

Fig 1 - HR20 Hand Remote

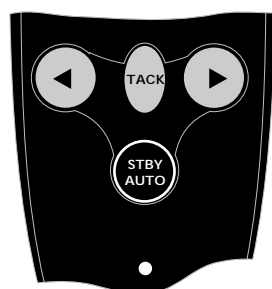


Fig 2 - Engaging Autopilot Mode

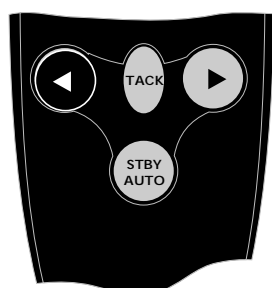


Fig 3 - Remote steering to Port in Standby Mode

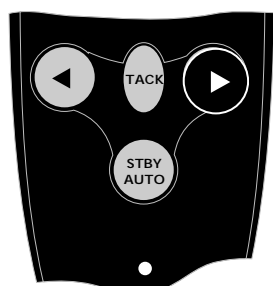


Fig 4 - Adjusting course in Auto Mode (1° & 10°)

## Hand Remote HR20

The HR20 is designed to allow remote operation of the TP20, TP30 and WP30 Cockpit Autopilots from elsewhere on the vessel.

To engage the Autopilot, steer the desired course and then press the **STBY/AUTO** button (Fig 2). The LED will light indicating that the Autopilot is activated. To disengage the Autopilot, simply press **STBY/AUTO** again.

While in Standby Mode, the arrowed **Port** and **Starboard** buttons can be used to “power steer” the vessel using the Autopilot (Fig 3). In Auto Mode, pressing the **Port** and **Starboard** buttons once will alter course by 1° in the desired direction (Fig 4). Pressing and holding the buttons will alter course in 10° increments.

The Autotack facility allows the Autopilot to automatically tack the vessel through a preset angle. Press and hold the **TACK** button, and while keeping it held, press the **Port** or **Starboard** button (Fig 5), depending on which direction the vessel is tacking.

**NOTE** - If in Sail To Wind Mode, the vessel will tack onto the same apparent wind bearing, but on the opposite tack. In this mode, the Autopilot will only allow a tack in the correct direction, and the facility is disabled if sailing downwind.

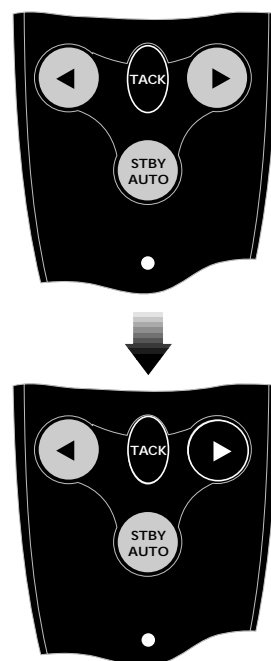


Fig 5 - Initiating Starboard Autotack

## Installation & Wiring

The HR20 is linked to the Autopilot via its NMEA input terminals. To enable a neat installation, the HR20 is supplied with a 4-way bulkhead socket and cable assembly. This is connected to the power supply, and to the NMEA terminals of the Autopilot.

If a GPS / Navigational Receiver is already interfaced to the Autopilot via the NMEA terminals, these wires should be disconnected and re-linked to the green (Com) and white (Data) wires of the Hand Remote socket assembly (Fig 6). The blue and yellow wires should be connected to the NMEA Com and Data terminals respectively of the Autopilot to replace the removed NMEA cable. The red and black wires should be connected to a 12v supply cable.

Note that the Autopilot and NMEA link will still function with the HR20 unplugged.

4 Pin Socket Wiring	
Wire	Wire To
Green	NMEA Com from GPS*
White	NMEA Data from GPS*
Red	12v+ DC
Black	0v
Blue	NMEA Com - Autopilot
Yellow	NMEA Data - Autopilot

\* GPS or other NMEA0183 compatible Navigational Receiver

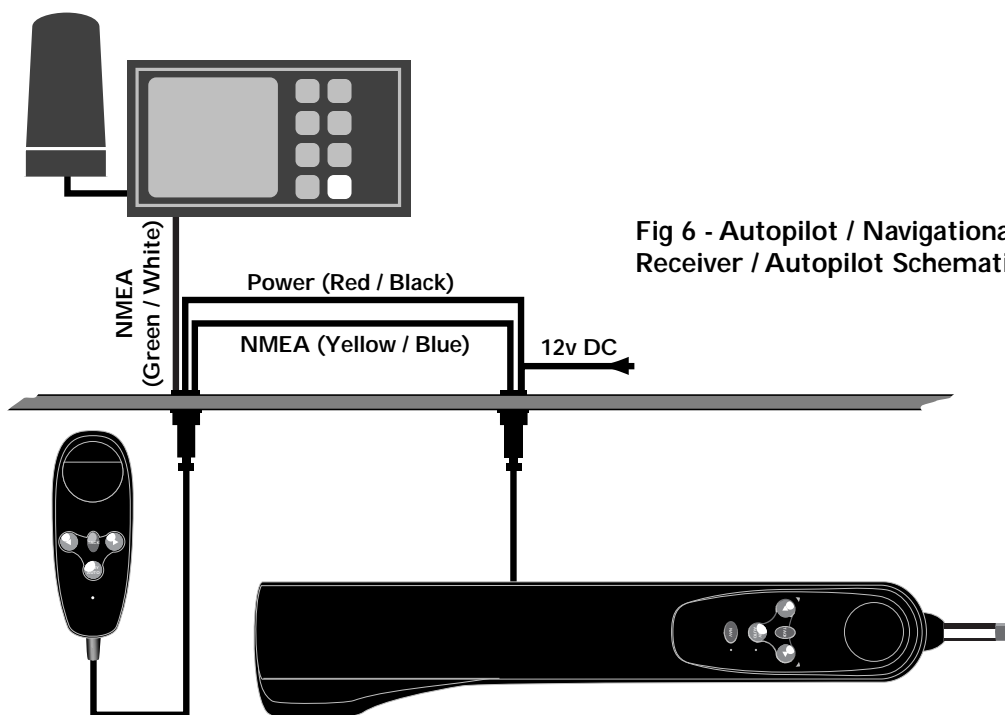


Fig 6 - Autopilot / Navigational Receiver / Autopilot Schematic