

Compass Calibration

The compass supplied with your AP4 autopilot has been calibrated during manufacture. This calibration will be satisfactory for almost all installations. If you have a steel vessel, or some other factor, which causes the compass to perform poorly, the calibration procedure will adjust compass characteristics to compensate. The calibration should only be done if the compass is **known** to be inaccurate.

If the AP4 compass displays a **constant offset** (eg the autopilot compass reads 3 degrees high **on all bearings**), simply rotate the AP4 compass case to align bearings with the ships compass. **It is not necessary** to re-calibrate the compass as described below.

If the AP4 compass has inconsistent variation on different headings, the following calibration procedure can be carried out. This procedure should only be done in calm waters with adequate sea room.

1. In **SET** mode, hold down **GPS** button and press **TIMER** button, **[900]** will show on the display. Release buttons, rotate course knob until display shows **[901]**. Press the **TIMER** button. The display will flash between **[CAL]** and **[***]** (heading).

2. Turn vessel slowly through two complete circles in same direction.

3. In **SET** mode, hold down **GPS** button and press **TIMER** button. Release buttons, rotate course knob until display shows **[902]**. Press **TIMER** button.

Note: If display shows **[rES]** the calibration was invalid and the AP4 defaults the factory setting. Repeat steps 1, 2 and 3 to carry out calibration again.

This completes the compass calibration. Check alignment of the AP4 compass by steering vessel due North (000 on ships compass) and, if necessary, rotate outer case of AP4 compass in its bracket until heading display reads 000.

It is important to realise that on any vessel the ships compass can have heading errors as a result of the vessels magnetic signature. These errors can be minimised by having the ships compass swung and compensated by a licensed compass adjuster. Such adjustment should be repeated annually. In any case it is highly unlikely that the ships compass and autopilot compass will be congruent for every heading.

If you are unsure of the success of the calibration, you may return to the factory calibration setting following step 1 above but rotating course knob until display