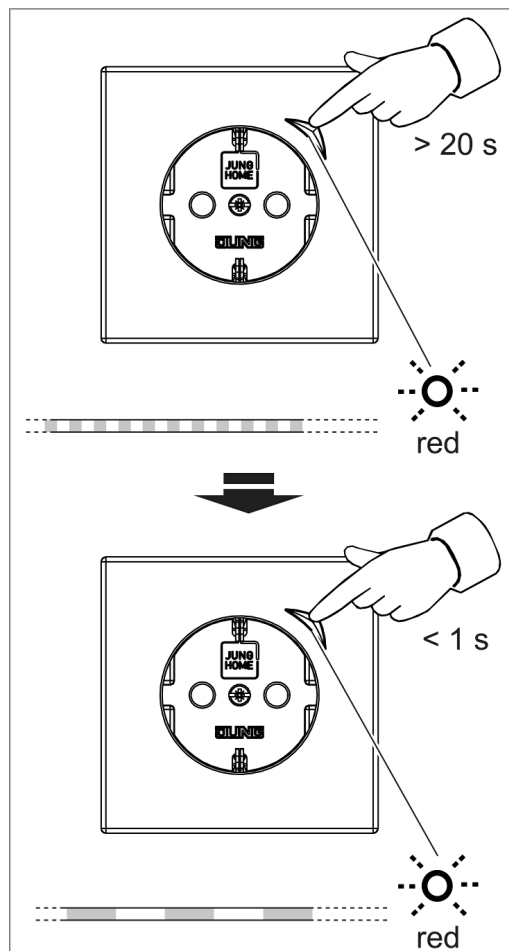
Image 5: Factory reset

- Press the button (4) for more than 20 seconds until the status LED flashes quickly in red.
- Release the button (4) and press it briefly again within 10 seconds.

   The status LED flashes in red more slowly for approx. 5 seconds. The device has been reset to the default setting.

ℹ️ After resetting the device to the default setting, it must be removed from the JUNG HOME app provided it has not already been deleted from the app.

9   Technical data

Rated voltage	AC 220 ... 250 V ~
Mains frequency	50 / 60 Hz
Standby power	max. 0.25 W
Ambient temperature	-5 ... +45°C
Transport temperature	-25 ... +70°C
Storage temperature	-5 ... +45°C
Relative humidity	20 ... 70% (no moisture condensation)
Accuracy per month	± 13 s

Power reserve	min. 4 h

ℹ️ The time is updated with every connection to the app

Measured values, only JUNG HOME SCHUKO socket Energy

Effective power	-3680 ... +3680 W
Accuracy (power)	1% ±0.1 W
Active energy	-999,999 ... 999,999 kWh

Switching current at 25 °C

Ohmic	16 A
Motors	4.3 A (@ cos φ 0.6)

Connected load

Incandescent lamps	2300 W
HV halogen lamps	2300 W
Electronic transformers	1500 W
Inductive transformers	1000 VA
HV-LED lamps	typ. 400 W
Compact fluorescent lamps	typ. 400 W
Fluorescent lamps, uncompensated	920 VA

Installation depth	45 mm
Radio frequency	2.402 ... 2.480 GHz
Transmission capacity	max. 10 mW, Class 1.5
Transmission range (inside building)	typ. 30 m

This device includes an integrated battery. At the end of its useful life, dispose of the device together with the battery in accordance with the environmental regulations. Do not throw device into household waste. Consult your local authorities about environmentally friendly disposal. According to statutory provisions, the end consumer is obligated to return the device.

10   List of functions and parameters

The JUNG HOME app can be used to configure all functions of the JUNG HOME device and its behaviour in the Bluetooth Mesh project for the respective individual purposes.

When commissioning with the app, a device is created in the app, which maps the load control with all the corresponding functions and parameters.

All devices created in the JUNG HOME app can be used independently and set separately.

⊡ button settings

Parameters	Setting options, default setting	Explanation
Behaviour of the status LED when switched on	Colour selection Default setting: green	LED colour and brightness** when load is switched on.
Behaviour of the status LED when switched off	Colour selection Default setting: orange	LED colour and brightness** when load is switched off.
Night mode**	On, off Default setting: Off	In night mode, the status LED is lit up only for max. 5 seconds after operation, not permanently. Note: If night mode is activated, it cannot be clearly seen whether the device is switched on and hence mains voltage applied to the load.
Operating lock	No lock, factory reset lock, operating lock Default setting: no lock	Factory reset lock: prevents resetting on the device and hence the removal from a project and pairing again by unauthorised persons. After the mains voltage returns, the factory reset lock is deactivated for 2 minutes. Operating lock: prevents normal operation on the device and hence the load from being controlled. This lock can be used, for example, to restrict manual access temporarily. Operation via the app remains possible. The operating lock cannot be deactivated on the device.

** Available by update in the future: You can find notes on updates and dates at www.jung.de/JUNGHOME

Load control settings ⊡

Settings for automatic functions ◷

Parameters	Setting options, Default setting	Explanations
Time programs	Load status, time and weekdays	The load status can be changed at defined times (weekdays and time) depending on the system insert.

Parameters	Setting options, Default setting	Explanations
Astro timer**	Off, sunrise or sunset Default setting: Off	The astro timer shows the sunrise and sunset times in the course of a calendar year. Depending on the location, load statuses can be changed with the position of the sun, for example to switch on the outdoor lighting at sunset and switch it off again at sunrise.
Astro timer** time shift	0 (off) ... 120 minutes before or after sunrise and sunset Default setting: Off	Astro times represent the sunrise and sunset times in the course of a calendar year. If you want the time program to be executed in the early morning before the start of twilight or only at full brightness, this can be implemented with the "sunrise" shift. If you want the time program to be executed in the evening at the start of twilight or only at full darkness, this can be implemented with the "sunset" shift. Displaces the load actuation time by the set value.
Astro timer** limit range	Off, earliest time, latest time default setting: off	To narrow the time range of an astro timer down to an earliest and/or latest execution time. For example, the garden lighting can be switched off at the latest at 9:00 pm even if the sun does not set until 10:00 pm.
Set location**	Geographic location	The astro timer in the JUNG HOME devices needs the geographic location of the project to calculate the sunrise or sunset time. The astro timer is calculated once a week for the localised place.
Only JUNG HOME SCHUKO socket Energy		

Parameters	Setting options, Default setting	Explanations
Energy consumption and operating hours of switched on load	Reading out the stored measured values kWh of the last 24 hours, reading out the stored measured values kWh of the last 31 days, resetting the energy consumption and operating hours	The energy consumption and the operating hours of the switched-on load since the last reset are displayed in the app. These values can be reset to 0 to start a new measurement. The energy consumption of the last 24 hours and the last 31 days is graphically displayed. For this purpose, the measured power is averaged over a period of 60 minutes each for the last 24 hours and over 24 hours each for the last 31 days and displayed as active energy in kWh.
Switch-on threshold	0.3 .... + 3,680 W, 1 s... 60 min Default setting: none	The loads of the JUNG HOME devices selected in the app are switched on if the power value exceeds the value set for the set period. This automatic operation can be used as a master/slave function: If the energy socket detects that a connected load is switched on, a second wirelessly linked JUNG HOME device can be switched on automatically.
Switch-off threshold	0.3 .... + 3,680 W, 1 s... 60 min Default setting: none	The loads of the JUNG HOME devices selected in the app are switched off if the power value falls below the value set for the set period. This automatic operation can be used as a power-save function. If the energy socket detects that a connected load is set to standby mode, this device can be deenergised automatically.

** Available by update in the future: You can find notes on updates and dates at www.jung.de/JUNGHOME

Additional load output settings ⊙

Parameters	Setting options, default setting	Explanation
Switch-on delay	0 s (off) ... 240 min Default setting: Off	Switches on the load after a switch-on command, delayed by the value. Repeated switch-on commands during the current delay do not start the delay again. If the load has not yet been switched on due to the delay, the load remains switched off when a switch-off command arrives.

Parameters	Setting options, default setting	Explanation
Switch-off delay	0 s (off) ... 240 min Default setting: Off	Switches off the load after a switch-off command, delayed by the value. A switch-off command during the current delay immediately switches the load off. If the load has not yet been switched off due to the delay when a switch-on command comes, then the load will remain on.
Run-on time (load)	0 s (off) ... 240 min Default setting: Off	Ensures that the load is switched off after the set run-on time expires instead of remaining permanently switched on after a switch-on command. If a movement is detected by a linked JUNG HOME sensor cover during the run-on time or the operating cover is switched on again by operating an extension or a linked JUNG HOME operating cover, the run-on time is restarted and the light remains on. The load can be switched off early during a running run-on time only if the "Manual switch-off during run-on time" parameter is set to "On" or a disabling function (continuous OFF) is started.
Manual switch-off during run-on time	Off, On Default setting: On	If this parameter is set to "On", it is possible to switch off the load manually during a current "run-on time (load)". For an automatic staircase lighting controlled by JUNG HOME operating and/or sensor covers, this parameter should be set to "Off" to prevent the light from being switched off by a second person.

Parameters	Setting options, default setting	Explanation
Presentation function**	Off, On Default setting: Off	The presentation function is used in combination with a linked JUNG HOME presence detector. The presentation function can be switched on or off with the app or a linked JUNG HOME push-button. With the presentation function switched on, the light is switched off and movements detected by a JUNG HOME presence detector are prevented from switching on the light for a defined locking time. Not only sensor signals from JUNG HOME presence detectors, but also sensor signals from JUNG HOME motion detectors, switch-on and switch-off commands via extensions, wireless control with the app and other JUNG HOME devices restart the locking time. The presentation function is automatically ended at the end of the locking time. Alternatively, the presentation function can be switched off manually.
Locking time presentation function**	3 ... 240 min Default setting: 3 min	Defines the locking time during which the light remains off with the "presentation function" switched on. Sensor signals from JUNG HOME presence detectors and JUNG HOME motion detectors, switch-on and switch-off commands via extensions, wireless control with the app and other JUNG HOME devices restart the locking time.
Minimum switching repeat time**	100 ms ... 10 s Default setting: 100 ms	Limits the switching speed of the device by increasing the value, in order to protect the connected load, for example. Only when the set time has elapsed is switching possible again. The last command during the blocking time is executed after a delay. The switching repeat time starts after each switching operation.
Behaviour after mains voltage return	Switched off, switched on, previous status Default setting: Off	Behaviour of the load output after the mains voltage returns. Note: Do not use the "switched on" setting in combination with consumers that could lead to danger to life or limb or damage to property.

Parameters	Setting options, default setting	Explanation
Disabling function (restraint guidance)**	Deactivated, continuously ON, continuously OFF, for fixed time ON/ OFF Default setting: deactivated	The disabling function switches the load output to the desired status and blocks it against control by the motion sensor, extension operation, time programs and wireless control with the app and other JUNG HOME devices. The lock applies for an adjustable time or until the disabling function is deactivated again.

** Available by update in the future: You can find notes on updates and dates at www.jung.de/JUNGHOME

11 Troubleshooting

Device has no function after mounting, status LED (4) repeatedly flashes red three times

Cause: An incorrect cover type was mounted on the insert.

There are switchable sockets BT..1521S.. and switchable measuring sockets BT..1521SE... The insert and cover must be of the same type.

Replace the cover with a cover type that matches the insert.

Load is switched off, device cannot be operated, status LED (4) repeatedly flashes red three times

Cause: The overcurrent protection has tripped, only JUNG HOME SCHUKO socket Energy.

Eliminate the cause.

Acknowledge fault via button (4). The device can then be switched on again.

12 Accessories

If you have an existing appliance box with insufficient depth:

Frame 28 mm structure height	A558..HBF..
Frame 28 mm structure height	LS98..HBF..

13 Conformity

Albrecht Jung GmbH & Co. KG hereby declares that the radio system type, art. no. BT..1521S.., BT..1521SE.. meets the directive 2014/53/EU. You can find the full article number on the device. The complete text of the EU Declaration of Conformity is available under the Internet address: www.jung.de/ce

14   Warranty

The warranty is provided by the specialist trade in accordance with statutory requirements.

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