

# KMR-7 Quick Installation Manual



## Multi-function display with NMEA multiplexer

### Verifying the contents

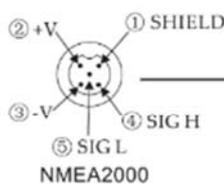
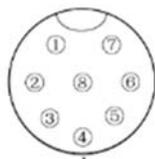
When you first open the box of your KMR-7 Multi-function display unit, please confirm that you have the following items inside the box:

- Display unit KMR-7
- Mounting brackets
- Manuals (quick start and quick installation manual)
- Standard accessories pack (one power/data cable, one data cable, 2 spare fuses, 4 mounting screws)

### Interconnections

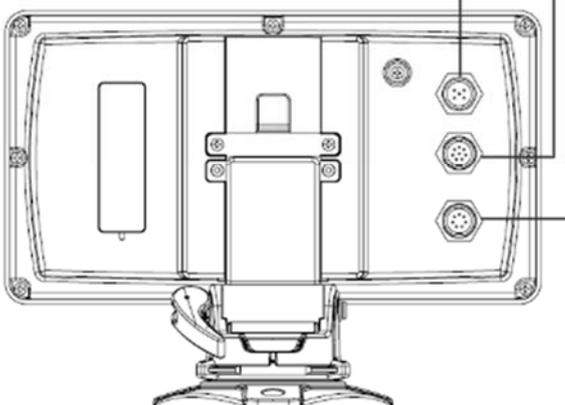
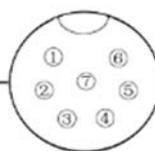
#### NMEA0183 Data input

- |  |          |
|--|----------|
| ① Brown : NMEA0183 input + (RS232/RX+ or RS422/B)  | } Port 1 |
| ② Red : NMEA0183 input - (RS232/RX- or RS422/A)    |          |
| ③ Orange : NMEA0183 input + (RS232/RX+ or RS422/B) | } Port 2 |
| ④ Yellow : NMEA0183 input - (RS232/RX- or RS422/A) |          |
| ⑤ Green : NMEA0183 input + (RS232/RX+ or RS422/B)  | } Port 3 |
| ⑥ Blue : NMEA0183 input - (RS232/RX- or RS422/A)   |          |
| ⑦ Purple : NMEA0183 input + (RS232/RX+ or RS422/B) | } Port 4 |
| ⑧ Grey : NMEA0183 input - (RS232/RX- or RS422/A)   |          |



#### Power and NMEA0183 Data output

- |  |                            |
|--|----------------------------|
| ① Yellow : NMEA0183 output +(RS232/TX+ or RS422/Z) | } Port 1                   |
| ② White : NMEA0183 output - (RS232/TX- or RS422/Y) |                            |
| ③ Blue : NMEA0183 output + (RS232/TX+ or RS422/Z)  | } Port 2                   |
| ④ Green : NMEA0183 output - (RS232/TX- or RS422/Y) |                            |
| ⑤ Red : Power +                                    | } Power input 12V or 24VDC |
| ⑥ Black : Power -                                  |                            |
| ⑦ Orange : 12VDC out                               |                            |



## **Specifications**

### 1. Power supply

1.1 Electrical: 10.5 – 32VDC

1.2 Protection: overcurrent, overvoltage, power transient and accidental reverse polarity protection

### 2. Output/Input (IEC61162-1)

2.1 Input: 4 x NMEA0183 (opto-isolated)

2.1.1 Input Port 1, 2 & 3

a) Support sentences: RMC, GGA, GLL, GSA, GSV, AAM, APA, APB, BOD, BWC, BWR, DBT, DPT, HDT, MTW, RMB, VTG, XTE, ZDA, MWD, VWR, VWT, MWV, XDR

b) Baudrate: auto scan up to 115200

2.1.2 Input Port 4 (For AIS input)

a) Support sentences: RMC, GGA, GLL, GSA, GSV, AAM, APA, APB, BOD, BWC, BWR, DBT, DPT, HDT, MTW, RMB, VTG, XTE, ZDA, MWD, VWR, VWT, MWV, XDR, VDO, VDM

b) Baudrate: 38400

2.2 Output : 2 x NMEA0183 (RS422)

2.2.1 Output port 1

a) Output sentences: Selectable sentences among of the input sentences

b) Support sentences: RMC, GGA, GLL, GSA, GSV, AAM, APA, APB, BOD, BWC, BWR, DBT, DPT, HDT, MTW, RMB, VTG, XTE, ZDA, MWD, VWR, VWT, MWV, XDR

c) Baudrate: Selectable among 4800, 9600, 19200, 38400

2.2.2 Output port 2

a) Output sentences: Selectable sentences among of the input sentences

b) Support sentences: RMC, GGA, GLL, GSA, GSV, AAM, APA, APB, BOD, BWC, BWR, DBT, DPT, HDT, MTW, RMB, VTG, XTE, ZDA, MWD, VWR, VWT, MWV, XDR, VDO, VDM

c) Baudrate: 38400 (Fixed)

### 2.3 NMEA2000

2.3.1 Supported receive PGN :

126992, 127237, 127245, 127488, 127250, 127489, 128259, 128267, 129025, 129026, 129029, 129038, 129039, 129040, 129539, 129540, 129793, 129794, 129798, 129809, 129810, 130306, 130310, 130311, 130312, 129041, 129802, 129801, 129795, 129797, 129811, 129812, 129808, 127252, 130576

2.3.2 Supported transmit PGN :

126992, 129026, 129540, 128267, 129029, 127250, 128259, 129025, 129539, 130306, 130310, 130311, 130312, 129810, 129809, 129798, 129794, 129793, 129040, 129039, 129038, 129041, 129802, 129801, 129795, 129797, 129811, 129812

### 3. Environmental conditions

3.1 Ambient temperature: -5°C to +55°C

3.2 Humidity: 93% ±3% on 40°C

3.3 Waterproofing: IPX6

For more details please download the full manual from <http://www.onwamarine.com>