

# **MULTIPLEXER**

## **MX4**

### **Operation and Installation Manual**

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**CONTENTS**

	<b>Page</b>
OUTLINE: .....	1
FEATURES: .....	1
PARTS SUPPLIED:.....	2
INSTALLATION:.....	2
OUTPUT BAUD RATE: .....	2
SPECIFICATIONS: .....	3
CONNECTION DETAILS .....	4
DATA OUTPUT POLARITY: .....	4

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## **OUTLINE:**

The MX4 has been designed to assist with the total integration of electronic equipment aboard a vessel.

This Multiplexer receives data from up to 4 NMEA sources, either current loop, RS422, or RS232. The data is then multiplexed together and output to 4 RS422 outputs (each capable of driving a number of current loop inputs) and 4 industry standard RS232 outputs.

It has an isolated power supply that provides full dc isolation between the input supply and ground/all outputs.

## **FEATURES:**

LED Power On indicator.

LED DATA Indicator.

Wide range input supply voltage.

All necessary connectors supplied.

EMI/RFI shielded plastic case.

Isolated ground.

Low power opto isolated input (<1 ma).

4800 or 9600 Baud output data rate.

4 RS422 outputs.

Each current loop/RS422 output is capable of driving a number of current loop loads.

4 independent RS232 outputs.

Flexible mounting capability.

## **PARTS SUPPLIED:**

- 1 x MX4 Interface.
- 4 x 9 pin Female D connectors.

## **INSTALLATION:**

1. Run a two core screened data cable from each serial data source to the required serial In/Out connector of the MX4.
2. Run a two core (for current loop or RS232) or three core (for RS422) screened cable from the MX4 outputs to the inputs of the receiving equipment.
3. Connect the supply cable to a suitable 10-35v supply (Black/Red + volts, Black - volts).

## **OUTPUT BAUD RATE:**

1. Remove the 6 top panel screws.
2. Move the jumper across the 2 header pins for 9600 Baud.
3. Move the jumper to one header pin for 4800 Baud.

### **Note:**

The MX4 has dc isolation between its power supply input and ground. This makes it suitable for interfacing to onboard computer installations and all isolated ground equipment, while being powered from the vessel's battery supply, without affecting the integrity of the battery positive (+) or negative (-) relative to ground.

## **SPECIFICATIONS:**

### **Input Requirements:**

RS232, Current Loop or RS422, in NMEA format. (4800,N,8,1)

### **Output capabilities:**

**Out A - D :** Current loop, RS422 or RS232. (4800,8N,1 or 9600,8,N,1)

### **Power Requirements:**

10-35 vdc @ 50 - 200 mA.

The power supply provides full dc isolation between power supply input and ground/all outputs.

### **Physical Parameters:**

**Enclosure:** Plastic EMI/RFI shielded.

**Weight:** 300 grams.

**Dimensions:** 92 x 155 x 37 mm.

**Mounting:** Table top or under shelf.

**Indicators:** (LED), Power ON and DATA

Pacific Micro Systems has a policy of continued development and therefore reserves the right to change specifications without notice.

## CONNECTION DETAILS

### INPUT / OUTPUT DATA:

IN / OUT A, B, C, D	Description
2	RX +
7	RX -
1	0 v Return (Ground)
3	RS232 TX
5	RS422 TX +
9	RS422 TX -

### DATA OUTPUT POLARITY:

