Timpdon Marine

Radio MultiSwitch
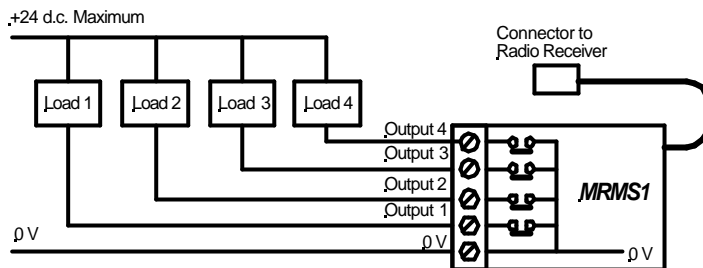### *Model MRMS1*

Control four Switches from one RC channel.

Individual On/Off Switch Selection

Powered from RC receiver.

Features

- Control up to four switched outputs from one RC channel.

- Each output switch rated at 24 V d.c., 2 A.

- Individual switch selection - latched **on / off** by joystick pulsing.

- Requires analogue transmitter channel with spring loaded centre neutral joystick.

- Digital microprocessor controlled.

- Small size – 45mm x 27mm x 15mm.

- Powered from RC receiver.

Timpdon Marine   Tel **0161 - 980 7804**   Issue 1 – June 2011
                          Web www.timpdon.co.uk
                          EMail marine@timpdon.co.uk

Installation and Wiring

1   Connect the flying lead to the selected channel of your radio receiver.

2   Connect switch loads between positive supply and appropriate switch terminals.

3   Connect negative supply to **0V** terminal. Note that **0V** terminal is connected internally to **0V** supply of RC receiver.

4   The supply voltage to the loads must not exceed 24 V d.c.

5   Each switch is rated for a maximum current of 2A.

Operation

1   Switches are turned **on** by pulsing the transmitter joystick from **Neutral to Maximum**, and back, and turned **off** by pulsing the joystick from **Neutral to Minimum**, and back.

2   The switch selected is determined by the number of successive rapid pulse movements of the joystick:

1 Pulse	Switch 1
2 Pulses	Switch 2
3 Pulses	Switch 3
4 Pulses	Switch 4

Each successive pulse must occur within **1 second** of the previous pulse.

Timpdon Marine   **Tel 0161 - 980 7804**   Issue 1 – June 2011
                            Web www.timpdon.co.uk
                            EMail marine@timpdon.co.uk

If the joystick is pulsed more than four times, **Switch 4** will be selected.

The selected switch will operate **1 second** after the last detected pulse.

Auto Zero

The *MultiSwitch* will automatically determine the transmitted pulse width of the neutral position of the transmitter provided that:

- The transmitter is on when the *MultiSwitch* is powered up.
- The joystick is in the **Neutral** position, with a pulse width in the range 1.3 to 1.7 ms.

The measured auto zero value will be saved in non-volatile memory, and used for subsequent determinations of maximum and minimum switching positions, to remove the need for any transmitter adjustments.

If the *MultiSwitch* is subsequently powered up with the transmitter off, the previously saved auto zero value will be restored.

Timpdon Marine   **Tel 0161 - 980 7804**   Issue 1 – June 2011
                  Web www.timpdon.co.uk
                 EMail marine@timpdon.co.uk