

PILOT-H

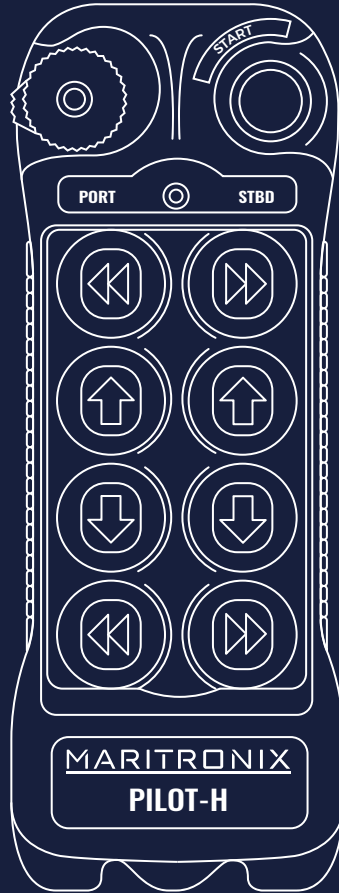
MARITRONIX



2024

WIRELESS HANDHELD REMOTE CONTROL

DATASHEET



SPECIFICATIONS



TRANSMITTER

Dimensions	70×185×40mm
Weight	210g
Case material	PA6GF30
Power	LR6(AA)1.5Vx2
Operating temperature	-35°C to +75°C
Protection level	IP65

FCC certified
CE certified



RECEIVER

Dimensions	260×167×82mm
Weight	2500g
Case material	aluminium
Power	12V/24V DC
Operating temperature	-35°C to +75°C
Protection level	IP65 with hydrophobic vent

FCC certified
CE certified

THE SCOPE OF DELIVERY FOR A PILOT-H INCLUDES:

- 1 transmitter
- 1 receiver
- 2 mounting plates for receiver
- 1 antenna for receiver
- 1 universal cable set
- 1 external buzzer
- 1 user manual
- 1 installation manual
- 1 lanyard
- 1 protective case for transmitter

REMOTE CONTROLLER (TRANSMITTER)

TAKE COMMAND

Activate helm control by pressing the start button while the remote control is already turned on. Depending on your boat's propulsion system and the configuration of the Pilot-H, it may be necessary to first manually activate the station to which the Pilot-H is connected.

BOW THRUSTER

Activate the bow thruster to push the bow to port by pressing the upper left button(1). Press the upper right button(2) to push the bow to starboard. These buttons will only operate a bow thruster if it is installed on the boat and the Pilot-H Receiver is configured accordingly. If not, pressing these buttons will have no effect.

ENGINE CONTROL

Press the upper left button(3) to engage the port engine forward. Press the lower left button(5) to engage the port engine in reverse. Press the upper right button(4) to engage the starboard engine forward. Press the lower right button(6) to engage the starboard engine in reverse. For boats with a single engine, press the upper left button(3) to engage the engine in reverse, and the upper right button(4) to engage the engine forward.

STERN THRUSTER

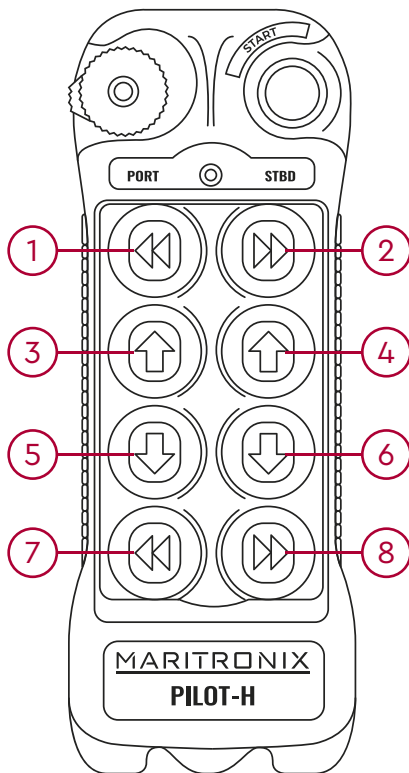
Activate the stern thruster to push the stern to port by pressing the lower left button(7). Press the lower right button(8) to push the stern to starboard. These buttons will operate a stern thruster only if it is physically installed on the boat or a virtual stern thruster is enabled in the system configuration menu, and the Pilot-H Receiver is configured accordingly. If these conditions are not met, pressing these buttons will have no effect.

ANCHOR WINCH

Raise the anchor by holding the green button and pressing the bow thruster left button(1). Lower the anchor by holding the green button and pressing the bow thruster right button(2).

HORN

To activate the horn, press either the left(7) or right(8) stern thruster button while holding down the green start button.



WORKING ALGORITHM AND CONNECTION SCHEME

The Pilot-H system is connected between the control head and the engine ECU. When the engine command button on the Pilot-H transmitter is pressed, it emulates the control head commands and transmits them to the engine control unit. Upon releasing the button or switching off the remote control, the connection between the control head and the engine ECU is promptly restored. This method of connection ensures both safety and reliability.



A 2000mm high-quality cable set is included in each package. Each cable features an individual connector, number, color, and a label sticker with a wire description at the end. This design ensures a safe and easy installation process. Additionally, for certain head control models, pre-wired T cross connectors are available for purchase, allowing for faster plug-and-play installation.



The built-in configuration program allows both installers and users to modify the system configuration and setup. The program is accessible via Wi-Fi compatible devices such as laptops or tablets. Since the program is integrated into the system, no additional software or applications are required. This approach ensures that parameters can be configured even after 20 or 40 years, as no updates or third-party software are necessary.

PILOT-H INSTALLATION:

COMPATIBILITY, ADDITIONAL MODULES AND INSTRUCTIONS.

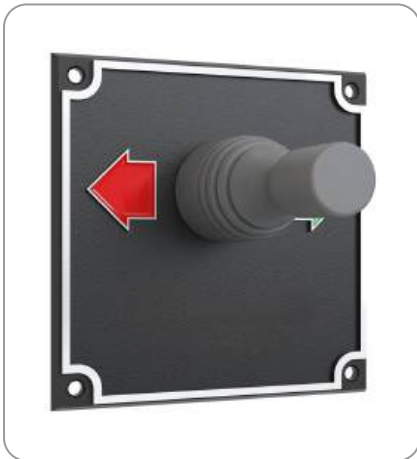
PILOT-H is compatible with most analog proportional control systems. Please refer to the list of commonly installed analog propulsion control and thruster systems. Note that some manufacturers are not listed because they share the same control panels.

In some cases, an additional module is required to connect PILOT-H, especially with analog proportional thruster control panels. This module can be purchased directly from Maritronix. For correct installation, review the datasheet and connection schematics of the installed thruster and engine control system.

If the control panel uses a CAN bus protocol for data transmission between the engine and the control panel, a gateway is needed to control the thrusters with the PILOT-H remote. In this case, please contact the manufacturer for more information.

In special cases where direct gearbox control is needed, this function must be enabled in the configuration menu.

To obtain the installation manual and T cross connector for fast installation (if available) for a specific type of control, please select the SYS ID number from the list below corresponding to the installed configuration on the boat when ordering the PILOT-H.



**VOLVO PENTA
ANALOG CONTROLS**

EDC			<p>CMD: YES <u> </u> SYS ID: 101</p>
EDC			<p>CMD: YES <u> </u> SYS ID: 102</p>
EDC			<p>CMD: YES <u> </u> SYS ID: 103</p>
EVC -B -C			<p>CMD: NO <u> </u> SYS ID: 104</p>
EVC -C			<p>CMD: NO <u> </u> SYS ID: 105</p>
EVC -D -E			<p>CMD: YES <u> </u> SYS ID: 106</p>

ZF
MICROCOMMANDER CLEARCOMMAND CRUISECOMMAND MINICOMMAND
ANALOG CONTROLS

<p>MC2000 - 4</p>	 A black, compact analog control unit with two silver-colored levers on top.	<p>CMD: YES _____ SYS ID: 201</p>
<p>MC2000 - 2</p>	 A white, compact analog control unit with two silver-colored levers on top.	<p>CMD: YES _____ SYS ID: 202</p>
<p>760</p>	 A black, compact analog control unit with two black levers on top.	<p>CMD: YES _____ SYS ID: 203</p>
<p>456 - 3</p>	 A black, compact analog control unit with two silver-colored levers on top.	<p>CMD: YES _____ SYS ID: 204</p>
<p>460 - 4</p>	 A black, compact analog control unit with two black levers on top.	<p>CMD: YES _____ SYS ID: 205</p>

<p>463-4</p>		<p>CMD: YES <u> </u> SYS ID: 206</p>	
<p>4200</p>		<p>CMD: YES <u> </u> SYS ID: 207</p>	
<p>MC2000 - 4</p>			<p>CMD: YES <u> </u> SYS ID: 208</p>
<p>412</p>		<p>CMD: YES <u> </u> SYS ID: 209</p>	
<p>MC2000 - 1</p>		<p>CMD: YES <u> </u> SYS ID: 210</p>	

<p>BELLMARINE</p>		<p>CMD: NO <hr style="width: 10%; margin: 0 auto;"/> SYS ID: 301</p>
<p>REXROTH</p>		<p>CMD: YES <hr style="width: 10%; margin: 0 auto;"/> SYS ID: 302</p>
<p>REXROTH ANALOG 12 PIN</p>		<p>CMD: YES <hr style="width: 10%; margin: 0 auto;"/> SYS ID: 303</p>
<p>HONDA ANALOG</p>		<p>CMD: NO <hr style="width: 10%; margin: 0 auto;"/> SYS ID: 304</p>
<p>HYDRONAUTICA</p>		<p>CMD: YES <hr style="width: 10%; margin: 0 auto;"/> SYS ID: 305</p>
<p>KOBELT</p>		<p>CMD: NO <hr style="width: 10%; margin: 0 auto;"/> SYS ID: 306</p>
<p>KOBELT</p>		<p>CMD: NO <hr style="width: 10%; margin: 0 auto;"/> SYS ID: 307</p>

<p>MERCURY ANALOG</p>		<p>CMD: NO — SYS ID: 308</p>	
<p>MERCURY JOYSTICK PILOTING 1</p>			<p>CMD: NO — SYS ID: 309</p>
<p>MTU ANALOG 17PIN</p>		<p>CMD: YES — SYS ID: 310</p>	
<p>NHK MEC TELEFLEX MORSE KE4,KE5,KE6</p>		<p>CMD: YES — SYS ID: 311</p>	
<p>NHK MEC TELEFLEX MORSE KE4+,KE5+, KE6+</p>		<p>CMD: YES — SYS ID: 312</p>	
<p>SUZUKI PRECISION CONTROL ANALOG</p>		<p>CMD: NO — SYS ID: 313</p>	

<p>TELEFLEX I6000</p>		<p>CMD: YES — SYS ID: 314</p>
<p>TELEFLEX EC</p>		<p>CMD: YES — SYS ID: 315</p>
<p>TWIN DISC EC150</p>		<p>CMD: YES — SYS ID: 316</p>
<p>TWIN DISC EC200,EC300 ANALOG</p>		<p>CMD: YES — SYS ID: 317</p>
<p>YAMAHA ANALOG</p>		<p>CMD: YES — SYS ID: 318</p>
<p>YANMAR VC10 ANALOG</p>		<p>CMD: YES — SYS ID: 319</p>

**BOW AND STERN
THRUSTERS**

<p>SIDE POWER</p>		<p>TYPE: ON/OFF — SYS ID: 501</p>
		<p>TYPE: ON/OFF — SYS ID: 502</p>
		<p>TYPE: ON/OFF — SYS ID: 503</p>
		<p>TYPE: ON/OFF — SYS ID: 504</p>
		<p>TYPE: ON/OFF — SYS ID: 505</p>

		<p>TYPE: ON/OFF <hr style="width: 10%; margin: 0 auto;"/> SYS ID: 506</p>	
<p>SIDE POWER</p>			<p>TYPE: PROPORTIONAL SYS ID: 507 + S-LINK INT 8730B BOW</p>
			<p>TYPE: PROPORTIONAL SYS ID: 508 + S-LINK INT 8730S STERN</p>
<p>ABT</p>		<p>TYPE: ON/OFF/PROPORTIONAL <hr style="width: 10%; margin: 0 auto;"/> SYS ID: 509</p>	
		<p>TYPE: ON/OFF/PROPORTIONAL <hr style="width: 10%; margin: 0 auto;"/> SYS ID: 510</p>	
<p>BCS</p>		<p>TYPE: ON/OFF <hr style="width: 10%; margin: 0 auto;"/> SYS ID: 511</p>	

	 <p>A black rectangular control panel for a BCS thruster. It features a central joystick with a red arrow pointing left and a green arrow pointing right. Below the joystick are two toggle switches labeled 'OFF' and 'ON', with the word 'THRUSTER' printed below them. A 'FAULT' indicator is visible on the right side.</p>	<p>TYPE: ON/OFF/PROPORTIONAL <hr style="width: 20%; margin: 0 auto;"/> SYS ID: 512</p>
<p>BCS</p>	 <p>A black rectangular control panel for a BCS thruster, similar to the first one but with a different joystick orientation and button layout.</p>	<p>TYPE: ON/OFF <hr style="width: 20%; margin: 0 auto;"/> SYS ID: 513</p>
	 <p>A black rectangular control panel for a BCS thruster, featuring a joystick and several indicator lights.</p>	<p>TYPE: ON/OFF <hr style="width: 20%; margin: 0 auto;"/> SYS ID: 514</p>
	 <p>A black rectangular control panel for a BCS thruster, showing a joystick and multiple indicator lights.</p>	<p>TYPE: ON/OFF <hr style="width: 20%; margin: 0 auto;"/> SYS ID: 515</p>
<p>CMC</p>	 <p>A black square control panel for a CMC thruster. It has a central joystick and two rotary buttons at the bottom.</p>	<p>TYPE: ON/OFF/PROPORTIONAL <hr style="width: 20%; margin: 0 auto;"/> SYS ID: 516</p>
<p>CRAFTSMAN</p>	 <p>A square control panel for a Craftsman thruster, featuring a joystick and indicator lights.</p>	<p>TYPE: ON/OFF <hr style="width: 20%; margin: 0 auto;"/> SYS ID: 517</p>

<p>CRAFTSMAN</p>		<p>TYPE: ON/OFF <u> </u> SYS ID: 518</p>
		<p>TYPE: ON/OFF <u> </u> SYS ID: 519</p>
<p>DANFOSS</p>		<p>TYPE: ON/OFF/PROPORTIONAL <u> </u> SYS ID: 520</p>
<p>JET THRUSTER</p>		<p>TYPE: ON/OFF <u> </u> SYS ID: 521</p>
<p>KOBELT KEYPOWER</p>		<p>TYPE: ON/OFF <u> </u> SYS ID: 522</p>
<p>LEWMAR</p>		<p>TYPE: ON/OFF <u> </u> SYS ID: 523</p>

<p>LEWMAR</p>		<p>TYPE: ON/OFF <u> </u> SYS ID: 524</p>
<p>QUICK</p>		<p>TYPE: ON/OFF <u> </u> SYS ID: 525</p>
		<p>TYPE: ON/OFF <u> </u> SYS ID: 526</p>
<p>VETUS</p>		<p>TYPE: ON/OFF <u> </u> SYS ID: 527</p>
		<p>TYPE: ON/OFF <u> </u> SYS ID: 528</p>
		<p>TYPE: ON/OFF <u> </u> SYS ID: 529</p>

		<p>TYPE: ON/OFF SYS ID: 530</p>
		<p>TYPE: ON/OFF SYS ID: 531</p>
<p>VETUS</p>		<p>TYPE: ON/OFF SYS ID: 532</p>
		<p>TYPE: ON/OFF SYS ID: 533</p>
		<p>TYPE: ON/OFF SYS ID: 534</p>
<p>WESMAR</p>		<p>TYPE: ON/OFF SYS ID: 535</p>

<p>WESMAR</p>		<p>TYPE: ON/OFF <hr style="width: 20px; margin: 0 auto;"/> SYS ID: 536</p>
<p>ENGBO XFORCE</p>		<p>TYPE: ON/OFF <hr style="width: 20px; margin: 0 auto;"/> SYS ID: 537</p>
		<p>TYPE: ON/OFF <hr style="width: 20px; margin: 0 auto;"/> SYS ID: 538</p>
		<p>TYPE: ON/OFF <hr style="width: 20px; margin: 0 auto;"/> SYS ID: 539</p>
<p>MAX POWER</p>		<p>TYPE: ON/OFF <hr style="width: 20px; margin: 0 auto;"/> SYS ID: 540</p>
<p>NAIAD MARINE SYSTEMS</p>		<p>TYPE: ON/OFF <hr style="width: 20px; margin: 0 auto;"/> SYS ID: 541</p>

ANCHOR WINCHES

TRAC	 A black rectangular control panel for a TRAC Auto Deploy anchor winch. It features three large triangular buttons: 'UP' at the top left, 'DOWN' at the bottom left, and 'AUTO DEPLOY' at the bottom right. A central anchor icon is positioned between the 'DOWN' and 'AUTO DEPLOY' buttons. The 'TRAC Auto Deploy' logo is at the top.
MAXWELL	 A black rectangular control panel for a MAXWELL WINDLASS anchor winch. It features a large triangular button with a red outline on the left and a smaller square button with a power symbol on the right. The 'WINDLASS' and 'MAXWELL' logos are visible.
QUICK	 A black rectangular control panel for a QUICK WCS 830 anchor winch. It features a central vertical slider with three directional arrows (up, anchor, down). The 'QUICK' logo and 'WCS 830' are visible at the top.
LOFRANS	 A black rectangular control panel for a LOFRANS WINDLASS anchor winch. It features a central rotary knob with four directional arrows (up, down, left, right). The 'WINDLASS' and 'LOFRANS' logos are visible.
NON-SPECIFIC BRANDS	 A black rectangular control panel for a NON-SPECIFIC BRANDS WINDLASS anchor winch. It features three vertical buttons with icons: an upward arrow, an anchor, and a downward arrow. The 'WINDLASS' logo is at the top.

The reverse rotation delay is set through the Pilot-H's configuration program.