



**eSIGN –
a new dimension
in signalling**

Handbuch Manual **eSIGN 24V**

Funktionsbeschreibung der Signalsäule mit Konfigurationssoftware
Functional description of the signal tower with configuration software

Version: 3.0 - 01/2024

310.657.006

Deutsch	5
English	105



Handbuch

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Version: 3.0 - 01/2024

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Impressum

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1 Überblick

1.1 Funktion

Mit der neuen eSIGN bringen wir Licht in neue Dimensionen. Dank elektrischer Modularität lassen sich verschiedene Signalisierungsmodi mit mehreren Farben, Helligkeitsstufen und Leuchtbildern realisieren: Von der klassischen Ampel bis hin zu komplett kundenspezifischen Einstellungen. Auch variable Füllstandanzeigen oder vollflächige Signalisierungen sind mit eSIGN problemlos realisierbar. Das bringt nicht nur Übersicht in Ihre Prozessabläufe, sondern eröffnet ganz neue Möglichkeiten.

Mit Hilfe der WERMA eSIGN-Konfigurationssoftware können die einzelnen Segmente einer WERMA eSIGN konfiguriert und die Konfiguration auf die eSIGN übertragen werden.

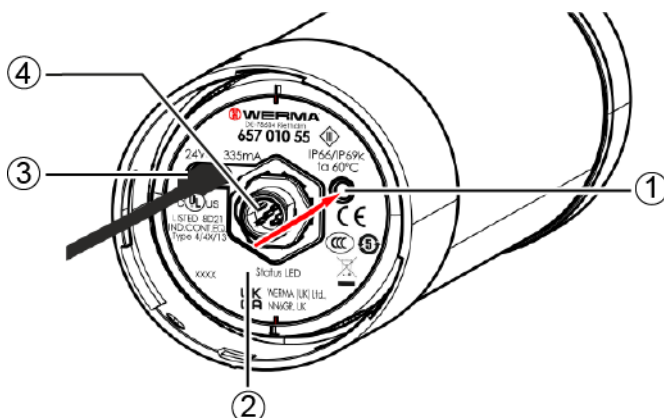
Die Konfiguration kann mit oder ohne angeschlossener eSIGN durchgeführt werden. Falls keine eSIGN angeschlossen wird, kann die Konfiguration in einer Konfigurationsdatei gespeichert und zu einem späteren Zeitpunkt geladen und auf eine angeschlossene eSIGN übertragen werden.

1.2 Hardware-Beschreibung

Die Informationen zur Hardware gelten für folgende Artikelnummern:

- 657.0x0.55 & 657.2x0.55 - 9 Segmente
- 657.1x0.55 & 657.3x0.55 - 9 Segmente mit Sirene
- 657.5x0.55 & 657.7x0.55 - 15 Segmente
- 657.6x0.55 & 657.8x0.55 - 15 Segmente mit Sirene

1.2.1 Übersicht Anschlussbereich



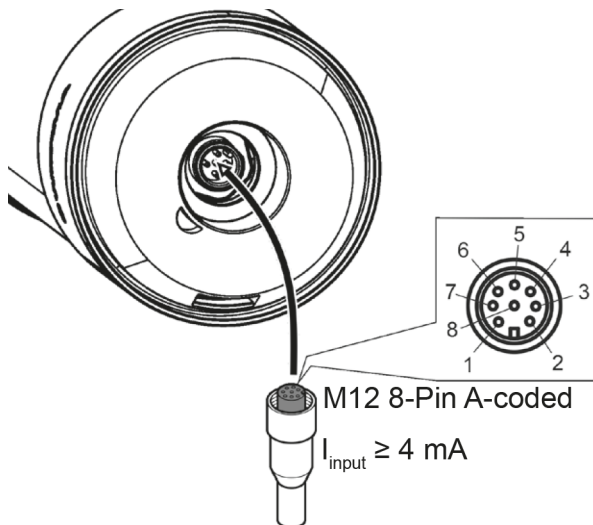
Pos.	Beschreibung
1	User-Button
2	Status-LED
3	USB-C-Anschluss
4	M12-Stecker 8-polig

LED-Status	Beschreibung
LED blinkt gelb	normaler Betrieb
LED pulsiert	Firmware-Update wird aufgespielt
LED ist aus	USB-C-Kabel nicht richtig verbunden

i Der User-Button ist in der aktuellen eSIGN-Version ohne Funktion und wird für zukünftige Funktionserweiterungen bereitgehalten.

1.2.2 Übersicht M12-Stecker 8-polig

Der Anschluss der eSIGN erfolgt über einen 8-poligen M12-Stecker mit folgender Belegung:



M12 Pinbelegung	Litzenfarbe M12- Kabel	Funktion
1	weiß	Signal 1
2	braun	Signal 2
3	grün	Signal 3
4	gelb	Signal 4
5	grau	Signal 5
6	rosa	Signal 6
7	blau	COM
8	rot	+24V

1.3 Systemanforderungen eSIGN-Konfigurationssoftware

Betriebssystem	Windows 10 x86/x64 Aktuelle Windows-Updates werden vorausgesetzt.
USB-Anschluss	Notwendig für die Hardware-Konfiguration.



Unterstützte Betriebssysteme werden nur solange unterstützt, wie auch Microsoft diese über den Microsoft-Support Lifecycle unterstützt.

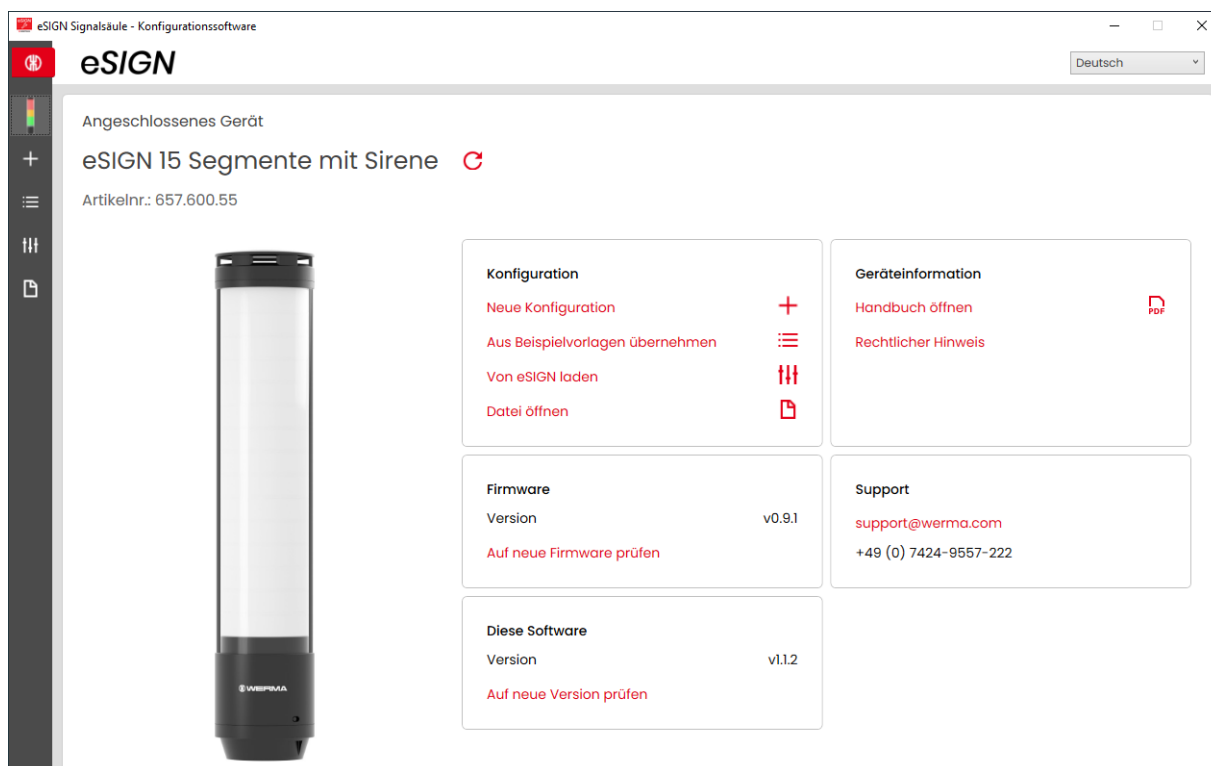
2 eSIGN-Konfigurationssoftware installieren

Die eSIGN-Konfigurationssoftware muss nicht installiert werden und ist als Portable lauffähig.

1. eSIGN-Konfigurationssoftware von folgender Webseite herunterladen: www.werma.com/software.

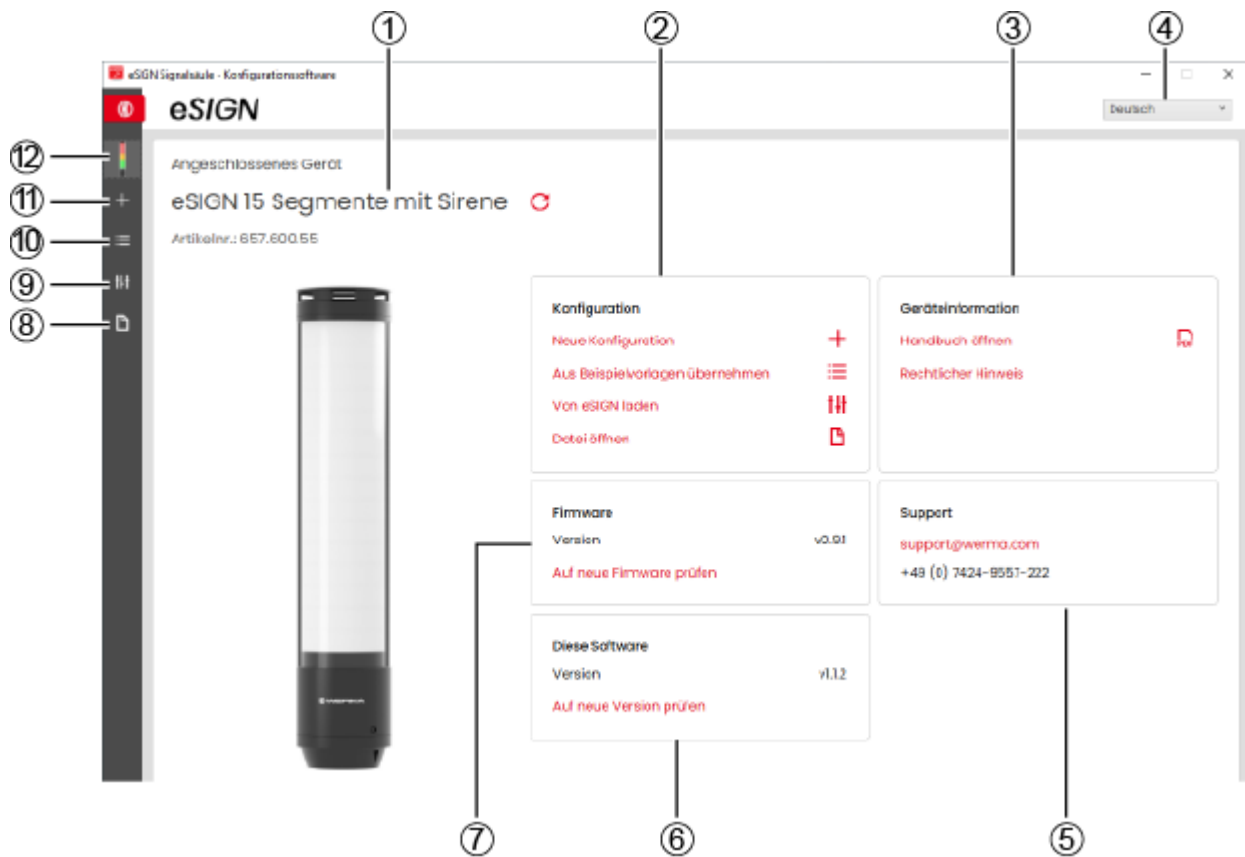
3 eSIGN-Konfigurationssoftware starten

1. Auf `Werma-eSIGN-Konfigurator.exe` doppelklicken.
→ Die eSIGN-Konfigurationssoftware startet.



3.1 Überblick

DE



Pos.	Beschreibung
1	Variante der angeschlossenen eSIGN
2	Bereich Konfiguration
3	Bereich Geräteinformation
4	Sprache einstellen
5	Bereich Support
6	Bereich Diese Software
7	Bereich Firmware
8	Bestehende Konfiguration öffnen
9	Konfiguration von der eSIGN laden
10	Konfiguration aus Beispieldaten übernehmen
11	Neue Konfiguration erstellen
12	Startbildschirm aufrufen

3.1.1 Bereich Konfiguration

Im Bereich **Konfiguration** gibt es folgende Möglichkeiten, eine Konfiguration vorzunehmen:

- **Neue Konfiguration:** Eine neue Konfiguration erstellen (siehe "Neue Konfiguration erstellen", S. 15).
- **Aus Beispielvorlagen übernehmen:** Standard-Vorlagen öffnen, die sofort auf das Gerät überspielt werden können (siehe "Konfiguration aus Beispielvorlagen übernehmen", S. 64).
- **Von eSIGN laden:** Aktuelle Konfiguration (ggf. Auslieferungszustand) zur Bearbeitung öffnen (siehe "Konfiguration von der angeschlossener eSIGN laden", S. 66).
- **Datei öffnen:** Eine bestehende Konfiguration öffnen und wiederverwenden (siehe "Bestehende Konfiguration öffnen", S. 67).

3.1.2 Bereich Geräteinformation

Im Bereich **Geräteinformation** können das Handbuch und rechtliche Hinweise aufgerufen werden.

3.1.3 Bereich Support

Im Bereich **Support** werden die Kontaktinformationen des WERMA-Supports angezeigt.

3.1.4 Bereich Diese Software

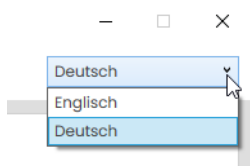
Im Bereich **Diese Software** werden Informationen zur eSIGN Konfigurationssoftware angezeigt und eine Möglichkeit zur Aktualisierung der Konfigurationssoftware angeboten.

3.1.5 Bereich Firmware

Im Bereich **Firmware** werden Informationen zur Firmware der angeschlossenen eSIGN angezeigt und eine Möglichkeit zur Aktualisierung der Firmware angeboten.

3.2 Sprache einstellen

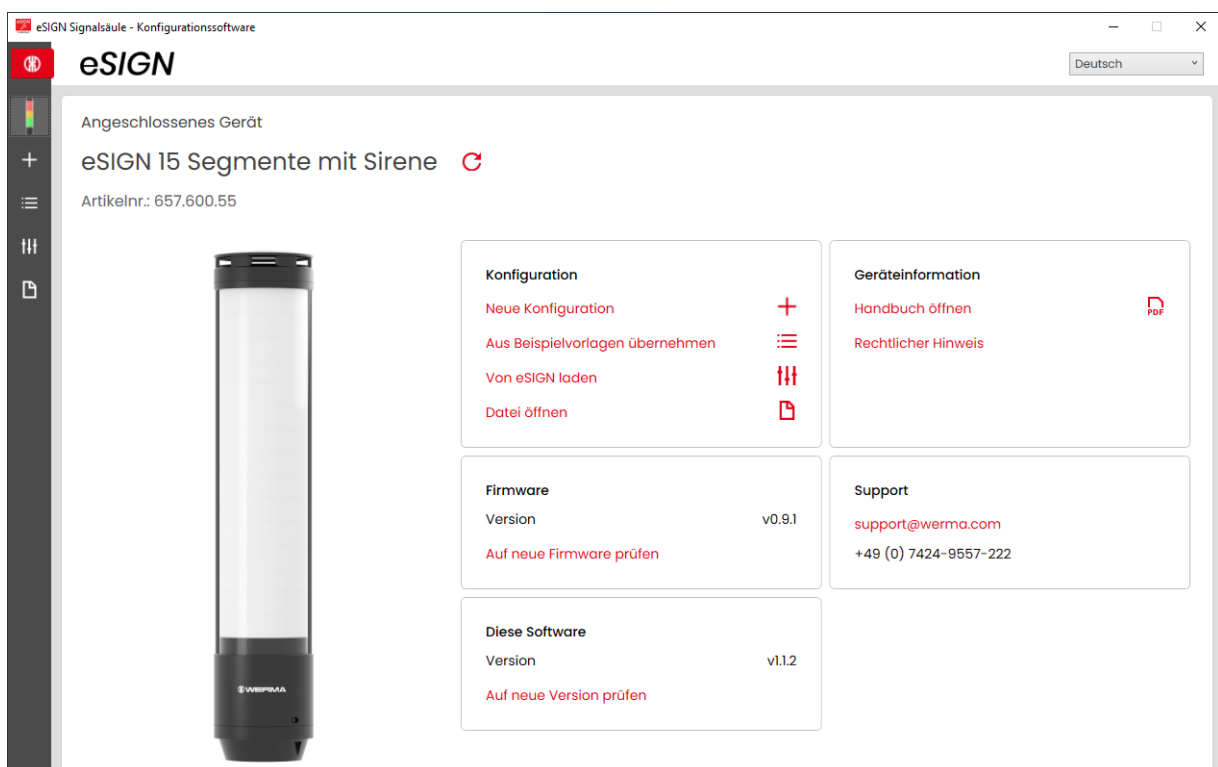
1. Im Auswahlmennü die gewünschte Sprache wählen.



4 Neue Konfiguration erstellen

-  Die Konfiguration kann mit oder ohne angeschlossener eSIGN durchgeführt werden
-  Die eSIGN kann gleichzeitig per USB-Kabel mit einem Computer und mit der 24V-Stromversorgung über das M12-Kabel verbunden werden.

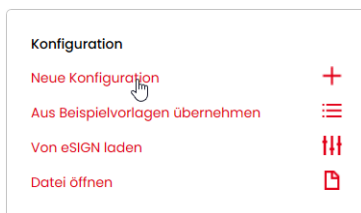
1. eSIGN per USB-Kabel an Computer anschließen.
→ Die eSIGN-Konfigurationssoftware erkennt die angeschlossene eSIGN.



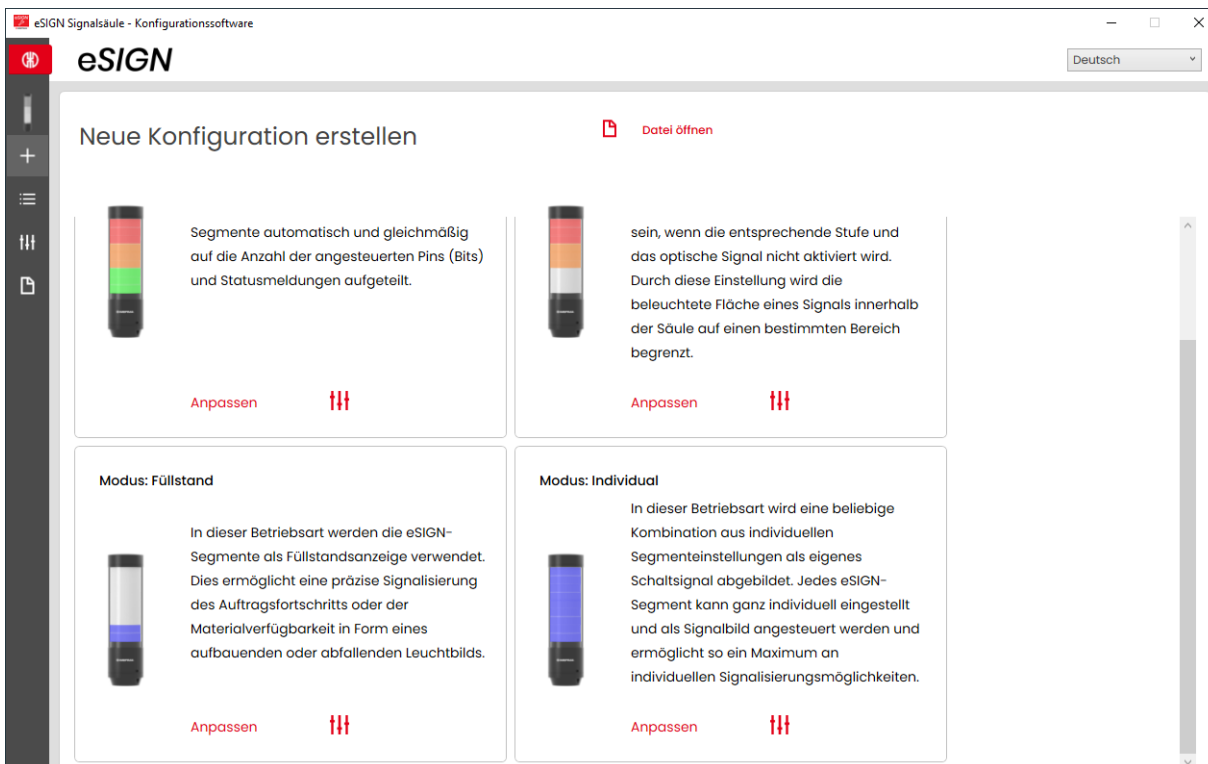
2. Falls die eSIGN-Konfigurationssoftware die angeschlossene eSIGN nicht erkennt: Auf **Ange-**
schlossenes Gerät aktualisieren klicken.

kein Gerät verbunden 

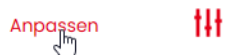
3. Im Bereich **Konfiguration** auf **Neue Konfiguration** klicken.



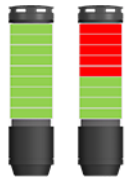
→ Der Bildschirm **Neue Konfiguration erstellen** erscheint.



4. Je nach gewünschtem Konfigurationsmodus im Bereich **Autoscale, Signalsäule, Füllstand** oder **Individual** auf **Anpassen** klicken.



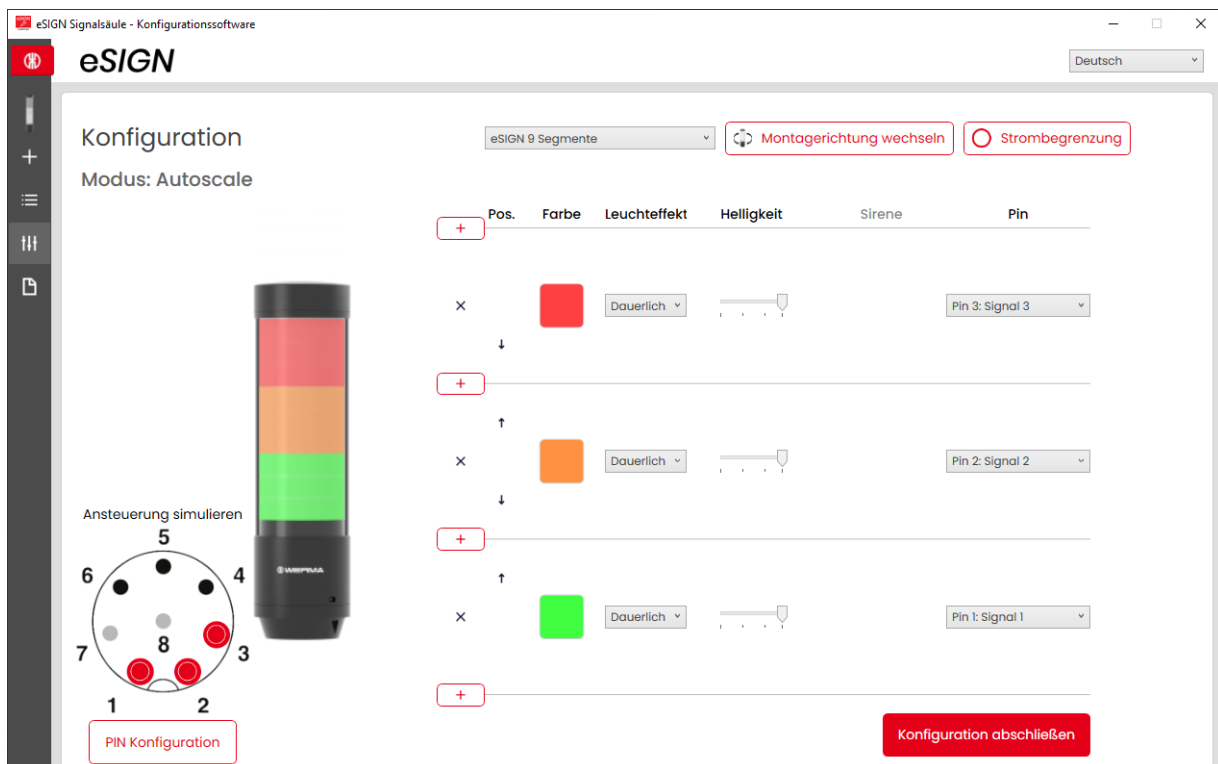
4.1 Modus Autoscale



Die eSIGN-Segmente werden automatisch und gleichmäßig auf die Anzahl der angesteuerten Pins (Bits) und Statusmeldungen aufgeteilt.

Mit dieser Einstellung kann das volle Potenzial der eSIGN durch eine vollflächige Signalisierung ausgeschöpft werden. Ist z. B. nur eine Statusmeldung aktiv, wird die gesamte Fläche der eSIGN einfarbig beleuchtet, um eine maximale Sichtbarkeit zu gewährleisten.

Bei Anliegen von mehreren Signalen wird die beleuchtete Fläche anteilig aufgetrennt. Können die Segmente nicht gleichmäßig aufgeteilt werden, erhält die Farbe mit der höchsten Priorität (höchste Stelle innerhalb der Säule) das letzte Segment. Falls mehrere Segmente übrig sind, werden diese der Priorisierung nach (die Positionierung in der Säule von oben nach unten) gleichmäßig verteilt.



Bei Bedarf kann die Ausrichtung der dargestellten Signalsäule über die Schaltfläche **Montagerichtung wechseln** um 180° gedreht werden.



Bei Bedarf (z. B. um die Strombegrenzungen von Steuerungsausgängen berücksichtigen zu können) kann über die Schaltfläche **Strombegrenzung** die Leistungsaufnahme der eSIGN verringert werden. In diesem Fall wird der Strombedarf der Säule auf unter 500 mA reduziert. Als Folge wird die Helligkeit der optischen Signale bzw. die Lautstärke der akustischen Signale verringert.

Der Modus **Autoscale** ist die Standard-Betriebsart bei Auslieferung und wie folgt eingestellt:

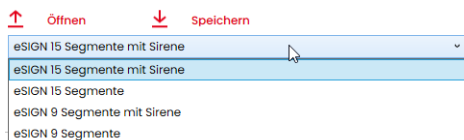
- Varianten mit 9 Segmenten:
 - 3 Stufen rot/gelb/grün
 - Dauerlicht
- Varianten mit 15 Segmenten:
 - 5 Stufen rot/gelb/grün/weiß/blau
 - Dauerlicht

Bei kundenindividuellen Versionen weicht der Auslieferungszustand von diesem Standard ab und ist gesondert dokumentiert.

4.1.1 eSIGN-Variante wählen

Falls eine eSIGN angeschlossen wurde, ist die Variante entsprechend vorausgewählt. Falls keine eSIGN angeschlossen wurde, kann die Variante der zu konfigurierenden eSIGN gewählt werden.

1. Bei Bedarf die Variante der zu konfigurierenden eSIGN wählen.



4.1.2 Stufe hinzufügen oder entfernen

Sobald im Modus **Autoscale** eine Stufe hinzugefügt oder entfernt wird, werden die einzelnen eSIGN-Segmente automatisch neu aufgeteilt und gleichmäßig auf alle Stufen verteilt. Falls die Segmente nicht gleichmäßig aufgeteilt werden können, erhält die Farbe mit der höchsten Priorität (höchste Stelle innerhalb der Säule) das letzte Segment. Falls mehrere Segmente übrig sind, werden diese der Priorisierung nach (die Positionierung in der Säule von oben nach unten) gleichmäßig verteilt.

Stufe hinzufügen

1. Auf **Hinzufügen** klicken.



×

→ Eine Stufe wurde hinzugefügt.

Stufe entfernen

1. Auf **Entfernen** klicken.



→ Eine Stufe wurde entfernt.

4.1.3 Stufe verschieben

Bei Bedarf können die einzelnen Stufen nach oben oder unten verschoben werden.

1. In der Spalte **Pos.** auf den Pfeil nach oben oder auf den Pfeil nach unten klicken, um die Stufe nach oben bzw. nach unten zu verschieben.



4.1.4 Farbe wählen

Jeder Stufe kann eine vorgegebene Standardfarbe oder eine individuelle Farbe zugewiesen werden.

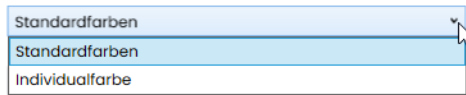
1. In der Spalte **Farbe** auf das Farbfeld klicken.



→ Das Fenster **Farbe auswählen** erscheint.



2. Wählen, ob eine Standardfarbe oder eine individuelle Farbe verwendet werden soll.



Standardfarbe

3. Auf das gewünschte Farbfeld klicken.

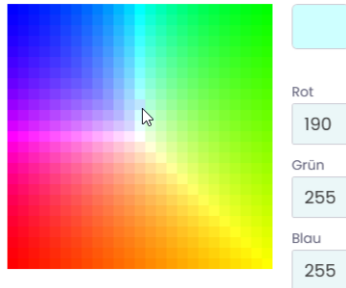


Folgende 8 Standardfarben stehen zur Auswahl zur Verfügung:

- rot
- gelb
- grün
- weiß
- blau
- hellgelb
- violett
- türkis

Individualfarbe

4. Gewünschte Farbe im Farbfeld auswählen oder den entsprechenden RGB-Wert in den Feldern **Rot**, **Grün** und **Blau** eingeben.



5. Auf **Farbe auswählen** klicken.



4.1.5 Leuchteffekt wählen

1. In der Spalte **Leuchteffekt** den gewünschten Leuchteffekt wählen.



Folgenden 8 Leuchteffekte stehen zur Auswahl zur Verfügung:

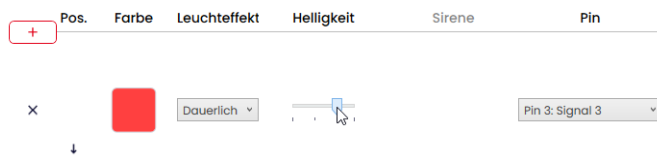
- Dauerlicht
- Blink 1Hz
- Blink 2 Hz
- Blink 3Hz
- Blitz 1x
- Blitz 2x
- Blitz 3x
- Rundum
- Ohne



Die Einstellung **Ohne** kann gewählt werden, falls die Stufe nur mit Sirene belegt werden soll.

4.1.6 Helligkeit einstellen

1. In der Spalte **Helligkeit** aus den 4 Optionen die gewünschte Helligkeit der Stufe einstellen.



4.1.7 Sirene wählen

Falls die angeschlossene oder gewählte eSIGN eine Sirene hat, kann ein Signalton gewählt werden, der bei Aktivierung der Stufe ertönt.

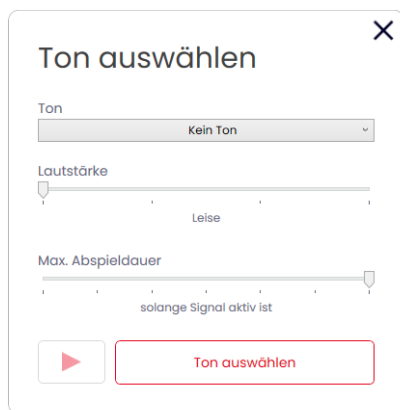


Falls Signaltöne für mehrere Stufen hinterlegt und die Stufen gleichzeitig angesteuert werden, ertönt die Sirene für die Farbe mit der höchsten Priorität (höchste Stelle innerhalb der Säule).

1. In der Spalte **Sirene** auf **Kein Ton** klicken.

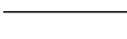
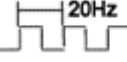
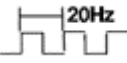
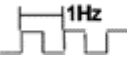
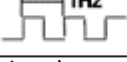
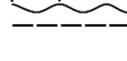
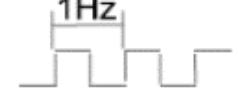


→ Das Fenster **Ton auswählen** erscheint.



2. Den gewünschten **Ton**, die gewünschte **Lautstärke** und **Max. Abspieldauer** wählen.

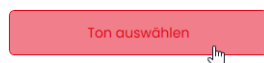
Folgenden 10 Tonarten stehen zur Auswahl zur Verfügung:

Ton	Frequenz	Beschreibung	Max. dB (A)
1	 2.7 kHz	Dauerton	104
2	 0.9 kHz	Dauerton	96
3	 2.8 kHz	Pulston	97
4	 0.9 kHz	Pulston	93
5	 2.8 kHz	Pulston	103
6	 0.9 kHz	Pulston	96
7	 2.8 kHz	Pulston	104
8	 2.3 kHz- 3.6 kHz	Wobbelton	104
9	 2.6 kHz	Dauerton	105
10	 1200 Hz 800 Hz	Wechselton	92



Die gewählten Einstellungen können über die Schaltfläche **Abspielen** (▶) getestet werden. Der wird dabei über den Computer abgespielt.

3. Auf **Ton auswählen** klicken.



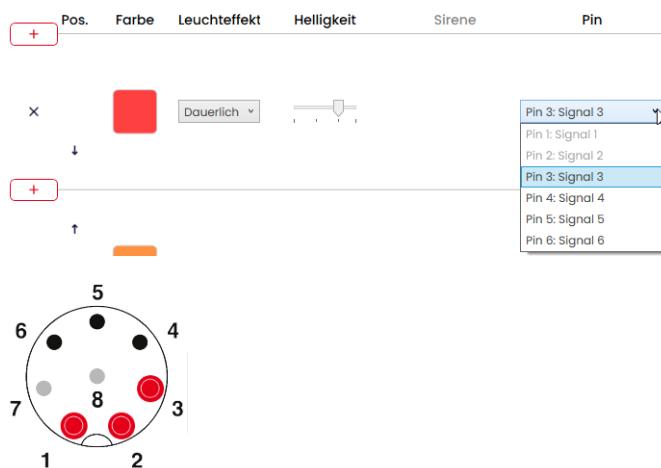
4.1.8 Pin wählen



Die Felder sind mit einer Standardbelegung vorkonfiguriert, von der unteren Stufe der Säule beginnend mit Pin 1.

Bereits verwendete Pins werden grau dargestellt. Die Belegung kann bei Bedarf beliebig verändert werden.

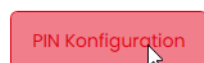
1. In der Spalte **Pin** den Pin des 8-poligen Steckers wählen, auf dem das Signal zum Auslösen der Stufe gesendet wird.



Pin-Konfiguration anpassen

Bei Bedarf kann die Zuordnung der Litzenfarbe zum Pin geändert und eine Beschreibung des Signals hinterlegt werden.

1. Unter der Pin-Übersicht auf **PIN Konfiguration** klicken.



→ Das Fenster **PIN Konfiguration** erscheint.

PIN Konfiguration

✕

	Farbe	Beschreibung
Pin 1: Signal 1	WH	
Pin 2: Signal 2	BN	
Pin 3: Signal 3	GN	
Pin 4: Signal 4	YE	
Pin 5: Signal 5	GY	
Pin 6: Signal 6	PK	
Pin 7: COM	BU	
Pin 8: +24V	RD	

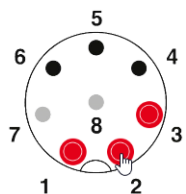
Speichern

2. In der Spalte **Farbe** die gewünschte Litzenfarbe eingeben.
3. In der Spalte **Beschreibung** die Beschreibung des Signals eingeben.
4. Auf **Speichern** klicken.

4.1.9 Ansteuerung simulieren

Nachdem alle Einstellungen vorgenommen wurden, kann die Ansteuerung simuliert werden.

1. In der Pin-Übersicht auf den Pin klicken, der die gewünschte Stufe aktivieren soll.



4.1.10 Konfiguration abschließen

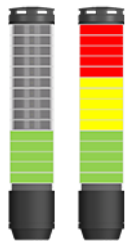
1. Bei Bedarf weitere Änderungen an der Konfiguration vornehmen.
2. Sobald alle Stufen wie gewünscht konfiguriert sind, auf **Abschließen** klicken.
→ Das Fenster **Abschließen** erscheint.



3. Auf **Speichern** klicken, um die Konfiguration in einer Konfigurationsdatei zu speichern.
4. Auf **Auf Gerät übertragen** klicken, um die Konfiguration auf die angeschlossene eSIGN zu übertragen.
5. Auf **PDF-Konfigurationsblatt anzeigen** klicken, um eine Übersicht der aktuellen Konfiguration anzuzeigen.
6. Auf **PDF-Konfigurationsblatt speichern** klicken, um die Übersicht der aktuellen Konfiguration als PDF-Datei zu speichern.

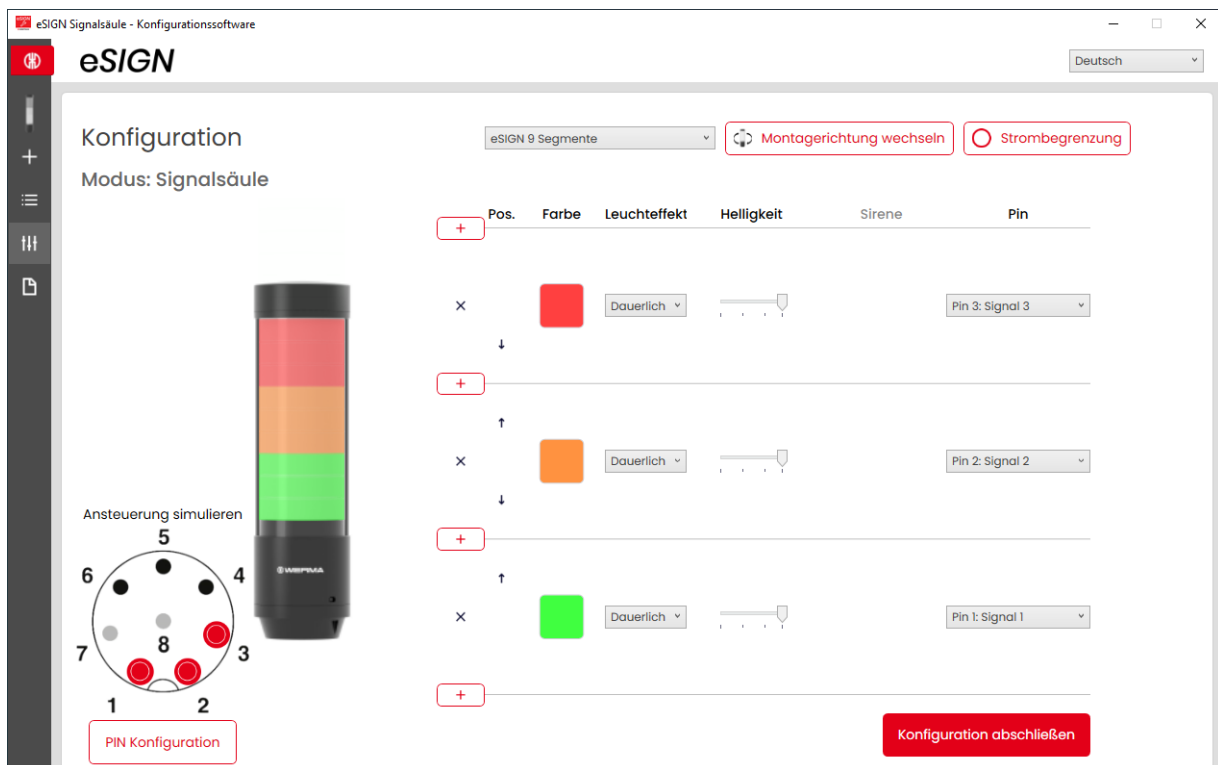
4.2 Modus Signalsäule

DE



Einzelne eSIGN-Segmente können zu einer Stufe zusammengeschaltet werden. Dadurch kann eine klassische Signalsäule in elektronisch modularer Form realisiert werden. In diesem Modus haben die Stufen feste Positionen und können aus sein, wenn die entsprechende Stufe und das optische Signal nicht aktiviert wird.

Durch diese Einstellung wird die beleuchtete Fläche eines Signals innerhalb der Säule auf einen bestimmten Bereich begrenzt.



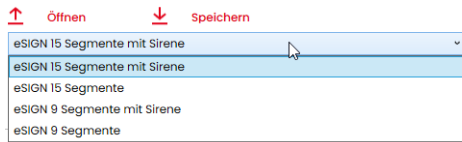
i Bei Bedarf kann die Ausrichtung der dargestellten Signalsäule über die Schaltfläche **Montagerichtung wechseln** um 180° gedreht werden.

i Bei Bedarf (z. B. um die Strombegrenzungen von Steuerungsausgängen berücksichtigen zu können) kann über die Schaltfläche **Strombegrenzung** die Leistungsaufnahme der eSIGN verringert werden. In diesem Fall wird der Strombedarf der Säule auf unter 500 mA reduziert. Als Folge wird die Helligkeit der optischen Signale bzw. die Lautstärke der akustischen Signale verringert.

4.2.1 eSIGN-Variante wählen

Falls eine eSIGN angeschlossen wurde, ist die Variante entsprechend vorausgewählt. Falls keine eSIGN angeschlossen wurde, kann die Variante der zu konfigurierenden eSIGN gewählt werden.

1. Bei Bedarf die Variante der zu konfigurierenden eSIGN wählen.



4.2.2 Stufe hinzufügen oder entfernen

Sobald im Modus **Signalsäule** eine Stufe hinzugefügt oder entfernt wird, werden die einzelnen eSIGN-Segmente automatisch neu aufgeteilt und gleichmäßig auf alle Stufen verteilt.

Stufe hinzufügen

1. Auf **Hinzufügen** klicken.



x

→ Eine Stufe wurde hinzugefügt.

Stufe entfernen

1. Auf **Entfernen** klicken.



→ Eine Stufe wurde entfernt.

4.2.3 Stufe verschieben

Bei Bedarf können die einzelnen Stufen nach oben oder unten verschoben werden.

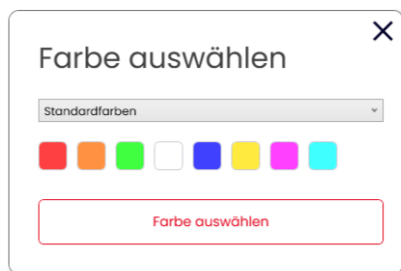
1. In der Spalte **Pos.** auf den Pfeil nach oben oder auf den Pfeil nach unten klicken, um die Stufe nach oben bzw. nach unten zu verschieben.



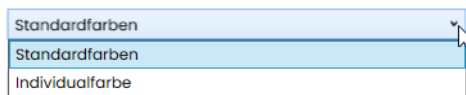
4.2.4 Farbe wählen

Jeder Stufe kann eine vorgegebene Standardfarbe oder eine individuelle Farbe zugewiesen werden.

1. In der Spalte **Farbe** auf das Farbfeld klicken.



2. Wählen, ob eine Standardfarbe oder eine individuelle Farbe verwendet werden soll.



Standardfarbe

3. Auf das gewünschte Farbfeld klicken.

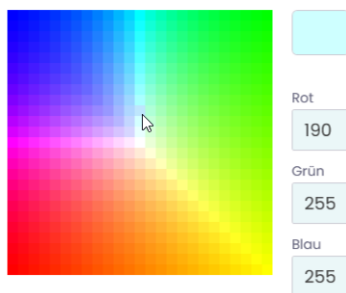


Folgende 8 Standardfarben stehen zur Auswahl zur Verfügung:

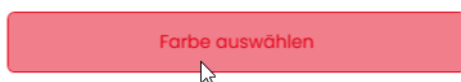
- rot
- gelb
- grün
- weiß
- blau
- hellgelb
- violett
- türkis

Individualfarbe

4. Gewünschte Farbe im Farbfeld auswählen oder den entsprechenden RGB-Wert in den Feldern **Rot**, **Grün** und **Blau** eingeben.



5. Auf **Farbe auswählen** klicken.



4.2.5 Leuchteffekt wählen

1. In der Spalte **Leuchteffekt** den gewünschten Leuchteffekt wählen.



Folgenden 8 Leuchteffekte stehen zur Auswahl zur Verfügung:

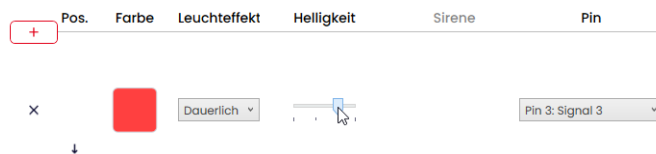
- Dauerlicht
- Blink 1 Hz
- Blink 2 Hz
- Blink 3 Hz
- Blitz 1x
- Blitz 2x
- Blitz 3x
- Rundum
- Ohne



Die Einstellung **Ohne** kann gewählt werden, falls die Stufe nur mit Sirene belegt werden soll.

4.2.6 Helligkeit einstellen

1. In der Spalte **Helligkeit** aus den 4 Optionen die gewünschte Helligkeit der Stufe einstellen.



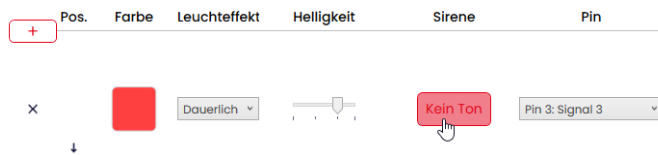
4.2.7 Sirene wählen

Falls die angeschlossene oder gewählte eSIGN eine Sirene hat, kann ein Signalton gewählt werden, der bei Aktivierung der Stufe ertönt.

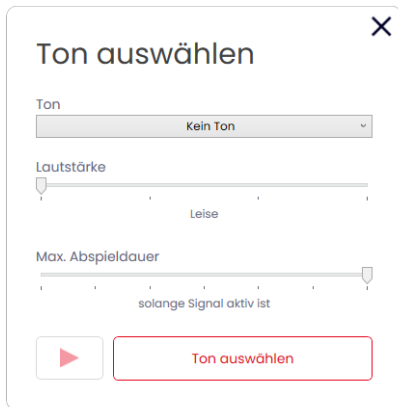


Falls Signaltöne für mehrere Stufen hinterlegt und die Stufen gleichzeitig angesteuert werden, ertönt die Sirene für die Farbe mit der höchsten Priorität (höchste Stelle innerhalb der Säule).

1. In der Spalte **Sirene** auf **Kein Ton** klicken.

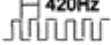
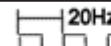
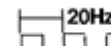
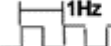


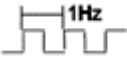
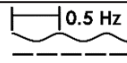
→ Das Fenster **Ton auswählen** erscheint.



2. Den gewünschten **Ton**, die gewünschte **Lautstärke** und **Max. Abspieldauer** wählen.

Folgenden 10 Tonarten stehen zur Auswahl zur Verfügung:

Ton	Frequenz	Beschreibung	Max. dB (A)
1	———— 2.7 kHz	Dauerton	104
2	———— 0.9 kHz	Dauerton	96
3	 420Hz 2.8 kHz	Pulston	97
4	 20Hz 0.9 kHz	Pulston	93
5	 20Hz 2.8 kHz	Pulston	103
6	 1Hz 0.9 kHz	Pulston	96

Ton	Frequenz	Beschreibung	Max. dB (A)
7	 2.8 kHz	Pulston	104
8	 2.3 kHz- 3.6 kHz	Wobbelton	104
9	 2.6 kHz	Dauerton	105
10	 1200 Hz 800 Hz	Wechselton	92

 Die gewählten Einstellungen können über die Schaltfläche **Abspielen** (▶) getestet werden. Der wird dabei über den Computer abgespielt.

3. Auf Ton auswählen klicken.



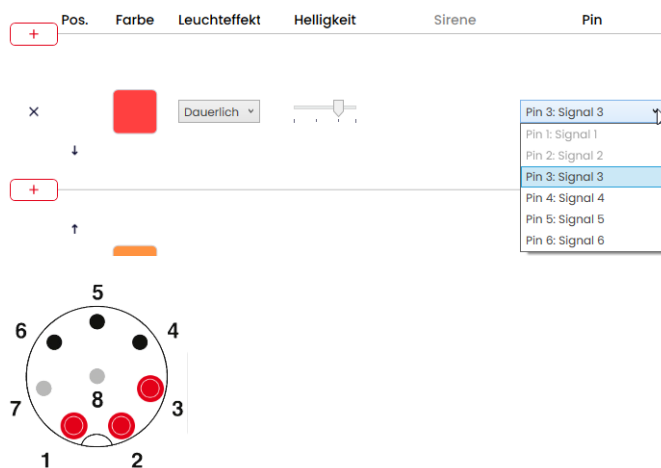
4.2.8 Pin wählen



Die Felder sind mit einer Standardbelegung vorkonfiguriert, von der unteren Stufe der Säule beginnend mit Pin 1.

Bereits verwendete Pins werden grau dargestellt. Die Belegung kann bei Bedarf beliebig verändert werden.

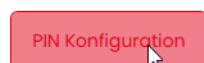
1. In der Spalte **Pin** den Pin des 8-poligen Steckers wählen, auf dem das Signal zum Auslösen der Stufe gesendet wird.



Pin-Konfiguration anpassen

Bei Bedarf kann die Zuordnung der Litzenfarbe zum Pin geändert und eine Beschreibung des Signals hinterlegt werden.

1. Unter der Pin-Übersicht auf **PIN Konfiguration** klicken.



→ Das Fenster **PIN Konfiguration** erscheint.

PIN Konfiguration

✕

	Farbe	Beschreibung
Pin 1: Signal 1	WH	
Pin 2: Signal 2	BN	
Pin 3: Signal 3	GN	
Pin 4: Signal 4	YE	
Pin 5: Signal 5	GY	
Pin 6: Signal 6	PK	
Pin 7: COM	BU	
Pin 8: +24V	RD	

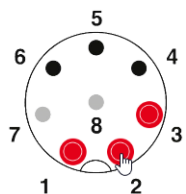
Speichern

2. In der Spalte **Farbe** die gewünschte Litzenfarbe eingeben.
3. In der Spalte **Beschreibung** die Beschreibung des Signals eingeben.
4. Auf **Speichern** klicken.

4.2.9 Ansteuerung simulieren

Nachdem alle Einstellungen vorgenommen wurden, kann die Ansteuerung simuliert werden.

1. In der Pin-Übersicht auf den Pin klicken, der die gewünschte Stufe aktivieren soll.



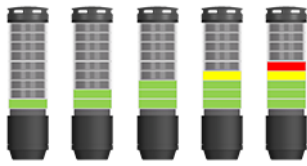
4.2.10 Konfiguration abschließen

1. Bei Bedarf weitere Änderungen an der Konfiguration vornehmen.
2. Sobald alle Stufen wie gewünscht konfiguriert sind, auf **Abschließen** klicken.
→ Das Fenster **Abschließen** erscheint.



3. Auf **Speichern** klicken, um die Konfiguration in einer Konfigurationsdatei zu speichern.
4. Auf **Auf Gerät übertragen** klicken, um die Konfiguration auf die angeschlossene eSIGN zu übertragen.
5. Auf **PDF-Konfigurationsblatt anzeigen** klicken, um eine Übersicht der aktuellen Konfiguration anzuzeigen.
6. Auf **PDF-Konfigurationsblatt speichern** klicken, um die Übersicht der aktuellen Konfiguration als PDF-Datei zu speichern.

4.3 Modus Füllstand



In dieser Betriebsart werden die eSIGN-Segmente als Füllstandanzeige verwendet. Dies ermöglicht eine präzise Signalisierung des Auftragsfortschritts oder der Materialverfügbarkeit in Maschinenprozessen in Form eines aufbauenden oder abfallenden Leuchtbilds.

Modus: Füllstand

Gerät

eSIGN 15 Segmente mit Sirene ▾

Farben

Einzelfarbe ▾

Anzahl der Signalkombinationen: 15

- = Anzahl zugeordneter Segmente: 15
- = Anzahl nicht zugeordneter Segmente: 0

Aufteilung nicht zugeordnete Segmente

Top (Füllend) ▾

[Konfiguration erstellen](#)

4.3.1 eSIGN-Variante wählen

Falls eine eSIGN angeschlossen wurde, ist die Variante entsprechend vorausgewählt. Falls keine eSIGN angeschlossen wurde, kann die Variante der zu konfigurierenden eSIGN gewählt werden.

1. Bei Bedarf im Feld **Gerät** die Variante der eSIGN wählen.

Gerät

eSIGN 15 Segmente mit Sirene	▼
eSIGN 15 Segmente mit Sirene	
eSIGN 15 Segmente	
eSIGN 9 Segmente mit Sirene	
eSIGN 9 Segmente	

4.3.2 Anzahl der Signalkombinationen wählen

1. Im Bereich **Anzahl der Signalkombinationen** wählen, wie viele eSIGN-Segmente für die Füllstandanzeige verwendet werden sollen.

Falls nicht alle eSIGN-Segmente für die Füllstandanzeige verwendet werden:

2. Im Feld **Aufteilung nicht zugeordnete Segmente** wählen, wie die eSIGN-Segmente angezeigt werden, die nicht für die Füllstandanzeige verwendet werden sollen.

Einstellung	Beschreibung
Top (Füllend)	Nicht zugeordnete eSIGN-Segmente werden oben angeordnet und mit der obersten Stufe geschaltet.
Unten (Füllend)	Nicht zugeordnete eSIGN-Segmente werden unten angeordnet und mit der untersten Stufe geschaltet.
Top (Aus)	Nicht zugeordnete eSIGN-Segmente werden oben angeordnet und sind immer aus.
Unten (Aus)	Nicht zugeordnete eSIGN-Segmente werden unten angeordnet und sind immer aus.

4.3.3 Farbe wählen

Für die Anzeige des Füllstands kann eine einheitliche Farbe oder ein Farbverlauf gewählt werden. Bei einem Farbverlauf wird der Verlauf der Farbtöne zwischen den beiden Farben automatisch berechnet.

Bei Bedarf kann die Farbe jedes einzelnen Segments der Füllstandanzeige zu einem späteren Zeitpunkt angepasst werden.

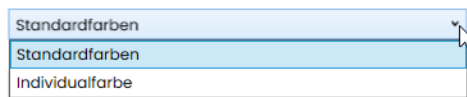
1. Im Feld **Farben** wählen, ob der Füllstand in einer einheitlicher Farbe oder als Farbverlauf dargestellt werden soll.

Einzelfarbe

2. Auf das Farbfeld klicken, um die gewünschte Farbe zu wählen.
→ Das Fenster **Farbe auswählen** erscheint.



3. Wählen, ob eine Standardfarbe oder eine individuelle Farbe verwendet werden soll.



Standardfarbe

4. Auf das gewünschte Farbfeld klicken.

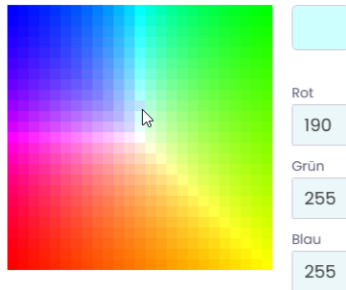


Folgende 8 Standardfarben stehen zur Auswahl zur Verfügung:

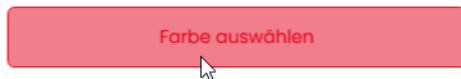
- rot
- gelb
- grün
- weiß
- blau
- hellgelb
- violett
- türkis

Individualfarbe

5. Gewünschte Farbe im Farbfeld auswählen oder den entsprechenden RGB-Wert in den Feldern **Rot**, **Grün** und **Blau** eingeben.



6. Auf **Farbe auswählen** klicken.



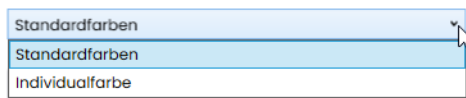
7. Auf **Konfiguration erstellen** klicken.
→ Der Bildschirm **Konfiguration** erscheint.

Farbverlauf

8. Auf die Farbfelder für die Start- und die Endfarbe des Farbverlaufs klicken.
→ Das Fenster **Farbe auswählen** erscheint.



9. Wählen, ob eine Standardfarbe oder eine individuelle Farbe verwendet werden soll.



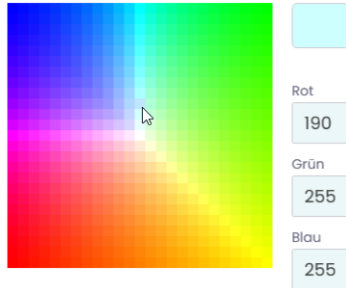
Standardfarbe

10. Auf das gewünschte Farbfeld klicken.

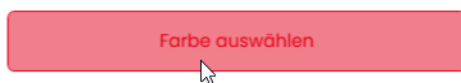


Individualfarbe

11. Gewünschte Farbe im Farbfeld auswählen oder den entsprechenden RGB-Wert eingeben in den Felder **Rot**, **Grün** und **Blau** eingeben.

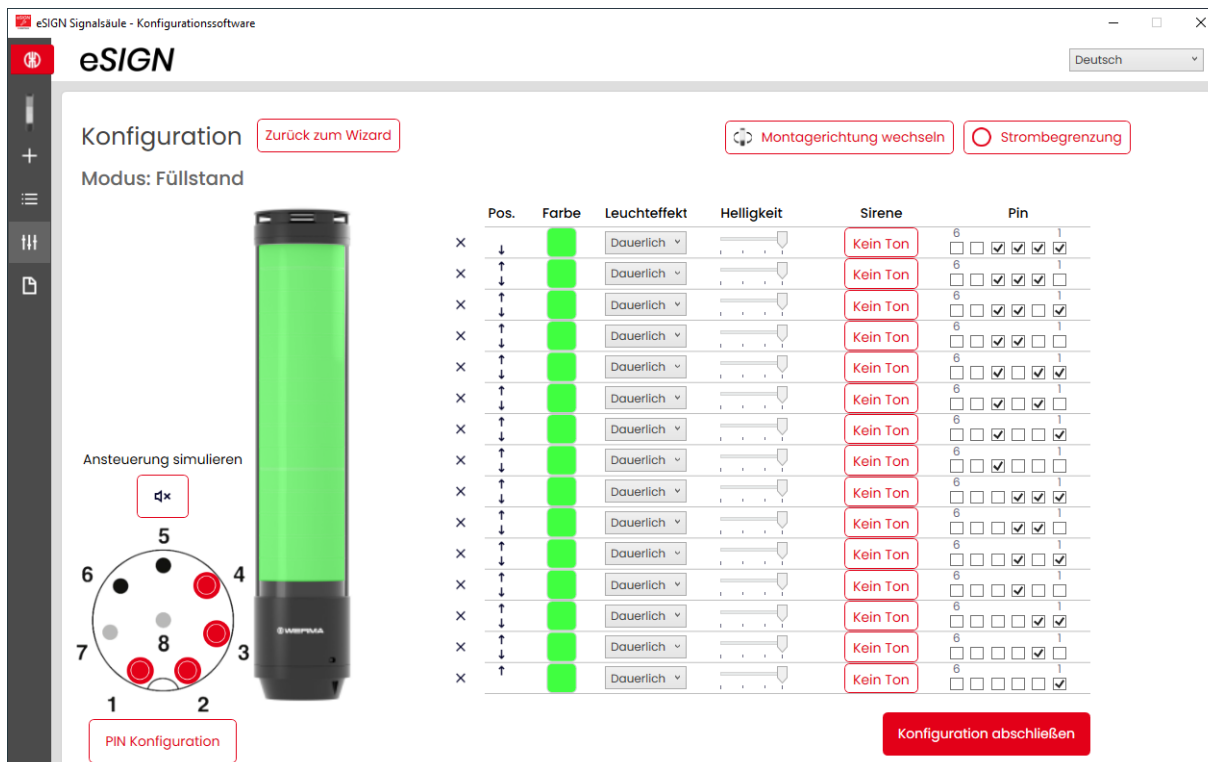


12. Auf **Farbe auswählen** klicken.



13. Auf **Konfiguration erstellen** klicken.
→ Der Bildschirm **Konfiguration** erscheint.

4.3.4 Füllstandanzeige konfigurieren

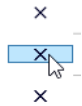


- i Bei Bedarf kann die Ausrichtung der dargestellten Signalsäule über die Schaltfläche **Montagerichtung wechseln** um 180° gedreht werden.
- i Bei Bedarf (z. B. um die Strombegrenzungen von Steuerungsausgängen berücksichtigen zu können) kann über die Schaltfläche **Strombegrenzung** die Leistungsaufnahme der eSIGN verringert werden. In diesem Fall wird der Strombedarf der Säule auf unter 500 mA reduziert. Als Folge wird die Helligkeit der optischen Signale bzw. die Lautstärke der akustischen Signale verringert.
- i Bei Bedarf kann über den Link **Zurück zum Wizard** die Konfiguration der Farbe und Segmente erneut aufgerufen und angepasst werden.

Segmente entfernen oder hinzufügen

Segment entfernen

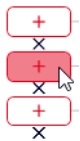
1. Auf **Entfernen** klicken.



→ Das Segment wurde entfernt.

Segment hinzufügen

1. Auf **Hinzufügen** klicken.



→ Das Segment wurde hinzugefügt.

Segmente verschieben

Bei Bedarf können die einzelnen Segmente nach oben oder unten verschoben werden.

1. In der Spalte **Pos.** auf den Pfeil nach oben oder auf den Pfeil nach unten klicken, um das Segment nach oben bzw. nach unten zu verschieben.

	Pos.	Farbe	Leuchteffekt	Helligkeit	Sirene	Pin				
x	↓		Dauerlich ▾		Kein Ton	6	☐	☒	☒	☒
x	↑		Dauerlich ▾		Kein Ton	6	☐	☒	☒	☒

Farbe wählen

Für jedes einzelne Segment kann bei Bedarf eine vorgegebene Standardfarbe gewählt oder eine individuelle Farbe zugewiesen werden.

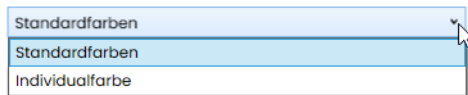
1. In der Spalte **Farbe** auf das Farbfeld klicken.

	Pos.	Farbe	Leuchteffekt	Helligkeit	Sirene	Pin
x	↓		Dauerlich ▾		Kein Ton	6 ☐ ☒ ☒ ☒ 1
x	↑		Dauerlich ▾		Kein Ton	6 ☐ ☒ ☒ ☒ 1

→ Das Fenster **Farbe auswählen** erscheint.



2. Wählen, ob eine Standardfarbe oder eine individuelle Farbe verwendet werden soll.



Standardfarbe

3. Auf das gewünschte Farbfeld klicken.

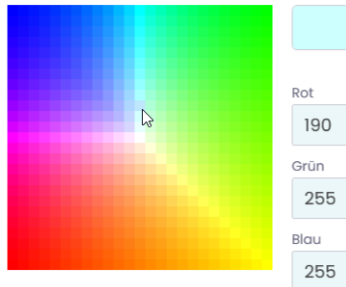


Folgende 8 Standardfarben stehen zur Auswahl zur Verfügung:

- rot
- gelb
- grün
- weiß
- blau
- hellgelb
- violett
- türkis

Individualfarbe

4. Gewünschte Farbe im Farbfeld auswählen oder den entsprechenden RGB-Wert in den Feldern **Rot**, **Grün** und **Blau** eingeben.



5. Auf **Farbe auswählen** klicken.



Leuchteffekt wählen

1. In der Spalte **Leuchteffekt** den gewünschten Leuchteffekt wählen.

Pos.	Farbe	Leuchteffekt	Helligkeit	Sirene	Pin
x	↓	Dauerlich		Kein Ton	6 ☐ 1 ☒
x	↓	Dauerlicht		Kein Ton	6 ☐ 1 ☒
x	↓	Blink: 1Hz		Kein Ton	6 ☐ 1 ☒
x	↓	Blink: 2Hz		Kein Ton	6 ☐ 1 ☒
x	↓	Blink: 3Hz		Kein Ton	6 ☐ 1 ☒
x	↓	Blitz: 1x		Kein Ton	6 ☐ 1 ☒
x	↓	Blitz: 2x		Kein Ton	6 ☐ 1 ☒
x	↓	Blitz: 3x		Kein Ton	6 ☐ 1 ☒
x	↓	Rundum		Kein Ton	6 ☐ 1 ☒
x	↓	Ohne		Kein Ton	6 ☐ 1 ☒

Folgenden 8 Leuchteffekte stehen zur Auswahl zur Verfügung:

- Dauerlicht
- Blink 1 Hz
- Blink 2 Hz
- Blink 3Hz
- Blitz 1x
- Blitz 2x
- Blitz 3x
- Rundum
- Ohne



Die Einstellung **Ohne** kann gewählt werden, falls die Stufe nur mit Sirene belegt werden soll.

Helligkeit einstellen

1. In der Spalte **Helligkeit** aus den 4 Optionen die gewünschte Helligkeit der Stufe einstellen.

	Pos.	Farbe	Leuchteffekt	Helligkeit	Sirene	Pin
×	↓	■	Dauerlich ▾		Kein Ton	6 ☐ ☐ ☒ ☒ ☒ 1
×	↑	■	Dauerlich ▾		Kein Ton	6 ☐ ☐ ☒ ☒ ☒ 1

Sirene wählen

Falls die angeschlossene oder gewählte eSIGN eine Sirene hat, kann ein Signalton gewählt werden, der bei Aktivierung des Segments ertönt.



Falls Signaltöne für mehrere Stufen hinterlegt und die Stufen gleichzeitig angesteuert werden, ertönt die Sirene für die Farbe mit der höchsten Priorität (höchste Stelle innerhalb der Säule).

1. In der Spalte **Sirene** auf **Kein Ton** klicken.

	Pos.	Farbe	Leuchteffekt	Helligkeit	Sirene	Pin
×	↓	■	Dauerlich ▾		Kein Ton	6 ☐ ☐ ☒ ☒ ☒ 1
×	↑	■	Dauerlich ▾		Kein Ton	6 ☐ ☐ ☒ ☒ ☒ 1

→ Das Fenster **Ton auswählen** erscheint.

Ton auswählen

Ton

Kein Ton ▾

Lautstärke

Leise

Max. Abspieldauer

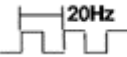
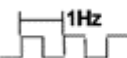
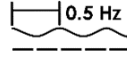
solange Signal aktiv ist

Ton auswählen

2. Den gewünschten **Ton**, die gewünschte **Lautstärke** und **Max. Abspieldauer** wählen.

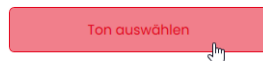
Folgenden 10 Tonarten stehen zur Auswahl zur Verfügung:

Ton	Frequenz	Beschreibung	Max. dB (A)
1	2.7 kHz	Dauerton	104
2	0.9 kHz	Dauerton	96
3	420Hz 2.8 kHz	Pulston	97
4	20Hz 0.9 kHz	Pulston	93

Ton	Frequenz	Beschreibung	Max. dB (A)
5	 2.8 kHz	Pulston	103
6	 0.9 kHz	Pulston	96
7	 2.8 kHz	Pulston	104
8	 2.3 kHz- 3.6 kHz	Wobbelton	104
9	 2.6 kHz	Dauerton	105
10	 1200 Hz 800 Hz	Wechselton	92

 Die gewählten Einstellungen können über die Schaltfläche **Abspielen** (▶) getestet werden. Der wird dabei über den Computer abgespielt.

3. Auf Ton auswählen klicken.



Pin wählen

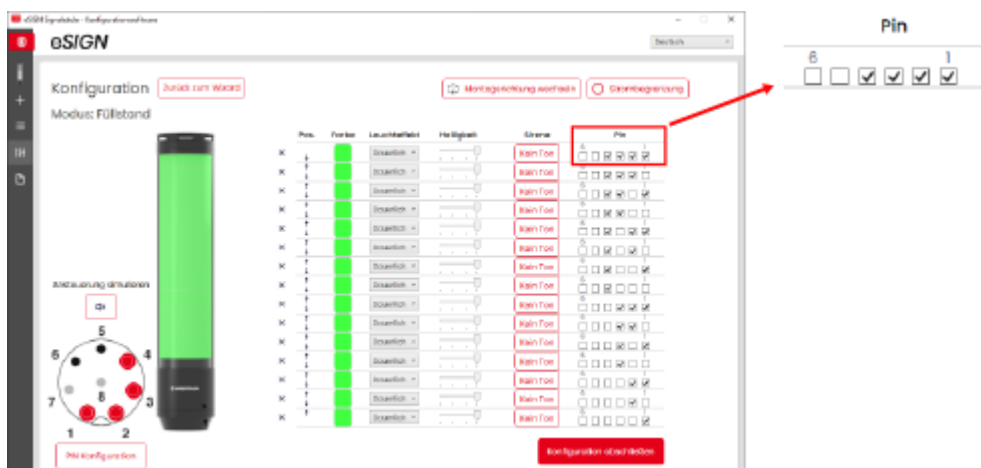
- i** Die Felder sind mit einer Standardbelegung vorkonfiguriert, von der unteren Stufe der Säule beginnend mit Pin 1.

Bereits verwendete Pins werden grau dargestellt. Die Belegung kann bei Bedarf beliebig verändert werden.

Die Ansteuerung der Füllstandanzeige erfolgt über eine Bit-Codierung. Die Kontrollkästchen in der Spalte **Pin** entsprechen den 6 Pins bzw. Signalleitungen. Das Setzen eines Hakens in einem oder mehreren Kontrollkästchen zeigt an, dass diese Pins bzw. Signalleitungen angesteuert werden müssen, um die entsprechende Einstellung zu aktivieren.

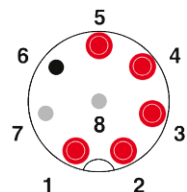
Beispiel:

Für die Darstellung der kompletten Säule in grün müssen die Pins 1-4 angesteuert werden.



1. In der Spalte **Pin** die Pins des 8-poligen Steckers wählen, auf dem das Signal zum Auslösen der Stufe gesendet wird.

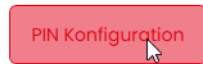
Pos.	Farbe	Leuchteffekt	Helligkeit	Sirene	Pin
x	↓		Dauerlich v	Kein Ton	8 ☐ ☒ ☒ ☒ ☒ ☒
x	↑		Dauerlich v	Kein Ton	8 ☐ ☒ ☒ ☒ ☒ ☒



Pin-Konfiguration anpassen

Bei Bedarf kann die Zuordnung der Litzenfarbe zum Pin geändert und eine Beschreibung des Signals hinterlegt werden.

1. Unter der Pin-Übersicht auf **PIN Konfiguration** klicken.



→ Das Fenster **PIN Konfiguration** erscheint.

PIN Konfiguration

×

	Farbe	Beschreibung
Pin 1: Signal 1	WH	
Pin 2: Signal 2	BN	
Pin 3: Signal 3	GN	
Pin 4: Signal 4	YE	
Pin 5: Signal 5	GY	
Pin 6: Signal 6	PK	
Pin 7: COM	BU	
Pin 8: +24V	RD	

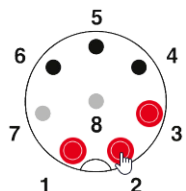
Speichern

2. In der Spalte **Farbe** die gewünschte Litzenfarbe eingeben.
3. In der Spalte **Beschreibung** die Beschreibung des Signals eingeben.
4. Auf **Speichern** klicken.

4.3.5 Ansteuerung simulieren

Nachdem alle Einstellungen vorgenommen wurden, kann die Ansteuerung simuliert werden.

1. In der Pin-Übersicht auf den Pin klicken, der die gewünschte Stufe aktivieren soll.



4.3.6 Konfiguration abschließen

1. Bei Bedarf weitere Änderungen an der Konfiguration vornehmen.
2. Sobald alle Stufen wie gewünscht konfiguriert sind, auf **Abschließen** klicken.
→ Das Fenster **Abschließen** erscheint.

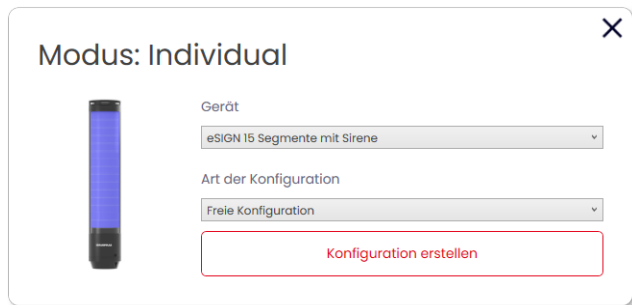


3. Auf **Speichern** klicken, um die Konfiguration in einer Konfigurationsdatei zu speichern.
4. Auf **Auf Gerät übertragen** klicken, um die Konfiguration auf die angeschlossene eSIGN zu übertragen.
5. Auf **PDF-Konfigurationsblatt anzeigen** klicken, um eine Übersicht der aktuellen Konfiguration anzuzeigen.
6. Auf **PDF-Konfigurationsblatt speichern** klicken, um die Übersicht der aktuellen Konfiguration als PDF-Datei zu speichern.

4.4 Modus Individual



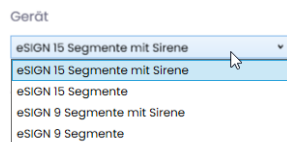
In dieser Betriebsart wird eine beliebige Kombination aus individuellen Segmenteinstellungen als eigenes Schaltsignal abgebildet. Jedes eSIGN-Segment kann individuell eingestellt und die Gesamteinstellung für die komplette Säule als ein Signalbild angesteuert werden. Der Modus **Individual** ermöglicht auf diese Art und Weise ein Maximum an individuellen Signalisierungsmöglichkeiten.



4.4.1 eSIGN-Variante wählen

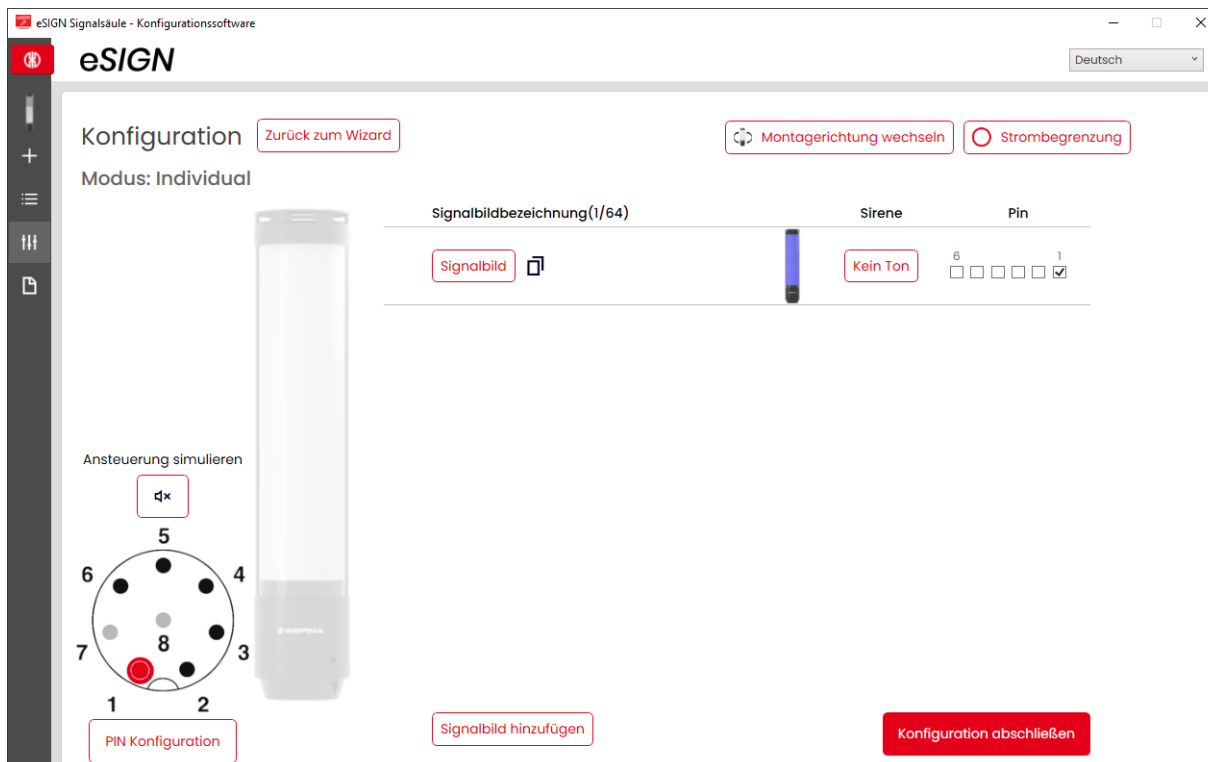
Falls eine eSIGN angeschlossen wurde, ist die Variante entsprechend vorausgewählt. Falls keine eSIGN angeschlossen wurde, kann die Variante der zu konfigurierenden eSIGN gewählt werden.

1. Bei Bedarf im Feld **Gerät** die Variante der eSIGN wählen.



2. Auf **Konfiguration erstellen** klicken.
→ Der Bildschirm **Konfiguration** erscheint.

4.4.2 Signalbilder konfigurieren



- i** Bei Bedarf kann die Ausrichtung der dargestellten Signalsäule über die Schaltfläche **Montagerichtung wechseln** um 180° gedreht werden.
- i** Bei Bedarf (z. B. um die Strombegrenzungen von Steuerungsausgängen berücksichtigen zu können) kann über die Schaltfläche **Strombegrenzung** die Leistungsaufnahme der eSIGN verringert werden. In diesem Fall wird der Strombedarf der Säule auf unter 500 mA reduziert. Als Folge wird die Helligkeit der optischen Signale bzw. die Lautstärke der akustischen Signale verringert.
- i** Bei Bedarf kann über den Link **Zurück zum Wizard** die Konfiguration der eSIGN-Variante erneut aufgerufen und angepasst werden.

Signalbild anpassen



Es können bis zu 64 Signalbilder konfiguriert und auf eine eSIGN übertragen werden.

Ein Signalbild besteht aus den einzelnen optischen Einstellungen jedes Segments und ggf. einem Signalton.

1. Auf **Signalbild** klicken.

Signalbildbezeichnung(1/64)



→ Das Fenster **Signalbild** erscheint.

Signalbild

Sirene
Kein Ton



Stufe verbinden	Pos	Farbe	Leuchteffekt	Helligkeit
0	↓	■	Dauerlicht	
0	↓	■	Dauerlicht	
0	↓	■	Dauerlicht	
0	↑	■	Dauerlicht	
0	↑	■	Dauerlicht	
0	↓	■	Dauerlicht	
0	↓	■	Dauerlicht	
0	↑	■	Dauerlicht	
0	↑	■	Dauerlicht	
0	↓	■	Dauerlicht	
0	↓	■	Dauerlicht	
0	↑	■	Dauerlicht	
0	↑	■	Dauerlicht	
0	↓	■	Dauerlicht	
0	↓	■	Dauerlicht	

Zurücksetzen

Speichern



Bei Bedarf kann das aktuelle Signalbild über die Schaltfläche **Zurücksetzen** auf die Standardeinstellungen zurückgesetzt werden.

Signalbild benennen

1. Im Feld **Signalbild** eine Bezeichnung für das aktuelle Signalbild eingeben.

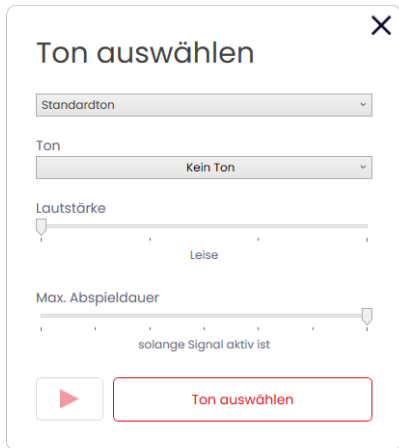
Sirene wählen

Falls die angeschlossene oder gewählte eSIGN eine Sirene hat, kann ein Signalton gewählt werden, der bei Aktivierung des Signalbilds ertönt.

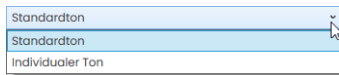
1. Im Feld **Sirene** auf **Kein Ton** klicken.



→ Das Fenster **Ton auswählen** erscheint.



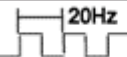
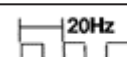
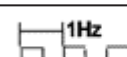
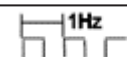
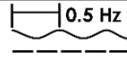
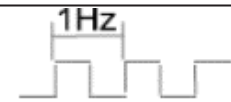
2. Wählen, ob ein Standardton oder eine individueller Ton verwendet werden soll.



Standardton

3. Den gewünschten **Ton**, die gewünschte **Lautstärke** und **Max. Abspieldauer** wählen.

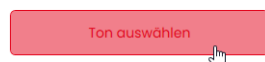
Folgenden 10 Tonarten stehen zur Auswahl zur Verfügung:

Ton	Frequenz	Beschreibung	Max. dB (A)
1	 2.7 kHz	Dauerton	104
2	 0.9 kHz	Dauerton	96
3	 2.8 kHz	Pulston	97
4	 0.9 kHz	Pulston	93
5	 2.8 kHz	Pulston	103
6	 0.9 kHz	Pulston	96
7	 2.8 kHz	Pulston	104
8	 2.3 kHz- 3.6 kHz	Wobbelton	104
9	 2.6 kHz	Dauerton	105
10	 1200 Hz 800 Hz	Wechselton	92



Die gewählten Einstellungen können über die Schaltfläche **Abspielen** (▶) getestet werden. Der wird dabei über den Computer abgespielt.

4. Auf **Ton auswählen** klicken.



Individualer Ton

Ton auswählen

Individualer Ton

Grafische Parameterbeschreibung

Lautstärke

Leise

Tonart

Dauerton

Frequenz 1 (Hz)

1000

Haltedauer Frequenz 2(ms)

0

Folge/Anzahl

0

Pause bis Wiederholung (ms)

0

Pause zwischen Zyklen (ms)

0

Ton auswählen

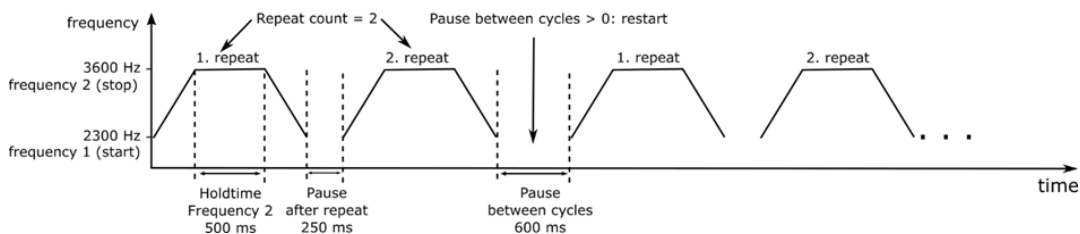
1. Einstellungen wie gewünscht vornehmen.



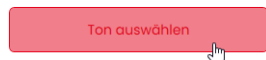
Die Option **Individualer Ton** bietet die Möglichkeit, aus verschiedenen Parametern, einen kundenindividuellen Ton zu generieren.

Weiterführende Informationen zu den einzelnen Einstellungen können über die Schaltfläche **Grafische Parameterbeschreibung** und durch Klick auf ? aufgerufen werden.

Über die Schaltfläche **Grafische Parameterbeschreibung** kann folgendes Bild abgerufen werden, um die Auswirkung der einzelnen Einstellungen zu verdeutlichen:



2. Auf **Ton auswählen** klicken.



Segmente verbinden oder trennen

Bei Bedarf können mehrere Segmente zu einer Stufe verbunden und wieder getrennt werden.

Segmente verbinden

1. In der Spalte **Stufen verbinden** auf das Symbol **Stufen verbinden** klicken.



Segmente trennen

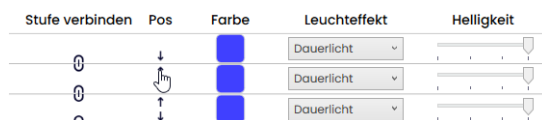
1. In der Spalte **Stufen verbinden** auf das Symbol **Stufen trennen** klicken.



Stufen verschieben

Bei Bedarf können die einzelnen Stufen nach oben oder unten verschoben werden.

1. In der Spalte **Pos.** auf den Pfeil nach oben oder auf den Pfeil nach unten klicken, um die Stufe nach oben bzw. nach unten zu verschieben.



Farbe wählen

Für jedes einzelne Segment kann bei Bedarf eine vorgegebene Standardfarbe gewählt oder eine individuelle Farbe zugewiesen werden.

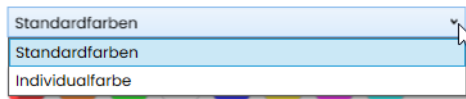
1. In der Spalte **Farbe** auf das Farbfeld klicken.



→ Das Fenster **Farbe auswählen** erscheint.



2. Wählen, ob eine Standardfarbe oder eine individuelle Farbe verwendet werden soll.



Standardfarbe

3. Auf das gewünschte Farbfeld klicken.

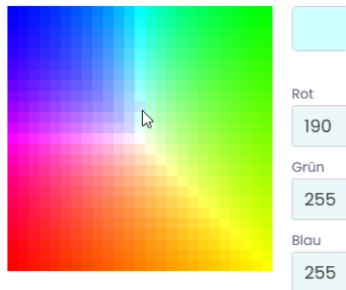


Folgende 8 Standardfarben stehen zur Auswahl zur Verfügung:

- rot
- gelb
- grün
- weiß
- blau
- hellgelb
- violett
- türkis

Individuallfarbe

4. Gewünschte Farbe im Farbfeld auswählen oder den entsprechenden RGB-Wert in den Feldern **Rot**, **Grün** und **Blau** eingeben.



5. Auf **Farbe auswählen** klicken.



Leuchteffekt wählen

1. In der Spalte **Leuchteffekt** den gewünschten Leuchteffekt wählen.

Stufe verbinden	Pos	Farbe	Leuchteffekt	Helligkeit
0	↓	■	Dauerlicht	1 2 3 4
0	↑	■	Dauerlicht	1 2 3 4
0	↓	■	Blink: 1Hz	1 2 3 4
0	↑	■	Blink: 2Hz	1 2 3 4
0	↓	■	Blink: 3Hz	1 2 3 4
0	↑	■	Blitz: 1x	1 2 3 4
0	↓	■	Blitz: 2x	1 2 3 4
0	↑	■	Blitz: 3x	1 2 3 4
0	↓	■	Rundum	1 2 3 4
0	↑	■	Ohne	1 2 3 4
0	↓	■	Dauerlicht	1 2 3 4

Folgenden 8 Leuchteffekte stehen zur Auswahl zur Verfügung:

- Dauerlicht
- Blink 1 Hz
- Blink 2 Hz
- Blink 3 Hz
- Blitz 1x
- Blitz 2x
- Blitz 3x
- Rundum
- Ohne

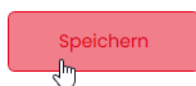
Helligkeit einstellen

1. In der Spalte **Helligkeit** aus den 4 Optionen die gewünschte Helligkeit der Stufe einstellen.

Stufe verbinden	Pos	Farbe	Leuchteffekt	Helligkeit
0	↓	■	Dauerlicht	1 2 3 4
0	↑	■	Dauerlicht	1 2 3 4

Sobald alle Einstellungen vorgenommen wurden:

2. Auf **Speichern** klicken.



4.4.3 Pin wählen

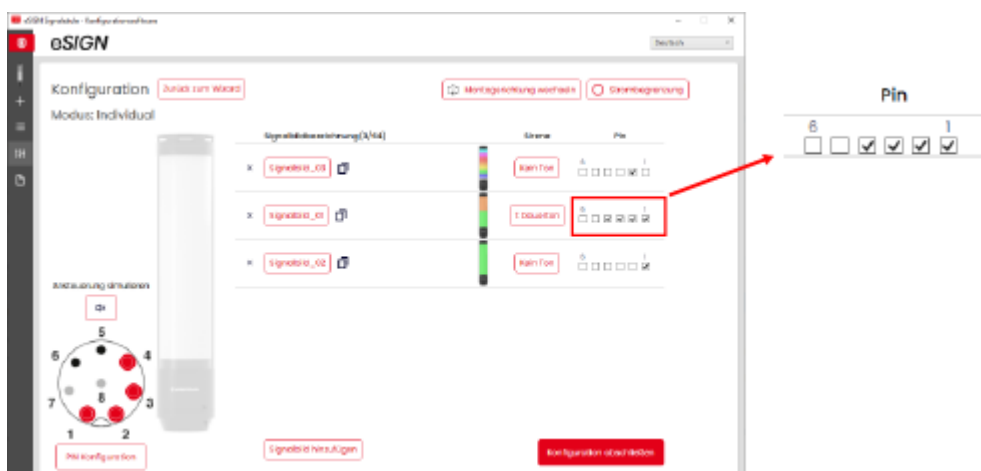


Die Felder sind mit einer Standardbelegung vorkonfiguriert.
Die Belegung kann bei Bedarf beliebig verändert werden.

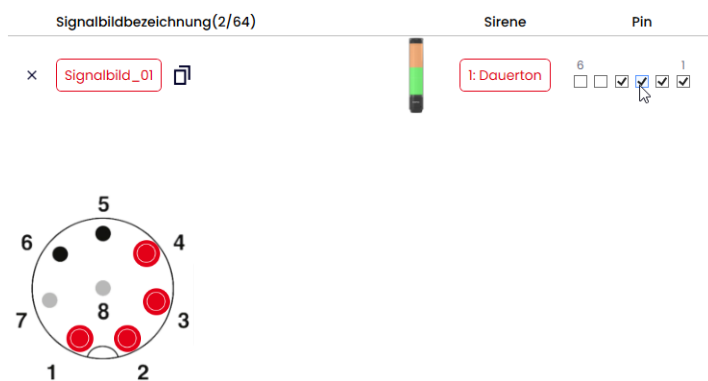
Die Ansteuerung der einzelnen Signaltbilder erfolgt über eine Bit-Codierung. Die Kontrollkästchen in der Spalte **Pin** entsprechen den 6 Pins bzw. Signalleitungen. Das Setzen eines Hakens in einem oder mehreren Kontrollkästchen zeigt an, dass diese Pins bzw. Signalleitungen angesteuert werden müssen, um das entsprechende Signaltbild zu aktivieren.

Beispiel:

Für die Aktivierung des Signaltbilds **Signalbild_01** müssen die Pins 1-4 angesteuert werden.



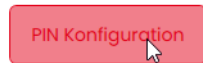
1. In der Spalte **Pin** die Pins des 8-poligen Steckers wählen, auf dem das Signal zum Auslösen des Signaltbilds gesendet wird.



Pin-Konfiguration anpassen

Bei Bedarf kann die Zuordnung der Litzenfarbe zum Pin geändert und eine Beschreibung des Signals hinterlegt werden.

1. Unter der Pin-Übersicht auf **PIN Konfiguration** klicken.



→ Das Fenster **PIN Konfiguration** erscheint.

×

PIN Konfiguration

	Farbe	Beschreibung
Pin 1: Signal 1	WH	
Pin 2: Signal 2	BN	
Pin 3: Signal 3	GN	
Pin 4: Signal 4	YE	
Pin 5: Signal 5	GY	
Pin 6: Signal 6	PK	
Pin 7: COM	BU	
Pin 8: +24V	RD	

Speichern

2. In der Spalte **Farbe** die gewünschte Litzenfarbe eingeben.
3. In der Spalte **Beschreibung** die Beschreibung des Signals eingeben.
4. Auf **Speichern** klicken.

4.4.4 Signalbild duplizieren



Es können bis zu 64 Signalbilder konfiguriert und auf eine eSIGN übertragen werden.

Ein Signalbild besteht aus den einzelnen optischen Einstellungen jedes Segments und ggf. einem Signalton.

1. In der Zeile des gewünschten Signalbilds auf **Duplizieren** klicken.



2. Das Signalbild wie beschrieben konfigurieren.

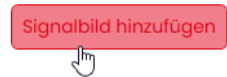
4.4.5 Signalbild hinzufügen



Es können bis zu 64 Signalbilder konfiguriert und auf eine eSIGN übertragen werden.

Ein Signalbild besteht aus den einzelnen optischen Einstellungen jedes Segments und ggf. einem Signalton.

1. Auf **Signalbild hinzufügen** klicken.



2. Das Signalbild wie beschrieben konfigurieren.

4.4.6 Signalbild löschen

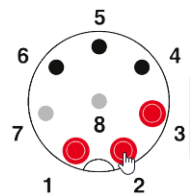
1. In der Zeile des gewünschten Signalbilds auf **Entfernen** klicken.



4.4.7 Ansteuerung simulieren

Nachdem alle Einstellungen vorgenommen wurden, kann die Ansteuerung simuliert werden.

1. In der Pin-Übersicht auf den Pin klicken, der das gewünschte Signalbild aktivieren soll.



4.4.8 Konfiguration abschließen

1. Bei Bedarf weitere Änderungen an der Konfiguration vornehmen.
2. Sobald alle Signalbilder wie gewünscht konfiguriert sind, auf **Abschließen** klicken.
→ Das Fenster **Abschließen** erscheint.

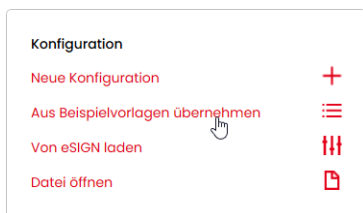


3. Auf **Speichern** klicken, um die Konfiguration in einer Konfigurationsdatei zu speichern.
4. Auf **Auf Gerät übertragen** klicken, um die Konfiguration auf die angeschlossene eSIGN zu übertragen.
5. Auf **PDF-Konfigurationsblatt anzeigen** klicken, um eine Übersicht der aktuellen Konfiguration anzuzeigen.
6. Auf **PDF-Konfigurationsblatt speichern** klicken, um die Übersicht der aktuellen Konfiguration als PDF-Datei zu speichern.

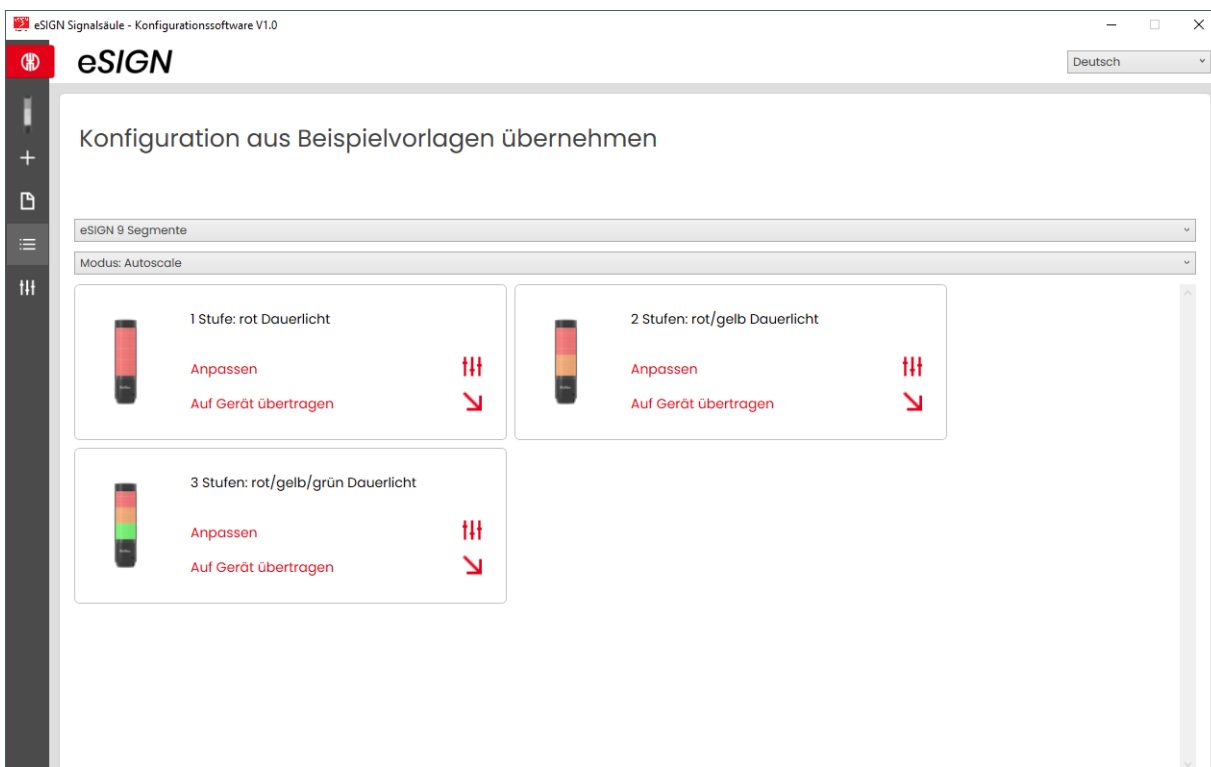
5 Konfiguration aus Beispielvorlagen übernehmen

Die eSIGN-Konfigurationssoftware stellt verschiedene vordefinierte Konfigurationen bereit, die direkt auf eine angeschlossene eSIGN übertragen oder als Grundlage für eigene Konfigurationen verwendet werden können.

1. Im Bereich **Konfiguration** auf **Aus Beispielvorlagen übernehmen** klicken.



→ Das Fenster **Konfiguration aus Beispielvorlagen übernehmen** erscheint.



2. Variante der eSIGN wählen.
3. Modus wählen.
→ Die verfügbaren Vorlagen werden angezeigt.
4. In der gewünschten Vorlage auf **Anpassen** klicken, um die Vorlage zu laden und weiter zu bearbeiten.

5. Auf **Auf Gerät übertragen** klicken, um die Vorlage zu laden und direkt auf die angeschlossene eSIGN zu übertragen.

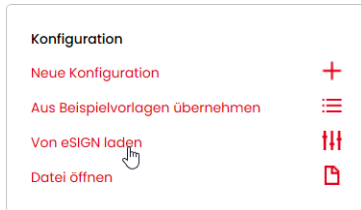


Für weitere Informationen zur Konfiguration, siehe "Neue Konfiguration erstellen", S. 15.

6 Konfiguration von der angeschlossener eSIGN laden

Falls eine eSIGN am Computer angeschlossen ist, bietet die eSIGN-Konfigurationssoftware die Möglichkeit, die aktuelle Konfiguration (ggf. Auslieferungszustand) zur Bearbeitung zu öffnen. Falls keine eSIGN angeschlossen ist, ist dieser Menüpunkt verblasst.

1. Im Bereich **Konfiguration** auf **Von eSIGN laden** klicken.



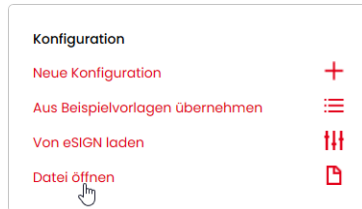
→ Das Fenster **Konfiguration** erscheint im eingestellten Modus und ist bereits mit der aktuellen Konfiguration befüllt.



Für weitere Informationen zur Konfiguration, siehe "Neue Konfiguration erstellen", S. 15.

7 Bestehende Konfiguration öffnen

1. Im Bereich **Konfiguration** auf **Datei öffnen** klicken.



2. Gewünschte Konfigurationsdatei wählen und auf **Öffnen** klicken.



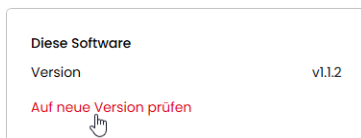
Alternativ kann über das Seitenmenü die zuletzt verwendete Konfigurationen angezeigt werden (siehe "Überblick", S. 13).

8 eSIGN-Konfigurationssoftware aktualisieren



Um eine Software-Aktualisierung durchführen zu können, muss der Computer mit dem Internet verbunden sein.

1. Im Bereich Diese Software auf **Auf neue Version prüfen** klicken.



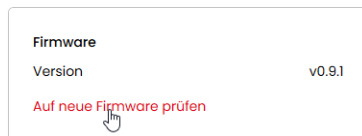
- Die eSIGN-Konfigurationssoftware sucht nach Software-Aktualisierungen.
- Falls eine Aktualisierung gefunden wurde, erscheint eine entsprechende Meldung.

9 Firmware aktualisieren

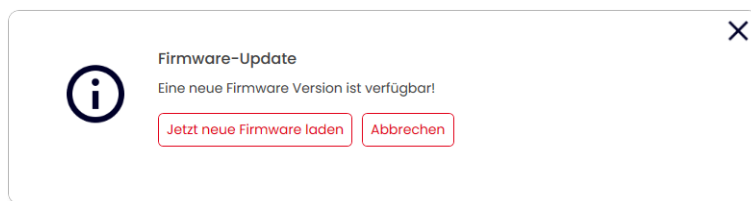


Um eine Firmware-Aktualisierung durchführen zu können, muss der Computer mit dem Internet verbunden sein und eine eSIGN angeschlossen sein.

1. Im Bereich Firmware auf **Auf neue Firmware prüfen** klicken.



- Die eSIGN-Konfigurationssoftware sucht nach Firmware-Aktualisierungen für die angeschlossene eSIGN.
- Falls eine Aktualisierung gefunden wurde, erscheint eine entsprechende Meldung.



2. Auf **Jetzt neue Firmware laden** klicken.

- Die neue Firmware wird auf die angeschlossene eSIGN übertragen.

10 Support



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10. Stephane Carrez (m68hc11-elf/m68hc12-elf targets only)

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Manual

eSIGN 24 V

Functional description of the signal tower with configuration software

Version: 3.0 - 01/2024

310.657.006

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1 Overview

1.1 Function

The new *eSIGN* brings new dimensions to light. Electronic modularity enables the product to create a variety of signal modes with various colours, brightness levels and light effects, from the classic signal tower to completely customised settings. *eSIGN* can also switch with ease between variable filling level indications or full-surface signalling. In addition to providing you with an overview of your process cycles, this also opens up completely new options.

The WERMA *eSIGN* configuration software can be used to configure the individual segments and to transfer the configuration to the *eSIGN*.

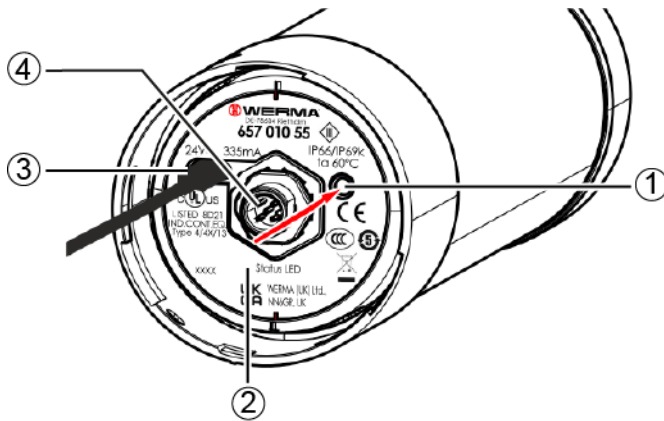
The configuration can be performed with or without connecting an *eSIGN*. If no *eSIGN* is connected, the configuration can be saved in a configuration file and later loaded and transferred to a connected *eSIGN*.

1.2 Hardware description

The hardware information applies to the following part numbers:

- 657.0x0.55 & 657.2x0.55 - 9 segments
- 657.1x0.55 & 657.3x0.55 - 9 segments with siren
- 657.5x0.55 & 657.7x0.55 - 15 segments
- 657.6x0.55 & 657.8x0.55 - 15 segments with siren

1.2.1 Overview of the connection area



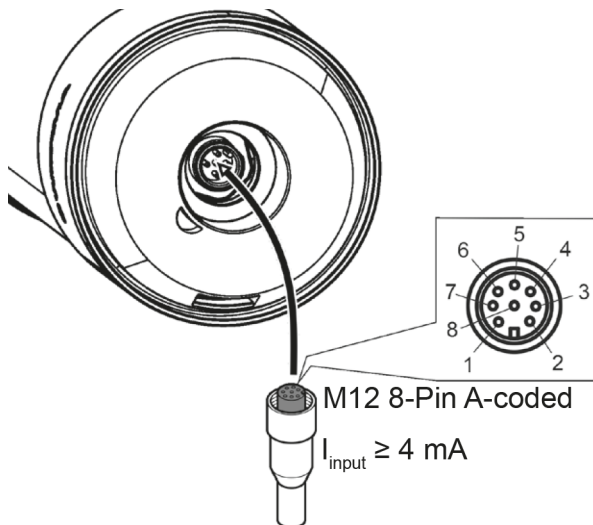
Item	Description
1	User button
2	Status LED
3	USB-C connection
4	8-pin M12 connector

LED status	Description
LED flashes yellow	Normal operation
LED pulses	Firmware update is being installed
LED is off	USB-C cable not properly connected

 The user button is not functional in the current eSIGN version and is kept available for future functional enhancements.

1.2.2 Overview of the 8-pin M12 connector

The eSIGN is connected via an 8-pin M12 connector with the following assignment:



M12 pin assignment	Wire colour of M12 cable	Function
1	White	Signal 1
2	Brown	Signal 2
3	Green	Signal 3
4	Yellow	Signal 4
5	Grey	Signal 5
6	Pink	Signal 6
7	Blue	COM
8	Red	+24V

1.3 System requirements for the eSIGN configuration software

Operating system	Windows 10 x86/x64 Up-to-date Windows updates are a compulsory requirement.
USB port	Required for the hardware configuration.



Supported operating systems are only supported for as long as Microsoft also supports them through the Microsoft Support Lifecycle.

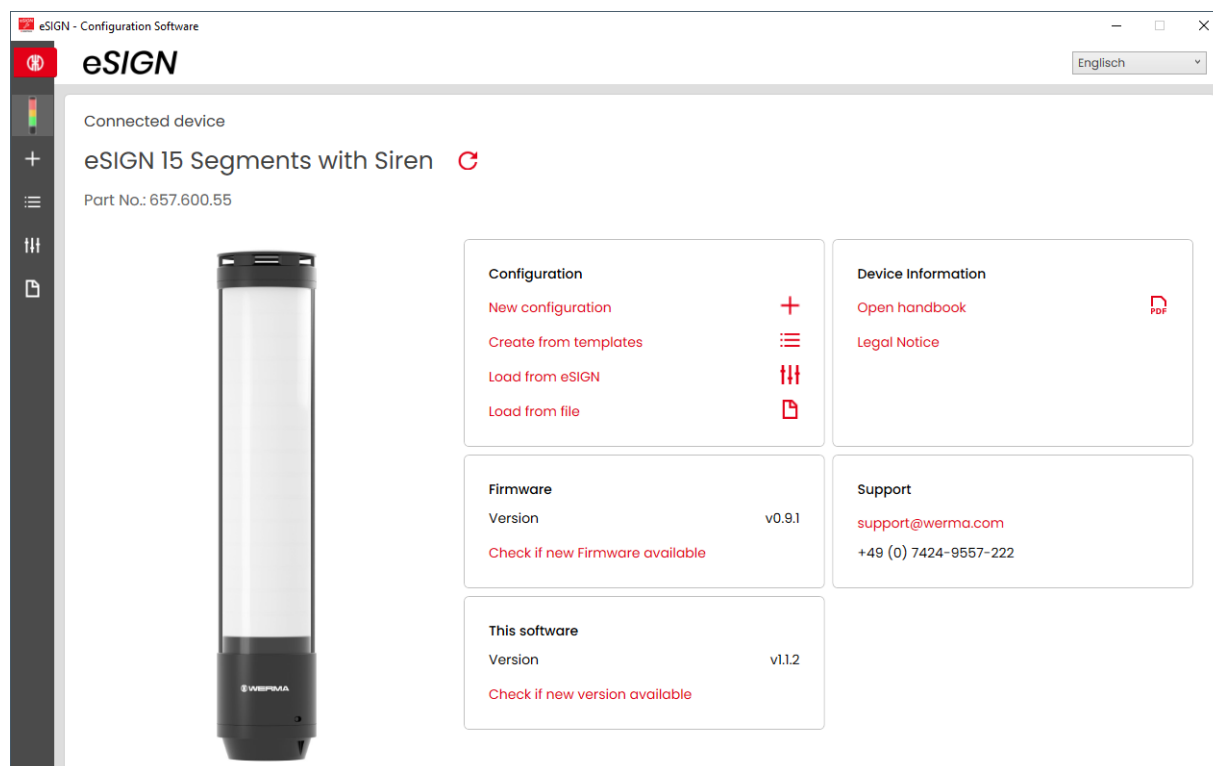
2 Installing the eSIGN configuration software

The eSIGN configuration software does not need to be installed and runs as a portable version.

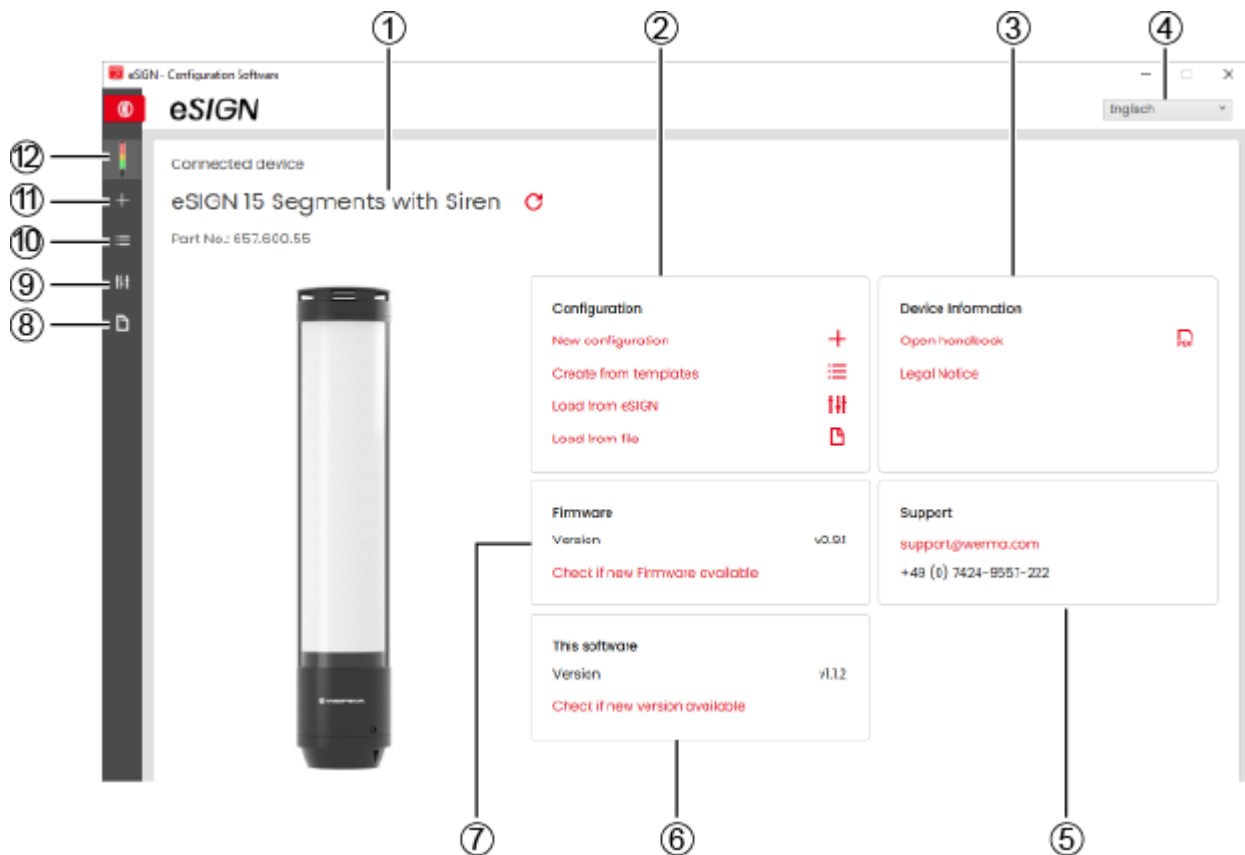
1. Download the eSIGN configuration software from the following website: www.werma.com/software.

3 Starting the eSIGN configuration software

1. Double-click on `Werma-eSIGN-Konfigurator.exe`.
→ The eSIGN configuration software starts.



3.1 Overview



Item	Description
1	Connected eSIGN variant
2	Configuration Area
3	Device Information Area
4	Set the language
5	Support Area
6	This Software Area
7	Firmware Area
8	Open the existing configuration
9	Load the configuration from the eSIGN
10	Create a configuration from sample templates
11	Create a new configuration
12	Open the start screen

3.1.1 Configuration Area

The following options for creating a configuration are available in the **Configuration** area:

- **New configuration:** Create a new configuration (see "Creating a new configuration", p. 115).
- **Create from templates:** Open standard templates that can be transferred to the device immediately (see "Creating a configuration from sample templates", p. 164).
- **Load from eSIGN:** Open the current configuration (for example the default setting) for editing (see "Loading the configuration of the connected eSIGN", p. 166).
- **Load from file:** Open and reuse an existing configuration (see "Opening the existing configuration", p. 167).

3.1.2 Device Information Area

The handbook and legal information can be opened in the **Device Information** area.

3.1.3 Support Area

The **Support** area displays the contact information of the WERMA support team.

3.1.4 This Software Area

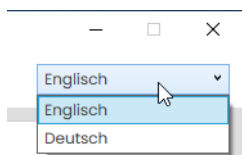
The **This Software** area displays information about the eSIGN configuration software and offers a possibility to update the configuration software.

3.1.5 Firmware Area

The **Firmware** area displays information about the firmware of the connected eSIGN and offers a possibility to update the firmware.

3.2 Setting the language

1. Select the desired language in the selection menu.



4 Creating a new configuration

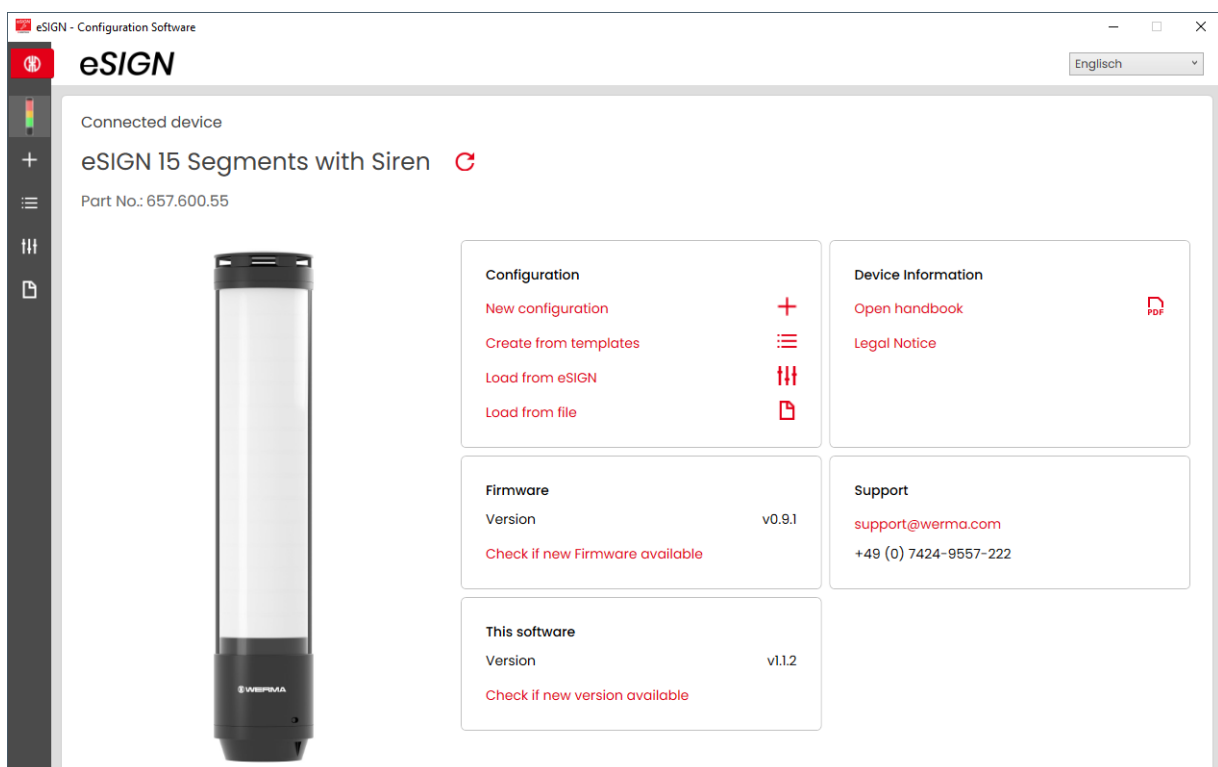


The configuration can be performed with or without connecting an eSIGN.



The eSIGN can be connected simultaneously to a computer via the USB cable and to the 24V power supply via the M12 cable.

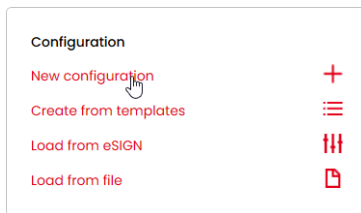
1. Use the USB cable to connect the eSIGN to the computer.
→ The eSIGN configuration software detects the connected eSIGN.



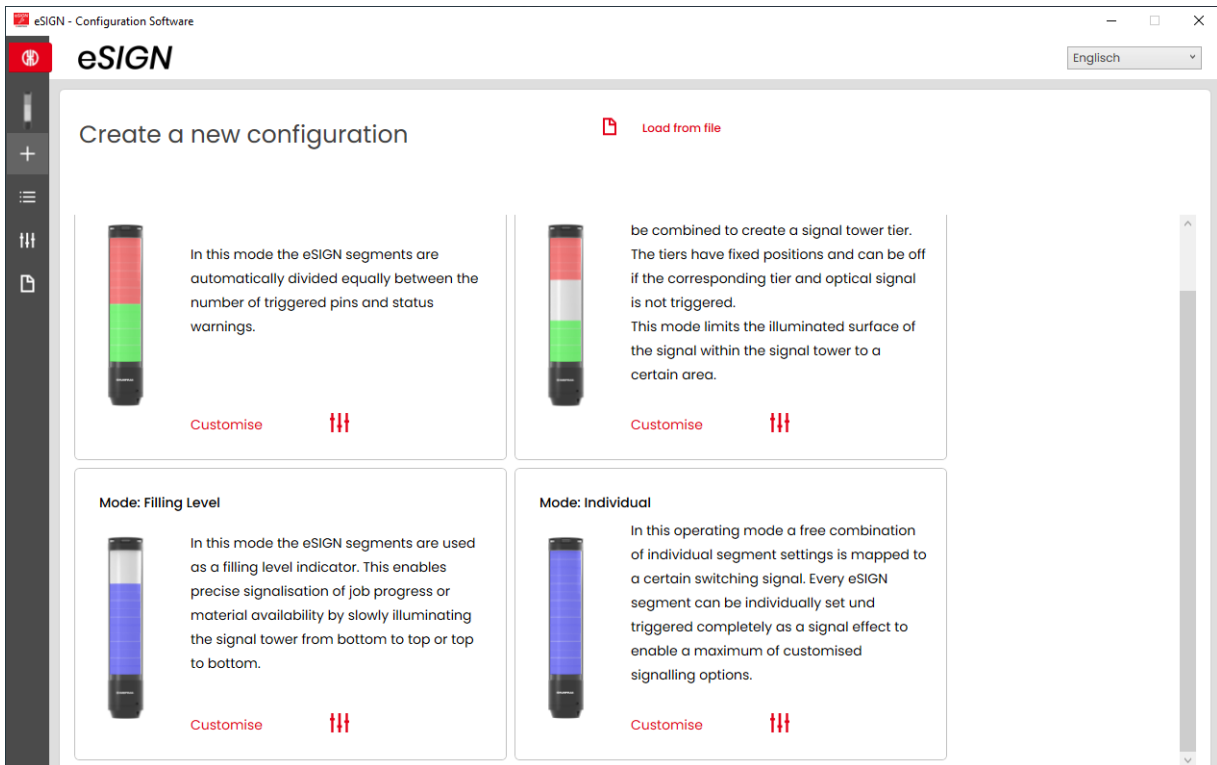
2. If the eSIGN configuration software does not detect the connected eSIGN: Click on **Refresh connected device**.

No Device connected 

3. Click on **New configuration** in the **Configuration** area.



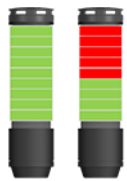
→ The **Create a new configuration** screen appears.



4. Depending on the desired configuration mode, click on **Customise** in the **Autoscale, Signal Tower, Filling Level** or **Individual** area.

Customise

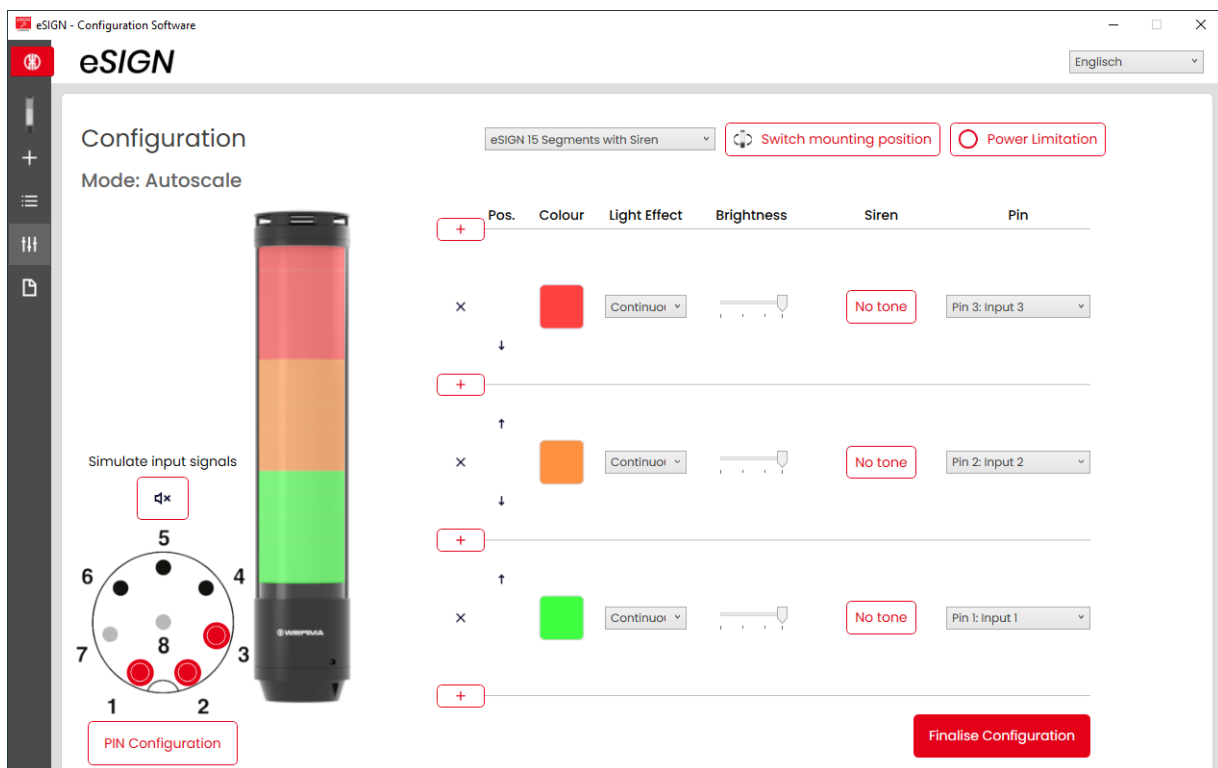
4.1 Autoscale mode



eSIGN segments are automatically divided equally between the number of triggered pins and status warnings.

This enables the full potential of the eSIGN to be exploited by providing full-surface illumination. If for example only one status warning is active then the entire surface of the eSIGN is illuminated in one colour for maximum visibility.

If several status warnings are active, the illuminated area is split proportionally. If the segments cannot be divided equally then the highest priority colour (highest position in the signal tower) receives the remaining segment. If several segments are remaining then they will be divided equally according to the prioritisation (position in the signal tower from top to bottom).



If necessary, the orientation of the displayed signal tower can be rotated by 180° with the **Switch mounting position** button.

-
- i** If necessary (for example, to take into account the power limits of control outputs), the power consumption of the eSIGN can be reduced with the **Power Limitation** button. In this case, the current power requirement of the tower is reduced to less than 500 mA. As a result, the optical signals' brightness or the audible signals' volume is reduced.
-

The **Autoscale** mode is the standard default operating mode at the time of delivery and is set as follows:

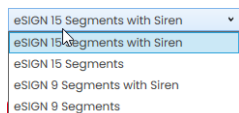
- Variants with 9 segments:
 - 3 tiers red/yellow/green
 - Continuous light
- Variants with 15 segments:
 - 5 tiers red/yellow/green/white/blue
 - Continuous light

The default setting deviates from this standard for customer-specific versions and is documented separately.

4.1.1 Selecting the eSIGN variant

The variant is pre-selected accordingly if eSIGN has been connected. If no eSIGN has been connected, the variant of the eSIGN to be configured can be selected.

1. If necessary, select the variant of the eSIGN to be configured.



4.1.2 Adding or removing a tier

As soon as a tier is added or removed in **Autoscale** mode, the individual **eSIGN** segments are automatically re-divided and evenly distributed across all tiers. If the segments cannot be divided equally then the highest priority colour (highest position in the signal tower) receives the remaining segment. If several segments are remaining then they will be divided equally according to the prioritisation (position in the signal tower from top to bottom).

Adding a tier

1. Click on **Add**.



×

→ A tier has been added.

Removing a tier

1. Click on **Remove**.

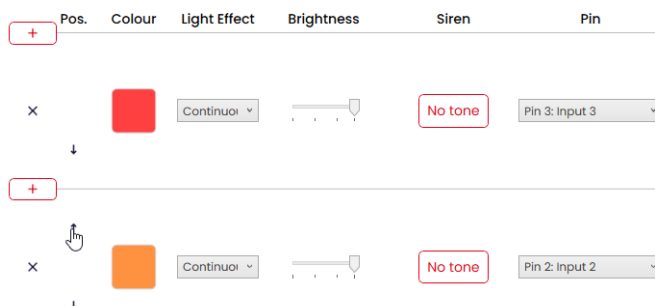


→ A tier has been removed.

4.1.3 Moving a tier

The individual tiers can be moved up or down as required.

1. In the **Pos.** column, click on the Move up or Move down arrow to move the tier up or down.



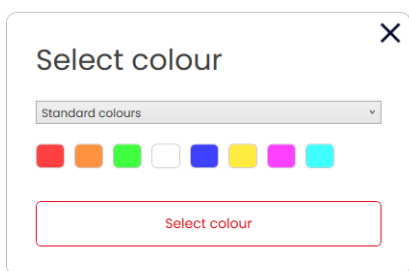
4.1.4 Selecting a colour

A standard colour or individual colour can be assigned to every tier.

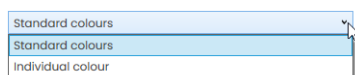
1. Click on the colour field in the **Colour** column.



→ The **Select colour** window appears.



2. Select whether to use a standard colour or an individual colour.



Standard colour

3. Click on the desired colour field.

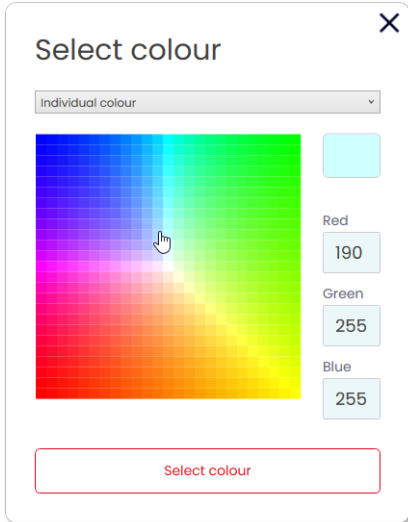


The following 8 standard colours are available for selection:

- red
- yellow
- green
- white
- blue
- light yellow
- violet
- turquoise

Individual colour

4. Select the desired colour in the colour field or enter the appropriate RGB value in the **Red**, **Green** and **Blue** fields.



The dialog box titled "Select colour" features a close button (X) in the top right corner. Below the title is a dropdown menu currently set to "Individual colour". The main area contains a color selection palette with a grid of color swatches. A mouse cursor is positioned over a light blue swatch. To the right of the palette are three input fields labeled "Red", "Green", and "Blue", with values 190, 255, and 255 respectively. At the bottom of the dialog is a red button labeled "Select colour".

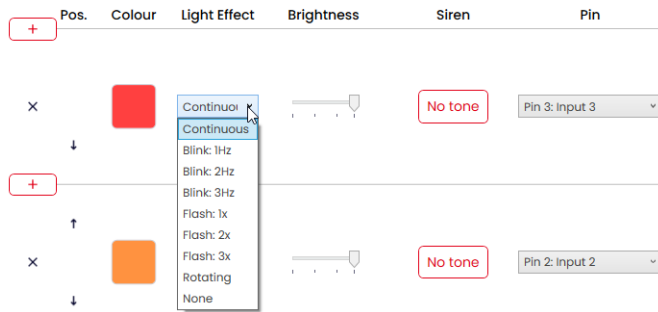
5. Click on **Select colour**.



A red rectangular button with the text "Select colour" in white. A mouse cursor is clicking on the button.

4.1.5 Selecting a light effect

1. Select the desired light effect in the **Light Effect** column.



The interface shows a table with columns: Pos., Colour, Light Effect, Brightness, Siren, and Pin. The "Light Effect" column has a dropdown menu open, showing options: Continuous, Continuous, Blink: 1Hz, Blink: 2Hz, Blink: 3Hz, Flash: 1x, Flash: 2x, Flash: 3x, Rotating, and None. The "Siren" column has a "No tone" button. The "Pin" column has dropdown menus for "Pin 3: Input 3" and "Pin 2: Input 2".

The following 8 light effects are available for selection:

- Continuous light
- Blinking 1 Hz
- Blinking 2 Hz
- Blinking 3 Hz
- Flashing 1x
- Flashing 2x

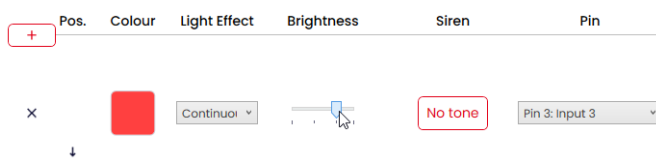
- Flashing 3x
- Rotating
- None



The **None** setting can be selected if the tier is only to be configured with a siren.

4.1.6 Setting the brightness

1. Set the desired brightness of the tier from the four options in the **Brightness** column.



4.1.7 Selecting the siren

If the connected or selected eSIGN has a siren, you can select a signal tone which will sound when the tier is activated.

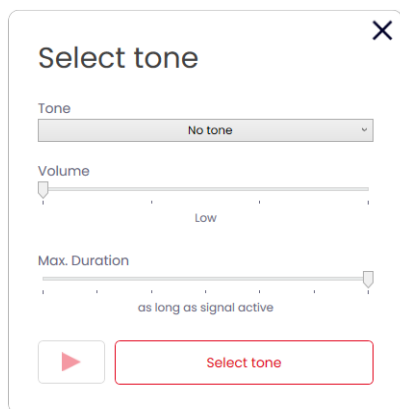


If several tiers are set, and the tiers are activated at the same time, the siren will sound for the colour with the highest priority (highest position within the tower).

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

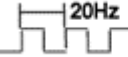
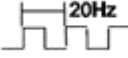
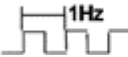
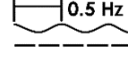


→ The **Select tone** window appears.



2. Select the desired **Tone, the desired **Volume** and **Max. Duration**.**

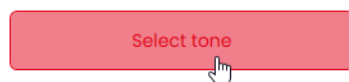
The following 10 tones are available for selection:

Sound	Frequency	Description	Max. dB (A)
1	 2.7 kHz	Continuous tone	104
2	 0.9 kHz	Continuous tone	96
3	 2.8 kHz	Pulse tone	97
4	 0.9 kHz	Pulse tone	93
5	 2.8 kHz	Pulse tone	103
6	 0.9 kHz	Pulse tone	96
7	 2.8 kHz	Pulse tone	104
8	 2.3 kHz- 3.6 kHz	Sweep tone	104
9	 2.6 kHz	Continuous tone	105
10	 1200 Hz 800 Hz	Alternating tone	92



The selected settings can be tested using the **Play** button (▶). The sound file is then played by the computer.

3. Click on **Select tone.**



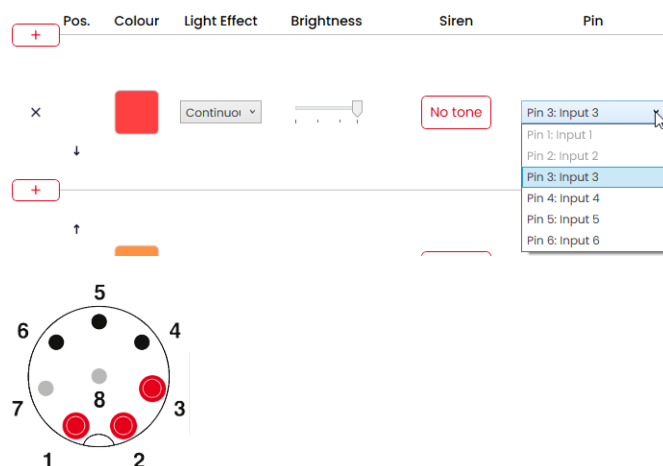
4.1.8 Selecting a pin



The fields are pre-configured with a standard configuration, starting from the bottom tier of the tower with pin 1.

Pins that are already in use are shown in grey. The configuration can be changed as required.

1. In the **Pin** column select the pin of the 8-pin connector on which the signal to trigger the tier is sent.



Modifying the pin configuration

If necessary, the assignment of the wire colour to the pin can be changed and a description of the signal added.

1. Click on **PIN Configuration** under the pin overview.



→ The **PIN Configuration** window appears.

PIN Configuration

✕

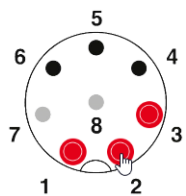
	Wire Colour	Description
Pin 1: Input 1	WH	
Pin 2: Input 2	BN	
Pin 3: Input 3	GN	
Pin 4: Input 4	YE	
Pin 5: Input 5	GY	
Pin 6: Input 6	PK	
Pin 7: COM	BU	
Pin 8: +24V	RD	

2. Enter the desired wire colour in the **Wire Colour** column.
3. Enter the description of the signal in the **Description** column.
4. Click on **Save**.

4.1.9 Simulating signal inputs

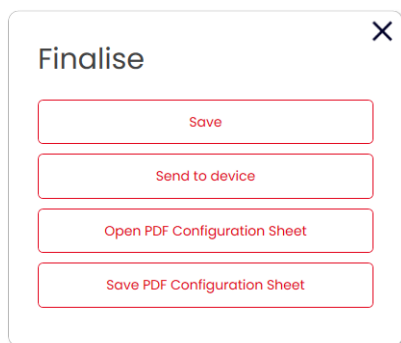
Once all settings have been made, the signal inputs can be simulated.

1. Click on the pin that activates the desired tier in the pin overview.



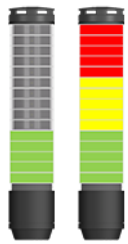
4.1.10 Finalising the configuration

1. Make additional changes to the configuration as required.
2. Once all tiers are configured as desired, click on **Finalise**.
→ The **Finalise** window appears.



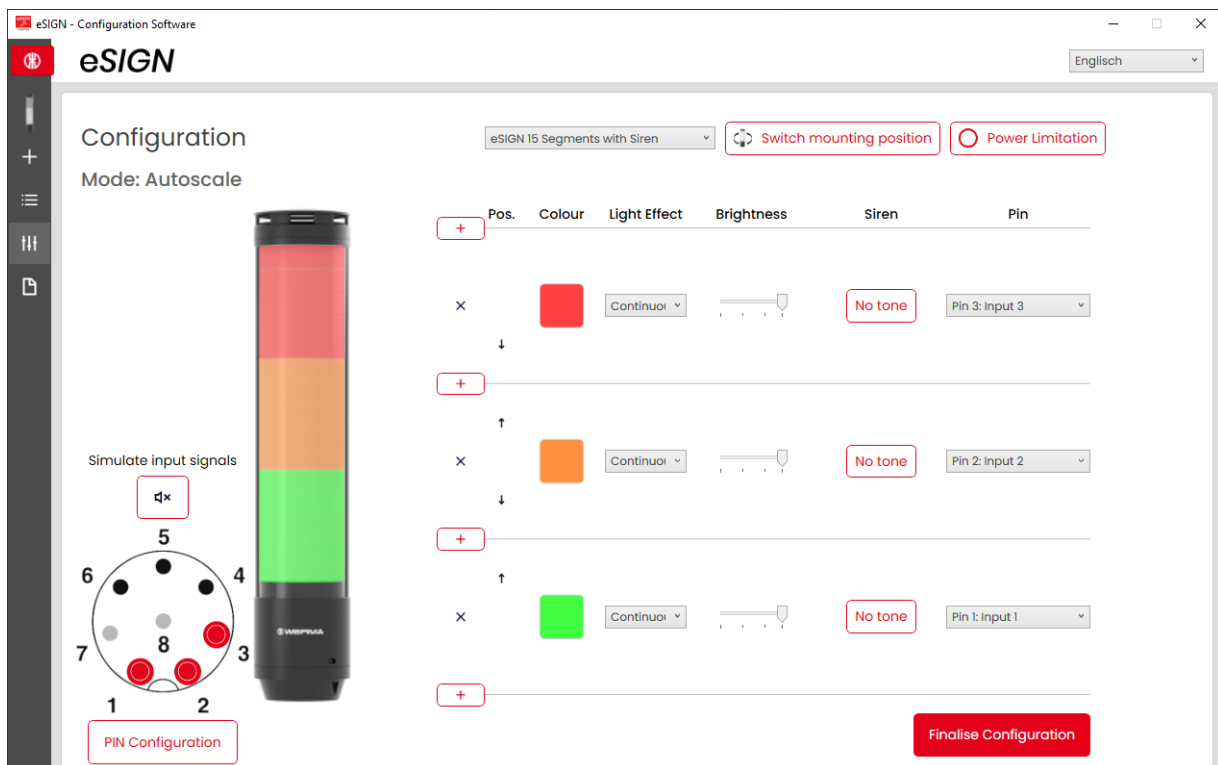
3. Click on **Save** to save the configuration in a configuration file.
4. Click on **Send to device** to transfer the configuration to the connected eSIGN.
5. Click on **Open PDF Configuration Sheet** to display an overview of the current configuration.
6. Click on **Save PDF Configuration Sheet** to save the overview of the current configuration as a PDF file.

4.2 Signal tower mode



Individual eSIGN segments can be combined to create a signal tower tier. This enables a classic signal tower to be created 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 tower to a certain area.



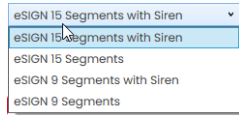
i If necessary, the orientation of the displayed signal tower can be rotated by 180° with the **Switch mounting position** button.

i If necessary (for example, to take into account the power limits of control outputs), the power consumption of the eSIGN can be reduced with the **Power Limitation** button. In this case, the current power requirement of the tower is reduced to less than 500 mA. As a result, the optical signals' brightness or the audible signals' volume is reduced.

4.2.1 Selecting the eSIGN variant

The variant is pre-selected accordingly if eSIGN has been connected. If no eSIGN has been connected, the variant of the eSIGN to be configured can be selected.

1. If necessary, select the variant of the eSIGN to be configured.



4.2.2 Adding or removing a tier

As soon as a tier is added or removed in **Signal Tower** mode, the individual eSIGN segments are automatically re-divided and evenly distributed across all tiers.

Adding a tier

1. Click on **Add**.



×

→ A tier has been added.

Removing a tier

1. Click on **Remove**.

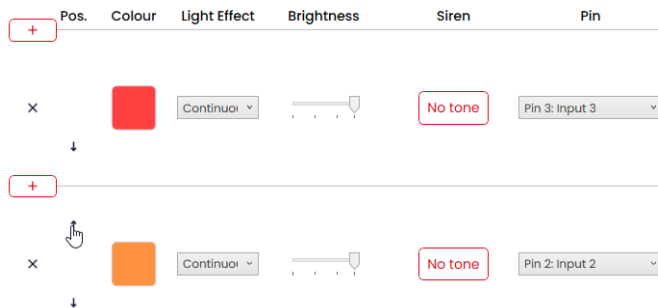


→ A tier has been removed.

4.2.3 Moving a tier

The individual tiers can be moved up or down as required.

1. In the **Pos.** column, click on the Move up or Move down arrow to move the tier up or down.



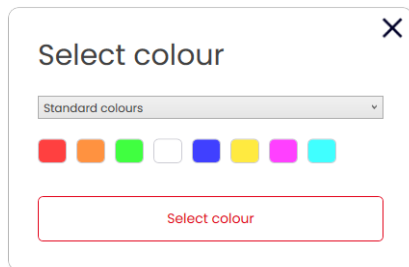
4.2.4 Selecting a colour

A standard colour or individual colour can be assigned to every tier.

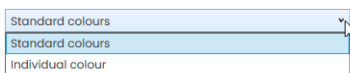
1. Click on the colour field in the **Colour** column.



→ The **Select colour** window appears.



2. Select whether to use a standard colour or an individual colour.



Standard colour

3. Click on the desired colour field.

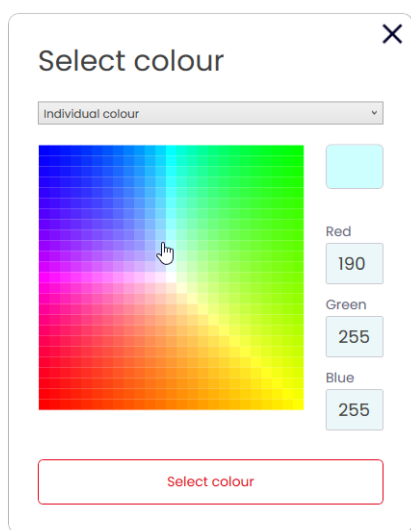


The following 8 standard colours are available for selection:

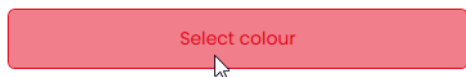
- red
- yellow
- green
- white
- blue
- light yellow
- violet
- turquoise

Individual colour

4. Select the desired colour in the colour field or enter the appropriate RGB value in the **Red**, **Green** and **Blue** fields.

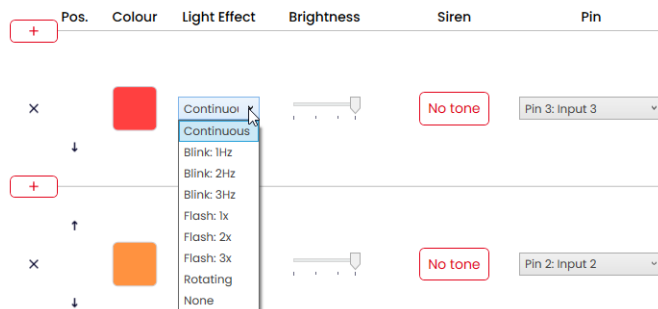


5. Click on **Select colour**.



4.2.5 Selecting a light effect

1. Select the desired light effect in the **Light Effect** column.



The following 8 light effects are available for selection:

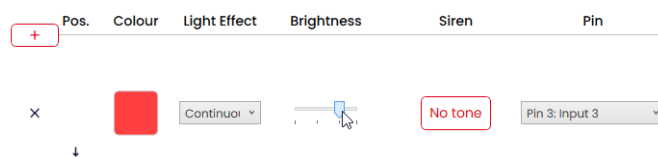
- Continuous light
- Blinking 1 Hz
- Blinking 2 Hz
- Blinking 3 Hz
- Flashing 1x
- Flashing 2x
- Flashing 3x
- Rotating
- None



The **None** setting can be selected if the tier is only to be configured with a siren.

4.2.6 Setting the brightness

1. Set the desired brightness of the tier from the four options in the **Brightness** column.



4.2.7 Selecting the siren

If the connected or selected eSIGN has a siren, you can select a signal tone which will sound when the tier is activated.

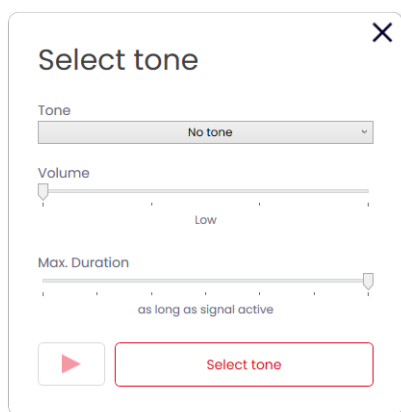


If several tiers are set, and the tiers are activated at the same time, the siren will sound for the colour with the highest priority (highest position within the tower).

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

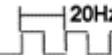
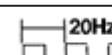
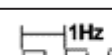


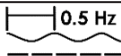
→ The **Select tone** window appears.



2. Select the desired **Tone**, the desired **Volume** and **Max. Duration**.

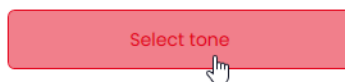
The following 10 tones are available for selection:

Sound	Frequency	Description	Max. dB (A)
1	———— 2.7 kHz	Continuous tone	104
2	———— 0.9 kHz	Continuous tone	96
3	 420Hz 2.8 kHz	Pulse tone	97
4	 20Hz 0.9 kHz	Pulse tone	93
5	 20Hz 2.8 kHz	Pulse tone	103
6	 1Hz 0.9 kHz	Pulse tone	96

Sound	Frequency	Description	Max. dB (A)
7	 2.8 kHz	Pulse tone	104
8	 2.3 kHz- 3.6 kHz	Sweep tone	104
9	— 2.6 kHz	Continuous tone	105
10	 — 1200 Hz — 800 Hz	Alternating tone	92

 The selected settings can be tested using the **Play** button (▶). The sound file is then played by the computer.

3. Click on Select tone.



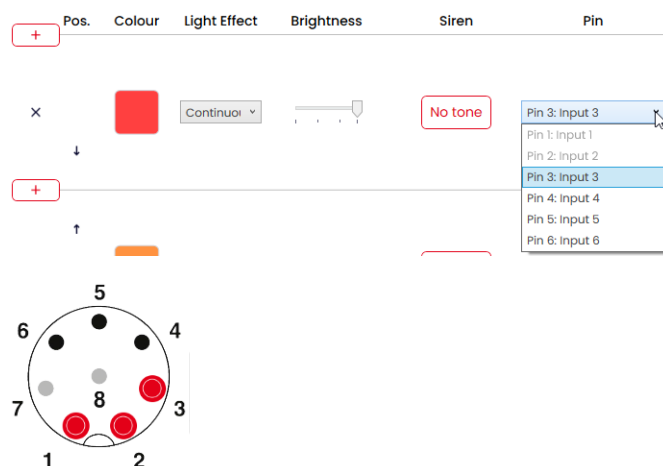
4.2.8 Selecting a pin



The fields are pre-configured with a standard configuration, starting from the bottom tier of the tower with pin 1.

Pins that are already in use are shown in grey. The configuration can be changed as required.

1. In the **Pin** column select the pin of the 8-pin connector on which the signal to trigger the tier is sent.



Modifying the pin configuration

If necessary, the assignment of the wire colour to the pin can be changed and a description of the signal added.

1. Click on **PIN Configuration** under the pin overview.



→ The **PIN Configuration** window appears.

PIN Configuration

✕

	Wire Colour	Description
Pin 1: Input 1	WH	
Pin 2: Input 2	BN	
Pin 3: Input 3	GN	
Pin 4: Input 4	YE	
Pin 5: Input 5	GY	
Pin 6: Input 6	PK	
Pin 7: COM	BU	
Pin 8: +24V	RD	

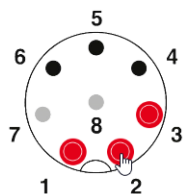
Save

2. Enter the desired wire colour in the **Wire Colour** column.
3. Enter the description of the signal in the **Description** column.
4. Click on **Save**.

4.2.9 Simulating signal inputs

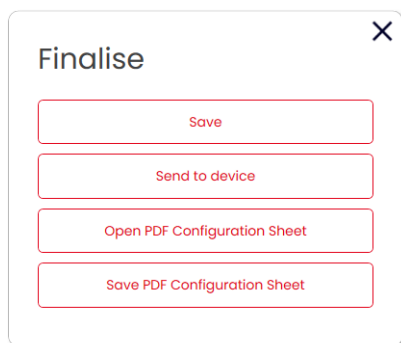
Once all settings have been made, the signal inputs can be simulated.

1. Click on the pin that activates the desired tier in the pin overview.



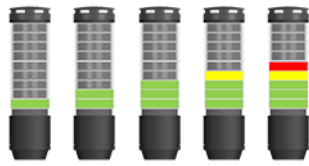
4.2.10 Finalising the configuration

1. Make additional changes to the configuration as required.
2. Once all tiers are configured as desired, click on **Finalise**.
→ The **Finalise** window 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 eSIGN.
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.

4.3 Filling Level mode



In this operating mode eSIGN segments are used as a filling level indicator. This enables precise signalisation of job progress or material availability in machine processes by slowly illuminating the signal tower from bottom to top or top to bottom.

Mode: Filling Level

Device

eSIGN 15 Segments with Siren

Colours

Single Colour

Number of signal combinations: 15

= Number of assigned segments: 15

= Number of unassigned segments: 0

Allocation of unassigned segments

Top (filled)

Generate Configuration

4.3.1 Selecting the eSIGN variant

The variant is pre-selected accordingly if eSIGN has been connected. If no eSIGN has been connected, the variant of the eSIGN to be configured can be selected.

1. If necessary, select the variant of the eSIGN in **Device** field.

Device

eSIGN 15 Segments with Siren

eSIGN 15 Segments with Siren

eSIGN 15 Segments

eSIGN 9 Segments with Siren

eSIGN 9 Segments

4.3.2 Selecting the number of signal combinations

1. Select in the **Number of signal combinations** area how many eSIGN segments are to be used for the filling level indicator.

If not all eSIGN segments are used for the filling level indicator:

2. Select in the **Allocation of unassigned segments** field how to display the eSIGN segments that are not to be used for the filling level indicator.

Setting	Description
Top (filled)	Unassigned eSIGN segments are assigned to the top and triggered with the top tier.
Bottom (filled)	Unassigned eSIGN segments are assigned to the bottom and triggered with the bottom tier.
Top (not active)	Unassigned eSIGN segments are assigned to the top and are always off.
Bottom (not active)	Unassigned eSIGN segments are assigned to the bottom and are always off.

4.3.3 Selecting a colour

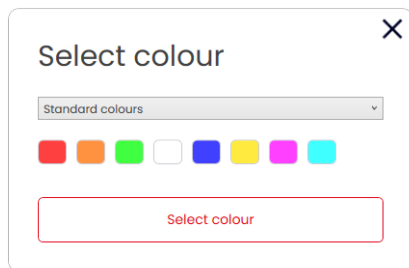
A uniform colour or colour gradient can be selected for the filling level indicator. The colour gradient option means that the gradual transformation between the two colours is automatically calculated.

If necessary, the colour of each segment of the filling level indicator can be adjusted later.

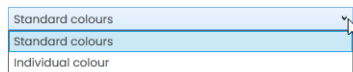
1. In the **Colours** field, select whether the fill level should be displayed in a uniform colour or as a colour gradient.

Single colour

2. Click on the colour field to select the desired colour.
→ The **Select colour** window appears.



3. Select whether to use a standard colour or an individual colour.



Standard colour

4. Click on the desired colour field.

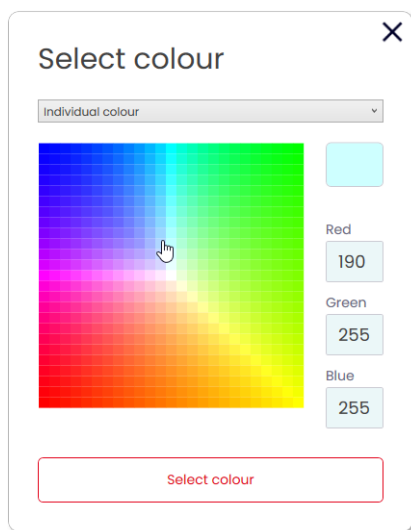


The following 8 standard colours are available for selection:

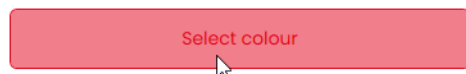
- red
- yellow
- green
- white
- blue
- light yellow
- violet
- turquoise

Individual colour

5. Select the desired colour in the colour field or enter the appropriate RGB value in the **Red**, **Green** and **Blue** fields.



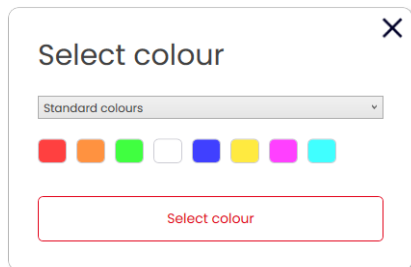
6. Click on **Select colour**.



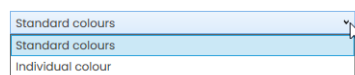
7. Click on **Generate configuration**.
→ The **Configuration** screen appears.

Colour gradient

8. Click on the colour fields for the start and end colour of the colour gradient.
→ The **Select colour** window appears.



9. Select whether to use a standard colour or an individual colour.



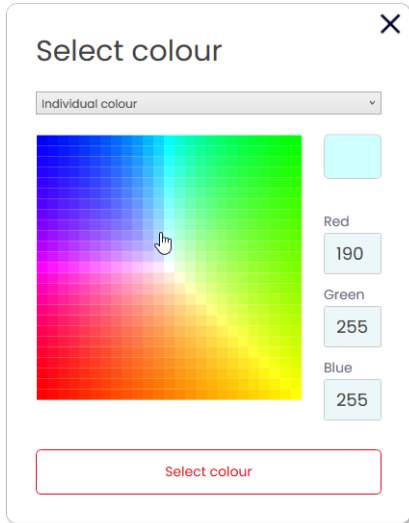
Standard colour

10. Click on the desired colour field.



Individual colour

11. Select the desired colour in the colour field or enter the appropriate RGB value in the **Red**, **Green** and **Blue** fields.



Select colour

Individual colour

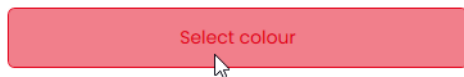
Red
190

Green
255

Blue
255

Select colour

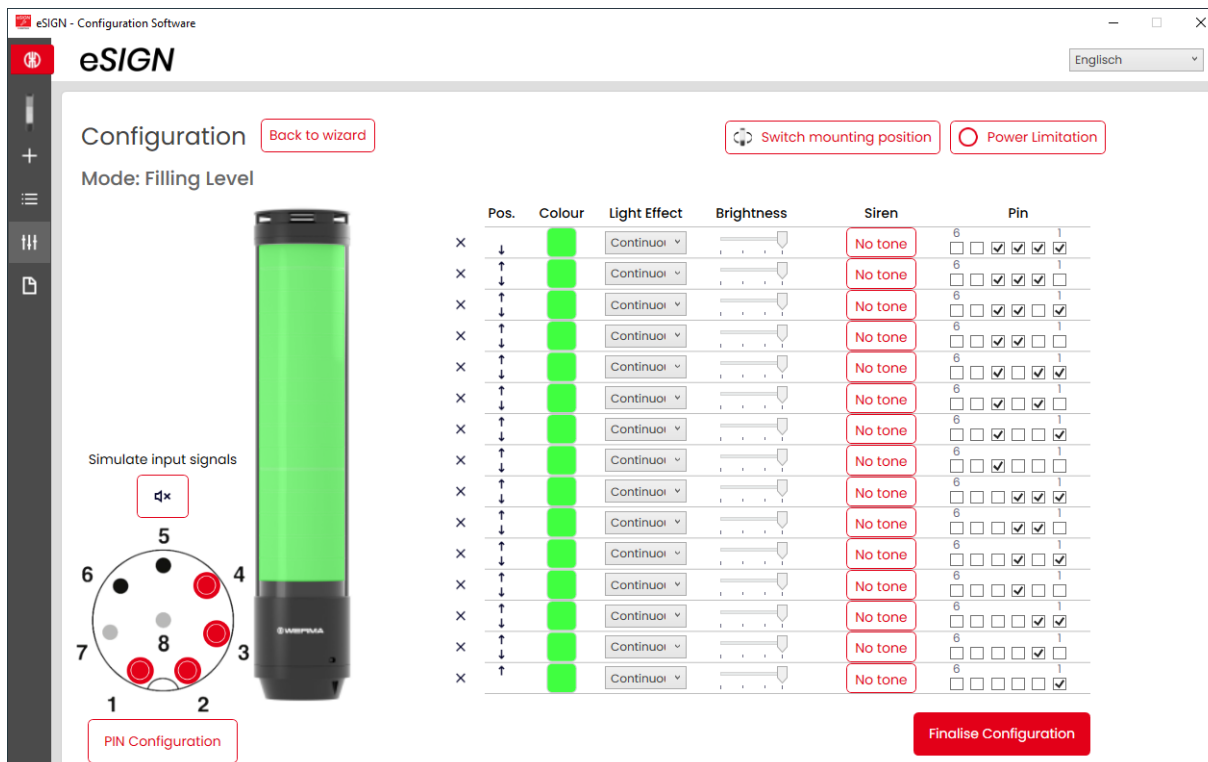
12. Click on **Select colour**.



Select colour

13. Click on **Generate configuration**.
→ The **Configuration** screen appears.

4.3.4 Configuring the filling level indicator



i If necessary, the orientation of the displayed signal tower can be rotated by 180° with the **Switch mounting position** button.

i If necessary (for example, to take into account the power limits of control outputs), the power consumption of the eSIGN can be reduced with the **Power Limitation** button. In this case, the current power requirement of the tower is reduced to less than 500 mA. As a result, the optical signals' brightness or the audible signals' volume is reduced.

i If necessary, the configuration of the colour and segment can be opened and adjusted via the **Back to wizard** link.

Removing or adding segments

Removing a segment

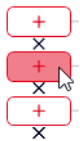
1. Click on **Remove**.



→ The segment has been removed.

Adding a segment

1. Click on **Add**.



→ The segment has been added.

Moving a segment

The individual segments can be moved up or down as required.

1. In the **Pos.** column, click on the Move up or Move down arrow to move the segment up or down.

	Pos.	Colour	Light Effect	Brightness	Siren	Pin				
x	↓		Continui ▼		No tone	6	☐	☒	☒	☒
x	↑		Continui ▼		No tone	6	☐	☒	☒	☒

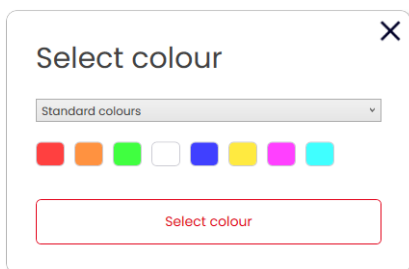
Selecting a colour

A standard colour can be selected for each segment or an individual colour assigned as required.

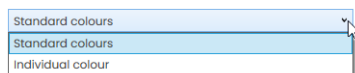
1. Click on the colour field in the **Colour** column.

	Pos.	Colour	Light Effect	Brightness	Siren	Pin
x	↓		Continual		No tone	6 ☐ ☐ ☒ ☒ ☒
x	↑		Continual		No tone	6 ☐ ☒ ☒ ☒ ☐

→ The **Select colour** window appears.



2. Select whether to use a standard colour or an individual colour.



Standard colour

3. Click on the desired colour field.

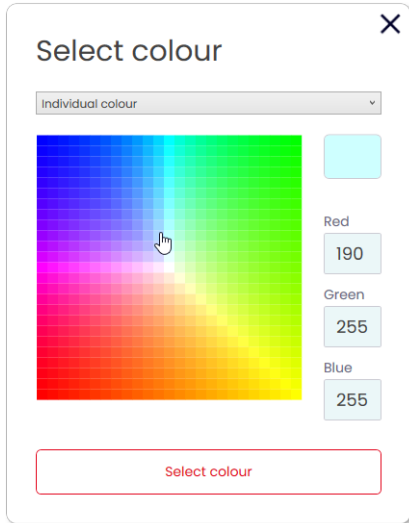


The following 8 standard colours are available for selection:

- red
- yellow
- green
- white
- blue
- light yellow
- violet
- turquoise

Individual colour

4. Select the desired colour in the colour field or enter the appropriate RGB value in the **Red**, **Green** and **Blue** fields.



The dialog box titled "Select colour" features a color selection tool. At the top, there is a dropdown menu labeled "Individual colour". Below it is a large color wheel with a grid overlay. A mouse cursor is shown clicking on a point in the color wheel. To the right of the color wheel are three input fields for RGB values: "Red" (190), "Green" (255), and "Blue" (255). At the bottom of the dialog is a red button labeled "Select colour".

5. Click on **Select colour**.



A red rectangular button with the text "Select colour" in white. A mouse cursor is shown clicking on the button.

Selecting a light effect

1. Select the desired light effect in the **Light Effect** column.

Pos.	Colour	Light Effect	Brightness	Siren	Pin
×	↓	Continuous		No tone	6 ☐ ☐ ☒ ☒ ☒ 1
×	↑	Continuous		No tone	6 ☐ ☐ ☒ ☒ ☒ 1
×	↑	Blink: 1Hz		No tone	6 ☐ ☐ ☒ ☒ ☒ 1
×	↑	Blink: 2Hz		No tone	6 ☐ ☐ ☒ ☒ ☒ 1
×	↑	Blink: 3Hz		No tone	6 ☐ ☐ ☒ ☒ ☒ 1
×	↑	Flash: 1x		No tone	6 ☐ ☐ ☒ ☒ ☒ 1
×	↑	Flash: 2x		No tone	6 ☐ ☐ ☒ ☒ ☒ 1
×	↑	Flash: 3x		No tone	6 ☐ ☐ ☒ ☒ ☒ 1
×	↑	Rotating		No tone	6 ☐ ☐ ☒ ☒ ☒ 1
×	↑	None		No tone	6 ☐ ☐ ☒ ☒ ☒ 1

The following 8 light effects are available for selection:

- Continuous light
- Blinking 1 Hz
- Blinking 2 Hz
- Blinking 3 Hz
- Flashing 1x
- Flashing 2x
- Flashing 3x
- Rotating
- None



The **None** setting can be selected if the tier is only to be configured with a siren.

Setting the brightness

1. Set the desired brightness of the tier from the four options in the **Brightness** column.

Pos.	Colour	Light Effect	Brightness	Siren	Pin
x	↓	Continuoi		No tone	6 1
x	↑	Continuoi		No tone	6 1

Selecting the siren

If the connected or selected eSIGN has a siren, you can select a signal tone which will sound when the segment is activated.



If several tiers are set, and the tiers are activated at the same time, the siren will sound for the colour with the highest priority (highest position within the tower).

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

Pos.	Colour	Light Effect	Brightness	Siren	Pin
x	↓	Continuoi		No tone	6 1
x	↑	Continuoi		No tone	6 1

→ The **Select tone** window appears.

×

Select tone

Tone

No tone

Volume

Low

Max. Duration

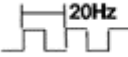
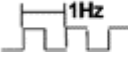
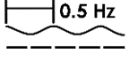
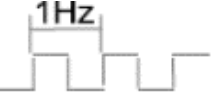
as long as signal active

Select tone

2. Select the desired **Tone**, the desired **Volume** and **Max. Duration**.

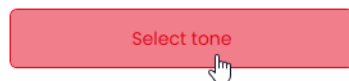
The following 10 tones are available for selection:

Sound	Frequency	Description	Max. dB (A)
1	2.7 kHz	Continuous tone	104
2	0.9 kHz	Continuous tone	96
3	420Hz 2.8 kHz	Pulse tone	97
4	20Hz 0.9 kHz	Pulse tone	93

Sound	Frequency	Description	Max. dB (A)
5	 2.8 kHz	Pulse tone	103
6	 0.9 kHz	Pulse tone	96
7	 2.8 kHz	Pulse tone	104
8	 2.3 kHz- 3.6 kHz	Sweep tone	104
9	 2.6 kHz	Continuous tone	105
10	 1200 Hz 800 Hz	Alternating tone	92

 The selected settings can be tested using the **Play** button (▶). The sound file is then played by the computer.

3. Click on **Select tone**.



Selecting a pin



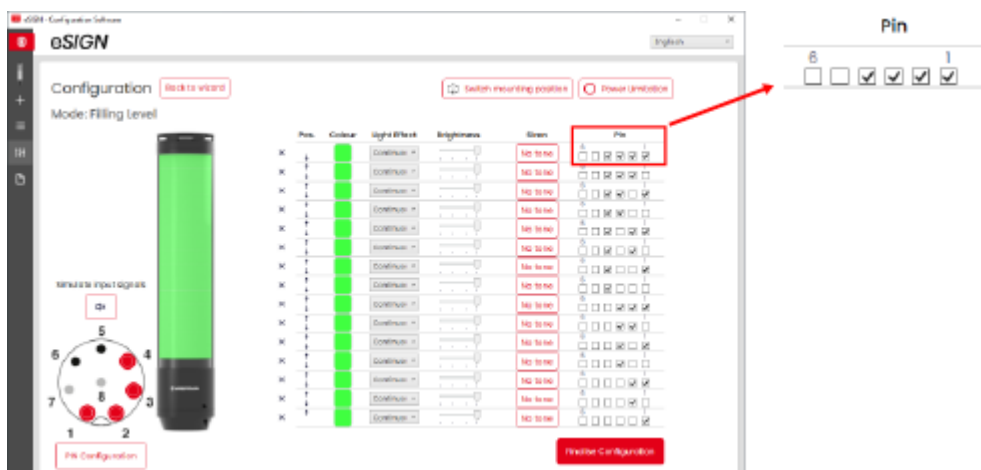
The fields are pre-configured with a standard configuration, starting from the bottom tier of the tower with pin 1.

Pins that are already in use are shown in grey. The configuration can be changed as required.

The filling level indicator is triggered via bit coding. The checkboxes in the **Pin** column correspond to the 6 pins or signal inputs. Selecting one or more checkboxes indicates that these pins or signal inputs must be triggered to activate the corresponding setting.

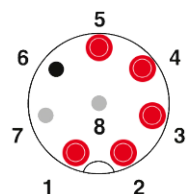
Example:

For the complete tower to be displayed in green, pins 1-4 must be triggered.



1. In the **Pin** column select the pins of the 8-pin connector on which the signal to trigger the tier is sent.

Pos.	Colour	Light Effect	Brightness	Siren	Pin
X	↓	Continuai		No tone	6
X	↑	Continuai		No tone	6



Modifying the pin configuration

If necessary, the assignment of the wire colour to the pin can be changed and a description of the signal added.

1. Click on **PIN Configuration** under the pin overview.



→ The **PIN Configuration** window appears.

PIN Configuration

✕

	Wire Colour	Description
Pin 1: Input 1	WH	
Pin 2: Input 2	BN	
Pin 3: Input 3	GN	
Pin 4: Input 4	YE	
Pin 5: Input 5	GY	
Pin 6: Input 6	PK	
Pin 7: COM	BU	
Pin 8: +24V	RD	

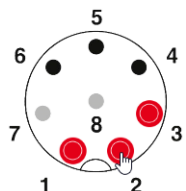
Save

2. Enter the desired wire colour in the **Colour** column.
3. Enter the description of the signal in the **Description** column.
4. Click on **Save**.

4.3.5 Simulating signal inputs

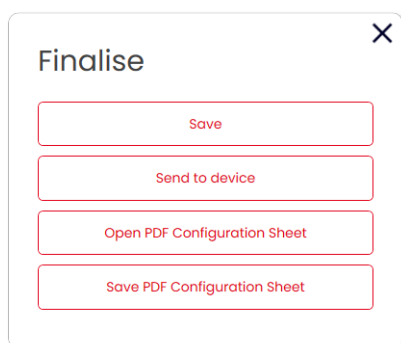
Once all settings have been made, the signal inputs can be simulated.

1. Click on the pin that activates the desired tier in the pin overview.



4.3.6 Finalising the configuration

1. Make additional changes to the configuration as required.
2. Once all tiers are configured as desired, click on **Finalise**.
→ The **Finalise** window appears.

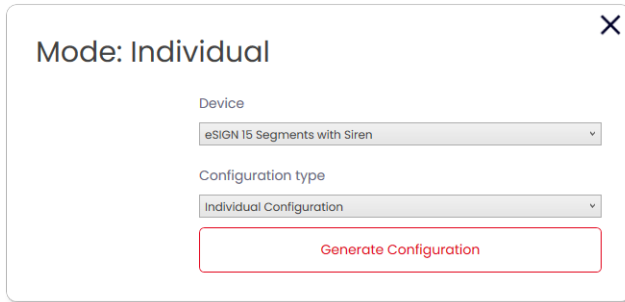


3. Click on **Save** to save the configuration in a configuration file.
4. Click on **Send to device** to transfer the configuration to the connected eSIGN.
5. Click on **Open PDF Configuration Sheet** to display an overview of the current configuration.
6. Click on **Save PDF Configuration Sheet** to save the overview of the current configuration as a PDF file.

4.4 Individual mode



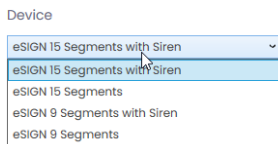
In this operating mode a free combination of individual segment settings is mapped to a certain switching signal. Every eSIGN segment can be individually set and triggered as a complete signal effect in the form of the entire signal tower to enable a maximum of customised signalling options.



4.4.1 Selecting the eSIGN variant

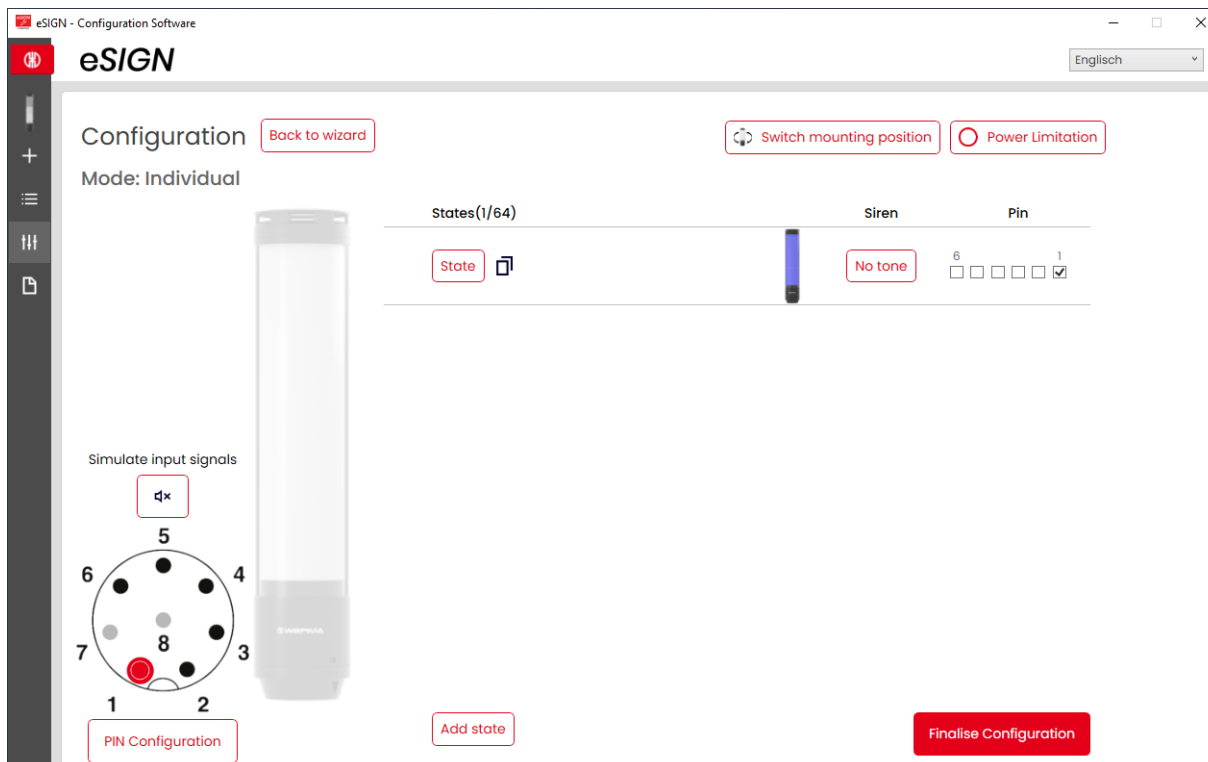
The variant is pre-selected accordingly if eSIGN has been connected. If no eSIGN has been connected, the variant of the eSIGN to be configured can be selected.

1. If necessary, select the variant of the eSIGN in the **Device** field.



2. Click on **Generate configuration**.
→ The **Configuration** screen appears.

4.4.2 Configuring signal effects



- i** If necessary, the orientation of the displayed signal tower can be rotated by 180° with the **Switch mounting position** button.
- i** If necessary (for example, to take into account the power limits of control outputs), the power consumption of the eSIGN can be reduced with the **Power Limitation** button. In this case, the current power requirement of the tower is reduced to less than 500 mA. As a result, the optical signals' brightness or the audible signals' volume is reduced.
- i** The configuration of the eSIGN variant can be opened and adjusted again via the **Back to wizard** link as required.

Modifying the signal effect



Up to 64 signal effects can be configured and transferred to an eSIGN.

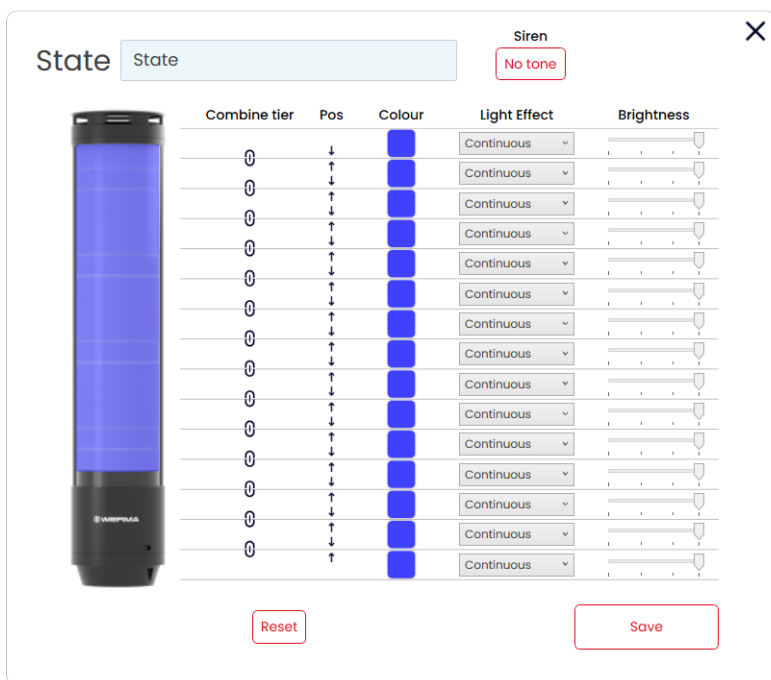
A signal effect consists of the individual optical settings of each segment and, if relevant, a signal tone.

1. Click on **State**.

States(1/64)



→ The **State** window appears.



The screenshot shows the 'State' configuration window. At the top, there is a 'State' label and a 'Siren' dropdown menu set to 'No tone'. Below this is a table with columns: 'Combine tier', 'Pos', 'Colour', 'Light Effect', and 'Brightness'. The table contains 16 rows, each representing a segment of the signal effect. The 'Colour' column shows blue color swatches, and the 'Light Effect' column shows 'Continuous' dropdown menus. The 'Brightness' column shows sliders. To the left of the table is a vertical bar representing the signal effect, currently showing blue. At the bottom of the window are 'Reset' and 'Save' buttons.



If necessary, the current signal effect can be reset to the default settings via the **Reset** button.

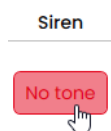
Naming the signal effect

1. Enter a description for the current signal effect in the **State** field.

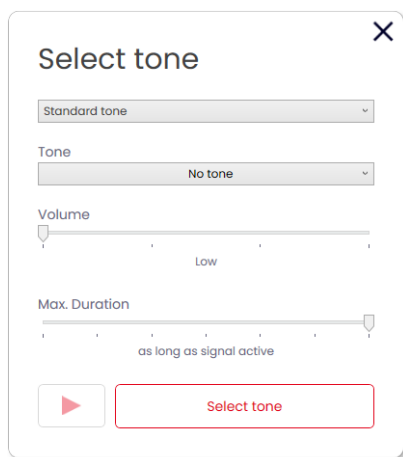
Selecting the siren

If the connected or selected eSIGN has a siren, you can select a signal tone which will sound when the signal effect is activated.

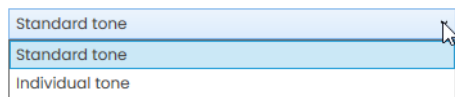
1. Click on **No tone** in the **Siren** field.



→ The **Select tone** window appears.



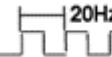
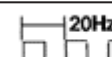
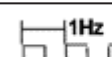
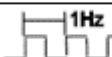
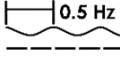
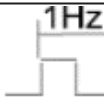
2. Select whether to use a standard tone or an individual tone.



Standard tone

3. Select the desired **Tone**, the desired **Volume** and **Max. Duration**.

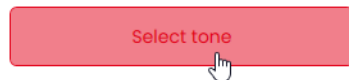
The following 10 tones are available for selection:

Sound	Frequency	Description	Max. dB (A)
1	———— 2.7 kHz	Continuous tone	104
2	———— 0.9 kHz	Continuous tone	96
3	 2.8 kHz	Pulse tone	97
4	 0.9 kHz	Pulse tone	93
5	 2.8 kHz	Pulse tone	103
6	 0.9 kHz	Pulse tone	96
7	 2.8 kHz	Pulse tone	104
8	 2.3 kHz- 3.6 kHz	Sweep tone	104
9	———— 2.6 kHz	Continuous tone	105
10	 — 1200 Hz — 800 Hz	Alternating tone	92



The selected settings can be tested using the **Play** button (▶). The sound file is then played by the computer.

4. Click on **Select tone**.



Individual tone

Individual tone

Graphical Parameter Description

Volume

Low

Tone type

Permanent

Frequency 1 (Hz)

1000

Hold time Frequency 2 (ms)

0

Repeat count

0

Pause after repeat (ms)

0

Pause between cycles (ms)

0

Select tone

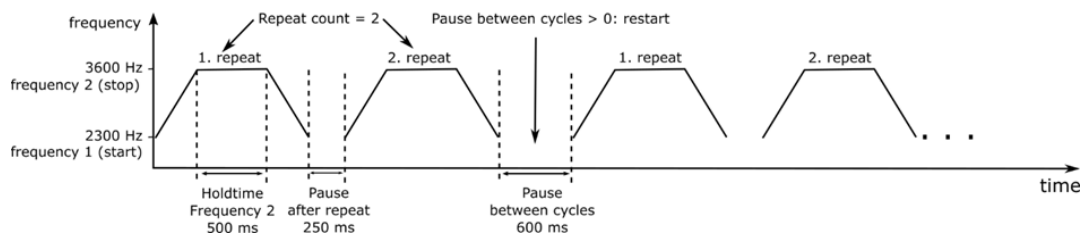
1. Make the settings as desired.



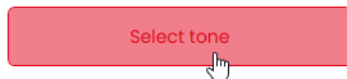
The **Individual tone** option allows a customer-specific tone to be generated from different parameters.

Further information on the individual settings can be accessed via the **Graphical Parameter Description** button and by clicking on ?.

The following screen can be accessed via the **Graphical Parameter Description** button to indicate the effect of the individual settings:



2. Click on **Select tone**.

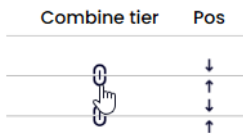


Connecting or separating segments

If required, multiple segments can be connected to form a tier and then separated again.

Connecting segments

1. In the **Combine tier** column, click on the **Combine tier** symbol.



Separating segments

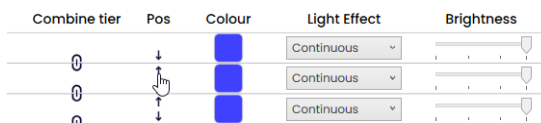
1. In the **Combine tier** column, click on the **Seperate tier** symbol.



Moving tiers

The individual tiers can be moved up or down as required.

1. In the **Pos.** column, click on the Move up or Move down arrow to move the tier up or down.



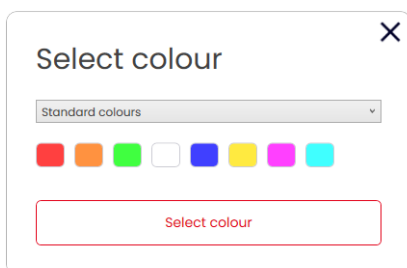
Selecting a colour

A standard colour can be selected for each segment or an individual colour assigned as required.

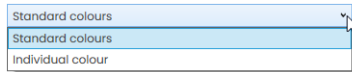
1. Click on the colour field in the **Colour** column.



→ The **Select colour** window appears.



2. Select whether to use a standard colour or an individual colour.



Standard colour

3. Click on the desired colour field.

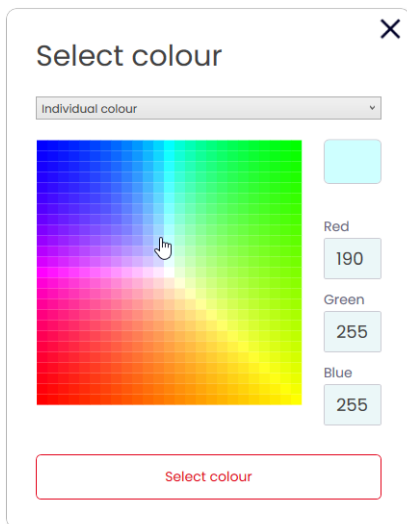


The following 8 standard colours are available for selection:

- red
- yellow
- green
- white
- blue
- light yellow
- violet
- turquoise

Individual colour

4. Select the desired colour in the colour field or enter the appropriate RGB value in the **Red**, **Green** and **Blue** fields.



5. Click on **Select colour**.



Selecting a light effect

1. Select the desired light effect in the **Light Effect** column.

Combine tier	Pos	Colour	Light Effect	Brightness
0	↓	■	Continuous	
0	↑	■	Continuous	
0	↓	■	Blink: 1Hz	
0	↑	■	Blink: 2Hz	
0	↓	■	Blink: 3Hz	
0	↑	■	Flash: 1x	
0	↓	■	Flash: 2x	
0	↑	■	Flash: 3x	
0	↓	■	Rotating	
0	↑	■	None	
0	↓	■	Continuous	

The following 8 light effects are available for selection:

- Continuous light
- Blinking 1 Hz
- Blinking 2 Hz
- Blinking 3 Hz
- Flashing 1x
- Flashing 2x
- Flashing 3x
- Rotating
- None

Setting the brightness

1. Set the desired brightness of the tier from the four options in the **Brightness** column.

Combine tier	Pos	Colour	Light Effect	Brightness
0	↓	■	Continuous	
0	↑	■	Continuous	

As soon as all settings have been made:

2. Click on **Save**.



4.4.3 Selecting a pin

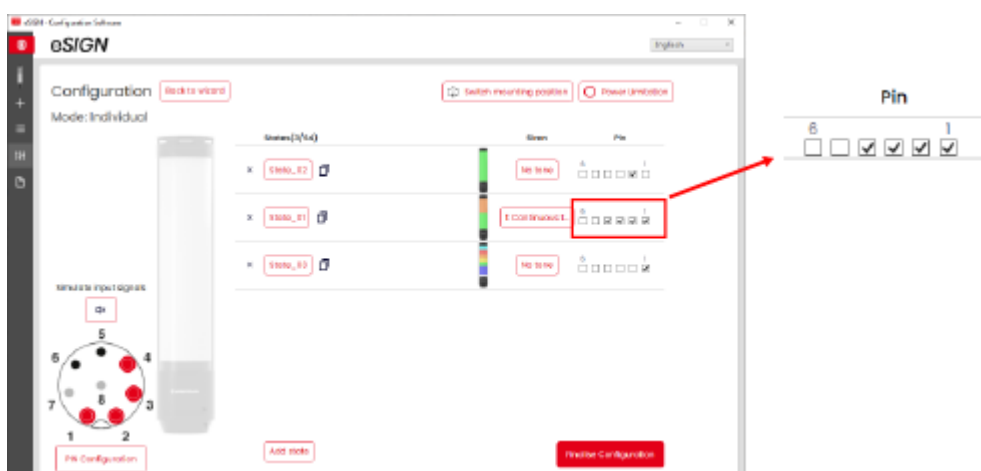


The fields are pre-configured with a standard configuration.
The configuration can be changed as required.

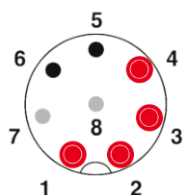
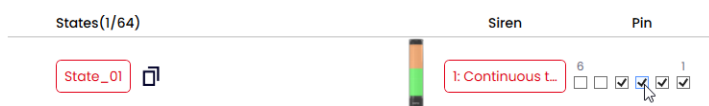
The individual signal effects are triggered via bit coding. The checkboxes in the **Pin** column correspond to the 6 pins or signal inputs. Selecting one or more checkboxes indicates that these pins or signal inputs must be triggered to activate the corresponding signal effect.

Example:

Pins 1-4 must be triggered to activate the **State_01** signal effect.



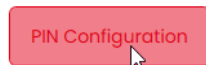
1. In the **Pin** column, select the pins of the 8-pin connector on which the signal to trigger the signal effect is sent.



Modifying the pin configuration

If necessary, the assignment of the wire colour to the pin can be changed and a description of the signal added.

1. Click on **PIN Configuration** under the pin overview.



→ The **PIN Configuration** window appears.

✕

PIN Configuration

	Wire Colour	Description
Pin 1: Input 1	WH	
Pin 2: Input 2	BN	
Pin 3: Input 3	GN	
Pin 4: Input 4	YE	
Pin 5: Input 5	GY	
Pin 6: Input 6	PK	
Pin 7: COM	BU	
Pin 8: +24V	RD	

Save

2. Enter the desired wire colour in the **Wire Colour** column.
3. Enter the description of the signal in the **Description** column.
4. Click on **Save**.

4.4.4 Duplicating the signal effect



Up to 64 signal effects can be configured and transferred to an eSIGN.

A signal effect consists of the individual optical settings of each segment and, if relevant, a signal tone.

1. Click on **Duplicate** in the line of the desired signal effect.



2. Configure the signal effect as described.

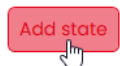
4.4.5 Adding a signal effect



Up to 64 signal effects can be configured and transferred to an eSIGN.

A signal effect consists of the individual optical settings of each segment and, if relevant, a signal tone.

1. Click on **Add state**.



2. Configure the signal effect as described.

4.4.6 Deleting a signal effect

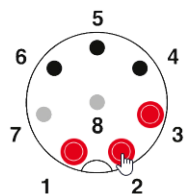
1. Click on **Remove** in the line of the desired signal effect.



4.4.7 Simulating signal inputs

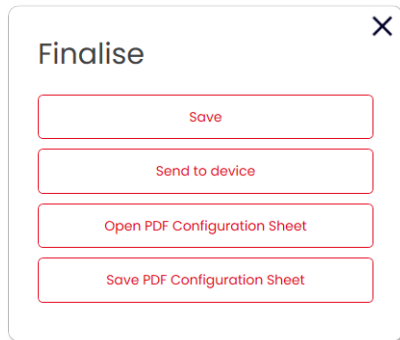
Once all settings have been made, the signal inputs can be simulated.

1. Click on the pin that activates the desired signal effect in the pin overview.



4.4.8 Finalising the configuration

1. Make additional changes to the configuration as required.
2. Once all signal effects are configured as desired, click on **Finalise**.
→ The **Finalise** window appears.

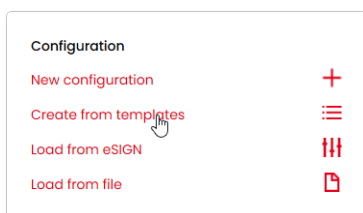


3. Click on **Save** to save the configuration in a configuration file.
4. Click on **Send to device** to transfer the configuration to the connected eSIGN.
5. Click on **Open PDF Configuration Sheet** to display an overview of the current configuration.
6. Click on **Save PDF Configuration Sheet** to save the overview of the current configuration as a PDF file.

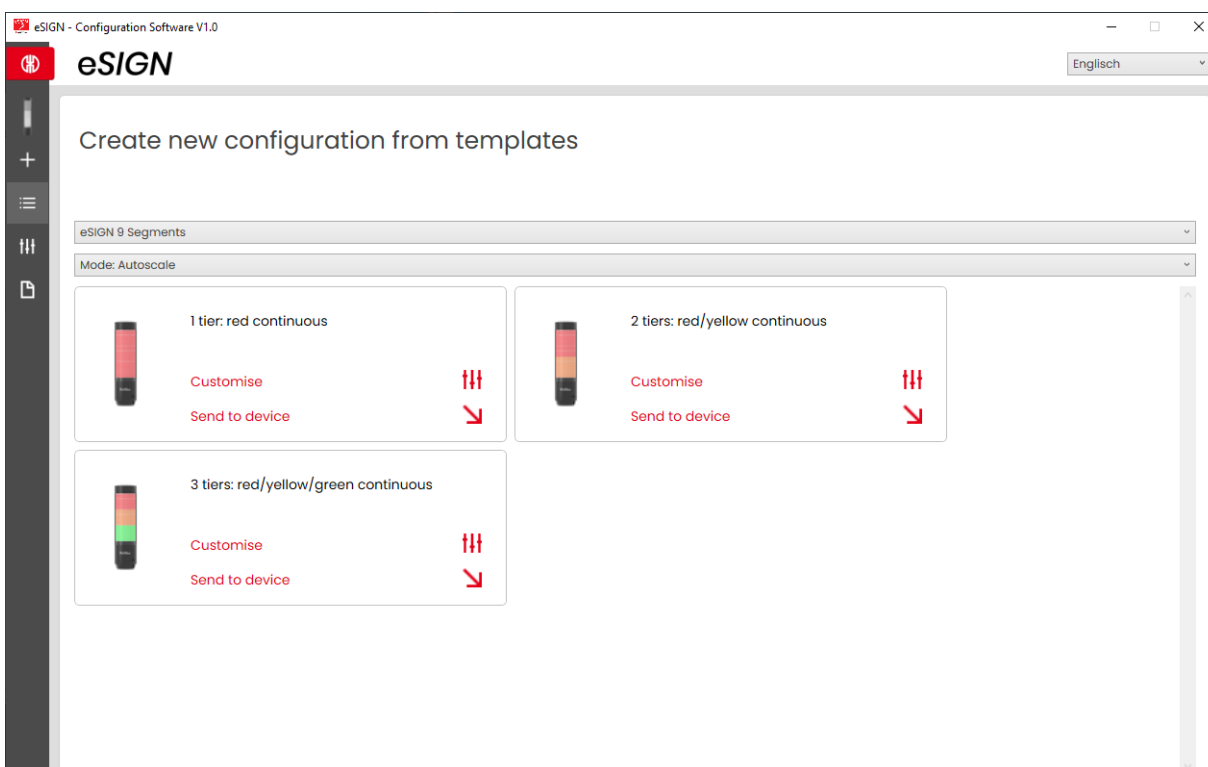
5 Creating a configuration from sample templates

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

1. Click on **Create from templates** in the **Configuration** area.



→ The **Create new configuration from templates** window appears.



2. Select the eSIGN variant.
3. Select the mode.
→ The available templates are displayed.
4. Click on **Customise** in the desired template to load and continue editing the template.
5. Click on **Send to device** to load the template and transfer it directly to the connected eSIGN.



For more information on the configuration, see "*Creating a new configuration*", p. 115.

6 Loading the configuration of the connected eSIGN

If an eSIGN is connected to the computer, the eSIGN configuration software offers the option of opening the current configuration (if available) for editing. If no eSIGN is connected, this menu item is faded out.

1. Click on **Load from eSIGN** in the **Configuration** area.



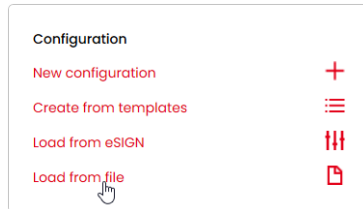
→ The **Configuration** window appears in the set mode and is already filled with the current configuration.



For more information on the configuration, see "Creating a new configuration", p. 115.

7 Opening the existing configuration

1. Click on **Load from file** in the **Configuration** area.



2. Select the desired configuration and click on **Open**.



Alternatively, the last used configurations can be displayed via the side menu (see "Overview", p. 113).

8 Updating eSIGN configuration software



The computer must be connected to the internet to perform a software update.

1. Click on **Check if new version available** in the This Software area.



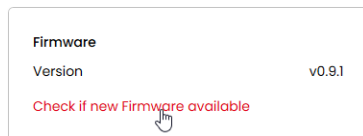
- The eSIGN configuration software checks for software updates.
- A corresponding message appears if an update is found.

9 Updating the firmware

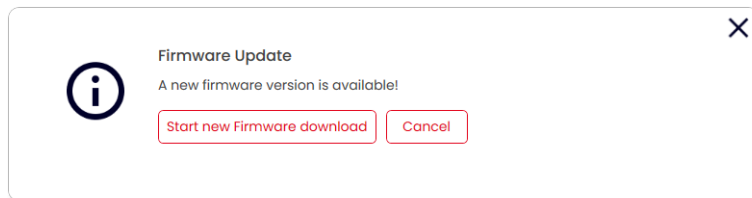


The computer must be connected to the internet and an eSIGN to perform a firmware update.

1. Click on **Check if new Firmware available** in the Firmware area.



- The eSIGN configuration software checks for firmware updates for the connected eSIGN.
- A corresponding message appears if an update is found.



2. Click on **Start new Firmware download**.
 - The new firmware is transferred to the connected eSIGN.

10 Support



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