## LIGHT SIGNAL ALARM SYSTEM for ER

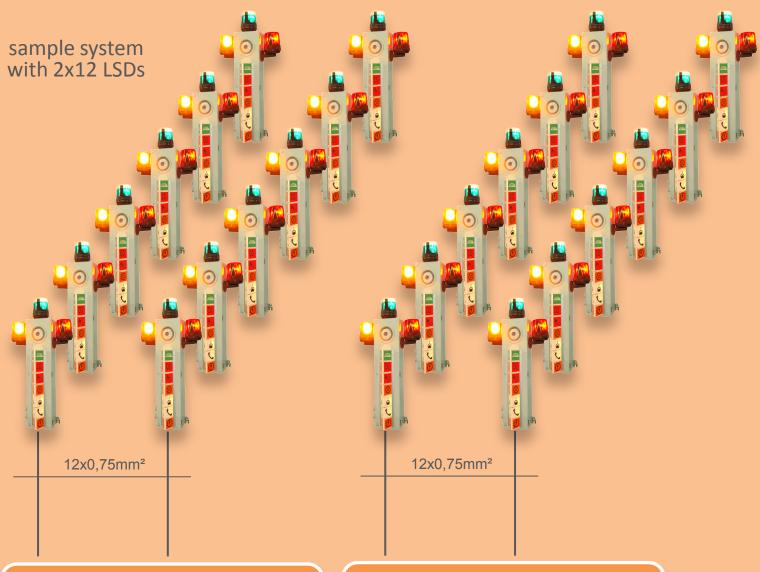
#### with high signalling Light Signal Devices



LED & triac technology available

- √ digital sound processing
- ✓ multiple acoustics philosophies
- ✓ 80 up to 120dB(A) sound pressure
- √ mini-PLC based compact control unit

# LIGHT SIGNAL ALARM SYSTEM for ER



two independant control units (LSCUs) do service one half each of installed alarm devices





POWER POWER SUPPLY SUPPLY (MSB) (ESB)

DRY N/O CONTACTS FROM SYSTEM CORRESPONDING SYSTEMS FAILURE





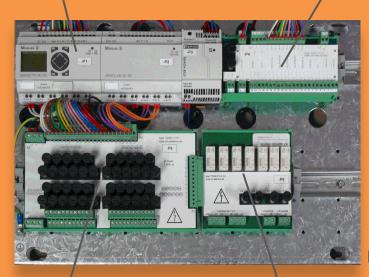
POWER POWER SUPPLY (MSB) (ESB)

DRY N/O CONTACTS FROM SYSTEM CORRESPONDING SYSTEMS FAILURE



mini-PLC with info display

input module with 2-pole plug terminals



basic LSCU to serve 32 LSDs

LSCU 210.1.4.8

output module with 4 micro-fuse secured output lines

ESB / MSB power supply change-over module (16A) (optional)

#### technical data & features:

- ✓ only one power supply 230VAC, 115VAC or 24VDC is required
- ✓ clever commissioning and test features reduce start-up work
- ✓ individual acoustics delay settings adjustable by user
- ✓ compact design (482x320mm, weight: 5,56kg, IP20)
- ✓ suitable wall box is available (600x600x210mm, IP66)
- ✓ max. output current: 1,25A (each channel)
- ✓ external wiring type: max. 2,5mm²
- ✓ numbers of controlled LSDs: unlimitted
- ✓ corresponding systems: dry n/o contacts (24VDC / 50mA) required
- ✓ online user manual @ www.sm-electrics.de

#### **Light Signal Devices LSD 209 - standard**

no internal wiring due to common PCB which serves all triangular lights! system voltage: 230VAC, 115VAC or 24VDC, degree of enclosure: real IP55

LSD 209.x.3.1



- ≥ acc. to SeeBG
- ➤ 1 sounder with 2 frequencies 4 different sound characteristics max. 117dB(A) sound level
- > sound level adjustable
- > x = 3...8 triangular lights
- ➤ 3 high signalling 3-lense rotating lights

LSD 209.x.2.1



- > acc. to IMO / SOLAS
- ➤ 1 sounder with 2 frequencies 4 different sound characteristics max. 117dB(A) sound level
- > sound level adjustable
- > x = 3...8 triangular lights
- ➤ 2 high signalling 3-lense rotating lights

LSD 209.x.0.1



- > acc. to IMO / SOLAS
- ➤ 1 sounder with 2 frequencies 4 different sound characteristics max. 117dB(A) sound level
- > sound level adjustable
- > x = 3...8 triangular lights

#### Light Signal Devices LSD 309 dac, dynamic acoustics control

μp based acoustics controller w. digital signal processing generates individually sounder's soft start system voltage: 230VAC, 115VAC or 24VDC, degree of enclosure: real IP55

LSD 309.x.3.1 dac



- acc. to SeeBG
- ➤ 1 sounder with 5 frequencies 8 different sound characteristics max. 117dB(A) sound level
- ➤ digital signal processing with soft start
- x = 3...8 triangular lights
- ➤ 3 high signalling 3-lense rotating lights

LSD 309.x.2.1 dac



- > acc. to IMO / SOLAS
- ➤ 1 sounder with 5 frequencies 8 different sound characteristics max. 117dB(A) sound level
- digital signal processing with soft start
- x = 3...8 triangular lights
- ➤ 2 high signalling 3-lense rotating lights

LSD 309.x.0.1 dac



- > acc. to IMO / SOLAS
- 1 sounder with 5 frequencies 8 different sound characteristics max. 117dB(A) sound level
- digital signal processing with soft start
- $\Rightarrow$  x = 3...8 triangular lights

#### Light Signal Devices LSD 210 - special edition

twin bulbs for all triangular lights system voltage: 230VAC, 115VAC or 24VDC, degree of enclosure: real IP55

LSD 210.x.3.1



- acc. to SeeBO
- ➤ 1 sounder with 4 frequencies 4 different sound characteristics max. 118dB(A) sound level
- > sound level adjustable
- > x = 3...10 triangular lights
- ➤ 3 high signalling 3-lense rotating lights

LSD 210.x.2.1



- > acc. to IMO / SOLAS
- ➤ 1 sounder with 4 frequencies 4 different sound characteristics max. 118dB(A) sound level
- > sound level adjustable
- > x = 3...10 triangular lights
- ➤ 2 high signalling 3-lense rotating lights

LSD 210.x.0.1



- > acc. to IMO / SOLAS
- ➤ 1 sounder with 4 frequencies 4 different sound characteristics max. 118dB(A) sound level
- > sound level adjustable
- > x = 3...10 triangular lights

LSD 210.4.3.1



- ➤ acc. to SeeBG
- ➤ 1 sounder with 4 frequencies 4 different sound characteristics max. 118dB(A) sound level
- > sound level adjustable
- ➤ 3 high signalling 3-lense rotating lights

LSD 210.x.0.0



> acc. to IMO / SOLAS > x = 3...10 triangular lights LSD 210.80.0.0 indication panel



- > power supply: 230VAC, 115VAC or 24VDC
- > panel for console mounting
- > up to 9 symbols
- > twin bulbs or LEDs
- > integrated electronic buzzer (rear side)
- > 144x144x70mm, IP 23



#### triangular light symbols

- √ listed symbols are in stock
- √ all individual symbols are available



CO2 ALARM



**GENERAL ALARM** 



**EOT CALL** 



**FIRE ALARM** 



HOSPITAL CALL



**INTERCOM CALL** 



**FIRE ALARM ER** 



MAN OVER BOARD



**ENGINEER CALL** 



HI FOG ALARM



**STEERING GEAR** 



**TELEPHONE CALL** 





**SPRINKLER ALARM** 



**SPT CALL** 



**NOVEC ALARM** 



WATCH ALARM ER



**BRIDGE ALARM** 



**WATER FOG** 



**BILGE ALARM** 



**WATCH ALARM** 



**WATER MIST** 



**ENGINE ALARM** 



**COLD STORE ALARM**