

**NEW**



The vocal element can be combined with up to 4 signal elements

- 102 dB high output vocal element with excellent tone and sound quality
- Plays customer-specific audio files (signal tones, music and spoken text)
- Easy transfer of audio files and simple operation
- Sound output level can be triggered externally
- Creation of individual playlists and playback modes possible

**Life duration up to 5,000 hrs**

**i TECHNICAL SPECIFICATIONS:**


Dimensions (Ø x Height):	125 mm x 118 mm
Housing:	PC/ABS Blend
Lens:	PC
Number of signal elements:	Max. 4 additional signal elements possible
Sound output:	Adjustable, up to 102 dB
File Transfer:	Via USB connection and provided software
Possible data format:	Mp3 and wav files
Number of sequences:	15 files can be remotely triggered depending on the number of signal elements used or one sequence with max. 50 files
Suitable for:	Windows 2000 service pack 4, Windows XP, Windows Vista, Windows 7, Windows 8
Assembly:	Vocal element, USB connection cable and software

**🛒 ORDER SPECIFICATIONS:**

Voltage	24 V DC
Current consumption	≤ 400 mA
Vocal element	<b>645 860 55</b>

**⚠️ ADDITIONAL INFORMATION:**

**Further installation examples:**



To ensure IP protection it is recommended that the vocal element is fitted with the sound outlet facing downwards.

Optimum distribution of sound is thus ensured.

**📐 TECHNICAL DIAGRAMS:**

see page 310

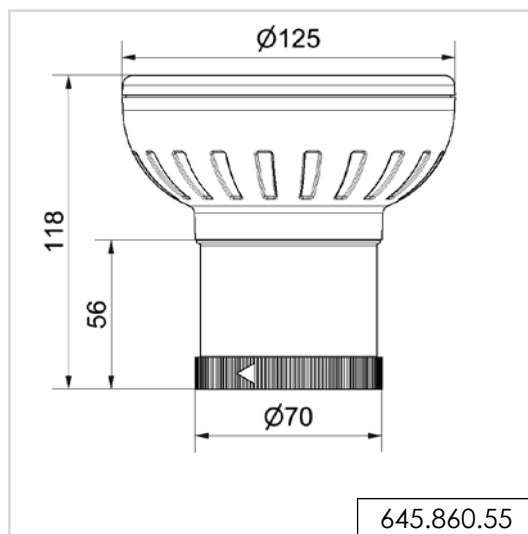
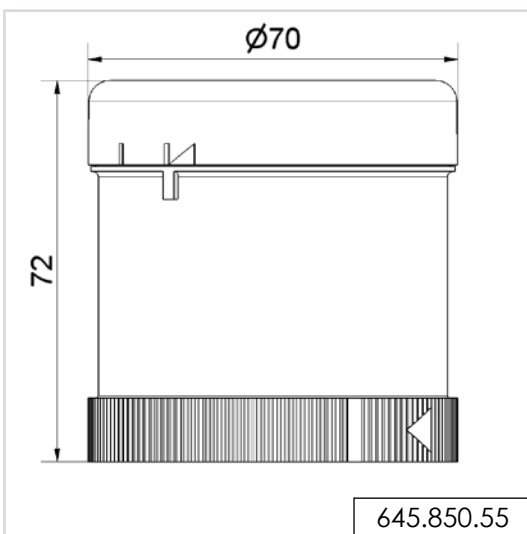
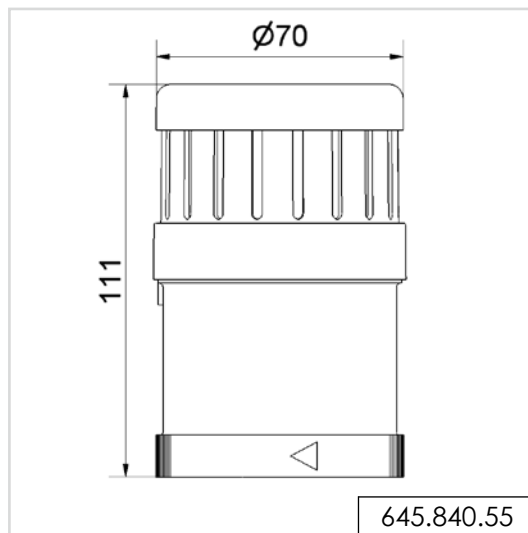
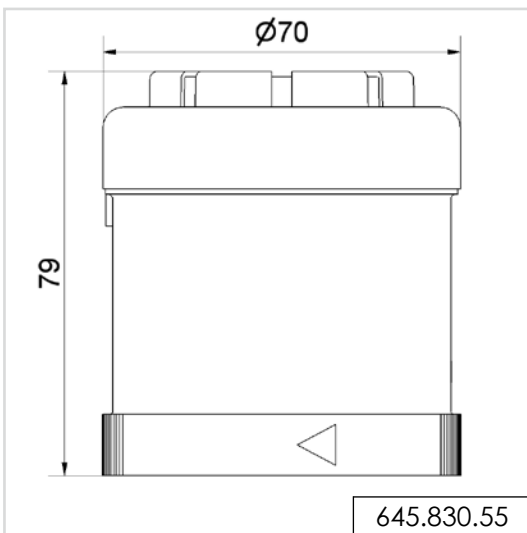
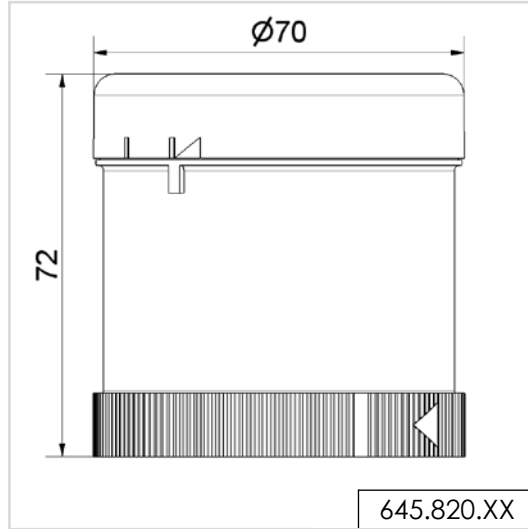
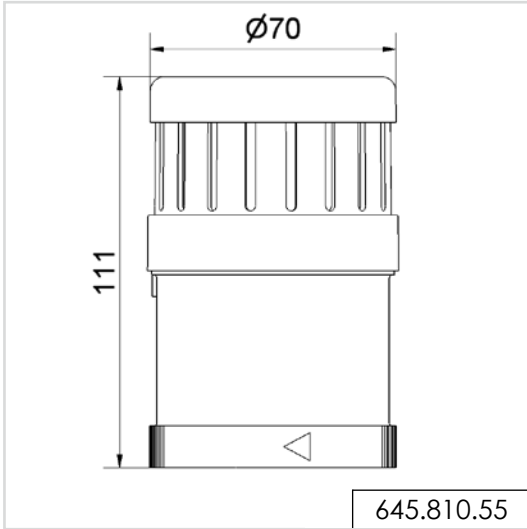


User-friendly software ensures easy transfer of audio files and simple operation

See note on page 347

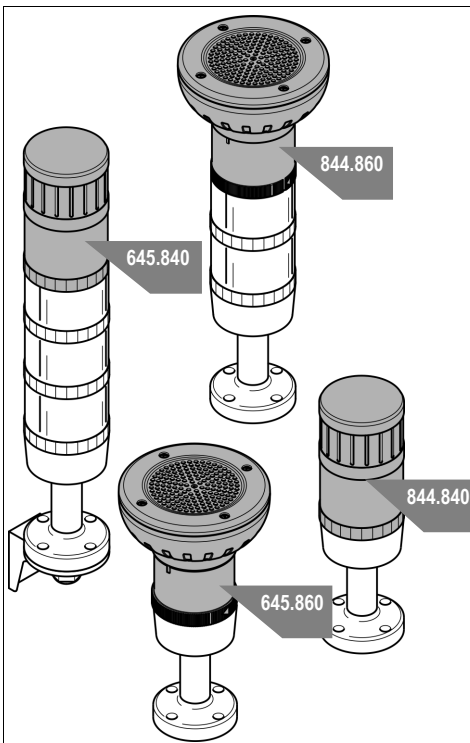
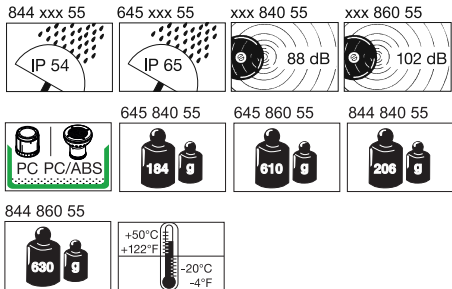


# Technical Diagrams



Technical  
Diagrams

EN 60947-5-1

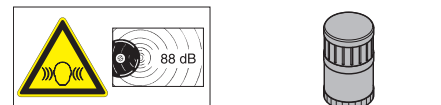
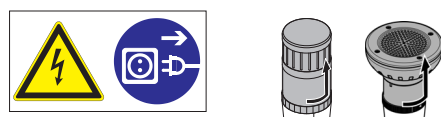


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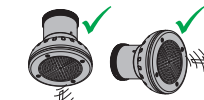
- D** Anschluss **ausschließlich** durch ausgebildete Elektro-Fachkräfte.
- GB** Electrical connection is to be made by trained electrical specialists **only**.
- F** Le branchement doit **uniquement** être effectué par des professionnels.
- I** Il collegamento deve essere eseguito **solo** da elettricisti specializzati.
- E** La conexión **sólo** debe ser realizada por electricistas debidamente formados.
- PT** A ligação deve ser feita **exclusivamente** por profissional eléctrico especializado.
- NL** De aansluiting mag **enkel** gebeuren door erkende vakmensen.
- CZ** Připojení smí **provádět** pouze kvalifikovaný personál.
- PL** Podłączenie **wyłącznie** przez specjalistów-elektryków.
- FI** Liittäminen kuuluu **ainoastaan** koulutettujen sähköalan ammattilaisten tehtäviin.
- RUS** Подключение проводится только специа-листом-электриком.
- TR** Bağlantı **sadece** eğitimli elektrik teknisyenleri tarafından yapılmalıdır.
- CN** 布线需由专业电工执行



844 860 55



645 860 55



## 1. Sicherheitshinweise

### Safety instructions

- Beachten Sie auch die Anleitung der WERMA Signalsäule.  
*Please also refer to the instructions for the WERMA signal tower.*
- Verwendung nur mit 24 V WERMA Signalsäulen.  
*Only for use with 24 V WERMA signal towers.*
- Weitere Informationen finden Sie im Handbuch auf dem Sprachausgabeelement.  
*For additional information, please read the manual on the vocal element.*
- Aufgrund der hohen Masse wird die Montage an Orten mit hoher Schwing- bzw. Schockbelastung nicht empfohlen.  
*Due to the weight of the product we advise against installation in applications with strong vibrations or mechanical impact.*

## 2. Technische Daten

### Specifications

645 840 55	24 V=, I < 400 mA
645 860 55	24 V=, I < 400 mA
844 840 55	24 V=, I < 400 mA
844 860 55	24 V=, I < 400 mA

- 15 Dateien fernsteuerbar; maximal 50 Dateien  
*15 files triggered externally; maximum 50 files*

## 3. Systemanforderungen

### System requirements

- USB-Anschluss  
*USB port*
- Windows 2000 Service Pack 4, Windows XP, Windows Vista, Windows 7 oder Windows 8

- Windows 2000 Service Pack 4, Windows XP, Windows Vista, Windows 7 or Windows 8
- Windows Server 2000 Service Pack 4, Windows Server 2003 oder Windows Server 2008  
*Windows Server 2000 Service Pack 4, Windows Server 2003 or Windows Server 2008*
  - Microsoft Framework 2.0 (wird, falls nicht auf Ihrem PC vorhanden, bei dem Start der Sprachausgabe-Software installiert.)  
*Microsoft Framework 2.0 (will be installed together with the vocal element software if not available on your PC.)*

## 4. Inbetriebnahme

### Installation

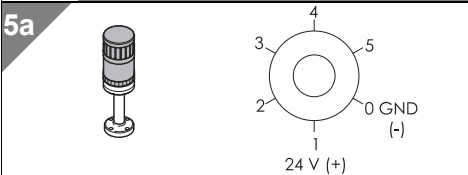
- Schließen Sie das Sprachausgabeelement per USB-Kabel an Ihren PC an.  
*Connect the vocal element via USB port to your PC.*



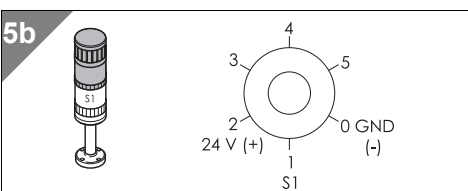
- Die Sprachausgabe wird als Massenspeicher erkannt. Öffnen Sie anschließend den Massenspeicher, um die darauf gespeicherten Daten anzuzeigen.  
*The vocal element will be recognized as a data storage medium. Open the file to display the stored data.*
- Starten Sie die 'vocal\_element.exe'.  
**Hinweis:** Microsoft Framework 2.0 wird, falls nicht auf Ihrem PC vorhanden, bei dem Start der vocal\_element.exe installiert. Hierfür benötigen Sie Administrationsrechte.  
*Start 'vocal\_element.exe'.*  
**Note:** Microsoft Framework 2.0 will be installed together with the vocal element software if not available on your PC. Administration rights are required for the installation process.
- Die Software der Sprachausgabe wird geöffnet und Sie können nun die gewünschten Dateien auf dem Sprachausgabeelement speichern.  
*The vocal element software starts automatically and you can now save the desired files on the vocal element.*

## 5. Montage Assembly

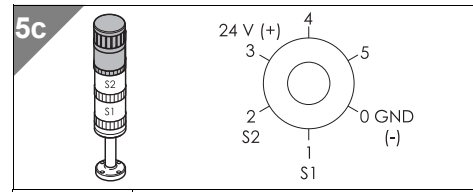
<b>5</b>	5a - 645 840 55/844 840 55, 645 860 55/844 860 55
	5b - 645 840 55/844 840 55, 645 860 55/844 860 55 + ⊗
	5c - 645 840 55/844 840 55, 645 860 55/844 860 55 + ⊗ ⊗
	5d - 645 840 55/844 840 55, 645 860 55/844 860 55 + ⊗ ⊗ ⊗



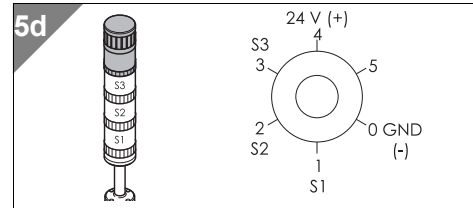
Aufnahme- position recording position	Anschluss Nummer Terminal number (NC = nicht belegt not connected)				
	1	2	3	4	5
1	24 V(+)	NC	NC	NC	NC
2	NC	24 V(+)	NC	NC	NC
3	24 V(+)	24 V(+)	NC	NC	NC
4	NC	NC	24 V(+)	NC	NC
5	24 V(+)	NC	24 V(+)	NC	NC
6	NC	24 V(+)	24 V(+)	NC	NC
7	24 V(+)	24 V(+)	24 V(+)	NC	NC
8	24 V(+)	NC	NC	NC	24 V(+)
9	24 V(+)	NC	NC	NC	24 V(+)
10	NC	24 V(+)	NC	24 V(+)	NC
11	24 V(+)	24 V(+)	NC	24 V(+)	NC
12	NC	NC	24 V(+)	24 V(+)	NC
13	24 V(+)	NC	24 V(+)	24 V(+)	NC
14	NC	24 V(+)	24 V(+)	24 V(+)	NC
15	24 V(+)	24 V(+)	24 V(+)	24 V(+)	NC



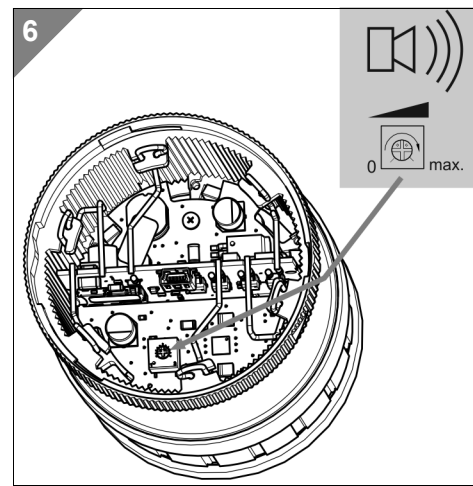
Aufnahme- position recording position	Anschluss Nummer Terminal number (NC = nicht belegt not connected)				
	1	2	3	4	5
1	S1	24 V(+)	24 V(+)	NC	NC
2			NC	24 V(+)	NC
3			24 V(+)	24 V(+)	NC
4			NC	NC	24 V(+)
5			24 V(+)	NC	24 V(+)
6			NC	24 V(+)	24 V(+)
7			24 V(+)	24 V(+)	24 V(+)



Aufnahme- position recording position	Anschluss Nummer Terminal number (NC = nicht belegt not connected)				
	1	2	3	4	5
1	S1	S2	24 V(+)	24 V(+)	NC
2				NC	24 V(+)
3				24 V(+)	24 V(+)



Aufnahme- position recording position	Anschluss Nummer Terminal number (NC = nicht belegt not connected)				
	1	2	3	4	5
1	S1	S2	S3	24 V(+)	24 V(+)



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# **Manual - Vocal Element**

**Version 1.0.2 - 2014**

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## 1. Introduction

The vocal elements signal towers play signal tones, music and spoken text in a unique way.

The vocal element can be quickly integrated into the existing signal tower, and the bayonet mechanism ensures that the unit is immediately ready to function.

The vocal element is connected to the PC or laptop via the USB connection cable included in delivery. Existing audio files such as signal tones, music or spoken texts can be easily saved to the vocal element via the supplied software.

The state-of-the-art technology ensures that up to 50 customer-specific mp3 or wav files can be stored and up to 15 of these files can be triggered remotely.

The vocal elements feature outstanding tone and sound quality and an adjustable sound output.

Version 1.0.2 - 08/2014

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WERMA reserves the right to make technical improvements to the product and accepts no responsibility for mistakes or printing errors which may be contained in this documentation.

## 2. Assembly

Description
Vocal element
USB cable 1,8m
Vocal element instruction leaflet

## 3. System requirements

- USB port
- Windows 2000 Service Pack 4, Windows XP, Windows Vista, Windows 7, Windows 8 or Windows 8.1
- Windows Server 2000 Service Pack 4, Windows Server 2003 or Windows Server 2008
- Microsoft Framework 2.0  
(Will be installed together with the vocal element software if not available on your PC.)

## 4. Safety instructions

- Please also refer to the instructions for the signal tower.
- Only for use with 24 V signal towers.



- Ⓓ Anschluss **ausschließlich** durch ausgebildete Elektro-Fachkräfte.
- ⒼⒷ Electrical connection is to be made by trained electrical specialists **only**.
- Ⓕ Le branchement doit **uniquement** être effectué par des professionnels.
- Ⓘ Il collegamento deve essere eseguito **solo** da elettricisti specializzati.
- Ⓔ La conexión **sólo** debe ser realizada por electricistas debidamente formados.
- Ⓟ A ligação deve ser feita **exclusivamente** por profissional eléctrico especializado.
- Ⓝ De aansluiting mag **enkel** gebeuren door erkende vakmensen.
- Ⓒ Připojení smí **provádět** pouze kvalifikovaný personál.
- Ⓟ Podłączenie **wyłącznie** przez specjalistów-elektryków.
- Ⓕ Liittäminen kuuluu **ainoastaan** koulutettujen sähköalan ammattilaisten tehtäviin.
- Ⓜ Подключение проводится только специалистом-электриком.
- Ⓓ Bağlantı **sadece** eğitimli elektrik teknisyenleri tarafından yapılmalıdır.
- Ⓒ 布线需由专业电工执行



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## 5. Specifications

Description	Value
Operating voltage	24 V DC
Current consumption	Max. 400 mA
Duty cycle	100%
Life duration	> 5.000 h
Temperature	-20° ... +50°C
Number of tones	Max. 50; remote triggering of max. 15
Total recording time	<=13 h for medium quality

## 6. Installation

1. Connect the vocal element via USB port to your PC.











2. The vocal element will be recognized as a data storage medium. Open the file to display the stored data.
3. Start 'vocal\_element.exe'.




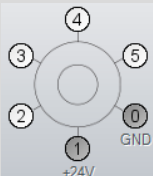

**Note:** Microsoft Framework 2.0 will be installed together with the vocal element software if not available on your PC. **Administration rights are required for the installation process.**

4. The vocal element software starts automatically and you can now save the desired files on the vocal element, see 8.

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## 7. Software

	Click on this icon to add mp3- and wav-files to the vocal element. A maximum of 50 files can be added, but only the first 15 files will be played externally by the vocal element.
	If you want to delete files, then select the file to be deleted and click on this icon.
	These icons can be used to customize the recording position of the files.
	Click on this icon to export all the added files in the defined recording position to a "playlist" and then save them.
	Click on this icon to import a previously created "playlist".
	Play a selected file.
	Stop file replay.
 Volume 100%	The volume control can be used to set an individual volume level for each tone. The minimum setting is 5% of the volume. The maximum setting is 100%.

	<p>Access the product manual.</p>
	<p>Show the current version.</p>
	<p>Click on this icon to store the files on the vocal element and log the vocal element out from your PC.  <b>Note:</b> Please wait for the appropriate messages to appear and only then detach the vocal element from your PC.</p>
	<p>When a file is selected the relevant wiring combination in the terminal element will be displayed in this simulation. When choosing a PIN assignment in the simulation you will receive the appropriate file.  <b>Note:</b> The triggering refers to the mounting position, see 9.</p>
	<p>Click on this icon to open the manual.</p>



Click on this icon to open a new window and make the following settings.

### Input mode

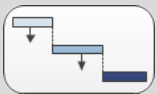


The chosen file is played. In addition, can be defined the external volume control.

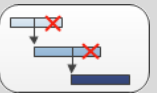


All the files (max. 50) stored on the vocal element will be played one after the other, starting with the first file. The external volume control cannot be selected, if this input mode is chosen.

### Start mode



The currently activate file will be played to the end even if a new file is selected. The new file will then be played afterwards.



The currently activate file will be stopped if a new file is selected.

### Sound quality



High quality sound output with slow transfer time.



Medium quality sound output with normal transfer time.



Low quality sound output with fast transfer time.

## Max. volume



The volume control can be used to set an individual volume level for all tones. The minimum setting is 5% of the volume. The maximum setting is 100%.

## External volume control



No external volume control.



External volume control on pin 4 (+24 V DC). The volume can be defined in the following settings via the additional volume control: 50%, 25% and 12.5%.



External volume control on pins 3 and 4 (+24V DC).

The volume can be set as follows:

Input 3	Input 4	percentage volume
0	0	100%
1	0	50%
0	1	25%
1	1	12.5%

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**Example:**

1. Add a file:



Add



Define recording position



Save and log out safely

2. Create a playlist:



Add



Define recording  
position

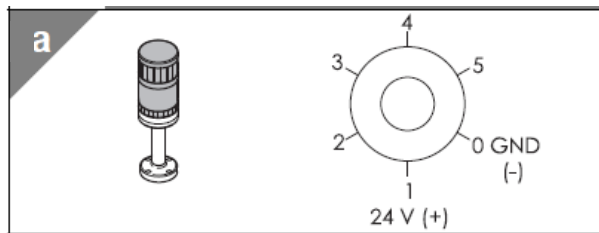


Export and save

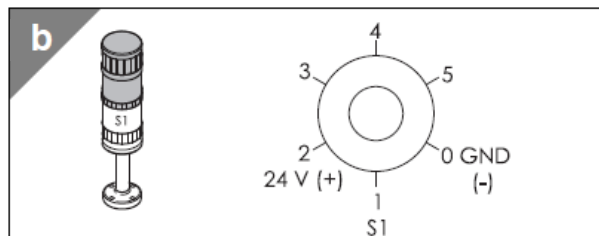


Save and log out  
safely

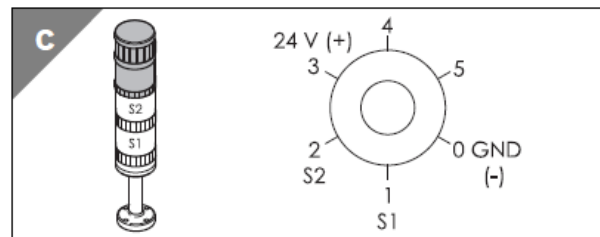
## 8. Assembly



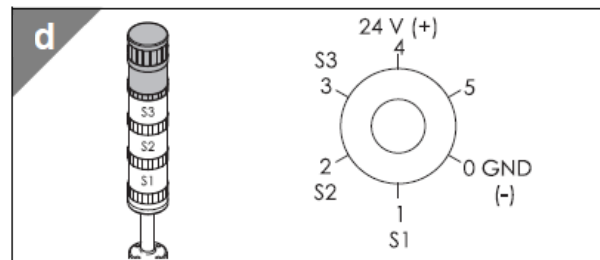
Aufnahme- position recording position	Anschluss Nummer Terminal number (NC = nicht belegt not connected)				
	1	2	3	4	5
1	24 V(+)	24 V(+)	NC	NC	NC
2		NC	24 V(+)	NC	NC
3		24 V(+)	24 V(+)	NC	NC
4		NC	NC	24 V(+)	NC
5		24 V(+)	NC	24 V(+)	NC
6		NC	24 V(+)	24 V(+)	NC
7		24 V(+)	24 V(+)	24 V(+)	NC
8		NC	NC	NC	24 V(+)
9		24 V(+)	NC	NC	24 V(+)
10		NC	24 V(+)	NC	24 V(+)
11		24 V(+)	24 V(+)	NC	24 V(+)
12		NC	NC	24 V(+)	24 V(+)
13		24 V(+)	NC	24 V(+)	24 V(+)
14		NC	24 V(+)	24 V(+)	24 V(+)
15		24 V(+)	24 V(+)	24 V(+)	24 V(+)



Aufnahme- position recording position	Anschluss Nummer Terminal number (NC = nicht belegt not connected)				
	1	2	3	4	5
1	S1	24 V(+)	24 V(+)	NC	NC
2			NC	24 V(+)	NC
3			24 V(+)	24 V(+)	NC
4			NC	NC	24 V(+)
5			24 V(+)	NC	24 V(+)
6			NC	24 V(+)	24 V(+)
7			24 V(+)	24 V(+)	24 V(+)



Aufnahme- position recording position	Anschluss Nummer Terminal number (NC = nicht belegt not connected)				
	1	2	3	4	5
1	S1	S2	24 V(+)	24 V(+)	NC
2				NC	24 V(+)
3				24 V(+)	24 V(+)



Aufnahme- position recording position	Anschluss Nummer Terminal number (NC = nicht belegt not connected)				
	1	2	3	4	5
1	S1	S2	S3	24 V(+)	24 V(+)

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## 9. Volume setting

