

Jastram Digital Control System Summary

The key features of the Jastram Digital Steering Control System DCA 100 are:

- Up to 8 steering input devices
- Modular design for customization
- Optional keypad and display
- Proportional or On/Off Hydraulics
- Can be used with all Jastram input devices
- Suitable for all Class

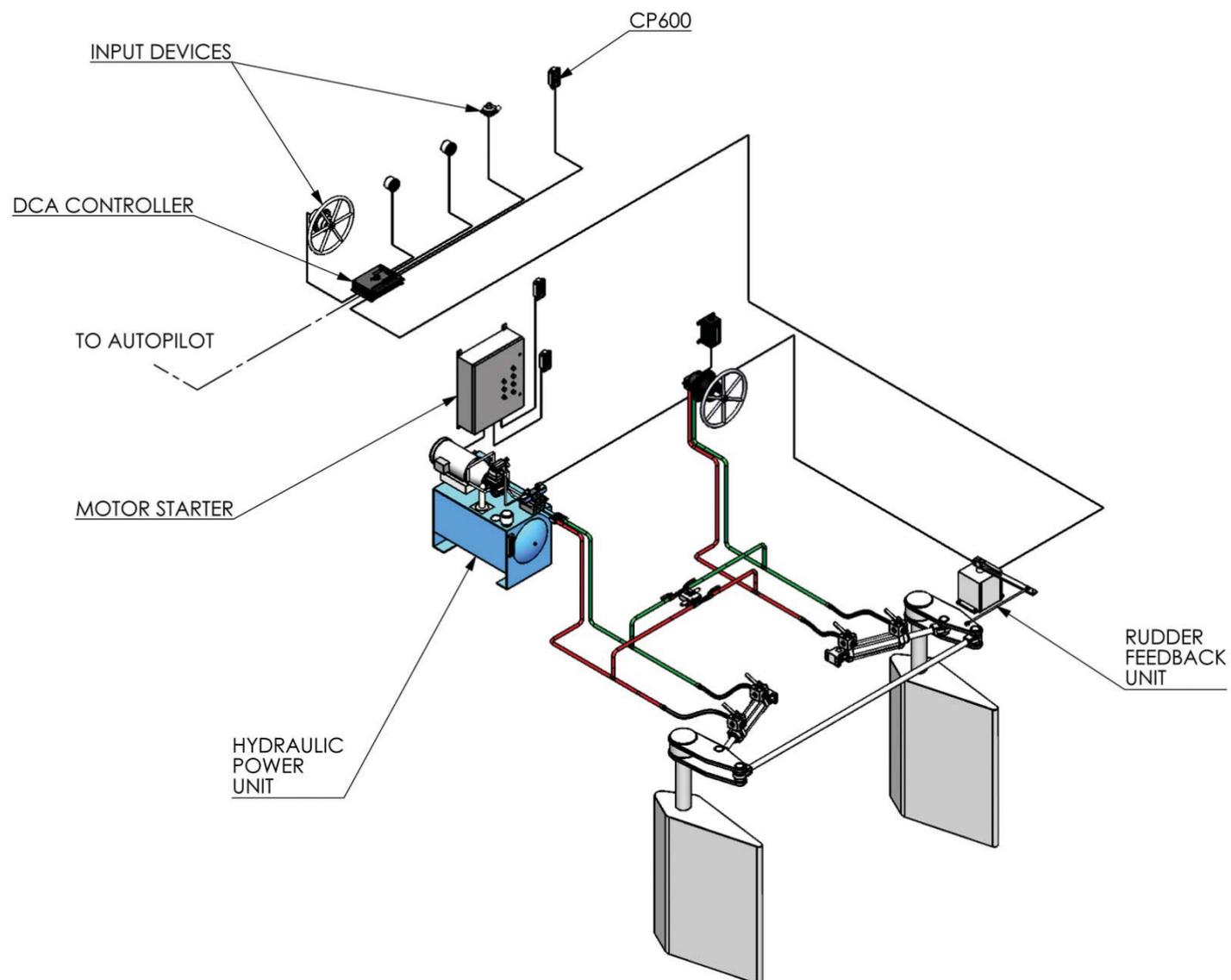


Photo courtesy of SEASPAR.

Jastram Digital Control Amplifier

The new Jastram Digital Control Amplifier (DCA) is specifically designed for small to mid-size commercial vessels and pleasure crafts. As its larger cousin the DSC, it relies on state-of-the-art digital technology for fast and accurate steering controls, in a small and simple design.

Up to eight input devices can be connected to each DCA. These input devices can be Non-Follow-Up (jog switch), Full-Follow-Up (lever controller or electric wheel), Digital (Jastram digital helm pump) and an additional interface to autopilot is provided.

The DCA is the controller between the rudder command and the steering hydraulics. It will convert the command from any input device to a smooth and accurate rudder motion.



Data is subject to change without notice.



Digital Control Amplifier

The DCA 100 is a state of the art digital steering control system.

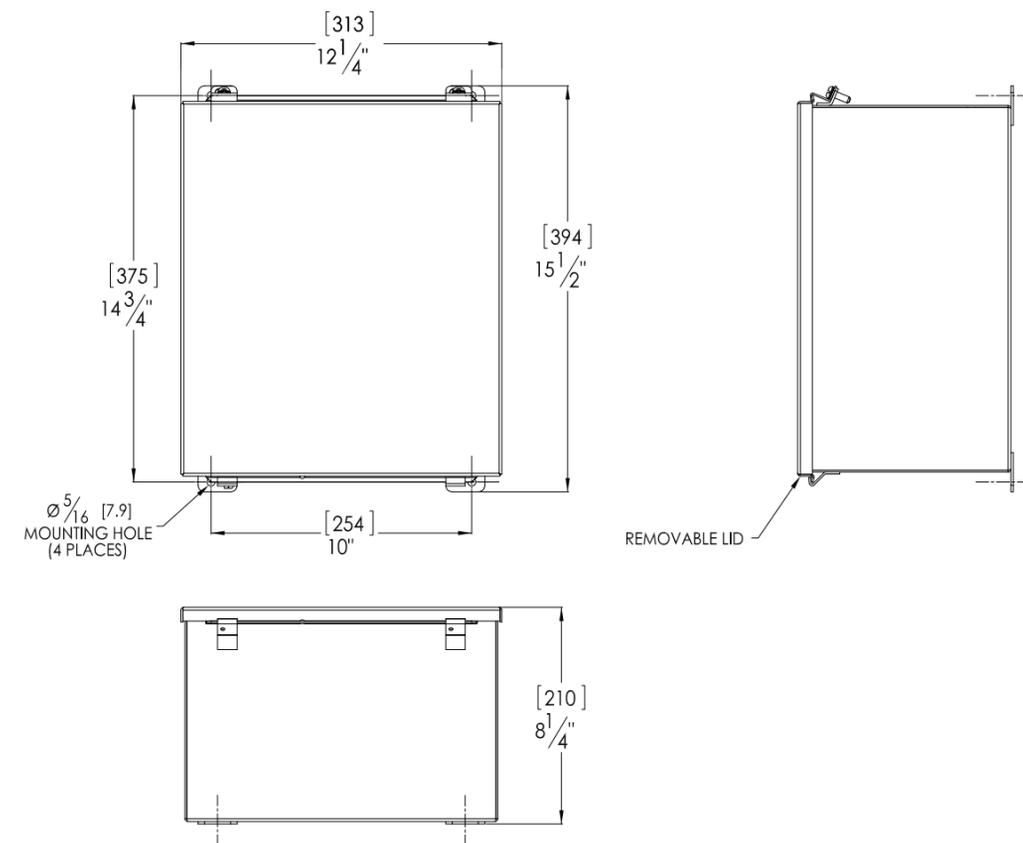
In conjunction with Jastram steering gear, it provides a turn-key solution to mid size vessels' steering needs and is suitable for both commercial vessels or yachts.

The Digital Control Amplifier System (DCA) consists of a main unit and multiple expansion units. Each installed steering input device has its own expansion module to provide the control input capabilities. Station lockout and / or two speed rudder operation are also provided by the expansion units. There can be a maximum of eight (8) steering input devices connected to the DCA.

The DCA has the capability to receive inputs from all the Jastram steering input devices.

Steering mode selection and display are achieved by connecting to a Jastram control panel (Membrane Style CP 600/CP 375 or Rotary Style CP-36) or take-over (T.O.) push button. The rudder position signal to the DCA is obtained from a potentiometer type rudder feedback unit (RFU).

The DCA can be used for both classed and non-classed systems. For classed systems, the DCA is approvable by: ABS, GL, DNV and BV.



Specifications

Enclosure Protection:	IP54, NEMA 12.
Supply Voltage:	24 VDC, -20%, +30% .
EMC Protection:	EN60945,2005.
Maximum Rudder Speed:	8 Seconds (On-Off).
	5 Seconds (Proportional).
Rudder Position Accuracy:	± 1/2 °.
Safe Distance to Compass:	2Ft. (0.63).
Operable Ambient Temperature:	-25°C to +70°C.
Power Consumption:	Dependent on System configuration.
Weight:	7 Lbs.(3.17 Kg).
Short Circuit Protection:	Yes, 4.0 Amp fuse.

Cable Specifications

Maximum Cable length:	750 Ft.(230m).
Cable Break Protection:	Yes.
Connector:	5.08 mm pitch pluggable screw terminals

Control Panel (CP375, CP600)

This unit provides direct button selection of the available steering control modes. It is configured for each system installation. Mode selection is located at every steering station as required by Classification Societies.

- Selected mode of steering is illuminated
- Control Panel face is backlit and includes a built-in dimmer control.
- Fault light and audible alarm are built in
- Black Lexan face panels are:
 - * 3 in. (76mm) wide by 6 in. (152mm) high, or
 - * 3 in. (76mm) wide by 3 3/4 in. (95mm) high
- Panels are water resistant from front.
- Selection panels can also be supplied by others for integration into an integrated bridge

