



JUNG 429 D1 ST Room Controller Display Module Instruction Manual

[Home](#) » [JUNG](#) » JUNG 429 D1 ST Room Controller Display Module Instruction Manual 

Contents

- 1 JUNG 429 D1 ST Room Controller Display Module
- 2 Specifications
- 3 Product Usage Instructions
- 4 Device Components
- 5 Safety instructions
- 6 Device components
- 7 Intended use
- 8 Operation
- 9 Information for electrically skilled persons
- 10 Technical data
- 11 Accessories
- 12 Warranty
- 13 FAQ
- 14 Documents / Resources
 - 14.1 References
- 15 Related Posts

JUNG

JUNG 429 D1 ST Room Controller Display Module



Specifications

- **Product Name:** Room Controller Display Module
- **Model:** Art. no. 429 D1 ST
- **Manufacturer:** Jung
- **Contact Information:**
 - Telefon:** +49 2355 806-0,
 - Telefax:** +49 2355 806-204,
 - Email:** kundencenter@jung.de, Website: www.jung.de

Product Usage Instructions

Safety Instructions

Electrical devices should only be mounted and connected by electrically skilled persons to avoid serious injuries, fire, or property damage. Please read and follow the manual fully. Use only the enclosed plastic screws for fastening the device to the supporting frame to ensure safe operation. Electrostatic discharges can cause defects in the device. This manual is an integral part of the product and must remain with the customer.

Device Components

Figure 1:

1. LCD with push-button operation
2. Buttons 1 and 2
3. Operating and status LED

System Information

This device is a product of the KNX system and complies with the KNX directives. Detailed technical knowledge obtained in KNX training courses is a prerequisite for proper understanding. The device can be updated using the Jung ETS Service App (additional software). The device is KNX Data Secure capable, offering protection against manipulation in building automation. It requires detailed technical knowledge for configuration. A device certificate, attached to the device, is required for safe commissioning. Planning, installation, and commissioning of the device are carried out with the aid of the ETS, version 5.7.7 and higher or 6.1.0.

Safety instructions

- Electrical devices may be mounted and connected only by electrically skilled persons.
- Serious injuries, fire, or property damage are possible. Please read and follow the manual fully.
- Use only the enclosed plastic screws for fastening to the supporting frame! Otherwise, safe operation cannot be ensured. Electrostatic discharges can cause defects in the device.
- This manual is an integral part of the product and must remain with the customer.

Device components

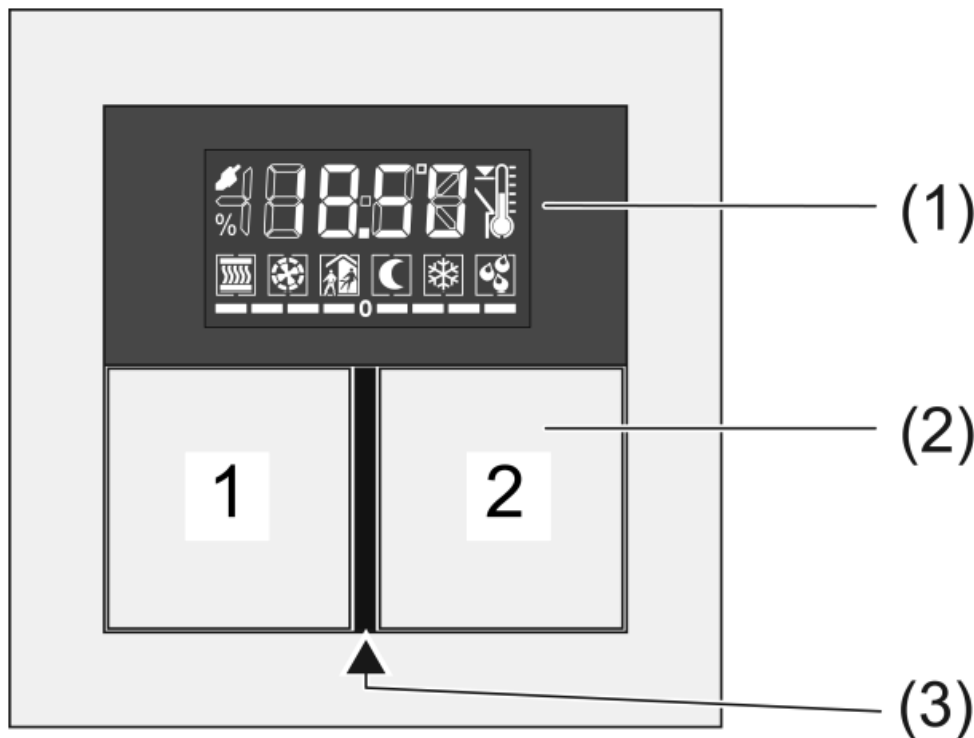


Figure 1

1. LCD with push-button operation
2. Buttons 1 and 2
3. Operating and status LED

System information

- This device is a product of the KNX system and complies with the KNX directives. Detailed technical knowledge obtained in KNX training courses is a prerequisite to proper understanding.

- The function of this device depends upon the software. Detailed information on load-able software and attainable functionality as well as the software itself can be obtained from the manufacturer's product database.
- The device can be updated. Firmware can be easily updated with the Jung ETS Service App (additional software).
- The device is KNX Data Secure capable. KNX Data Secure offers protection against manipulation in building automation and can be configured in the ETS project. Detailed technical knowledge is required. A device certificate, which is attached to the device, is required for safe commissioning. During mounting, the device certificate must be removed from the device and stored securely.
- Planning, installation, and commissioning of the device are carried out with the aid of the ETS, version 5.7.7 and higher or 6.1.0.

Intended use

- Operation of loads, e.g. light on/off, dimming, blinds up/down, brightness values, temperatures, calling up and saving light scenes, etc.
- Measurement and feedback control of the room temperature
- Mounting in appliance box according to DIN 49073

Product characteristics

All buttons can be assigned with push-button sensor functions or functions for controller operation.

- Four red status LEDs
- A blue operation LED as an orientation light to indicate the programming status
- Integrated bus coupling unit
- Completion with a set of buttons (see accessory)
- Connection of push-button sensor extension module for expansion of up to four additional buttons
- Integrated room temperature sensor
- Room temperature control with setpoint value specification
- Indication of room or setpoint temperature
- Indication of outdoor temperature – with external sensor, e.g. weather station
- Indication of time, in conjunction with KNX time encoder
- The push-button sensor functions for switching, dimming, controlling blinds, value transmitters, calling up moods, etc.
- Button function or rockers function, vertical or horizontal

Operation

Operating a function or load

























Depending on the programming, a button can have up to three functions assigned to it – upper/left, lower/right, and entire surface. Operation depends on the specific function.

- **Switch:** Short press on button.
- **Dim:** Long press on button. The dimming process ends when the button is released.
- **Move Venetian blind:** Long press on button.


- **Stop or adjust Venetian blind:** Short press on button.
- **Call up the light scene:** Short press on the button.
- **Save light scene:** Long press on the button.
- **Set value, e.g. brightness or temperature setpoint:** Short press on button.



Operating modes and indication icons

The device compares the current room temperature with the setpoint temperature and controls heating or cooling devices according to the current demand. The set-point temperature depends on the current operating mode and can be changed by the user, depending on the programming. The operating modes and the current controller status are shown in the display.

-  Operating mode Comfort
-  Operating mode Standby
-  Operating mode Night
-  Operating mode Frost/heat protection
- The  icon flashes if the room temperature drops below 5 °C / 41 °F.
-  Dewpoint operation indication; controller blocked
-   Comfort extension, night
-   Comfort extension, frost protection
-   ...  Fan controller with fan level indication.  = Fan off.
-  Manual fan control
-   ...  Heating mode with heating stage indication
-   ...  Cooling mode with cooling step indication
-  Indoor temperature
-  Outdoor temperature
-  Setpoint temperature
- ...--0 or 0--....: Setpoint temperature reduced or increased manually

When switched on, the display shows, next to the icon for the current operating mode, either:

- the current time: the seconds mark flashes.
- the current room temperature: icon 

- the current outdoor temperature: icon 
- the current setpoint temperature: icon 

The display switches the information over automatically or at the press of a button, depending on the programming.

Second operating level

In the second operating level, the following settings are available in sequence. Some items are not visible, depending on the programming of the device.

- Presence mode
- Setpoint shift
- Basic temperature for Comfort mode
- Lowering for standby mode, heating
- Raising for standby mode, cooling
- Lowering for night mode, heating
- Raising for night mode, cooling
- Changing the operating mode
- Fan controller
- Time indication
- Current room temperature indication
- Current temperature setpoint indication
- Current outdoor temperature indication
- Display contrast
- Display illumination
- OK – Exit and save settings
- ESC – Exit without saving settings

Operating second operating level

The second operating level is programmed and not disabled.

- **Open:** Simultaneously press buttons 1 and 2 at the top left (see figure 1).
- Press button 1 at the top or bottom.
The current setting is switched or the displayed value is increased or decreased.
- Press button 2 at the top or bottom.
The display switches to the previous or next menu entry.

Information for electrically skilled persons

Mounting and electrical connection

DANGER

- The electric shock when live parts are touched.

- Electric shocks can be fatal.
- Cover up live parts in the installation environment.

Snapping on the adapter frame

The adapter frame is required depending on the switch design range.

- With the adapter frame (7) in the correct orientation, snap it from the front onto the module (8) (see figure 2).
Note marking TOP =.

Mounting and connecting the device

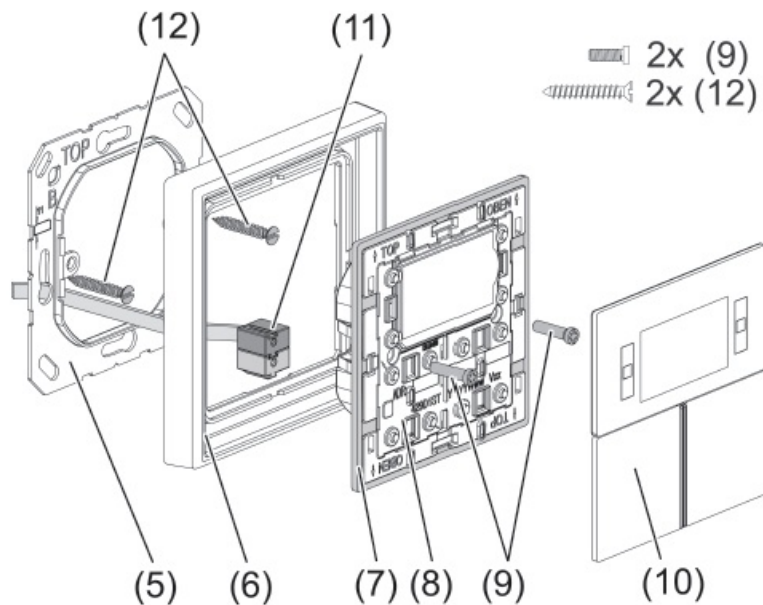


Figure 2: Mounting the controller module

1. Supporting frame
2. Design frame
3. Adapter frame
4. Controller module
5. Fastening screws
6. Design control surfaces
7. KNX device connection terminal
8. Box screws

Supporting frame side A for A design ranges, CD design ranges, and FD design. Supporting frame side B for LS design ranges.

- **Recommended installation height:** 1.50 m.

When the push-button sensor extension module is used (see Figure 3): preferably mounted vertically. Use a large supporting frame (13). When mounting on only one appliance box, countersink the lower screws into the wall, e.g. with a $\varnothing 6 \times 10$ mm hole. Use a supporting frame as a template.

DANGER!

When mounting with 230 V devices under a common cover, e.g. socket outlets, there is a danger of electrical shocks in the event of a fault! Electric shocks can be fatal. Do not install any 230 V devices in combination with a push-button sensor extension module under a common cover!

- Mount supporting frame (5) or (13) in the correct position onto an appliance box. Note marking TOP = at the top; marking A or B in front. Use only the enclosed box screws (12).
- Push frame (6) onto the supporting frame.
- Mount the push-button sensor extension module (14) preferably below. Route connecting cable (16) between supporting frame and intermediate web.
- Push-button sensor extension module: Insert connecting cable (16) in the correct orientation into slot (15) in the controller module. Do not crimp the connection cable (see figure 3).
- Connect the controller module (8) to the KNX using the KNX device connection terminal (11) and push it onto the supporting frame.
- Fasten the controller module (8) and push-button sensor extension module (12) to the supporting frame using the enclosed plastic screws (9). Tighten the plastic screws only lightly.
- Before mounting the control surfaces (10), load the physical address into the device (see Chapter 5.2. commissioning).

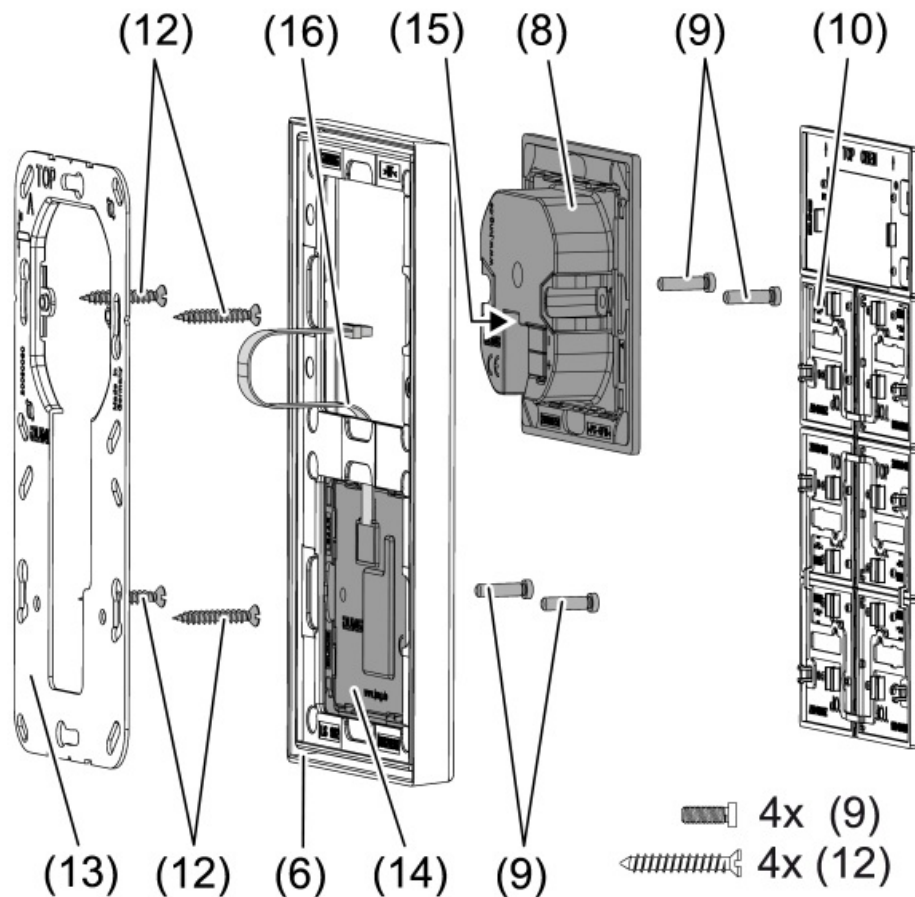


Figure 3: Mounting with push-button sensor extension module

- Supporting frame for mounting with push-button sensor extension module
- Extension module push-button sensor
- Slot for push-button sensor extension module
- Push-button sensor extension module connecting cable

Commissioning

Preconditions in secure operation

- Secure commissioning is activated in the ETS.
- Device certificate entered/scanned or added to the ETS project. A high-resolution camera should be used to scan the QR code.
- Document all passwords and keep them safe.

Programming the physical address and application software

- Project design and commissioning with ETS version 5.7.7 and higher or 6.1.0. The device is connected and ready for operation.

The buttons are not mounted yet.

If the device does not receive any application software or the wrong application software, then the blue operation LED flashes slowly.

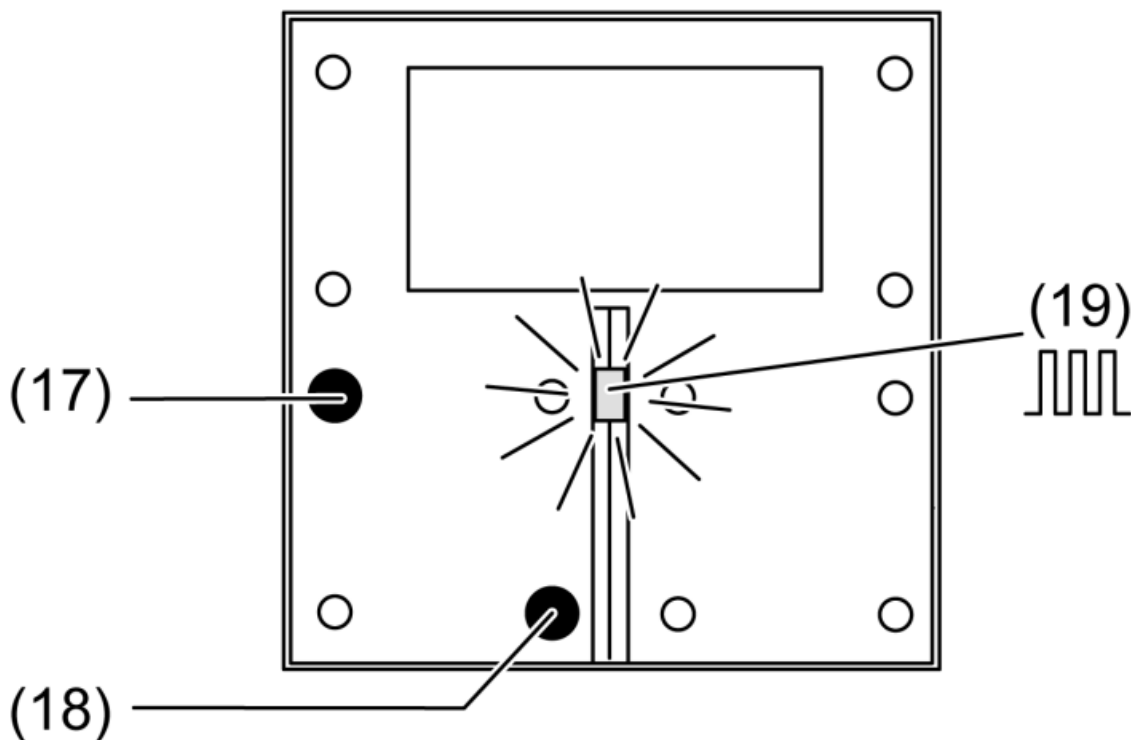


Figure 4: Activating programming mode

- Activate programming mode: Press and hold push button (17) (see Figure 4). Then press the push-button (18). The operation LED (19) flashes quickly.
- Programming the physical address. The operation LED (19) returns to its previous state – off, on, or flashing slowly.
- Programming the application program. The operation LED flashes slowly (approx. 0.75 Hz) while the application program is programmed.

Fitting the control surfaces

- The buttons (10) are available as a complete set of buttons. Individual buttons can be replaced using buttons

with icons.

The physical address is loaded into the device.

Place the buttons (10) on the device in the correct orientation and snap in with a short push.

Note marking TOP =.

Safe-state mode

- The safe-state mode stops the execution of the loaded application program.
- If the device does not work properly – for instance as a result of errors in the project design or during commissioning – the execution of the loaded application program can be halted by activating the safe-state mode. The device remains passive in safe-state mode, since the application program is not being executed (state of execution: terminated).
- Only the system software of the device is still functional. ETS diagnosis functions and programming of the device are possible.

Activating safe-state mode

- Switch off the bus voltage.
- Press and hold down the top left and bottom right buttons.
- Switch on the bus voltage.

The safe-state mode is activated. The operation LED flashes slowly (approx. 1 Hz).

Do not release the buttons until the operation LED flashes.

Deactivating safe-state mode

Switch off the voltage or carry out ETS programming.

Master reset

- The master reset restores the basic device settings (physical address 15.15.255, firmware remains in place). The device must then be recommissioned with the ETS.
- In secure operation: A master reset deactivates device security. The device can then be recommissioned with the device certificate.
- If the device – for instance as a result of errors in the project design or during commissioning – does not work properly, the loaded application program can be deleted from the device by performing a master reset. The master reset resets the device to delivery state. Afterward, the device can be put into operation again by programming the physical address and application program.

Performing a master reset

Precondition: The safe-state mode is activated.

- Press and hold down the push button (20) . Then press the push-button (21) for longer than 5 seconds until the operation LED flashes quickly (approx. 4 Hz).
- Release the buttons.
 - The device performs a master reset.

- The device restarts. The operation LED flashes slowly.

Resetting the device to its default settings

Devices can be reset to factory settings with the ETS Service App. This function uses the firmware contained in the device that was active at the time of delivery (delivered state). Restoring the factory settings causes the devices to lose their physical address and configuration.

Flashing frequencies of the LEDs

State of operation	Operation LED	Status LED
Application discharged	Approx. 0.75 Hz	With On button pressed
Safe-state mode	Approx. 1 Hz	—
Flashing status	Approx. 2 Hz	Approx. 2 Hz
Alarm signal	Approx. 2 Hz	Approx. 2 Hz
Master reset	Approx. 4 Hz	—
Programming mode	Approx. 8 Hz	—
Full-surface operation	—	Approx. 8 Hz

Technical data

- **KNX medium** TP256
- **Safety** KNX Data Secure (X-mode)
- **Commissioning mode** S mode
- **Rated voltage** KNX DC 21 ... 32 V SELV
- **Current consumption** KNX
 - **Without extension module:** 9 ... 12 mA
 - **With extension module:** 12 ... 15 mA
- **Connection mode** KNX Device connection terminal
- **Connecting cable** KNX EIB-Y (St)Y 2x2x0.8
- **Protection class** III
- **Measuring range** -5 ... +45°C
- **Ambient temperature** -5 ... +45°C
- **Storage/transport temperature** -25 ... +70°C

Accessories

- **Cover kit for Room controller module** Art. no.: ..4093 TSA..
- **Push-button extension module, 1-gang** Art. no.: 4091 TSEM
- **Push-button extension module, 2-gang** Art. no.: 4092 TSEM
- **Push-button extension module, 3-gang** Art. no.: 4093 TSEM
- **Push-button extension module, 4-gang** Art. no.: 4094 TSEM
- **Cover kit 1-gang** Art. no.: ..401 TSA..

- **Cover kit 2-gang Art. no.:** ..402 TSA..
- **Cover kit 3-gang Art. no.:** ..403 TSA..
- **Cover kit 4-gang Art. no.:** ..404 TSA..

Warranty

The warranty is provided by the specialist trade under statutory requirements.


FAQ

- **Q: How can I update the firmware of the device?**
 - A: The firmware of the device can be easily updated using the Jung ETS Service App (additional software).
- **Q: What is KNX Data Secure and how can it be configured?**
 - A: KNX Data Secure is a feature that offers protection against manipulation in building automation. It can be configured in the ETS project. Detailed technical knowledge is required for configuration.
- **Q: What version of ETS is required for planning, installation, and commissioning?**
 - A: The device requires ETS version 5.7.7 and higher or 6.1.0 for planning, installation, and commissioning

ALBRECHT JUNG GMBH & CO. KG

- Volmestraße 1 58579 Schalksmühle GERMANY
- **Telefon:** +49 2355 806-0
- **Telefax:** +49 2355 806-204
- kundencenter@jung.de
- www.jung.de

Documents / Resources

	<p>JUNG 429 D1 ST Room Controller Display Module [pdf] Instruction Manual 429 D1 ST Room Controller Display Module, 429 D1 ST, Room Controller Display Module, Controller Display Module, Display Module</p>
---	--

References

-  [JUNG - Switches and systems](#)

- [User Manual](#)

[Manuals+](#), [Privacy Policy](#)

This website is an independent publication and is neither affiliated with nor endorsed by any of the trademark owners. The "Bluetooth®" word mark and logos are registered trademarks owned by Bluetooth SIG, Inc. The "Wi-Fi®" word mark and logos are registered trademarks owned by the Wi-Fi Alliance. Any use of these marks on this website does not imply any affiliation with or endorsement.