

Active (Push-Button) Remote

Remote Selection.

To enable operation with the Active Remote unit, Remote selection must be carried out as described in MCU installation for DIP switch settings.

Remote Functions

The Active Remote Unit has a keypad with 6 selections, together with a power indicator and a control knob.

The power indicator lights when the remote unit is connected and power is switched on.

Prior to operating the Active Remote unit, set the control knob to centre. This removes the possibility of a sudden course change if Power Steering is selected.

- * **"Off"** selection : Cancels any selected mode and returns the Autopilot to the manual steering mode.
- * **"Auto"** selection : Engages the autopilot and locks on to the current heading. Heading changes can be made by rotating the control knob in the required direction. From centre position to full travel Port or Starboard will give a course change of approximately 90 degrees.
- * **"Power Steer"** selection : The control knob acts as a steering wheel and allows the user to steer the vessel to the direction required. Centralise the knob to stop the vessel turning and select "Auto" to lock on to that heading. If large course changes are required it is recommended that this function is used.
- * **"GPS"** selection : With a route selected in the GPS unit, press this function to allow the autopilot to follow the route. Selection of "Off", "Auto" or "Power Steer" will cancel the GPS mode.

* "**Response**" selection : Allows for adjustment of the autopilot sensitivity using the control knob.

This setting is used for adjusting the autopilot response to varying sea conditions, and varying vessel capabilities. The response value sets the desired accuracy of the vessel steering. A low value of response will cause the vessel to steer very accurately but may cause excessive use of the steering motor.

- * A low **response** value signifies a smaller, acceptable heading deviation (for calm weather)
- * A high **response** value signifies a larger acceptable heading deviation (for rougher weather - to reduce the work on the drive unit).

NOTE: Too low a setting may cause the steering motor to work continuously. The **response** setting should be increased until this ceases. Before adjusting response, read the **rudder** section on the next page as the two adjustments have an effect on optimum steering.

Hold the **Response** key down and vary the sensitivity with the control knob until the required setting is achieved. Clockwise rotation increases acceptable heading deviation, counter-clockwise decreases. Release the **Response** key. The selected setting will now be locked in.

Input from the control knob will be ignored for the next 5 seconds. This will allow time for the control knob to be positioned as desired without causing loss of selected heading. After 5 seconds the control knob returns to its previous function.

* "**Rudder**" selection : Allows for changing of the **Rudder Ratio** setting with the control knob.

This setting is used to determine the amount of rudder the vessel requires for steering (actually, the amount of rudder angle applied for a given angle off-course).

In general, an agile vessel with a relatively large rudder or very small keel will require a small rudder setting. A large, slow vessel may require a high value for the rudder ratio.

- * A low setting will allow a small amount of applied rudder. If the setting is too low, vessel will track in slow "S" or understeer.
- * A high setting allows a large amount of applied rudder. If the setting is too high, the vessel will track in rapid "S" or oversteer.
- * The setting should be adjusted carefully to give the optimum steering for the vessel

Note: Before adjusting the rudder ratio, the **response** (sensitivity) should be set fairly low. After adjusting for optimum steering with rudder ratio, then re-set the response to avoid excessive working of the steering motor.

Hold the **Rudder** key down and vary the rudder ratio with the control knob until the required setting is achieved. Clockwise rotation increases rudder ratio, counter-clockwise decreases. Release the **Rudder** key. The selected setting will now be locked in.

Input from the control knob will be ignored for the next 5 seconds. This will allow time for the control knob to be positioned as desired without causing loss of selected heading. After 5 seconds the control knob returns to its previous function.