

SIDE-POWER Thruster Systems



DC Speed Control

Speed Controlled DC electric thrusters

With many boat customers now having had several boats with thrusters, many choose to upgrade to more powerful versions to be sure that the thrusters work well for them in all situations. However, very powerful single speed thrusters can, in light weather conditions, be a bit difficult to use as they push the boat too fast. The solution is to fit the new Sidepower DC Power Controller which enables proportional speed control of a DC electric thruster. By also controlling the thruster's power, you get even more precise handling of the boat in all conditions.

Another great advantage is that when you run the thruster at less than full power, the usable run time is extended, with close to continuous usage being possible when you are running the thruster at less than 50% of full power (percentage of thrust with continuous duty depending on thruster model).

The extended runtime is put to good use in the Hold-function incorporated in the new panels. With a single press of a button, the bow and stern thrusters will keep you alongside the docks. The amount of thrust applied can be adjusted, and in addition the bow and stern thruster can be individually synchronized to get a balanced sideways motion - making singlehanded docking easy!

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Speed Controlled DC electric thrusters

The DC Speed Control system is built with the same high safety standards as all Sidepower products. Our focus on safety is a totally integral part of the product design so that everything from build quality to ease of installation is thought of to ensure long term reliability.

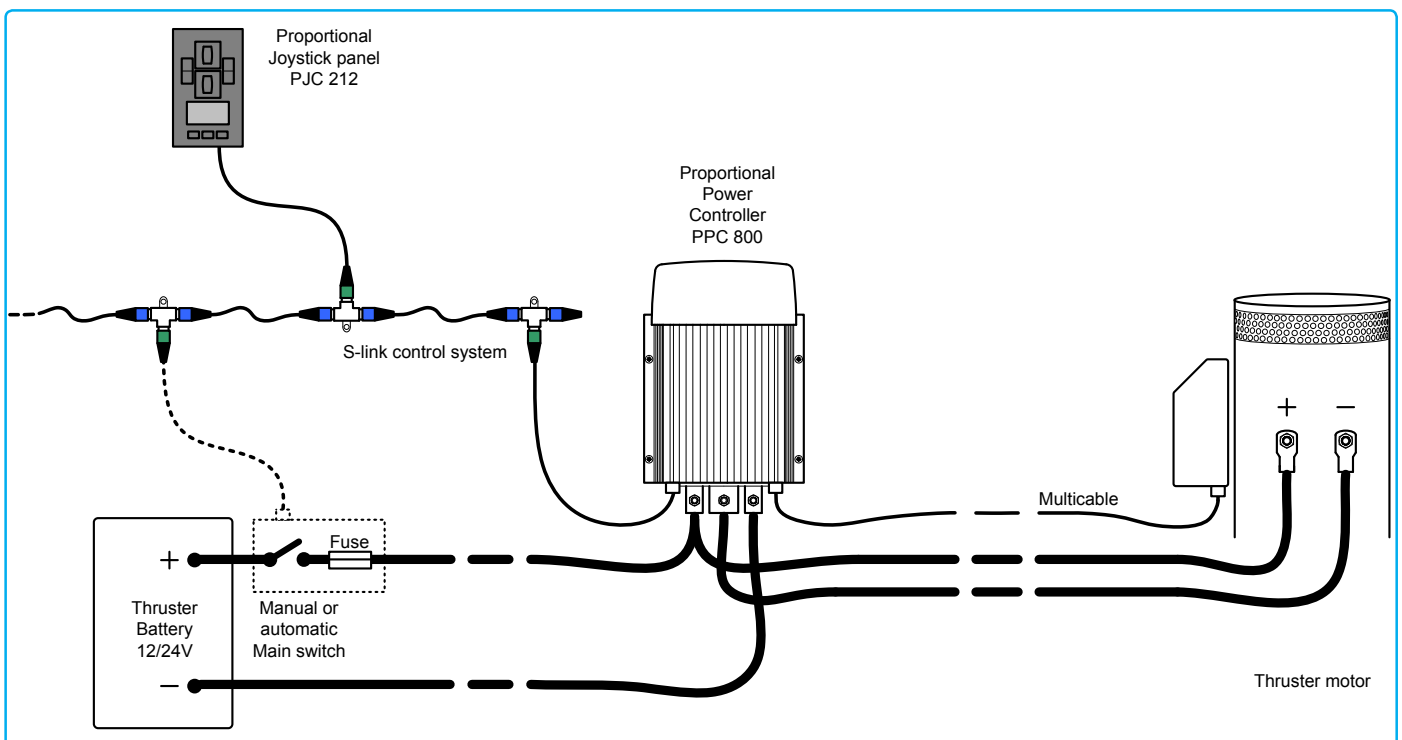
A DC Speed Control system contains three main elements - a proportional control panel, a power control unit and a DC electric thruster - all tied together with the new S-link control system

The thrusters used in a speed control system is almost identical to the familiar SE range of DC thrusters, the only difference being the addition of a temperature sensor and a new electronic control box. All mechanical and main electric parts are from the well proven thruster range produced by Side-Power for many years. All 12 & 24 volt DC electric thrusters produced by Side-Power can be enabled for DC Speed Control by authorized Side-Power service personel, even the oldest models.

The DC Power Control unit is controlled by S-link and monitors important parameters such as temperature in both controller and thruster as well as thruster voltage.

The Proportional Joystick Control Panels features a Back-lit LCD display giving instant feedback to the user. System status, amount of thrust & direction of thrust as well as thruster temperature and remaining run time will be shown in real time on the display. Important user warnings and alarms will be given to the user both on screen and via audible signals.

DC SPEED CONTROL COMPONENTS



S-Link Control System

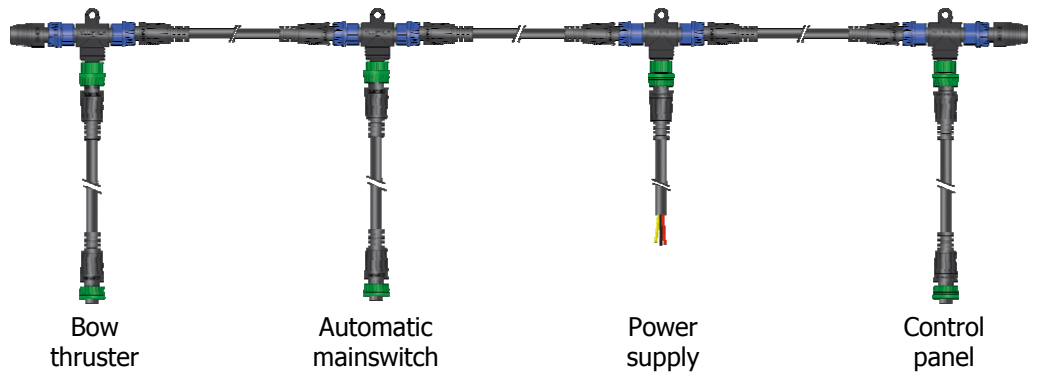


Speed Controlled DC electric thrusters

S-link is a "CAN" based control system with full intelligent communication between all units in the system, much like a computer network.

Main advantages include:

- Round, compact and waterproof plugs with unique keying and color coding to avoid faulty hookup
- Unlimited number of commands or information transfer on a single cable
- User feedback at panel
- Intelligent troubleshooting



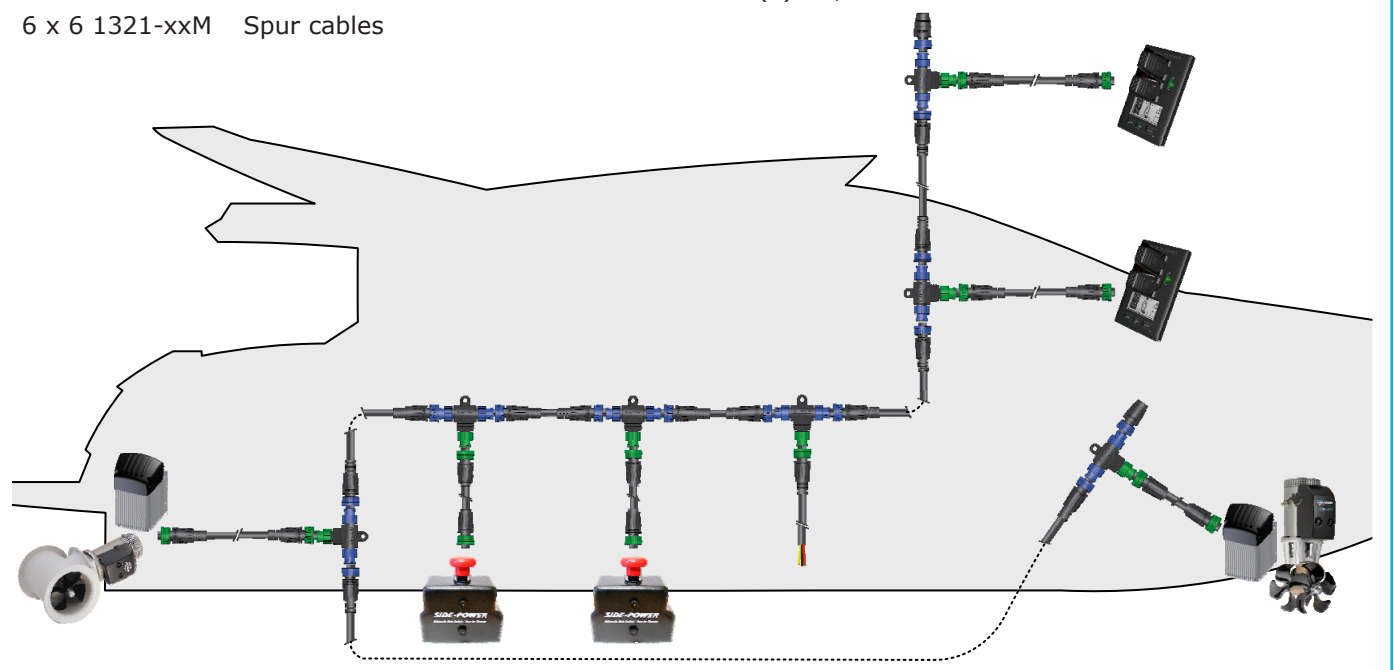
DC SPEED CONTROL SYSTEM EXAMPLE

S-Link cable components:

- 2 x 6 1327 End terminators
- 7 x 6 1326 T-connectors
- 1 x 6 1328 Power spur
- 6 x 6 1320-xxM Backbone cables
- 6 x 6 1321-xxM Spur cables

DC Speed Control components:

- 2 x PJC212 Compact Proportional Control Panels
- 2 x PPC800 DC Power Control units
- 2 x 8977xx S-Link Automatic Main Switches
- 2 x SE(P)xxx/xxx DC Power Control enabled thrusters



DC Speed Control

System component features

PJC 212

- Plug and play S-link control cable wiring
- Finger tip control with purpose designed joysticks
- Hold - function for easy docking, runs thrusters at selected power
- Back-lit LCD display with instant feedback
 - System status
 - Amount of thrust & direction of thrust
 - Thruster temperature/remaining run time
 - Battery status
 - Selectable LCD colour & level for both night and day
- Interactive multi-language menus
- System setup via "wizard"
- Diagnostics via panel/computer interface
- Built-in audible alarm "buzzer"
- Connector for external "buzzer"/loud audible alarms



PPC 800

- Plug and play S-link control cable wiring
- Easy to access, solid main cable terminals
- Easy to place as it can be located anywhere between the batteries and the thruster, also in areas requiring ignition protected parts
- Reliable solid state switching
- Thermal and overcurrent protection
- Active cooling for continuous usage



Thruster for DC Speed Control

- Any Side-Power DC Electric thruster can be upgraded to DC Power Control specification
- Temperature monitoring through PPC800
- Increased directional solenoid lifetime because the solenoids will not switch with load
- IPC intelligence for extra safety



Additional information available in separate product information sheets