

LOPOLIGHT

CONTROL & MONITORING SYSTEM



THE COMPLETE LED NAVIGATION LIGHT CONTROL & MONITORING SYSTEM

An introduction to - and overview of - the various type approved modules available to vessels of all types and sizes.

CONTROL & MONITORING SYSTEM SOLUTIONS

Reliable and precise monitoring of your navigation lights is needed both for safety - and it is required by the authorities, such as Class, Flag, Maritime authorities and IMO.

Lopolight offers a broad range of navigation light control and monitoring (NLC) solutions that satisfies the needs of any maritime professional, any vessel of any size. The system is modular, allowing you to select required modules, whilst maintaining the safety of the ship and compliance with the relevant rules and standards. For simplicity we have grouped the elements into modules. So you really need only to make 3 choices to get to your solution.

1. How you want to power the NLC

2. How many lights to control

3. Which control head you want

Please note - The Lopolight NLC solution only works with Lopolight Navigation Lights.



Primary Power-supply
100-260 VAC. 18-32VDC



Isolate DC/DC converter

POWER SUPPLY

For classed vessels we offer class approved power supplies from Phoenix®, with options of AC or DC. Extra large power supplies available for Ice Class installations.

Part numbers:

500-200-1AC
500-202-2AC
500-203-1AC/1DC
500-204-2DC
500-205-2AC Ice class

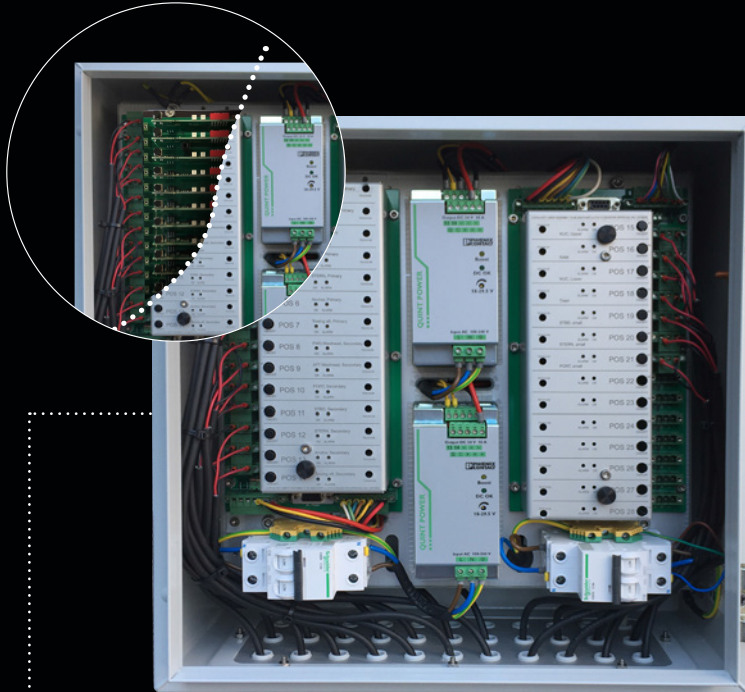
Alternatively we have a more compact option of high quality DC/DC power supply from Victron®

Part numbers:

500-210-1DC
500-211-2DC
500-212-2DC Ice class
500-213-No power supply

NAVIGATION LIGHT CONTROLLER

This is the core of the system for controlling and monitoring your nav lights – with the unique Lopolight monitor relay, one for each light. The system is scalable from 4 up to 60 lights.



CABINET OPTION

The cabinet is an optional IP66 enclosure. Available in 2 sizes.

FULL SIZE

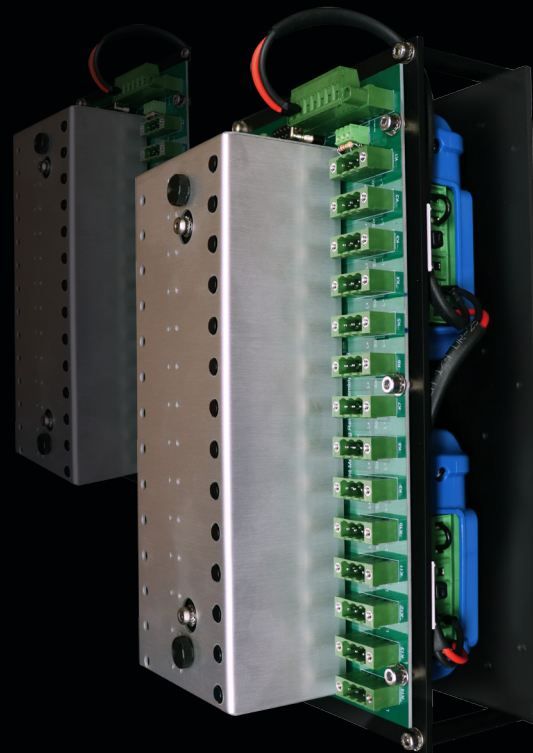
Required for the Phoenix® power supplies. Each full size system holds up to 28 relays, several systems can be combined up to 60 outputs

COMPACT

Ideal for installations where space is at a premium and power supply is DC. Each compact system holds up to 14 relays, several systems can be combined up to 60 outputs.

Part numbers:
500-100-XX/core NLC

*XX is the number of lights.
This NLC will control, a double
light counts as 2 lights.*



CONTROL OPTIONS

To control your NLC you have several choices.



PUSH BUTTON PANEL

The classic robust panel is available in 3 sizes depending on the number of lights to control 14, 21 and 28. Each panel has 4 group functions for single operation of light configurations such as Running, Anchor, R.A.M. and N.U.C. Lights can be paired automatic backup and both light light failure or power failure is constantly monitored with both audible and visible warning. You can pair the lights and any alarms are both visible and audible.

The panel has a RS-232 port that can be used for remote output/input. A NMEA 0183 interface is built-in offering status output for alarm handling systems, VDR and AMS.

More than one panel can be connected to a system allowing easy control for a double bridge installation on vessels such as double ended ferries.

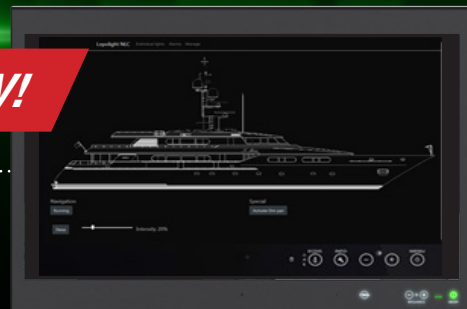
Remote control can easily be established via the Remote Relay Control Module, or if a classic mimic is required the Smart Controller is available.

For Navy and SAR vessels special versions of these panels with nav light dimming function are available. The panels can be water-proofed to IP67. Each panel is engraved to customer specification in language of choice.

Part numbers:

500-110-14 Push Button Control Panel, 14 lights
500-110-21 Push Button Control Panel, 21 lights
500-110-28 Push Button Control Panel, 28 lights
500-121 Smart Controller
500-145 Remote Relay Control Module

NEW!



MIMIC PANEL

The latest addition to our range is the interactive MIMIC panel.

As the name indicates it presents a mimic of your vessel and through the touch interface is directly controllable from the screen.

With an unlimited number of light groups, possibility of creating group interactions such as when the anchor lights are activated, the running light will turn off, this mimic panel is extremely versatile.

A comprehensive alarm log is readily accessible for the oncoming watch.

The mimic panel is powered by a compact Linux computer sitting at the NLC core. It works as a webserver (TCP/IP).

If more than one screen(client) is needed, then you just add a client computer that will connect to the web-server, and provide relevant alarm functions.

The mimic panel system is also an excellent choice for autonomous vessels.

The computer (either webserver or dedicated client) connects to the monitor via DP or DVI and USB for touch. Lopolight can supply the monitor or we can connect to an already existing monitor.

Based on a line drawing (side view) of your vessel we will create a mimic, set-up your lights - and the system will be ready to go!

Part numbers:

500-140 MIMIC webserver/client
500-141 Client computer
500-130-10 10,4" Touchscreen
500-130-13 13" Touchscreen
500-130-15 15" Touchscreen
500-130-24 24" Touchscreen

TRUSTED BY PROFESSIONALS WORLDWIDE

Several hundred vessels have trusted Lopolight to supply complete navigation light systems including the crucial control and monitoring system.



NEW YORK TO STATEN ISLAND FERRIES

Chose Lopolight Ice-Class lights for their double ender ferries with dual bridges and tell-tale panels in the engineering rooms



SUPER YACHTS

With compact combination of lights, meeting class requirements and integration to glass bridge systems



WORKBOAT

Self-propelled Heavy lift crane with over 50 nav lights and 2 bridges



ICE-CLASS PELAGIC TRAWLERS

Working in Arctic waters - de-icing is crucial. Easy management of fishing lights was important to the customer

NAVIGATION CONTROL PANEL

NLC equipment is compact and can be placed away from controls. Easy integration to vessel bridge systems



"A TURN-KEY PROVIDER OF ROBUST FUTURE-PROOF AND TYPE APPROVED NAVIGATION LIGHT SYSTEMS"

FEATURES

Type & class approved

Modular and Scalable

Group Functions

Audible and Visual Alarm

Multivoltage

Automatic switching from primary to back-up light

Full ice-class control & monitoring System

Ice-class heater and nav light on same 2-lead cable

Pre-heating of ice-class lights

Control & monitors dimmable nav lights (Navy/SAR only)

External communications

Ready for autonomous vessel operation

SRTP ready

BENEFITS

Tested and approved to IMO 253(83), IEC60945, IACS10 and MIL STD 461F, type approved by Lloyds Register and ABS

From 4 to 60 lights - our system can grow with you from the simplest installation to the most complex communication solution, from single controls to multiple mimic panels.

Provides single operation of multiple lights. ex: Press one button and port, starboard, stern and masthead come on

Instant notification of power or light failure

Connects to ships power, any supply from 24VDC to 264VAC

Without human intervention the system will detect and correct a failure event

System retains full monitoring and control even when the thermostat controlled ice class nav lights are switching between heating and not

Retro-fit ready - no additional cable or labor cost to install ice class lighting

Optional pre-heating of lights, ensuring that ice-class signal light are always ready for deployment

11 step dimming of the nav lights can be activated on a light group, or individually. Even in dimmed state the nav lights are precisely monitored.

Our modular systems provide multiple communication protocols from VDR ready signals to TCP/IP

With the Mimic panel it is exceptionally easy to control the nav lights remotely

Fully compliant to Safe Return To Port requirements

ALL OUR PRODUCTS ARE DESIGNED TO PROVIDE SAFTY AT SEA, THE SYSTEMS ARE SIMPLE, STRAIGHT FORWARD AND INTUITVE. THEY ALLOW OPERATORS TO CONCENTRATE ON THE TASK AT HAND OFFERING THE UTMOST SECURITY FOR YOUR VESSEL AND CREW.

LOPOLIGHT
PROFESSIONAL SERIES



THE ULTIMATE NAVIGATION LIGHT

The specialist in LED Navigation Lighting presents the ultimate navigation light for commercial vessels.

Strong experience from over 150.000 LED Navigation Lights produced, enables Lopolight to offer a better level of quality, better reliability, stronger service and installation flexibility than ever seen:

The Lopolight Professional Series is:

- LED technology
- Up to 100.000 hours lifetime for an installation
- Full range for all vessel sizes and vessel types
- Fully waterproof, IP 68
- Completely vibration safe
- High quality components
- Worldwide approval – MED Wheelmarked
- 5 year warranty

Options:

- Ice class versions with built-in defrosters
- Dimmable versions for NAVY & SAR





Type approval by Lloyds Register

MED Wheelmark

UL 1104 tested

Vibrationsafe
- all components are
embedded in epoxy

Precision machined
Aluminium body

High quality OSRAM
LED's ensuring long life

AC or DC
versions available

5 years warranty
Global service
network

Submersible
- light is completely
sealed to IP68

Built-in microprocessor
will alert when end-of-life of the
light is approaching

Black Anodised for
ultimate protection

Base in high density PE for
complete galvanic isolation
(not shown)



PROFESSIONAL SERIES RANGE.

The Lopolight range has over 70 different LED Navigation lights for all possible ship sizes and applications. The Professional series is selected from specially from this range and ruggedized with thicker and harder anodizing.

VESSEL LENGTH	OVER 50 METER	UNDER 50 METER	
	Double lights	Double lights	Single lights
Masthead light	300-138-PRO	300-038-PRO	300-036-PRO
Port side light	301-109ST-PRO	301-009ST-PRO	301-009-PRO
Starboard side light	301-108ST-PRO	301-008ST-PRO	301-008-PRO
Stern light	301-105ST-PRO	301-005ST-PRO	301-005-PRO
360 degree white	300-112ST-PRO	200-012ST-PRO	200-012-PRO
360 degree red	300-114ST-PRO	200-014ST-PRO	200-014-PRO
360 degree green	300-115ST-PRO	200-015ST-PRO	200-015-PRO
180 degree white	300-124ST-PRO	200-024ST-PRO	200-024-PRO
180 degree red	300-116ST-PRO	200-016ST-PRO	200-016-PRO
180 degree green	300-118ST-PRO	200-018ST-PRO	200-018-PRO
Maneuvering light	200-064-PRO (single light) 200-064ST-PRO (double light)		

To ensure that the correct light plan is created for your vessel we propose to have our specialists:

- Receive your GA drawing (data is handled confidentially)
- Based on the GA create a specific light plan proposal including control & monitoring system
- Submit drawings of all fittings, in 2D or 3D
- Engage in a dialogue to ensure the perfect fit for your needs
- Data collected will follow the project from light plan to delivery ensuring precision

LOPOLIGHT

DECK - SPREADER - INTERIOR LIGHTS



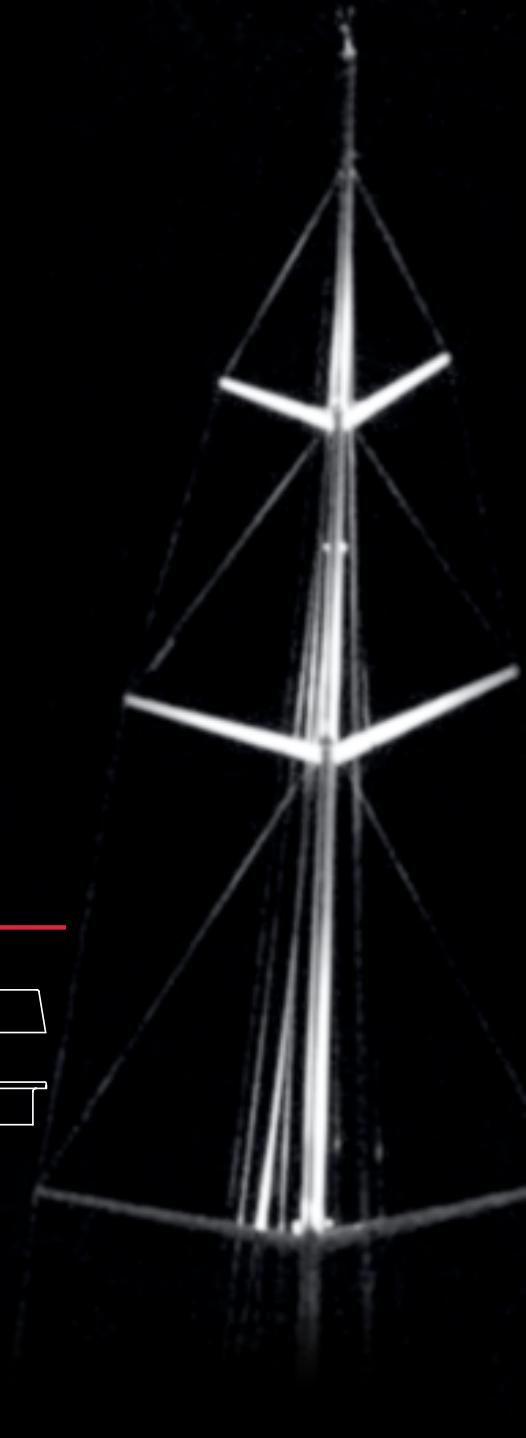
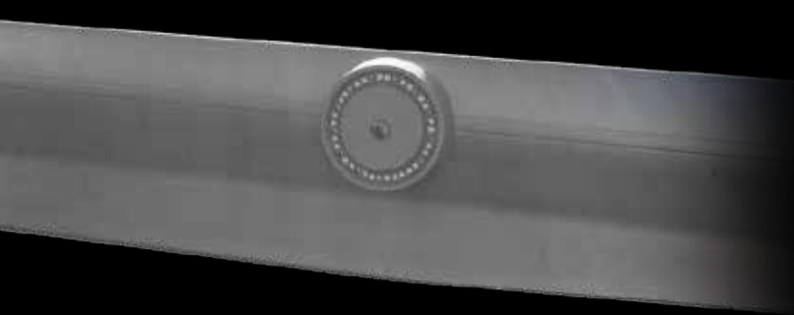
DECK – SPREADER – INTERIOR LIGHTS

Waterproof, rugged, minimalistic, iconic design are the common denominators for the Lopolight range of lights for illumination. All the lights are potted out with epoxy/polyurethane and are vibration proof in addition to the IP68 water proofing.

The materials used are high quality LED's from Cree or Nichia set in paintable silver or black anodized housings with solid driver electronics. As usual we are backing these promises with a strong 5 year warranty.

THE LOW PROFILE SERIES

2 basic shapes – surface or flush mount. These extremely low profile lights are emitting light so they for some versions challenge the light output of a 20W Halogen lamp – whilst only consuming 2,4W. All lights in this series are dimmable.



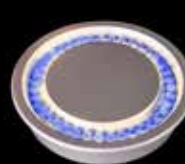
P/N 400-120



P/N 400-122



P/N 400-139



P/N 400-140



Rear side



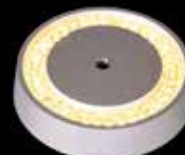
1: P/N 400-121



P/N 400-123



P/N 400-125



P/N 400-124

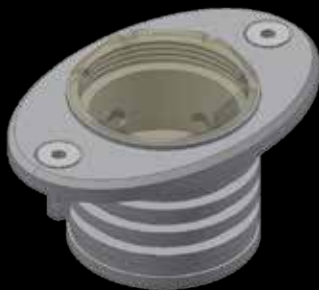


Dimmer
P/N 400-126

THE PERFECT SPREADER LIGHT

6 Watt white high intensity LED light that can be focused to 74°, 36°, 26° or even 6° light beam angles, perfect for up and down lighting mast application. The 10° multi adjustable wedge, supplied with the light ensures a simple and effective installation on all masts. The reflectors can be changed even after installation. Easy and hugely effective.

The light is also available in a flush mount version for in-boom or in-spreader mounting



THE ULTIMATIVE SPREADER LIGHT

Built for the largest and most demanding applications this 30W LED is extremely intense. Each of the 3 LED clusters can be individually configured to 74°, 36°, 26° or even 6° light beam (see picture).

The light can be dimmed, using the built-in communication bus. Reducing cable runs on multiple light installation, reducing weight and giving a simpler installation. For larger installations we even have a control panel.



SPECIFICATIONS

Light colour	Mounting	Power (Watt)	Light beam (Degrees)	Intensity (Lumens)	Voltage (DC)	Dimensions (mm)	Housing colour (anodised)	Part number
THE LOW PROFILE SERIES								
White	Surface mount	2,4W	30°	250 lm	10-32	Ø65x14	Silver	400-120
White	Surface mount	2,4W	30°	250 lm	10-32	Ø65x14	Black-HC	400-120-B
White	Flush mount	2,4W	30°	250 lm	10-32	Ø65x2 + 12	Silver	400-121
White	Flush mount	2,4W	30°	250 lm	10-32	Ø65x2 + 12	Black-HC	400-121-B
White/red	Surface mount	2,4W	30°	170 lm	10-32	Ø65x14	Silver	400-122
White/red	Surface mount	2,4W	30°	170 lm	10-32	Ø65x14	Black-HC	400-122-B
White/red	Flush mount	2,4W	30°	170 lm	10-32	Ø65x2 + 12	Silver	400-123
White/red	Flush mount	2,4W	30°	170 lm	10-32	Ø65x2 + 12	Black-HC	400-123-B
White/blue	Flush mount	2,4W	30°	170 lm	10-32	Ø65x2 + 12	Silver	400-140
Red	Surface mount	2,0W	30°	300 lm	10-32	Ø65x14	Silver	400-125
Red	Surface mount w/2.5M cable	2,0W	30°	300 lm	10-32	Ø65x14	Silver	400-125 2.5M
Red	Surface mount	2,0W	30°	300 lm	10-32	Ø65x14	Black-HC	400-125-B
Green	Surface mount	2,4W	30°	300 lm	10-32	Ø65x14	Silver	400-139
Green	Flush mount	2,4W	30°	300 lm	10-32	Ø65x2 + 12	Silver	400-128
White	Spreader light - Surface	2,4W	30°	250 lm	10-32	Ø65x14	Silver	400-124
White	Spreader light - Surface	2,4W	30°	250 lm	10-32	Ø65x14	Black-HC	400-124-B

THE PERFECT SPREADER AND BOOM LIGHT

White	Surface mount	6W	6°	1200 lm	10-32	Ø42x57*	Silver	400-082-06
White	Surface mount	6W	6°	1200 lm	10-32	Ø42x57*	Black-HC	400-082-06-B
White	Surface mount	6W	26°	1200 lm	10-32	Ø42x57*	Silver	400-082-26
White	Surface mount	6W	26°	1200 lm	10-32	Ø42x57*	Black-HC	400-082-26-B
White	Surface mount	6W	36°	1200 lm	10-32	Ø42x57*	Silver	400-082-36
White	Surface mount	6W	36°	1200 lm	10-32	Ø42x57*	Black-HC	400-082-36-B
White	Surface mount	6W	74°	1200 lm	10-32	Ø42x57*	Silver	400-082-74
White	Surface mount	6W	74°	1200 lm	10-32	Ø42x57*	Black-HC	400-082-74-B
White	Flush mount	6W	6°	1200 lm	10-32	Ø42x57*	Silver	400-083-06
White	Flush mount	6W	6°	1200 lm	10-32	Ø42x57*	Black-HC	400-083-06-B
White	Flush mount	6W	26°	1200 lm	10-32	Ø42x57*	Silver	400-083-26
White	Flush mount	6W	26°	1200 lm	10-32	Ø42x57*	Black-HC	400-083-26-B
White	Flush mount	6W	36°	1200 lm	10-32	Ø42x57*	Silver	400-083-36
White	Flush mount	6W	36°	1200 lm	10-32	Ø42x57*	Black-HC	400-083-36-B
White	Flush mount	6W	74°	1200 lm	10-32	Ø42x57*	Silver	400-083-74
White	Flush mount	6W	74°	1200 lm	10-32	Ø42x57*	Black-HC	400-083-74-B

THE ULTIMATIVE SPREADER LIGHT

White	Surface mount	30W	6°	6000 lm	10-32	90 x 55*	Silver	400-080-06
White	Surface mount	30W	6°	6000 lm	10-32	90 x 55*	Black-HC	400-080-06-B
White	Surface mount	30W	26°	6000 lm	10-32	90 x 55*	Silver	400-080-26
White	Surface mount	30W	26°	6000 lm	10-32	90 x 55*	Black-HC	400-080-26-B
White	Surface mount	30W	36°	6000 lm	10-32	90 x 55*	Silver	400-080-36
White	Surface mount	30W	36°	6000 lm	10-32	90 x 55*	Black-HC	400-080-36-B
White	Surface mount	30W	74°	6000 lm	10-32	90 x 55*	Silver	400-080-74
White	Surface mount	30W	74°	6000 lm	10-32	90 x 55*	Black-HC	400-080-74-B

*) see drawing

LOPOLIGHT



**LED ICE-CLASS
NAV LIGHTS
THAT YOU CAN
DEPEND ON!**

*How it looked
before Ice-Class
Lopolights.*



FINALLY!

AN ICE-CLASS LED NAV LIGHT WITH A BUILT-IN HEATER THAT ACTUALLY WORKS



- BASIC 2-WIRE INSTALLATION
- STANDBY DE-ICING
- PLUG'N PLAY
- COMPLETE MONITORING
- SIMPLE ONE CABLE INSTALL
- LOW POWER REQUIREMENT

STAND-BY DE-ICE FUNCTION

Activate the stand-by de-ice function and keep all relevant Lopolight's ready for use in an ice free condition. Even when light is switched off. This exclusive feature installs in the same 2-wire cabling that is powering the light.

FULLY INTEGRATED DESIGN - PLUG & PLAY, ABS, DNV & USGC APPROVED

The Ice-class feature has no impact to the weight, size, mounting configuration, IP-rating, electrical connections or approvals of the standard Lopolight Navigation Lights. All Lopolight ice class lights are available in a dimmable Navy/SAR version.

SEAMLESS INTEGRATION WITH LOPOLIGHT CONTROL & MONITORING SYSTEMS

The built-in logic- and power control allows full and detailed monitoring of the basic navigation light function, also when full de-icing is active. All functions controlled via 2-wire cabling! - all functions controlled via a correctly configured Lopolight NLC system.

NO ADDITIONAL CABLING REQUIRED - LESS COST AND EASIER TO INSTALL/RE-FIT

Lopolight's low power consumption, combined with the efficient de-ice control, works seamlessly using simple 2-wire cabling. Even dimmable navy installations can be integrated in the same simple cable systems.

LOWEST POWER CONSUMPTION FOR HEATING - ONLY 15 WATTS (20% OF THE COMPETITION)!

The low profile of the lights in combination with heat conducting aluminium, allows for efficient de-icing at low energy usage. Testing to -60°C /-76°F proves full de-icing ability, even under extreme arctic conditions.

TRUSTED BY PROFESSIONALS WORLDWIDE

THE TEAM AT LOPOLIGHT IS IMMENSELY PROUD TO HAVE SUPPLIED FULL ICE-CLASS NAVIGATION LIGHT SOLUTIONS TO:

- 320' New York - Staten Island Ferries
- 509' US Navy, Destroyer
- 174' US Navy, Landing Craft
- 947' LNG tankers
- 400' Mega yachts
- 147' Passenger vessel, Greenland
- 62' Research vessel, Canada
- 268' Shrimp Trawler, Greenland
- 268' Pelagic Trawler, Greenland
- 259' Pelagic Trawler, Alaska
- 111' Tug, USA

Check the NLC brochure on our website for more info on seamless integration of the ice class lights





Product list 2016

Product	Mounting type	Part Number	Double	Mounting base	Baseplate
<u>Power boats under 12 meters (39,4')</u>					
112,5° Green Starboard	Vertical	100-001			
112,5° Red Port	Vertical	100-002			
Combined sidelights	Horizontal	100-003		400-034 (2CS/2CD); 400-035 (4CD)	400-401; 400-402; 400-403
	Vertical	100-004			
135° White Stern light	Horizontal	300-005	300-005ST	400-034 (2CS/2CD); 400-035 (4CD)	400-401; 400-402; 400-403
	Vertical	300-006			
225° White, Masthead	Vertical	200-010			
225° White, Masthead w/decklight	Vertical	200-010DL			
225° White, Masthead & anchor	Horizontal	200-020		400-034 (2CS/2CD); 400-035 (4CD)	400-401; 400-402; 400-403
360° White - Anchor	Vertical	200-012	200-012ST	400-034 (2CS/2CD); 400-035 (4CD)	400-401; 400-402; 400-403
<u>Sailing boats under 12 meters (39,4')</u>					
112,5° Green Starboard	Vertical	100-001			
112,5° Red Port	Vertical	100-002			
Combined sidelights	Horizontal	100-003		400-034 (2CS/2CD); 400-035 (4CD)	400-401; 400-402; 400-403
	Vertical	100-004			
Tricolor	Horizontal	100-005		400-034 (2CS/2CD); 400-035 (4CD)	400-401; 400-402; 400-403
Tricolor w/anchor	Horizontal	100-009		400-034 (2CS/2CD); 400-035 (4CD)	400-401; 400-402; 400-403
225° White, Masthead	Vertical	200-010			
225° White, Masthead w/decklight	Vertical	200-010DL			
225° White, Masthead & stern w/anchor	Horizontal	200-030		400-034 (2CS/2CD); 400-035 (4CD)	400-401; 400-402; 400-403
135° White Stern light	Horizontal	300-005	300-005ST	400-034 (2CS/2CD); 400-035 (4CD)	400-401; 400-402; 400-403
	Vertical	300-006			
360° White - Anchor,	Horizontal	200-012	200-012ST	400-034 (2CS/2CD); 400-035 (4CD)	400-401; 400-402; 400-403



Product list 2016

Product	Mounting type	Part Number	Double	Mounting base	Baseplate
<u>Powered Vessels under 20 meters (66')</u>					
112,5° Green Starboard	Vertical	300-001			
	Horizontal	300-008	300-008ST	400-034 (2CS/2CD); 400-035 (4CD)	400-401; 400-402; 400-403
112,5° Red Port	Vertical	300-002			
	Horizontal	300-009	300-009ST	400-034 (2CS/2CD); 400-035 (4CD)	400-401; 400-402; 400-403
Combined sidelights	Horizontal	200-003		400-034 (2CS/2CD); 400-035 (4CD)	400-401; 400-402; 400-403
	Vertical	200-004			
135° White Stern light	Horizontal	300-005	300-005ST	400-034 (2CS/2CD); 400-035 (4CD)	400-401; 400-402; 400-403
	Vertical	300-006			
225° White, Masthead	Vertical	200-011			
225° White, Masthead w/decklight	Vertical	200-011DL			
225° White, Masthead w/anchor,	Horizontal	200-021		400-034 (2CS/2CD); 400-035 (4CD)	400-401; 400-402; 400-403
360° White - Anchor,	Horizontal	200-012	200-012ST	400-034 (2CS/2CD); 400-035 (4CD)	400-401; 400-402; 400-403
360° White w/strobe,	Horizontal	200-012S		400-034 (2CS/2CD); 400-035 (4CD)	400-401; 400-402; 400-403
360° Red,	Horizontal	200-014	200-014ST	400-034 (2CS/2CD); 400-035 (4CD)	400-401; 400-402; 400-403
1*180° Red	Vertical	200-016	200-016ST		
<u>Sailing Vessels under 20 meters (66')</u>					
112,5° Green Starboard	Vertical	300-001			
	Horizontal	300-008	300-008ST	400-034 (2CS/2CD); 400-035 (4CD)	400-401; 400-402; 400-403
112,5° Red Port	Vertical	300-002			
	Horizontal	300-009	300-009ST	400-034 (2CS/2CD); 400-035 (4CD)	400-401; 400-402; 400-403
Combined sidelights	Horizontal	200-003		400-034 (2CS/2CD); 400-035 (4CD)	400-401; 400-402; 400-403
	Vertical	200-004			
135° White Stern light	Horizontal	300-005	300-005ST	400-034 (2CS/2CD); 400-035 (4CD)	400-401; 400-402; 400-403
	Vertical	300-006			
Tricolor w/anchor & strobe,	Horizontal	200-007S		400-034 (2CS/2CD); 400-035 (4CD)	400-401; 400-402; 400-403
225° White, Masthead	Vertical	200-011			
225° White, Masthead w/decklight	Vertical	200-011DL			
360° White - Anchor,	Horizontal	200-012	200-012ST	400-034 (2CS/2CD); 400-035 (4CD)	400-401; 400-402; 400-403
360° White w/strobe,	Horizontal	200-012S		400-034 (2CS/2CD); 400-035 (4CD)	400-401; 400-402; 400-403
1*180° Red	Vertical	200-016			
1*180° Green	Vertical	200-018			



Product list 2016

Product	Mounting type	Part Number	Double	Mounting base	Baseplate
<u>Vessels under 50 meters (Power or Sail)</u>					
112,5° Green Starboard	Vertical	300-001			
	Horizontal	300-008	300-008ST	400-034 (2CS/2CD); 400-035 (4CD)	400-401; 400-402; 400-403
112,5° Red Port	Vertical	300-002			
	Horizontal	300-009	300-009ST	400-034 (2CS/2CD); 400-035 (4CD)	400-401; 400-402; 400-403
135° White Stern light	Horizontal	300-005	300-005ST	400-034 (2CS/2CD); 400-035 (4CD)	400-401; 400-402; 400-403
	Vertical	300-006			
225° White, Masthead	Vertical	300-037	300-039	At order decide cable back (standard) or cable down (CD)	
	Horizontal	300-036	300-038	Incl .400-034 (2CS/2CD); option 400-035 (4CD)	400-401; 400-402; 400-403
360° White - Anchor,	Horizontal	200-012	200-012ST	400-034 (2CS/2CD); 400-035 (4CD)	400-401; 400-402; 400-403
360° White w/strobe,	Horizontal	200-012S		400-034 (2CS/2CD); 400-035 (4CD)	400-401; 400-402; 400-403
135° Towing light,	Horizontal	200-013	200-013ST	400-034 (2CS/2CD); 400-035 (4CD)	400-401; 400-402; 400-403
360° Red,	Horizontal	200-014	200-014ST	400-034 (2CS/2CD); 400-035 (4CD)	400-401; 400-402; 400-403
360° Green,	Horizontal	200-015	200-015ST	400-034 (2CS/2CD); 400-035 (4CD)	400-401; 400-402; 400-403
1*180° Red	Vertical	200-016	200-016ST		
1*180° Green	Vertical	200-018	200-018ST		
1*180° White	Vertical	200-024	200-024ST		
360° Blue fuelling light,	Horizontal	200-022		400-034 (2CS/2CD); 400-035 (4CD)	400-401; 400-402; 400-403
360° Blue w/strobe	Horizontal	200-022S		400-034 (2CS/2CD); 400-035 (4CD)	400-401; 400-402; 400-403
360° Yellow light	Horizontal	200-023		400-034 (2CS/2CD); 400-035 (4CD)	400-401; 400-402; 400-403
360° Yellow light w/strobe	Horizontal	200-023S		400-034 (2CS/2CD); 400-035 (4CD)	400-401; 400-402; 400-403
135° Red Suez light	Horizontal	200-031		400-034 (2CS/2CD); 400-035 (4CD)	400-401; 400-402; 400-403



Product list 2016

Product	Mounting type	Part Number	Double	Mounting base	Baseplate
<u>Vessels over 50 meters (Power or Sail)</u>					
112,5° Green Starboard	Vertical	300-101	300-101ST		
	Horizontal	300-108	300-108ST	Incl .400-034 (2CS/2CD); option 400-035 (4CD)	400-401; 400-402; 400-403
112,5° Red Port	Vertical	300-102	300-102ST		
	Horizontal	300-109	300-109ST	Incl .400-034 (2CS/2CD); option 400-035 (4CD)	400-401; 400-402; 400-403
135° White Stern light	Vertical	300-106	300-106ST		
	Horizontal	300-105	300-105ST	Incl .400-034 (2CS/2CD); option 400-035 (4CD)	400-401; 400-402; 400-403
225° White Masthead, double light	Vertical	300-137	300-139	At order decide cable back (standard) or cable down (CD)	
	Horizontal	300-136	300-138	Incl .400-034 (2CS/2CD); option 400-035 (4CD)	400-401; 400-402; 400-403
360° White anchor light, cable side		300-112	300-112ST	Incl .400-034 (2CS/2CD); option 400-035 (4CD)	400-401; 400-402; 400-403
360° Red, cable side		300-114	300-114ST	Incl .400-034 (2CS/2CD); option 400-035 (4CD)	400-401; 400-402; 400-403
360° Green, cable side		300-115	300-115ST	Incl .400-034 (2CS/2CD); option 400-035 (4CD)	400-401; 400-402; 400-403
1*180° Red,		300-116	300-116ST		
1*180° Green,		300-118	300-118ST		
1*180° White,		300-124	300-124ST		
135° Yellow Towing light	Vertical	300-107			
	Horizontal	300113	300-113ST	Incl .400-034 (2CS/2CD); option 400-035 (4CD)	400-401; 400-402; 400-403
360° White Manouvering Light, cable side	Horizontal	200-064			
60° Blue steering light (Panama Canal)	Horizontal	300-140		Incl .400-034 (2CS/2CD); option 400-035 (4CD)	400-401; 400-402; 400-403



LOPOLIGHT
Product list 2016

Product	Mounting type	Part Number	Double	Mounting base	Baseplate
Deck/interior lights					
Deck/interior White, surface mount, dimmable		400-120			
Deck/interior White, flush mount, dimmable		400-121			
Deck/interior White & Red functions, surface mount, di		400-122			
Deck/interior White & Red functions, flush mount, dimmable		400-123			
Deck/interior Red, surface mount, dimmable		400-125			
Spreader/Deck lights					
3W spreader/deck light 30°, dimmable		400-124			
6W High power spreader/deck light, 6°, dimmable * NEW		400-082-06			
6W High power spreader/deck light, 26°, dimmable * NEW		400-082-26			
6W High power spreader/deck light, 36°, dimmable * NEW		400-082-36			
6W High power spreader/deck light, 74°, dimmable * NEW		400-082-74			
30W High power spreader/deck light, 6°, dimmable		400-080-06			
30W High power spreader/deck light, 26°, dimmable		400-080-26			
30W High power spreader/deck light, 36°, dimmable		400-080-36			
30W High power spreader/deck light, 74°, dimmable		400-080-74			
Floodlights					
Floodlight - WMS, 20W LED, 2000cd, 30° light beam		400-072			
Floodlight w/PIR sensor, 20W LED, 2000cd, 30° light beam		400-070			
Floodlight w/Emergency light, 20W LED, 2000cd, 30° beam		400-071			
Cables					
Marine grade shielded cable 2 x 0,5mm ² price per meter		400-300			