M4 Interface.
P/No. 995070

INSTALLATION NOTES

The M4 Interface is used in conjunction with an Analogue Input Module and provides two functions for added system integrity. An Analogue Module can support up to two M4 Interfaces.

The two functions of the M4 Interface are as follows:

1)   Monitoring a Detector Supply voltage. The Detector supply is connected to an M4 Interface board. The voltage being monitored is pre-scaled and two outputs are provided for connection to Inputs on an Analogue Module so that an alarm can be generated if the voltage is outside the range of the preset upper and lower thresholds.

2)   Provision of a monitored driver for a satellite siren.
A switched 13.8 V DC Siren output is provided.
The satellite siren is triggered by switching the siren output off, thus activating the siren, under any of the following conditions:
-   Satellite siren connection is severed. (Cut or disconnected)
-   Satellite siren cabinet tamper.
     (If Satellite siren connection is wired in series with siren cover tamper switch)
-   A specific Auxiliary on the Analogue Input Module is activated.
         (i.e. Qxx:X01 for the first M4 Interface and Qxx:X02 for a second M4 interface if required)
A Siren Tamper output is also provided that can be monitored by a Digital Input on the Analogue Module.

Specifications

Supply Voltage:	16 V AC.
Siren Output Voltage:	13.8 V DC.
Optional backup Battery:	12V 6.5 AH Sealed Lead Acid battery.
"DET+" Threshold adjustment range:	-25% to +25%.
Measurement error:	+/- 150mV.
Siren output current:	2A Maximum.
Physical dimensions:	Length: 140mm Width: 95mm
Installation environment:	0º to 40º Celsius
	15% to 85% Relative humidity (non-condensing)
Control Module Firmware:	V3 or later. (Memory configuration chosen must support Analogue Modules)

Parts List
-   M4 Interface PCB assembly.
-   Installation Kit in Plastic bag containing:
    -   1 x 6 Way Plug on Screw Terminal.
    -   1 x 3 Way Plug on Screw Terminal.
    -   2 x 2 Way Plug on Screw Terminals.
    -   2 x 4 Amp Fast Blow Fuse. M205
    -   Installation Manual. (This document)

Installation.
Installation environment should be maintained at a temperature of 0º to 40º Celsius and 15% to 85% Relative humidity (non-condensing)
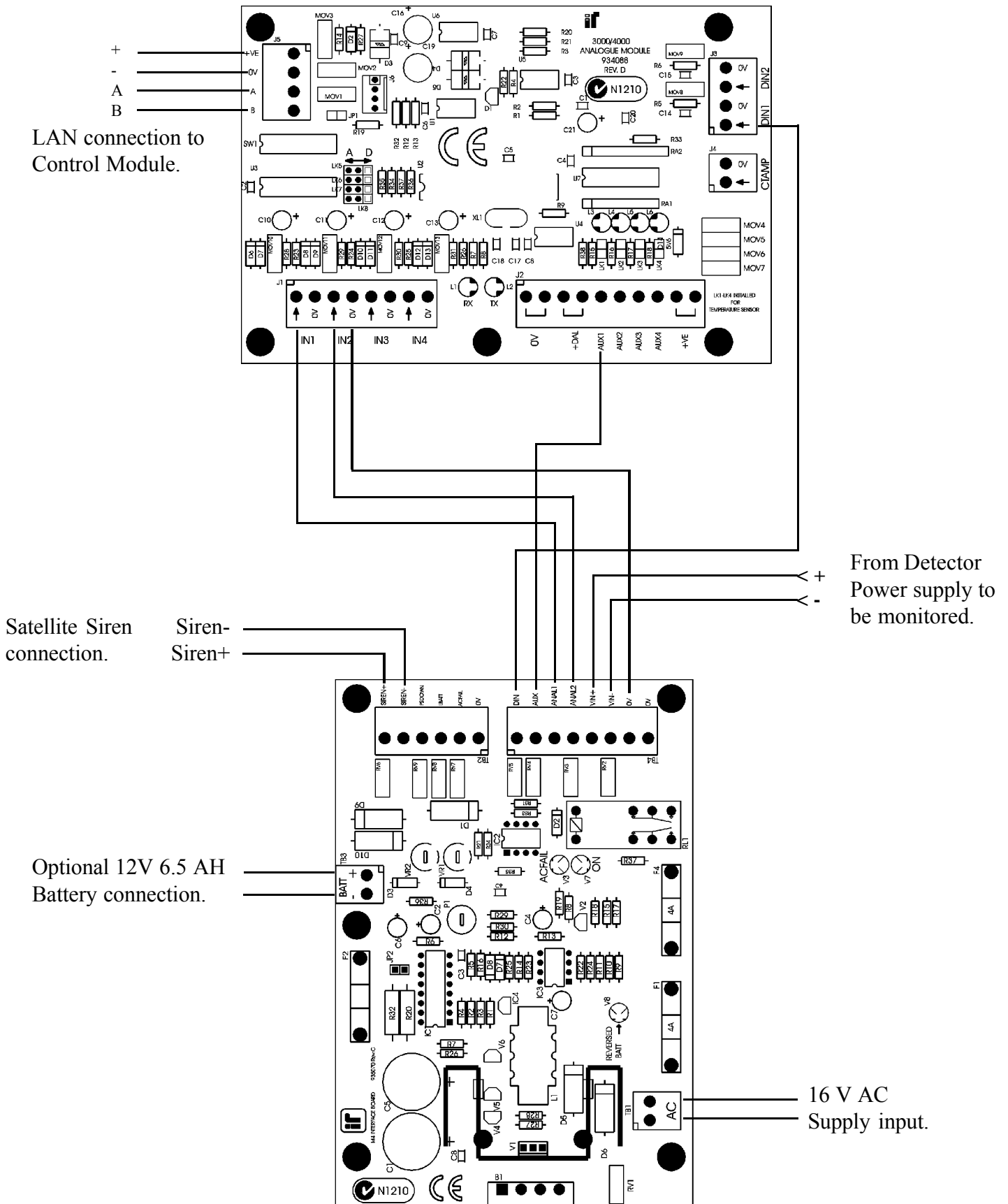Board assembly physical dimensions: Length: 140mm Width: 118mm   Height: 38mm
1.   The M4 Interface board is supplied in kit form and is mounted in a suitable enclosure along with an Analogue Module PCB.
2.   The 16 V AC supply, Satellite Siren, Analogue Module, optional Battery and Power Supply to be monitored are connected as per the wiring diagrams on pages 2 & 3.
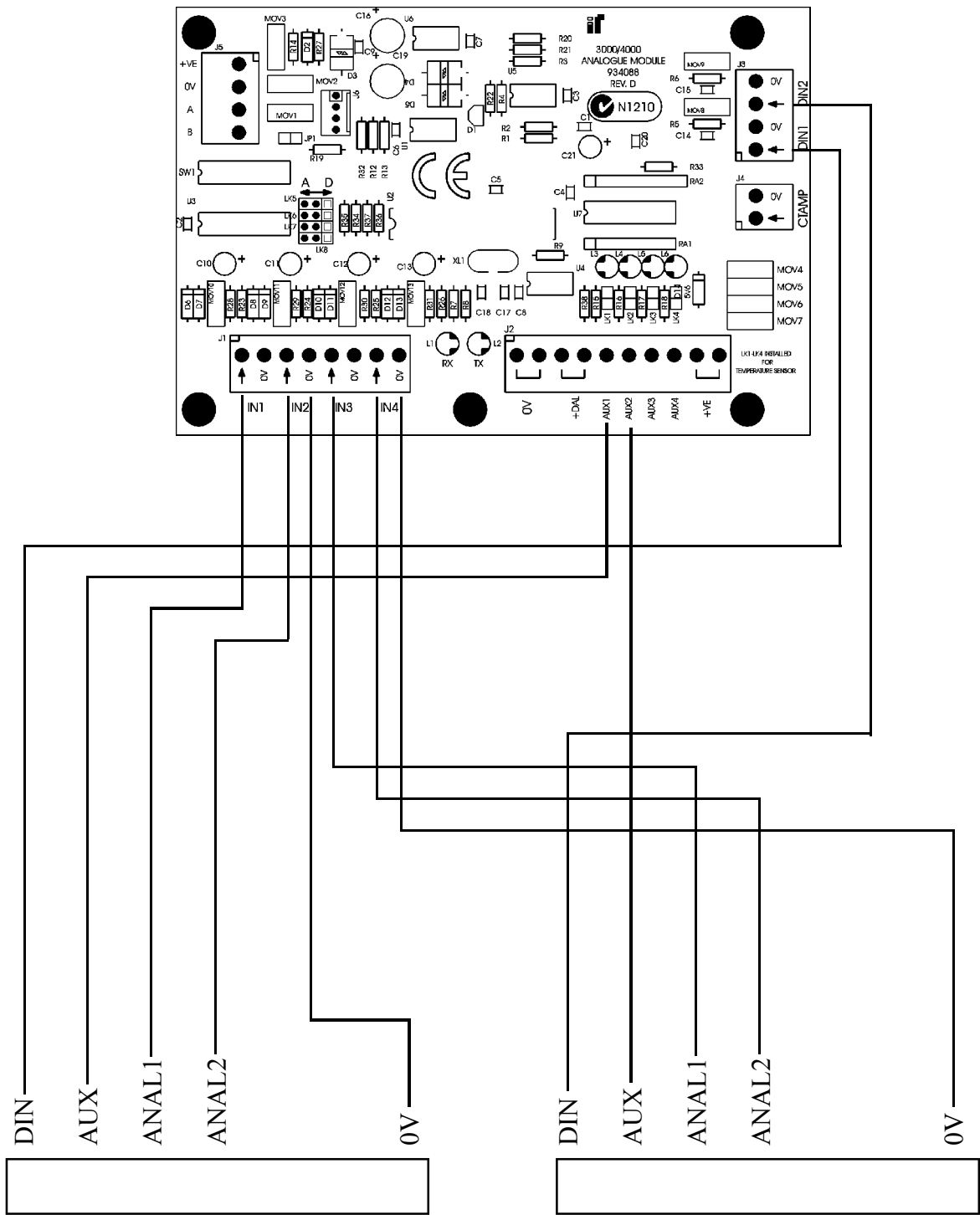
IMPORTANT NOTE.
Refer to the Analogue Module Installation Manual for details of additional connections and settings on the Analogue Module.

Connection Details - Single M4 Interface.

+

-

A

B

LAN connection to
Control Module.

From Detector
Power supply to
be monitored.

+

-

Satellite Siren   Siren-
connection.   Siren+

Optional 12V 6.5 AH
Battery connection.

16 V AC
Supply input.

Connection Details - Two M4 Interfaces.

(Additional wiring on M4 Interface board as per detailed connection diagram opposite)

TB4
First M4 Interface.

TB4
Second M4 Interface.

Programming Notes. (Refer to the Programmer's Manual for details)

The Input and Output numbers referred to in the following programming notes apply when the M4 Interface/s are connected according to the wiring diagrams on pages 2 & 3.

Detector Supply Measurement and Monitoring.

1. MENU, 7, 2, 9. Program the Analogue Module noting the following:
-The calibration string for Zone 1 and 2 (& Zone 3 and 4 if a second M4 Interface is connected) must be 0225FA000000.
-Set the Z01 / Z03 Trigger 1 Value/s for the desired Upper Threshold of the Detector Voltage.
-Set the Z02 / Z04 Trigger 1 Value/s for the desired Lower Threshold of the Detector Voltage.
 Refer to the following Table for examples of Trigger Value settings.

Upper Threshold		Z01 &/or Z03 Trigger 1 Value	Lower Threshold		Z02 &/or Z04 Trigger 1 Value
%	Voltage		%	Voltage	
+5%	14.45	1445	-5%	13.1	1310
+10%	15.13	1513	-10%	12.38	1238
+15%	15.81	1581	-15%	11.69	1169
+20%	16.5	1650	-20%	11	1100
+25%	17.2	1720	-25%	10.31	1031

2. MENU, 7, 0. Program the Zone Inputs
(Qxx:Z01 and Z02 for the first M4 Interface and Qxx:Z03 and Z04 if a second M4 Interface is connected)
Note the following:
-Program an appropriate name for each Zone.
        e.g. "DET+ Too High" for Zone 1.   "DET+ Too Low" for Zone 2.
-Set the "**S**wap Seal and Alarm" option to YES for Zone 2 and Zone 4 (if used) only.

3. MENU, 7, 1. Program an Area to monitor the Analogue Input Zones and assign the Zones to the Area using an appropriate Process Group in the normal manner.

Satellite Siren Driver Monitoring.

1. MENU, 7, 0. Program the Zone Input
(Qxx:Z05 for the first M4 Interface and Qxx:Z06 if a second M4 Interface is connected)
Note the following:
-Program an appropriate name. e.g. "Satellite Siren Tamper".
-Set the "**S**wap Seal and Alarm" option to YES.

2. MENU, 7, 1. Program an Area to monitor the Siren Tamper Zone/s and assign the Zone/s to the Area using an appropriate Process Group in the normal manner.

REFER TO THE ADVANCED TECHNICAL SUPPPORT SECTION OF THE WEBSITE
FOR DETAILED PROGRAMMING INSTRUCTIONS IF REQUIRED.
www.innerrange.com.au/techsupp.html

Designed & manufactured in Australia.
Due to on-going product development this manual is subject to change without notice.