

45DS Electrical Stage Course Computer Wiring

Before you start

Ensure the following core elements of the system have been fitted in accordance with the supplied installation guides:

- Compass
- Rudder Reference
- SmartPilot Computer (S3)
- SmartPilot Controller (ST7002)
- Drive Unit

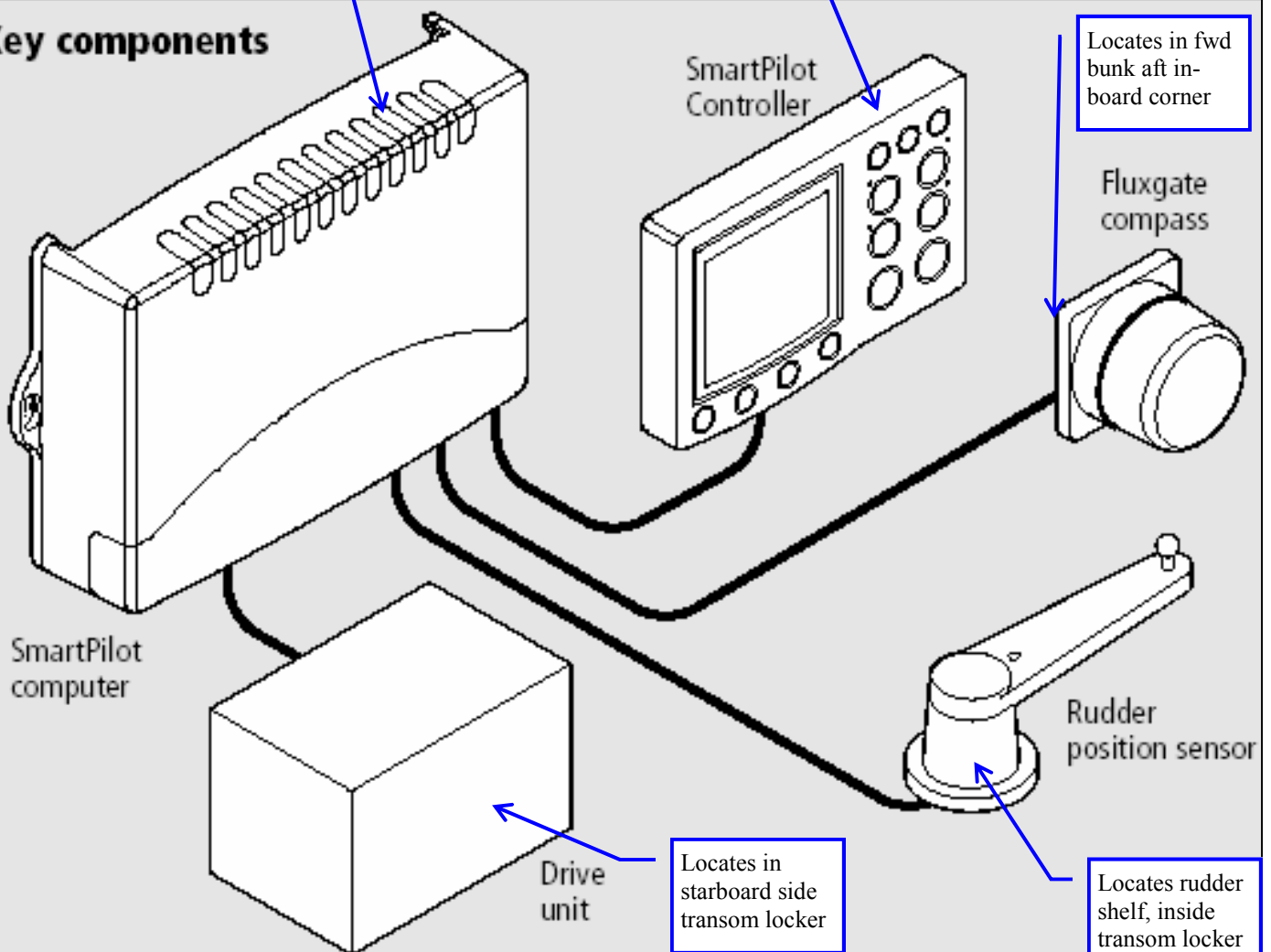
The core system will be connected like this following diagram

Locates starboard salon bunk backrest.

Locates cockpit port side NAV pod starboard side

The SmartPilot system

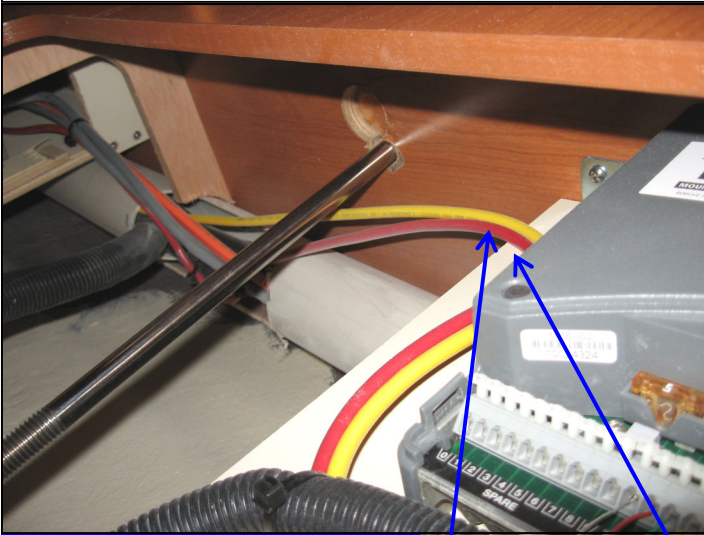
Key components



45DS Electrical Stage

Course Computer Wiring (2-14-08)

1. Course computer unit was mounted on panel that behind the bunk rest.
2. Install the computer the power supply, gain the 12V power from DC junction box, find autopilot terminal stud that comes on the junction panel.
3. Install power supply ground and the other end of the cable should be secured on the ground bus that locates inside the V berth hanging locker.
4. Install electric compass unit inside the main cabin fwd bunk inboard aft corner, keep the unit away from other electric device as possible. The other end of the fluxgate wire connects to the terminal on course computer.



Power supply cables routed from computer to DC junction box



Shows wires and cable were installed on S# course computer



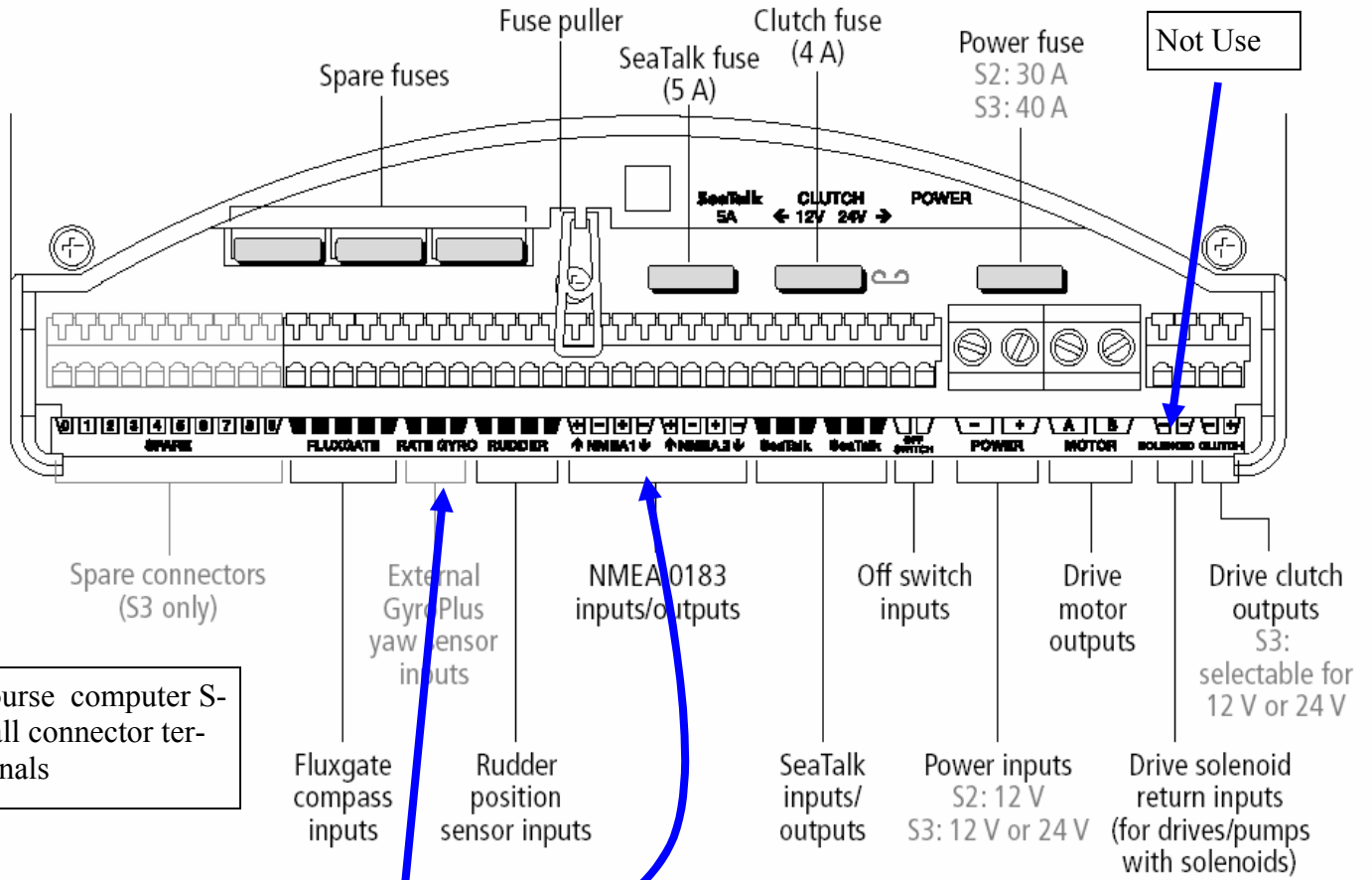
Inside the main cabin fwd bunk inboard aft corner.



Get power supply from autopilot breaker

45DS Electrical Stage Autopilot System Installation

S2 and S3 Systems



Course computer S-3 all connector terminals

Not Use

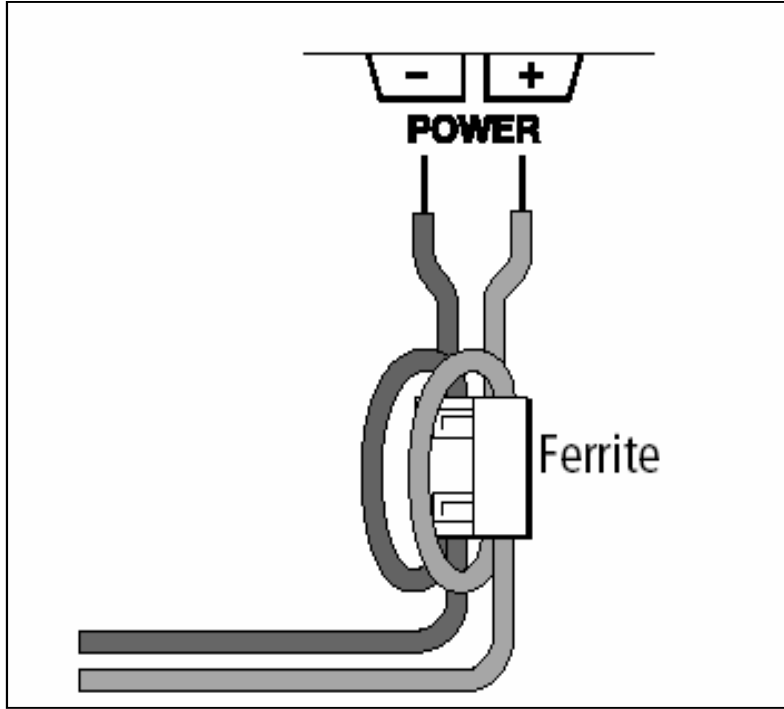
Removing and replacing the connector cover

S1 Systems	S2 and S3 Systems
<ul style="list-style-type: none"> hold the bottom of the connector cover gently lift the connector cover away from the base and the lid will come free 	<ul style="list-style-type: none"> use a flat-bladed screwdriver or small coin to rotate the catch $\frac{1}{4}$ turn (90°) in either direction – until you hear a click and the slot is horizontal lift off the cover
<p>To open</p> <p>PULL</p>	<p>To open</p>
<ul style="list-style-type: none"> replace the cover gently press the sides of the cover until you hear it click 	<ul style="list-style-type: none"> replace the cover turn the catch so the slot is vertical push in the catch until you hear it click
<p>To close</p>	<p>To close</p>

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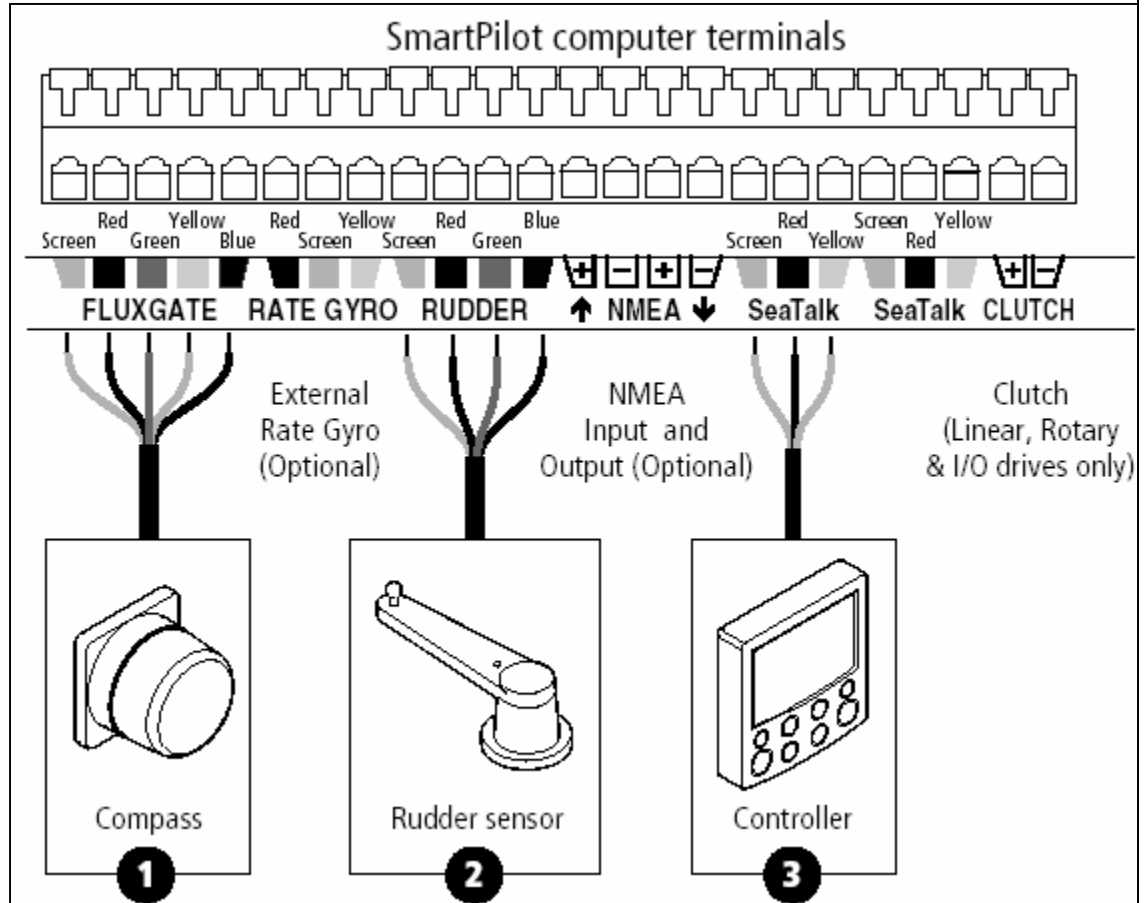
45DS Electrical Stage Autopilot System Installation

1. Strip 8–10 mm (½ in) of insulation from the end of each cable.
For the **POWER** connection, attach the suppression ferrite (supplied) around both the positive and negative power cables, between the cable clamp and SmartPilot computer. When you attach the ferrite, you must loop both power cables so that the ferrite encloses two passes of each cable. Secure the ferrite with the small tie-wrap.
2. Use a small screwdriver to loosen the screw on the terminal block.
3. Insert the stripped cable into the terminal and tighten the screw.



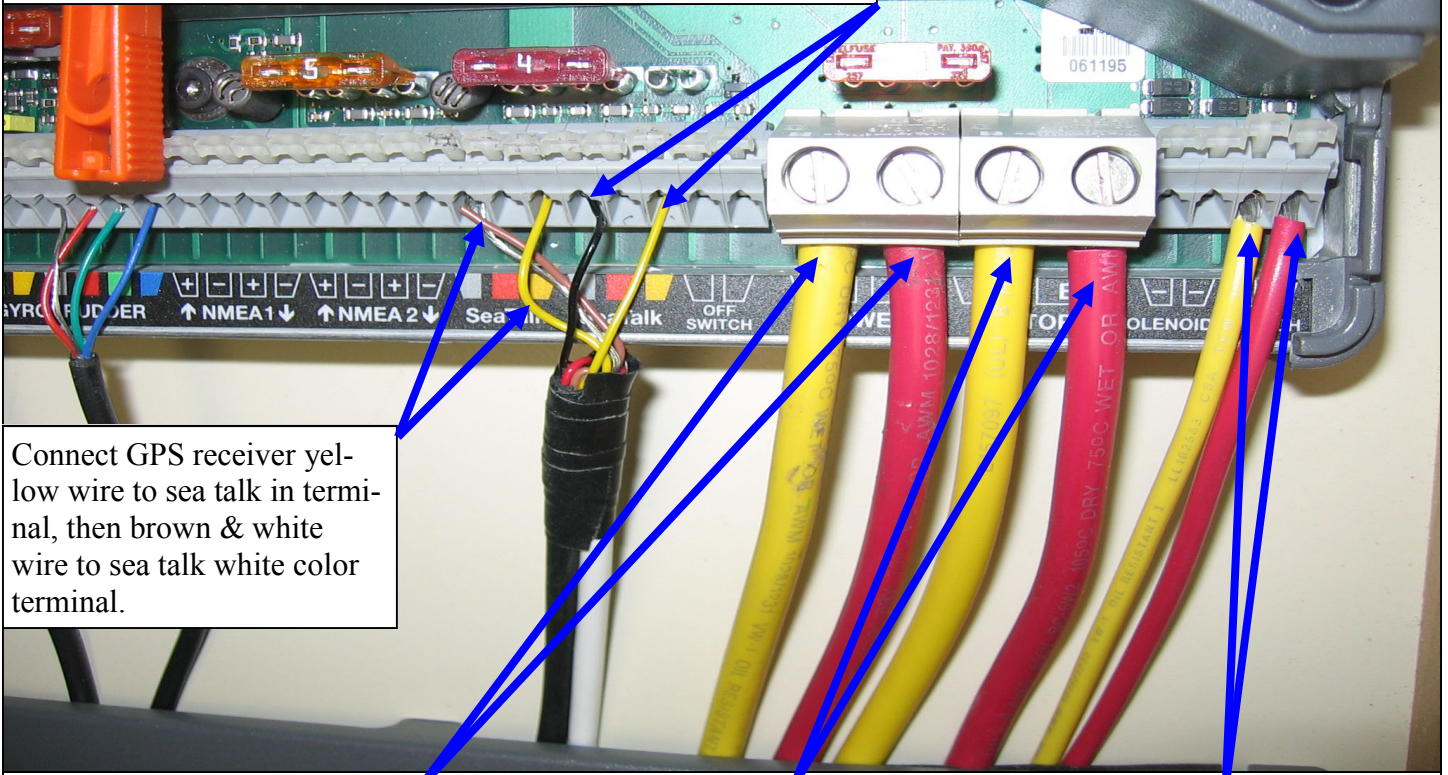
All SmartPilot computer terminals will accept stranded cable up to 2.5 mm (14 AWG). Connect the following elements as shown in the diagram:

1. Compass
2. Rudder Sensor
3. SmartPilot Controller via SeaTalk



45DS Electrical Stage Autopilot Course Computer Installation With ST-60

Connect Sea talk wire from DC junction breaker yellow wire to sea talk out terminal, then black wire to sea talk white color terminal. And bridge red wires of GPS & Sea Talk

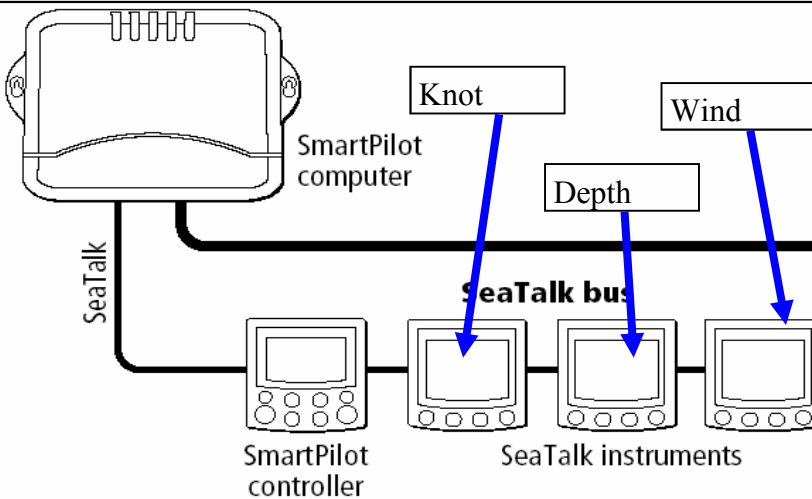


Connect GPS receiver yellow wire to sea talk in terminal, then brown & white wire to sea talk white color terminal.

These 2 terminals are from DC junction box autopilot breaker (provide power to course computer & drive unit)

These 2 terminal connect to autopilot drive motor for power supply

These 2 terminal connect to autopilot drive motor clutch

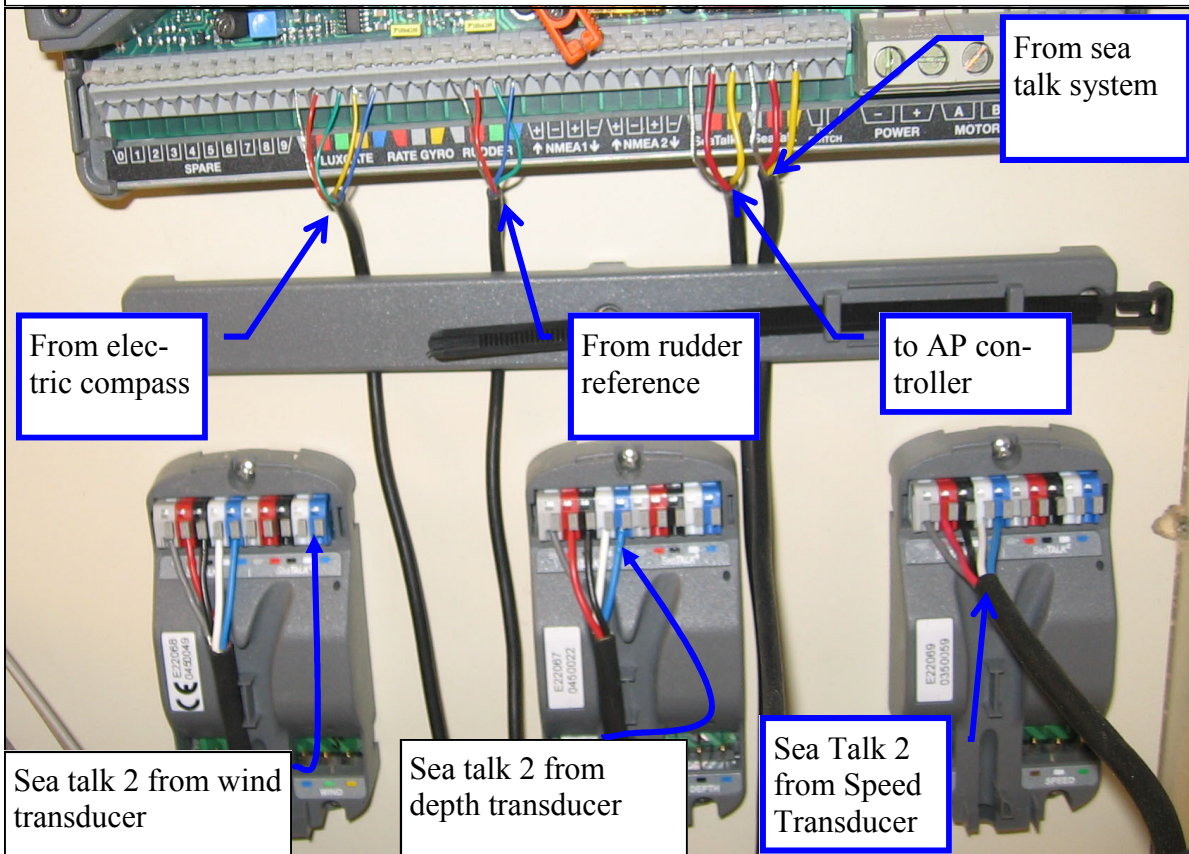


E-80 chart plotter locates on electrical panel, E-120 locates on cockpit center console

45DS Electrical Stage Autopilot Pedestal Display Installation (ST-60 & E120)

Sea- Talk Loop:

1. Install speed, depth and wind transducer wires on ST-60 displays.
2. Connect sea-talk cable that has been ran from electrical panel to autopilot controller.
3. Use sea-talk cable to bridge controller and knot display.
4. Use sea-talk cable to bridge knot & depth display
5. Use sea-talk cable to bridge Wind & depth display.

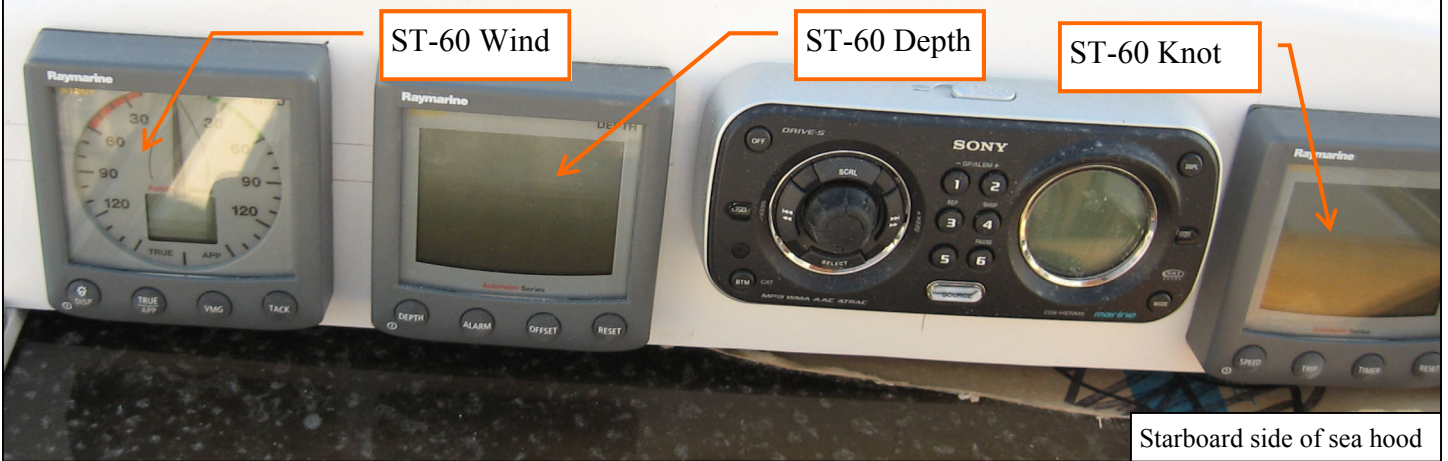


Autopilot rudder reference locates next to rudder quadrant



Autopilot drive unit under starboard side steering drive

45DS Electrical Stage Autopilot Pedestal Display Installation (ST-60 & E120)



Cockpit port helm station NAV pod