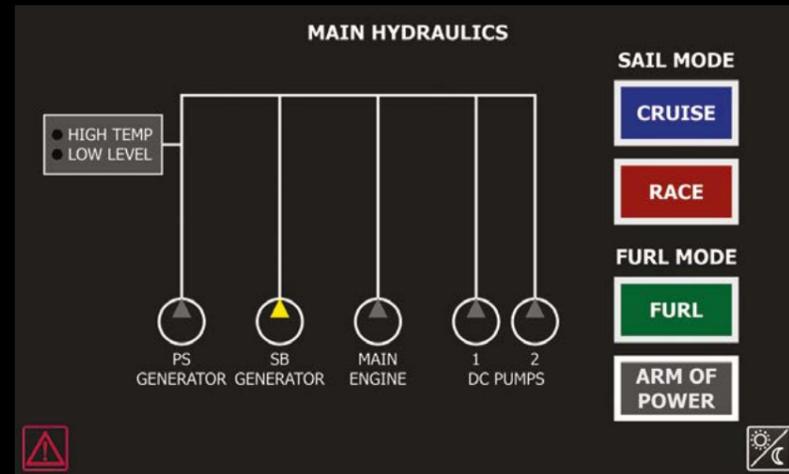


## Examples of hydraulic control and monitoring

The heart of the hydraulic control system is the WAGO PLC configuration. Depending on the size of the system we either install one PLC with extended modules or a network of PLC's. In case of a major break down critical parts like the hydraulic load sense valve and clutch can be manually operated on the local PLC stations. A watch-dog-timer monitors the network and resets the outputs should a network failure occur. Our software in combination with the WAGO modules is a proven combination for both on/off and proportional control of among others Danfoss, Cetop and Hawe valves.

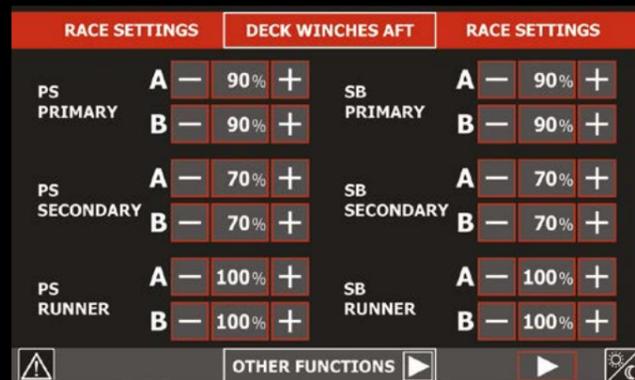
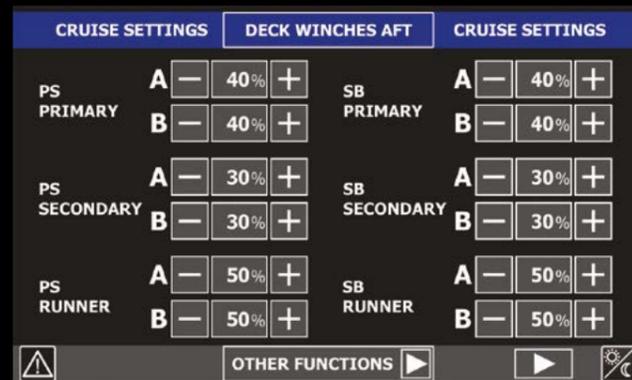


### Main hydraulics page

This page offers information about the available pumps, alarms and allows control of the winch speed settings and secondary functionality of the inner forestay furl.

## Winch speed pages

The hydraulic systems of modern sailing yachts have to be suitable for both cruising and racing. Having the ability to adjust the winch speed is also a matter of safety. While the main page allows selection of sail mode, the cruise and race setting pages allow flow control per winch.

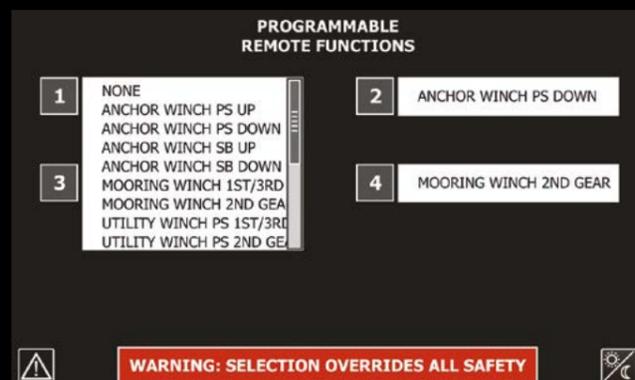
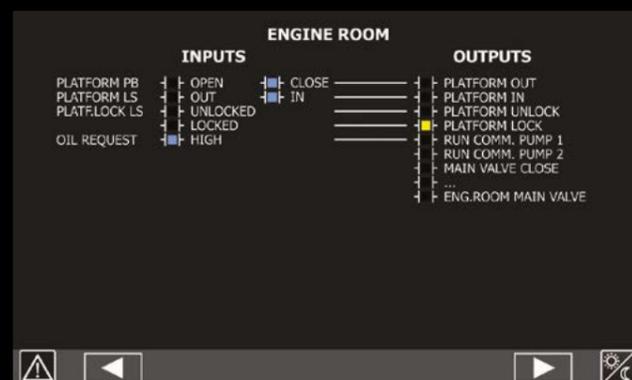


## Fault finding pages

Fault finding often is time consuming. Is it an input, or an output? These pages display the inputs and outputs of the PLC system. When you press a deck switch and the input does not respond, it is the deck switch and cabling you should check. Our engineering team uses Team Viewer to remotely support the crew.

## Programmable remote functions

This option allows selection of output for a four button remote control unit.



**Cornelis Jongkind**  
Yacht Installations

## Easy to use and reliable Alarm and Monitoring system

Apart from being a very good way of controlling and operating all kinds of yacht systems, an A&M system is also costs and weight saving. The Cornelis Jongkind A&M engineering team has equipped many yachts with their unique and user friendly systems. Touch screens installed throughout the yacht, enabling the owner and crew to monitor and control the yacht's systems. Simplicity, intuitive control and industrial standards make the system easy to use, reliable and fail-safe.



NAVIGATION,  
COMMUNICATION  
& ENTERTAINMENT



ALARM &  
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# Alarm and Monitoring system

## Hardware

The heart of the system is a WAGO PLC equipped with several extension units for networking. The user interface, the EXOR glass panel touch screens provide an open development environment. Future changes can easily be accommodated by our team or third parties as all software is open and to international standards.

## System options

Our A&M system supports a wide range of protocols enabling control and monitoring of typical yacht equipment. The list below is a selection from the protocols we have developed

- Mastervolt and Victron charger/inverter status and control
- Lithium Ion status and control
- Generator load management
- Main engine status and control
- Shore power converter status and control
- Hydraulic control allowing race and cruise settings for winch speed

## Infrastructure

The software for the system is not controlled by an external computer but within the main WAGO PLC and EXOR touch panel itself. This is the most reliable way of storing and processing data. In case of a major break down critical systems, e.g. hydraulic control and bilges, can be manually operated on the local PLC stations.

## Why choose Cornelis Jongkind alarm and monitoring systems

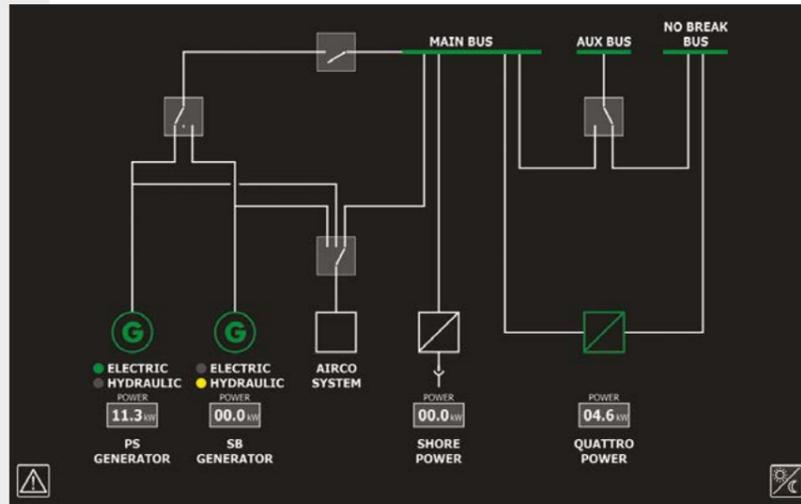
We aim for simplicity and clear visualisation of the A&M systems we design. Since our development tools and software are of open development standards, our systems can be reconfigured by third parties. The infrastructural flexibility and industrial standards of our equipment allow easy integration into existing boat systems. It enables building a fully customized lay-out and graphics with the ease of standard widgets and functionality.

This brochure presents examples of how the complex monitoring of a yacht can be displayed in a convenient and simple arrangement.



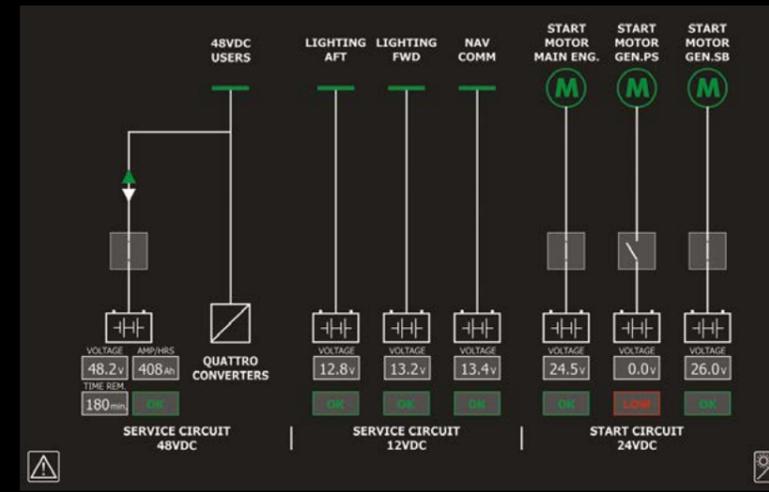
## General

The EXOR eTOP 500 touch panel series feature a high-brightness, contrast-enhanced ruggedized TFT display with a fully dimmable LED backlight. The product has been designed for use in harsh environments and outdoor applications. Glass bonding assembly and anti-reflective (AR) glass surface treatment provide superior optical performance. The durable glass touch screen requires human touch, eliminating false activations, and offers high reliability and durability; it will continue to work even when the surface is scratched or contaminated. All pages optionally have slide menus, dim and night vision bars. These features are important for the 7" and 10" touch screens.



## AC - systems

A schematic drawing of the AC-system including the performance of the generator(s) and shore connection also indicates how these sources are switched and used.

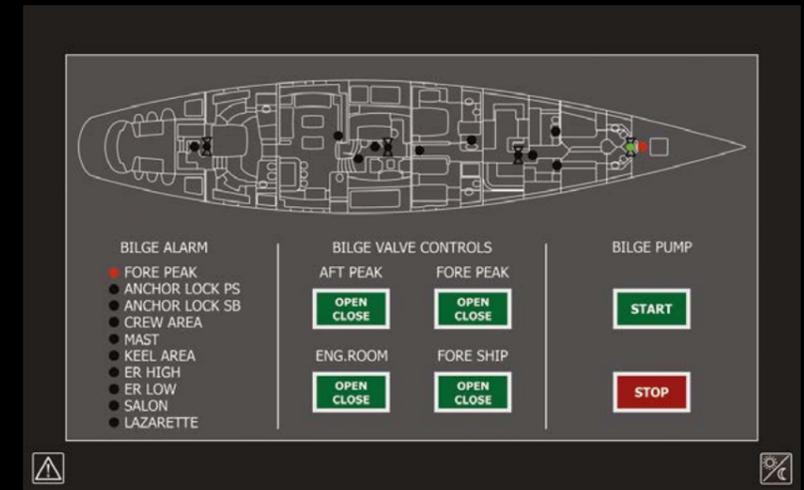


## DC - systems

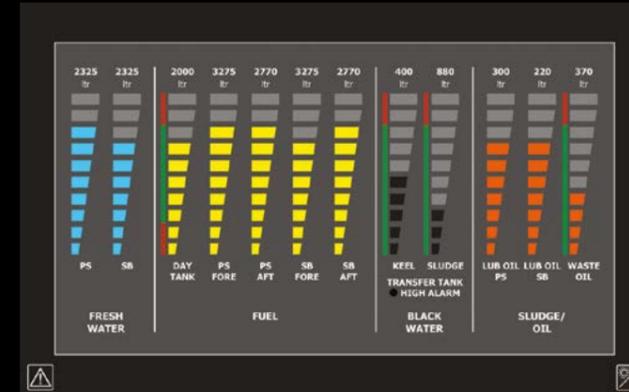
The DC-system includes the service and start circuit and indicates the battery status. This particular page displays the data retrieved from the Victron Lithium Ion batteries and Quattro inverter/chargers.

## Bilges

A top view of the yacht indicates the position of the bilge alarms. When a bilge level engages the alarm it will be stored in the alarm log. The screen next presents a manual bilge system. Opening of valves and the start/stop function of the pumps are manually controlled from this page.



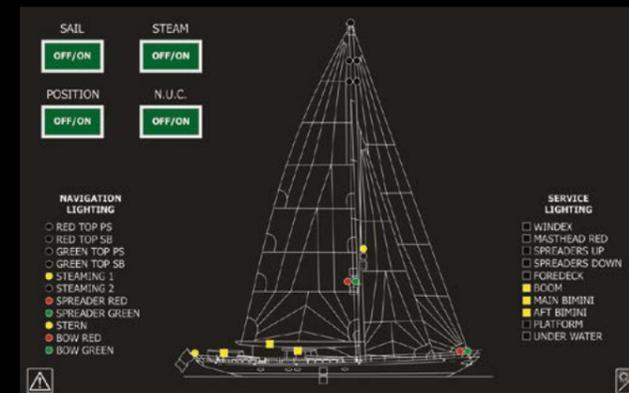
## Tank level indication and alarms



## Main engine monitoring and control



## Navigation lights indication, alarm and control



## Camera pages

