

TCM3-4DIO Quick Start Guide

Welcome to the TCM3 Family



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This guide provides an abbreviated, all-in-one-place reference for installing, connecting and setting up your TCM3 IO Controller.

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1 Connecting to the TCM3-4DIO

Antenna Antenna connection is via an SMA connector. Do not over tighten the connector. Please consult your reseller for further information on suitable antennas.

Serial Connection to the serial port allows the TCM3 to be configured using a simple serial terminal program. It's a 3 wire interface :- TXD, RXD & GND.

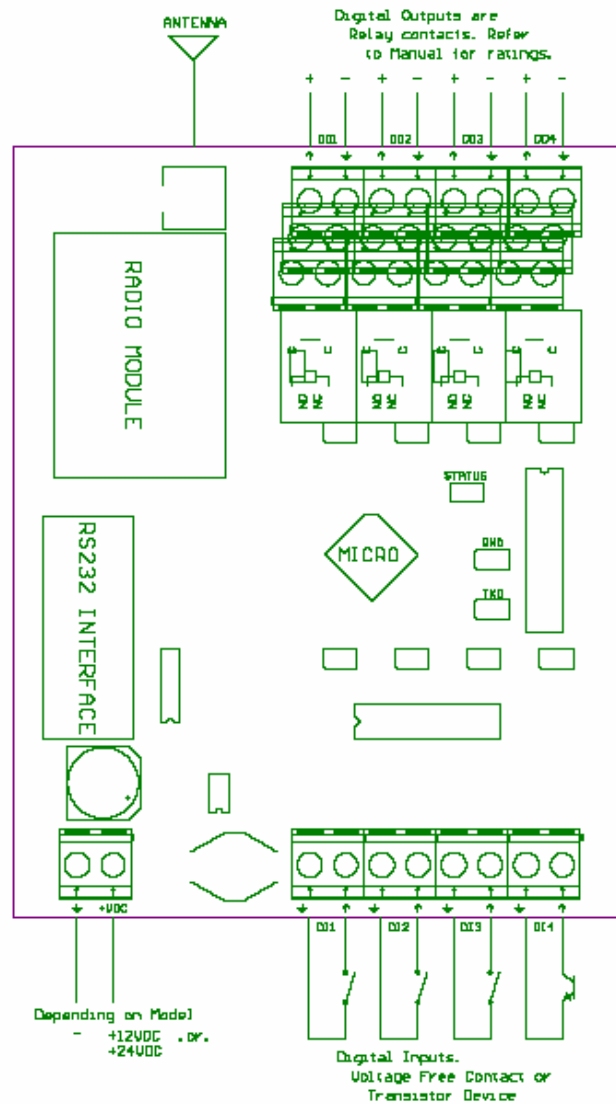
Power Connect power to the TCM using a regulated external supply of either 12VDC for the 12V model or 24VDC for the 24V model. Supply tolerance of +/-5% is allowed.

Do not apply power until all connections have been made.

Digital Inputs The inputs of the TCM3 are opto-isolated and voltage free. They provide a wetting current of 5mA. The inputs can be used with external switches or voltage free contacts.

Digital Outputs The outputs on the TCM3 are normally open relay contacts. Direct switching of 240VAC loads is not recommended. Use an external relay for high voltage and current loads.

Mounting Mounting the TCM can be either by use of the 4 mounting holes. The optional DIN rail PCB holder can be used for mounting on a standard TS32 DIN rail.



2 Quick Start Configuration

The following are basic steps to get a pair of TCM3's configured for operation.

1. Select a pair of TCM3's and connect as shown above.
2. Apply power and you will see the start-up message in the terminal window.
3. Type **STOP** at the command prompt. This enters the configuration mode.
4. Ensure both TCM3's are set to the same site code. **SITE 1**
5. Set the unit number on one TCM3 as **UNIT 1**. Set the unit code on another TCM3 as **UNIT 2**.
6. Quick set the port mapping by using **MAP CLEAR**. Confirm the port mappings by typing **MAP**.
7. Type **RESTART** to start the TCM3's running again.
8. Your TCM3's will now be running and reflecting the digital state of the inputs on the first TCM3 to the corresponding outputs of the second TCM3.
9. Please refer to the user manual for further information on programming the TCM3's.

3 Optional Extras

Your reseller can provide a number of optional extras for the TCM3-4DIO. These include antennas suitable for the selected RF operating frequency and the DIN rail PCB holder suitable for the mounting the TCM3-4DIO module.

4 Ordering

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<p>TCM3 – Model number</p> <p>4DIO – IO Options. 4 Digital Input and 4 Digital Output</p> <p>xxx – Operating frequency. Options are given below</p> <p>P – Indicates 100mW high power (on VHF modules only)</p> <p>24 – Operating voltage option. Omitted for 12VDC operation</p> <p>1 – Relay contact rating.</p> <p>A – Output options. Relays NC, NO, OC, etc.</p> <p>E – Common Earth for all output relays</p> <p>Available IO options are:</p> <p style="padding-left: 20px;">4DIO = 4 Digital inputs and 4 Digital outputs.</p> <p style="padding-left: 20px;">16DIO = 16 Digital inputs and 16 Digital outputs.</p> <p>Available operating frequency options are:</p> <p style="padding-left: 20px;">151.300 = 151.300MHz (Aus),</p> <p style="padding-left: 20px;">151.600 = 151.600MHz (Aus)</p> <p style="padding-left: 20px;">173.225 = 173.225MHz (NZ & EU),</p> <p style="padding-left: 20px;">173.250 = 173.250MHz (NZ & EU)</p> <p style="padding-left: 20px;">433.920 = 433.920MHz (Aus, NZ, EU, US),</p> <p style="padding-left: 20px;">869.850 = 869.850MHz (EU)</p> <p style="padding-left: 20px;">914.500 = 914.500MHz (US),</p> <p style="padding-left: 20px;">918.525 = 918.525MHz (Aus)</p>	<p>Available Operating Voltage options are:</p> <p style="padding-left: 20px;">12 or Not shown = 12 Volt DC +/- 5%</p> <p style="padding-left: 20px;">24 = 24 Volt DC +/- 5%</p> <p>Relay contact ratings are:</p> <p style="padding-left: 20px;">1 or Not shown = 1A @ 24VDC or 0.5A @ 125VAC</p> <p style="padding-left: 20px;">3 = 3A @ 24VDC or 1A @ 125VAC</p> <p>Available output options are:</p> <p style="padding-left: 20px;">A or Not shown = NO – Normally Open connectors fitted</p> <p style="padding-left: 20px;">B = NC – Normally Closed connectors fitted</p> <p style="padding-left: 20px;">C = OC – Open collector connectors fitted</p> <p style="padding-left: 20px;">D = NO & NC – Connectors for NO and NC fitted.</p> <p>Available grounding options are:</p> <p style="padding-left: 20px;">E = Common earth</p> <p style="padding-left: 20px;">Not shown – Isolated relay outputs</p>