



Series 8550-2000 MPC-D SYSTEM

FEATURES

- Aesthetic design
- Ergonomic
- Versatile
- Economical
- Electronic engine link
- Electronic gearbox link
- Electronic trolling valve link
- Actuator links
- Shaft brake link
- Gear shift and throttle sequencing
- Synchronizing
- Safety interlocks
- Station transfer
- Multi-functional display and horn at each station
- Redundant engine and gearbox control
- Redundant control lever position sensing
- Redundant power
- Redundant communication
- Redundant components monitored internally
- Watertight components and connectors
- Serial communication reduces wiring
- Factory preassembled cables
- Simple keypad or computer setup
- Self diagnostics
- Historical event logging
- Optional electric shaft

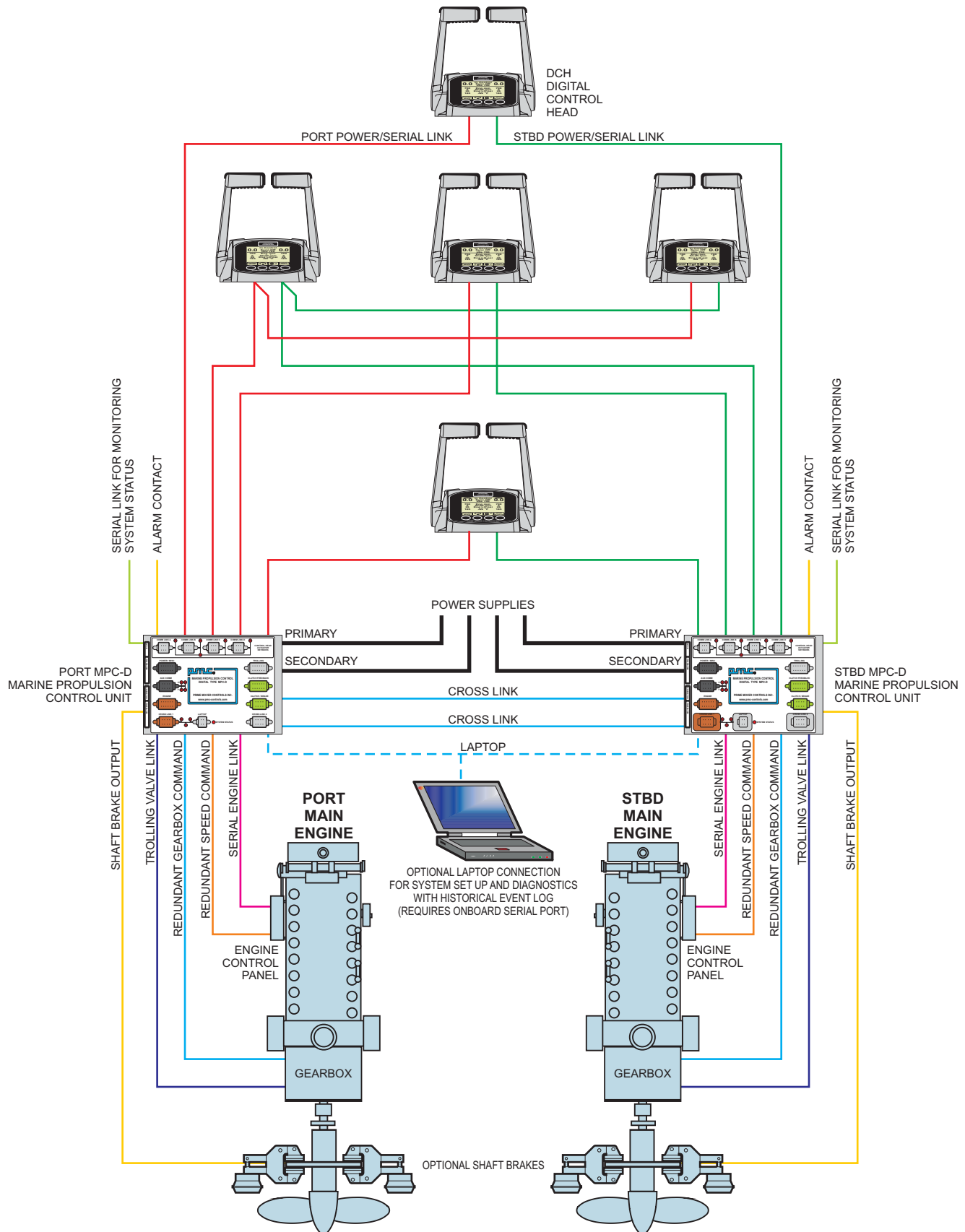
MARINE PROPULSION CONTROLS

TYPE MPC-D DIGITAL SYSTEM
FOR VESSELS WITH FIXED
PITCH PROPELLERS



PRIME MOVER CONTROLS INC.

SIMPLIFIED FIVE STATION CONTROL SYSTEM TYPICAL - DO NOT USE FOR CONSTRUCTION



MARINE PROPULSION CONTROL SYSTEM OPERATING FEATURES

- Single lever combined speed and clutch control
- Available for single and multiple screw vessels
- Lever line-up transfer interlock with override
- Transfer lock to prevent accidental transfer to remote stations
- Engine warm-up mode
- Vessel slow speed mode
- Trolling valve control with selectable engine RPM settings
- Synchronizing for electronic or mechanically governed engines
- Proportional reversing delay interlocks
- Proportional throttle boost
- Controlled acceleration/deceleration
- Clutch oil pressure throttle interlock
- Neutral start interlock
- Shaft brake control with multiple timing features

SAFETY FEATURES

- System accepts redundant power sources with internal switching and continuous monitoring
- Each control lever features a primary and secondary position sensor which is continuously monitored for drift and failure
- Back-up link between the port and starboard MPC-D control units allows control of both engines and clutches using only one MPC-D
- Full diagnostic capability from MPC-D and DCH control head
- Fault output to vessel alarm system
- Engine data link passthrough to vessel alarm system

OPTIONAL FEATURES

- The electric shaft option simulates a mechanical interconnection between the control head levers. Moving the lever at the station in command causes all other levers in the system to follow. This provides continuous alignment with the commanding lever position at all stations. Because all levers are continually aligned, control transfer between stations is smooth and “bumpless”.
- Extended low operating temperature range available for outdoor stations.

TYPE 5500 DCH DIGITAL CONTROL HEAD SPECIFICATIONS

Supply:

- Nominal 12 V_{DC} or 24 V_{DC}, max 9 V_{DC} to 36 V_{DC}
- Typical 175 mA @ 24 V_{DC}

Environmental:

- Operating temperature -5 °C to +70 °C (Optional extended range from -25 °C to + 70 °C)
- Storage temperature -30 °C to +80 °C
- Protection classification IP66 above console, IP43 below console
- Meets or exceeds marine classification and regulatory requirements for Electromagnetic Compatibility, Vibration, Temperature, Humidity and Voltage Variation

FEATURES

- Backlit, dimmable, 160 x 160 pixel graphical LCD
- Control and machinery status display (metric or imperial) and horn in each control head
- Shaft RPM indication is available on each control head LCD
- Four membrane buttons with intuitive software menu in plain English
- Dedicated station transfer button
- 140° control lever travel
- Housing and control levers available in black powder coat or chrome finish
- Custom colors available
- Optional electric shaft
- Optional station in command outputs for connection to auxiliary stations

TYPE 8550 MPC-D MARINE PROPULSION CONTROL UNIT SPECIFICATIONS

Supply:

- Nominal 12 V_{DC} or 24 V_{DC}, max 9 V_{DC} to 36 V_{DC}
- Typical 150 mA @ 24 V_{DC} (not including connected items)

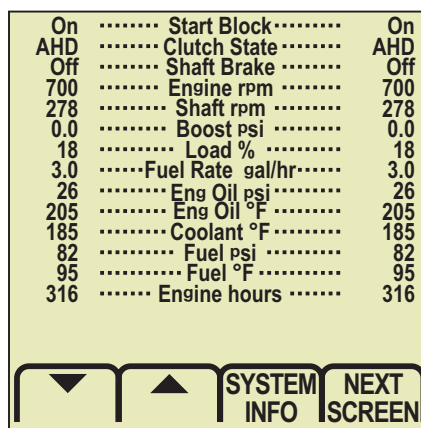
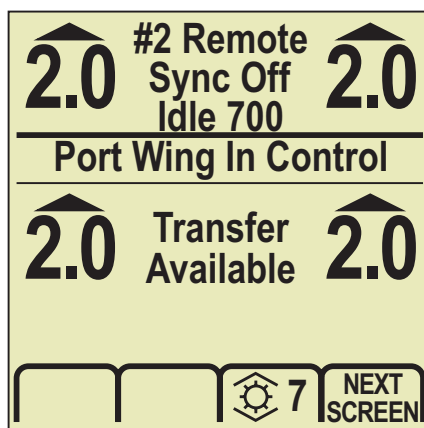
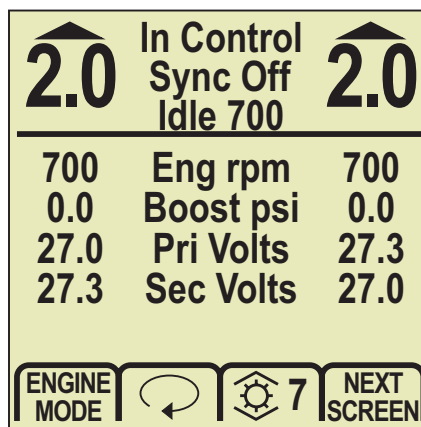
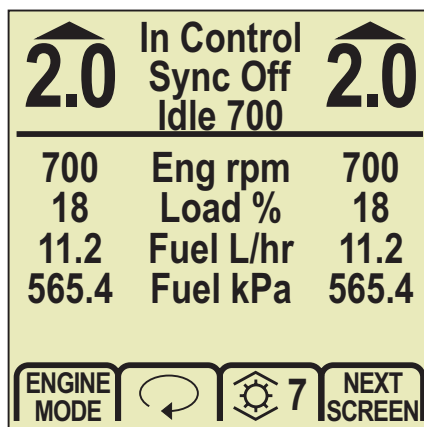
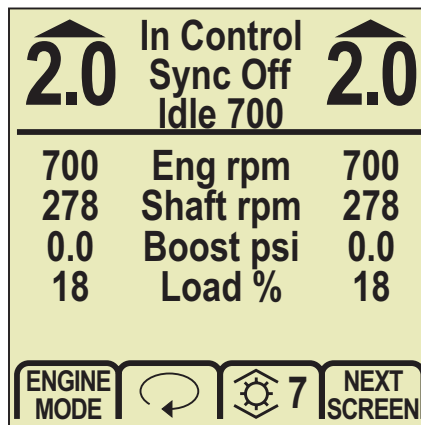
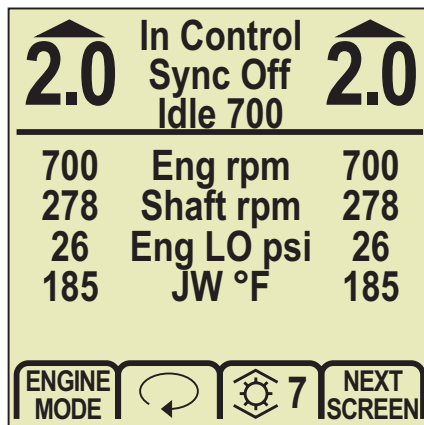
Environmental:

- Operating temperature -25 °C to +70 °C
- Storage temperature -40 °C to +85 °C
- Protection classification IP54
- Meets or exceeds marine classification and regulatory requirements for Electromagnetic Compatibility, Vibration, Temperature, Humidity and Voltage Variation

FEATURES

- Accepts up to 15 stations for Type 5500 DCH Control Heads and Electro-Mechanical Actuators
- Connects directly to standard J1939, J1587/1708 and proprietary serial links for reading internal engine parameters
- Serial link for monitoring system status
- Other PMC control heads can be used with the MPC-D control system when a Type 5500-5000 DCH Remote Display is used

TYPICAL DCH DISPLAY SCREENS SHOWN ACTUAL SIZE

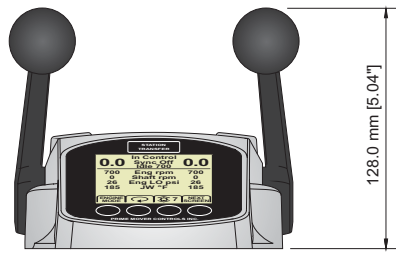


The dimmable, multi-function screen provides display of control and machinery status in imperial or metric units.

Screens can be configured to display the most basic system information or more comprehensive data.

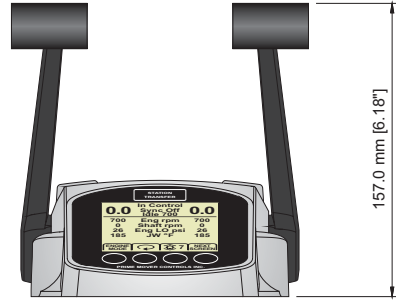
Items for display include: control system displays and alarms, control lever position, transfer status, engine operating parameters available from the engine serial link, shaft rpm (optional) and gear engagement.

OPTIONAL HANDLES FOR USE WITH DCH CONTROL HEADS SHOWN 1/4 SCALE



**Type 5500 DCH
Digital Control Head**

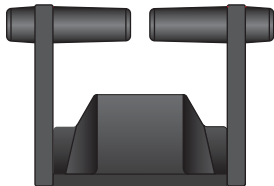
- Shown with short levers and ball knobs
- Levers available in black powder coat or chrome finish



**Type 5500 DCH
Digital Control Head**

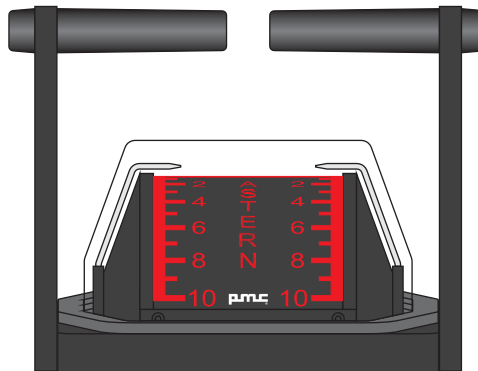
- Shown with standard length levers and short T grips
- Levers available in black powder coat or chrome finish

OPTIONAL CONTROL HEADS FOR USE WITH MPC-D SYSTEM SHOWN 1/4 SCALE



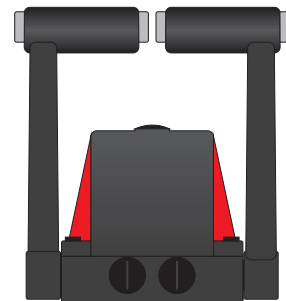
**Type 5078 SCH
Small Control Head**

- Super Compact
- Many handle options
- Black or chrome housing



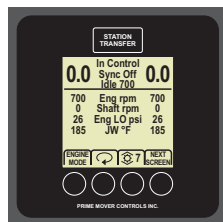
**Type 5400 PCH
Propulsion Control Head**

- Many handle options
- Back lit scales
- Optional electric shaft
- Optional integral telegraph



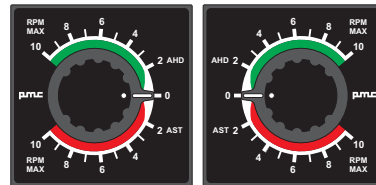
**Type 5040/5800 MCH
Remote Control Head**

- Compact
- Many handle options
- Back lit scales
- Optional electric shaft



**Type 5500-5000
DCH Remote Display**

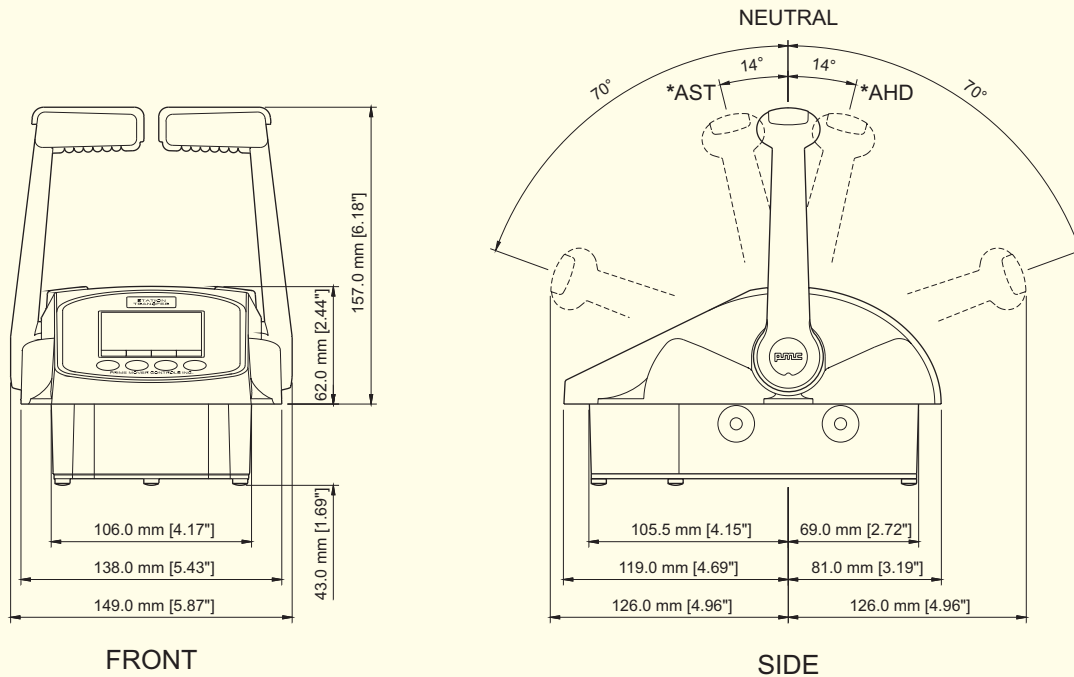
- LCD display and horn
- For use with alternate control heads
- Screen shown actual size on reverse page.



**Type 5061-2000 DLH
Dial Control Heads**

- Low profile
- For use on slide out wing stations with limited height or as a backup for electronic control systems.

DIMENSIONS FOR TYPE 5500 DCH DIGITAL CONTROL HEAD

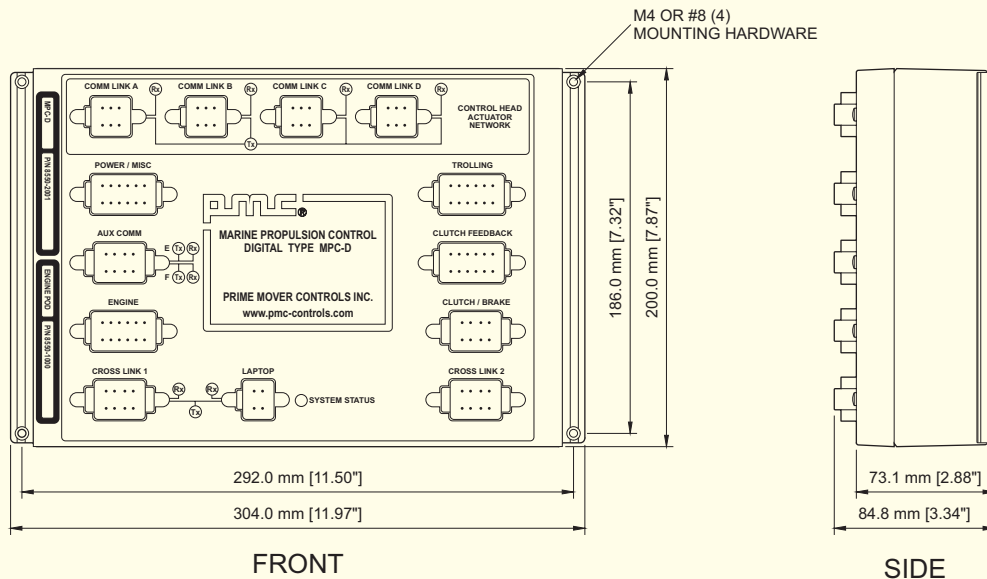


SCALE 1:4

NOTES:

- 1) *STANDARD DIRECTION SELECTION
- 2) DIRECTION CAN BE REVERSED FOR AFT FACING STATIONS
- 3) THREE DETENTS STANDARD
- 4) ELECTRIC SHAFT OPTION INCREASES DEPTH BELOW PANEL TO 150 mm.

DIMENSIONS FOR SERIES 8550-2000 MPC-D MARINE PROPULSION CONTROL UNIT



SCALE 1:4

PRIME MOVER CONTROLS INC.

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