

1 Safety

Warning indications

The following warning indications are used in this manual in the context of safety:



DANGER

Indicates that great potential danger exists that can lead to serious injury or death.



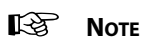
WARNING

Indicates that a potential danger that can lead to injury exists.



CAUTION


Indicates that the usage procedures, actions etc. concerned can result in serious damage to property. Some CAUTION indications also advise that a potential danger exists that can lead to serious injury or death.



NOTE

Emphasises important procedures, circumstances etc.

Symbols

 Indicates that the relevant procedure must be carried out.

 Indicates that a particular action is forbidden.

Share these safety instructions with all users.

General rules and laws concerning safety and accident prevention must always be observed.

2 Introduction

A bow thruster and/or a stern thruster can be controlled from any desired position on board by means of the radiographic remote control.

This product is designed exclusively for use as described in this manual and must only be used for this purpose. Any other use is a breach of the conditions of use and Vetus accepts no liability for any consequent damage. Claims on the warranty will not be accepted if unauthorized changes are made to the product.

A remote control (key fob) controls the bow/stern thrusters via CAN messages and relay outputs.

3 Installation



WARNING

In order to prevent personal injury, always disconnect the electrical supply during installation of and when carrying out maintenance on, the bow and/or stern thruster.

Position the receiver as far as possible away from large metal objects and electric motors.

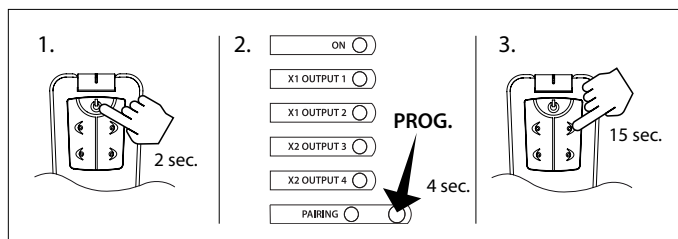
- Connect the receiver as indicated in the diagram.
- Install the antenna to ensure good reception of the signal.
- Insert the battery in the transmitter, see 7.3.
- Pair the remote control with the receiver, see chapter 4.
- Check its operation.

The remote control (transmitter) must be paired with the receiver.

4 Program (additional) transmitter

Each new transmitter must be added. A maximum of 5 transmitters can be coupled to one receiver. If a 6th transmitter is added the 1st transmitter will be deleted from the memory of the receiver.

Make sure that the wiring of the receiver is connected and the power supply switched on.



1. Press and hold the 'ON' key for about 2 seconds to switch on the new station.
2. Press and hold the 'PROG.' key until the red led lights up (4 sec.).
3. On the new transmitter, press one of the keys and keep it pressed until the red led in the receiver flashes.

The transmitter is now logged on. Wait for the red led to switch off before using the new transmitter.

5 CAN Control

CAN control is only available for Vetus V-CAN control led thrusters.

BOWPRO thruster connection must be done through CAN-bus instead of relays.

The receiver decodes the signals which are broadcasted into the V-CAN line and detects the status of the thrusters and the requests of the connected panels. For starting or recovering the control from the transmitter, the user must push the 'ON' button. The green led will turn on to indicate that the device is ready for usage.

5.1 led indications receiver

Green and red leds are blinking: Communication lost with any CAN control led thruster. If the communication with the other CAN control led thruster remains, it can still be used.

Once the communication with thruster is reestablished, errors can be removed by pressing the 'ON' button on the remote control.

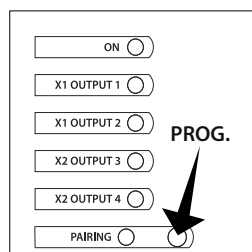
GREEN double blink: Control taken by another control panel.

Push 'ON' to recover the control.

Yellow led 1 blinking	Bow thruster overheat
Yellow led 2 blinking	Bow thruster low voltage
Yellow leds 1 and 2 blinking	Bow thruster overload
Yellow led 3 blinking	Stern thruster overheat
Yellow led 4 blinking	Stern thruster low voltage
Yellow leds 3 and 4 blinking	Stern thruster overload

6 Thrust direction

By changing the system configuration, the bow/stern thruster's thrust direction can be reversed.



Press and hold the PROG button until the red led lights up (4 sec.).

Press and hold the PROG button until the yellow led 1 or led 2 starts blinking.

You are now in the bow thruster, thrust direction setup mode.

led 1 flashes	standard bow thruster thrust direction
led 2 flashes	reverse bow thruster thrust direction

- To reverse the thrust direction of the bow thruster, briefly press the 'PROG' key.

Wait for 10 seconds to exit setup mode, or

- Press and hold the 'PROG' button (4 sec.) until the yellow led 3 or led 4 starts blinking.

You are now in the stern thruster, thrust direction setup mode.

led 3 flashes	standard stern thruster thrust direction
led 4 flashes	reverse stern thruster thrust direction

- To reverse the thrust direction of the stern thruster, briefly press the 'PROG' key.

Wait for 10 seconds or press and hold the 'PROG' button (4 sec.) to exit setup mode.

7 Operation

7.1 Receiver

- Switch on the power supply of the receiver.

The led on the receiver will flash and the remote control is ready to use.

When the receiver is in use, the corresponding yellow led (OUT1, OUT2, OUT3, OUT4) will turn on and CAN commands will be broadcasted.

The leds show the relay behavior not VCAN commands.

7.2 Transmitter

- Press and hold the 'ON' button on the transmitter for 2 seconds.

The led on the transmitter will flash and the remote control is ready for use.

A bow thruster and a stern thruster can be individually or simultaneously operated by use of the 4 keys.

- The blue led on the transmitter will remain on while one of the buttons is pressed.
- To ensure correct operation, the maximum distance between the transmitter and the receiver is 15 metres (50 ft).
- (DC thrusters only) It will take about 1.5 seconds for the receiver to react when an opposite action button (Port <> Starboard) is pressed (control with relays).
- The transmitter will go off automatically after about 5 minutes when it is not used.
- N.B. The receiver remains in standby mode and switches off the green led to avoid battery discharging. If not used for 10 minutes, the receiver turns off the bow/stern thrusters and goes into standby mode.

7.3 Battery insertion/replacement

From the backside remove both stainless steel clamps and remove the rear part of the housing. Remove the electronic circuit from the housing and replace the battery. Battery type: CR2032. Reassemble it in reverse order.

8 Technical specifications

Remote control

Power supply	3 VDC CR2032 (1x)
Protection class	IP66
Frequency	433.92 Hz
Temperature range	0°C - 70°C (+32°F - 158°F)
Weight	50 g (2 oz)

Receiver

Power supply	8 VDC to 30 VDC
Maximum current (per output)	8 A (at 30 Volts DC)
Protection class	IP40
Frequency	433.92 Hz
Temperature range	0°C - 70°C (+32°F - 158°F)
Weight	800 g (28 oz)