# 232i Wiring Diagrams and Specifications



### **TECHNICAL NOTES**

This product was re-designed using a new manufacturing technology, which changed the physical appearance of the keypad electronics. The LED's changed to surface mount chip LED's mounted on the circuit board that eliminates the need for the wire harnesses. Also, the voltage selection jumper on the main circuit board is no longer required.

To prevent electrical kick back voltage from damaging the keypad, when using an electrical locking device, you MUST install the transorb as close as possible to the lock. Wire the transorb in parallel with the lock power terminals.

Also, to avoid ESD (electro-static discharge) from interfering with the operation of the keypad, ground the negative terminal of the keypad to earth ground. If you cannot ground the power supply, then you must ground the keypad housing.

IEI recommends using a filtered and regulated power supply

Packing Checklist 232i Keypad 293 Relay Board (1) Slotted screws (2) Security Screws (2) Transorb (1) Features & Programming Guide Warranty Guide



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## SPECIFICATIONS:

#### **MECHANICAL:**

BOARD DIMENSIONS: 1.80"W x 2.845"H x 1.125"D

#### ELECTRICAL:

VOLTAGE: 12-24 Volts AC/DC (No Jumper Required)

CURRENT: 8mA@12VDC typical; 35ma with relay energized. 16mA@24VDC typical; 45ma with relay energized. 21mA@12VAC typical; 74mA with relay energized. 43mA@24VAC typical; 91mA with relay energized.

> Note: Keypads using the 293 Relay Board, need an additional 30mA for each relay energized.

OUTPUTS: Main Relay: 5 Amp, Form C @ 24VDC with 10 Amp surge. Outputs 2, 3, and 4 are 50mA negative voltage outputs

#### ENVIRONMENTAL:

TEMPERATURE: -20°F TO 130°F (-28°C TO 54°C) Indoor Only







Wiring to 250 Printer Interface For a Hard Copy Audit Trail	
*Print Live Only	NC1 O Relay 1 O WB C1 O O WVO NC2 O O BR
A separate power supply must be used for the	NO2 C2 NC3 NO3 C3 C3 C3 C3 C3 C3 C3 C
LI2 VAC	



The diagram above shows how to connect two keypads to control a single door. Entering your code on keypad 2 unlocks the maglock directly. When you enter your code on keypad 1, it triggers the REX input of keypad 2, which unlocks the door.

When using a propped door or forced door alarms, connect the alarms to keypad 2. Also use keypad 2 to shunt out an existing alarm system with the alarm shunt relay.

Please note that user codes must be programmed into both keypads.