

Internal Rudder Limits

If the autopilot attempts to drive the rudder beyond its physical limits, the steering gear may be damaged. An internal **rudder limit** adjustment has been set to prevent this occurring. The external **rudder limit** control on the front panel can then be used to restrict the rudder angle range even further, and is intended to be used to prevent sharp turns, rather than protect the autopilot system.

NOTE: If the rudder feedback unit has been installed correctly, it should not be necessary to adjust the Rudder Limits Switch Setting

The rudder limits prevent the steering motor driving the rudder beyond its physical (mechanical) stops. The **limit switch** is set so that the limit display comes on before the rudder reaches the stops.

There are two display symbols **P_L** (port limit), **S_L** (starboard limit) indicating the state of the rudder limit circuits ...

- * The port limit **P_L** display will come on when the rudder position is further to port than the limit set by the **rudder limit port setting**. This will cause any port drive command to be ignored and turn off the port drive light on the front panel.
- * The starboard limit **S_L** functions in the same way for rudder angles to starboard.

NOTE: THE RUDDER LIMITS ARE FACTORY SET TO APPROXIMATELY 25 DEGREES. IF THE RUDDER FEEDBACK HAS BEEN INSTALLED CORRECTLY, THE P L AND S L SYMBOLS SHOULD DISPLAY WHEN THE RUDDER IS MOVED PORT OR STARBOARD BY 25 DEGREES.

Setting Rudder Limit

- Select **Standby** mode
- Enter "**905**" and press and hold **GOTO** then **Auto, Standby or Power**, only the standby light will be on
 The display will indicate between 0 and 256 this is representative of rudder position where 128 is centre, 256 is fully port and 0 is fully starboard.
- Set the rudder to the required port position and press Port Arrow Button
- Set the rudder to the required Starboard position and press Stbd Arrow Button
- To store the Data press "**GOTO**"