

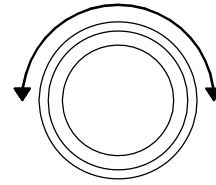
The AP28 will keep the boat on the set course until a new mode is selected or a new course is set with the course knob or the PORT or STBD keys. One revolution of the course knob equals a 45° course change.



Decrease



Increase



Course adjust 1°
(or 10°)/push

Course change
CCW: Decrease CW: Increase



On power boats you may in the Setup menu preset the keys to change course by 10° per press (see page 60)

Once the course is changed to a new set course, the boat will automatically turn to the new heading and maintain the new course.

Heading capture

When in AUTO or NoDrift mode (page 30) heading capture allows you to automatically cancel the turn you are in by an instant press on the **AUTO** key or the **NoDrift** key. The autopilot will cancel the turn to continue on the heading read from the compass the very moment you pressed the **AUTO** key or the **NoDrift** key. This is a useful feature if you are not sure of the exact turn you have to make to hit e.g. an inlet or a dock.



- **Automatic steering mode**
- New "captured" heading: 305°
- Compass reading: 311° M (magnetic) or T (true)



Regain manual steering by pressing the **STBY** key.

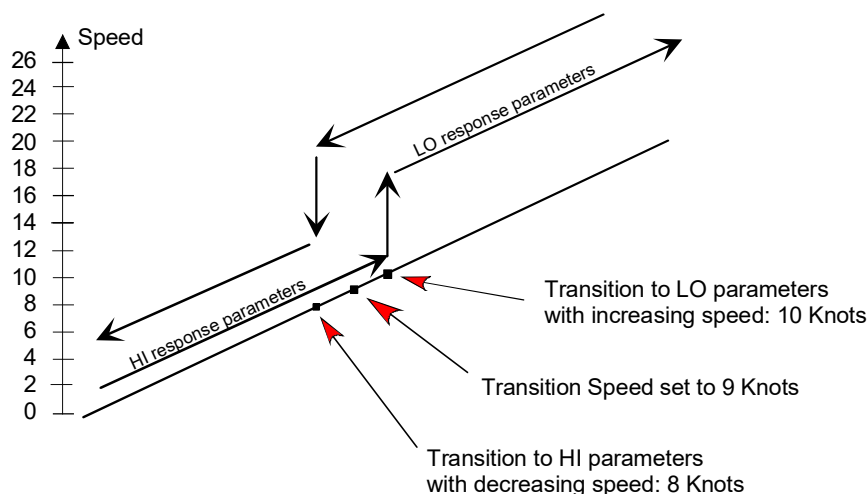
Control of steering performance

When operating in an automatic mode the AP28 utilizes two different sets of steering parameters (HI/LO). The

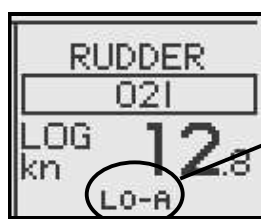
parameters control the response of the boat at different speeds or wind directions. The two parameter sets can be automatically or manually selected, and each set can be manually adjusted (response adjust).

The speed at which the autopilot automatically changes from LO to HI parameters (or opposite) is determined by the "Transition HI-LO" set in the *Installation/Commissioning/Seatrial* menu, page 83. See diagram on next page.

At no speed input the autopilot defaults to LO steering parameters when engaging an automatic mode from STBY. This is a safety feature to prevent oversteering.



Display legend



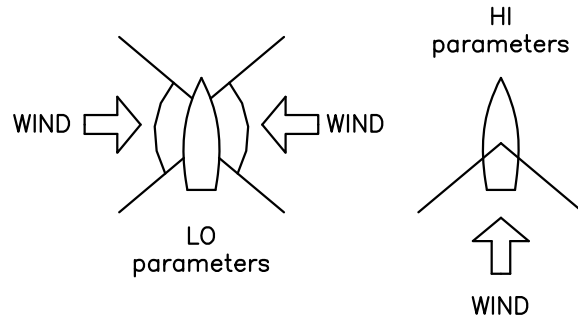
- HI-A High response parameters set automatically
- LO-A Low response parameters set automatically
- HI-M High response parameters set manually
- LO-M Low response parameter set manually

Power boats

On power boats the automatic selection of HI or LO is determined solely by the speed of the boat as shown in the diagram above.

Sailboats

When sailing in WIND mode, the parameter set is determined by the speed of the boat and the direction of the wind as per below.



So if you lose too much speed e.g. when tacking, the parameters will change to HI to gain sufficient rudder response. This should be observed when setting the transition speed on sailboats. See also **Wind response** on page 16.

Response adjust

The Autotune function in the AP28 is so refined that the majority of boats will need no further adjustments of the steering parameters. On some boats, however, or at particular sea conditions a fine tuning of the steering parameters may improve the performance of the autopilot.

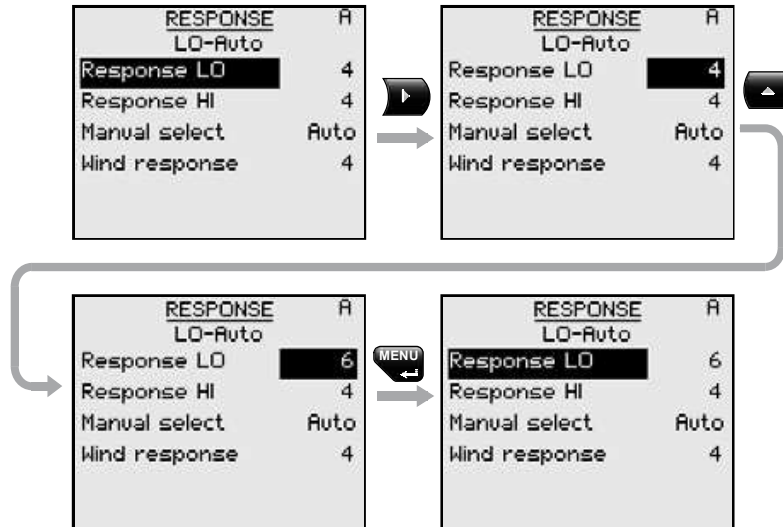
The Response control allows you to make this fine tuning for each of the two (HI/LO) parameter sets. The response can be set to nine levels. Level 4 is default with parameter values as set by the Autotune function. If no Autotune is made (not recommended) the level 4 values are the factory default values.

A low response level reduces the rudder activity and provides a more "loose" steering.

A high response level increases the rudder activity and provides a more "tight" steering.

A too high response level will make the boat start S-ing.

When you access the RESPONSE page the highlighted *Response* parameter is the one that is active.



Adjustment of HI and LO values can be performed even with the boat out of the water.

Range	Change per step	Default
1-9	1	4

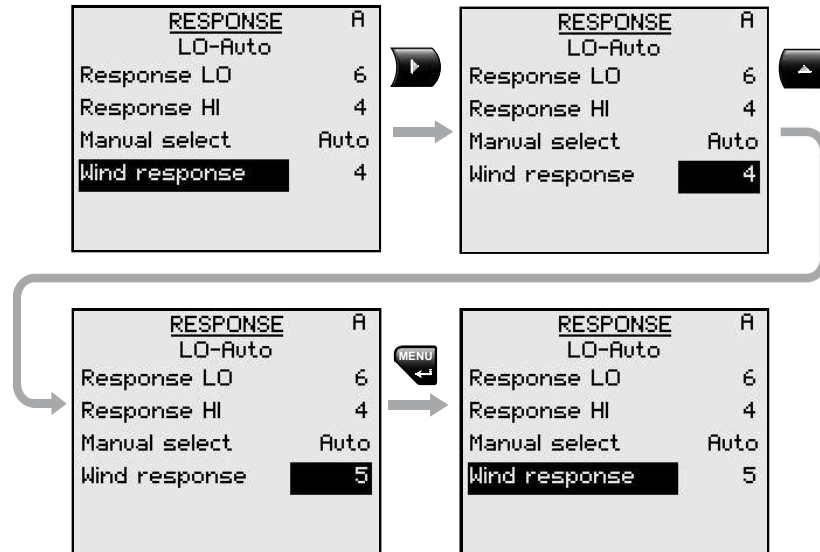
Wind response (sailboats)



Verify that the difference between Course To Steer (CTS) and the actual heading is at an acceptable minimum.

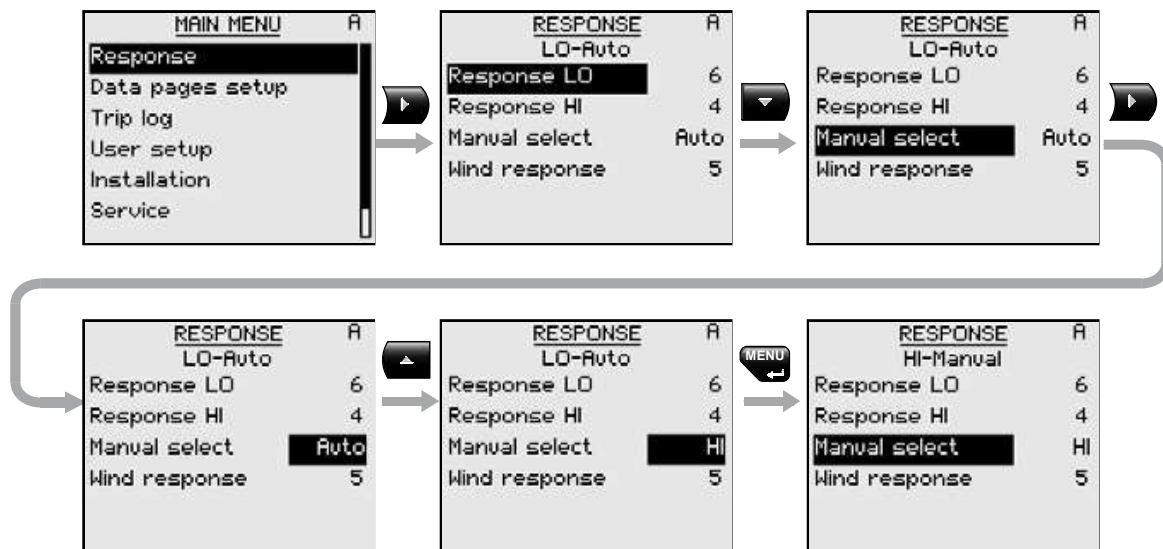
If the difference between the set wind angle and the actual wind angle is too big, increase the 'Wind response' to reduce the difference.

If the actual wind angle is S-ing around the set wind angle, or the rudder activity is too high, the 'Wind response' should be reduced.



Range	Change per step	Default
1-9	1	4

Selection of HI/LO parameters



The "Manual select" item has three alternatives:
Auto – HI – LO.

- Auto is automatically set by speed input
- HI or LO must be set manually when there is no speed input