

**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.

- 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.





# 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

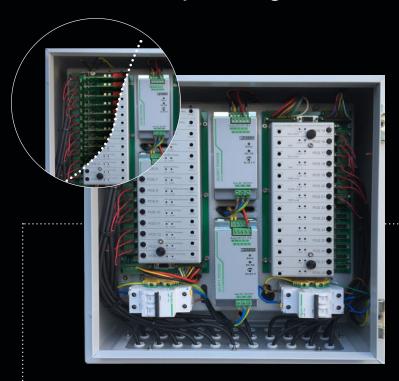
Alternatively we have a more compact option of high quality DC/DC power supply from Victron®

#### 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**

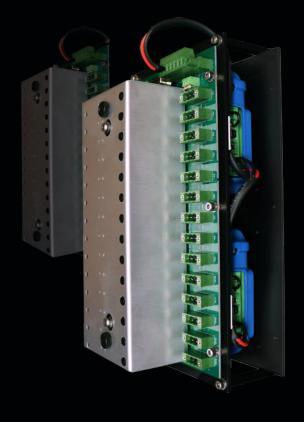
Required for the Phoenix® power supplies. Each full size system holds up to 28 relays, several systems can be combined up to 60 outputs

## **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

## 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.



integration to glass bridge systems

#### **WORKBOAT**

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

#### ICE-CLASS PELAGIC TRAWLERS

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	BENEFITS
Type & class approved	Tested and approved to IMO 253(83), IEC60945, IACS10 and MIL STD 461F, type approved by Lloyds Register and ABS
Modular and Scalable	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.
Group Functions	Provides single operation of multiple lights. ex: Press one button and port, starboard, stern and masthead come on
Audible and Visual Alarm	Instant notification of power or light failure
Multivoltage	Connects to ships power, any supply from 24VDC to 264VAC
Automatic switching from primary to back-up light	Without human intervention the system will detect and correct a failure event
Full ice-class control & monitoring System	System retains full monitoring and control even when the thermostat controlled ice class nav lights are switching between heating and not
Ice-class heater and nav light on same 2-lead cable	Retro-fit ready - no additional cable or labor cost to install ice class lighting
Pre-heating of ice-class lights	Optional pre-heating of lights, ensuring that ice-class signal light are always ready for deployment
Control & monitors dimmable nav lights (Navy/SAR only)	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.
External communications	Our modular systems provide multiple communication protocols from VDR ready signals to TCP/IP
Ready for autonomous vessel operation	With the Mimic panel it is exceptionally easy to control the nav lights remotely
SRTP ready	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.

