SIEMENS

Industrial controls

Command and signaling devices SIRIUS 8WD46 electronically configurable signaling columns

Configuration Manual

11/2023
A5E51600296002A/RS-AB/002

Legal information

Warning notice system

This manual contains notices you have to observe in order to ensure your personal safety, as well as to prevent damage to property. The notices referring to your personal safety are highlighted in the manual by a safety alert symbol, notices referring only to property damage have no safety alert symbol. These notices shown below are graded according to the degree of danger.

⚠ DANGER

indicates that death or severe personal injury **will** result if proper precautions are not taken.

⚠ WARNING

indicates that death or severe personal injury **may** result if proper precautions are not taken.

⚠ CAUTION

indicates that minor personal injury can result if proper precautions are not taken.

NOTICE

indicates that property damage can result if proper precautions are not taken.

If more than one degree of danger is present, the warning notice representing the highest degree of danger will be used. A notice warning of injury to persons with a safety alert symbol may also include a warning relating to property damage.

Qualified Personnel

The product/system described in this documentation may be operated only by **personnel qualified** for the specific task in accordance with the relevant documentation, in particular its warning notices and safety instructions. Qualified personnel are those who, based on their training and experience, are capable of identifying risks and avoiding potential hazards when working with these products/systems.

Proper use of Siemens products

Note the following:

⚠ WARNING

Siemens products may only be used for the applications described in the catalog and in the relevant technical documentation. If products and components from other manufacturers are used, these must be recommended or approved by Siemens. Proper transport, storage, installation, assembly, commissioning, operation and maintenance are required to ensure that the products operate safely and without any problems. The permissible ambient conditions must be complied with. The information in the relevant documentation must be observed.

Trademarks

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Disclaimer of Liability

We have reviewed the contents of this publication to ensure consistency with the hardware and software described. Since variance cannot be precluded entirely, we cannot guarantee full consistency. However, the information in this publication is reviewed regularly and any necessary corrections are included in subsequent editions.

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Ⓟ 12/2023 Subject to change

Table of contents

Introduction

1

1.1 Purpose of this documentation

This manual describes the possible uses of the 8WD46 electronically configurable signaling columns.

In order to provide users with the information they need to operate the system safely, this manual provides a general explanation regarding operating principles, selection, and installation.

1.2 Target group

This documentation contains information for the following target groups:

- Decision makers
- Technologists
- Project planning engineers
- Commissioning engineers

1.3 Required knowledge

A general knowledge of the following areas is needed in order to understand this documentation:

- Low-voltage controls
- Digital circuit logic
- Automation systems
- IO-Link
- Safety and security systems

1.4 Siemens Industry Online Support

Information and service

At Siemens Industry Online Support you can obtain up-to-date information from our global support database:

- Product support
- Application examples
- Forum
- mySupport

Link: Siemens Industry Online Support (https://support.industry.siemens.com/cs/de/en)

Product support

You can find information and comprehensive know-how covering all aspects of your product here:

- **FAQs**
  Answers to frequently asked questions
- **Manuals/operating instructions**
  Read online or download, available as PDF or individually configurable.
- **Certificates**
  Clearly sorted according to approving authority, type and country.
- **Characteristics**
  For support in planning and configuring your system.
- **Product announcements**
  The latest information and news concerning our products.
- **Downloads**
  Here you will find updates, service packs, HSPs and much more for your product.
- **Application examples**
  Function blocks, background and system descriptions, performance statements, demonstration systems, and application examples, clearly explained and represented.
- **Technical data**
  Technical product data for support in planning and implementing your project

Link: Product support (https://support.industry.siemens.com/cs/ww/en/ps)

mySupport

The following functions are available in your personal work area "mySupport":

- **Support Request**
  Search for request number, product or subject
- **My filters**
  With filters, you limit the content of the online support to different focal points.

- **My favorites**
  With favorites you bookmark articles and products that you need frequently.
- **My notifications**
  Your personal mailbox for exchanging information and managing your contacts. You can compile your own individual newsletter in the "Notifications" section.
- **My products**
  With product lists you can virtually map your control cabinet, your system or your entire automation project.
- **My documentation**
  Configure your individual documentation from different manuals.
- **CAx data**
  Easy access to CAx data, e.g. 3D models, 2D dimension drawings, EPLAN macros, device circuit diagrams
- **My IBase registrations**
  Register your Siemens products, systems and software.

1.5 Siemens Industry Online Support app

Siemens Industry Online Support app

The Siemens Industry Online Support app provides you access to all the device-specific information available on the Siemens Industry Online Support portal for a particular article number, such as operating instructions, manuals, data sheets, FAQs etc.

The Siemens Industry Online Support app is available for Android and iOS:

Android

iOS

1.6 Support Request

After you have registered, you can use the Support Request form in the online support to send your question directly to Technical Support:

Support Request:	Internet (https://www.siemens.com/support-request)

Safety instructions

2

2.1 Warning concerning misuse

NOTICE
Warning of damage to property Make sure that the equipment is used correctly and as intended, otherwise material damage cannot be ruled out. Tampering with the equipment may impair its function.

⚠ WARNING
Warning of personal injury. Risk of hearing damage When using the signaling column with acoustic elements, do not remain for prolonged periods in the immediate vicinity if the acoustic alarm is sounding. This can lead to hearing damage.

2.2 Important notes

The products described here have been developed to perform safety-related functions as part of an overall system or machine. A complete safety-oriented system generally features sensors, evaluation units, signaling units, and reliable shutdown concepts. It is the responsibility of the manufacturer to ensure that a system or machine is functioning properly as a whole. Siemens AG, its regional offices, and associated companies (hereinafter referred to as "Siemens") cannot guarantee all the properties of an overall installation or machine that has not been designed by Siemens. Nor can Siemens assume liability for recommendations that appear or are implied in the following description. No new guarantee, warranty, or liability claims beyond the scope of the Siemens general terms of supply are to be derived or inferred from the following description.

2.3 Before commencing work: Isolating the equipment from the supply system and ensuring that it cannot be reconnected.

⚠ DANGER

Hazardous voltage Will cause death or serious injury.

- Disconnect the system and all devices from the power supply before starting work.
- Secure against switching on again.
- Verify that the equipment is not live.
- Ground and short-circuit.
- Erect barriers around or cover adjacent live parts.

⚠ DANGER

Hazardous voltage Will cause death or serious injury.

Qualified Personnel.

The device / system may only be commissioned and operated by qualified personnel. For the purpose of the safety information in these operating instructions, a "qualified person" is someone who is authorized to energize, ground, and tag devices, systems, and circuits in accordance with established safety procedures.

2.4 Recycling and disposal

For environmentally-friendly recycling and disposal of your old device, contact a company certified for the disposal of used electrical and electronic equipment, and dispose of the device as specified in the regulations for your particular country.

2.5 Cybersecurity information

Siemens provides products and solutions with industrial cybersecurity functions that support the secure operation of plants, systems, machines and networks.

In order to protect plants, systems, machines and networks against cyber threats, it is necessary to implement – and continuously maintain – a holistic, state-of-the-art industrial cybersecurity concept. Siemens' products and solutions constitute one element of such a concept.

Customers are responsible for preventing unauthorized access to their plants, systems, machines and networks. Such systems, machines and components should only be connected to an enterprise network or the internet if and to the extent such a connection is necessary and only when appropriate security measures (e.g. firewalls and/or network segmentation) are in place.

For additional information on industrial cybersecurity measures that may be implemented, please visit
https://www.siemens.com/cybersecurity-industry.

Siemens' products and solutions undergo continuous development to make them more secure. Siemens strongly recommends that product updates are applied as soon as they are available and that the latest product versions are used. Use of product versions that are no longer supported, and failure to apply the latest updates may increase customer's exposure to cyber threats.

To stay informed about product updates, subscribe to the Siemens Industrial Cybersecurity RSS Feed under
https://new.siemens.com/cert.

Product description

3

3.1 Product overview

Product overview of the electronically configurable 8WD46 signaling columns

				
IO-Link -Variants	8WD4615-5JH47	8WD4615-5HH47	8WD4613-5JH47	8WD4613-5JH47
Conventional 24 V variant	8WD4615-5JH37	8WD4615-5HH37	8WD4613-5JH37	8WD4613-5HH37
Acoustic element	✓	---	✓	---

3.2 Application areas

Electronically configurable signaling columns are used on machines or in automatic processes for monitoring complex procedures, as visual or acoustic warning devices in emergency situations, or for displaying individual production stages.

Application areas

- Metal and mining industry
- Food and beverage industry
- Automotive industry
- Mechanical engineering
- Pharmaceuticals
- Infrastructure / building management systems

Typical areas of application

- Conveyor belts
- Conveying systems
- Packing stations
- Bottling and packaging
- Manufacturing and assembly lines

3.3 Intended purpose and use

Areas of application

8WD46 signaling columns are used in machines or in automatic processes for monitoring complex procedures or as visual or acoustic warning devices in emergency situations, e.g. for displaying individual assembly stages.

Communication capability of IO-Link variant

The IO Device Description (IODD) provides a full, transparent description of system characteristics as far as the IO-Link device. The IODD contains information about communication properties, device parameters, identification data, process data, and diagnostics data (Importing the IODD (Page 89)).

3.4 Function

Mode of operation and properties of the electronically configurable 8WD46 signaling columns

- Thermoplastic enclosure, diameter 72 mm
- With 9 or 15 segments (adjustable number of segments per tier)
- With or without acoustic element
- High degree of protection IP66/IP69 (IP69K), NEMA 4, 4X, 12, 13
- Connection via 4-pin or 8-pin M12 plugs
- Configuration via IO-Link interface or USB-C interface
- Integration into the TIA-Portal via IO-Link

Benefits

Choice of various light and acoustic signals with different functions:

- Light elements with multicolor LEDs
- Variety of colors: > 1 million
- Continuous, blink, flash, and rotating lights; siren
- Volume adjustable up to 105 dB
- Ten configurable sounds
- Extremely resistant to shock and vibrations
- Simple configuration and fast connection using M12 plugs
- No wiring required
- No special tools needed
- Communication capability via connection to IO-Link

More information

www.siemens.de/sirius-signalsaeulen

www.siemens.com/sirius-signaling-columns

https://mall.industry.siemens.com/mall/de/de/Catalog/Products/10436637?tree=CatalogTree

https://mall.industry.siemens.com/mall/en/de/Catalog/Products/10436637?tree=CatalogTree

3.5 Recommendation for the color assignment

Recommended color sequence

Service personnel with poor color vision will find it easier to recognize the meaning indicated by the illuminated position if a predefined color sequence is used.

As with traffic lights, operating personnel often use not only the color, but also the position of the lighting for orientation. In this case, the importance of the information diminishes from top to bottom.

The following color sequence (from top to bottom) is recommended for the assigned statuses:

Color	Meaning	Explanation	Resulting action
Red	Emergency	Hazardous condition	Immediate action required to deal with hazardous condition
Yellow	Abnormal	Impending critical condition	Monitoring and/or intervention
Blue	Mandatory	Indication of condition that requires action	Mandatory action
Green	Normal	Normal condition	Optional actions
White	Neutral	Further operating states that are not covered by red, yellow, blue, or green	Monitoring

3.6 Recommendation for flashing signaling columns

Flashing lights can be used for the following purposes:

- To attract attention
- To request immediate action
- To indicate a discrepancy between the command and actual states
- To indicate a change in process (flashing during transition)

For more information about flashing frequencies and pulse/pause ratios, please refer to IEC 61310-1 "Safety of machinery - Indication, marking and acuation".

Note

Note the urgency levels

For higher urgency levels, we recommend using higher flashing rates (see IEC 60073).

If flashing lights or displays are to display higher-priority information, an audible warning should also be considered.

Planning / configuring

4

4.1 Configuration options

Available operating modes

Mode: Signaling column	Mode: Autoscale	Mode: Filling level	Mode: Individual
Individual segments can be combined to create a signal column tier. The tiers have fixed positions and can be off if the corresponding tier and optical signal is not triggered.	The segments are automatically and uniformly distributed among the number of controlled pins and status messages. If the segments cannot be uniformly distributed, the color with the highest priority will be assigned to the last segment.	• The segments are used as filling level indicators. • From 0% (all segments are switched off) up to 100% (all segments are activated). Examples: Progress of order, tank liquid level, material quantity	Each segment can be set and controlled individually, thus allowing the maximum number of individual signaling options.

Optical configuration options

Colors	Brightness	Light effect
• Eight preset colors: – Red – Green – yellow – Blue – white – turquoise – violet – light yellow	The brightness can be adjusted for each tier.	Optical states: • Flashing light • Flashlight (single, double, and triple flashes) • Continuous • Rotating light element One illumination profile can be selected for each tier.
• Custom color configuration > 1 million colors		

Acoustic configuration options (siren)

Sounds	Volume
Ten preset sounds can be individually customized.	• 80 to 105 dB • Four different volume levels can be set

4.2 Planning / configuring - conventional 24 V variant

4.2.1 System requirements

The following system requirements must be met:

- Windows 10 x86/x64 operating system
- Current Windows updates
- USB port required for hardware configuration

4.2.2 Configuration software

To configure the conventional 24 V variant, download the configuration software:

Download: Configuration software (https://support.industry.siemens.com/cs/ww/en/view/109807684)

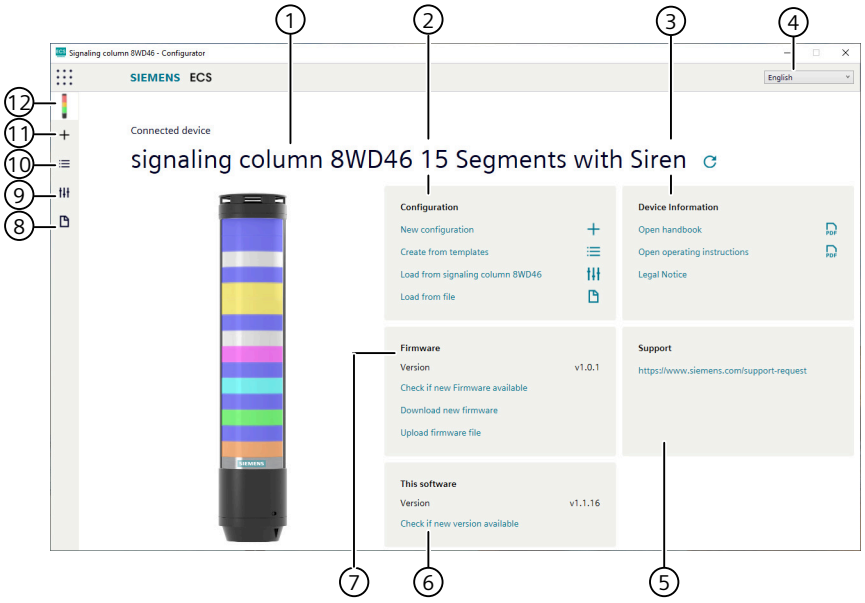
Connect the signaling column to your computer via the USB port.

The configuration software for electronically configurable signaling columns does not need to be installed. It is executed by means of the .exe file.

4.2.3 Start configuration software

Double-click the "Signaling-Column-8WD46_Configurator.exe" file to start the configuration software.

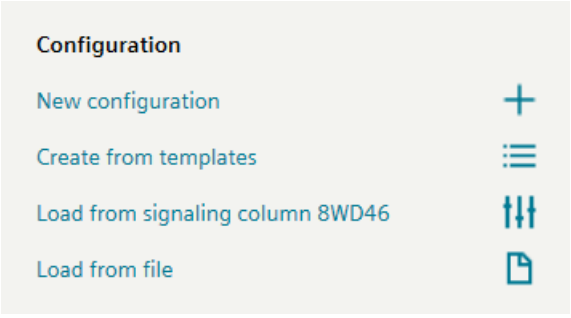
Configuration software homepage



Item	Description
1	Variant of the connected electronically configurable signaling column
2	Configuration area
3	Device information area
4	Set language
5	Support area
6	"This software" area
7	Firmware area
8	Open an existing configuration
9	Load configuration from the electronically configurable signaling column
10	Create new configuration from templates
11	Generate a new configuration
12	Call up start page

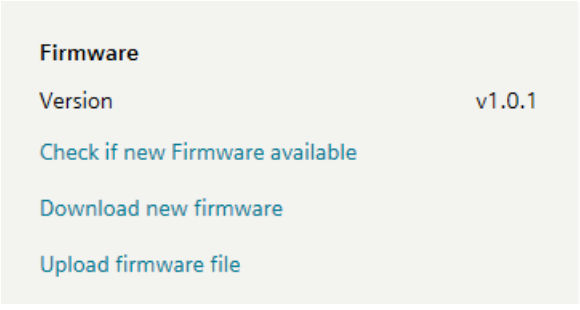
4.2.4 Configuration area

Configuration options



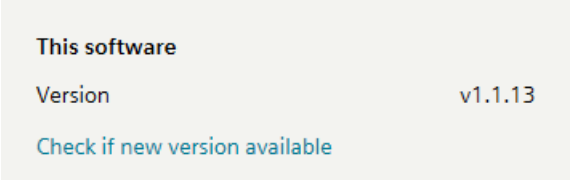
- New configuration: Generate a new configuration (see New configuration (Page 32)).
- Create from templates: Open standard templates which can immediately be transferred to the device (see Create new configuration from templates (Page 33)).
- Load from signaling column 8WD46: Open current configuration (delivery status, if applicable) for processing (see Load configuration from connected signaling column (Page 34)).
- Load from file: Open and reuse an existing configuration (see Open an existing configuration (Page 34)).

4.2.5 Firmware area



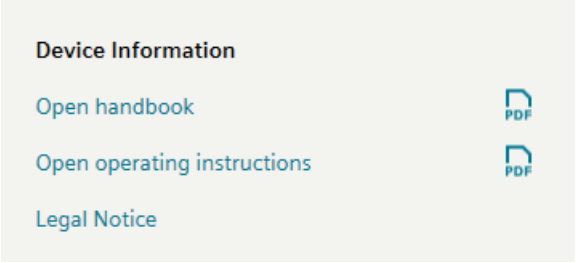
- Version: Here you can see which firmware version you are using when the signaling column is connected.
- Check if new firmware available: Here you can check if a more recent version of the firmware is available when the signaling column is connected.
- Download new firmware You can download the latest firmware here.
- Upload firmware file: Here you can transfer the downloaded firmware to your device.

4.2.6 "This software" area



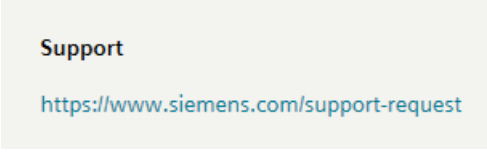
- Version: Here you can see which version of the software you are using.
- Check if new version available: Here you can check if a more recent version of the software is available.

4.2.7 Device information area



- Open handbook: You can download a PDF of the "8WD46 electronically configurable signaling columns" manual.
- Open operating instructions: You can download a PDF of the "8WD46 electronically configurable signaling columns" operating instructions.
- Legal notice: In this area you can view the OSS license texts (see OSS licenses (Page 133)).

4.2.8 Support area



Here you will be redirected to Online Support.

4.2.9 Set language

In the top right-hand corner of the screen, select the desired language for the software interface.

4.2.10 Delivery condition of conventional 24 V variant

Factory settings for all variants

- Mode: Autoscale
- Power limitation is deactivated

Variants with 9 segments:

- 3 tiers green / yellow / red
- Continuous
- Max. brightness

Variants with 15 segments:

- 5 tiers white / blue / green / yellow / red
- Continuous
- Max. brightness

Additionally for variants with siren:

- Continuous tone 2.7 kHz
- Low volume

4.2.11 New configuration

Note

Configuration is also possible without a connected signaling column.

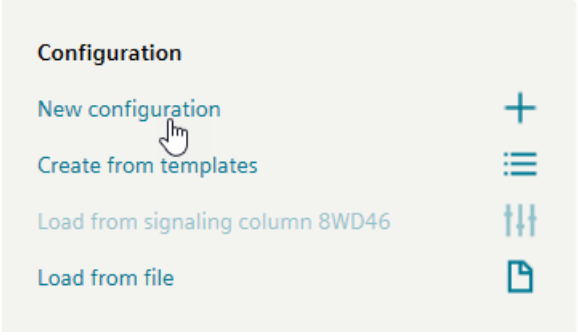
No signaling column needs to be connected in order to perform a configuration for an electronically configurable signaling column. The configuration can be performed in the connected or unconnected state. The configuration file can be saved locally on the computer and loaded again later.

Note

The electronically configurable signaling column can be simultaneously connected to a computer via USB cable and to the 24 V power supply via the M12 cable.

1. Connect the 8WD46 signaling column to the computer using a USB cable.
   The configuration software detects the connected signaling column.
2. If the configuration software does not detect the connected signaling column, click on "Refresh connected device".

   
3. In the "Configuration" area, click on "New configuration".

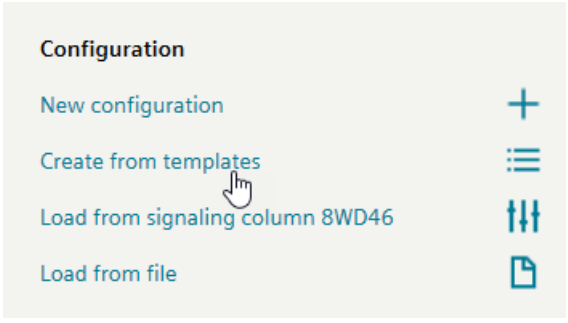
   

4. On the "Generate a new configuration" page, select the desired mode for your signaling column. You can choose between "Autoscale mode", "Signaling column mode", "Filling level mode" or "Individual mode".
5. Click on "Customize" in the area of the required mode.

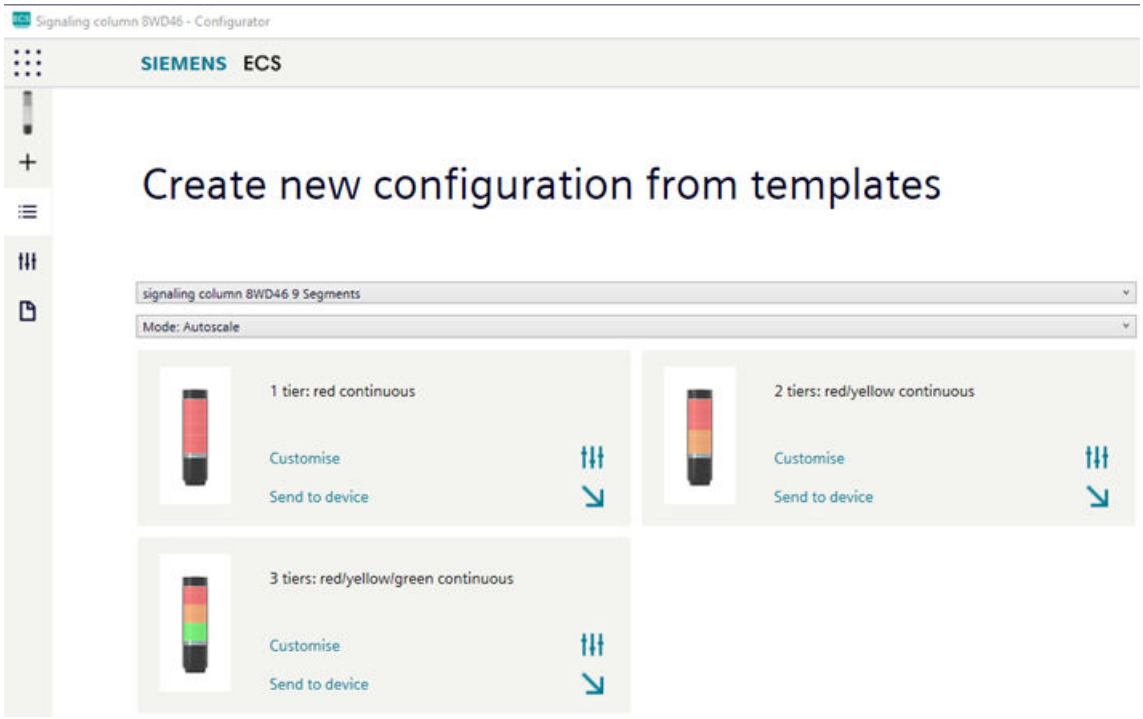
4.2.12 Create new configuration from templates

The configuration software provides various predefined configurations that can be transferred directly to a connected signaling column or used as a basis for your own configurations.

1. Open the configuration software.
2. In the "Configuration" area, click on "Create new configuration from templates".



3. In the "Create new configuration from templates" dialog box, select the variant of the signaling column.
4. Select a mode.



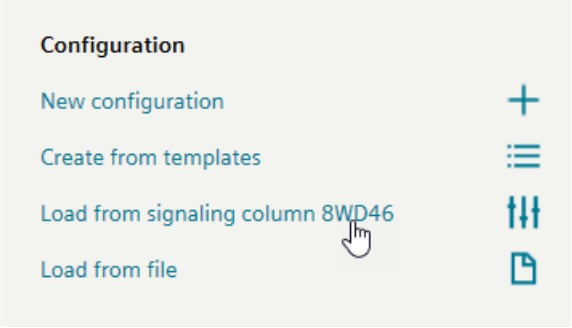
5. Select a template and click on "Customize" to load and further edit the template.
6. Click on "Finalize configuration".

7. Click on "Send to device" to load the template and transfer it directly to the connected signaling column.
8. Click on "Save" to save the configuration file locally on the computer and transfer it to the signaling column later.

4.2.13 Load configuration from connected signaling column

If a signaling column is connected to the computer, the configuration software offers the option of opening the current configuration (delivery status, if applicable) for editing.
If no signaling column is connected, this menu item is grayed out.

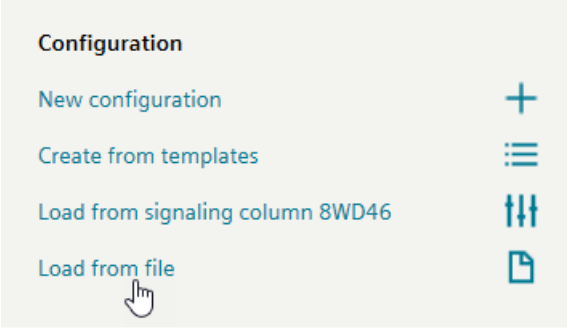
1. Open the configuration software.
2. In the "Configuration" area, click on "Load from signaling column 8WD46".



3. The "Configuration" dialog box opens in the set mode, and displays the set configuration.

4.2.14 Open an existing configuration

1. Open the configuration software.
2. In the "Configuration" area, click on "Load from file".

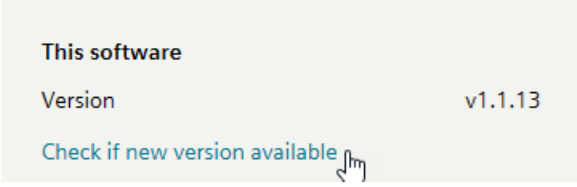


3. Select a stored file. Stored files have the extension ".signal".
4. Open the selected file. The configuration of the selected file is displayed.

4.2.15 Updating configuration software

Note
An Internet connection must be available.
To perform a software update, the computer must be connected to the Internet.

1. Open the configuration software.
2. In the "This software" area, click on "Check if new version is available".



3. A Siemens web page with the configuration software and its version is opened.
4. If a newer version of the software is available, it can be downloaded and used.

4.2.16 Update firmware

Note
An Internet connection must be available.
To perform a firmware update, the computer must be connected to the Internet.

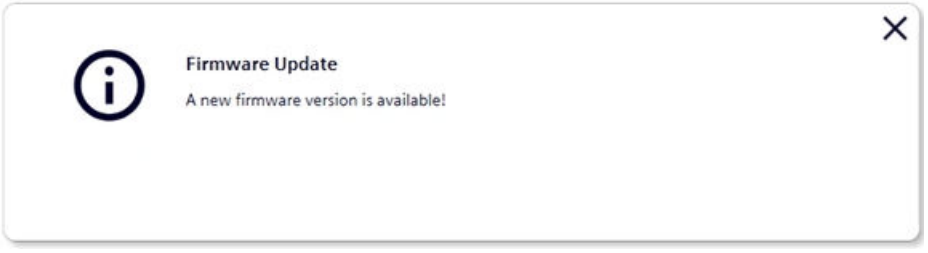
1. Connect the signaling column to the PC via the USB interface.
2. Open the configuration software.
3. Make sure that the connected signaling column has been recognized by the software.

Check if new firmware available

1. With the signaling column connected, click on "Check if new firmware is available" in the "Firmware" area to determine whether a more recent version of the firmware used is available.
2. A message with the result of the check is displayed.

- If no new firmware is available, the following window appears:

- If a newer version of the firmware is found, the following window is displayed:

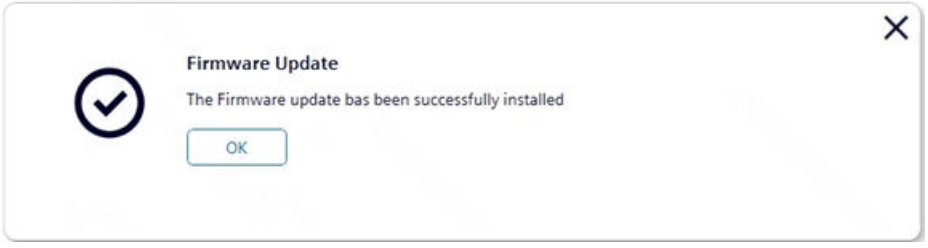


Start new firmware download

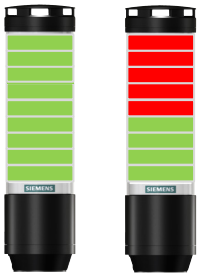
1. Click on "Start new firmware download".
2. You will be redirected to a web page. Click on the link that is displayed.
3. Save the displayed zip file locally to your PC.

Loading firmware onto the device

1. Navigate to the downloaded zip file.
2. Select "Open".
3. The new firmware is transferred to the connected signaling column.
4. The message "The Firmware update has been successfully installed" is displayed.

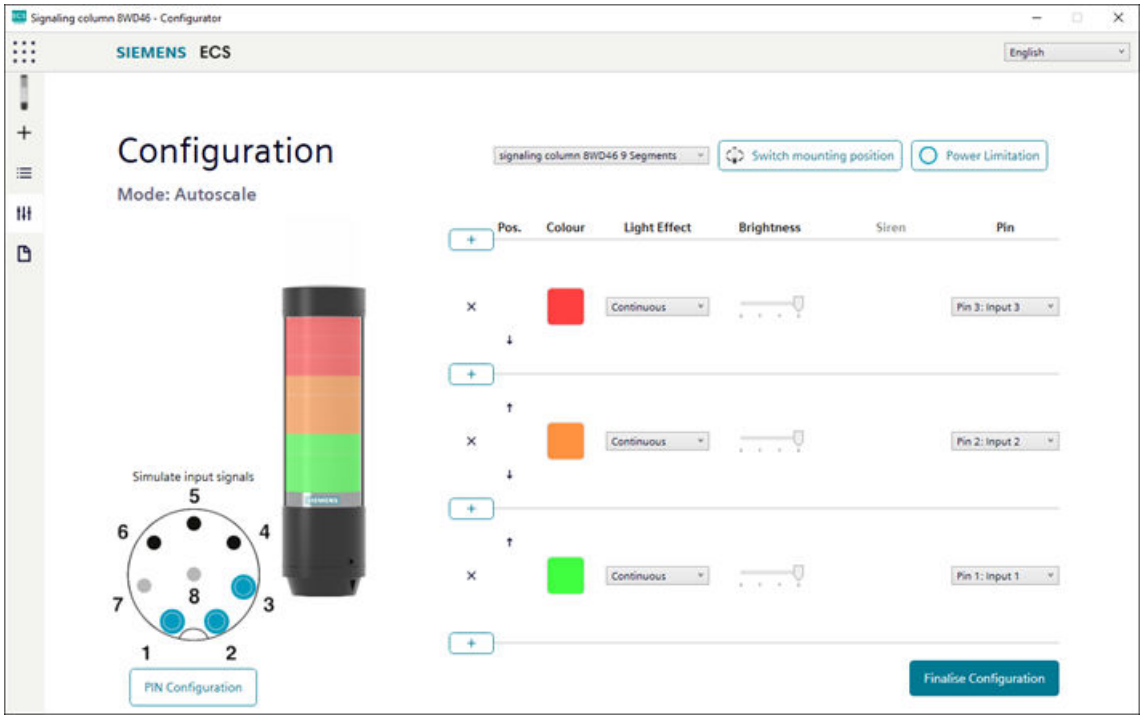


4.2.17 Mode: Autoscale



The segments of the electronically configurable signaling columns are automatically and uniformly distributed among the number of controlled pins (bits) and status messages. With this setting, the full potential of the signaling column can be exploited by means of full surface signaling. For example, if only one status message is active, the entire area of the signaling column is illuminated in a single color to ensure maximum visibility.

If multiple signals are present, the illuminated surface is split proportionally. If the segments cannot be uniformly distributed, the last segment is assigned to the color with the highest priority (highest position within the column). If there are several segments left, they are distributed evenly according to the prioritization, i.e. the positioning in the column from top to bottom.



Note

Switch mounting position

If required, the orientation of the displayed signaling column can be rotated by 180 degrees using the "Switch mounting position" button.

Note

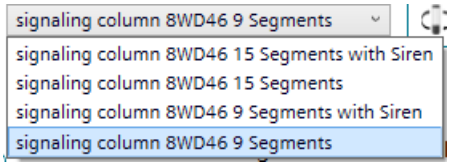
Power limitation

If required (e.g. in order to take into account the power limitations of control outputs), the power consumption of the signaling column can be reduced via the "Power limitation" button. In this case, the current demand of the column is reduced to less than 500 mA. As a result, the brightness of the visual signals or the volume of the acoustic signals is also reduced.

4.2.17.1 Select variant of the signaling column

If a signaling column has been connected to a computer, the configuration software detects and displays the variant.

If no signaling column has been connected to a computer, select the variant of the signaling column to be configured in the configuration software.



4.2.17.2 Add or remove tier

Add tier

Click on the plus sign to add a tier.

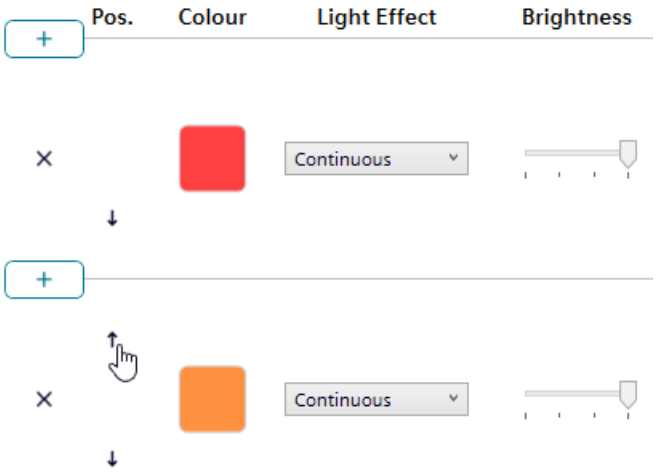
Remove tier

Click on the X symbol to remove a tier.

4.2.17.3 Shift tier

If necessary, individual tiers can be shifted up or down.

In the Pos. column, click the up or down arrow to move the tier up or down.



4.2.17.4 Select color

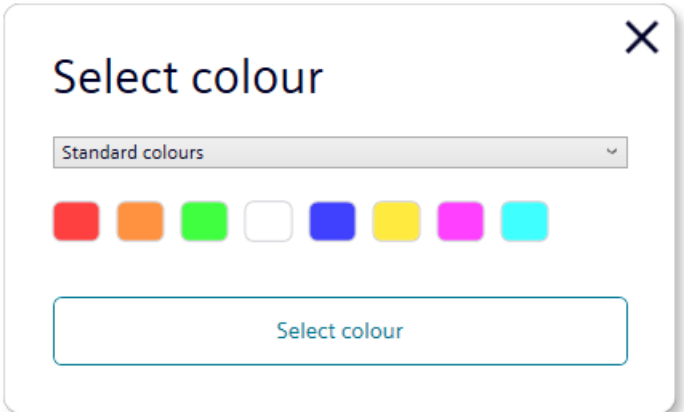
Each tier can be assigned a predefined standard color or an individual color.

Standard color

1. In the "Color" column, click on the displayed color.
2. In the "Select color" dialog box, select "Standard colors" from the drop-down list.
3. Click on the required color to select a standard color.
   The following 8 standard colors are available:

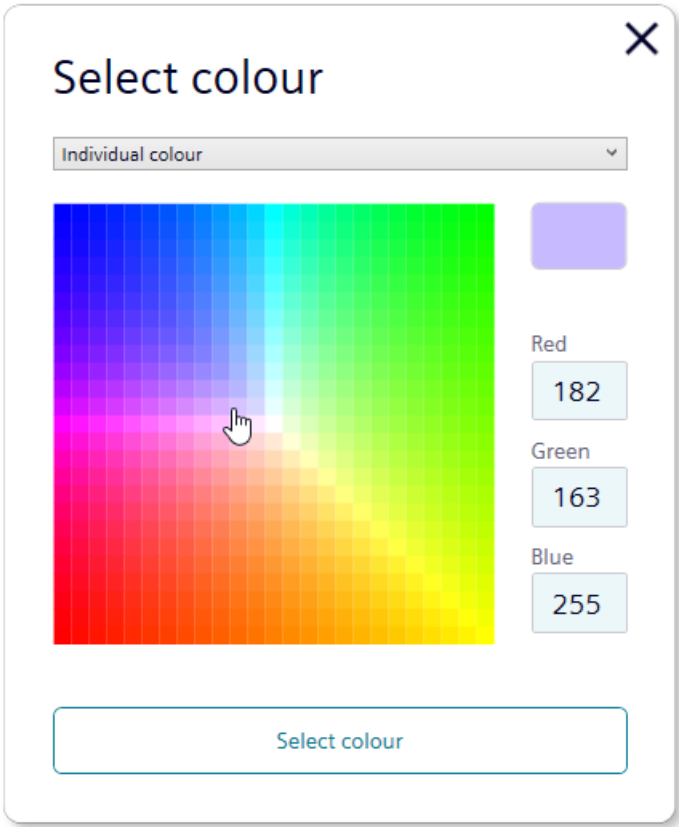
- Red
- yellow
- Green
- white
- Blue
- light yellow

- violet
- turquoise



Individual color

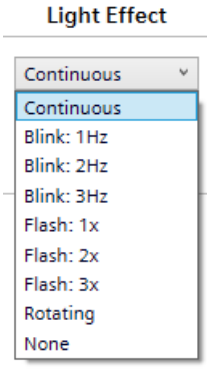
1. In the "Color" column, click on the displayed color.
2. In the "Select color" dialog box, select "Individual color" from the drop-down list.
3. Enter individual RGB values for red, green, and blue, or select a color by clicking on a color box.
4. Click the "Select color" button to assign the color.



4.2.17.5 Select light effect

In the "Light effect" column, select the required lighting effect from the drop-down list.

You can choose one of eight light effects.



The setting "None" can be selected if only a siren is to be assigned to the tier.

4.2.17.6 Select brightness

In the "Brightness" column, you can use the slider to set the desired brightness of the selected color at one of four levels.

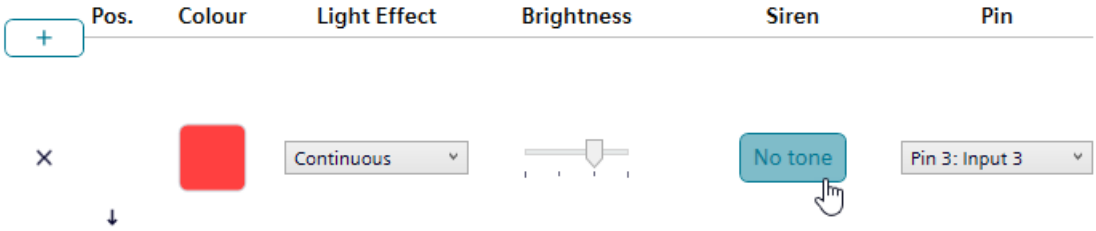
4.2.17.7 Select siren

If the connected or selected variant of the electronically configurable signaling column has a siren, it is possible to select a signal tone that will sound when the tier is activated.

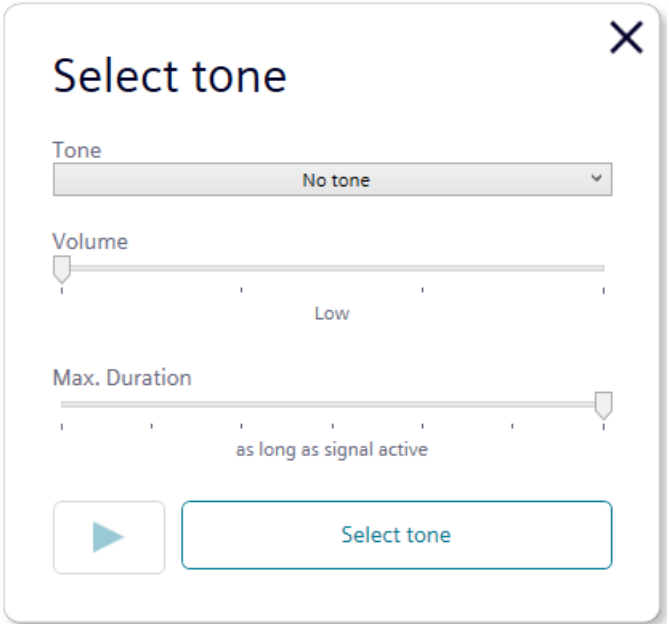
Note

If signal tones are stored for multiple tiers and the tiers are controlled simultaneously, the siren will sound for the color with the highest priority (highest position within the column).

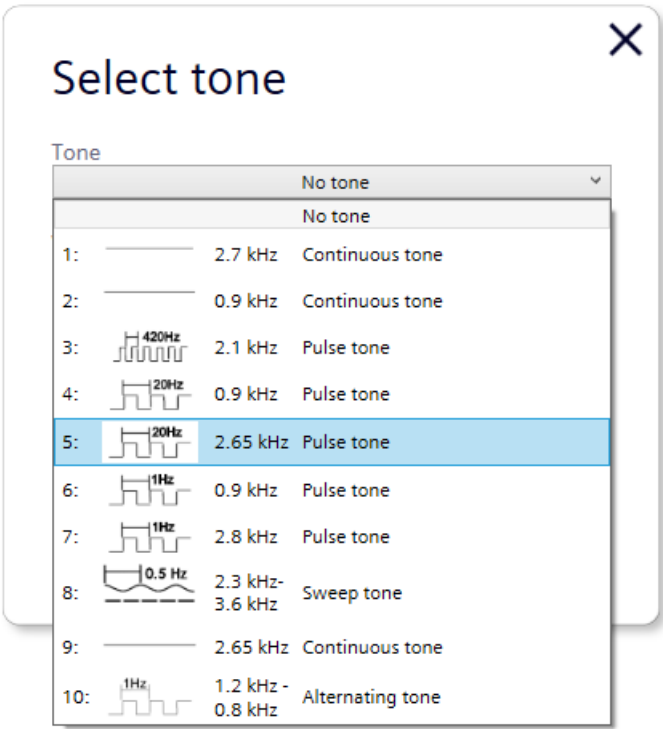
1. Click on "No tone" in the "Siren" column.



2. In the "Select tone" dialog box, select the desired tone, volume, and maximum duration.



3. In the "Tone" drop-down list, select the required tone for the siren. Ten different sounds are available for selection.



Note

Test tone

To test the selected settings, press the "Play" button. The selected tone is then played via the computer.

4. Click on the "Select tone" button to specify a tone.

4.2.17.8 Select pin

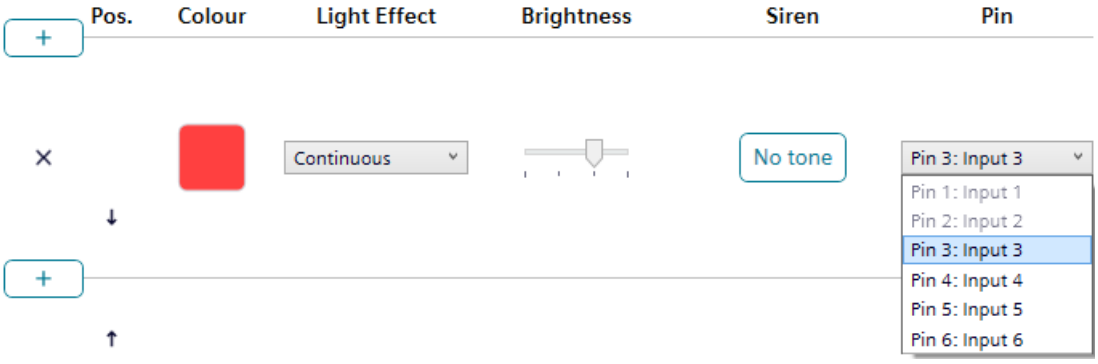
Standard assignment

The fields are preconfigured with a standard assignment, starting with pin 1 at the lowest level of the column.

Pin 7 and 8 are preassigned and cannot be used otherwise. The remaining pins can be adjusted as desired.

Select pin

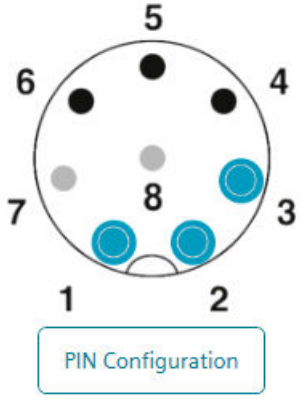
In the "Pin" column, select the pin of the 8-pin connector on which the signal for triggering the tier is sent.



4.2.17.9 Adapting the pin configuration

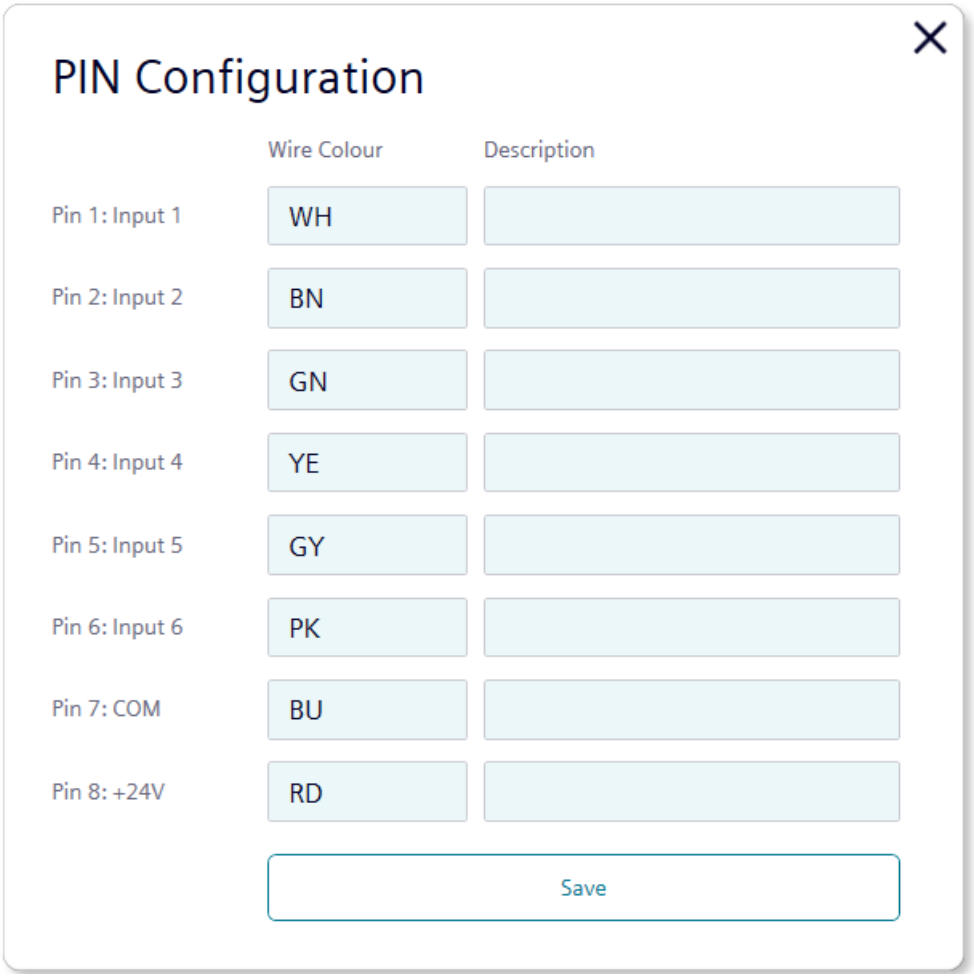
If required, the assignment of the wire color to the pin can be changed and a description of the signal can be stored.

1. Click the "PIN configuration" button.



2. In the "Wire color" column, enter the required color.

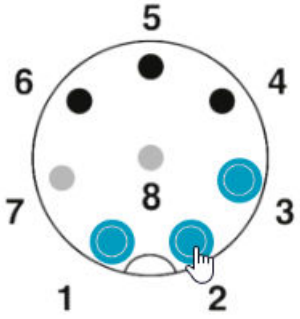
3. In the "Description" column, enter the signal description.
4. Click "Save" to apply the selection.



4.2.17.10 Simulate input signals

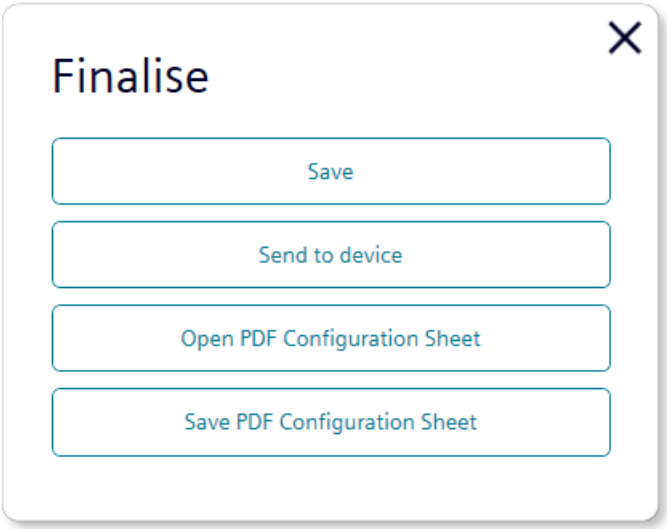
Once all adjustments have been made, the control can be simulated.

On the pin representation, click on the pin or on a combination of pins which is to activate the required tier or the required state.



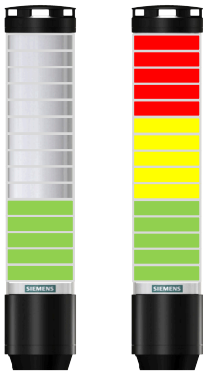
4.2.17.11 Finalize configuration

1. If necessary, make further changes to the configuration.
2. Click on "Finalize" as soon as all tiers are configured as required. The "Finalize" dialog box appears.



3. Click on "Save" to save the configuration in a configuration file.
4. Click on "Send to device" to transfer the configuration to the connected signaling column.
5. Click on "Open PDF configuration sheet" to display an overview of the current configuration.
6. Click on "Save PDF configuration sheet" to save the overview of the current configuration as a PDF file.

4.2.18 Mode: Signaling column

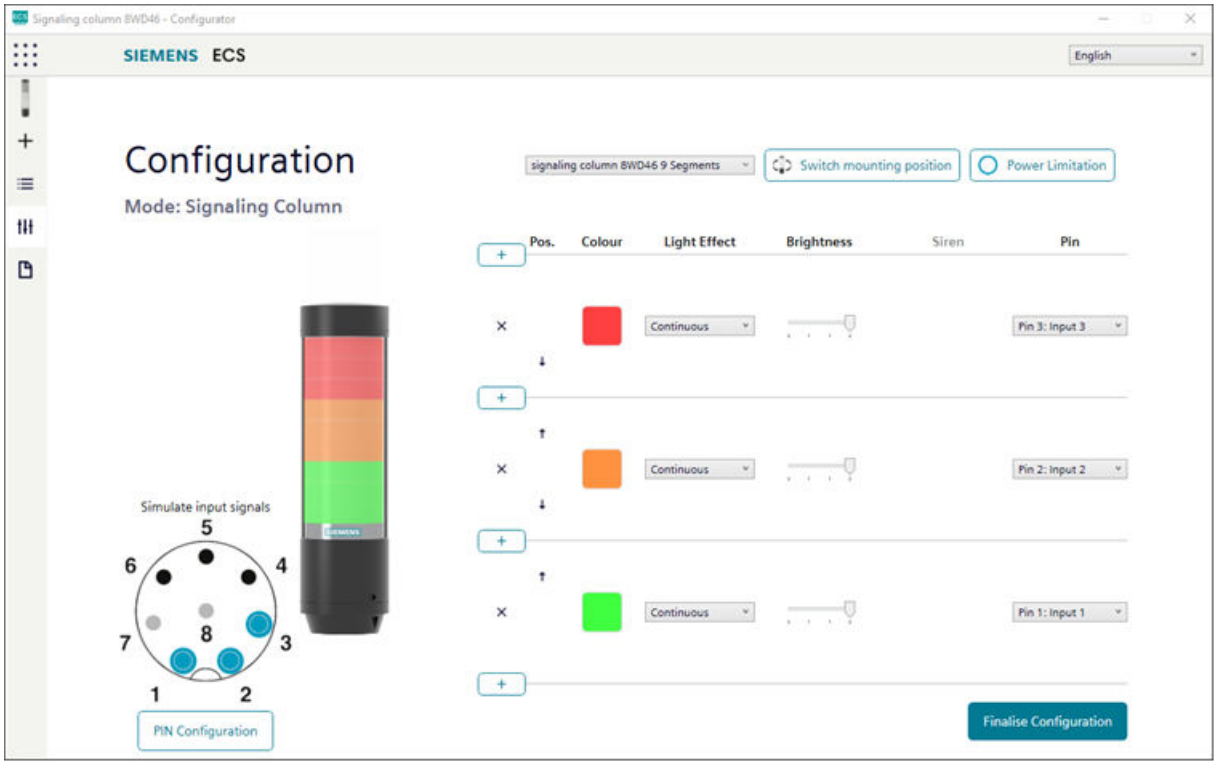


Individual segments of the signaling column can be combined to create a signal column tier.

This enables a conventional signaling column to be realized in an electronically modular form.

In this mode, the tiers have fixed positions and can be off if the corresponding tier and optical signal is not triggered.

This mode limits the illuminated surface of the signal within the signal to a certain area.



Note

Switch mounting position

If required, the orientation of the displayed signaling column can be rotated by 180 degrees using the "Switch mounting position" button.

Note

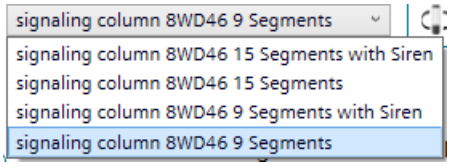
Power limitation

If required (e.g. in order to take into account the power limitations of control outputs), the power consumption of the signaling column can be reduced via the "Power limitation" button. In this case, the current demand of the column is reduced to less than 500 mA. As a result, the brightness of the visual signals or the volume of the acoustic signals is also reduced.

4.2.18.1 Select variant of the signaling column

If a signaling column has been connected to a computer, the configuration software detects and displays the variant.

If no signaling column has been connected to a computer, select the variant of the signaling column to be configured in the configuration software.



4.2.18.2 Add or remove tier

Add tier

Click on the plus sign to add a tier.

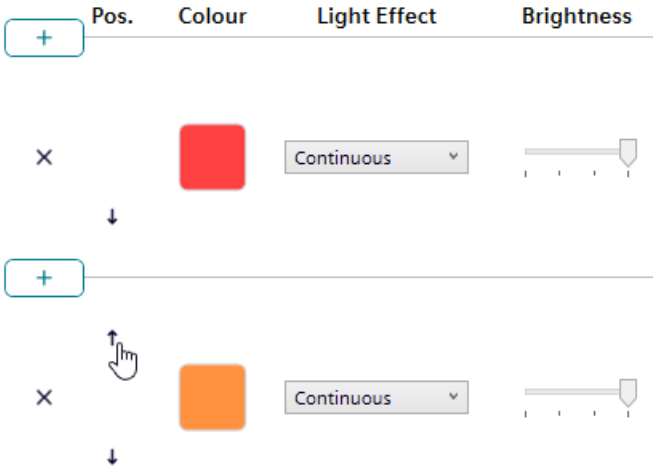
Remove tier

Click on the X symbol to remove a tier.

4.2.18.3 Shift tier

If necessary, individual tiers can be shifted up or down.

In the Pos. column, click the up or down arrow to move the tier up or down.



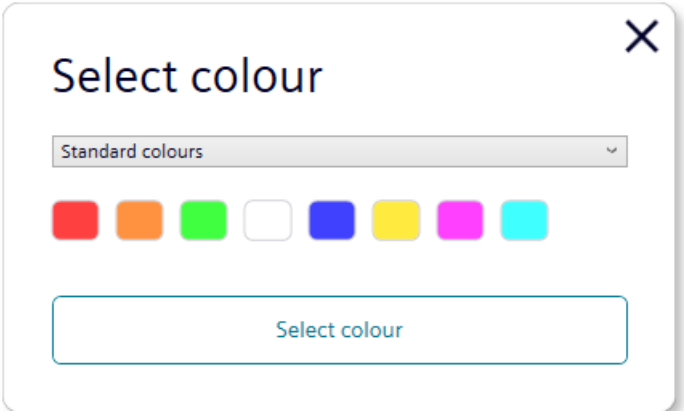
4.2.18.4 Select color

Each tier can be assigned a predefined standard color or an individual color.

Standard color

1. In the "Color" column, click on the displayed color.
2. In the "Select color" dialog box, select "Standard colors" from the drop-down list.
3. Click on the required color to select a standard color.
   The following 8 standard colors are available:

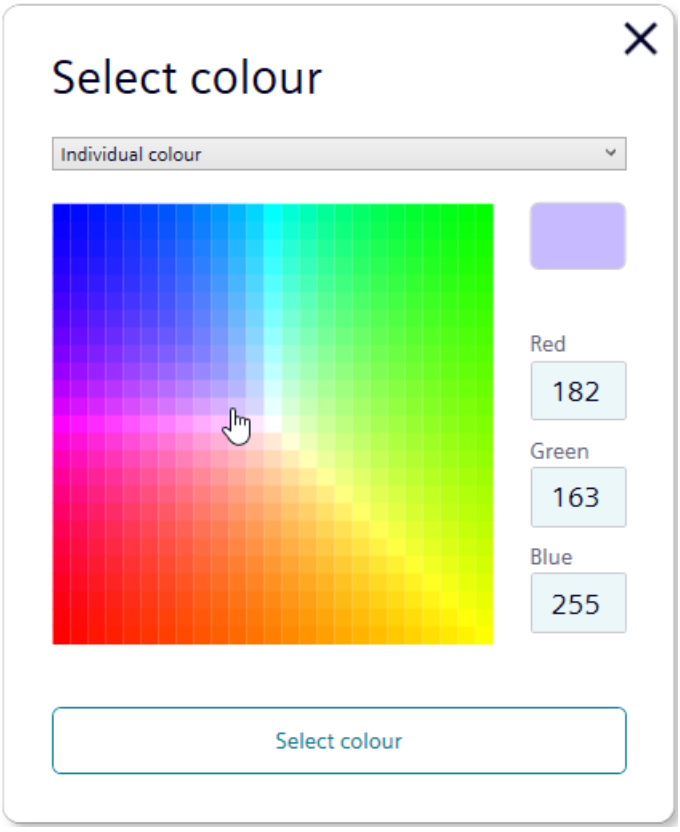
- Red
- yellow
- Green
- white
- Blue
- light yellow
- violet
- turquoise



Individual color

1. In the "Color" column, click on the displayed color.
2. In the "Select color" dialog box, select "Individual color" from the drop-down list.

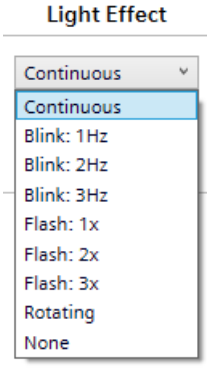
3. Enter individual RGB values for red, green, and blue, or select a color by clicking on a color box.
4. Click the "Select color" button to assign the color.



4.2.18.5 Select light effect

In the "Light effect" column, select the required lighting effect from the drop-down list.

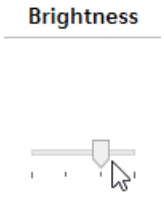
You can choose one of eight light effects.



The setting "None" can be selected if only a siren is to be assigned to the tier.

4.2.18.6 Select brightness

In the "Brightness" column, you can use the slider to set the desired brightness of the selected color at one of four levels.



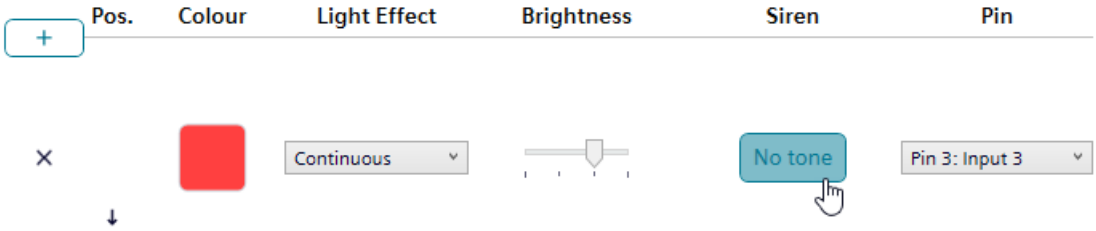
4.2.18.7 Select siren

If the connected or selected variant of the electronically configurable signaling column has a siren, it is possible to select a signal tone that will sound when the tier is activated.

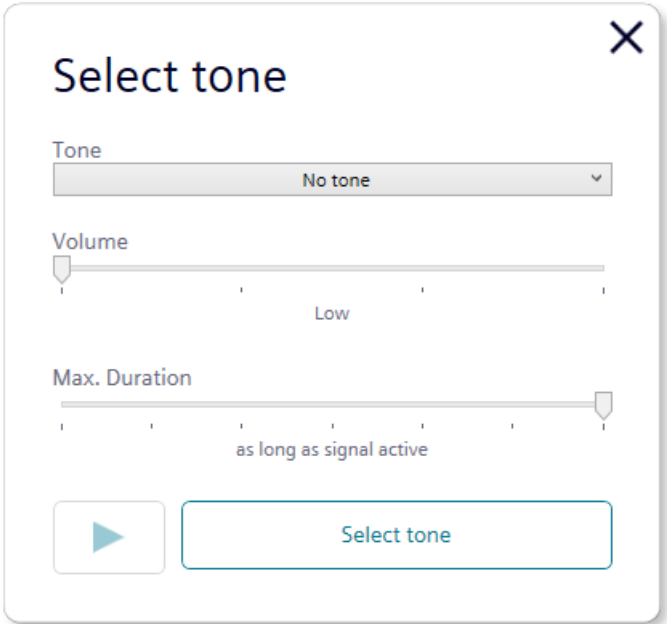
Note

If signal tones are stored for multiple tiers and the tiers are controlled simultaneously, the siren will sound for the color with the highest priority (highest position within the column).

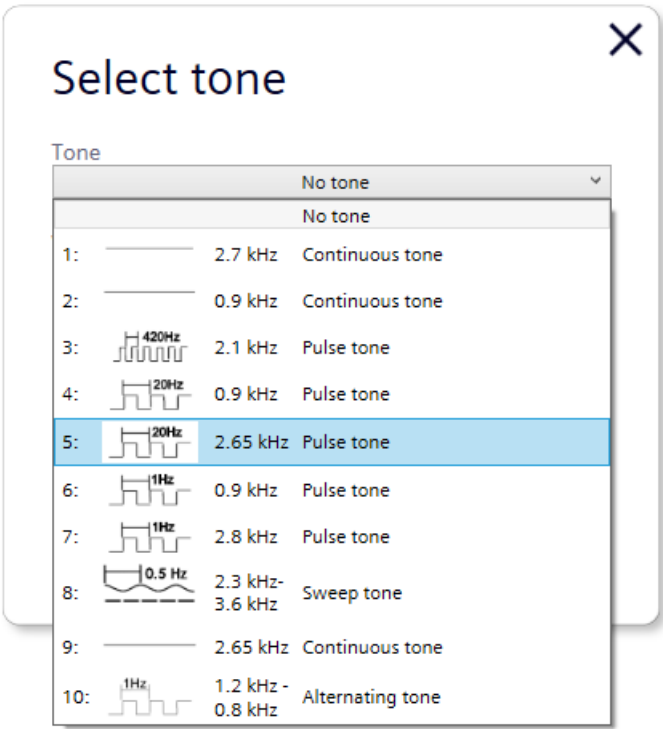
1. Click on "No tone" in the "Siren" column.



2. In the "Select tone" dialog box, select the desired tone, volume, and maximum duration.



3. In the "Tone" drop-down list, select the required tone for the siren. Ten different sounds are available for selection.



Note

Test tone

To test the selected settings, press the "Play" button. The selected tone is then played via the computer.

4. Click on the "Select tone" button to specify a tone.

4.2.18.8 Select pin

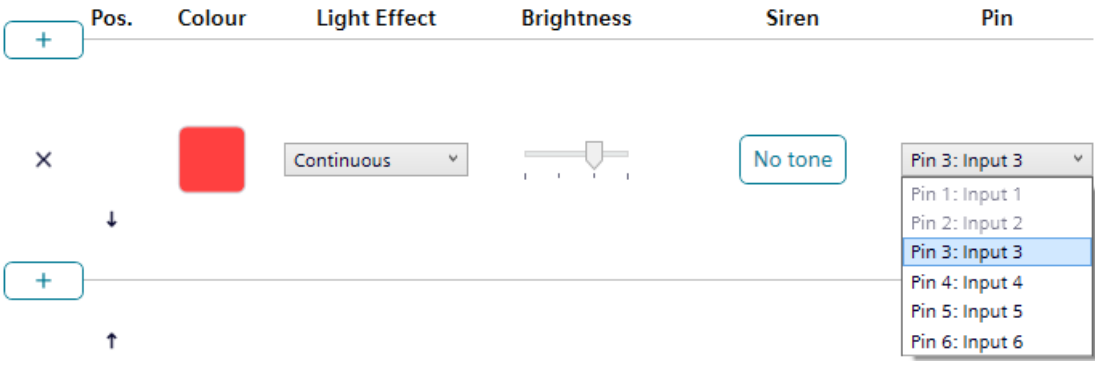
Standard assignment

The fields are preconfigured with a standard assignment, starting with pin 1 at the lowest level of the column.

Pin 7 and 8 are preassigned and cannot be used otherwise. The remaining pins can be adjusted as desired.

Select pin

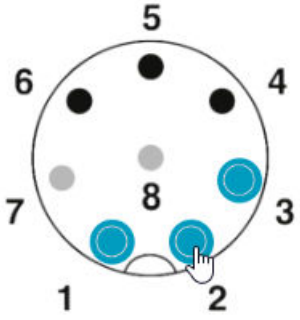
In the "Pin" column, select the pin of the 8-pin connector on which the signal for triggering the tier is sent.



4.2.18.9 Simulate input signals

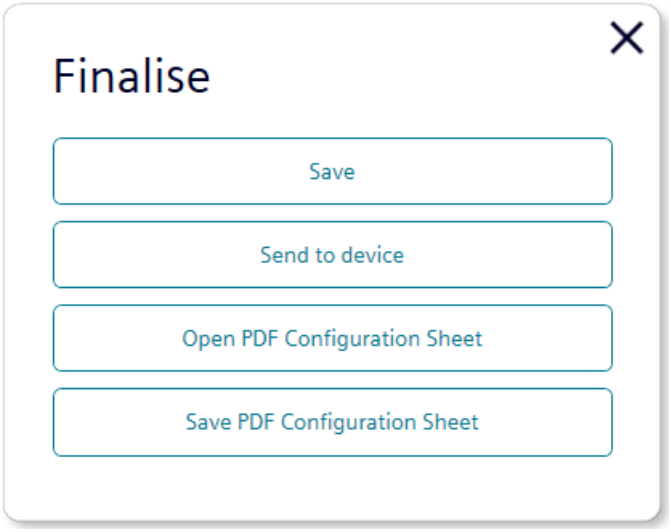
Once all adjustments have been made, the control can be simulated.

On the pin representation, click on the pin or on a combination of pins which is to activate the required tier or the required state.



4.2.18.10 Finalize configuration

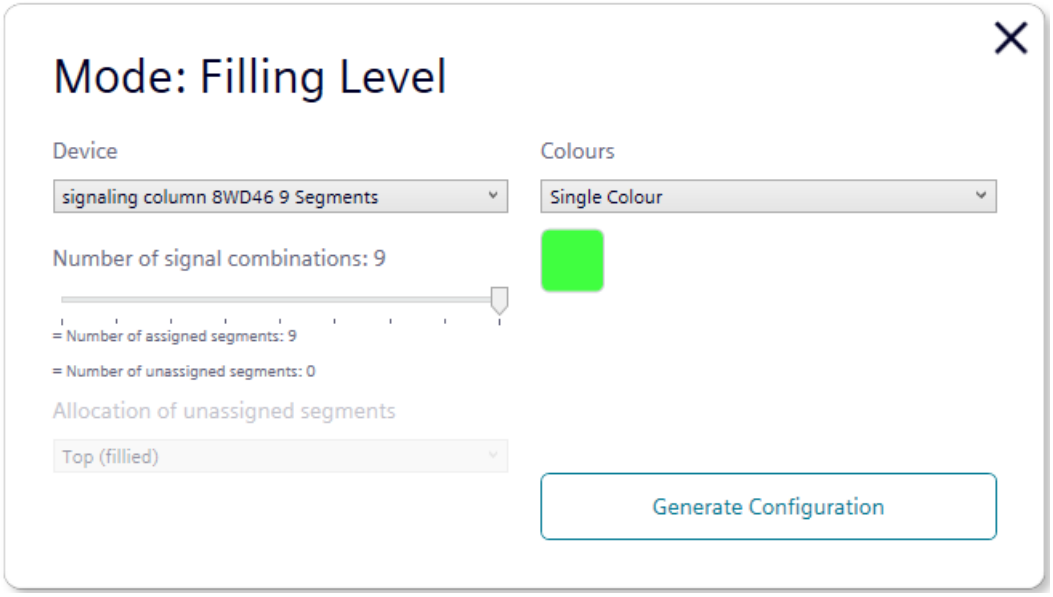
1. If necessary, make further changes to the configuration.
2. Click on "Finalize" as soon as all tiers are configured as required. The "Finalize" dialog box appears.



3. Click on "Save" to save the configuration in a configuration file.
4. Click on "Send to device" to transfer the configuration to the connected signaling column.
5. Click on "Open PDF configuration sheet" to display an overview of the current configuration.
6. Click on "Save PDF configuration sheet" to save the overview of the current configuration as a PDF file.

4.2.19 Mode: Filling level

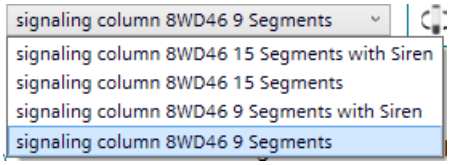
In this operating mode, the segments of the signaling column are used as a filling level indicator. This enables precise signaling of the progress of orders or material availability in machine processes in the form of a rising or falling illumination profile.



4.2.19.1 Select variant of the signaling column

If a signaling column has been connected to a computer, the configuration software detects and displays the variant.

If no signaling column has been connected to a computer, select the variant of the signaling column to be configured in the configuration software.



4.2.19.2 Selecting the number of signal combinations

1. In the "Number of signal combinations" area, select how many segments of the signaling column are to be used as a filling level indicator.
2. If not all segments of the signal tower are to be used for level indication:
   Use the "Allocation of unassigned segments" field to select how the segments of the signaling column that are not to be used for filling level indication are to be displayed.

Setting	Description
Top (filled)	Unassigned segments of the signaling column are positioned at the top and are switched together with the topmost tier.
Bottom (filled)	Unassigned segments of the signaling column are positioned at the bottom and are switched together with the lowest tier.

Setting	Description
Top (off)	Unassigned segments of the signaling column are positioned at the top and are always off.
Bottom (off)	Unassigned segments of the signaling column are positioned at the bottom and are always off.

4.2.19.3 Selecting the color for the filling level indicator

Either a uniform color or a color gradient can be selected for the filling level display. In the case of a color gradient, the sequence of hues between the two colors is calculated automatically.

The color of each individual segment of the filling level indicator can be adjusted later, if necessary.

In the "Colors" field, select whether the filling level should be displayed in a uniform color or as a color gradient.

4.2.19.4 Select color

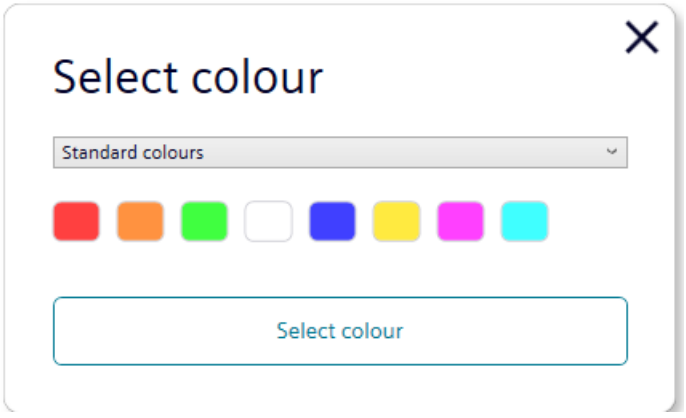
Each tier can be assigned a predefined standard color or an individual color.

Standard color

1. In the "Color" column, click on the displayed color.
2. In the "Select color" dialog box, select "Standard colors" from the drop-down list.
3. Click on the required color to select a standard color.
   The following 8 standard colors are available:

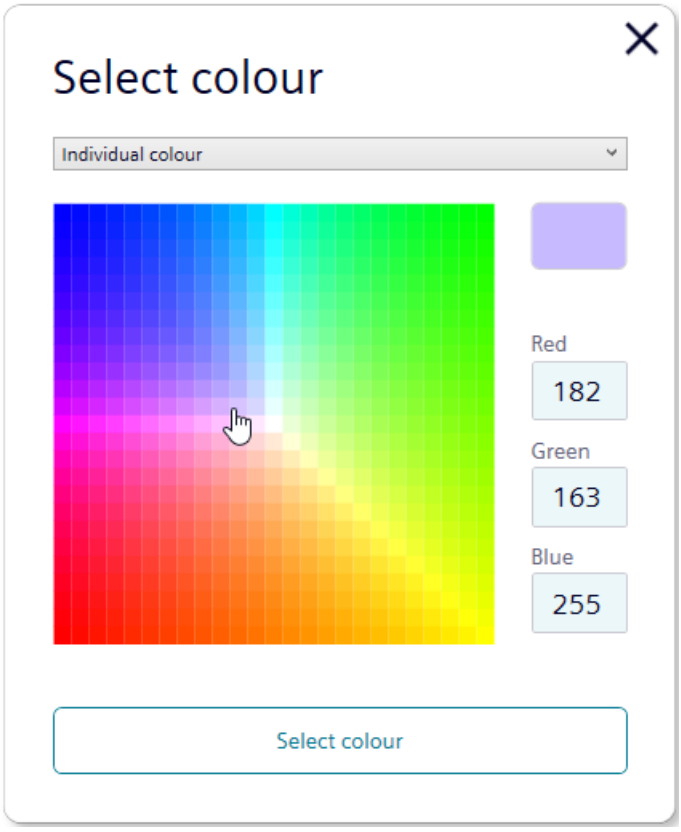
- Red
- yellow
- Green
- white
- Blue
- light yellow

- violet
- turquoise



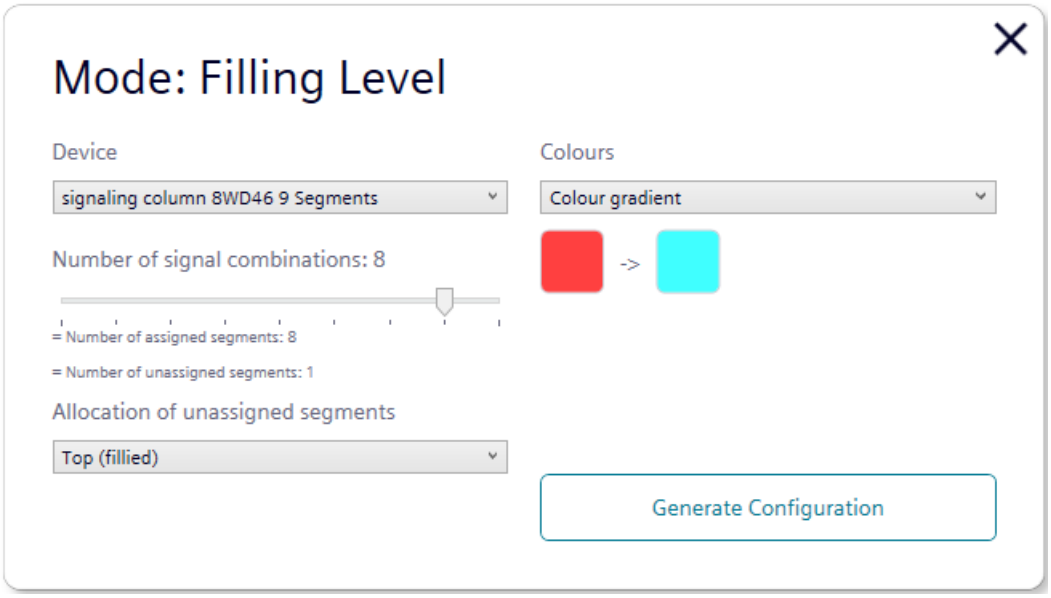
Individual color

1. In the "Color" column, click on the displayed color.
2. In the "Select color" dialog box, select "Individual color" from the drop-down list.
3. Enter individual RGB values for red, green, and blue, or select a color by clicking on a color box.
4. Click the "Select color" button to assign the color.



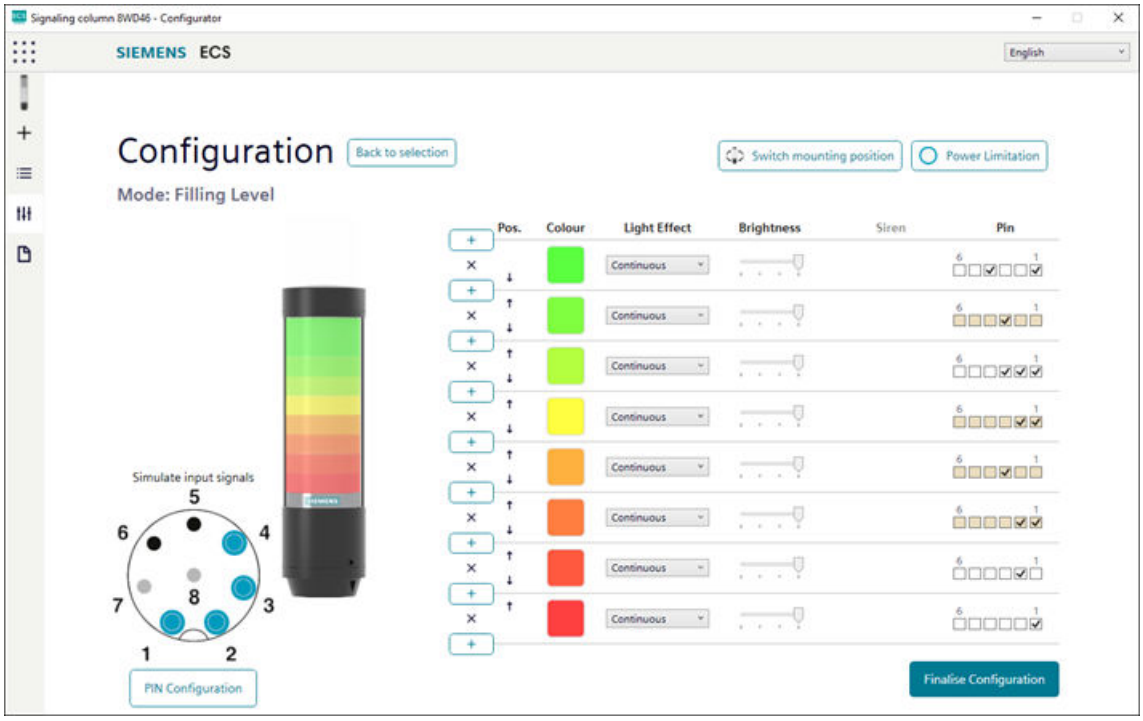
4.2.19.5 Selecting a color gradient

1. In the "Colors" area, select "Color gradient" from the drop-down list.



2. Click on the respective color and select either a standard or an individual color in the "Select color" dialog box.
3. Click on "Generate configuration".

4.2.19.6 Configuring a filling level indicator



Note

Switch mounting position

If required, the orientation of the displayed signaling column can be rotated by 180 degrees using the "Switch mounting position" button.

Note

Power limitation

If required (e.g. in order to take into account the power limitations of control outputs), the power consumption of the signaling column can be reduced via the "Power limitation" button. In this case, the current demand of the column is reduced to less than 500 mA. As a result, the brightness of the visual signals or the volume of the acoustic signals is also reduced.

Note

The "Back to selection" button can be used to retrieve and readjust the configuration of the color and segments.

4.2.19.7 Add or remove tier

Add tier

Click on the plus sign to add a tier.

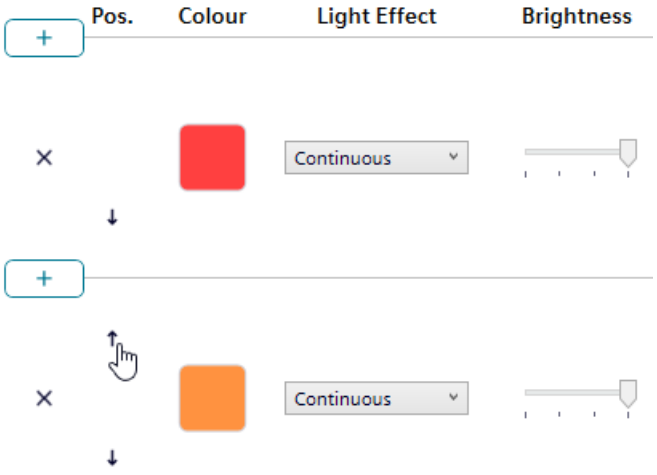
Remove tier

Click on the X symbol to remove a tier.

4.2.19.8 Shift tier

If necessary, individual tiers can be shifted up or down.

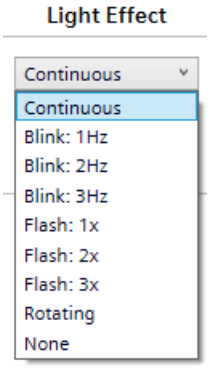
In the Pos. column, click the up or down arrow to move the tier up or down.



4.2.19.9 Select light effect

In the "Light effect" column, select the required lighting effect from the drop-down list.

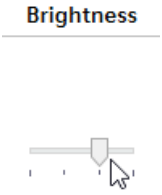
You can choose one of eight light effects.



The setting "None" can be selected if only a siren is to be assigned to the tier.

4.2.19.10 Select brightness

In the "Brightness" column, you can use the slider to set the desired brightness of the selected color at one of four levels.



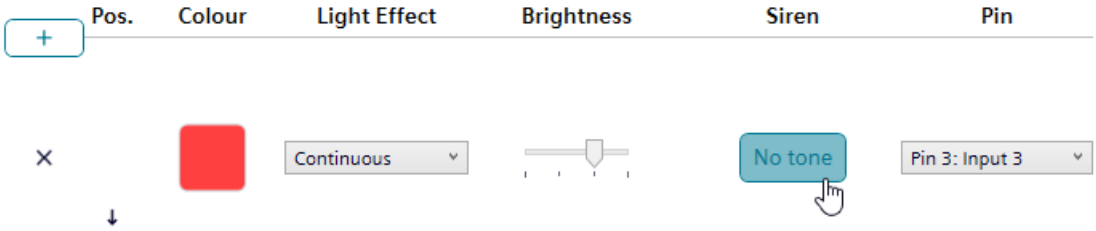
4.2.19.11 Select siren

If the connected or selected variant of the electronically configurable signaling column has a siren, it is possible to select a signal tone that will sound when the tier is activated.

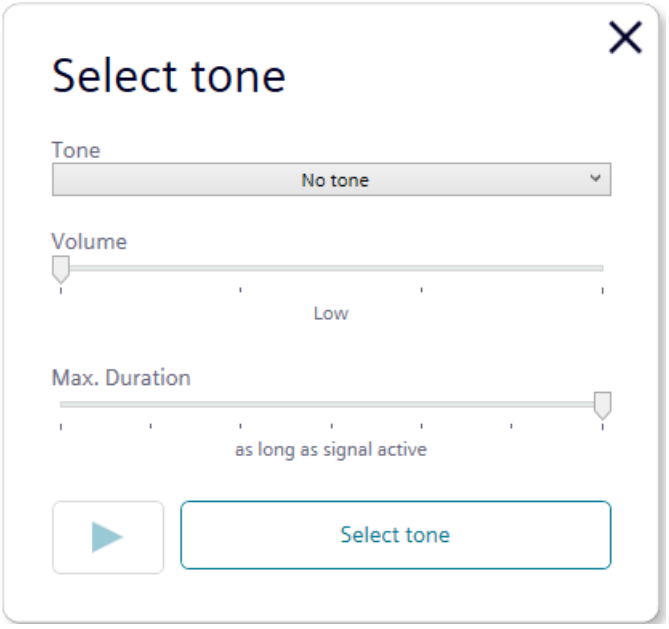
Note

If signal tones are stored for multiple tiers and the tiers are controlled simultaneously, the siren will sound for the color with the highest priority (highest position within the column).

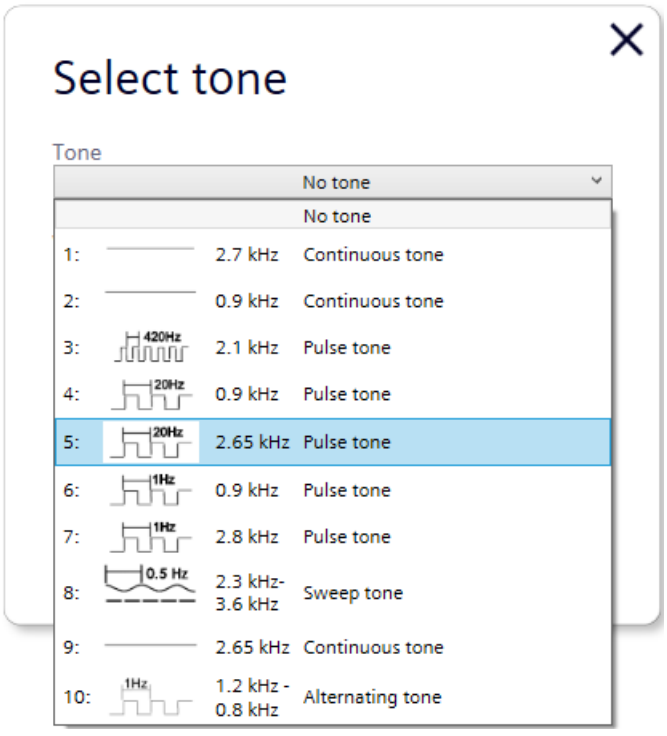
1. Click on "No tone" in the "Siren" column.



2. In the "Select tone" dialog box, select the desired tone, volume, and maximum duration.



3. In the "Tone" drop-down list, select the required tone for the siren. Ten different sounds are available for selection.



Note

Test tone

To test the selected settings, press the "Play" button. The selected tone is then played via the computer.

4. Click on the "Select tone" button to specify a tone.

4.2.19.12 Configuring pins in filling level mode

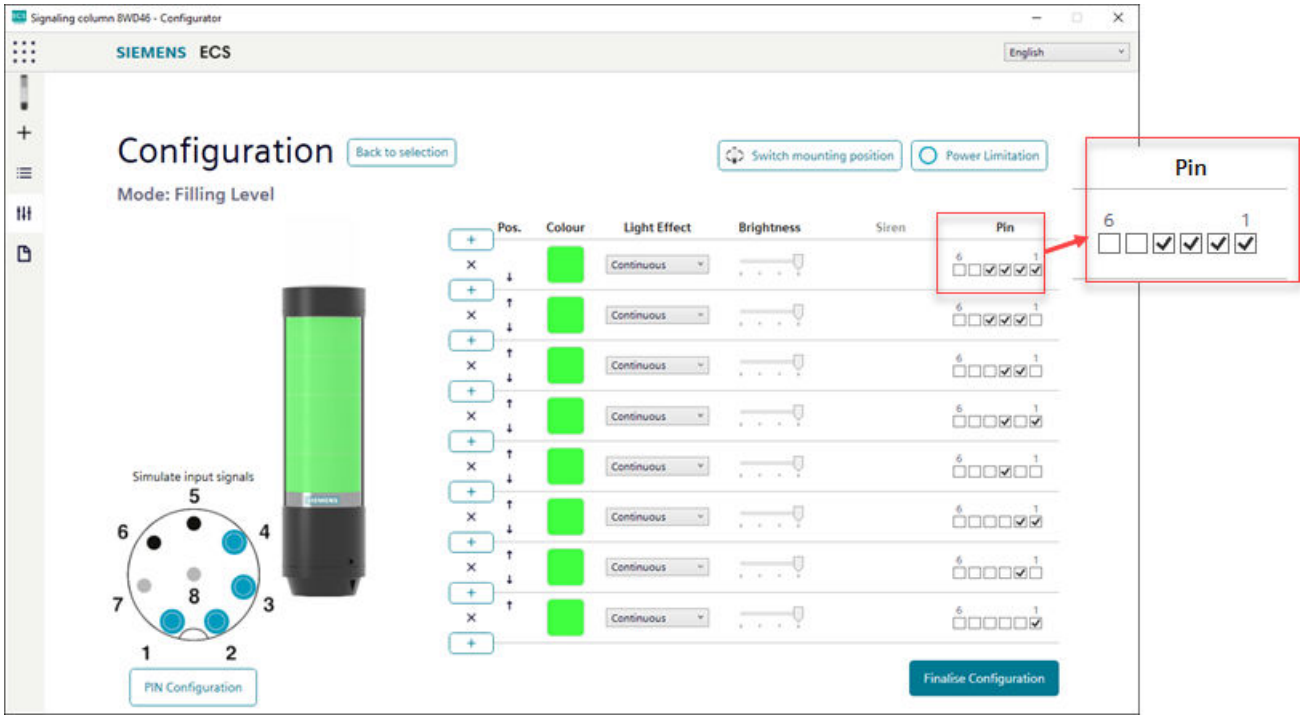
The fields are preconfigured with a standard assignment, starting with pin 1 at the lowest level of the column.

Pin 7 and 8 are preassigned and cannot be used otherwise. The remaining pins can be adjusted as desired.

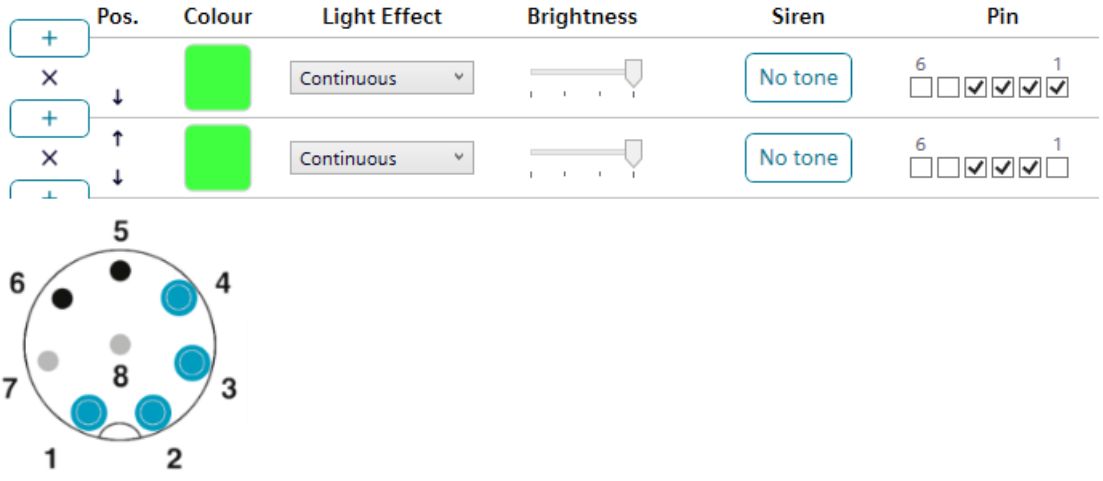
The filling level indicator is controlled via bit coding. The check boxes in the Pin column correspond to the 6 pins or signal lines. Placing a check mark in one or more check boxes indicates that these pins or signal lines must be controlled in order to activate the corresponding setting.

Example:

To display the entire column in green, pins 1 to 4 must be controlled.



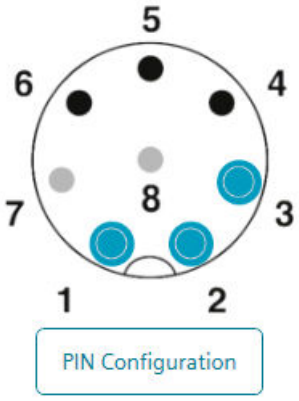
1. In the "Pin" column, select the pins of the 8-pin connector on which the signal for triggering the tier is to be sent.



4.2.19.13 Adapting the pin configuration

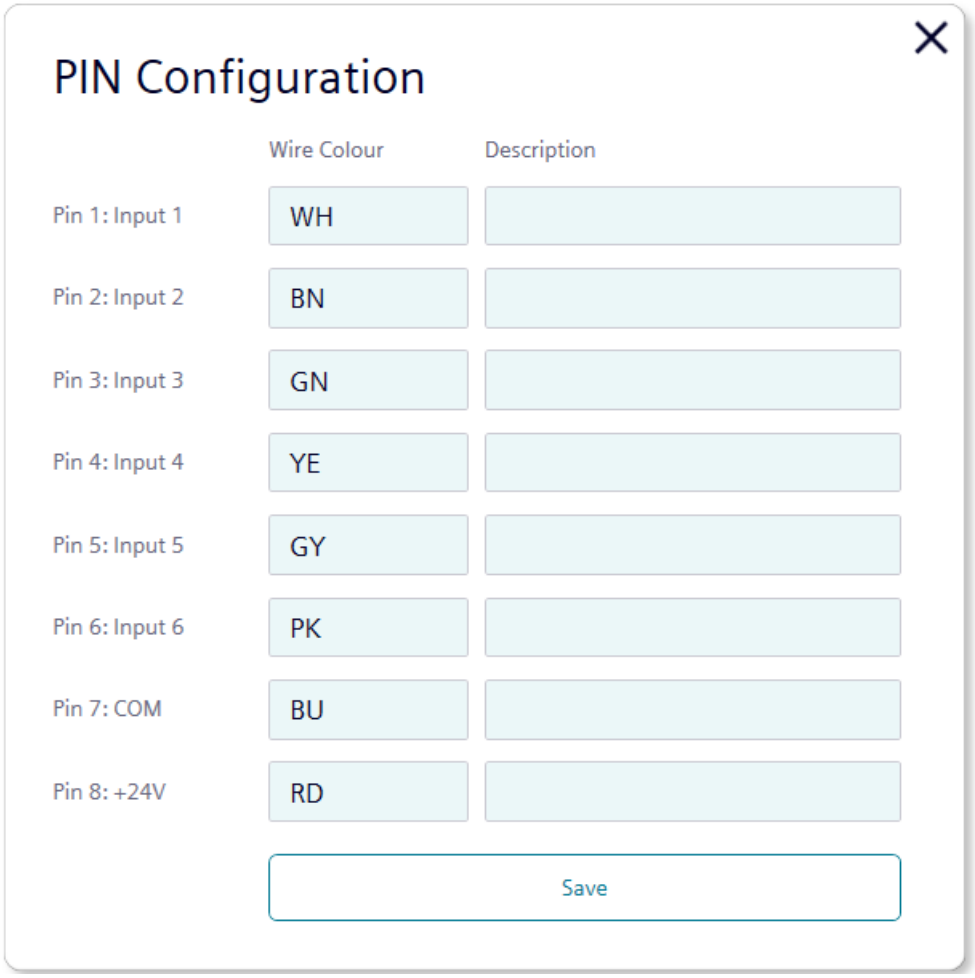
If required, the assignment of the wire color to the pin can be changed and a description of the signal can be stored.

1. Click the "PIN configuration" button.



2. In the "Wire color" column, enter the required color.

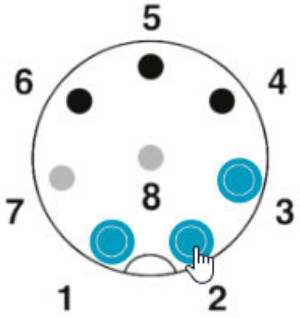
3. In the "Description" column, enter the signal description.
4. Click "Save" to apply the selection.



4.2.19.14 Simulate input signals

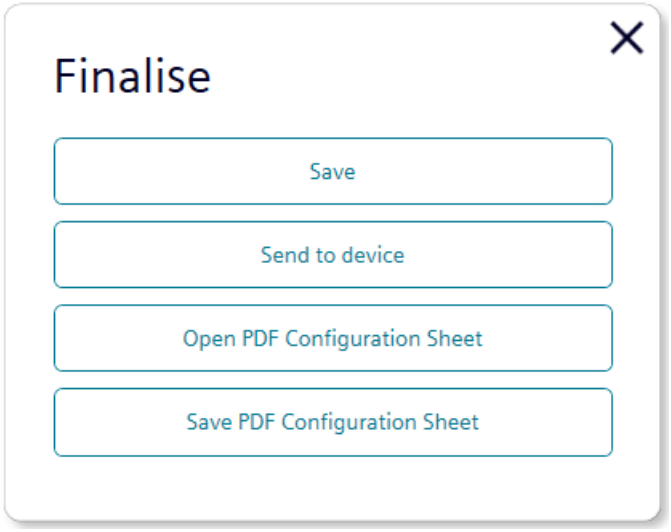
Once all adjustments have been made, the control can be simulated.

On the pin representation, click on the pin or on a combination of pins which is to activate the required tier or the required state.



4.2.19.15 Finalize configuration

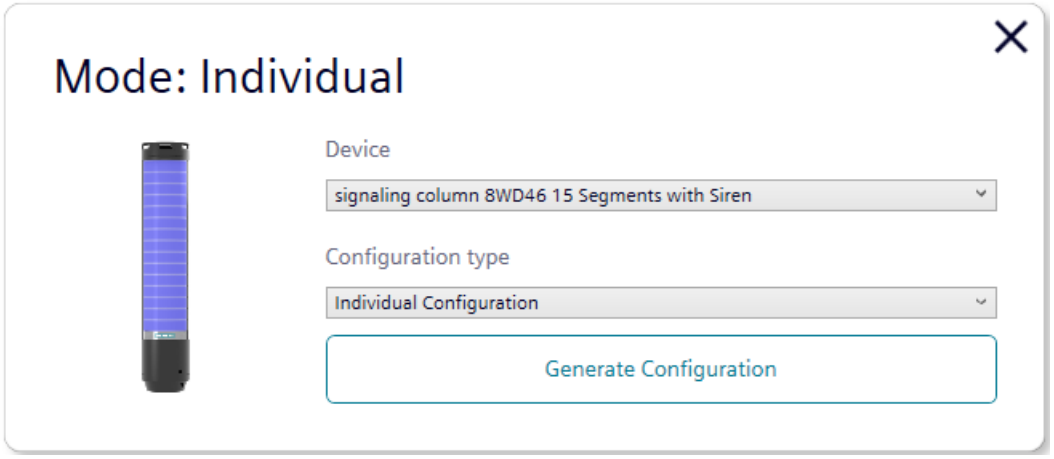
1. If necessary, make further changes to the configuration.
2. Click on "Finalize" as soon as all tiers are configured as required. The "Finalize" dialog box appears.



3. Click on "Save" to save the configuration in a configuration file.
4. Click on "Send to device" to transfer the configuration to the connected signaling column.
5. Click on "Open PDF configuration sheet" to display an overview of the current configuration.
6. Click on "Save PDF configuration sheet" to save the overview of the current configuration as a PDF file.

4.2.20 Mode: Individual

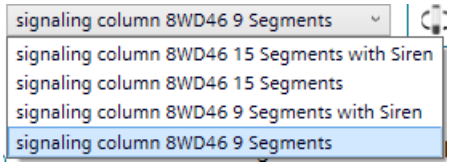
In this operating mode a free combination of individual segment settings is mapped to a certain switching signal. Each segment of the signaling column can be set individually and the overall setting for the complete column can be controlled as one state. In this way, the Individual mode enables a maximum number of individual signaling options.



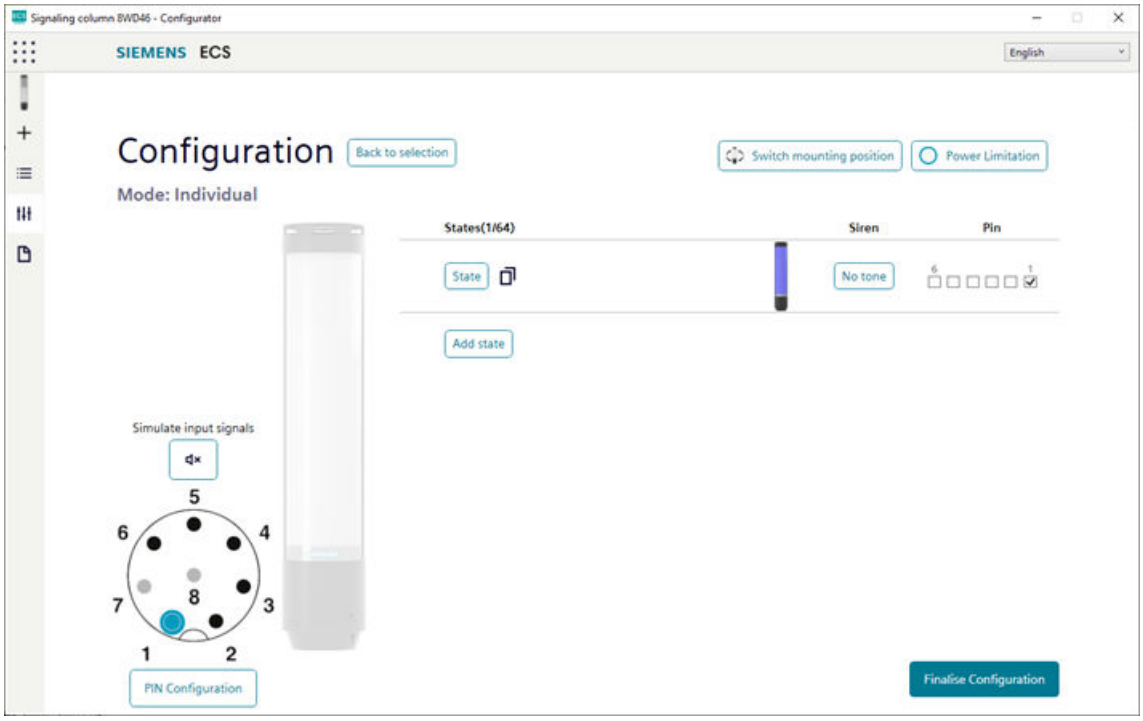
4.2.20.1 Select variant of the signaling column

If a signaling column has been connected to a computer, the configuration software detects and displays the variant.

If no signaling column has been connected to a computer, select the variant of the signaling column to be configured in the configuration software.



4.2.20.2 Configuring states



Note

Switch mounting position

The "Switch mounting position" button can be used to rotate the orientation of the displayed signaling column by 180 degrees.

Note

Power limitation

If required (e.g. in order to take into account the power limitations of control outputs), the power consumption of the signaling column can be reduced via the "Power limitation" button. In this case, the current demand of the column is reduced to less than 500 mA. As a result, the brightness of the visual signals or the volume of the acoustic signals is also reduced.

Note

Back to selection

The "Back to selection" button can be used to call up and adjust the configuration of the signaling column again.

4.2.20.3 Adapting a state

Note

States

- You can configure up to 64 states s and transfer them to one signaling column.
- A state consists of the individual optical settings of each segment and, if applicable, a signal tone.

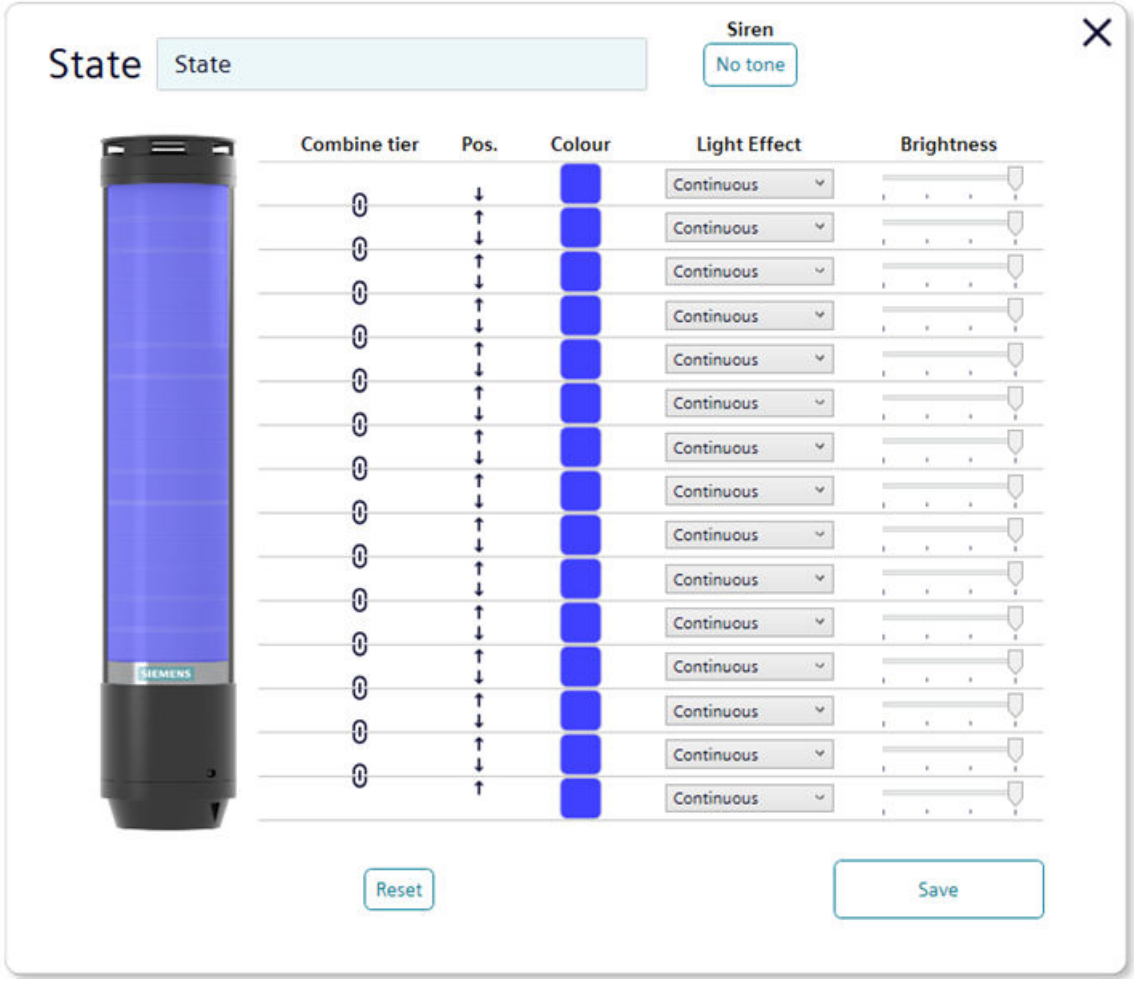
1. Click on "State".

2. You can make adjustments in the "State" window.

Note

Reset to default settings

The current state can be reset to the default settings using the "Reset" button.



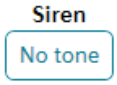
Naming the state

1. In the "State" box, enter a name for the current state.

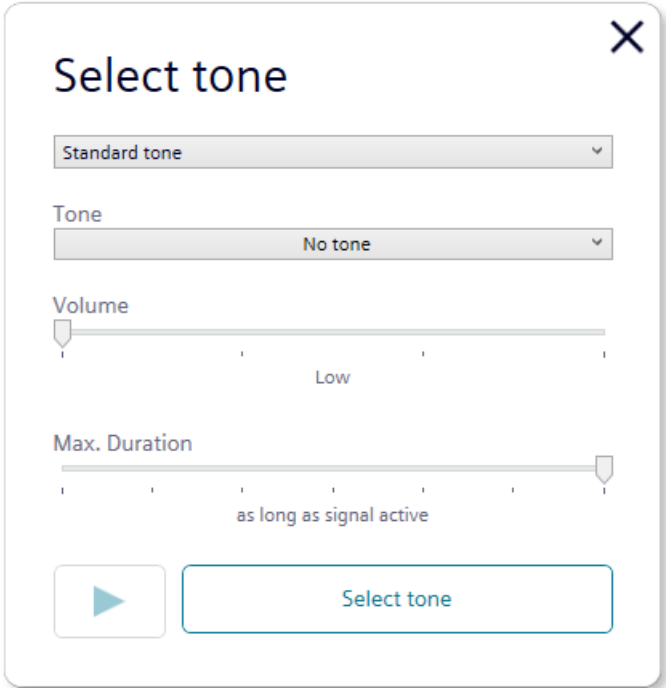
4.2.20.4 Selecting a custom siren

If the connected or selected variant of the electronically configurable signaling column has a siren, it is possible to select a signal tone that will sound when the tier of the state is activated.

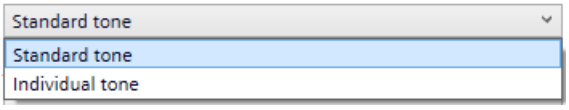
1. In the "Siren" box, click on the "No tone" button.



2. In the "Select tone" dialog box, select the desired tone, volume, and maximum duration.



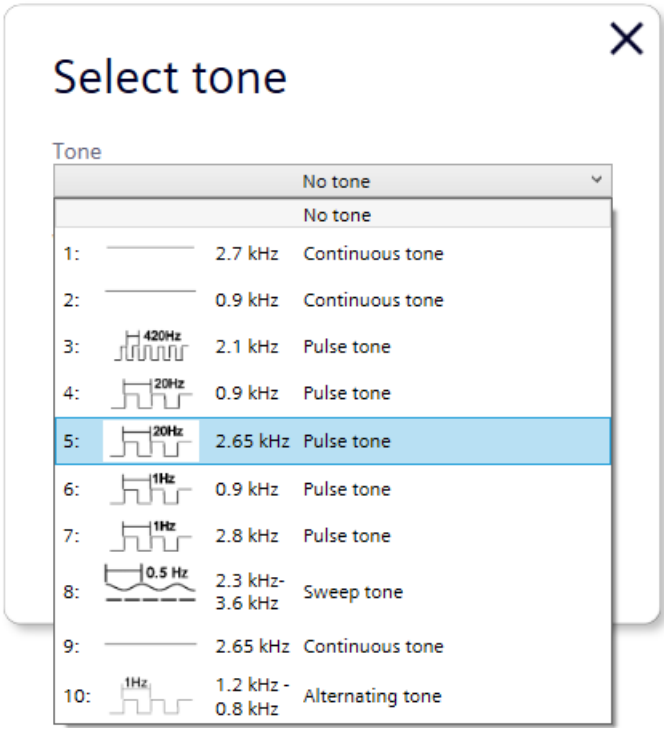
3. Choose whether a standard tone or individual tone is to be used.



4. Click on the "Select tone" button to specify a tone.

Standard tone

1. In the "Tone" drop-down list, select the required tone for the siren. Ten different sounds are available for selection.



Note

Test tone

To test the selected settings, press the "Play" button. The selected tone is then played via the computer.

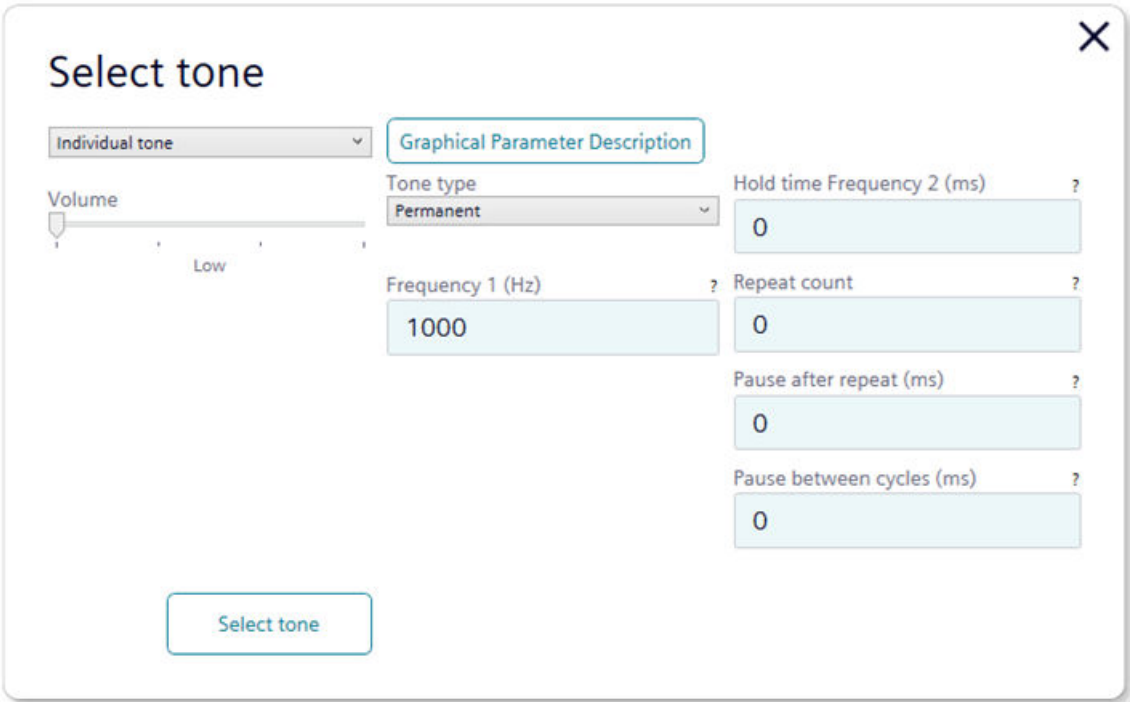
4.2.20.5 Individual tone

Note

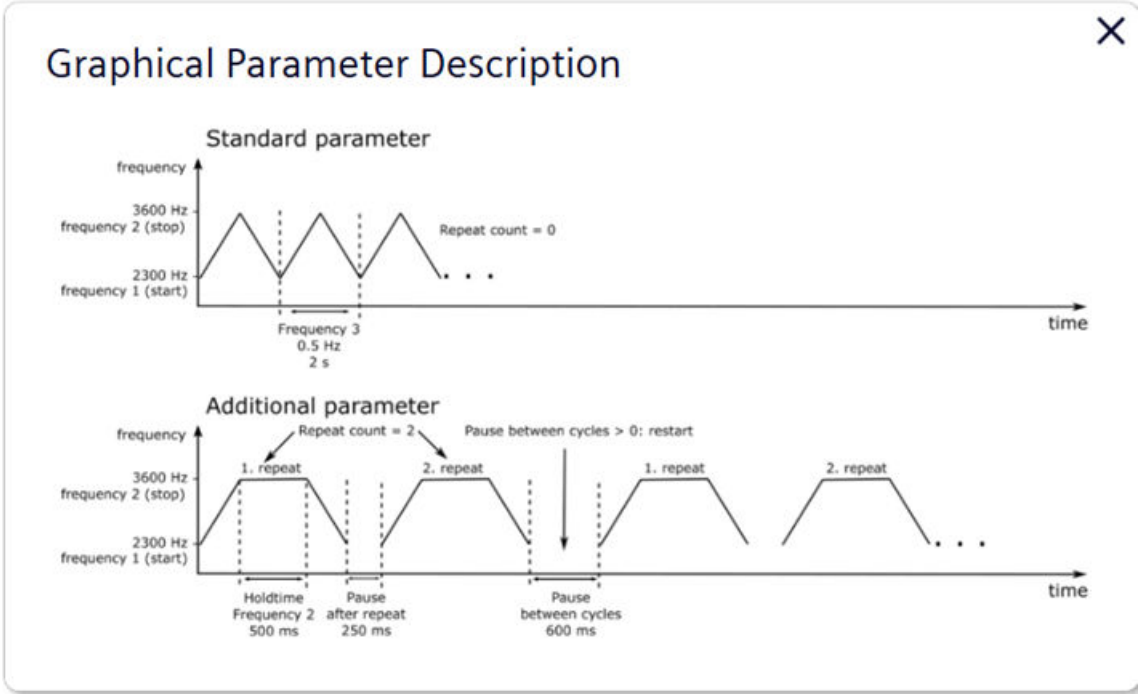
"Individual tone" option

The "Individual tone" option offers the possibility to generate a customer-specific tone on the basis of various parameters.
More information on the individual settings can be called up via the "Graphical parameter description" button and clicking on the small question mark.

1. In the "Select tone" dialog box, select "Individual tone" from the drop-down list.
2. Adjust the settings in the individual boxes.



3. The following image can be called up via the "Graphical parameter description" button to illustrate the effect of the custom settings:



4. Click on the "Select tone" button to specify a tone.

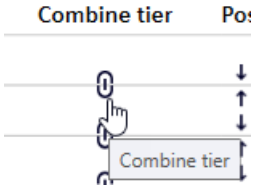
4.2.20.6 Connecting or separating segments

If necessary, multiple tiers can be combined and separated again.

Combine tier

1. Click on the "State" button.

2. In the "Combine tier" column, click the "Combine tier" symbol.



Disconnecting tiers

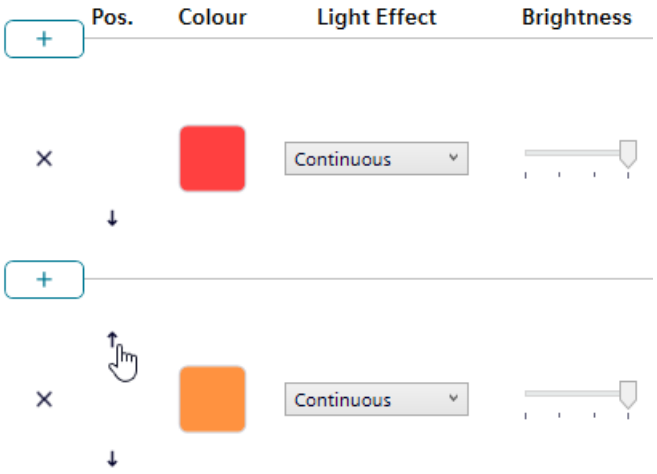
1. Click on the "State" button.

2. In the "Combine tier" column, click the "Separate tier" symbol.

4.2.20.7 Shift tier

If necessary, individual tiers can be shifted up or down.

In the Pos. column, click the up or down arrow to move the tier up or down.



4.2.20.8 Select color

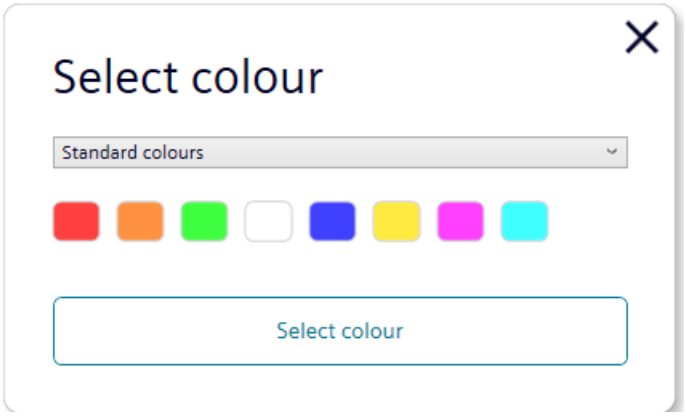
Each tier can be assigned a predefined standard color or an individual color.

Standard color

1. In the "Color" column, click on the displayed color.
2. In the "Select color" dialog box, select "Standard colors" from the drop-down list.
3. Click on the required color to select a standard color.
   The following 8 standard colors are available:

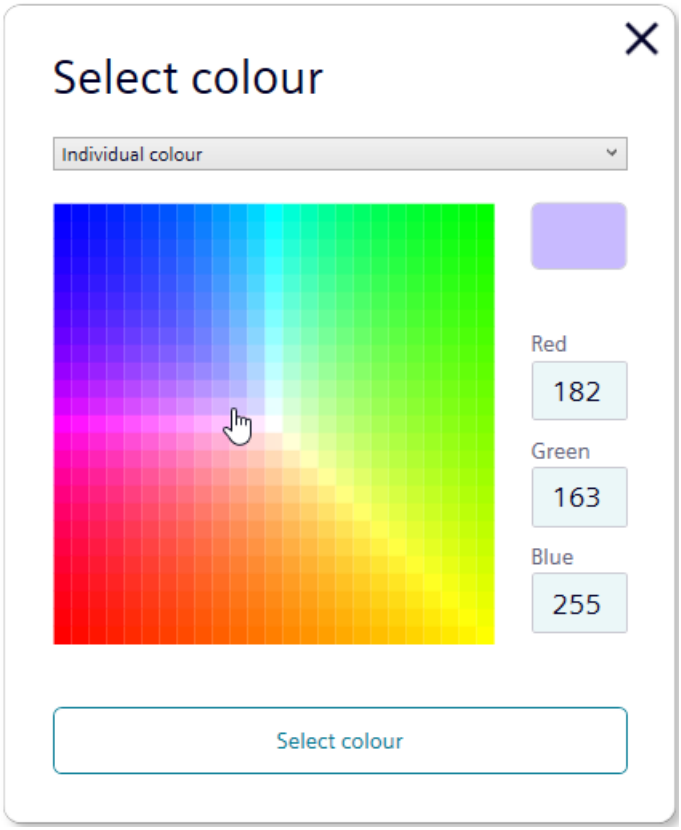
- Red
- yellow
- Green
- white
- Blue
- light yellow

- violet
- turquoise



Individual color

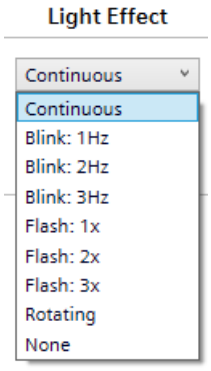
1. In the "Color" column, click on the displayed color.
2. In the "Select color" dialog box, select "Individual color" from the drop-down list.
3. Enter individual RGB values for red, green, and blue, or select a color by clicking on a color box.
4. Click the "Select color" button to assign the color.



4.2.20.9 Select light effect

In the "Light effect" column, select the required lighting effect from the drop-down list.

You can choose one of eight light effects.



The setting "None" can be selected if only a siren is to be assigned to the tier.

4.2.20.10 Select brightness

In the "Brightness" column, you can use the slider to set the desired brightness of the selected color at one of four levels.

4.2.20.11 Configuring Individual mode pins

The fields are preconfigured with a standard assignment, starting with pin 1 at the lowest level of the column.

Pin 7 and 8 are preassigned and cannot be used otherwise. The remaining pins can be adjusted as desired.

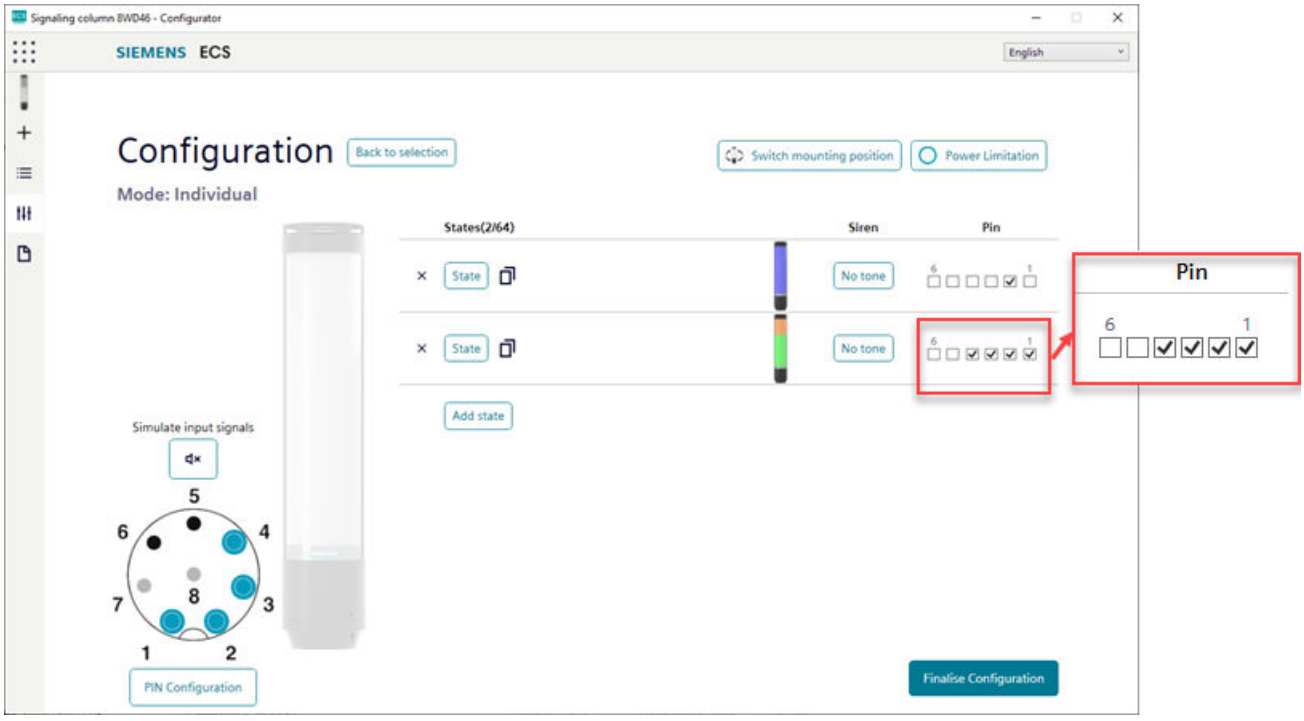
The filling level indicator is controlled via bit coding. The check boxes in the Pin column correspond to the 6 pins or signal lines. Placing a check mark in one or more check boxes indicates that these pins or signal lines must be controlled in order to activate the corresponding setting.

The individual states are controlled via bit coding. The check boxes in the Pin column correspond to the 6 pins or signal lines. Placing a check mark in one or more check

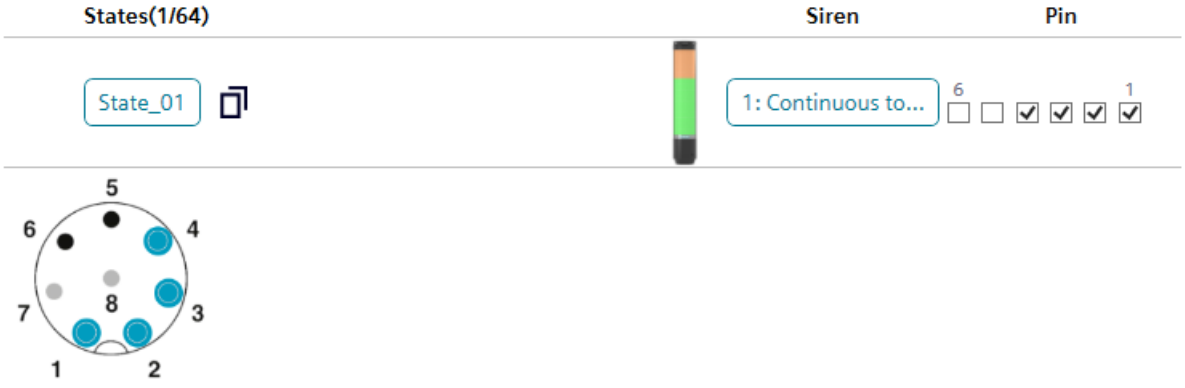
boxes indicates that these pins or signal lines must be controlled in order to activate the corresponding setting.

Example:

To activate "State_01", pins 1 to 4 must be energized.



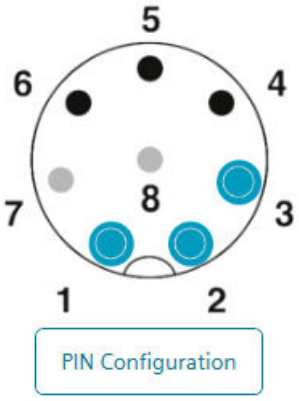
1. In the "Pin" column, select the pins of the 8-pin connector on which the signal for triggering the tier is to be sent.



4.2.20.12 Adapting the pin configuration

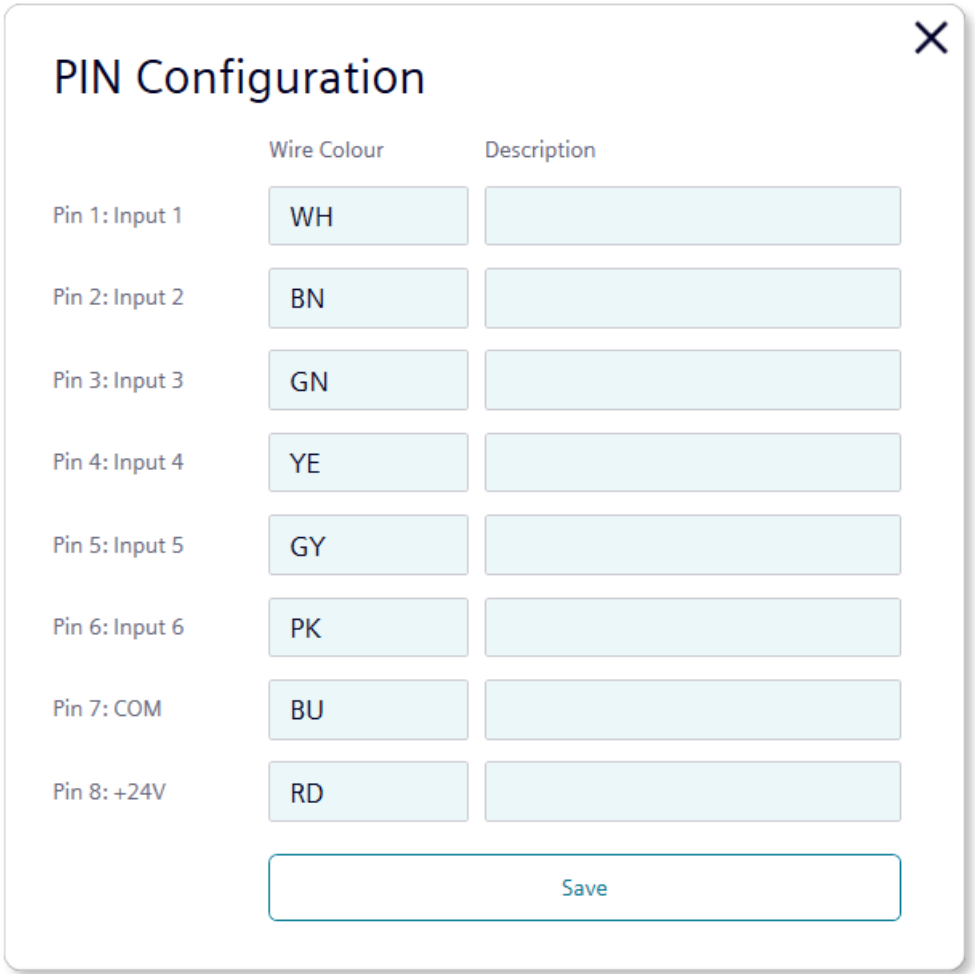
If required, the assignment of the wire color to the pin can be changed and a description of the signal can be stored.

1. Click the "PIN configuration" button.



2. In the "Wire color" column, enter the required color.

3. In the "Description" column, enter the signal description.
4. Click "Save" to apply the selection.



4.2.20.13 Duplicate state

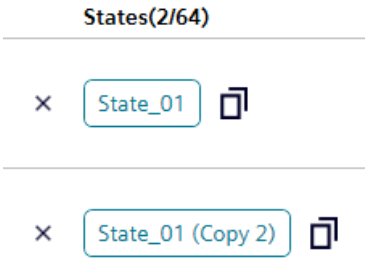
Note

State

You can configure up to 64 states and transfer them to one signaling column.
A state consists of the individual optical settings of each segment and, if applicable, a signal tone.

1. Click the "Duplicate" icon next to the state you want to duplicate.

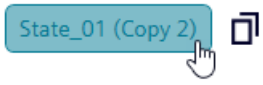
2. A copy is created below the selected state.



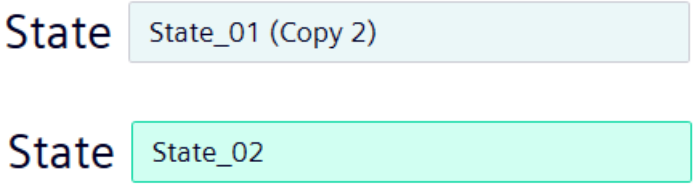
3. Click on the state to make settings.

4.2.20.14 Renaming the state

1. In the configuration, click the button of the state you want to rename.



2. Click in the field next to "State" and assign a new name.



4.2.20.15 Add state

Note

State

You can configure up to 64 states and transfer them to one signaling column.
A state consists of the individual optical settings of each segment and, if applicable, a signal tone.

1. Click the "Add state" button in the "States" column.

2. A new state is inserted.
3. Click on the state to make settings.

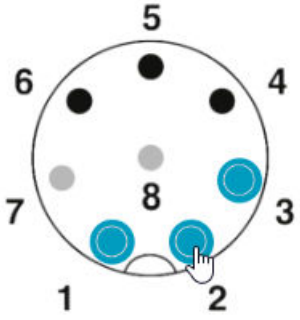
4.2.20.16 Deleting a state

1. Click the "Delete" icon next to the state you want to delete.

4.2.20.17 Simulate input signals

Once all adjustments have been made, the control can be simulated.

On the pin representation, click on the pin or on a combination of pins which is to activate the required tier or the required state.



4.3 Planning / configuring – IO-Link variant

4.3.1 System requirements

An IO-Link system essentially comprises the following components:

- IO-Link master
- IO-Link device (e.g.: sensors, valves, I/O modules, signal devices)
- Unshielded standard cables
- SIMATIC S7-PCT Port Configuration Tool (an engineering tool for configuring and parameterizing IO-Link)

The IO-Link master establishes the connection between the IO-Link devices and the automation system. As part of an I/O system, the IO-Link master is installed either in the control cabinet or as a remote I/O, with degree of protection IP65/67 protection, directly in the field. The IO-Link master communicates via various fieldbuses or product-specific backplane buses. An IO-Link master can have several IO-Link ports (channels). An IO-Link device can be connected to each port (point-to-point communication). The devices are also supplied with power via the output socket or the output terminals of the IO-Link master. More information about IO-Link can also be found in the IO-Link system description, which can be downloaded from www.io-link.com.

4.3.2 Update firmware

Note

The signaling column is supplied with the latest firmware.

There are no automatic updates.

Check whether you are using the latest firmware.

Requirements

Before you can perform a firmware update, the following requirements must be met:

- The computer must be connected to the Internet.
- The signaling column must be connected to the IO-Link master.
- The S7-PCT Port Configuration Tool must have been installed and is open.

Start new firmware download

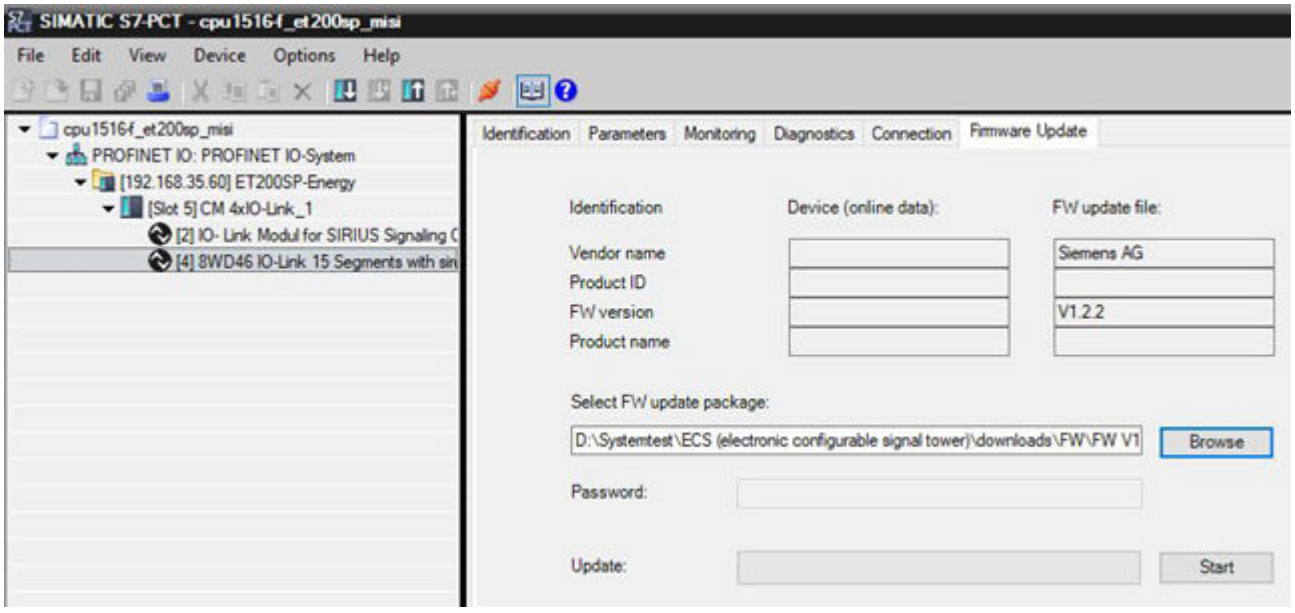
Note

You are not notified when a new firmware update is available.

1. Be sure to download the latest firmware from the Internet: Firmware (https://support.industry.siemens.com/cs/ww/en/view/109811208)
2. Save the displayed zip file locally to your PC.

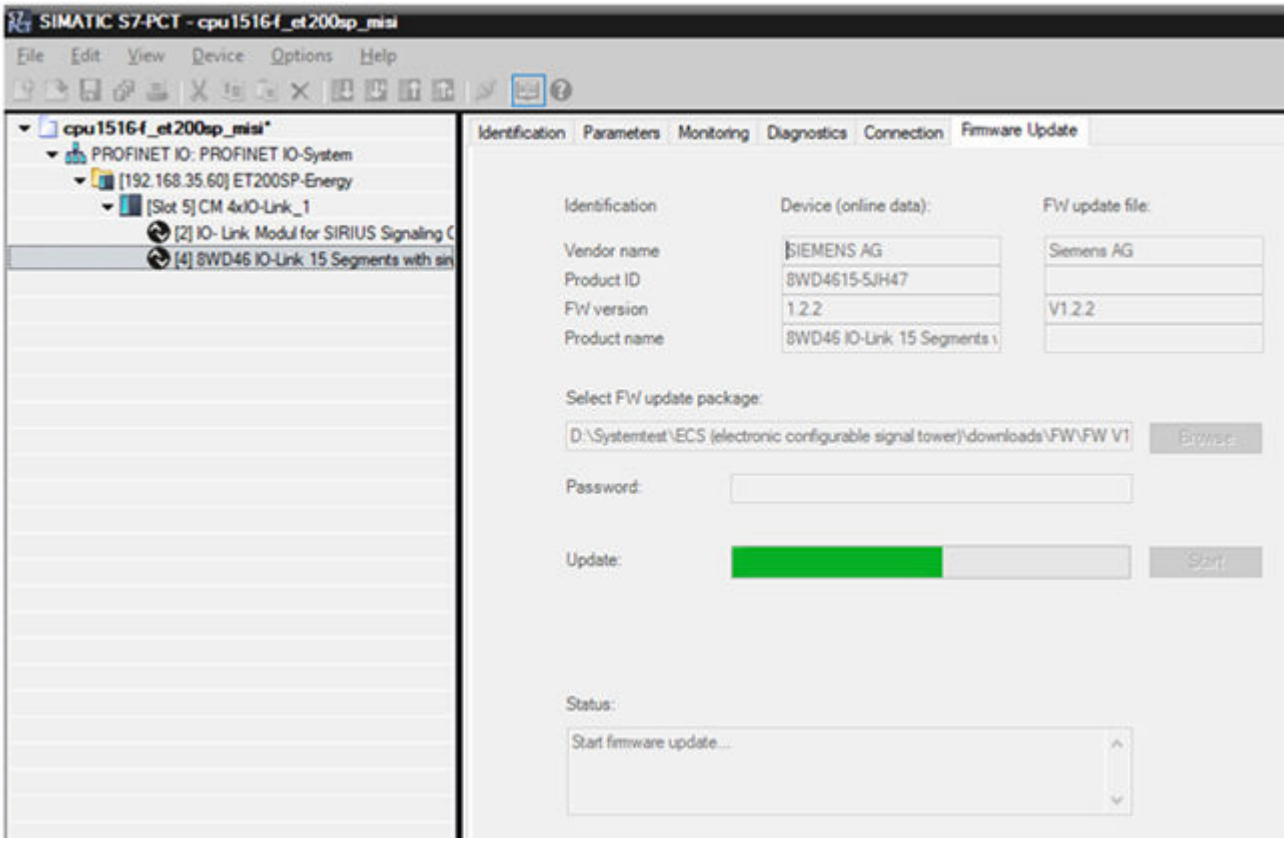
Loading firmware onto the device

1. Open the S7-PCT Port Configuration Tool.
2. Select the Firmware Update tab.
3. Enter the path where you save the firmware.
4. Under "FW Update", you will see the version of the selected firmware.

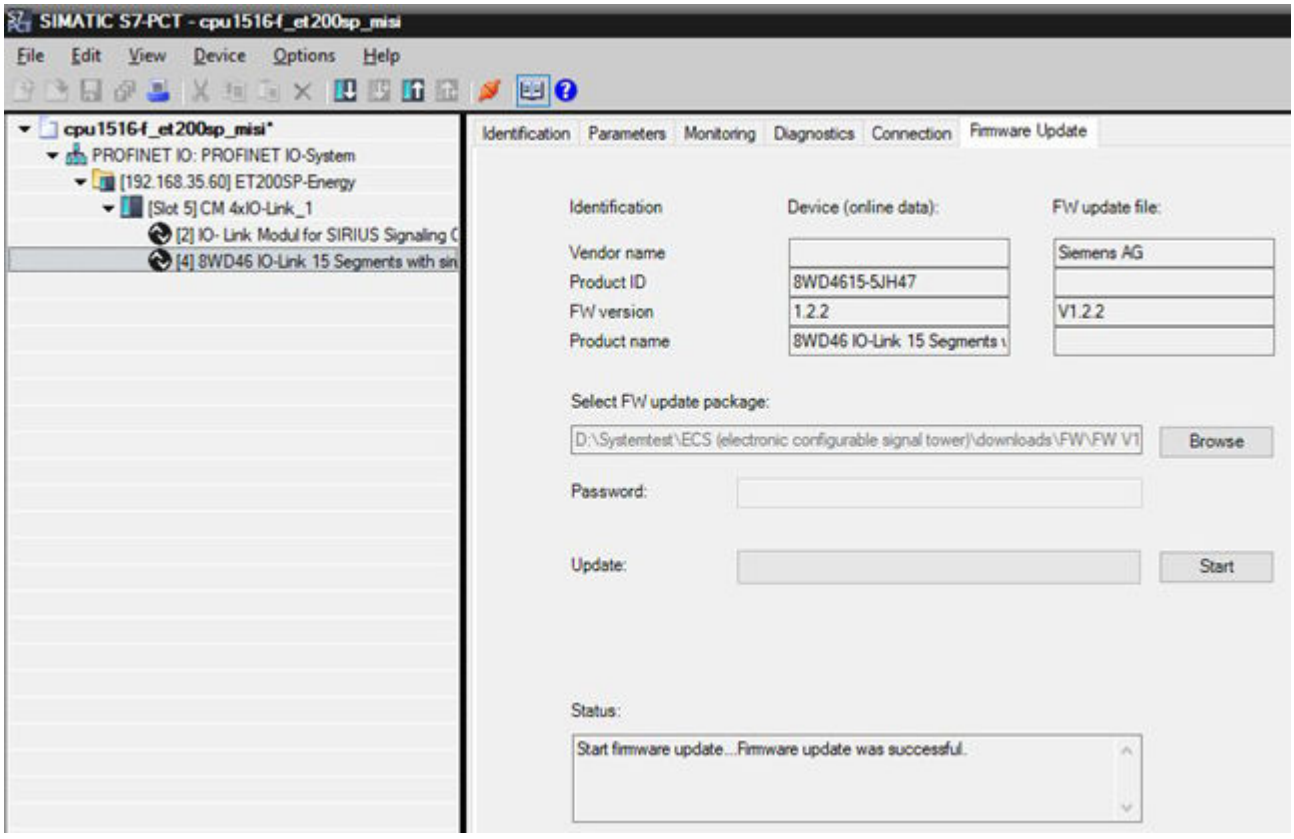


5. Click Start. The connected device is detected and the current data are displayed.

6. While the firmware update is in progress, the LED at the bottom of the signaling column is lit yellow. A progress bar indicates the current status of the updating operation. Updating can take several minutes.



7. Under "Status" you can see whether the firmware update was successful. The LED on the bottom of the signaling column flashes green.



Note

Signaling column settings are retained

After the firmware update, the existing parameter assignment of the signaling column is retained.

4.3.3 Delivery condition of IO-Link variant

Factory settings for all variants

- Autoscale mode
- Power limitation is activated

Variants with 9 segments:

- 3 tiers green / yellow / red
- Continuous
- Low brightness

Variants with 15 segments:

- 5 tiers white / blue / green / yellow / red
- Continuous
- Low brightness

Additionally for variants with siren:

- Continuous tone 2.7 kHz
- Low volume

4.3.4 Power reduction (current consumption) ON

Activation of the power reduction is designed to limit the current consumption from the IO-Link master during commissioning. The current consumption of the IO-Link column is then limited to a maximum of 200 mA.

After resetting the column to its factory settings, the power reduction parameter is ON and the LEDs are set to the continuous light pattern with 100% brightness.

Observe the note on IO-Link type/class A and the possible need for an external auxiliary voltage in section Connecting (Page 119).

4.3.5 Configuration – IO-Link variant

To configure the IO-Link variant, download the IODD.

Setting is via the IO device description (IODD).

4.3.6 Importing the IODD

All functions of the device that are relevant for the machine control system are described in a standardized IO-Link device description (IODD) file.

1. Go to the download for the IODD configuration software (https://support.industry.siemens.com/cs/ww/en/view/109807683).
2. After importing the IODD, search in the controller for new devices.
3. The electronically configurable 8WD46 signaling column is automatically detected.
4. The procedure for importing the IODD and searching for devices depends on the manufacturer of the controller. Refer to the manufacturer's documentation for more detailed information.

4.3.7 Setting the operating mode

The operating mode is set via the "Operating mode" parameter.

Parameter	Value	Mode
Operating mode	0	Signaling column mode
	1	Autoscale mode
	2	Filling level mode
	3	Individual mode

4.3.8 Basic functions

The following parameters apply for all four operating modes.

The parameters can be used to make the following settings for each segment:

- Standard color
- Light effect
- Brightness

The precise options within each of these settings is described in section Parameters for optical functions per segment (Page 90).

This allows a free choice of colors for each segment and maximum flexibility in the selection of the illumination profile since they can also be combined with each other.

This results in a bit count of 24 bits for the process data (16 bits for variants without a siren and 24 bits for variants with a siren).

4.3.9 Parameters for optical functions per segment

Parameter	Value	Description
Light effect	0	Continuous
	1	Blink 3 Hz
	2	Blink 2 Hz
	3	Blink 1 Hz
	4	Flash (1x)
	5	Flash (2x)
	6	Flash (3x)
	7	Rotating
Red proportion (only relevant for individual color PWM)	0...255	Red proportion
Green proportion (only relevant for individual color PWM)	0...255	Green proportion
Blue proportion (only relevant for individual color PWM)	0...255	Blue proportion

Parameter	Value	Description
Brightness	0	Minimum
	1	Low
	2	High
	3	Maximum
Standard color	0	Individual PWM (according to proportion red / green / blue)
	1	Red
	2	Green
	3	Blue
	4	Yellow
	5	Light yellow
	6	Turquoise
	7	Violet
	8	White

4.3.10 Parameters for acoustic functions for 10 custom sounds

Parameter	Value	Description
Tone type	0	Tone off
	1	Permanent
	2	Pulse tone
	3	Rising
	4	Falling
	5	Alternate
	6	Sweep tone
Frequency 1 (start)	245 ... 6000	Frequency at the start of a cycle in Hz
Frequency 2 (stop) (only for rising / falling / alternating)	0 (tone type 1) 245 ... 6 000 (tone type 2 ... 6)	Frequency at the end of a cycle in Hz
Frequency 3 (period)	0 (tone type 1) 1 ... 10 000 (tone type 2 ... 6)	Frequency for time between frequency 1 and frequency 2 in Hz*10
Volume	0	Low
	1	Medium
	2	Loud
	3	Very loud
Repeat count (only for rising / falling / alternating)	0 ... 65535	Repeat count
Pause after repeat (only for rising / falling / alternating)	0 ... 65535	Pause after repeat in ms

Parameter	Value	Description
Pause between cycles (only for rising / falling / alternating)	0 ... 65535	Duration of the pause between cycle in ms
Hold time frequency 2 (only for rising / falling / alternating)	0 ... 65535	Setting of the hold time for full-scale frequency in ms

4.3.11 Global parameters

Parameter	Value	Description
Derating (current consumption)	0	Derating (current consumption) OFF
	1	Derating (current consumption) ON Corresponds to a consumption of about 200 mA
Installation orientation	0	Normal (base downward)
	1	Overhead (e.g. ceiling installation)
Filling level mode (only relevant for filling level operating mode)	0	Use settings of segment 1 through 15 or 1 through 9
	1	Use setting of segment 1

4.3.12 Communication parameters

The following communication parameters are used:

IO-Link revision	V1.1
Bit rate	COM3 230400 bps
Min. cycle time	6 ms
SIO mode	No
Block parameterization	Yes
Data storage	Yes

In the event of communication problems, check the settings and correct them if necessary.

4.3.13 Configuration of electronically configurable signaling columns

Data records

Index	Subindex	Parameter	Access	Byte length	Value	Description
02		System command	wo	1	130	Use factory settings
16		Manufacturer's name	ro	48		SIEMENS AG

Index	Subindex	Parameter	Access	Byte length	Value	Description
17		Manufacturer's text	ro	48		
18		Product name	ro	32		Signal light platform
19		Product ID	ro	16		
20		Product text	ro	64		Platform for signal lights
21		Serial number	ro	16		Not in use
22		Hardware revision	ro	16		AB
23		Firmware revision	ro	16		1.21
24		Application-specific identifier	r/w	32		
25		Function tag	r/w	32		
26		Location tag	r/w	32		
36		Device status	ro			
37		Detailed device status	ro			
74		Operating hours	ro	4		
100		Mode	r/w	1		
101 - 115	1	Light effect	r/w	1		
	2	PWM R	r/w	1		
	3	PWM G	r/w	1		
	4	PWM B	r/w	1		
	5	Brightness	r/w	1		
	6	Standard color	r/w	1		
	7	Not used	r/w	1		
	8	Priority	r/w	1		
120 - 130	1	Mode	r/w	1		
	2	Frequency 1 (start)	r/w	2		
	3	Frequency 2 (stop)	r/w	2		
	4	Frequency 1 (period)	r/w	2		
	5	Volume	r/w	1		
	6	Repeat count	r/w	2		
	7	Pause after repeat	r/w	2		
	8	Pause between cycles	r/w	2		
	9	Hold time frequency 2	r/w	2		
131		Derating	r/w	1		
132		Filling level mode	r/w	1		
138		Overhead	r/w	1		
139		Number of elements	r/w	1		

ro = read only

wo = write only

r/w = read/write

4.3.14 Control in autoscale mode

The autoscale mode is the standard operating mode on delivery.

In this operating mode, the segments of the electronically configurable signaling columns are automatically divided equally between the number of triggered pins (bits) and status warnings.

With this setting, the full potential of the electronically configurable signaling column can be exploited by means of full surface signaling.

For example, if only one status message is active, the entire area of the electronically configurable signaling column is illuminated in a single color to ensure maximum visibility.

If multiple signals are present, the illuminated surface is split proportionally. If the segments cannot be uniformly distributed, the color with the highest priority will be assigned to the last segment or remaining segments.

The process data for autoscale mode can be found in the following table:

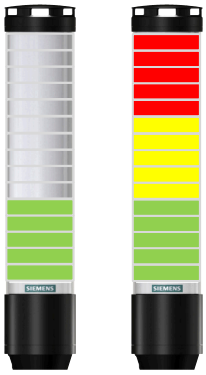
Byte	**1**								**0**							
Bit	**7**	**6**	**5**	**4**	**3**	**2**	**1**	**0**	**7**	**6**	**5**	**4**	**3**	**2**	**1**	**0**
Description	-	-	-	-								Seg 5	Seg 4	Seg 3	Seg 2	Seg 1

In this operating mode, the process data is reduced to 5 bits (variant with 15 segments) or 3 bits (variant with 9 elements).
The parameters of segments 1 to 5 are used for the setting.

4.3.15 Control in signaling column mode

Individual segments of the electronically configurable signaling column can be combined to create a signal column tier. This enables a conventional signaling column to be realized in an electronically modular form.

In this mode, the tiers have fixed positions and can be off if the corresponding tier and optical signal is not triggered.



This mode limits the illuminated surface of the signal within the signal to a certain area.

The maximum number of tiers selectable is 3 (for 9 segments) or 5 (for 15 segments).

The process data for this operating mode can be found in the following table:

Byte	**1**								**0**							
Bit	**7**	**6**	**5**	**4**	**3**	**2**	**1**	**0**	**7**	**6**	**5**	**4**	**3**	**2**	**1**	**0**
Description	-	-	-	-								Seg 5	Seg 4	Seg 3	Seg 2	Seg 1

According to the set number of tiers, process data bits starting at segment 1 are used.

4.3.16 Control in filling level mode

In the filling level mode, an analog value is displayed via the signaling column.

The segments of the electronically configurable signaling column are used as a filing level indicator. The bandwidth extends from 0%, when all segments are switched off, up to 100%, when all segments are activated. This enables precise signaling of the progress of orders or material availability in machine processes in the form of a rising or falling illumination profile.

Eight-bit process data is processed. The permissible value range lies between 0 and 100.

Byte	Byte 0	
Value	0 ... 100	% - Value

The color setting is specified via the "Filling level" global parameter.

Two options are available for selection:

- Segment settings 1 through 15 are accepted
- The segment 1 setting is accepted

4.3.17 Control in Individual mode

In the Individual mode, each segment is mapped as a separate switching signal.

You can individually set and control each segment of the electronically configurable signaling column (9 or 15 segments per column). This allows the maximum possible number of custom signaling options.

For the process data, the number of bits is 9 (variant with 9 elements) or 15 bits (variant with 15 segments).

The process data for Individual mode can be found in the following table:

Byte	**1**								**0**							
Bit	**7**	**6**	**5**	**4**	**3**	**2**	**1**	**0**	**7**	**6**	**5**	**4**	**3**	**2**	**1**	**0**
Description	-	Seg 15	Seg 14	Seg 13	Seg 12	Seg 11	Seg 10	Seg 9	Seg 8	Seg 7	Seg 6	Seg 5	Seg 4	Seg 3	Seg 2	Seg 1

The parameters of segments 1 through 15 are used for the setting.

4.3.18 Controlling the siren functions

Single-byte process data is used for the sirens. Numerical values from 1 to 10 are possible, each corresponding to one of the preset tones.
The following table provides an overview of the preset tones:

Tone	Frequency	Description	Max. dB (A)
1	2.7 kHz	Permanent	104
2	0.9 kHz	Permanent	96
3	420 Hz 2.1 kHz	Pulse tone	97
4	20 Hz 0.9 kHz	Pulse tone	93
5	20 Hz 2.65 kHz	Pulse tone	103
6	1 Hz 0.9 kHz	Pulse tone	96
7	1 Hz 2.8 kHz	Pulse tone	104
8	0.5 Hz 2.3 kHz - 3.6 kHz	Sweep tone	104
9	2.65 kHz	Permanent	105
10	1 Hz 1.2 kHz 0.8 kHz	Alternate	92

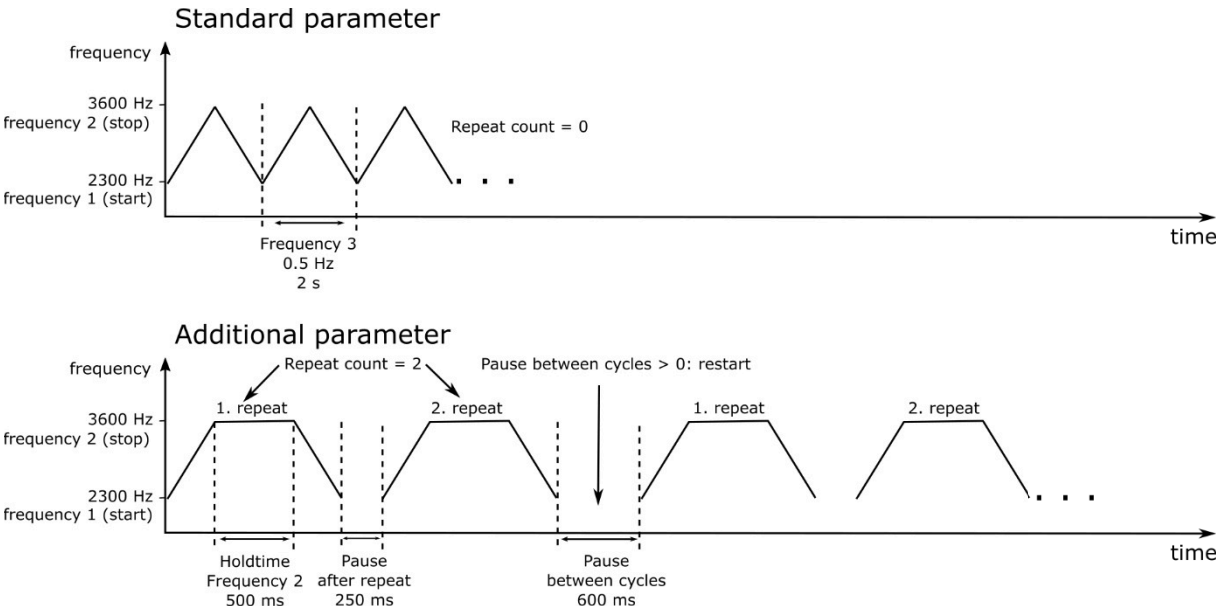
Alternatively, you can configure custom sounds. For this purpose, use the parameters described in section Parameters for acoustic functions for 10 custom sounds (Page 91).

First choose one of the following tone types:

- Permanent
- Pulse tone
- Rising
- Falling

- Alternate
- Sweep tone

The following graphic shows the respective effects of the parameters:



Example:

Tone 8. Tone type	r/w	Sweep tone
Tone 8. Frequency 1 (start)	r/w	2300
Tone 8. Frequency 2 (stop)	r/w	3600
Tone 8. Frequency 3 (period)	r/w	5
Tone 8. Volume	r/w	Low
Tone 8. Repeat count	r/w	0
Tone 8. Pause after repeat	r/w	0
Tone 8. Pause between cycles	r/w	0
Tone 8. Hold time frequency 2	r/w	0

4.3.19 Reset function

Set to delivery state

The "Factory settings" command deletes the existing parameterization and resets it to the as-delivered state (see Delivery condition of IO-Link variant (Page 88)).

4.3.20 Configuring the IO-Link

4.3.20.1 Combinations

IO-Link master and IO-Link device combinations are shown in the following table.

	IO-Link device...	
IO-Link master...	**... according to IO-Link communication specification V1.0**	**... according to IO-Link communication specification V1.1**
...according to IO-Link communication specification V1.0	Operation according to specification V1.0	Operation according to specification V1.0
...according to IO-Link communication specification V1.1	Operation according to specification V1.0	**Operation according to specification V1.1**[1)]

[1)] By selection of IODD V1.0.1, the device can be operated according to IO-Link communication specification V1.0.

Differences between IO-Link communication specifications V1.0 and V1.1

- Usable IO-Link telegram length (not relevant)
- Application-specific name: V1.0: 64 bytes max./V1.1: 32 bytes max.
- IO-Link device LED: V1.0: green/V1.1: Green blinking
- Device ID: V1.0: 0x00/V1.1: 0x01
- Parameter server functionality: V1.0: not available/V1.1: available

4.3.20.2 Configuring with STEP 7 and the S7-PCT Port Configuration Tool

Basic procedure and prerequisites

Procedure when configuring IO-Link master and IO-Link devices

Configuration takes place in two steps with STEP 7, V5.4 SP5 or STEP 7 TIA Portal, V12.0 or higher:

1. Configuring the IO-Link master in *HW Config*. You will find IO-Link master on the Internet (http://www.siemens.com/industrymall) under "Automation" > "Industrial communication" > "IO-Link" > "Master".
2. With the Port Configuration Tool *S7-PCT*, you configure the connected IO-Link-Devices.

Note

The block library for IO-Link (LIOLink) is available as download in the Siemens Industry Online Support (SIOS) via the following link: Library for IO-Link (LIOLink) (https://support.industry.siemens.com/cs/ww/en/view/82981502)

Note

An application example for using the device-specific blocks from the block library for IO-Link (LIOLink) can be found on the Internet (https://support.industry.siemens.com/cs/ww/en/view/90529409).

Requirements

- STEP 7 from V5.4 SP5 or STEP 7 TIA Portal from V12.0.
- The Port Configuration Tool *S7-PCT* is installed on the PG/PC.
  You can either install *S7-PCT* together with or STEP 7 or you can download it from the Internet (https://support.industry.siemens.com/cs/ww/en/view/32469496).
- IO-Link IODD files (IO Device Description) are installed in the *S7-PCT hardware catalog*. You can download all current IODD files for the SIRIUS devices from the Internet (https://support.industry.siemens.com/cs/ww/en/ps/15851/dl).
  IODD files for V1.0 and V1.1 are available for the combination of an IO-Link master and an IO-Link device according to the IO-Link communication specification V1.1. You may need IODD files according to the IO-Link communication specification V1.0 when replacing devices in existing installations.
- The GSD files of the IO-Link masters are already installed in *STEP 7 HW Config*. You can download all current GSD files for the Siemens IO-Link masters from the Internet (https://support.industry.siemens.com/cs/ww/en/ps/14288).

Configuration

Configuring the IO-Link master in *HW Config*

1. Start the SIMATIC Manager (*STEP 7*) or the TIA Portal and configure the project as described in the *STEP 7* online help.
2. Select the IO-Link master in the hardware catalog of *HW Config*.
3. Drag and drop the IO-Link master from the hardware catalog to the hardware configuration.
4. Select the IO-Link master in the hardware configuration (*STEP 7 V5.x*) / device view (*STEP 7* TIA).
5. Press the right mouse button and in the shortcut menu select "**Object Properties**" (*STEP 7 V5.x*) / "**Properties**" (*STEP 7* TIA).
   Result: The "**Properties**" window of the IO-Link master opens.
6. Check the settings of the addresses.
   Every IO-Link master port needs a corresponding overall address range depending on the IO-Link device used.

Configuring the IO-Link device with the S7-PCT Port Configuration Tool

1. Select the configured IO-Link master.
2. Press the right mouse button and select "**Start device tool**" (*STEP 7* TIA) / "**Configure IO-Link**" (*STEP 7 V5.x*) from the shortcut menu depending on the configuration tool used.
3. Select the IO-Link device in the component catalog of the S7-PCT Port Configuration Tool.
4. Drag the IO-Link device out of the component catalog to the required port of the IO-Link master.
5. Start by parameterizing the IO-Link device.
   More information is available in the *S7-PCT* online help.

4.3.20.3 Configuring with the S7-PCT port configuration tool (stand-alone)

Application

Configuration is always done with the S7-PCT Port Configuration Tool whenever no SIMATIC CPU is available and a SIMATIC IO-Link master is being used.

Basic procedure and prerequisites

Basic procedure when configuring IO-Link master and IO-Link devices with the S7-PCT Port Configuration Tool (stand-alone)

1. You configure the connected IO-Link devices with the *S7-PCT* Port Configuration Tool.

Requirements

- The *S7-PCT* Port Configuration Tool is installed on the PG/PC.
  You can either install *S7-PCT* together with STEP 7 V5.4 SP5 or higher or STEP 7 TIA Portal V12.0 or higher, or you can download it from the Internet (https://support.industry.siemens.com/cs/ww/en/view/32469496).
- IO-Link IODD files (IO Device Description) are installed in the *S7-PCT* hardware catalog. All current IODD files of the SIRIUS devices are available on the Internet (https://support.industry.siemens.com/cs/ww/en/ps/15851/dl).
  IODD files for V1.0 and V1.1 are available for the combination of an IO-Link master and an IO-Link device according to the IO-Link communication specification V1.1. You may need IODD files according to the communication specification V1.0 when replacing devices in existing installations.

Note

Configuring with S7-PCT stand-alone is not possible for the CPU versions of the ET 200.

Configuration

Configuring the IO-Link device with the S7-PCT Port Configuration Tool

1. Start the *S7-PCT* Port Configuration Tool.
2. Create a new project or open an existing project as described in the online help.
3. Double-click to select a bus category (PROFIBUS DP / PROFINET IO).
4. Double-click to select an IO-Link master.
5. Select the IO-Link device in the component catalog of the *S7-PCT* Port Configuration Tool.
6. Drag the IO-Link device out of the component catalog to the required port of the IO-Link master.
7. Load the configuration into the IO-Link master before parameterizing the IO-Link device.
8. Start by parameterizing the IO-Link device.
   More information is available in the *S7-PCT* online help.

Note

To be able to access the IO-Link master or an IO-Link device online, communication between the ET 200 and the higher-level controller must be active (BF LED on ET 200 interface module is off).

4.3.20.4 Block library for IO-Link (LIOLink)

The current block library for IO-Link (LIOLink) can be used for STEP 7 TIA Portal V16 and higher. For older STEP 7 versions, the article contains an archive download of an earlier version. The function block library for IO-Link (LIOLink) provides blocks and PLC data types to enable communication between the SIMATIC controller and IO-Link master or IO-Link device.

All blocks of the library are compatible with the SIMATIC S7-1200 / 1500 controller and mostly also with the SIMATIC S7-300 / 400 controller.

Basic blocks

The library contains the following blocks, among others:

- The LIOLink_Device block enables the reading and writing of acyclic data of an IO-Link device via the S7 program
- The LIOLink_Master block enables the backup (Backup) and restore (Restore) of device parameters and device settings of an IO-Link master via the S7 program (master exchange without engineering tool)

Device-specific blocks for simple communication with IO-Link devices

The library for IO-Link is available as download in the Siemens Industry Online Support (SIOS) via the following link:

Library for IO-Link (LIOLink) (https://support.industry.siemens.com/cs/ww/en/view/82981502)

Note

An application example for using the device-specific blocks for IO-Link can be found on the Internet (https://support.industry.siemens.com/cs/ww/en/view/90529409).

4.3.20.5 Replacing an IO-Link device

To replace an IO-Link device, the devices must be isolated from communication and disconnected from the power supply. After the connections have been restored and communication has been resumed, the parameterization can be restored according to the respective IO-Link communication specification:

- IO-Link communication specification V1.0: concerning the LIOLink_Device function block.
- IO-Link communication specification V1.1: via automatic parameterization under the ET 200SP

Replacing an IO-Link device according to the IO-Link communication specification V1.0

Procedure

Parameter data and configuration data specially optimized by the user for a specific application are stored in an IO-Link-Device. This data deviates in many cases from the default values stored in the IO-Link-Device.

In the event of replacement of an IO-Link-Device (referred to below as a "module"), the optimized data must be transferred to the new module because the parameters are stored only in the IO-Link device itself.

Data can be transferred via two channels:

- Module replacement with PG/PC
- Module replacement without PG/PC

Procedure with PG/PC

In the event of a replacement, a PG/PC is available with the SIMATIC project of the plant.

With the data stored in the SIMATIC project, and the *S7-PCT* port configuration tool, you transfer the parameters belonging to the replaced IO-Link-Device to the new IO-Link-Device.

Procedure without PG/PC

Requirements

- Implement the LIOLink_Device function block in the S7 program.
  You can download the LIOLink_Device function block and the description from the Internet (https://support.industry.siemens.com/cs/ww/en/view/82981502).

On completion of commissioning, a PG/PC with the project is no longer available. For backing up and restoring the parameter data and configuration data from or to a module, the LIOLink_Device function block is available for the SIMATIC S7 controllers.

With this function block, you back up all relevant data records of a module after commissioning, in a data block (DB), for example. In the event of a replacement, you write the relevant data from the data block to the replaced module with the LIOLink_Device function block.

Procedure

1. Install the block library for IO-Link (https://support.industry.siemens.com/cs/ww/en/view/82981502).
2. Use the LIOLink_Device function block as described in the documentation.
3. An application example for using the device-specific blocks from the block library for IO-Link (LIOLink) can be found on the Internet (https://support.industry.siemens.com/cs/ww/en/view/90529409).

Replacing an IO-Link device according to the IO-Link communication specification V1.1

Automatic saving of parameter data

If IO-Link masters and IO-Link devices according to the IO-Link Kommunikations-Spezifikation V1.1 are available, the "parameter server" function can be used to automatically back up parameter data.
When devices are replaced, this parameter data is written back to the new IO-Link device automatically on system startup.

Mounting

5

5.1 Configuration prior to installation

Note

Configuration prior to installation.

Conventional 24 V variant: Configuration via the USB-C interface must be performed before installing the signaling column (see Planning / configuring - conventional 24 V variant (Page 28)).

IO-Link variant: Configuration via M12 socket with IO-Link master is possible before or after installing the signaling column (see Planning / configuring – IO-Link variant (Page 85)).

5.2 Fixing options

The following fixing options can be used for electronically configurable signaling columns:

- Floor mounting (see Floor mounting (Page 107))
- Wall mounting (see Wall mounting (Page 111))
- Pipe mounting (see Pipe mounting (Page 114))

Accessories are required for the wall mounting and pipe mounting variants (see Accessories (Page 129)).

Floor mounting	**Wall mounting**	**Pipe mounting**
		
Floor mounting without accessories	Bracket for single-sided mounting	Base with integrated tube

5.2.1 Floor mounting

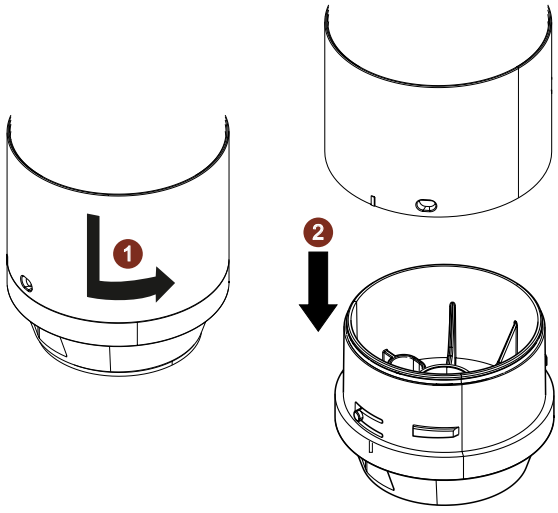
Break out the preset breaking points for the floor and wall mounting options

1. Remove the lower part of the signaling column by turning it counterclockwise.

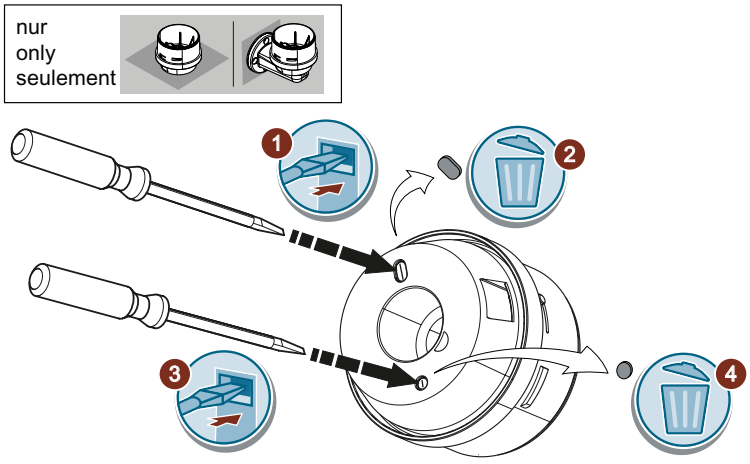
Note

Delivery state is unlocked.

In the delivery state, the lower and upper parts of the signaling column are not locked. The lower part only has to be unlocked if the signaling column has already been assembled (see Removing the lower section (Page 117)).

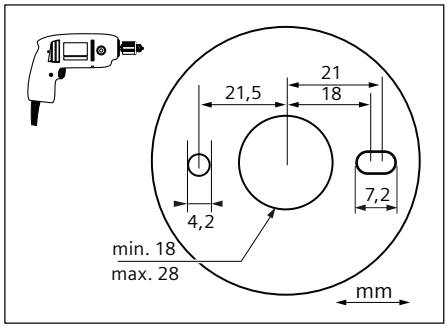


2. Use a screwdriver to punch out the premachined breaking points in the lower section of the signaling column.



Pre-drilling

If necessary, prepare the mounting surface by pre-drilling holes.

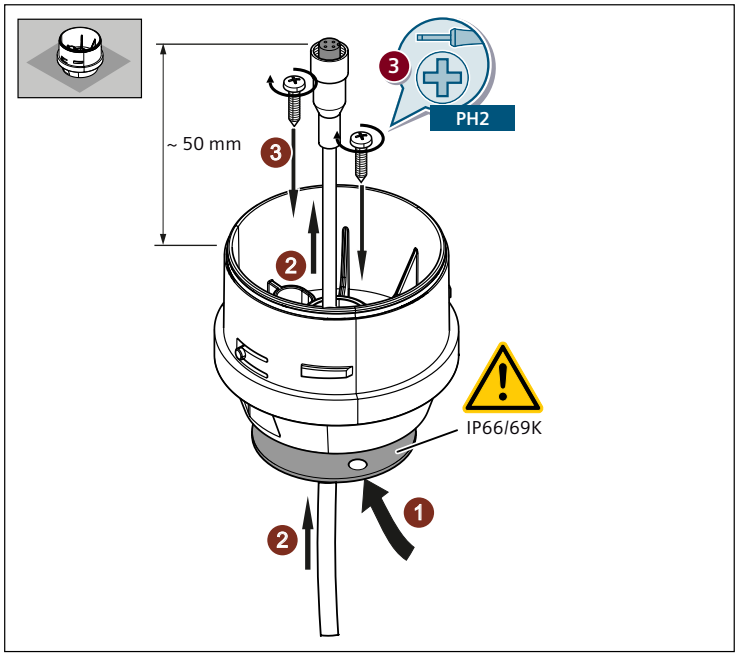


Note

Observe space requirements

During installation, observe the space requirements for the M12 socket.

1. Place the supplied gasket on the bottom part of the signaling column to achieve IP66/69K protection.
2. Feed the connecting cable through the lower part of the signaling column from below.
3. Using two screws, screw the lower part to the base.



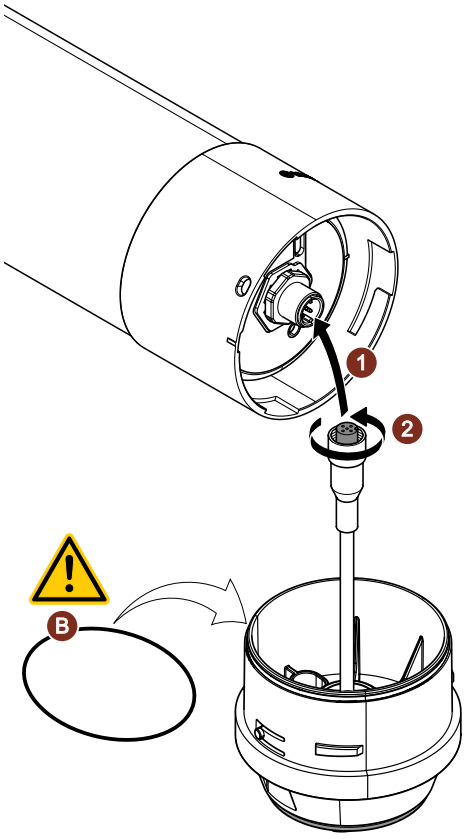
Connection

Note

Check seating of the O-ring.

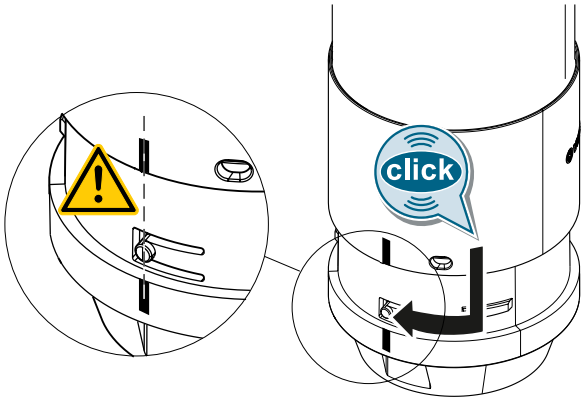
Make sure that the supplied O-ring (B) is placed on the top of the lower part.

1. Plug the socket of the connection cable into the signaling column connector.
2. Tighten the socket by turning clockwise.



Finalize the mounting work

1. Place the upper part onto the lower part of the signaling column. Make sure that the two parts are positioned correctly.
2. Turn the upper part clockwise to lock it in place.


click

5.2.2 Wall mounting

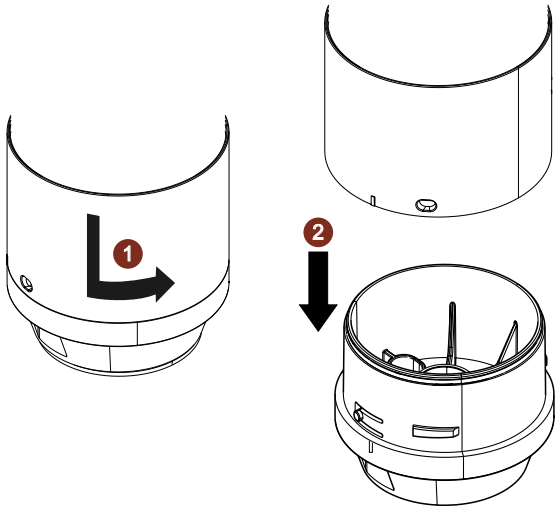
Break out the preset breaking points for the floor and wall mounting options

1. Remove the lower part of the signaling column by turning it counterclockwise.

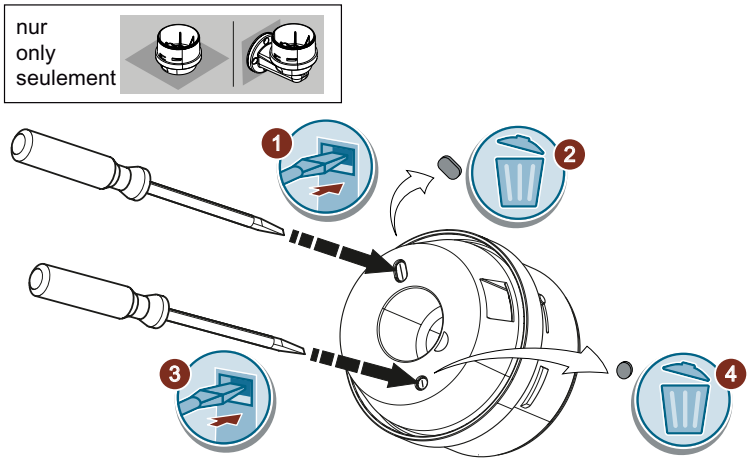
Note

Delivery state is unlocked.

In the delivery state, the lower and upper parts of the signaling column are not locked. The lower part only has to be unlocked if the signaling column has already been assembled (see Removing the lower section (Page 117)).

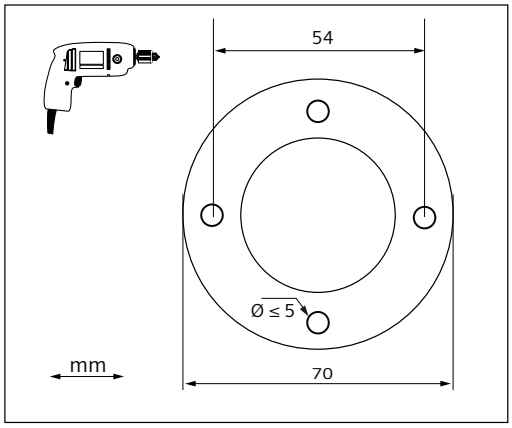


2. Use a screwdriver to punch out the premachined breaking points in the lower section of the signaling column.



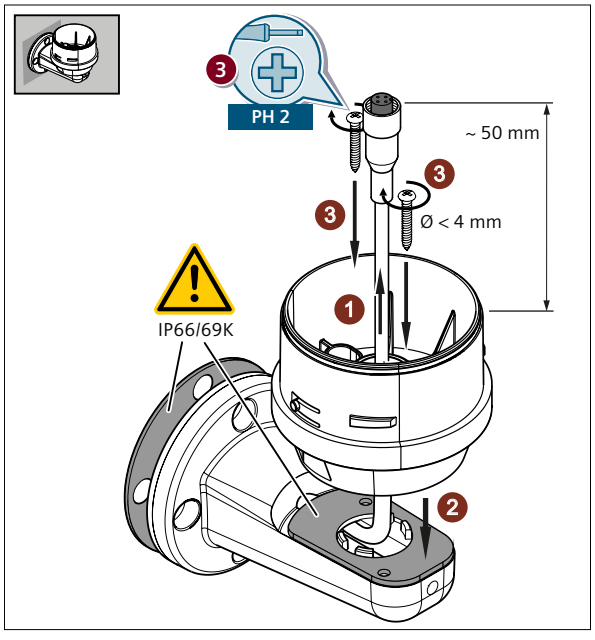
Pre-drilling

If necessary, prepare the mounting surface by pre-drilling holes.



Mounting

1. Use the supplied gaskets to achieve IP66/69K protection.
2. Feed the connecting cable through the bracket for wall mounting.
3. Secure the wall mounting bracket tightly with screws.
4. Using the two screws provided, screw the lower part of the column onto the wall mounting bracket.



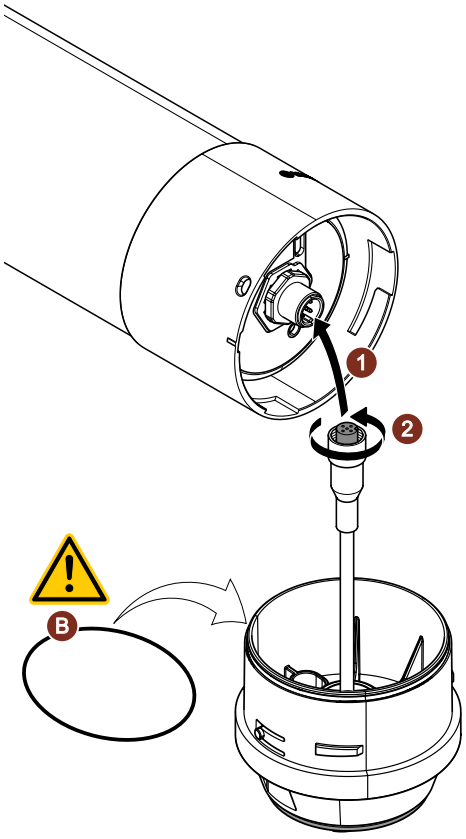
Connection

Note

Check seating of the O-ring.

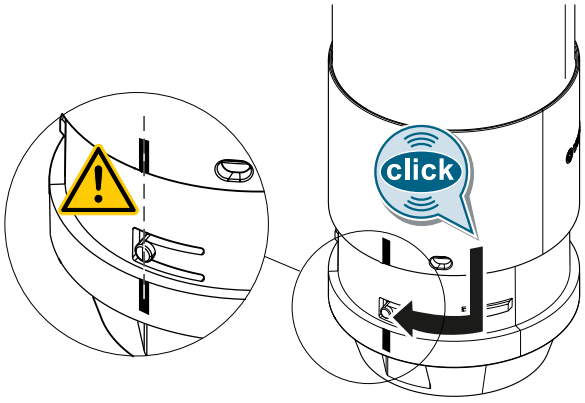
Make sure that the supplied O-ring (B) is placed on the top of the lower part.

1. Plug the socket of the connection cable into the signaling column connector.
2. Tighten the socket by turning clockwise.



Finalize the mounting work

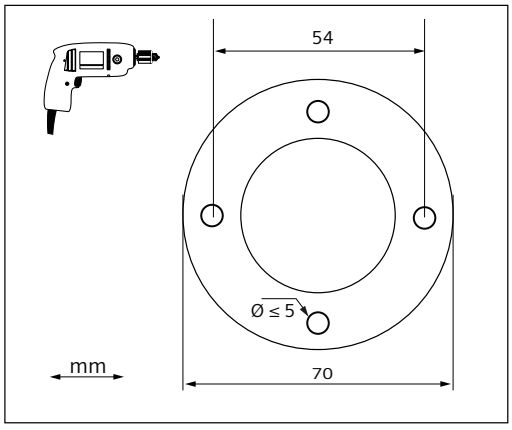
1. Place the upper part onto the lower part of the signaling column. Make sure that the two parts are positioned correctly.
2. Turn the upper part clockwise to lock it in place.



5.2.3 Pipe mounting

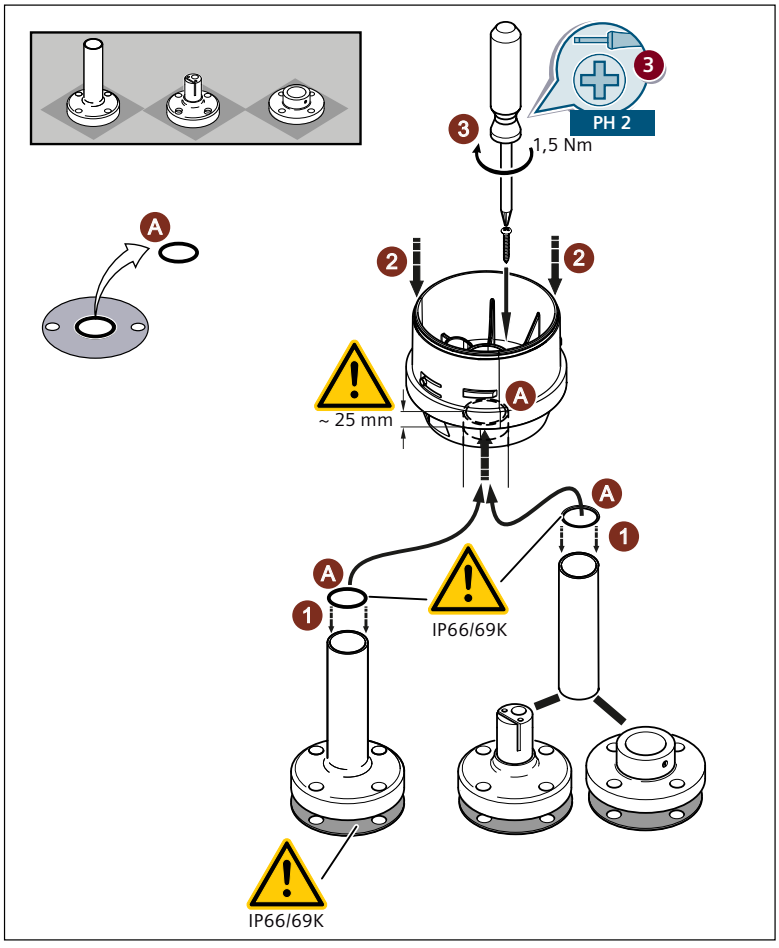
Pre-drilling

If necessary, prepare the mounting surface by pre-drilling holes.



1. Release the inner ring (A) from the outer ring of the supplied gasket. Inset the smaller gasket (A) into the lower section of the signaling column from below.
2. Place the lower part of the signaling column onto the pipe.
3. Tighten the supplied screw in the lower section of the signaling column to secure the lower section to the pipe element.

4. Place the supplied seal with 4 holes on the underside of the base.
5. Feed the connecting cable through the base, the pipe, and the lower section of the signaling column.



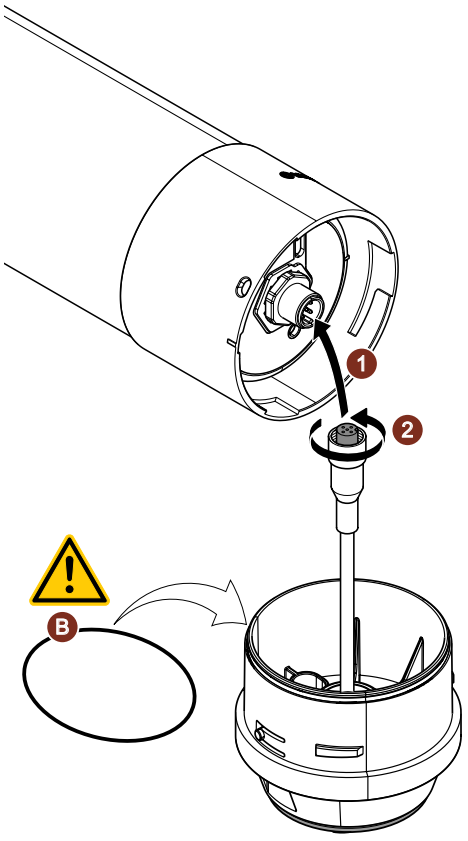
Connection

Note

Check seating of the O-ring.

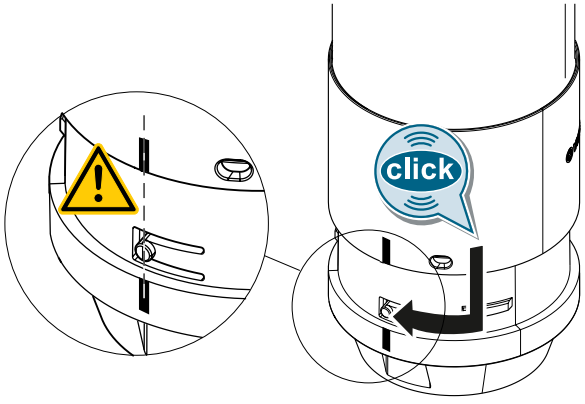
Make sure that the supplied O-ring (B) is placed on the top of the lower part.

1. Plug the socket of the connection cable into the signaling column connector.
2. Tighten the socket by turning clockwise.



Finalize the mounting work

1. Place the upper part onto the lower part of the signaling column. Make sure that the two parts are positioned correctly.
2. Turn the upper part clockwise to lock it in place.



5.2.4 Removing the lower section

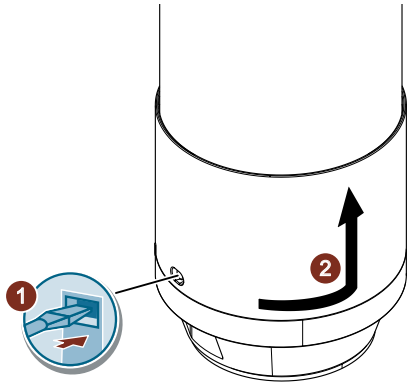
Note

Delivery state is unlocked.

In the delivery state, the lower and upper parts of the signaling column are not locked. The lower part only has to be unlocked if the signaling column has already been assembled.

Removing the lower section

1. Insert a screwdriver into the side opening of the lower part of the electronically configurable signaling column and press to unlock it.
2. Rotate the upper section of the signaling column counterclockwise and lift it off.



Connecting

6

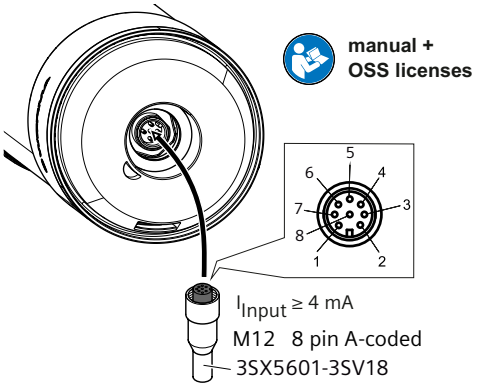
6.1 Conventional variant 24 V

6.1.1 Electrical connection – conventional 24 V variant

In the conventional 24 V variant, the signaling column is connected via an 8-pin M12 plug. No other wiring is necessary.

Pin assignment

8WD4613-5.H37 / 8WD4615-5.H37



Pin	Conductor color M12 cable (acc. to IEC 60947-5-2)	Function		Pin	Conductor color M12 cable (acc. to IEC 60947-5-2)	Function
1	WH	Input 1		5	GY	Input 5
2	BN	Input 2		6	PK	Input 6
3	GN	Input 3		7	BU	COM (GND)
4	YE	Input 4		8	RD	+24 V

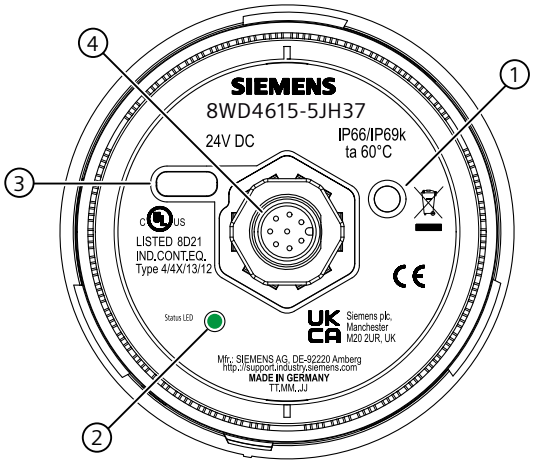
WH = white, BN = brown, GN = green, YE = yellow, GY = gray, PK = pink, BU = blue, RD = red

NOTICE
The limited voltage/current source must meet the following requirements: • A suitable insulating power supply in conjunction with a fuse conforming to UL248 (JDYX2/8). • The fuse must be rated at a maximum of T 2.5 A and must be installed in the 24 V DC power supply of the device to limit the available current.

6.1.2 Status LED – conventional 24 V variant

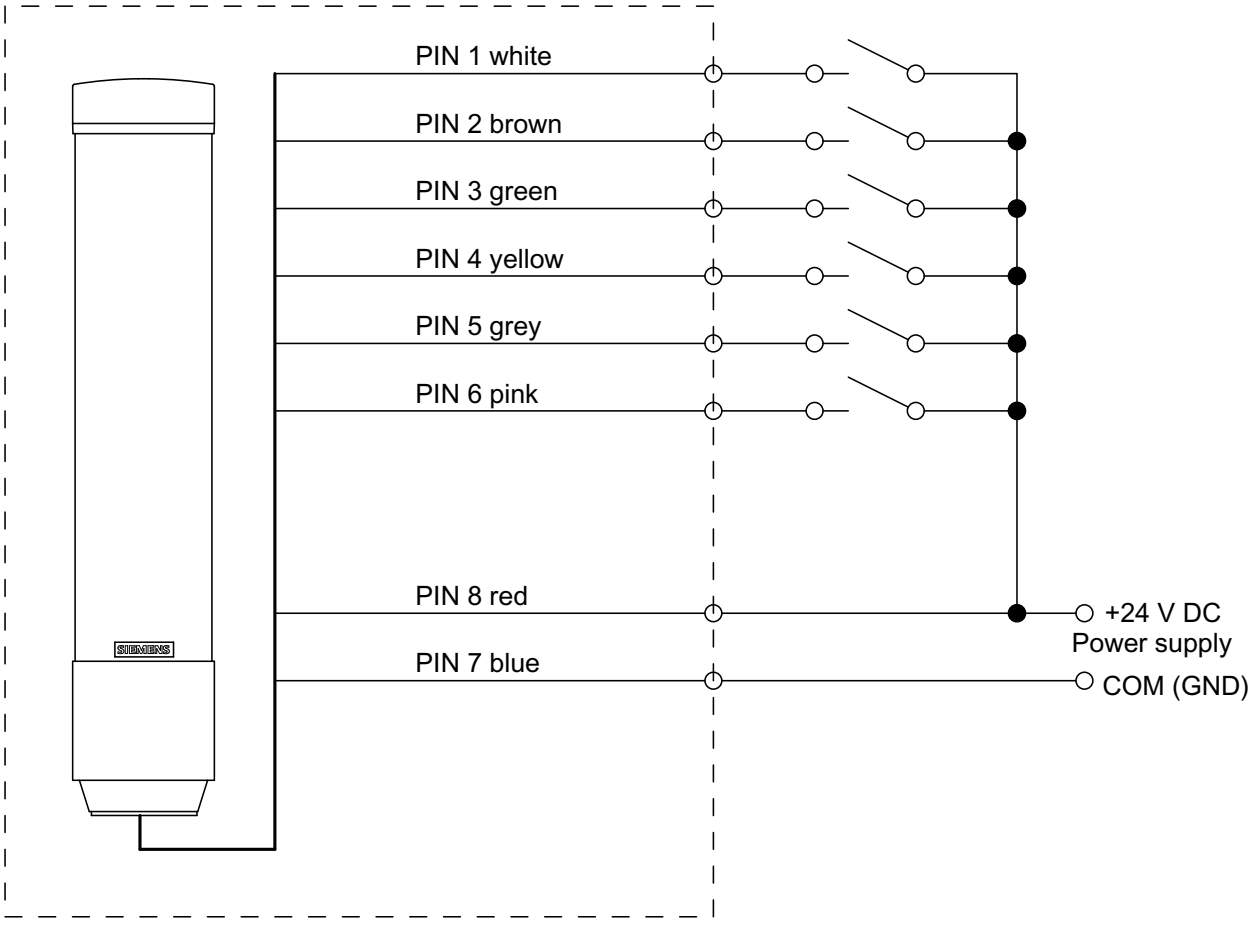
The functional status of the signaling column is indicated by a status LED in the nameplate on the underside of the signaling column.

LED status	Meaning
LED flashes yellow	Normal operation
LED pulsing	Firmware update in progress
LED off	USB-C cable not connected



	Meaning
1	User button (The user button has no function in the current version and is reserved for future functional extensions).
2	Status LED
3	USB-C port
4	M12 plug, 8-pin

6.1.3 Wiring example – conventional 24 V variant



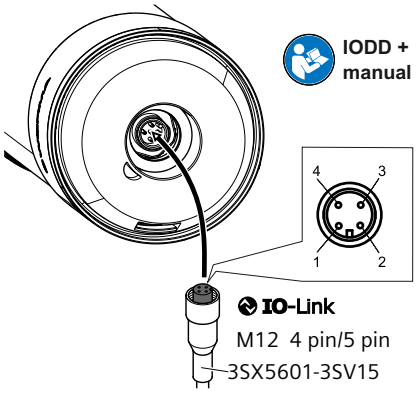
6.2 IO-Link variant

6.2.1 Electrical connection for IO-Link variant

In the IO-Link variant, the signaling column is connected via a 4-pin M12 plug. No other wiring is necessary.

Pin assignment

8WD4613-5.H47 / 8WD4615-5.H47



Pin	Conductor color M12 cable (acc. to IEC 60947-5-2)	IO-Link
1	BN	L+
2	WH	+ 24 V (optional)
3	BU	L-
4	BK	C/Q

BN = brown, WH = white, BU = blue, BK = black

Note

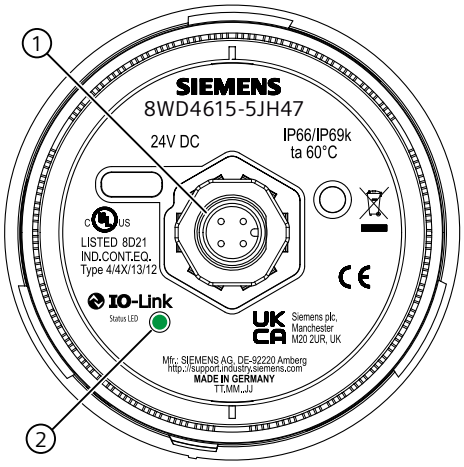
IO-Link type / Class A

For a current consumption > 200 mA, some IO-Link masters require an external auxiliary voltage supply (+ 24 V / Pin 2).

6.2.2 Status LED – IO-Link variant

The functional status of the signaling column is indicated by a status LED in the nameplate on the underside of the signaling column.

LED status	Supply voltage	Meaning
LED flashes red (500 ms ON / 500 ms OFF)	Supply voltage connected	No IO-Link communication
LED flashes green (900 ms ON / 100 ms OFF)	Supply voltage connected	IO-Link communication functioning correctly
LED lit yellow	Supply voltage connected	Firmware update in progress
LED off	Check power supply and connecting cable	Fault / no connection



	Meaning
1	M12 plug, 4-pin
2	Status LED

Technical specifications

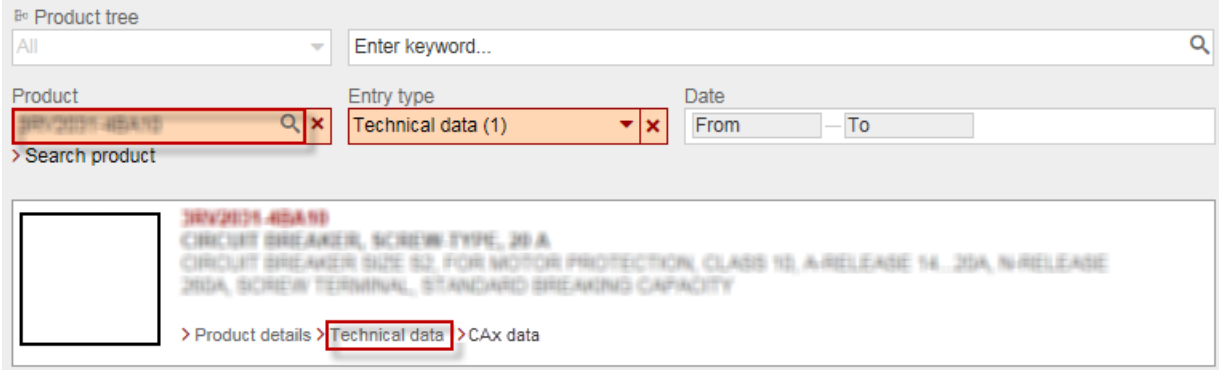
7

7.1 Technical data in Siemens Industry Online Support

Technical data sheet

You can also find the technical data of the product at Siemens Industry Online Support (https://support.industry.siemens.com/cs/ww/en/ps/).

1. Enter the full article number of the desired device in the "Product" field, and confirm with the Enter key.
2. Click the "Technical data" link.



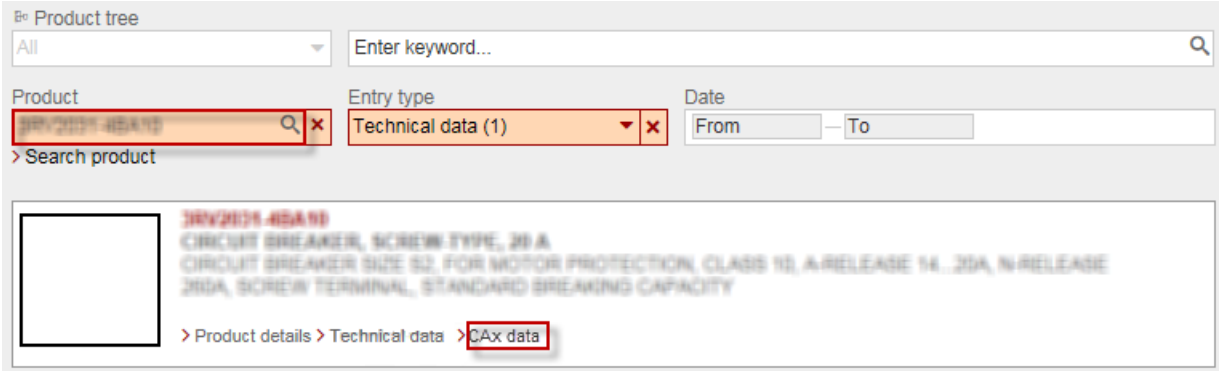
Dimension drawings

8

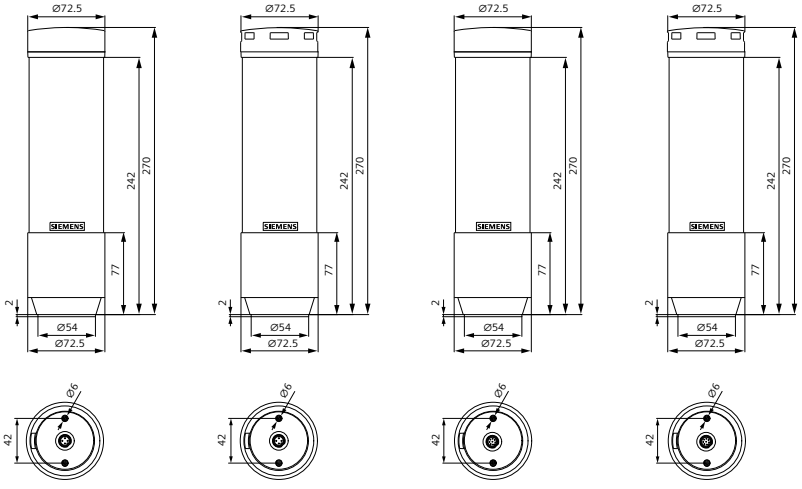
8.1 CAx data

You can find the CAx data in the Siemens Industry Online Support (https://support.industry.siemens.com/cs/ww/en/ps/).

1. Enter the full article number of the desired device in the "Product" field, and confirm with the Enter key.
2. Click the "CAx data link.



8.2 Dimension drawings

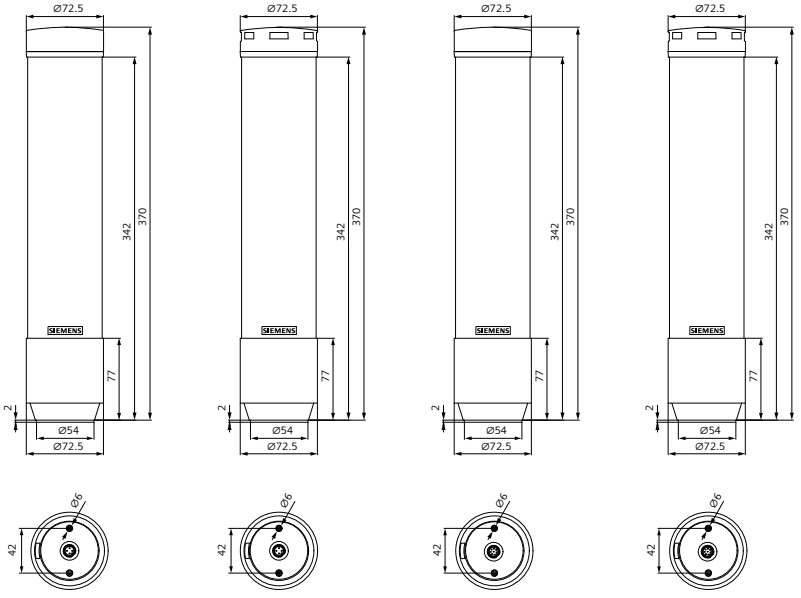


8WD4613-5HH47 IO-Link

8WD4613-5JH47 IO-Link

8WD4613-5HH37 Conventional 24 V

8WD4613-5JH37 Conventional 24 V



8WD4615-5HH47 IO-Link

8WD4615-5JH47 IO-Link

8WD4615-5HH37 Conventional 24 V

8WD4615-5JH37 Conventional 24 V

Accessories

9

9.1 Accessories

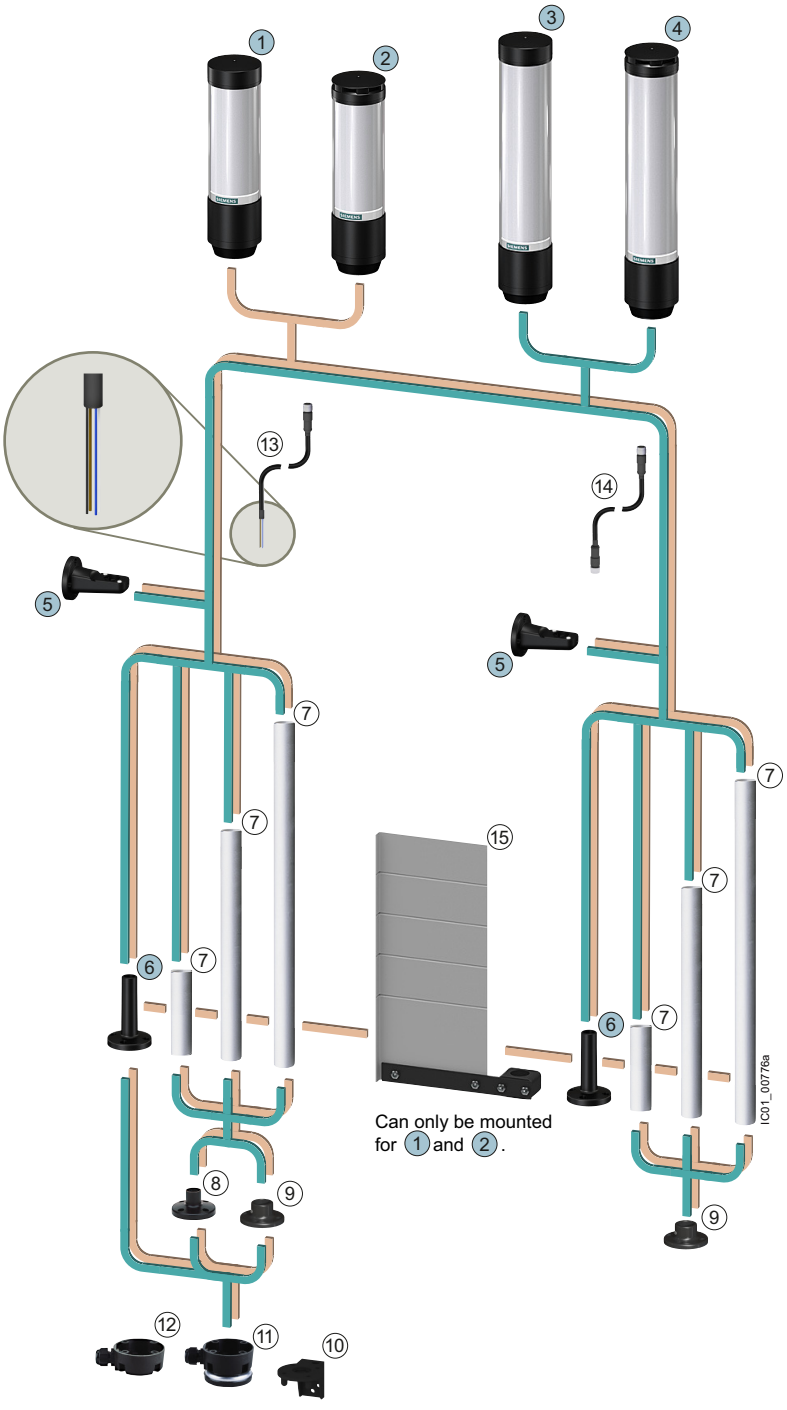
Mounting		Article No.
 8WD4..8-0DA	**Foot with pipe** Pipe length 100 mm	
	• Standard	8WD4308-0DA
	• Degree of protection IP66/IP69k	8WD4618-0DA
 8WD4308-0DB	**Foot, single**	
	• Plastic, for pipe mounting (pipe length ≤ 400 mm)	8WD4308-0DB
 8WD4308-0DC	• Metal, for pipe mounting (pipe length >400 mm)	8WD4308-0DC
 8WD4208-0EF	**Pipe, single**	
	• Length 100 mm	8WD4208-0EF
	• Length 150 mm	8WD4308-0EE
	• Length 250 mm	8WD4308-0EA
	• Length 400 mm	8WD4308-0EB
	• Length 1 000 mm	8WD4308-0ED
 8WD4308-0DD	**Socket for foot**	8WD4308-0DD
	• Cable outlet on the side (can also be used without foot)	8WD4308-0DD
 8WD4308-0DE	• Cable outlet on the side, with magnetic fixing	8WD4308-0DE
 8WD4408-0CC	**Bracket for foot mounting**	8WD4408-0CC
 8WD4308-0CA	**Bracket for wall mounting**	
	• Standard	8WD4308-0CA
 8WD4618-0CA	• Degree of protection IP66/IP69 (IP69K)	8WD4618-0CA

Cables for conventional signaling columns		Article No.
 8WD4618-0FB	**USB-C cable**	
	USB-A to USB-C, length 2 m	8WD4618-0FB
 3SX5601-2GA03	**Connecting cable**	
	• With M12 socket, 8-pin, straight, open end – Length 3 m – Length 5 m – Length 10 m – Length 15 m	 3SX5601-2GA03 3SX5601-2GA05 3SX5601-2GA10 3SX5601-2GA15
 3SX5601-3SV18	• With M12 socket, 8-pin, and M12 plug, 8-pin, length 1 m	3SX5601-3SV18
 6GT2090-0BE00	**M12 plug, 8-pin**	
	Straight	6GT2090-0BE00

Cables for signaling columns for IO-Link		Article No.
 3SX5601-3SB54	**Connecting cable**	
	• With M12 socket, open end, length 5 m – 4-pin – 5-pin	 3SX5601-3SB54 3SX5601-3SB55
	With M12 socket, 5-pin and M12 plug, 5-pin, length 1 m	3SX5601-3SV15
 3RK1902-4BA00-5AA0	**M12 plug, 5-pin**	
	• Straight, separate item • Angled, separate item	3RK1902-4BA00-5AA0 3RK1902-4DA00-5AA0

Labeling for 8WD4613 signaling columns with 9 segments		Article No.
 8WD4408-0FA	**Labeling panel**	8WD4408-0FA
	With fixing accessories, for mounting on pipe Ø 25 mm inscription area/ step 50 mm x 140 mm Suitable for standard labels, e.g. • Zweckform 3425 • Herma 4457	

9.2 Possible combinations



Signaling column with 9 segments

(1) Without acoustic signaling:
Conventional signaling column 8WD4613-5HH37/
Signaling column for IO-Link 8WD4613-5HH47

(2) With acoustic signaling:
Conventional signaling column 8WD4613-5JH37/
Signaling column for IO-Link 8WD4613-5JH47

Signaling column with 15 segments

(3) Without acoustic signaling:
Conventional signaling column 8WD4615-5HH37/
Signaling column for IO-Link 8WD4615-5HH47

(4) With acoustic signaling:
Conventional signaling column 8WD4615-5JH37/
Signaling column for IO-Link 8WD4615-5JH47

Accessories

(5) Bracket for wall mounting 8WD4618-0CA

(6) Foot with tube 8WD4618-0DA

(7) Tube 8WD4208-0EF/8WD4308-0E.

(8) Foot for tube mounting (≤ 400 mm) 8WD4308-0DB

(9) Foot for tube mounting (> 400 mm) 8WD4308-0DC

(10) Bracket for mounting on feet 8WD4408-0CC

(11) Socket (magnetic fixing) 8WD4308-0DE

(12) Socket 8WD4308-0DD

(13) Connecting cable with M12 plug with open end 3SX5601-2GA.., 3SX5601-3SB..

(14) Connecting cable at both ends with M12 plug 3SX5601-3S...

(15) Optional for signaling columns for 9 segments: Labeling panel 8WD4408-0FA

Degree of protection IP66/IP69 (IP69K)

relevant for (1) and (2)

relevant for (3) and (4)

Third-party software

A

A.1 OSS licenses

OSS licenses		Download
8WD4615-5.H37	DE	https://support.industry.siemens.com/cs/ww/en/view/109810657
	EN	https://support.industry.siemens.com/cs/ww/en/view/109810657

Index

I

L

M

O

P

R

S

T

U

W