
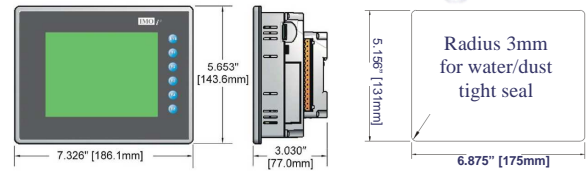


i³ User Start-up Guide



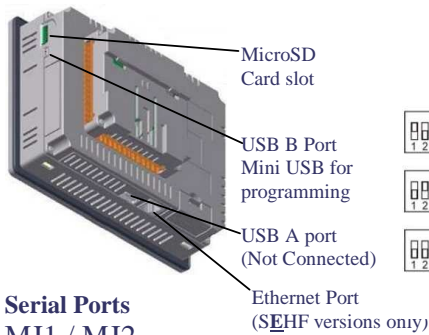
Getting Started:

1. Connect the 24VDC power as shown on the connector below.
2. Install i³ Configurator (V8.7 or later) onto your PC.
3. Connect serial programming cable into port MJ1 or USB cable to mini USB port.
4. If using the mini USB port, or a USB to serial convertor, please check in Window Device Manager which com port has been assigned. Then enter menu Tools->Editor Options->Communications port->Configure, and set accordingly.
5. Press the 'SYS' function key on the front of the unit and check Network ID. Then press the target sign  in the Configurator and make the Target ID match that of the i³

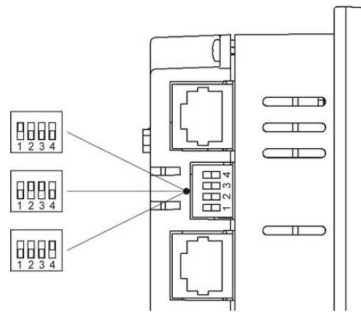


i	3	C	1	2	V	/	320x240 Colour Touch Display, 5 programmable keys
			0	0			0 Digital Inputs
			0				0 Analogue Inputs (10-bit)
			0				0 Analogue Outputs (12 bit)
			0				0 Digital Outputs
			-	S	C	H	2 Serial Ports, 1 CAN port, iCAN Protocol
				E			1 CAN Port + In-Built Ethernet
				A			CANOpen Protocol
				F			MicroSD Card

WARNING: Please ensure power is ON and i³ is in Idle mode before inserting SanDisk™ MicroSD.

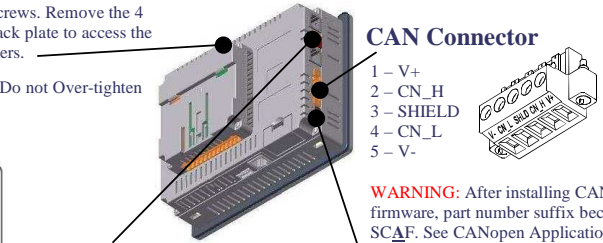


Serial Ports MJ1 / MJ2



Back cover screws. Remove the 4 screws and back plate to access the Internal jumpers.

WARNING: Do not Over-tighten screws.



External Switch Configuration

- SW1 - ON enables MJ2 RS485 port termination (121 Ohms). OFF disables MJ2 RS485 port termination.
- SW2 & SW3 - ON places MJ2 RS485 port in half-duplex mode. OFF places MJ2 RS485 port in full-duplex mode.
- SW4 - ON enables MJ1 RS485 port termination (121 Ohms). OFF disables MJ1 RS485 port termination.

Power Connector

- Power Up:**
Connect to Earth Ground.
Apply 10 - 30 VDC.
Screen lights up.
- 1 - Positive
 - 2 - Negative
 - 3 - Ground

Pin	Signal	Signal Description	Direction
8	TD ¹	RS-232 Transmit Data	Out
7	RD ¹	RS-232 Receive Data	In
6	0V	Ground	-
5	+5	+5 VDC 60mA max	Out
4	RTS ¹	RS-232 Request to Send	In
3	CTS ¹	RS-232 Clear to Send	Out
2	RX/TX-	Receive/Transmit Negative	In/Out
1	RX/TX+	RS-485 Receive/Transmit Positive	In/Out

Pin	Signal	Signal Description	Direction
8	TD ¹	RS-232 Transmit Data	Out
7	RD ¹	RS-232 Receive Data	In
6	0V	Ground	-
5	+5	+5 VDC 60mA max	Out
4	TX-	RS-485 Transmit Negative	In
3	TX+	RS-485 Transmit Positive	Out
2	RX-	RS-485 Receive Negative	In
1	RX+	RS-485 Receive Positive	In

¹Signals are labeled for connection to a DTE device

MJ2 RS485 Connection Examples:

MJ2 - Full Duplex Mode				MJ2 - Half Duplex Mode			
Pin	MJ2 Pins		Direction	Pin	MJ2 Pins		Direction
	Signal	Direction			Signal	Direction	
8	-	-		8	-	-	
7	-	-		7	-	-	
6	0V	Ground		6	0V	Ground	
5	-	-		5	-	-	
4	TX-	OUT		4	-	-	
3	TX+	OUT		3	-	-	
2	RX-	IN		2	TX-/RX-	IN/OUT	
1	RX+	IN		1	TX+/RX+	IN/OUT	

This equipment is suitable for use in Class I, Division 2, Groups A, B, C and D or Non-hazardous locations only

WARNING: EXPLOSION HAZARD – Do not disconnect equipment unless power has been switched off or the area is known to be non-hazardous.

AVERTISSEMENT - RISQUE D'EXPLOSION - AVANT DE DECONNECTER L'EQUIPEMENT, COUPER LE COURANT OU S'ASSURER QUE L'EMPLACEMENT EST DESIGNÉ NON DANGEREUX.

WARNING: To avoid the risk of electric shock or burns, always connect the safety (or earth) ground before making any other connections.

WARNING: To reduce the risk of fire, electrical shock, or physical injury it is strongly recommended to fuse the voltage measurement inputs. Be sure to locate fuses as close to the source as possible.

WARNING: Replace fuse with the same type and rating to provide protection against risk of fire and shock hazards.

WARNING: In the event of repeated failure, do not replace the fuse again as a repeated failure indicates a defective condition that will not clear by replacing the fuse.

WARNING: EXPLOSION HAZARD – Substitution of components may impair suitability for Class I, Division 2

AVERTISSEMENT - RISQUE D'EXPLOSION - LA SUBSTITUTION DE COMPOSANTS PEUT RENDRE CE MATERIAU INACCEPTABLE POUR LES EMBLEMENTS DE CLASSE 1, DIVISION 2

WARNING: The USB parts are for operational maintenance only. Do not leave permanently connected unless area is known to be non-hazardous.

WARNING: EXPLOSION HAZARD - BATTERIES MUST ONLY BE CHANGED IN AN AREA KNOWN TO BE NON-HAZARDOUS

AVERTISSEMENT - RISQUE D'EXPLOSION - AFIN D'EVITER TOUT RISQUE D'EXPLOSION, S'ASSURER QUE L'EMPLACEMENT EST DESIGNÉ NON DANGEREUX AVANT DE CHANGER LA BATTERIE

WARNING: Battery May Explode If Mistreated. Do Not Recharge, Disassemble or Dispose Of In Fire

WARNING: Only qualified electrical personnel familiar with the construction and operation of this equipment and the hazards involved should install, adjust, operate, or service this equipment. Read and understand this manual and other applicable manuals in their entirety before proceeding. Failure to observe this precaution could result in severe bodily injury or loss of life.

Small Extras:

RS232 Serial Programming Cable
For programming any *i*³ Model.



PART No: i3PC45

IP65 RJ45 Panel-Mounted Socket
Bring either MJ1 or MJ2 ports to the outside world by installing this into a 22.5mm cut-out.



PART No: i3PAD

USB to RS232 Converter
For PCs without a serial Com Port.
Add one with this device.



PART No: PC501

Display...
Control...
Connect...

i³ Intergrated Controller

& Associated Products

Communication:

Ethernet Expansion card

Link an *i*³ to an Ethernet network. Program monitor and debug remotely, or run *i*³ as a Modbus TCP server.



PART No: i³-E

GSM Modem Expansion Card

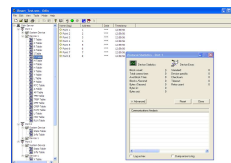
Send and Receive SMS messages via the *i*³, dial-up connection over GSM data link for remote programming, debugging etc. Or, use a GPRS always-on data connection ideal for programming, debugging, monitoring and connection to a SCADA package for constant data logging and remote control.



PART No: i³-M

ODIN OPC SERVER (With LOKI data-logger)

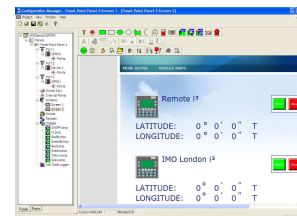
With no tag limit and 30+ Protocols to choose from (including IMO products, Mitsubishi, Allen Bradley, Siemens), ODIN can be used with LOKI to log data either to an Excel spreadsheet or an Access database.



PART No: IMO-OPC-SERVER

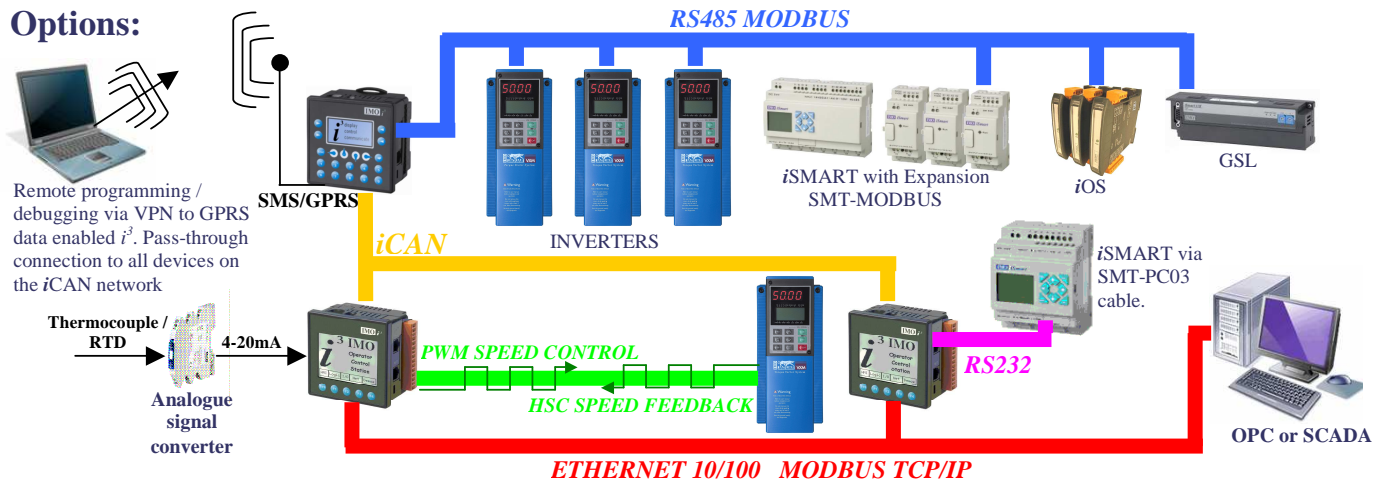
Panel Point SCADA^{lite}

With no tag limit and 30+ Protocols to choose from (including IMO products, Mitsubishi, Allen Bradley, Siemens), a powerful graphical editor, and a VB-based scripting language, Panel-Point allows a PC to become the central data hub of an application.



PART No: PANELPOINT (Developer)
PART No: PANELPOINTRT (Runtime)

Options:

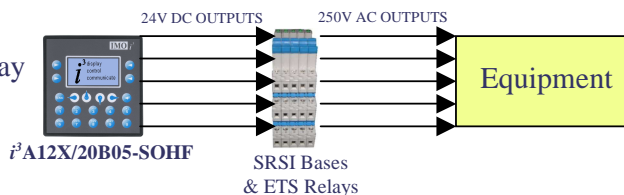


Miscellaneous:

DIN rail mounted SRSI Base and ETS Relay

Use the Transistor outputs of the *i*³ to operate the relay coils to switch up to 6A @ 250VAC.

Part Numbers: SRSI-24AC/DC, ETS-1AN-SL-24VDC

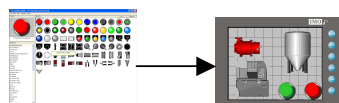


*i*³A12X/20B05-SOHF

SRSI Bases & ETS Relays

*i*³ Configurator with Symbol Library

Obtain a copy of the *i*³ Software with a library of colour buttons, pipes, vessels, motors, pumps, fans etc. To enhance the look and feel of applications on the *i*³C.



Part Numbers: IMO-CDSUITE

Custom screen overlays

Ask at IMO for custom overlays. Overlays are tooled to a customer's design.

GPS Receiver

Locate your *i*³ Controller anywhere in the world by connecting this device to MJ2 of a unit equipped with a GPRS enabled modem.



Part Number: *i*³-GPS