

## Electrical Specifications

### Power Supply Source.

Voltage:	11V to 14V DC.
Current:	500mA.
Connector:	2.1mm DC connector. (+ve centre pin)

### NOTE:

“AU” versions are supplied with an AC Adaptor providing a 12V DC, 500mA output.

### Current Consumption.

PCB only:	42mA.
with HID ProxPoint Reader:	75mA.

When other Readers are used, current drawn by the Reader must not exceed 200mA.

### Typical values:

Allow 50 to 120mA for small Prox Reader (~10cm range)

Allow 120 to 180mA for standard Prox Reader (~15cm range)

Note that these values are general approximations.

*See information supplied with Reader for actual current consumption.*

### Fuse Protection.

Reader Power Fuse: 500mA . Fast Blow.

**ALWAYS REPLACE WITH SAME FUSE TYPE AND VALUE!**

Output to PC: USB 2.0



## Card Enrolment Station. Installation Manual.

### No Reader Head fitted

**994500BlankAU** With AC Adaptor (12VDC. 500mA output)

**994500BlankEU** No AC Adaptor.

### With HID ProxPoint Reader fitted (Pictured)

**994500WiegAU** With AC Adaptor (12VDC. 500mA output)

**994500WiegEU** No AC Adaptor.



### Overview

The Insight Card Enrolment Station is designed to allow Cards to be enrolled in an Inner Range Concept 3000/4000 system via an Insight Operator Workstation PC.

All of the Wiegand formats available in the Concept 3000/4000 system are supported utilizing either Direct Entry or Site Code mode. Model options include a version with a HID ProxPoint Reader factory fitted, and a version with no Reader fitted, allowing the Installer to connect a Reader of the same type used in the system.

## Installing the Card Enrolment Station.

### Card Enrolment Station Parts List

- Insight Card Enrolment Station with USB cable.
- 1 x 4 Way Plug on Screw Terminal prefitted to connector “T2” on the PCB.
- HID ProxPoint Reader. Prefitted to enclosure in “WIEG” versions only.
- AC Adaptor. 240VAC/12VDC @500mA. (“AU” versions only)
- Installation Manual. (This document)

### Installing the Unit

The Insight Card Enrolment Station is supplied as a desktop unit which may be wall mounted if required.

Dimensions: Length: 190mm Width: 134mm  
 Height: 58mm. No Reader fitted. 65mm. HID ProxPoint Reader fitted.  
 USB Cable length: 1.85 metres.

Installation environment should be maintained at a temperature of 0° to 50° Celsius and 15% to 85% Relative humidity (non-condensing)

The Enrolment Station requires an isolating AC Adaptor compliant with local regulations and with the following specifications: (An AC Adaptor is provided with “AU” versions)

AC Input Voltage: As per local AC Mains supply voltage.  
 DC Output: Voltage: 12V DC. Current: 500mA.  
 DC Output connector: 2.1mm DC connector. Positive Centre Pin.

#### Before connecting Power.

The Enrolment Station is supplied with the Wiegand format set to “N bit Wiegand”. Steps 1 to 5 are only required if the Wiegand format needs to be changed and/or a Reader needs to be connected.

1. Remove the top of the enclosure by removing the 4 screws in the base.
2. If the unit is supplied without a Reader, connect the required Reader using the 4-way screw terminal block fitted to T2. The Reader may be mounted on the front panel if space permits. The front panel is pre-drilled with a cable entry hole and mounting holes to suit the HID ProxPoint Reader.  
*See wiring diagram and information on page 6.*

### Wiegand Format Selection

A specific Wiegand format may be selected via the DIPswitch settings.

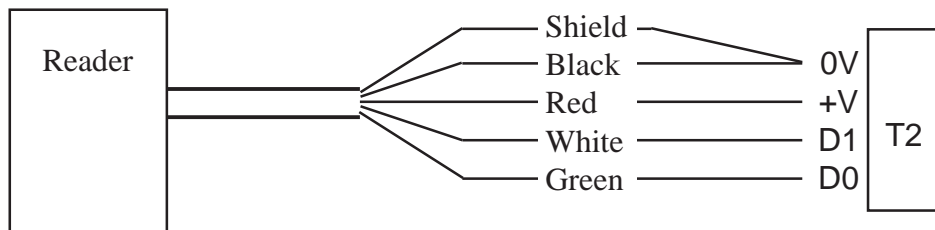
If all Cards used in the system are of the same format, and that format is shown in the list below, then this format should be selected using the DIPswitch setting shown.

If Cards of different formats are used in the system, or if the format is unknown, then the “N bit Wiegand” format should be selected.

Switches 5 to 8 are set to “off”.

Format:	DIPswitch			
	1	2	3	4
<b>No. Name</b>				
0 Not Used	off	off	off	off
1 Not Used	ON	off	off	off
2 Not Used	off	ON	off	off
3 N bit Wiegand	ON	ON	off	off
4 26 bit Wiegand	off	off	ON	off
5 30 bit Wiegand	ON	off	ON	off
6 32 bit Wiegand	off	ON	ON	off
7 34 bit Wiegand	ON	ON	ON	off
8 36 bit Wiegand	off	off	off	ON
9 37 bit Wiegand	ON	off	off	ON
10 40 bit Wiegand	off	ON	off	ON
11 Not Used	ON	ON	off	ON
12 27 bit Wiegand	off	off	ON	ON
13 N bit Fast Wiegand	ON	off	ON	ON
14 Not Used	off	ON	ON	ON

## Reader Wiring



### WIRING NOTES:

- 1) Always read the Reader manufacturer's installation manual before connecting the Reader to the Enrolment Station PCB.
- 2) If the Reader is supplied with screw terminal connections (i.e. does not have a cable), or if the cable needs to be extended, use shielded data cable. e.g. Tycab DMC6702, Garland MC7-6S, Belden 9536, Electra EAS7206, Alpha 1296C, etc. DO NOT use twisted pairs! Follow the wiring color code shown in the diagram above if possible.
- 3) Wire colors shown above are according to the Wiegand Card Reader Interface Standard, and are therefore typical of Readers supplied with a "pigtail" cable.

## JP2 / JP4 Link settings for common Readers

READER	JP2 Supply	JP4 Data O/P
Inner Range Secure40 Prox Reader	12V	12V
HID ProxPoint / MiniProx / ThinLine	5V	5V
HID ProxPro	12V	12V
HID Sensorkey	5V	5V
HID Swipe/Insertion/Turnstile Wiegand Card Readers	5V	5V
Motorola Indala. SlimLine/WallSwitch/PinProx/ ValueProx/SecureProx/MasterProx	5V	5V
Motorola Indala. Standard/ Medium Range/MasterProx (for 30cm read range)	12V	12V

NOTE: It is recommended that Readers with wide supply voltage ranges (e.g. 4V to 14V, 5V to 16V, etc.) are powered using the 5V option.

3. Set Link JP2 for the correct Reader supply voltage. It is recommended that Readers with wide supply voltage ranges (e.g. 4V to 14V, 5V to 16V, etc.) are powered using the "5V" option. See table on page 6 for settings for common Readers.
4. Set Link JP4 for the correct Reader Data output voltage. Typically set to the same voltage setting as JP2, but check Reader manufacturers information to confirm. See table on page 6 for settings for common Readers.
5. Select the required Wiegand format using DIPswitches 1 to 4 as required. See details and table on page 7.
6. Refit the top of the enclosure and secure using the 4 screws. Ensure that all wiring is inside the enclosure and does not get caught between the edges of the top and bottom halves of the enclosure.
7. Connect the Serial cable USB connector to a spare USB port on the Insight Workstation PC.

### Power-up.

8. Connect the AC Adaptor output cable to the 2.1mm DC input socket on the rear of the Enrolment Station. Note that the DC connector has a POSITIVE (+) centre pin.
9. Connect the AC Adaptor to a suitable AC mains outlet and switch on. Typically, the Reader will provide an indication that power is connected via its LED and/or beeper.

### Enrolling Cards.

9. The Enrolment Station is used with Insight Edit V3.0.0.11 or later.
  - a) Select "Users" from the menu tree and then select a User to edit.
  - b) In the User Edit dialogue, select the "Access" tab if not already displayed.
  - c) In the "Card Details" select the Card type required. This option must be set to "Direct Entry" or "Site Code" in order to use the Enrolment Station.
  - d) Click on the "Acquire" button to open the Comm Port Reader dialogue.
  - e) From the "Select Reader Type" drop-down list, select "IR Card Enroller".
  - f) Select the Comm Port number that the Enrolment Station is connected to.
  - g) Select the appropriate "Format" for the Card you wish to enrol.
  - h) Click on "Read", then present the Card at the Reader on the Enrolment Station. When the card is read, the Comm Port Reader dialogue automatically closes and the resulting Card number (Site Code mode) or Direct Entry number (Direct Entry mode) is displayed.

**THE CARD ENROLMENT STATION PCB**

*\* NOTE: If the Reader does not have a cable, or if the cable needs to be extended, use shielded Data cable.  
e.g. Tycab DMC6702, Garland MC7-6S, Belden 9536, Electra EAS7206, Alpha 1296C, etc. DO NOT use twisted pairs!  
See connection details on page 6.*

**L1.** On to indicate unit is operational.  
**L2.** Serial data output to PC.

NOTE: The RS232 version of this product uses a different PCB. Refer to Revision 1.01 of this installation manual for details.

**T1.**  
+VE +12V DC Power Supply input.  
0V 0V DC Power Supply input.  
LAN A Not Used.  
LAN B Not Used.

**JP3. ICP.** The 5-Pin Header socket of the USB Cable is pre-fitted to this connector.

**JP1. BOOST.** For 12V Readers.  
Fit if DC Volts measured at the Reader is <11.5V

**SW1. DIPswitches:**  
Switch 1-4. Wiegand format.  
Switch 5-8. Set to OFF.  
(See table on page 7)

**JP2. PWR.** Reader Power Supply voltage.  
5V / 12V. See table on page 6 for common settings.

**JP4. O/P.** Reader Data output voltage.  
5V / 12V. See table on page 6 for common settings.

**LK1.** LAN Termination.  
Not Used.

**F1/L12. FUSE & Fuse Fail Indicator LED.**  
MUST BE 500mA, M205.  
Do not substitute higher values.

**D0.** Data 0's from Reader.  
**D1.** Data 1's from Reader.

**T3. Reader connections \***  
0V Reader Ground.  
+V Reader Power.  
D1 Reader Data 1's input.  
D0 Reader Data 0's input.

**T3 / LK2.**  
Not Used.

**T4.**  
Not Used.

