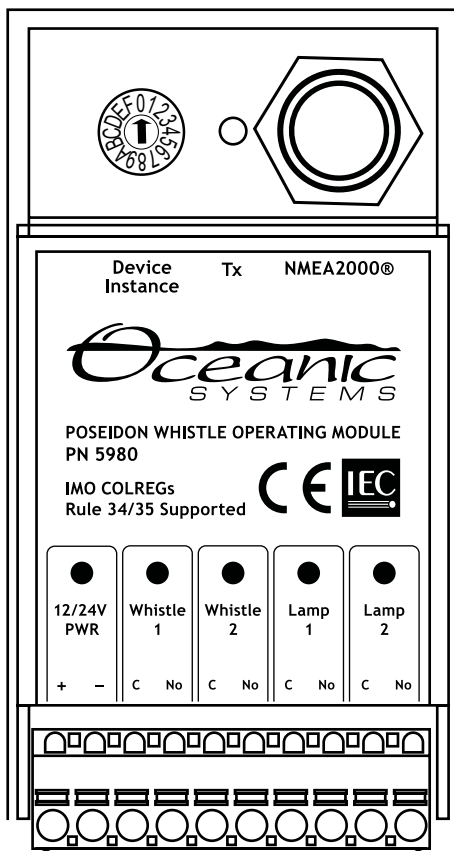


Whistle Operating Module
Part Numbers: 5980
USER MANUAL



1

INTRODUCTION

The Oceanic System's 5980 Whistle Operating Module is designed to control up to 2 separate ships horns or whistles and up to 2 separate ships warning lights on a Poseidon AMCS System.

This unit is designed to operate in a protected marine environment such as an electrical cabinet. It is important that it is installed and set up correctly according to this manual. Please read and follow the installation and setup instructions carefully to achieve the best results.

1.1 PRODUCT FEATURES

The 5980 Whistle Operating Module has the following features:

- 2 Fully Isolated 1 Amp ships Horn or Whistle Relays with normally open Contacts
- 2 Fully Isolated 1 Amp ships Warning Light Relays with normally open contacts
- Each relay circuit has a green indicating LED
- User Settable Device Instance Switch using a rotary switch
- Heartbeat blue LED confirming NMEA transmission.
- NMEA2000® micro C interface plug

2

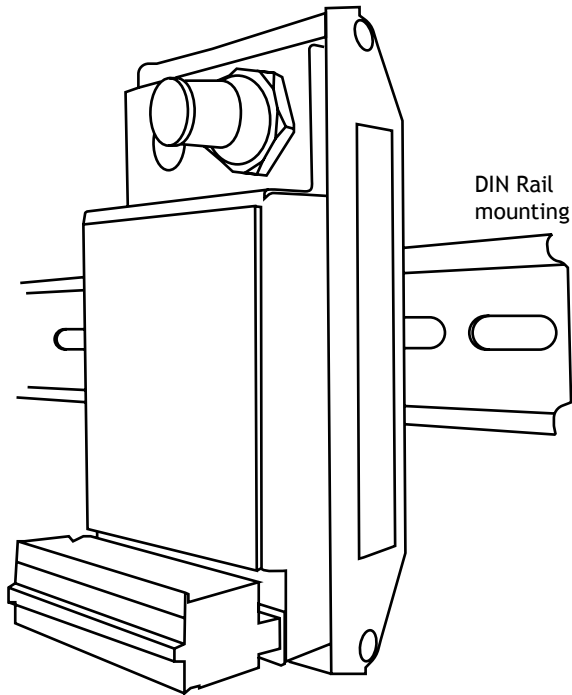
INSTALLATION

You should find the following items in the 5980 shipping box:

- 1 x 5980 Whistle Operating Module
- 1 x 5980 User Manual (This document)

2.2 MOUNTING THE UNIT

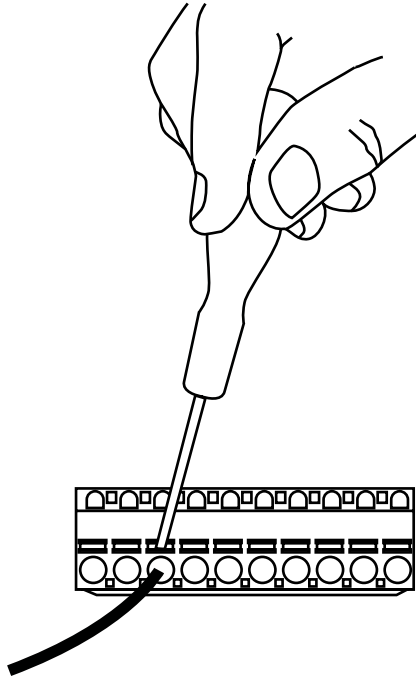
The unit should be mounted on a standard DIN rail mount in a protected area inside an electrical cabinet. The unit dimensions are shown on the following drawing.



2.3 CONNECTING THE NMEA2000® CABLE

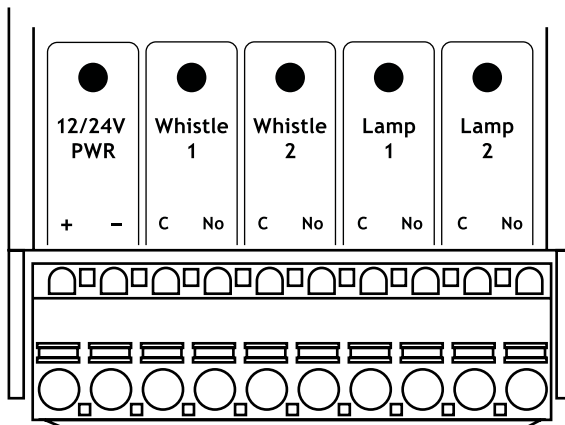
The unit is connected to the NMEA2000® network by the 5-way micro C socket on the front. Carefully attach the network drop cable to this plug and hand tighten until it is fully seated. Take care to match the orientation of the pip inside the socket to the recess inside the drop cable plug. The other end of the drop cable should be connected to a suitable Tee connector on the NMEA2000® network backbone cable.

2.4 CONNECTING THE RELAY CABLES TO THE WAGO SOCKET



The cables from the relays to the external sockets are connected using the 8 x 3-way WAGO Cage Clamp terminal block. The wire should be stripped for 8mm and then the cage clamp opened with a small screwdriver in the slot above the wire connection. Then simply insert the wire into its connection slot and release the cage clamp by removing the small screwdriver. This will produce a secure gas-tight connection on wire sizes from 0.08 - 2.5 mm².

The terminal connections are as follows:



3 CONFIGURATION

Multiples of the 5980 Whistle Operating Module can be installed on an NMEA2000® network. Each unit will require a unique Device Instance Address, which is set using the small rotary switch on the front face of the unit.

Valid Device Instances are “0” through to “F”. The switches are simply turned to the desired Device Instance with a small screwdriver.

4 OPERATION

The 5980 Whistle Operating Module has two horn circuits and two warning lamp circuits, each equipped with a 1 Amp relay that can drive the units directly. If a greater current is required they can drive a larger external relay to supply that extra current.

A small green LED next to each output lights to indicate that the circuit is energised.

5 MAINTENANCE

- Do not use chemical cleaners as they may remove paint or markings or may corrode the enclosure or seals.
- Ensure that the unit is mounted securely and cannot be moved relative to the mounting surface. If the unit is loose, tighten the mounting screws.
- Check the security of the cables connected to the NMEA2000® connector, tighten if necessary.
- Check the security of the cables connected to the WAGO terminal block, reseating them if necessary.

6 TECHNICAL SPECIFICATION

As Oceanic Systems are constantly improving their products, specifications are subject to change without notice. Oceanic Systems’ products are designed to be accurate and reliable. However, they should only be used as aids to navigation and not as a replacement for traditional navigation aids and techniques.

Relay Outputs

Parameter	Comment
4 Independent Relay Outputs	Fully Isolated, SP NO contacts
DC Power Rating	1 Amp at 35 Volts DC resistive load
Wire Sizes	0.08 - 2.5mm ² section

Certifications

Parameter	Comment
NMEA2000®	Tested
Maritime Nav and RadioComm Equipment	IEC60945
CE and FCC	Electromagnetic Compatibility

NMEA2000® Parameter Group Numbers (PGNs)

Type	PGN No	PGN Name
Command	PGN065453	Whistle Control (prop)
Status	PGN065452	Whistle Status (prop)
Protocol	PGN126464	Tx/Rx PGN List
	PGN126996	Product Information
	PGN059392	ISO Acknowledge
	PGN059904	ISO Request
	PGN060928	ISO Address Claim
	PGN126208	Command/Request Group
	PGN126993	Heartbeat
	PGN126998	Configuration

Electrical and Mechanical

Parameter	Value	Comment
Operating Voltage	9 to 32 Volts	DC Voltage
Power Consumption	300mA	Average Operating
Load Equivalence Number	1	Indefinitely
Reverse Battery Protection	Yes	Indefinitely
Load Dump Protection	Yes	SAE J1113
Size	117mm x 60mm x70mm	
Weight	0.1kg	

NMEA2000® Parameter Group Numbers (PGNs)

Type	Value
IEC60954 Classification	Protected
Degree of Protection	IP20
Operating Temperature	-25°C to 50°C
Storage Temperature	-40°C to 70°C
Relative Humidity	93%RH @40° per IEC60945-8.2
Vibration	2-13.2Hz @ ±1mm, 13.2-100Hz @ 7m/s2 per IEC60945-8.7
Electromagnetic Emission	Conducted and Radiated Emission per IEC60945-9
Electromagnetic Immunity	Conducted, Radiated, Supply, and ESD per IEC60945-10
Safety Precautions	Dangerous Voltage, Electromagnetic Radio Frequency per IEC 60945-12

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TECHNICAL SUPPORT

If you require technical support for any Oceanic Systems products you can reach us using any of the following:-

- Tel: +44(0)1425 610022
- Fax: +44(0)1425 614794
- Email: support@osukl.com
- Web: www.osukl.com
- Post: Oceanic Systems (UK) Ltd
Unit 10-11 Milton Business Centre
Wick Drive, New Milton, Hampshire BH25 6RH

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TROUBLESHOOTING/FAQ

Please note that below are some FAQ/Troubleshoot Questions. If none of these help or apply, then please don't hesitate to contact Technical Support.

Blue LED not flashing	Check NMEA2000® network cable connection and network power
Device not switching relays on command	Check Device Instance Switches match the settings required by the control device
Green LED indicates relay operated but device connected to the relay output not operating	Check wiring of device

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WARRANTY RETURN PROCEDURE

To apply for warranty claims, contact Oceanic Systems or one of its dealers to describe the problem and determine the appropriate course of action. If a return is necessary, place the product in its original packaging together with proof of purchase and send to an Authorized Oceanic Systems Service Location. You are responsible for all shipping and insurance charges. Oceanic Systems will return the replaced or repaired product with all shipping and handling prepaid except for requests requiring expedited shipping (i.e. overnight shipments). Failure to follow this warranty return procedure could result in the product's warranty becoming null and void.

Oceanic Systems reserves the right to modify or replace, at its sole discretion, without prior notification, the warranty listed above.