

# DBS 5000

Winner of the *reddot design award*, the DBS 5000 warning system combines modern design, a versatile range of functions and powerful LED lighting technology. The optimum warning effect attracts the attention of road users and ensures additional safety when in operation. The low-profile design not only ensures low air resistance and reduced noise, but also makes it possible to access destinations where clearance height is an issue.



**reddot award 2017**  
winner

## Customisable

- fitted using a modular system
- easily adaptable to individual needs

## Aerodynamic housing

- low wind resistance and reduced noise levels
- low-profile design

## Variety of mounting options

- fast and easy mounting options for flat or curved vehicle roofs
- vehicle-specific carrier systems offer additional mounting options

## Maximum warning effect

- state-of-the-art lighting technology
- automatic day/night switching

## Easy operation

- digital control via CAN447 or FireCAN
- converters for analogue control available

## Variety of lengths

- lengths: 700, 1100, 1200, 1400, 1600 or 1800 mm



## RANGE OF FUNCTIONS AVAILABLE

- infrared LED (helicopter recognition)
- LED command vehicle light (GREEN)
- direction indicator (turning light)\*
- day/night switching (automatic)
- working light
- undercarriage loudspeaker to support public address
- alley lights: 0° or 20° tilt
- additional flashers
- power flash
- rear warning system
- traffic advisor (special approval required)
- convoy function (control required)
- integration of compressor horns possible
- also available with clear lamp domes

\*CAN447 requires an I/O-Box to feed in the signals

Also available with examination in accordance with ICAO type C.  
Further information can be found on page 96.

<i>Technical data:</i>	
Designation:	DBS 5000
Voltage:	12 V / 24 V
Flash frequency:	> 2 Hz (beacon)
Average power consumption:	from 4 A (at 12 V)
Lengths:	700, 1100, 1200, 1400, 1600, 1800 mm
Depth:	285 mm
Height:	63 mm
Weight:	from 5.1 kg
Material:	lamp dome: PC / cover glass: PMMA / housing: aluminium
Type of protection:	IP5K4K / IPX9K
<i>Homologation: (Germany and international)</i>	
Light according to ECE-R 65:	TB2 (E) 00 4446
EMC according to ECE-R 10:	(E) 10R-05 7981
Direction indicator: Light according to ECE-R 6:	01 1 (E) 4453 (front) / 01 2a (E) 4453 (rear)
Rear warning system: Light according to ECE-R 65:	XA1 (E) 00 4471
Power flash: light according to TA13a:	~ K 1427

# DBS 5000

## Lamp dome

- clear
- blue
- red

## Cover profile

## Main beacon with function monitoring, optional:

- direction indicator
- helicopter recognition
- command vehicle light

## Alley lights

- lighting for the surrounding area (20°)
- search light (0°)

## Cover glass

- white
- blue
- clear
- blue transparent

## LED modules (middle section)



- working light
- additional flasher
- rear warning system
- power flash

## Basic lightbar

<b>Possible lengths</b>
700, 1100, 1200, 1400, 1600, 1800 mm

<b>Main beacon (HKL)</b>	
Function	
Main beacon (blue)	<ul style="list-style-type: none"> <li>• high-power LEDs with wide angle lenses</li> <li>• class 2 homologation with automatic day/night switching</li> <li>• integrated function monitoring</li> <li>• flash pattern: strobe flash</li> <li>• optional: signal light: command vehicle light green, fourfold on the main beacons (flashing)</li> <li>• optional: helicopter recognition, fourfold, infrared rotating, for night vision devices</li> <li>• optional: direction indicator, front and rear, in the main beacons*</li> <li>• also available with clear lamp domes</li> </ul>

<b>Control module (KM)</b>	
Function	
Digital control	<ul style="list-style-type: none"> <li>• serial control by 2-wire cable for CAN447 control units (e.g. BE 300, HBE 300)</li> <li>• compatibility of other control units on request</li> </ul>
FireCAN	<ul style="list-style-type: none"> <li>• serial control for FireCAN control units</li> </ul>
Analogue control	<ul style="list-style-type: none"> <li>• converters for analogue control available</li> <li>• analogue control via signal line</li> <li>• for limited range of functions (compatibility on request)</li> </ul>

<b>Roof mounting</b>		
Function		
	Rubber mouldings	<ul style="list-style-type: none"> <li>• for flat or curved vehicle roofs</li> </ul>
	Mounting brackets	<ul style="list-style-type: none"> <li>• universal and various vehicle-specific models available</li> </ul>



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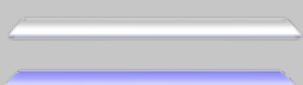
# DBS 5000

Electrical connection	
Function	
Cable outlet	<ul style="list-style-type: none"> <li>• cable outlet, passenger side: standard</li> <li>• cable outlet, driver side</li> <li>• separate cable outlet (power supply and signal line are laid separately)</li> <li>• vehicle-specific electrical connections on request</li> </ul>

## Options

Acoustics		
Function		Possible for
Undercarriage loudspeaker	<ul style="list-style-type: none"> <li>• undercarriage loudspeaker directed towards the rear and/or the front for public address</li> <li>• external amplifier and cable harness required</li> </ul>	<ul style="list-style-type: none"> <li>• 12 V</li> <li>• 24 V</li> </ul>
Martin compressor system	<ul style="list-style-type: none"> <li>• external Martin compressor with 4 diaphragm acoustic horns, mounted on the lightbar</li> </ul>	<ul style="list-style-type: none"> <li>• 12 V</li> <li>• 24 V</li> </ul>

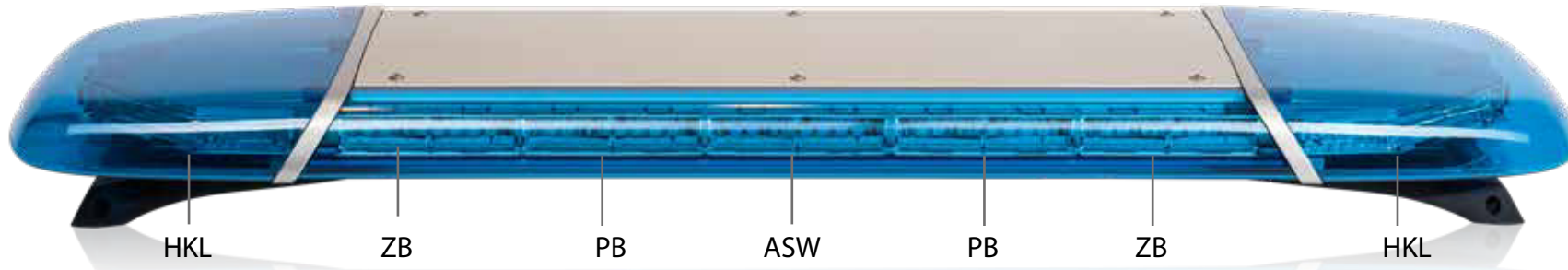
Alley lights (side lights)			
Function			Possible for
	Lighting for surrounding area	<ul style="list-style-type: none"> <li>• colour: white</li> <li>• tilt angle: 20°</li> <li>• mounted in pairs (left and right)</li> </ul>	<ul style="list-style-type: none"> <li>• 12 V</li> <li>• 24 V</li> </ul>
	Search lights	<ul style="list-style-type: none"> <li>• colour: white</li> <li>• without tilt angle</li> <li>• mounted in pairs (left and right)</li> </ul>	<ul style="list-style-type: none"> <li>• 12 V</li> <li>• 24 V</li> </ul>

Cover glass		
Description		
	Cover glass in full colour: <ul style="list-style-type: none"> <li>• white (RAL 9010)</li> <li>• blue (RAL 5017)</li> </ul>	
	Cover glass, transparent: <ul style="list-style-type: none"> <li>• clear</li> <li>• blue transparent</li> </ul>	<ul style="list-style-type: none"> <li>• clear or tinted transparent cover glass</li> <li>• required when middle modules are mounted</li> </ul>

## Middle modules

### Options - front mounting

Configuration example



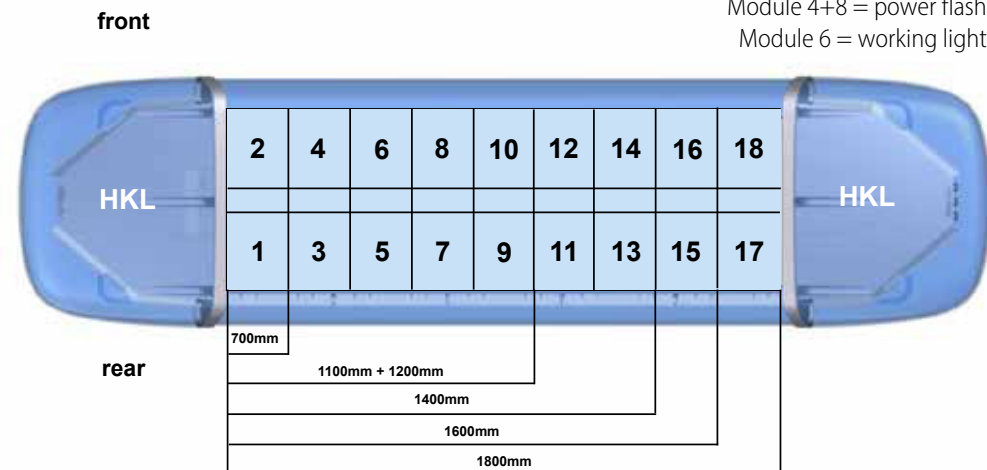
### Overview of module slots

Configuration example for 1100 mm:

- Module 2+10 = additional flashers
- Module 4+8 = power flash
- Module 6 = working light



Additional flasher (ZB), working light (ASW) and power flash (PB)*	
Function	
Additional flashers (pair) max. 3 pairs, depending on the length	<ul style="list-style-type: none"> <li>a module consists of 9 blue LEDs in the reflector housing</li> <li>directional</li> <li>synchronisation with respective main flasher</li> <li>reduced in night mode</li> </ul>
Working light (0°) (up to 4 pcs. per lightbar)	<ul style="list-style-type: none"> <li>9 white LEDs in the reflector housing</li> <li>selectable mounting position</li> <li>1500 lumens</li> </ul>
Power flash	<ul style="list-style-type: none"> <li>a module consists of 9 blue LEDs in the reflector housing</li> <li>directional</li> <li>optimised for distance effect</li> </ul>
*max. 6 modules possible	



# DBS 5000

## Middle modules

### Options - rear mounting

Configuration example



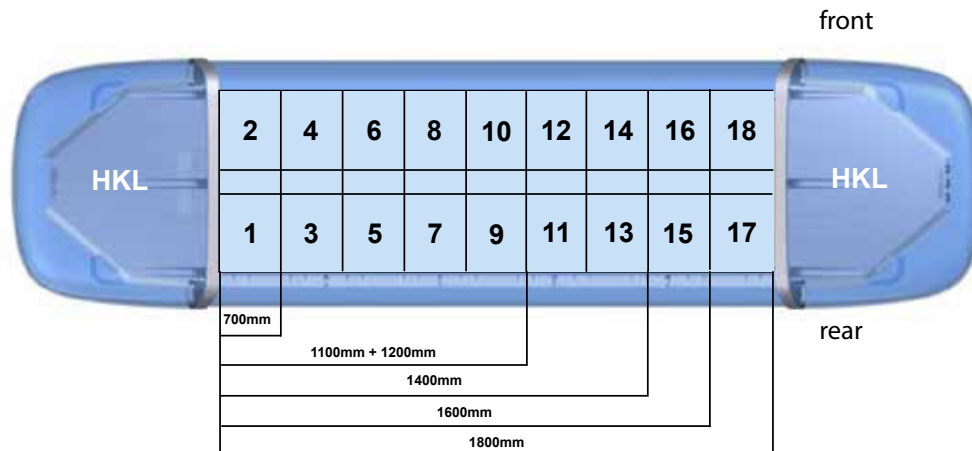
### Overview of module slots

#### Configuration example for 1100 mm:

- Module 1+9 = additional flashers
- Module 3+7 = rear warning system
- Module 5 = working light



driving direction



Additional flasher (ZB), working light (ASW), rear warning system (HWS) * and traffic advisor (VLE)	
Function	
Additional flashers (pair) max. 3 pairs, depending on the length	<ul style="list-style-type: none"> <li>a module consists of 9 blue LEDs in the reflector housing</li> <li>directional</li> <li>synchronisation with respective main flasher</li> <li>reduced in night mode</li> </ul>
Working light (0°) (up to 4 pcs. per lightbar)	<ul style="list-style-type: none"> <li>9 white LEDs in the reflector housing</li> <li>selectable mounting position</li> <li>1500 lumens</li> </ul>
Rear warning system (2, 4 or 6 modules possible)	<ul style="list-style-type: none"> <li>a module consists of 9 amber LEDs in the reflector housing</li> <li>directional</li> <li>available only in pairs (mounted left and right)</li> </ul>
Traffic advisor (special approval required)	<ul style="list-style-type: none"> <li>consists of 5 or 6 middle modules with 9 amber LEDs each</li> <li>directional flashing sequences possible</li> <li>including flash pattern for rear warning system</li> </ul>
*max. 6 modules possible	



## Special function

### Convoy

- "convoy front" switches the rear part of the main beacon (HKL) and the rear additional flasher (ZB) off in order not to blind the following traffic
- "convoy rear" switches the front part of the main beacon (HKL) and the front additional flasher (ZB) off in order not to blind the traffic travelling ahead
- the control unit has to support the "convoy" function





# DBS 5000

can switch between blue and amber

The bicoloured lightbar system DBS 5000 can be switched between blue and amber.

The blue warning signal is used to clear a path on the way to the destination.

The beacon can be switched to amber at the destination in order to act as a warning signal to secure the area.



## PRODUCT FEATURES:

- can switch between blue and amber
- both colours are homologated according to ECE-R 65
- blue: can be used to indicate the right-of-way while driving
- amber: can be used as a warning signal at the destination
- blue additional flasher
- amber additional flasher
- direction indicator\*
- working light
- alley lights
- rear warning system (amber)
- power flash (blue)
- day/night switching
- partially integration of compressor horns possible
- installation of undercarriage loudspeakers possible

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Rear warning system: Light according to ECE-R 65:	XA1 (E1) 00 4471
Power flash: light according to TA 13a:	~ K 1427