Schneider

Central unit insert

Operating instructions



Art. no. MTN5190-0000

Necessary accessories

- To be completed with:
- corresponding modules (see function overview).

Accessories

- PlusLink Expander (Art. no. CCTDT5130)
- PlusLink distributor (3 cycles) (Art. no. MTN5130-0001)

For your safety

∆ DANGER

Risk of serious damage to property and personal injury, e.g. from fire or electric shock, due to incorrect electrical installation.

Safe electrical installation can only be ensured if the person in question can prove basic knowledge in the following areas:

- Connecting to installation networks
- · Connecting several electrical devices
- Laying electric cables

These skills and experience are normally only possessed by skilled professionals who are trained in the field of electrical installation technology. If these minimum requirements are not met or are disregarded in any way, you will be solely liable for any damage to property or personal injury.

DANGER

Risk of death from electric shock.

The PlusLink carries an electrical current even when the device is switched off. Before working on the device, always disconnect it from the supply by means of the fuse in the incoming circuit. If one or more PlusLink lines are separately fused in your installation then they are not electrically isolated from one another. In this case, you should use the PlusLink Expander.

The device can become damaged.

The voltage difference between different phases can damage the device.

Connect all connected devices of one or several PlusLink lines to the same phase or use a PlusLink terminal for cross-phase installation.

Getting to know the central unit insert

Using the central unit insert, you can control all receiving

devices in up to four **PlusLink** lines.

Receiving devices include, for example, the following inserts completed with corresponding modules:

- Electronic switch insert, 1-gang/2-gang
- Relay switch insert, 1-gang/2-gang
- Universal dimmer insert, 1-gang/2-gang
- Blind control insert
- DALI insert
- 1-10 V insert

The central unit insert has four PlusLink outputs for connecting to the PlusLink lines. To be able to use the **PlusLink (PL)**, you require a separate core in your installation for each PlusLink line.

You can execute the following functions, for example, with the central unit insert in conjunction with the respective modules:

- Global light and blind control
- Lamps: switching on/off, dimming Blinds/roller shutters: raising/lowering, up/down in steps
- calling up, changing and saving global light and blind scenes

When the scene is called up, the saved brightness values or position values for the blind for all connected devices of the PL lines are activated. It is possible to change the scenes according to your wishes and save them.

Further options: see function overview

Alternatively, you can connect a mechanical push-button (panic button) to the PL1 output. When the panic button is pressed, a panic scene is called up for all connected devices of the PL lines. It is possible to change and save the panic scene. You can choose between the set values of "on/off" for lightscenes and "up/down" for blind scenes.

The central unit insert may become damaged.

Always operate the central unit insert within with the specified technical data.

Function overview of the central unit insert complete with relevant modules

Complete the central unit insert with relevant modules in order to carry out **global** light and blind control via the **PlusLink (PL)**.

The modules control up to 4 PL lines at the same time. The display timer module can control each line separately.

Module:	Global functions:
Push-button module Ba- sic, 1-gang	 switching on/off
	 dimming
	 raising/lowering
Push-button module Ba- sic, 2-gang	 switching on/off
	 dimming
	 raising/lowering
	 calling up and saving light and blind scenes
Push-button module Comfort, 1-gang	 switching on/off
	 dimming
	 raising/lowering
	 staircase lighting function
Push-button module Comfort, 2-gang	 switching on/off
	 dimming
	 raising/lowering
	 calling up and saving light and blind scenes
	 staircase lighting function

Wiser push-button mod-	 switching on/off
ule, 1-gang	 dimming
	 raising/lowering
	Additional app functions:
	 Timer (e.g. staircase light- ing)
	Time switch
Wiser push-button mod-	 switching on/off
ule, 2-gang	dimming
	 raising/lowering
	 calling up and saving light and blind scenes
	Additional app functions:
	 Timer (e.g. staircase light- ing)
	Time switch
ARGUS 180 flush-mount- ed sensor module	 movement detection in- dependent of brightness and sending of a trigger command
ARGUS 180 flush-mount- ed sensor module with switch	 movement detection in- dependent of brightness and sending of a trigger command
Display timer module	manual control for all PL lines together: switching, dimming, low- ering/raising (push-button function) or retrieving scenes (scene function)
	time-controlled for all PL lines together or each PL line separately: switching, raising/lower- ing

You can set the additional app functions via the Wiser Room App. Detailed information on the operation of the app can be found in the in-app help.

Understanding PlusLink

What you need to know about the PlusLink:

• To be able to use the PL, you require a separate core for each PL line in your installation.

Recommended cables for PL installation	Maximum total cable sections in a PL line
NYM-J 3x1.5 mm ²	100 m
NYM-J 4x1.5 mm ²	80 m
NYM-J 5x1.5 mm ²	65 m

- All devices connected to one or more PL lines must be connected to the same phase. The PlusLink terminal is required for cross-phase installation.
- · The PL carries mains voltage
- The PL transfers the commands from the sending devices to the receiving devices. Individual addressing of the devices in the PL line is not possible. All devices are always activated at the same time.
- A maximum of 10 sending and 10 receiving devices can be connected to a PL line.
- The PL is not subject to prioritisation. Each new command overwrites the previous one.
- · No separate software is required for using the PL.

Installing the central unit insert

Wiring the insert for the application required



In one PlusLink line, use either only devices for light control or only devices for blind control.

Sample installations for use in combination with receiving devices



- A Central unit insert
- B PL line 1: Mechanical push-button (panic button)
- © PL line 2: Blind control (blind control insert with relevant modules)
- PL line 3: Light control (e.g. universal dimmer insert, DALI insert with respective modules)
- E PL line 4: Light control (e.g. relay switch insert, electronic switch insert)
- $\ensuremath{\textcircled{}}$ $\ensuremath{\textcircled{}}$ Side controller Plus

Installing the central unit insert



- A Central unit insert
- B Frame
- © Module (see function overview)
- D Rockers for module

Operating the central unit: global light and blind control via PlusLink

The insert is shown here in operation in combination with a push-button module. More details on how to operate the various modules can be found in the corresponding operating instructions. "Blind/roller shutter" will be referred to below as just "blind".

Global light control

Example of switching on/off and dimming up to four PL lines:

- When the push-button module on the central unit insert is pressed, all loads in the PL line are controlled together.
- Short press on the push-button (< 0.5 s): switching on/ off, starting staircase lighting function
- Long press on the push-button (> 0.5 s): dimming



- A Push-button module on central unit insert
- (B) For example: electronic switch insert, relay switch insert, universal dimmer insert, DALI insert, or 1-10 V insert

Example of staircase lighting function in up to four PL lines

If the sensor module A on the central unit insert detects a movement, it sends a trigger command to all local sensor modules B in the PL lines.

The local sensor modules check the ambient brightness. The staircase lighting function only starts if the brightness level is below the set brightness threshold.



- A Sensor module on central unit insert
- B Sensor module in PL line

Global blind control

Example of raising/lowering and up/down in steps of upto 4 PL lines

When the display timer module on the central unit insert is pressed, all loads in the PL lines are controlled together:

- Long press on the push-button (> 0.5 s): raising/lowering
- Short press on the push-button (< 0.5 s): up/down in steps



- A Display timer module on central unit insert
- B Blind control insert

Operating the central unit: retrieving, changing and saving global scenes via PlusLink

(only with push-button module, 2-gang)

When you save a scene, this affects all connected devices of the PL lines.

Proceed as follows to change and save a scene according to your requirements:

- (1) Change the states of individual devices in the light and/or blind scene.
- 2 Save the scene.

Retrieving global light or blind scenes

Standard scenes

All receiving devices are delivered from the factory with presettings for a light or blind scene.

- S1: Light on (100%) / blind up
- S2: Light off / blind down

Panic button: Light on (100%) / blind down

- ① Retrieve scene: Press the S1 or S2 push-button briefly.
- The devices of the light scene adopt the saved brightness value.
- The devices of the blind scene initially move to the uppermost position. After the set running time has
 elapsed (the standard is 2 minutes), the blinds move
 to the saved position.



- A Central unit insert
- B Mechanical push-button (panic button)
- © PL line with blind scene: Blind control insert
- PL line with light scene: e.g. electronic switch insert, relay switch insert, universal dimmer insert, DALI insert or 1-10 V insert
- (E) PL line with light scene: e.g. electronic switch insert, relay switch insert, universal dimmer insert, DALI insert or 1-10 V insert

Changing and saving light scenes

Using a dimmer as example:



- ① Set the brightness values of the lamps that you want to change on the receiving device.
- ② Save scene: Press the S1 or S2 push-button for a long time.

All lamps are switched off briefly and then back on again to indicate that the saving procedure was successful. Then the lamps adopt the saved brightness value.

Changing and saving blind scenes

In combination with the push-button module Basic on the receiving insert, you can only save the fixed position values of "up/down" ((1)(A)) for blind scenes. In combination with the push-button modules Comfort and Wiser on the receiving insert, you can save any position values ((1)(B)).



- A Set the positions (fully up/down) of the blinds that you want to change on the receiving device.
 B Set the positions (any values) of the blinds that
- you want to change on the receiving device. ② Save scene: Press the S1 or S2 push-button for a
- long time.

The blinds are lowered and raised by one step to indicate that the saving procedure was successful.

Retrieving panic scenes

Standard scenes

All devices are delivered from the factory with presettings for a panic scene.

- Panic button: Light on (100 %) / blind down / switching duration = 30 minutes
- ① Retrieve panic scene: press the panic button briefly.



- A Central unit insert
- B Mechanical push-button (panic button)
- C PL line with panic scene: e.g. electronic switch insert, relay switch insert, universal dimmer insert, DALI insert, or 1-10 V insert
- D PL line with panic scene: Blind control insert

Changing and saving panic scenes

In the case of panic scenes, you can only save start and end values such as "on/off" for the lightscene or "up/ down" for the blind scene.







- ① Retrieve panic scene: short press on the mechanical push-button (panic button).
- (2) Set the positions (up/down) of the blinds that you want to change on the receiving device.
- ③ Set the brightness values (on/off) of the lamps that you want to change on the receiving device.
- ④ Save the panic scene: long press on the mechanical push-button (panic button).

The blinds move down a step and then back up to indicate that the saving procedure has been successful. The lamps are switched off briefly and then back on again, and then return to their saved brightness value.

1 The panic scene has the same priority as the global scenes of the central unit insert.

Technical data

Nominal voltage:	AC 220/230 V ~, 50/60 Hz
Neutral conductor:	required
Output:	4 x PlusLink
Connecting terminals:	Screw terminals for max. $2x 2.5$ mm ² or $2x 1.5$ mm ²
Protection:	max. 16 A circuit breaker



Dispose of the device separately from household waste at an official collection point. Professional recycling protects people and the environment against potential negative effects.

Schneider Electric Industries SAS

If you have technical questions, please contact the Customer Care Centre in your country. schneider-electric.com/contact