

Securing the Cables

1. Strip at least 5 mm ($\frac{1}{4}$ in) of insulation from the end of each cable
2. Use a small screwdriver to push the small plastic lever on top of the terminal and release the cable clamp
3. Insert the stripped cable and release the lever to grip the cable

1.7 How to connect SeaTalk equipment

Note: For Volvo Penta IPS autopilot systems, please refer to the Connections guide supplied with the DPU.

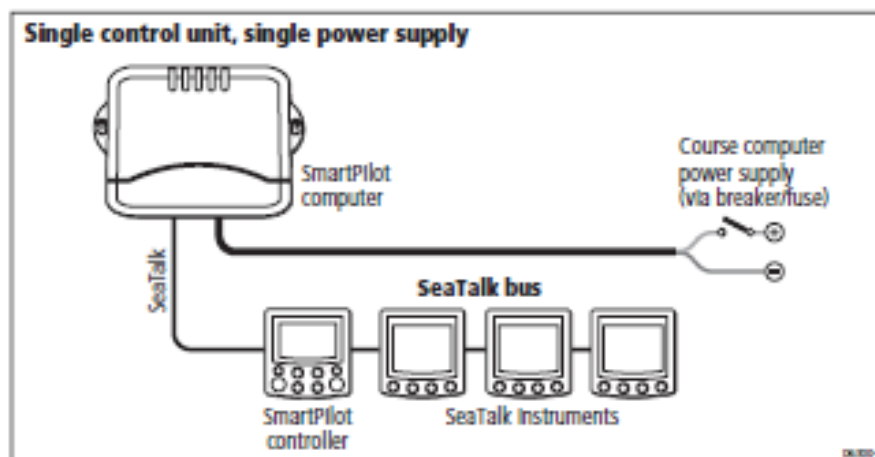
You can use SeaTalk to connect your SmartPilot to:

- additional SeaTalk controllers: you can use any controller to operate the SmartPilot and view autopilot information
- SeaTalk equipment (such as instruments, chartplotters, radar and GPS):
 - the SmartPilot can use information from this equipment to enhance course keeping and provide additional features.
 - you can also display information from the SeaTalk equipment on the SmartPilot controller.

The following illustrations show some typical ways to connect simple SeaTalk systems.

Single control unit, single power supply

The simplest type of system has the SmartPilot computer providing power to a single SeaTalk bus that includes a single controller and several instruments.

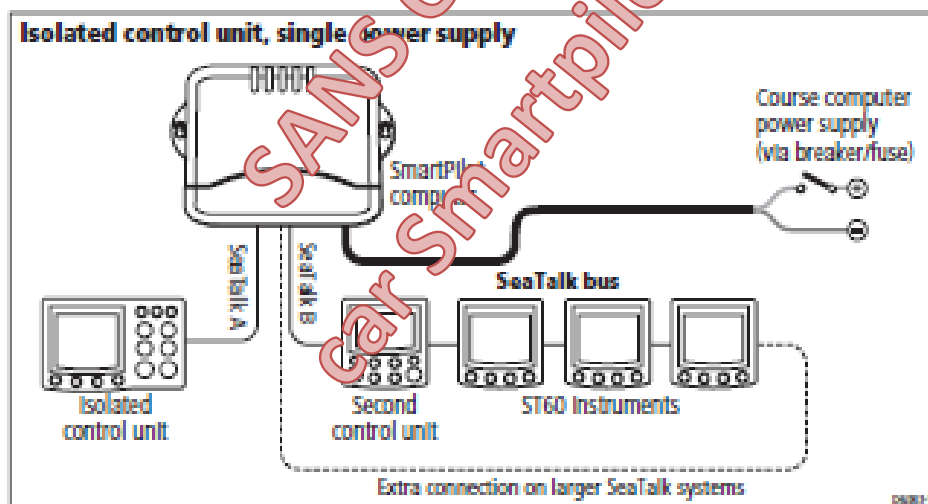


Isolated control unit, single power supply (S2 and S3 computers only)

If you have two control units, we recommend that you connect one to each SeaTalk terminal. In the following illustration:

- the SmartPilot computer provides power to the SeaTalk system
- one control unit is connected on its own to SeaTalk A so it is isolated against any possible failure of SeaTalk B

If the SeaTalk B line fails, the isolated control unit will switch to standby mode as a safety measure. By pressing **auto** on the isolated control unit, you can regain full autopilot control.



Note: Depending on the number of SeaTalk units and the total length of SeaTalk cabling, you may need to provide 12 V power supply to each end of the SeaTalk bus ('ring-main' style). Refer to the instrument handbook for more information.

Separate SmartPilot computer and instrument power

Another option is to provide separate power supplies to the SmartPilot computer and SeaTalk system so you can have independent, switched instrument and pilot systems.

Note: *DO NOT* connect the SeaTalk RED wire at the SmartPilot terminal

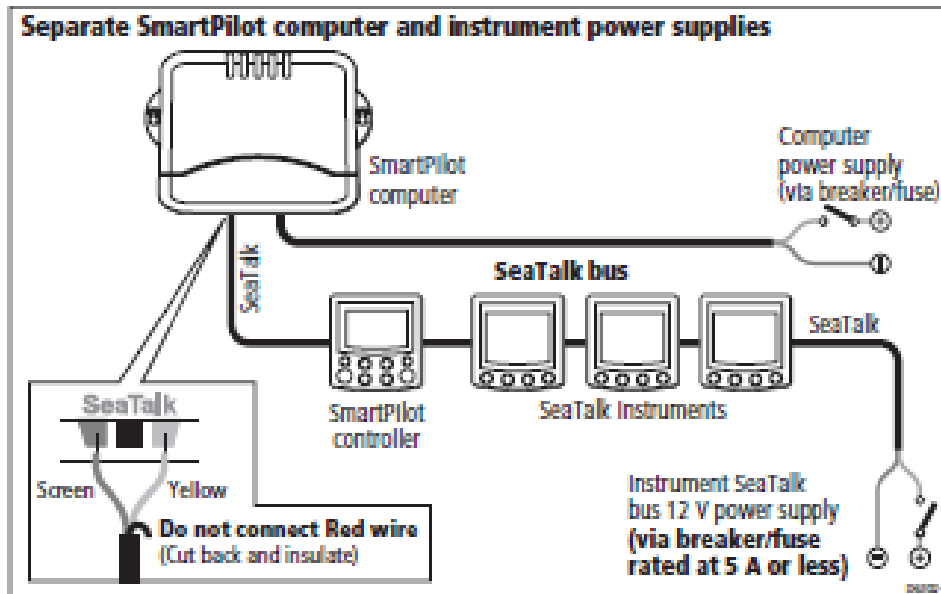


WARNING: Use correct fuse

The fuse supplying the instrument system MUST be rated at 5A or less.

The behavior of the computer and the instruments now depend on where power is applied to the system.

- **Computer AND instrument power supplies ON:**
The system will function normally.
- **Only computer power supply ON:**
The controller and instruments do not power up.
- **Only instrument power supply ON:**
The controller shows a PILOT OFF or NO LINK message.



Connecting SeaTalk or NMEA compasses

You can connect SeaTalk or NMEA compasses to the SmartPilot computer, either to replace the fluxgate compass or provide supplementary compass signals.

When you connect more than one compass to the autopilot system, the computer processes their signals in this order of priority:

1. Fluxgate compass
2. NMEA compass
3. SeaTalk compass

This means that if you want to use a NMEA compass as the primary compass, you need to disconnect the fluxgate compass.

To connect a SeaTalk or NMEA compass to the autopilot system:

- **NMEA compass:** connect it to a NMEA input on the computer
- **SeaTalk compass:** connect it to the SeaTalk bus or the SeaTalk terminals

1.8 How to connect NMEA equipment

If you have equipment on your boat that transmits or receives NMEA 0183 data (e.g. GPS), you can connect this equipment to the SmartPilot. NMEA equipment can be connected in any combination of these ways:

- using the SmartPilot computer NMEA input/output
- using the NMEA input on the back of the SmartPilot controller. (Refer to the Controller handbook for NMEA data details)
- using the SeaTalk/NMEA interface (part number: E85001) to convert the NMEA data to SeaTalk data



WARNING: Connections to other equipment

If you are connecting Raymarine equipment to other equipment using a non-Raymarine cable, you MUST attach an appropriate suppression ferrite to the cable near to the Raymarine unit.

