

Beier IVCS 4000 Dynamic Positioning System





Beier Radio was founded in 1945 and continues to be a leader in the ever-evolving marine electronics industry today. Having supplied DP systems for hundreds of vessels over the years, Beier Radio is recognized as a reliable provider of turnkey vessel control and navigation solutions.

Our integrated engineering department and installation team specialize in retrofit projects, providing custom-designed systems for our clients, reducing vessel downtime, and achieving the highest level of performance on the open water.

Beier IVCS 4000

The Beier IVCS 4000 Dynamic Positioning System can be supplied as a stand-alone or integrated solution tailored to the specific needs of each customer. It can be installed during new vessel construction, as a retrofit to upgrade a non-DP vessel, or to provide additional capability and performance to a vessel with a DP system.

The Beier IVCS 4000 is designed to integrate with various types of propulsion/thruster and power management systems. The sensors and reference systems are selected according to Class Rules and vessel mission.

Typical applications for the Beier IVCS 4000 include:

- Offshore supply vessel
- Anchor handling tug supply vessels
- Heavy lift semi-submersible vessels
- Dredgers
- Hydrographic survey vessels
- Cable layers
- Crew boats
- Diving support vessels
- Oil and gas shuttle tankers
- Cruise ships and mega-yachts
- Buoy tenders



Beier IVCS 4000 Highlights

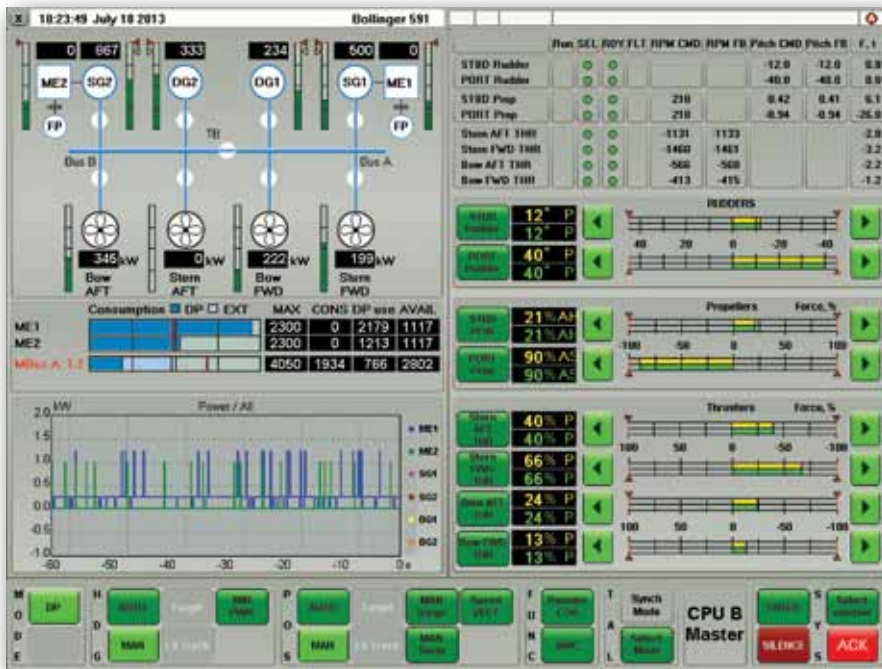


The Beier IVCS 4000 is the premier vessel control and monitoring system, providing DP and wide range of support capabilities to vessel owners and operators, all activated with a simple touch of the control screen. While the functionality of DP systems varies by class requirements, the following is a list of some of the powerful features of the Beier IVCS 4000:



USER INTERFACE DESIGN CONCEPT

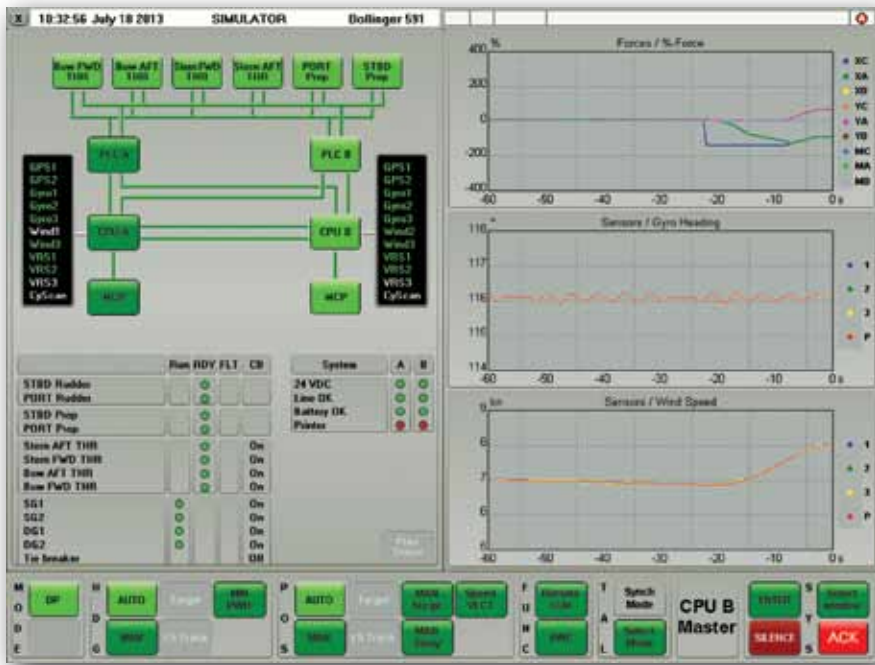
The user interface of the Beier IVCS 4000 has been developed in cooperation with experienced DP operators to provide world class functionality and ease of operation. The information provided is clear and unambiguous. The high quality marine touch screen and the new generation DP control panel provide a unique intuitive experience. The voice alarms and messaging function help to maintain a high level of awareness in any situation.



THRUST ABILITY DIAGRAM

The Thrust Ability Diagram shows in real time all possible combinations of control and thruster availability and/or allowed power load.





SYSTEM MONITORING

The system constantly monitors the state of PLCs, computers, buses, sensors, thrusters, generators, and power circuits in real time. The information is available for the operator in the form of messages and an easy-to-understand diagram that can be displayed on the screen upon request. The diagram uses colors to indicate the

state of the components and the connections between them. If a component becomes active, inactive or fails, the color with which the component is displayed also changes.

AUTOPILOT CONTROL MODE

The Beier IVCS 4000 Series is equipped with a built-in fully functional autopilot. The Autopilot Mode is used for heading control when the vessel is moving forward.



TREND VIEW

In the Beier IVCS 4000 Trend View Window, the operator is able to trace the system performance history for three different parameters at a time.

CONSEQUENCE ANALYSIS

For DP2 Classed Vessels, the Consequences Analysis function makes it possible to determine whether the vessel is able to maintain its position in the case of a worst case failure, the most typical of which are thruster failure, generator failure and the circuit breaker/tie breaker failure. Possible consequences prediction is based on the actual weather conditions, the performance of the enabled thrusters and the power plant (generators, circuit breakers, tie breakers) status.



SIMULATOR MODE

Each Beier DP System is delivered with a built-in Simulator Mode that provides simulations for operator training and makes it possible to analyze the vessel's performance changes in different environmental conditions. Simulations are performed at the DP system control station (console). No additional equipment is required. The simulation mode can only be used when the system is not in use for DP operations.



Starting the simulation session, the operator can set the initial conditions (vessel initial speed, heading, latitude, and longitude). The environmental conditions, such as wind and current speed and direction, wave height and direction, water depth settings can also be set.

CENTER OF ROTATION (COR)

The Beier IVCS allows the operator to set different centers of rotation. The COR can be located at the ship's center, at the bow or at the stern or in any other location manually set by the operator.



DATA LOGGER

The Beier DP offers an advanced option for recording, storage and playbacks of data related to DP operation. If installed in addition to the conventional Alarm and Event printer required by Class, it ensures precise recording of:

- Ship sensor data available for DP
- Results of filtering processes
- PMS information
- Operator actions
- Position reference system data
- Thruster commands and responses
- System faults
- Other relevant data

Though recording devices for ship operations are not yet required by IMO or Class, they help the ship owner in the assessment of DP-causality cases.

PROJECT MANAGEMENT

We specialize in No Fault project management services for new construction and retrofit projects, providing engineering assistance and on-the-job hands-on management to complete your project and get your vessels operational. Beier Radio can also provide technical drawings and submittals for any flag approval. We work with vessel companies, shipyards, and naval architects. Beier Radio installs the equipment we design, build and sell, providing for a No Fault sea trial. With the Beier No Fault approach to project management, your sea trial will be smooth and your vessel will get to work quickly.

REMOTE DIAGNOSTICS

With our remote diagnostics capabilities, Beier Radio is able to detect and correct most system failures within minutes, saving you time and money.

TRAINING CENTER

An example of Beier Radio's commitment to our customers is the addition of The Marine Training Institute. This state-of-the-art facility is where we train our customers' crews on the same DP equipment we install on their vessels. The new facility also includes training on our IVMS, ECDIS, GMDSS and Radar systems. The Marine Training Institute training center is accredited by the Nautical Institute of London. Learn more at www.themarinetraininginstitute.com.



RESEARCH & DEVELOPMENT

Beier Radio is constantly working to enhance our vessel control and management systems to outpace the demands of the evolving marine industry. Sentinel is our research and development arm, developing and testing new system products.

Beier Radio is Trusted by the Marine Industry's Leaders:

All Oceans
Barry Graham Oil Service
Bisso Marine Company
Bollinger Shipyards
Boredelon Marine
Bourbon
Breux Bay Craft
Breux Brothers
C & G Boatwork
Candy Fleet
Cheremie Marine
Conrad Shipyard
Crescent Towing & Salvage
Crew Boats
EnSCO Offshore
Graham Gulf
Great Lakes Dredging
Gulf Coast Shipyard Group

Gulf Logistics
Gulf Offshore Logistics
Halimar Shipyard
Harvey Gulf
Hornbeck Offshore
IXELEX
JMS Naval Architects
Kevin Gross Marine
KMJ Services
Laborde Marine
Leevac Shipyard
LA Department of Transportation & Development
Louisiana Tugs
Midship Marine
MNM Boats
Naviera Bourbon
Neville Boat Works
New Generations

Oceanering International
Odyssey Marine
Offshore Lifeboats
Reservoir Geophysical
Riverhawk Fast Sea Frames
Seacor Marine
Southern States Offshore
St. Johns Shipyard
Supreme Service & Spec Co
Swiftships
Texas Crewboats
Tidewater
Thoma-Sea Marine
Trinity Yachts
US ARMY Reserves
VT Halter Marine

See a full client list at www.beierradio.com



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