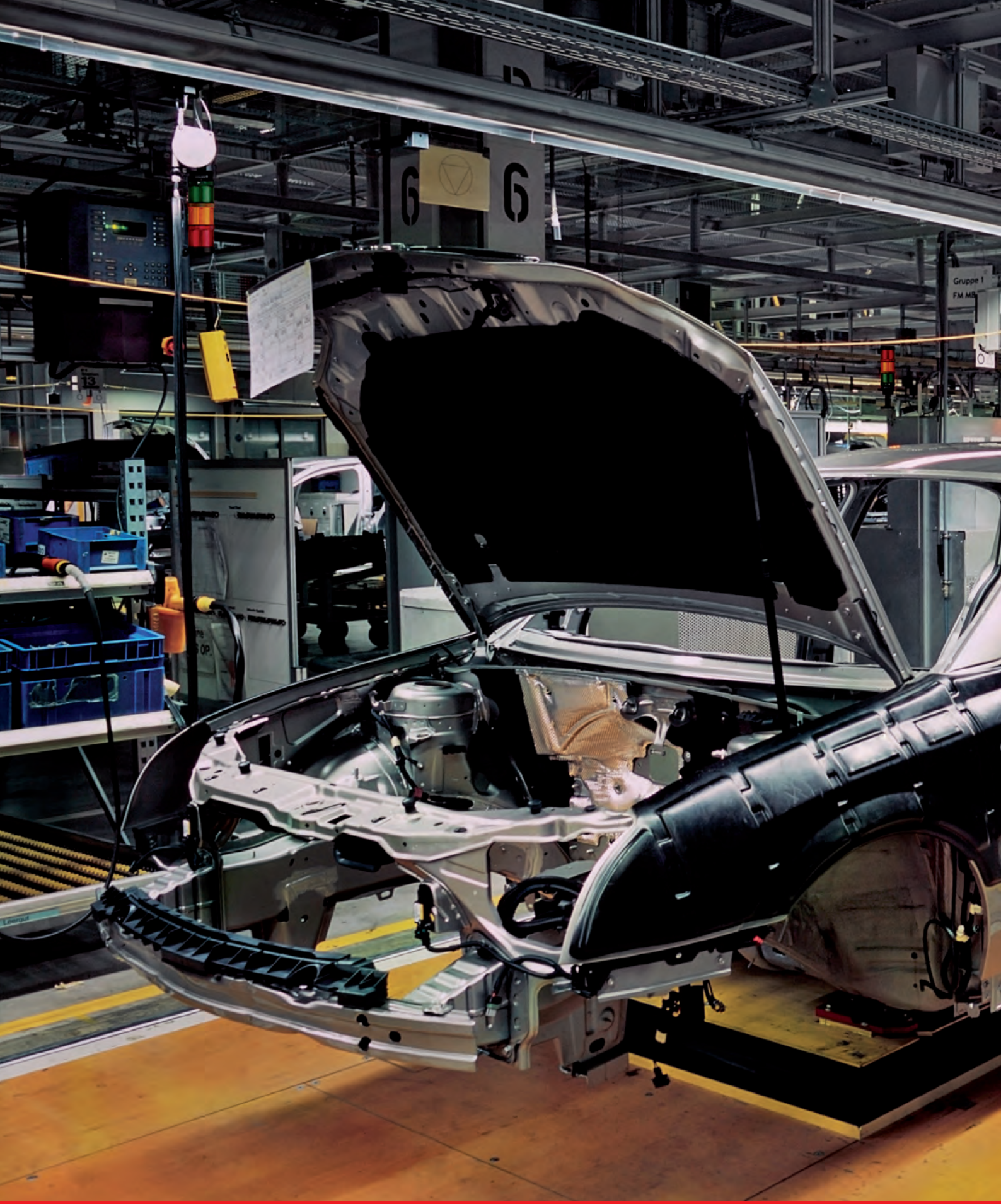




Intelligent signal devices for the automotive industry and automotive supply industry

Increase productivity with clever systems solutions





**EUROPE'S
LEADER IN
SIGNALLING**

INCREASE YOUR PRODUCTIVITY IMMEDIATELY

WERMA solutions allow you to monitor work processes, identify bottlenecks immediately and initiate speedy responses and durable counter-measures. Down-time becomes transparent enabling continuous improvement opportunities to be realised and improved process optimisation.

SIGNAL TOWERS - MODULAR

Professional signalling provides the application with greater safety and security and can help reduce response times considerably. Monitor the processes, make them reliable and keep them running - saving time and money. We call this intelligent signalling technology.



KombiSIGN 40 and 72

There is no need to compromise with KombiSIGN 72 and 40, because these products combine quick installation, excellent visibility and the highest level of flexibility. This saves time and money.

- Easy, intuitive installation - incorrect assembly is practically impossible (Poka Yoke)
- TwinLIGHT and TwinFLASH combine two easily selectable light effects in one element
- In ClassicLOOK or DesignLOOK to suit all machine surfaces
- The Omniview lens gives excellent all-round visibility with no blind spots
- Completely pre-assembled standard versions are available (common configurations as a complete tower with a single part number)
- Smooth surfaces prevent dirt gathering and make cleaning easy (KombiSIGN 72)



KombiSIGN 40 - ClassicLOOK

Diameter	40 mm
Dimensions optical signal element (Ø x Height)	40 mm x 58,6 mm
Protection rating	IP 66
Number of tiers possible	1-5
Interface optional	IO-Link
Life duration Optical Signal Elements/ Audible Signal Elements	50.000 h
Lens	PC, transparent



Pre-assembled signal tower - green/yellow/red

TwinLIGHT

Light effects:	LED Permanent light, LED Blinking light, adjustable via slide switch
Dimensions (Ø x Height):	40 mm x 214 mm
Voltage:	24 V AC/DC
Order No.:	639 300 01

Optical Signal Elements

	TwinLIGHT	TwinFLASH
Light effects:	LED Permanent light, LED Blinking light, adjustable via slide switch	LED Flashing light, LED EVS light, adjustable via slide switch
Voltage:	24 V AC/DC	24 V DC
Current consumption:	< 50 mA	< 65 mA
red	634 110 75	634 120 55
green	634 210 75	634 220 55
yellow	634 310 75	634 320 55
white	634 430 75	634 440 55
blue	634 510 75	634 520 55

Multicolour

Light effects:	LED Permanent light
Colours:	Red, yellow, green, blue, white, violet, turquoise controlled by binary inputs
Voltage:	24 V DC
Current consumption:	< 100 mA
Order No.:	634 450 55



Audible Signal Elements



	2 Tone Siren	8 Tone Siren
Dimensions (Ø x Height):	40 mm x 45 mm	40 mm x 68 mm
Housing:	PC	PC
Sound output:	85 dB (A)	89-95 dB (A), can be set via slide switch
Tone type:	Continuous or pulse tone, can be set via slide switch	8 tones, can be set via slide switch
Voltage:	24 V AC/DC	24 V AC/DC
Current consumption:	< 80 mA	< 200 mA
Order No.:	635 800 75	635 810 75



Terminal Element	
Housing:	PC
Dimensions (Ø x Height):	40 mm x 40 mm
Cable entry:	Cable diameter max. 9 mm
Connection:	Push-in terminal max. 1,5 mm ²
Voltage:	24 V AC/DC
Order No.:	630 800 75



 **IO-Link**

IO-Link Terminal element	
Housing:	PC
Dimensions (Ø x Height):	40 mm x 58,6 mm
Cable entry:	Cable diameter max. 9mm
Connection:	Push-in terminal max. 0,75 mm ²
Voltage:	24 V via IO-Link
Current consumption:	10 mA
Order No.:	631 800 55



Adapter for base mounting	
Housing:	PC
Dimensions (Ø x Height):	40 mm x 30 mm
Order No.:	630 810 00



Adapter for single hole mounting	
Housing:	PC
Dimensions (Ø x Height):	40 mm x 54 mm
Order No.:	630 820 00



Adapter for tube mounting	
Housing:	PC
Dimensions (Ø x Height):	40 mm x 75 mm
Order No.:	630 830 00

Use our configurators at www.werma.com to put together the right tower quickly and easily.



KombiSIGN 40 - DesignLOOK

Diameter	40 mm
Dimensions optical signal element (Ø x Height)	40 mm x 58,6 mm
Protection rating	IP 66
Number of tiers possible	1-5
Interface optional	IO-Link
Life duration Optical Signal Elements/ Audible Signal Elements	50.000 h
Lens	PC, transparent



Pre-assembled signal tower - green/yellow/red

TwinLIGHT

Light effects:	LED Permanent light, LED Blinking light, adjustable via slide switch
Dimensions (Ø x Height):	40 mm x 214 mm
Voltage:	24 V AC/DC
Order No.:	639 301 01

Optical Signal Elements

TwinLIGHT

TwinFLASH

Light effects:	LED Permanent light, LED Blinking light, adjustable via slide switch	LED Flashing light, LED EVS light, adjustable via slide switch
Voltage:	24 V AC/DC	24 V DC
Current consumption:	< 50 mA	< 65 mA
red	634 130 75	634 140 55
green	634 230 75	634 240 55
yellow	634 330 75	634 340 55
white	634 430 75	634 440 55
blue	634 530 75	634 540 55

Multicolour

Light effects:	LED Permanent light
Colours:	Red, yellow, green, blue, white, violet, turquoise controlled by binary inputs
Voltage:	24 V DC
Current consumption:	< 100 mA
Order No.:	634 450 55





Audible Signal Elements

	2 Tone Siren	8 Tone Siren
Dimensions (Ø x Height):	40 mm x 45 mm	40 mm x 68 mm
Housing:	PC	PC
Sound output:	85 dB (A)	89-95 dB (A), can be set via slide switch
Tone type:	Continuous or pulse tone, can be set via slide switch	8 tones, can be set via slide switch
Voltage:	24 V AC/DC	24 V AC/DC
Current consumption:	< 80 mA	< 200 mA
Order No.:	635 700 75	635 710 75



Terminal Element

Dimensions (Ø x Height):	40 mm x 40 mm
Housing:	PC
Cable entry:	Cable diameter max. 9 mm
Connection:	Push-in terminal max. 1,5 mm ²
Voltage:	24 V AC/DC
Order No.:	630 700 75



 **IO-Link**

IO-Link Terminal element

Dimensions (Ø x Height):	40 mm x 58,6 mm
Housing:	PC
Cable entry:	Cable diameter max. 9mm
Connection:	Push-in terminal max. 0,75 mm ²
Voltage:	24 V via IO-Link
Current consumption:	10 mA
Order No.:	631 400 55



Adapter for base mounting

Dimensions (Ø x Height):	40 mm x 30 mm
Housing:	PC
Order No.:	630 710 00



Adapter for single hole mounting

Dimensions (Ø x Height):	40 mm x 54 mm
Housing:	PC
Order No.:	630 720 00



Adapter for tube mounting

Dimensions (Ø x Height):	40 mm x 75 mm
Housing:	PC
Order No.:	630 730 00

Use our configurators at www.werma.com to put together the right tower quickly and easily.



KombiSIGN 72 - ClassicLOOK

Diameter	70 mm
Protection rating	IP 65
Number of tiers possible	1-5
Interface optional	ASi, USB, SmartMONITOR, AndonSPEED



Pre-assembled signal tower - green/yellow/red (Base mounting)

TwinLIGHT

Light effects:	LED Permanent light, LED Blinking light, adjustable via slide switch
Dimensions (Ø x Height):	70 mm x 211,5 mm
Voltage:	24 V AC/DC
Order No.:	649 000 01

Pre-assembled signal tower - green/yellow/red (Tube mounting)

TwinLIGHT

Light effects:	LED Permanent light, LED Blinking light, adjustable via slide switch
Dimensions (Ø x Height):	70 mm x 299 mm
Voltage:	24 V AC/DC
Order No.:	649 000 02

Optical Signal Elements

	TwinLIGHT	TwinFLASH
Dimensions (Ø x Height):	70 mm x 65,5 mm	70 mm x 65,5 mm
Lens:	PC, transparent	PC, transparent
Life duration:	50.000 h	50.000 h
Light effects:	LED Permanent light, LED Blinking light, adjustable via slide switch	LED Flashing light, LED EVS light, adjustable via slide switch
Voltage:	24 V AC/DC	24 V DC
Current consumption:	< 80 mA	< 80 mA
red	647 110 75	647 120 55
green	647 210 75	647 220 55
yellow	647 310 75	647 320 55
white	647 430 75	647 440 55
blue	647 510 75	647 520 55





IO-Link



Audible Signal Elements

	2 Tone Siren	8 Tone Siren
Housing:	PC	PC
Life duration:	5.000 h	5.000 h
Dimensions (Ø x Height):	70 mm x 54 mm	70 mm x 54 mm
Sound output:	95-105 dB (A), adjustable by slide switch	86-102 dB (A), can be set via DIP switch
Tone type:	Permanent tone or alternating tone, selectable by slide switch	8 tones, can be set via DIP switch
Voltage:	24 V AC/DC	24 V AC/DC
Current consumption:	< 40 mA	< 30 mA
Order No.:	645 870 75	645 890 75

IO-Link-Element

Dimensions (Ø x Height):	70 mm x 65,5 mm
Voltage:	24 V via IO-Link
Current consumption	< 6 mA
Order No.:	646 840 55

Terminal Elements

Dimensions (Ø x Height):	70 mm x 42,5 mm
Housing:	Terminal element: PA-GF Cap: PC
Fixing:	Base mounting, Tube mounting for tube Ø 25 mm (accessory), Bracket mounting (accessory)
Cable entry:	Cable diameter max. 11 mm
Connection:	CAGE CLAMP® technology max. 1,5 mm ²
Voltage:	12-230 V AC/DC
Base mounting	640 800 00
Tube mounting	640 810 00

Accessories

Base with integrated tube	960 000 51
Bracket for 1-sided mounting	960 000 52
Bracket for base mounting	960 000 53
Bracket for tube mounting	960 000 54
Bracket for base mounting with concealed cable entry	960 000 55
Base for tube Ø 25 mm, plastic	960 000 50



KombiSIGN 72 - DesignLOOK

Diameter	70 mm
Protection rating	IP 65
Number of tiers possible	1-5
Interface optional	ASi, USB, SmartMONITOR, AndonSPEED



Pre-assembled signal tower - green/yellow/red (Base mounting)

TwinLIGHT

Light effects:	LED Permanent light, LED Blinking light, adjustable via slide switch
Dimensions (Ø x Height):	70 mm x 211,5 mm
Voltage:	24 V AC/DC
Order No.:	649 001 01



Pre-assembled signal tower - green/yellow/red (Tube mounting)

TwinLIGHT

Light effects:	LED Permanent light, LED Blinking light, adjustable via slide switch
Dimensions (Ø x Height):	70 mm x 299 mm
Voltage:	24 V AC/DC
Order No.:	649 001 02

Optical Signal Elements

	TwinLIGHT	TwinFLASH
Dimensions (Ø x Height):	70 mm x 65,5 mm	70 mm x 65,5 mm
Lens:	PC, transparent	PC, transparent
Life duration:	50.000 h	50.000 h
Light effects:	LED Permanent light, LED Blinking light, adjustable via slide switch	LED Flashing light, LED EVS light, adjustable via slide switch
Voltage:	24 V AC/DC	24 V DC
Current consumption:	< 80 mA	< 80 mA
red	647 130 75	647 140 55
green	647 230 75	647 240 55
yellow	647 330 75	647 340 55
white	647 430 75	647 440 55
blue	647 530 75	647 540 55



Audible Signal Elements



	2 Tone Siren	8 Tone Siren
Housing:	PC	PC
Life duration:	5.000 h	5.000 h
Dimensions (Ø x Height):	70 mm x 54 mm	
Sound output:	95-105 dB (A), adjustable by slide switch	86-102 dB (A), can be set via DIP switch
Tone type:	Permanent tone or alternating tone, selectable by slide switch	8 tones, can be set via DIP switch
Voltage:	24 V AC/DC	24 V AC/DC
Current consumption:	< 40 mA	< 30 mA
Order No.:	645 770 75	645 790 75



 **IO-Link**

IO-Link-Element

Dimensions (Ø x Height):	70 mm x 65,5 mm
Voltage:	24 V via IO-Link
Current consumption:	< 6 mA
Order No.:	646 440 55

Terminal Elements



Dimensions (Ø x Height):	70 mm x 42,5 mm
Housing:	Terminal element: PA-GF Cap: PC
Fixing:	Base mounting, Tube mounting for tube Ø 25 mm (accessory), Bracket mounting (accessory)
Cable entry:	Cable diameter max. 11 mm
Connection:	CAGE CLAMP® technology max. 1,5 mm ²
Voltage:	12-230 V AC/DC
Base mounting	640 900 00
Tube mounting	640 910 00

Accessories

Base with integrated tube	960 000 51
Bracket for 1-sided mounting	960 000 52
Bracket for base mounting	960 000 53
Bracket for tube mounting	960 000 54
Bracket for base mounting with concealed cable entry	960 000 55
Base for tube Ø 25 mm, plastic	960 000 50



VOCAL ELEMENT

This element enables individual messages or sounds to be recorded to ensure immediate action is taken - even in multi-language environments. The unique vocal element plays sounds, melodies and recorded messages. The instructions given via the vocal element can be heard even in very noisy environments.



Vocal element

- Plays customer-specific audio files (sounds, melodies and your own recorded messages)
- Clear instructions given in the relevant local language
- Simple data transfer and user-friendly operation
- Individual playlists can be created

Protection rating	IP 65
Housing	PC
Number of tiers	Max. 4 additional signal elements possible
File Transfer	Via USB connection and provided software
Possible data format	Mp3 and wav files
Number of sequences	15 files can be remotely triggered depending on the number of signal elements used or one sequence with max. 50 files.
Suitable for	Windows®, System requirements – see Handbook
Assembly	Vocal element, USB connection cable and software
Voltage	24 V DC



Vocal element

Dimensions (Ø x H):	70 mm x 111 mm
Sound output:	Adjustable, up to 88 dB (A)
Current consumption:	< 400 mA
Order no.:	645 840 55



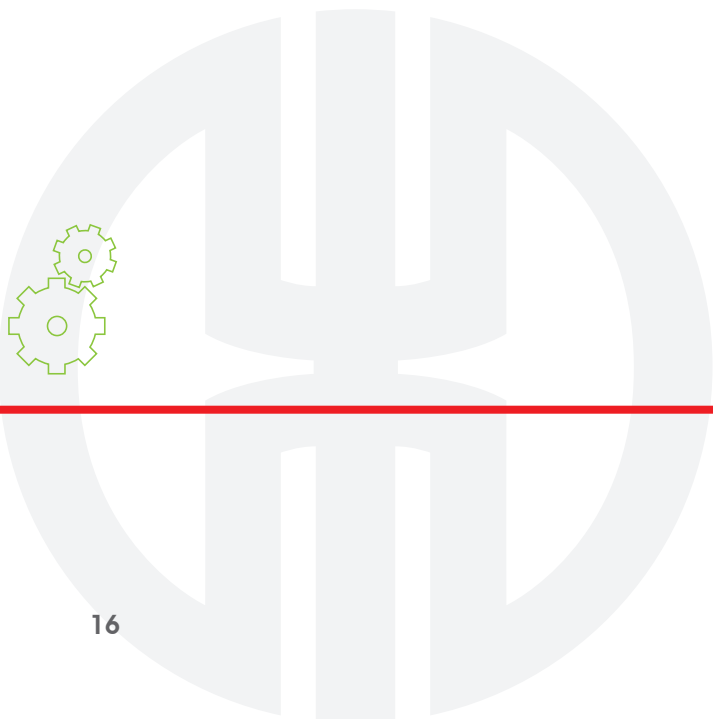
Vocal element

Dimensions (Ø x H):	125 mm x 118 mm
Sound output:	Adjustable, up to 102 dB (A)
Current consumption:	< 500 mA
Order no.:	645 860 55



SmartMONITOR

SmartMONITOR is the clever alternative to monitor machines and equipment and easily collect relevant data to help optimise manufacturing processes. Intelligent wireless networking of signal towers creates a simple, low-cost and retrofittable alternative to conventional, complex machine data collection systems. This allows you to combat unplanned downtimes and to track down latent capacity reserves.



Your benefits

- Identifies and documents faults and unproductive time more quickly
- Reduces response times and prevents downtime
- Works regardless of the manufacturer, age or function of the machine
- Provides all relevant data of machines, systems and manual workstations at a glance
- Reports show opportunities for process and productivity improvements
- Modular and expandable with no cabling required

Typical applications

- Discover hidden optimisation potential
- Indicates machine stoppages
- Manage the supply of material to machines and workstations
- As a control station for manufacturing companies
- Production reporting

Features

- Robust and proven wireless network for manufacturing environments
- Licence-free software is included
- Integrated analytics and reporting tools
- WIN slave control enables you to trigger simple logical rules for example to activate an additional signal tower as a head-of-line function



WIRELESS NETWORKING

STATUS MONITORING

This hardware monitors up to eight different statuses and transmits them to the receiver.



COUNTING MODULE

This hardware monitors up to six different statuses and counts a quantity pulse. This information is transmitted to the receiver.




CONTROLLING A SIGNAL TOWER


In combination with the software, this hardware allows the actuation of a signal tower or an external application (start machine, stop machine etc.).




TRANSMITTER




 WIN slave
Order no. **860 640 02**

 WIN transmitter
Order no. **860 640 05**




 WIN slave performance
Order no. **860 640 12**

 WIN transmitter performance
Order no. **860 640 15**




 WIN slave control
Order no. **860 640 22**


 WIN transmitter control
Order no. **860 640 25**



RECEIVER



 WIN ethernet master*
Order no. **860 000 06**

 WIN ethernet receiver*
Order no. **860 000 07**

*incl. Software



SIGNAL TOWER

SIGNAL ELEMENTS (UP TO A MAXIMUM OF 4)		PRE-ASSEMBLED SIGNAL TOWER	
 <p>8 tone siren DesignLOOK Order no. 645 790 75</p>	 <p>8 tone siren ClassicLOOK Order no. 645 890 75</p>	<p>Base mounting</p>  <p>TwinLIGHT DesignLOOK Order no. 649 001 01</p>  <p>TwinLIGHT ClassicLOOK Order no. 649 000 01</p>	<p>Tube mounting</p>  <p>TwinLIGHT DesignLOOK Order no. 649 001 02</p>  <p>TwinLIGHT ClassicLOOK Order no. 649 000 02</p>
 <p>2 tone siren DesignLOOK Order no. 645 770 75</p>	 <p>2 tone siren ClassicLOOK Order no. 645 870 75</p>		
 <p>TwinLIGHT DesignLOOK red Order no. 647 130 75</p>	 <p>TwinLIGHT ClassicLOOK red Order no. 647 110 75</p>		
 <p>TwinLIGHT DesignLOOK green Order no. 647 230 75</p>	 <p>TwinLIGHT ClassicLOOK yellow Order no. 647 310 75</p>		
 <p>TwinLIGHT DesignLOOK yellow Order no. 647 330 75</p>	 <p>TwinLIGHT ClassicLOOK green Order no. 647 210 75</p>		
 <p>TwinLIGHT DesignLOOK clear Order no. 647 430 75</p>	 <p>TwinLIGHT ClassicLOOK clear Order no. 647 430 75</p>		
 <p>TwinLIGHT DesignLOOK blue Order no. 647 530 75</p>	 <p>TwinLIGHT ClassicLOOK blue Order no. 647 510 75</p>		
<p>Base mounting</p>  <p>Terminal element Order no. 640 800 00</p>  <p>Terminal element Order no. 640 900 00</p>	<p>Tube mounting</p>  <p>Terminal element + Base with integrated tube Order no. 640 810 00 + 975 840 10</p>  <p>Terminal element + Base with integrated tube Order no. 640 910 00 + 960 000 51</p>	<p>Bracket mounting</p>  <p>Terminal element + Bracket for base mounting Order no. 640 800 00 + 960 000 02</p>  <p>Terminal element + Bracket for base mounting Order no. 640 900 00 + 960 000 53</p>	

Further accessories can be found in our current catalogue or at www.werma.com



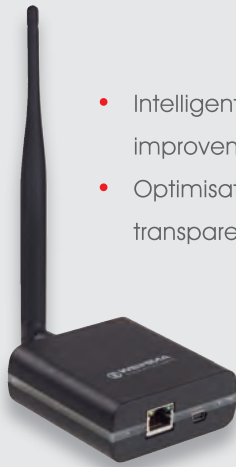
AndonSPEED

With AndonSPEED you can optimise your processes for manual stations and for packaging and shipping stations. Because AndonSPEED provides a visual display of problem areas – at the push of a button. Permanent time-savings are possible thanks to quick fault correction. The system can also transfer the calls for action wirelessly to a central control station and send e-mail alerts automatically.



Your benefits

- Rapid assistance reduces wait times
- Reduces response times and prevents shutdowns
- Quick fault repair enabling more "units per hour"



- Intelligent reporting for lasting improvements
- Optimisation potential is made transparent

Typical applications

- Report stoppages on chutes or conveyor belts
- Manage the supply of materials to packaging stations
- Report missing items at the shipping station
- Process improvement in shipping areas

Features

- Robust, proven wireless network for production environments
- Licence-free software is included
- Integrated analytics and reporting tools
- Ability to implement a head-of-line function, for example, with slave control

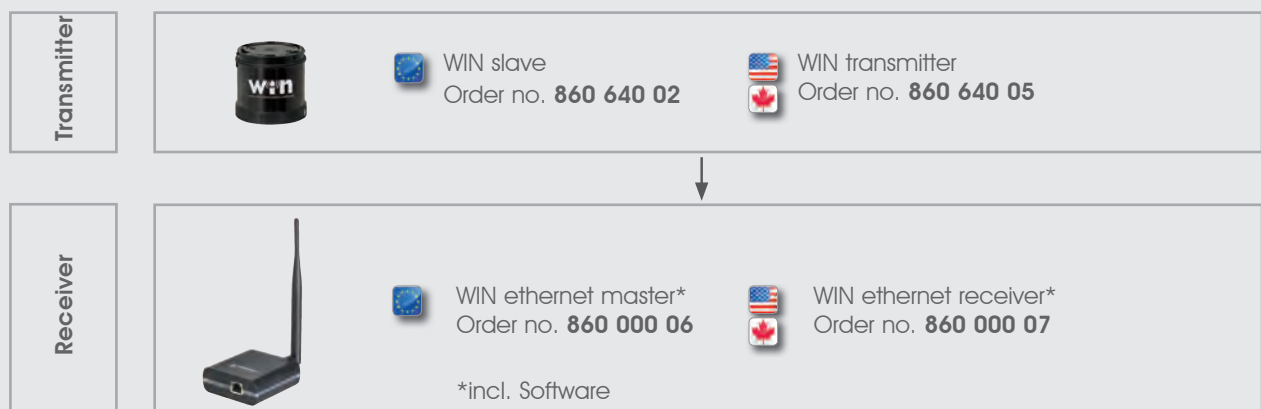




1. ANDON PRODUCT



2. WIRELESS NETWORKING



3. SIGNAL TOWER

SIGNAL ELEMENTS (UP TO A MAXIMUM OF 4)

 8 tone siren DesignLOOK Order no. 645 790 75	 8 tone siren ClassicLOOK Order no. 645 890 75
 2 tone siren DesignLOOK Order no. 645 770 75	 2 tone siren ClassicLOOK Order no. 645 870 75
 TwinLIGHT DesignLOOK red Order no. 647 130 75	 TwinLIGHT ClassicLOOK red Order no. 647 110 75
 TwinLIGHT DesignLOOK green Order no. 647 230 75	 TwinLIGHT ClassicLOOK yellow Order no. 647 310 75
 TwinLIGHT DesignLOOK yellow Order no. 647 330 75	 TwinLIGHT ClassicLOOK green Order no. 647 210 75
 TwinLIGHT DesignLOOK clear Order no. 647 430 75	 TwinLIGHT ClassicLOOK clear Order no. 647 430 75
 TwinLIGHT DesignLOOK blue Order no. 647 530 75	 TwinLIGHT ClassicLOOK blue Order no. 647 510 75

Base mounting Tube mounting Bracket mounting

 Terminal element Order no. 640 800 00	 Terminal element + Base with integrated tube Order no. 640 810 00 + 975 840 10	 Terminal element + Bracket for base mounting Order no. 640 800 00 + 960 000 02
 Terminal element Order no. 640 900 00	 Terminal element + Base with integrated tube Order no. 640 910 00 + 960 000 51	 Terminal element + Bracket for base mounting Order no. 640 900 00 + 960 000 53

PRE-ASSEMBLED SIGNAL TOWER

Base mounting Tube mounting

 TwinLIGHT DesignLOOK Order no. 649 001 01	 TwinLIGHT DesignLOOK Order no. 649 001 02
 TwinLIGHT ClassicLOOK Order no. 649 000 01	 TwinLIGHT ClassicLOOK Order no. 649 000 02

Further accessories can be found in our current catalogue or at www.werma.com



AndonLIGHT

Provides an introduction to professional call for action systems: the easy-to-retrofit Andon products in combination with WERMA KombiSIGN 72 signal towers. With these products it is easy to improve safety and efficiency in the workplace.



Your benefits

- Rapid assistance reduces wait times
- Reduces response times and prevents shutdowns
- Intuitive and self-explanatory light system
- More reliability and efficiency (no running around looking for help)
- It can be expanded to a wireless network system at any time

Typical applications

- Professional signalisation of problems at the workstation
- Manage supply of materials to workstations
- Optimise processes

Features

- Up to eight different statuses
- Signal directly on the signal tower with AndonCONTROL
- Activate signals on the signal tower with Andon SmartBOX





1. ANDON PRODUCT



2. SIGNAL TOWER

SIGNAL ELEMENTS (UP TO A MAXIMUM OF 4)		PRE-ASSEMBLED SIGNAL TOWER	
 8 tone siren DesignLOOK Order no. 645 790 75	 8 tone siren ClassicLOOK Order no. 645 890 75	Base mounting	Tube mounting
 2 tone siren DesignLOOK Order no. 645 770 75	 2 tone siren ClassicLOOK Order no. 645 870 75	 TwinLIGHT DesignLOOK Order no. 649 001 01	 TwinLIGHT DesignLOOK Order no. 649 001 02
 TwinLIGHT DesignLOOK red Order no. 647 130 75	 TwinLIGHT ClassicLOOK red Order no. 647 110 75	 TwinLIGHT ClassicLOOK Order no. 649 000 01	 TwinLIGHT ClassicLOOK Order no. 649 000 02
 TwinLIGHT DesignLOOK green Order no. 647 230 75	 TwinLIGHT ClassicLOOK yellow Order no. 647 310 75		
 TwinLIGHT DesignLOOK yellow Order no. 647 330 75	 TwinLIGHT ClassicLOOK green Order no. 647 210 75		
 TwinLIGHT DesignLOOK clear Order no. 647 430 75	 TwinLIGHT ClassicLOOK clear Order no. 647 430 75		
 TwinLIGHT DesignLOOK blue Order no. 647 530 75	 TwinLIGHT ClassicLOOK blue Order no. 647 510 75		
Base mounting	Tube mounting	Bracket mounting	
 Terminal element Order no. 640 800 00	 Terminal element + Base with integrated tube Order no. 640 810 00 + 975 840 10	 Terminal element + Bracket for base mounting Order no. 640 800 00 + 960 000 02	
 Terminal element Order no. 640 900 00	 Terminal element + Base with integrated tube Order no. 640 910 00 + 960 000 51	 Terminal element + Bracket for base mounting Order no. 640 900 00 + 960 000 53	

Further accessories can be found in our current catalogue or at www.werma.com



SIGNAL BEACONS & TRAFFIC LIGHTS

WERMA's beacons and traffic lights help indicate risks and imminent danger promptly and clearly. This enables processes to be made safe and efficient. This is what we call intelligent signal technology.





The type of optical signals used depends on the application and the surroundings. With Evo*SIGNAL*, finding the right signal device has never been so easy: Almost all areas of application are optimally covered by only three sizes (signal lamps) with specific mounting adapters. The new modular, simple and clear standard solution. Evo*SIGNAL* is one of a kind.

- Simple and easy to use: Number of different articles reduced to 20% whilst retaining a full range
- Twin functions: Twin*LIGHT* and Twin*FLASH* unite two light pattern functions in one element. They can be remote-controlled via connection terminals and also used as escalation levels
- Poka Yoke: Simple and intuitive installation - incorrect installation is impossible
- Mini and Midi also available as Tri*COLOUR* variants
- Maxi Twin*FLASH* can be used as an attention-grabbing alternative to xenon strobes and rotating mirror beacons



EvoSIGNAL - Mini

Protection rating	IP 66
Dimensions (Ø x H)	62 mm x 85 mm
Housing	PC/ABS
Lens	PC, transparent
Available versions	Optical, Optical-Audible, Audible
Available light effects	TwinLIGHT, TwinFLASH
Cable entry	Cable diameter 8-12 mm
Connection	Push-In terminal max. 1,5 mm ²
Fixing	Base/Installation/Tube/Wall mounting
Flash/Blinking frequency	1 Hz



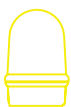
260 - Optical

	TwinLIGHT	TwinFLASH
Voltage	24 V AC/DC	24 V AC/DC
Current consumption	≤ 75 mA	≤ 75 mA
red	260 110 75	260 120 75
green	260 210 75	260 220 75
yellow	260 310 75	260 320 75
white	260 410 75	260 420 75
blue	260 510 75	260 520 75
TriCOLOUR		
Voltage	24 V AC/DC	
Current consumption	≤ 90 mA	
Order no.	260 430 75	



460 - Optical-Audible

	TwinLIGHT	TwinFLASH
Voltage	24 V AC/DC	24 V AC/DC
Current consumption	≤ 115 mA	≤ 115 mA
Tone type	Continuous or pulse tone	Continuous or pulse tone
red	460 110 75	460 110 60
green	460 210 75	460 210 60
yellow	460 310 75	460 310 60
white	460 410 75	460 410 60
blue	460 510 75	460 510 60





160 - Audible	
Voltage	24 V AC/DC
Current consumption	≤ 40 mA
Tone type	Continuous or pulse tone
Order no.	160 700 75



Mounting adapter	Always required!
Base mounting	260 700 01
Installation mounting M22	260 700 03
Installation mounting PG29	260 700 04
Tube mounting	260 700 05
Bracket mounting with cable gland	260 700 06
Bracket mounting	260 700 07



EvoSIGNAL - Midi

Protection rating	IP 66
Dimensions (Ø x H)	85 mm x 130 mm
Housing	PC/ABS
Lens	PC, transparent
Available versions	Optical, Optical-Audible, Audible
Available light effects	TwinLIGHT, TwinFLASH, Rotating
Cable entry	Cable Diameter 8-12 mm
Connection	Push-In terminal max. 1,5 mm ²
Fixing	Base/Wall/Tube mounting
Flash/Blinking frequency	1 Hz



261 - Optical

	TwinLIGHT	TwinFLASH	Rotating
Voltage	12/24 V AC/DC	12/24 V AC/DC	12/24 V AC/DC
Current consumption	≤ 185 mA	≤ 850 mA	130 mA
red	261 110 70	261 120 70	261 140 70
green	261 210 70	261 220 70	261 240 70
yellow	261 310 70	261 320 70	261 340 70
white	261 410 70	261 420 70	261 440 70
blue	261 510 70	261 520 70	261 540 70
TriCOLOUR			
Voltage	12/24 V AC/DC		
Current consumption	≤ 145 mA		
Order no.	261 530 70		



461 - Optical-Audible

	TwinLIGHT	TwinFLASH
Voltage	12/24 V AC/DC	12/24 V AC/DC
Current consumption	≤ 345 mA	≤ 110 mA
Tonart	Mehrton	Mehrton
red	461 110 70	461 120 70
green	461 210 70	461 220 70
yellow	461 310 70	461 320 70
white	461 410 70	461 420 70
blue	461 510 70	461 520 70



161 - Audible

Voltage	12/24 V AC/DC
Current consumption	≤ 175 mA
Tone type	Multi-tone
Order no.	161 700 70



Mounting adapter Always required!

Base mounting	261 700 01
Base mounting with cable gland	261 700 02
Tube mounting	261 700 05
Bracket mounting with cable gland	261 700 06
Bracket mounting	261 700 07
Horn	261 700 03



EvoSIGNAL - Maxi

Protection rating	IP 66
Dimensions (Ø x H)	120 mm x 173 mm
Housing	PC/ABS
Lens	PC, transparent
Available versions	Optical
Available light effects	TwinLIGHT, TwinFLASH, Rotating
Cable entry	Cable diameter 8-12 mm
Connection	Push-In terminal max. 1,5 mm ²
Fixing	Base/Wall mounting
Flash/Blinking frequency	1 Hz



262 - Optical

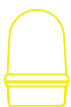
	TwinLIGHT	TwinFLASH	Rotating
Voltage	12/24 V AC/DC	12/24 V AC/DC	12/24 V AC/DC
Current consumption	≤ 700 mA	≤ 760 mA	≤ 550 mA
red	262 110 70	262 120 70	262 140 70
green	262 210 70	262 220 70	262 240 70
yellow	262 310 70	262 320 70	262 340 70
white	262 410 70	262 420 70	262 440 70
blue	262 520 70	262 520 70	262 540 70

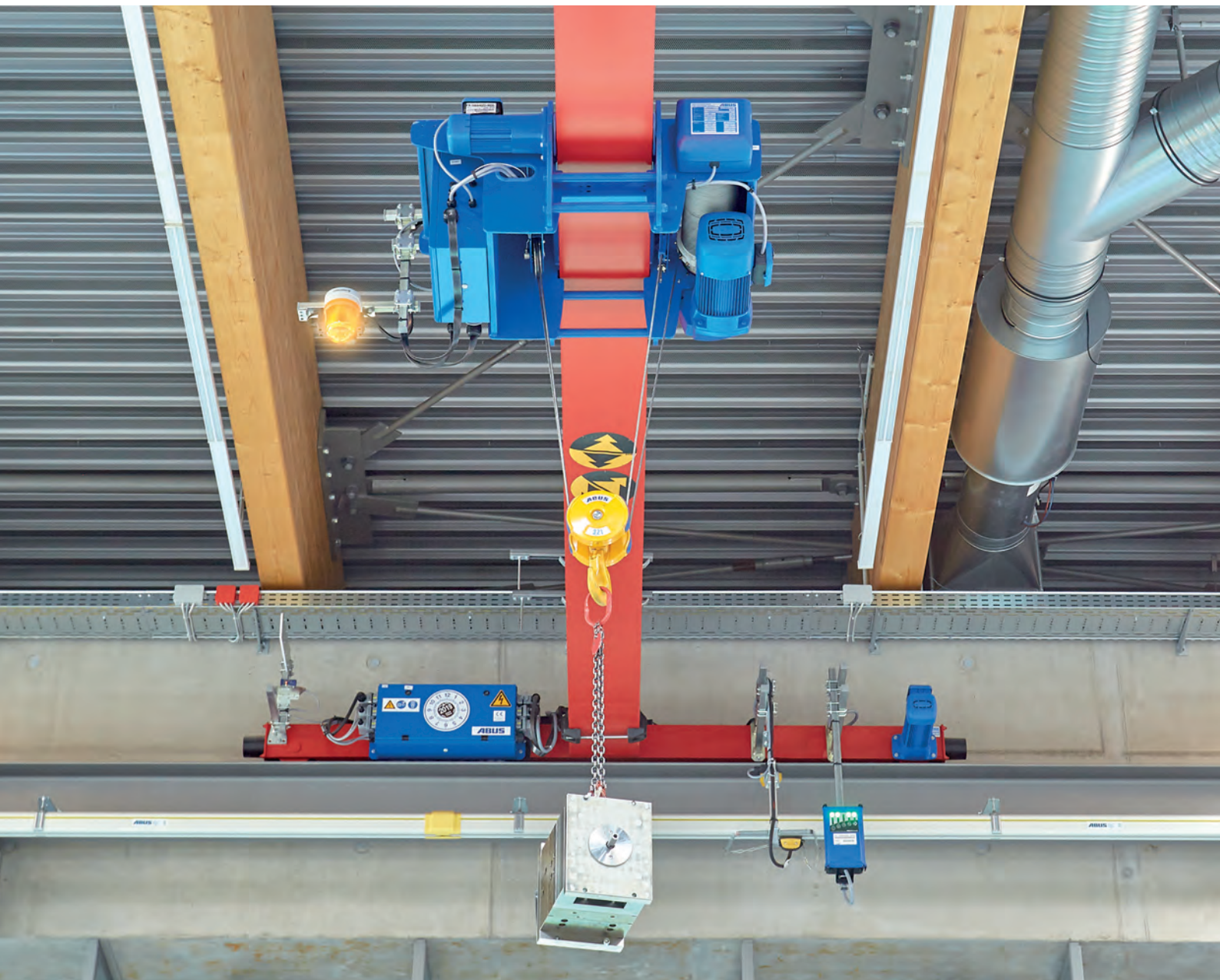


Mounting adapter

Always required!

Base mounting	262 700 01
Base mounting with cable exit at side	262 700 02
Bracket mounting with cable gland	262 700 06
Bracket mounting with concealed cable entry	262 700 07





Midi Signal Beacons - Base/Bracket mounting



Midi Beacons provide flexible signalling over medium distances. The high protection rating IP65 ensures the safe operation in many areas – both indoor and outdoor applications.

- Versatile light effects (permanent / blinking / rotating / flash / EVS) for a wide range of applications
- No moving mechanical parts, therefore unsusceptible to shock and vibration
- Maintenance-free operation and lower running costs due to low current consumption

Protection rating	IP 65
Dimensions (Ø x H)	98 mm x 151 mm
Housing	PC/ABS-Blend
Lens	PC, transparent
Cable entry	Cable diameter 5-7-mm
Connection	Screw terminal 0,5 - 1,5 mm²
Service life of drive	> 5.000 h



885 - Rotating Mirror Beacon

Installation position:	Surface		
Halogen bulb:	G 6.35 20 W 12 V/24 V		
Mirror rotation rate:	180 r.p.m.		
Duty cycle:	100 %		
Halogen bulb included in assembly.			
Voltage:	12 V DC	24 V AC/DC	115 V AC / 115 V DC / 230 V AC / 230 V DC
Current consumption:	1,9 A	1,0 A	0,4 A / 0,2 A / 0,2 A / 0,1 A
red	885 100 54	885 100 75	885 100 78
green	885 200 54	885 200 75	885 200 78
yellow	885 300 54	885 300 75	885 300 78
blue	885 500 54	885 500 75	885 500 78
yellow	885 310 54	885 310 75	885 310 78
blue	885 510 54	885 510 75	885 510 78



Midi Signal Beacons - Tube mounting

Protection rating	IP 65
Dimensions (Ø x H)	98 mm x 200 mm
Housing	PC/ABS-Blend
Lens	PC, transparent
Cable entry	Cable diameter 5-7-mm
Connection	Screw terminal 0,5 - 1,5 mm ²
Service life of drive	> 5.000 h



885 - Rotating Mirror Beacon

Installation position:	As required		
Halogen bulb:	G 6.35 20 W 12 V/24 V		
Mirror rotation rate:	180 r.p.m.		
Duty cycle:	100 %		
Halogen bulb included in assembly.			
Voltage:	12 V DC	24 V AC/DC	115 V AC / 115 V DC / 230 V AC / 230 V DC
Current consumption:	1,9 A	1,0 A	0,4 A / 0,2 A / 0,2 A / 0,1 A
red	885 110 54	885 110 75	885 110 78
green	885 210 54	885 210 75	885 210 78
yellow	885 310 54	885 310 75	885 310 78
blue	885 510 54	885 510 75	885 510 78



Maxi Signal Beacons



WERMA's Maxi Beacons give flexible signalling over larger distances. The IP65 rated units are ideally suited for use in both indoor and outdoor applications.

- Versatile light effects (permanent / rotating / flash / EVS) for a wide range of applications
- Resistant to shock and vibration
- Maintenance-free operation and low running costs

Protection rating	IP 65
Dimensions (Ø x H)	142 mm x 218 mm
Housing	PC/ABS blend
Kalotte	PC, transparent
Cable entry	Cable diameter 5-7-mm
Connection	Screw terminal 0,5 - 1,5 mm²
Duty cycle	100 %
Life duration	Up to 50.000 h
Fixing	Base mounting, Bracket/Tube mounting (accessory)



883 - Rotating Mirror Beacon

Drive:	Wheel and disc drive, motor in centre of gravity
Halogen bulb:	G 6.35 35 W 12 V/24 V
Mirror rotation rate:	180 r.p.m.
Service life of drive:	> 5.000 h
Duty cycle:	100 %

Halogen bulb included in assembly.

Voltage:	12 V DC	24 V AC/DC	115 V AC/DC	230 V AC
Current consumption:	3 A	1,6 A	0,35 A	0,17 A
red	883 100 54	883 100 75	883 100 77	883 100 68
green	883 200 54	883 200 75	883 200 77	883 200 68
yellow	883 300 54	883 300 75	883 300 77	883 300 68
blue	883 500 54	883 500 75	883 500 77	883 500 68

Further colours and voltages on request.





838 - Xenon Double Flash Beacon

Flash energy:	15 Ws		
Flash frequency:	C. 1 Hz		
Life duration:	4 x 10 ⁶ flashes		
Voltage:	24 V DC	115 V AC	230 V AC
Current consumption:	800 mA	400 mA	200 mA
red	838 100 55	838 100 67	838 100 68
yellow	838 300 55	838 300 67	838 300 68



884 - Revolving Signal Beacon

Drive:	Wheel and disc drive, motor in centre of gravity
Halogen bulb:	G 6.35 35 W 12 V/24 V
Mirror rotation rate:	60 r.p.m.
Service life of drive:	> 5.000 h
Duty cycle:	100 %

Halogen bulb included in assembly.

Voltage:	24 V AC/DC	230 V AC
Current consumption:	1,6 A	0,17 A
red	884 100 75	884 100 68
green	884 200 75	884 200 68
yellow	884 300 75	884 300 68
blue	884 500 75	884 500 68

Halogen bulb included in assembly.

Accessories - 883 + 884

Plastic bracket for wall mounting	975 883 06
Adaptor for tube mounting	975 883 09
Base for tube mounting	975 840 91
Tube, Ø 25 mm, 100 mm long	975 845 10
Tube, Ø 25 mm, 250 mm long	975 840 25
Wire guard, only for base mounting	975 883 08

SPARE PARTS:

Halogen bulb 35 W/12 V for 230 V AC, 12 V DC, 115 V AC/DC	955 883 34
Halogen bulb 35 W/24 V for 24 V AC/DC	955 883 35



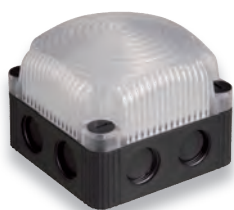
FlexSQUARE - Square shaped beacons



The compact 853 LED beacon is particularly versatile. With an IP67 protection rating, it is suitable for all indoor and outdoor applications, even in harsh environmental conditions.

- Powerful high-output, forward-directed light effect
- Clearly visible, also from the side
- Easy mounting and electrical installation thanks to the elastic, self-sealing, membranes or optional M20 cable gland for mounting on different sides
- Many combinations possible (traffic lights, for example)
- Where space is restricted: Multi-coloured version available, with up to seven colour

Protection rating	IP 65
Dimensions (L x H x W)	85 mm x 85 mm x 72 mm
Housing	PP-GF, black
Lens	PC, transparent
Cable entry	Cable diameter 5-7-mm
Fixing	Wall, base and ceiling mounting
Equipment	Elastic self-sealing membranes for cable entry without tools Eight integrated M20 threads, no nuts required Optional use of a cable gland, thread length of cable gland ≤ 9 mm (accessory)
Assembly	Incl. snap-on fixing bracket (optional use)
Life duration	Up to 50.000 h



853 - LED Permanent Beacon

Connection:	Screw terminal 0,5 - 1,5 mm ²			
Voltage:	12 V DC	24 V DC	48 V AC	115-230 V AC
Current consumption:	< 180 mA	< 80 mA	< 35 mA	< 40 mA
red	853 100 54	853 100 55	853 100 66	853 100 60
green	853 200 54	853 200 55	853 200 66	853 200 60
yellow	853 300 54	853 300 55	853 300 66	853 300 60
clear	853 400 54	853 400 55	853 400 66	853 400 60
blue	853 500 54	853 500 55	853 500 66	853 500 60

853 - LED Permanent Beacon - multicolour

Connection:	CAGE CLAMP® 0,5 - 1,5 mm ²	
Voltage:	24 V DC	115-230 V AC
Current consumption:	< 150 mA	< 35 mA
Multicolour	853 480 55	-
RGY (red, green, yellow)	-	853 480 60





853 - LED Double Flash Beacon

Connection:	Screw terminal 0,5 - 1,5 mm ²			
Voltage:	12 V DC	24 V DC	48 V AC	115-230 V AC
Current consumption:	< 100 mA	< 80 mA	< 95 mA	< 180 mA
red	853 110 54	853 110 55	853 110 66	853 110 80
green	853 210 54	853 210 55	853 210 66	853 210 80
yellow	853 310 54	853 310 55	853 310 66	853 310 80
clear	853 410 54	853 410 55	853 410 66	853 410 80
blue	853 510 54	853 510 55	853 510 66	853 510 80

853 - LED EVS Beacon

Connection:	Screw terminal 0,5 - 1,5 mm ²			
Voltage:	12 V DC	24 V DC	48 V AC	115-230 V AC
Current consumption:	< 400 mA	< 200 mA	< 95 mA	< 160 mA
red	853 120 54	853 120 55	853 120 66	853 120 60
green	853 220 54	853 220 55	853 220 66	853 220 60
yellow	853 320 54	853 320 55	853 320 66	853 320 60
clear	853 420 54	853 420 55	853 420 66	853 420 60
blue	853 520 54	853 520 55	853 520 66	853 520 60



153 - Siren

Connection:	Screw terminal 0,5 - 1,5 mm ²			
Voltage:	12 V DC	24 V DC	48 V AC	115-230 V AC
Current consumption:	< 150 mA	< 100 mA	< 150 mA	< 75 mA (115 V) < 150 mA (230 V)
Order no.	153 000 54	153 000 55	153 000 66	153 000 60

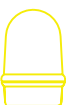
Tone types and frequencies

Tone:	Tone type:
1	Continuous tone (c. 3000 Hz)
2	Horn tone (c. 110 Hz)
3	1 Hz tone (c. 3,0 kHz)
4	20 Hz whistle tone (c. 3,0 kHz)
5	800 - 970 Hz rising @ 2 Hz
6	2400 - 2850 Hz rising @ 7 Hz
7	1200 - 500 Hz falling @ 1 Hz
8	Alternating tone 800 Hz/1200 Hz@1 Hz

Accessories

Connector for traffic light combinations	975 853 01
Cable gland M20 x 1.5 mm, 8mm thread length	975 853 02

Use our configurators at www.werma.com to put together the right tower quickly and easily.



TRAFFIC LIGHTS

The traffic light range provides effective and reliable signalling in single or combination lights.



Your benefits

- Cost-effective traffic light with LEDs and clear lenses
- Easy installation in just a few steps and with any combination of 4 lights
- RGY version: reduction in number of variants by combining three colours in a single product – Ideal where space is restricted
- Additional high-output audible signalling of up to 110 dB(A) available in combination with multi-tone sound-er/vocal alarm 190
- Extremely robust: available up to IP 69K



Traffic Light

Protection rating	IP 65
Dimensions (Ø x H)	150 mm x 154 mm
Housing	PC/ABS-Blend, grey
Lens	PC, transparent
Cable entry	From top or bottom with cable gland M20 x 1.5 mm or from the back with rubber grommet Ø 6-12 mm, included in assembly.
Connection	CAGE CLAMP® 0,5 - 1,5 mm ²
Fixing	Base mounting, bracket mounting (accessory), tube mounting (accessory)
Installation position	As required
Life duration	Up to 50.000 h



890 - LED Traffic Light

Voltage:	12-24 V DC	115-230 V AC
Current consumption:	< 200 mA	< 35 mA
red	890 120 55	890 120 68
green	890 220 55	890 220 68
yellow	890 320 55	890 320 68

890 - LED Permanent Light RGY

Voltage:	12-24 V DC	115-230 V AC
Current consumption:	< 220 mA	< 40 mA
RGY (red, green, yellow)	890 480 55	890 480 68

Accessories

FIXING BRACKET

Fixing bracket for one beacon	975 890 33
Fixing bracket for two beacons	975 890 34
Fixing bracket for three beacons	975 890 35
Fixing bracket for four beacons	975 890 37

CONNECTING GROMMET

Connecting grommet for traffic light combinations	975 890 25
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Use our configurators at www.werma.com to put together the right tower quickly and easily.

Traffic Light

Protection rating	IP65/69k
Dimensions (L x H x W)	2 tier: 85 mm x 309 mm x 136 mm 3 tier: 85 mm x 394 mm x 136 mm
Housing	PC-ABS, grey
Cable entry	Cable diameter max. 13 mm
Fixing	Wall mounting, tube mounting (accessory)
Connection	Screw terminal 0,5-1,5 mm ²
Installation position	Vertical/hanging
Duty cycle	100 %
Life duration	Up to 50.000 h



894 - LED Traffic Light

Lens:	PC, clear transparent	
Voltage:	24 V DC	115-230 V AC
Current consumption:	< 60 mA (red/yellow) < 120 mA (green)	< 30 mA per tier at 230 V/50 Hz
red/green	894 160 55	894 160 68
red/yellow/green	894 180 55	894 180 68

894 - LED Traffic Light

Lens:	PC, colored transparent	
Voltage:	24 V DC	115-230 V AC
Current consumption:	< 60 mA (red/yellow)	< 30 mA per tier at 230 V/50 Hz
red/green	894 060 55	894 060 68
red/yellow/green	894 080 55	894 080 68



VOCAL ALARM

This extremely loud Vocal Alarm provides the ability to play application-specific audio files in order to produce clear and targeted instructions. It is particularly suitable for large assembly facilities and can address defined groups of people (for example, a particular work unit) in a targeted manner.

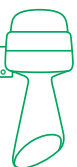


Vocal alarm



- Reliable alarm output over long distances or in noisy environments
- Easy to adjust to local conditions
- Excellent audio and sound quality for optimum clarity of signalling
- Completely flexible; audio files selected and loaded by yourself

Protection rating	IP 65
Dimensions (L x H x W)	111 mm x 98 mm x 111 mm
Voltage	24 V DC
Current consumption	< 500 mA Low Power < 1500 mA High Power
Housing	PP-GF, PC/ABS
Sound output	Adjustable, up to 110 dB
File transfer	Via USB connection and provided software
Possible data format	Mp3 and wav files
Number of sequences	15 files can be remotely triggered or one sequence with max. 50 files
Suitable for	Windows®, System requirements - see Handbook
Assembly	Vocal alarm, USB connection cable and software
Order no.	154 000 55



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