

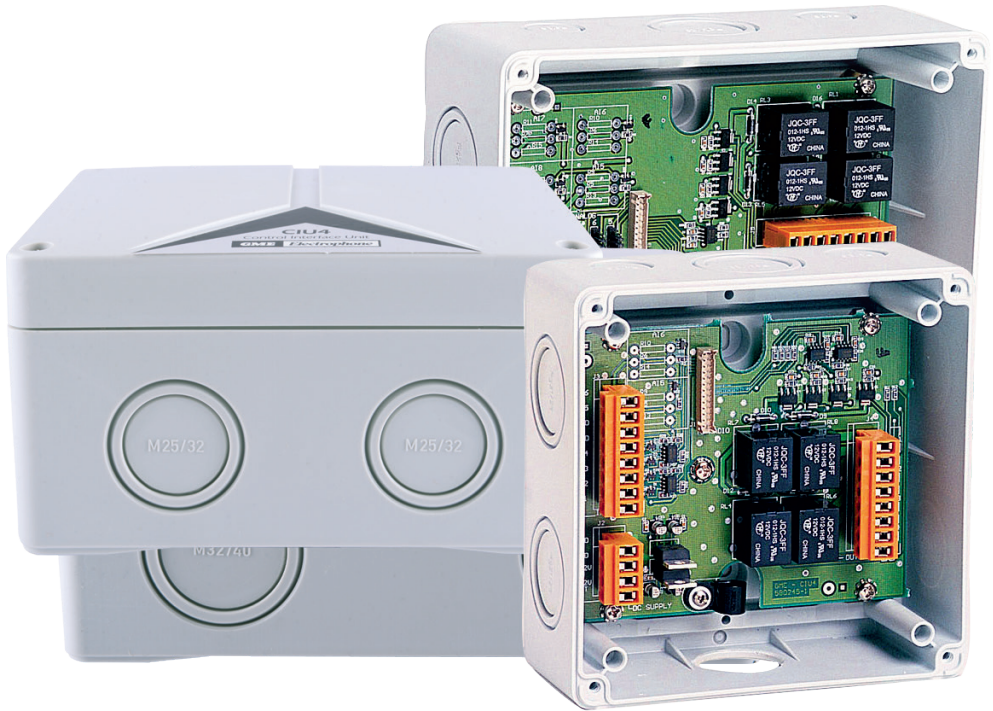


PROFESSIONAL

CIU4/CIU8

Control Interface Units

INSTRUCTION MANUAL



INSTALLATION

General

The CIU4 and CIU8 Control Interface Units are designed to connect the TX3600T Telemetry Radio to the sensors and equipment which are to be controlled and monitored by the Telemetry System.

The CIU connects to the TX3600T via two LE003 (25 pin 'D' connector to 26 pin PCB plug) cables connected together via a 25 pin 'D' "gender changer" adapter.

All external equipment and sensors connect to the CIU via screw terminal blocks.

There are two models available:

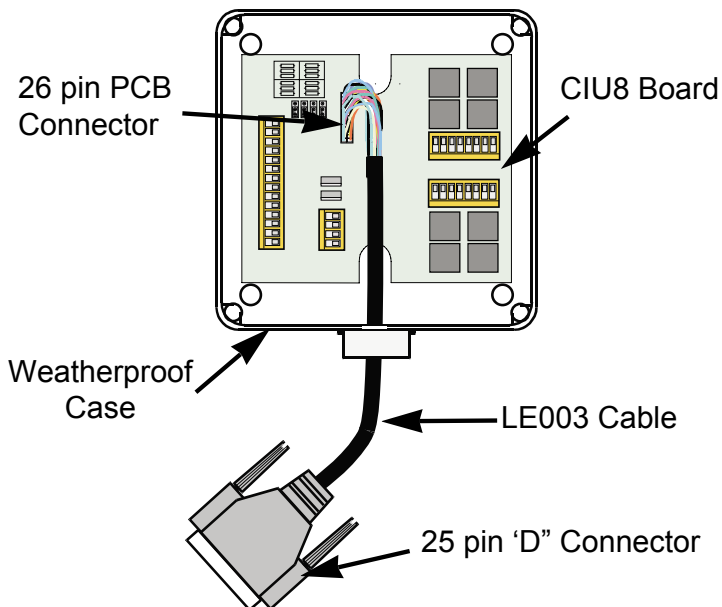
The **CIU4** has 4 Digital Outputs, 4 Digital Inputs and 2 Analogue Inputs.

The **CIU8** is fitted with 8 Digital Outputs and 8 Inputs, of which 4 are Digital and 4 are configurable as Digital or Analogue.

Both the CIU4 and CIU8 operate from a 12 Volt power source.

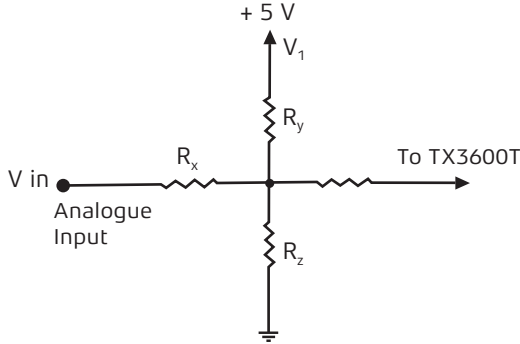
Installation

The CIU4 and CIU8 are supplied in a weatherproof box. The box should be installed in a vertical position with the cables extending downward through the exit flange at the bottom.



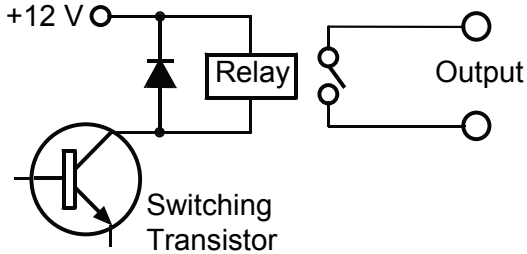
ANALOGUE INPUT SETUP

The circuit of the analogue inputs is shown below. Resistor values are determined by formulas outlined in the Telemetry System Manual available from Dealer Support Site. Refer to the Resistor Network diagrams below for specific circuit references for R_x , R_y and R_z for each analogue input port.

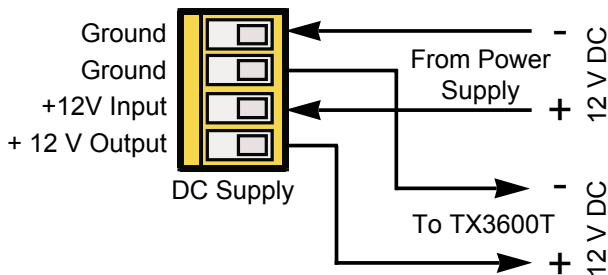


OutPuts

The outputs are relay switched, ground isolated contact pairs. The relay contacts are rated at a maximum of 24 Volts at 8 Amps. If larger switching voltages or currents are required, additional external switching relays must be used.

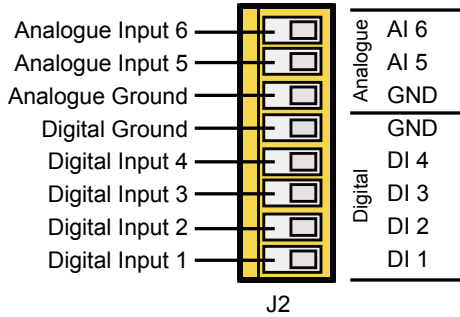


DC SUPPLY CONNECTIONS

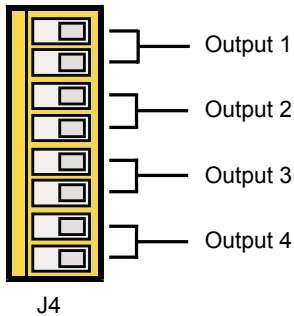


Inputs

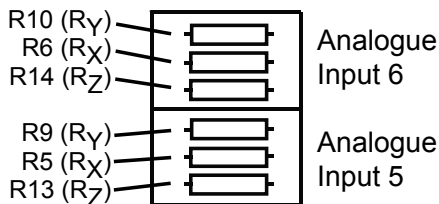
The Input connector has provision for 4 Digital inputs and 2 Analogue inputs.



Output Connector

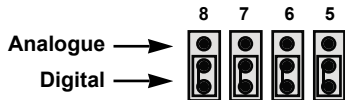


Resistor Network



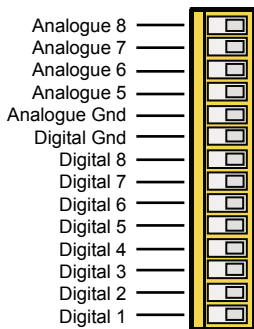
Analogue/Digital Input Selection

Outputs 5, 6, 7 and 8 can be selected as either Digital or Analogue outputs. Each output mode is selected using a jumper on the PCB.

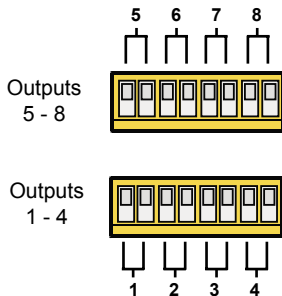


After setting input ports 5 - 8 to their appropriate type, connect your devices to the matching analogue or digital input port on the INPUT connector socket.

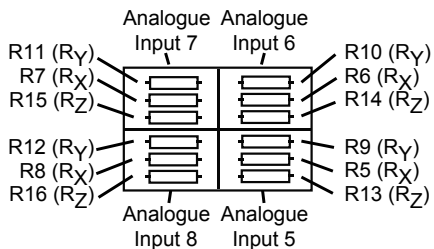
Input Connector



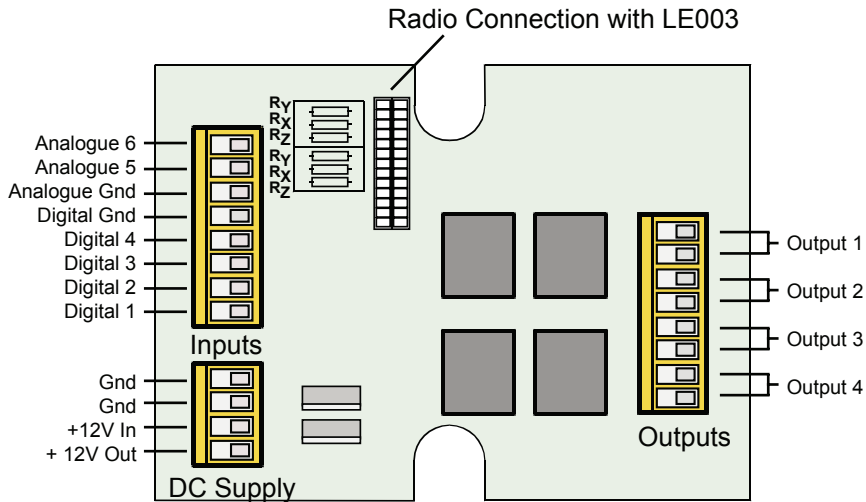
Output Connector



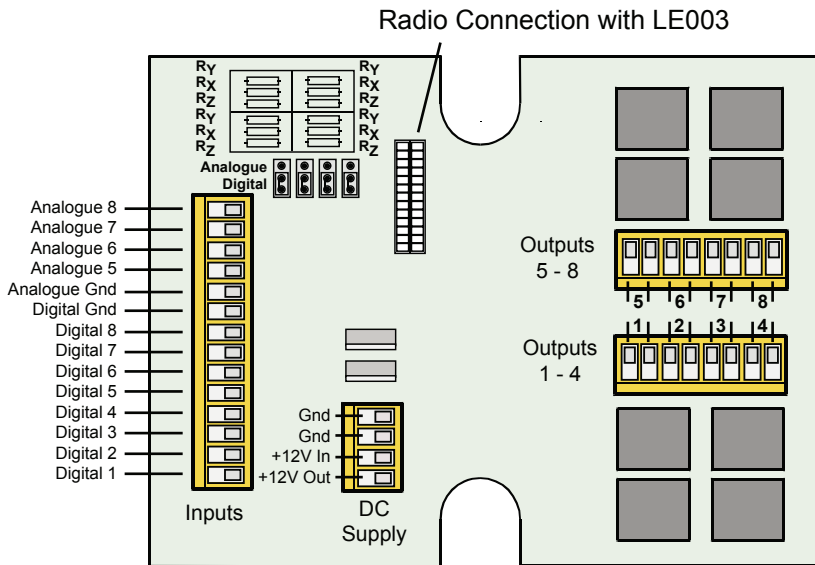
Resistor Network



CIU-4 Port Locations



CIU-8 Port Locations



SPECIFICATIONS

| Digital Inputs: | | |
|------------------------|--------|--------|
| | CIU8 | CIU4 |
| No. of Inputs | 8 | 4 |
| Input On | Earth | Earth |
| Input Off | O/C | O/C |
| Max. Voltag | ± 30 V | ± 30 V |

| Analogue Inputs: | | |
|-------------------------|-----------------------------|-----------------------------|
| | CIU8 | CIU4 |
| No. of inputs: | 4 | 2 |
| FSD Voltage: | Set using Scaling Resistors | Set using Scaling Resistors |

| Outputs: | | |
|------------------|-----------|-----------|
| | CIU8 | CIU4 |
| No. of Outputs: | 8 | 4 |
| Switching Volts: | 24VDC Max | 24VDC Max |
| Switching Amps: | 8A DC Max | 8A DC Max |

| General: | | |
|--------------------|----------------|----------------|
| | CIU8 | CIU4 |
| Scaling Resistors: | ¼ Watt | ¼ Watt |
| Supply Voltage: | 10-15 V DC | 10-15 V DC |
| Supply Current: | 10-250 mA | 10-130mA |
| Dimensions (mm): | 180 x 180 x 90 | 140 x 140 x 80 |

WARRANTY

STANDARD COMMUNICATIONS CONTRACT WARRANTY AGAINST DEFECTS

This warranty against defects is given by Standard Communications Pty Ltd ACN 000 346 814 (We, us, our or GME). Our contact details are set out in clause 2.7.

1. Consumer guarantees

1.1 Our goods come with guarantees that cannot be excluded under the Australian Consumer Law. You are entitled to a replacement or refund for a major failure and for compensation for any other reasonably foreseeable loss or damage. You are also entitled to have the goods repaired or replaced if the goods fail to be of acceptable quality and the failure does not amount to a major failure.

1.2 To the extent we are able, we exclude all other conditions, warranties and obligations which would otherwise be implied.

2. Warranty against defects

2.1 This warranty is in addition to and does not limit, exclude or restrict your rights under the Competition and Consumer Act 2010 (Australia) or any other mandatory protection laws that may apply.

2.2 We warrant our goods to be free from defects in materials and workmanship for the warranty period (see warranty table) from the date of original sale (or another period we agree to in writing). Subject to our obligations under clause 1.2, we will at our option, either repair or replace goods which we are satisfied are defective. We warrant any replacement parts for the remainder of the period of warranty for the goods into which they are incorporated.

2.3 To the extent permitted by law, our sole liability for breach of a condition, warranty or other obligation implied by law is limited

- (a) in the case of goods we supply, to any one of the following as we decide –
 - (i) the replacement of the goods or the supply of equivalent goods;
 - (ii) the repair of the goods;
 - (iii) the cost of repairing the goods or of acquiring equivalent goods;
- (b) in the case of services we supply, to any one of the following as we decide –
 - (i) the supplying of the services again;
 - (ii) the cost of having the services supplied again.

2.4 For repairs outside the warranty period, we warrant our repairs to be free from defects in materials and workmanship for three months from the date of the original repair. We agree to re-repair or replace (at our option) any materials or workmanship which we are satisfied are defective.

2.5 We warrant that we will perform services with reasonable care and skill and agree to investigate any complaint regarding our services made in good faith. If we are satisfied that the complaint is justified, and as our sole liability to you under this warranty (to the extent permitted at law), we agree to supply those services again at no extra charge to you.

2.6 To make a warranty claim you must before the end of the applicable warranty period (see warranty table), at your own cost, return the goods you allege are defective, provide written details of the defect, and give us an original or copy of the sales invoice or some other evidence showing details of the transaction.

2.7 Send your claim to: **Standard Communications Pty Ltd**, PO Box 96 Winston Hills, NSW 2153, Australia. Tel: (02) 8867 6000 Fax: (02) 8867 6199 Email: servadmin@gme.net.au

2.8 If we determine that your goods are defective, we will pay for the cost of returning the repaired or replaced goods to you, and reimburse you for your reasonable expenses of sending your warranty claim to us.

3. What this warranty does not cover

3.1 This warranty will not apply in relation to:



- (a) goods modified or altered in any way;
- (b) defects and damage caused by use with non Standard Communications products;
- (c) repairs performed other than by our authorised representative;
- (d) defects or damage resulting from misuse, accident, impact or neglect;
- (e) goods improperly installed or used in a manner contrary to the relevant instruction manual; or
- (f) goods where the serial number has been removed or made illegal.

4. Warranty period

4.1 We provide the following warranty on GME and Kingray products. No repair or replacement during the warranty period will renew or extend the warranty period past the period from original date of purchase.

| PRODUCT TYPE | PROFESSIONAL & TELEMETRY WARRANTY PERIOD |
|-----------------------------------|--|
| CIU4/CIU8 Control Interface units | 2 years |

For more information call or visit us:

 **1300 463 463**  gme.net.au



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