#### **COMMAND AND CONTROL STYLES**

#### 212i INDOOR STYLE

Flushmount, indoor design

#### 212w WEATHER RESISTANT STYLE

• Flushmount, outdoor design

#### 212r RUGGEDIZED STYLE

- Weatherproof self-contained metal housing
- Vandal resistant
- Cast metal housing suitable for wall, post or gooseneck mounting
- Available in white or black
- 4 On-Board relavs

#### 212se SEALED ENVIRONMENTAL STYLE

Weatherproof self-contained metal housing

#### **ACCESSORIES**

#### **DATA LOGGING**

• IEI-250 PRINTER INTERFACE provides power, communication inputs and outputs for up to 8 Door ♦ Gard keypads. Interfaces with any parallel printer for user/door activity logging

#### **INSTALLATION**

- IEI-280 WEATHERPROOF SURFACE BACK BOX
- IEI-281 FLUSH MOUNT BACK BOX
- IEI 12 or 24 VDC 1A PLUG-IN POWER SUPPLIES
- IEI-293 THREE RELAY PLUG--IN BOARD with FORM C. 1 Amp relays. Converts transistor outputs to dry contacts (for use with Command and Control indoor, weather resistant and Mullion styles).

#### Vandal resistant

- Small design suitable for residential, commercial and industrial applications
- 4 On-Board Relays
- Available in Bronze or Satin Aluminum

#### 212mp MULTIPAD BACKLIT STYLE

- Weatherproof self-contained housing.
- Illuminated Keys
- Contemporary Design
- 4 On-board Relays

#### **TAMPER PROTECTION**

- IEI-282 TAMPER SWITCH detects faceplate removal
- IEI-283 SECURITY MODULE responds to tamper switch (included) and cuts all in/out power to the door lock. Wires can't be crossed to unlock door. Must be reset from inside the protected area.
- IEI-289 TAMPER SCREWS TRI-HEAD
- IEI-267 1/4" DRIVER
- IEI-270 ADAPTER SOCKET TRI-HEAD
- IEI-271 TAMPER WRENCH ALLEN WITH PIN
- IEI-288 TAMPER SCREWS ALLEN WITH PIN

#### OTHER DOOR & GARD PRODUCTS FROM IEI

#### **CONTROL PANEL ACCESS CONTROL SYSTEMS**

**Battery Operated Keypad-Direct** keyswitch replacement (for indoor use)

262B The Partitioner Self-Contained 2-zone control

## **POWERGARD POWER SUPPLIES**

PG1224-1 12/24VDC 1.3 Amp Power Supply PG1224-3 12/24VDC 2.5 Amp Power Supply

#### **SELF-CONTAINED ACCESS CONTROL SYSTEMS**

232i Indoor Keypad

Weather-Resistant Keypad 232w

Sealed Environment Keypad 232se

Ruggedized Keypad 232r

232iLM Mullion Keypad

Card Reader System 233

Card Reader/Keypad System

# **FEATURES**

- Lock Release Relay
- Lock Release Time
- Alarm Zone Shunting Relay
- Propped Door Alarm Relay
- Front Programmable
- Multiple User

- Timed Egress Input
- Forced Door Alarm Relay

**MAIN RELAY** The main relay is a form C relay, which you can program as a timed output (1 to 90 seconds) or to toggle (latch). See the Wiring Diagram and Specifications for the relay electrical specifications.

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#### **AUXILIARY OUTPUTS**

**FEATURES:** 

**120 USERS** 

5 minutes or 5 years.

**PROGRAMMING** 

**MEMORY** 

codes.

CODES

4 INDEPENENT OUTPUTS

ALL OUTPUTS ASSIGNABLE BY CODE

Non-volatile EEPROM memory means your codes and

instructions will be there whether you remove power for

All programming is done entirely from the front of the

keypad. LED or sounder guidance makes programming

easy. It takes seconds for an authorized user to change

The Door ◆ Gard Command and Control keypads allow

digits in length and digits may be repeated. The Master

up to 120 individual user codes. Codes can be 1 to 6

Code is always stored in user location one (1).

**4 INDEPENENT TIMERS** 

ON BOARD MAIN RELAY

REMOTE TRIGGERING INPUT

**KEYPAD PROGRAMMABLE** 

You can program these outputs as timed outputs (1 to 90 seconds) or to toggle (latch). They can be controlled individually or in combination by a code. Some models have 1 Amp form C relays and other models have negative voltage outputs with a 50mA sink.\*

Panic is activated by pressing the \* and # keys at the same time. By default, it operates output 4 and activates for 1 second.

#### REMOTE TRIGGERING INPUT (REX)

FEATURES AND PROGRAMMING GUIDE

**COMMAND AND CONTROL SERIES** 

DOOR ♦ GARD COMMAND AND CONTROL SERIES keypads offer field proven reliability and cost effective

Command and Control Series keypads are the perfect choice for controlling electric locking devices, security systems,

automatic operators or machinery. Door • Gard keypads accept power from a 12 or 24 Volt AC/DC supply.

solutions anywhere limited control or access is desired. Designed for individual control of up to four devices. Door ♦ Gard

By default, upon a momentary closure this normally open loop triggers the main relay for the same time period as the Master Code. You can also program the REX to operate any combination of the available outputs. The auxiliary outputs activate for their programmed time.

#### **KEYPRESS FEEDBACK/AUDIBLE KEYPRESS**

Door ♦ Gard Command and Control keypads, by default, acknowledge a keypress by momentarily illuminating the vellow LED or activate the sounder. This depends on the model. You can turn this off through programming.

## **KEYPAD ACTIVE OUTPUT**

Door ♦ Gard Command and Control keypads can be programmed to energize a voltage output whenever a key is touched. You can use this to turn on lights, CCTV camera, or notify a guard. This output is not available if you are using the IEI 250 Printer Interface.

#### **AUTO ENTRY**

This feature is used when you don't want to press the \* key after entering your code. You only need to enter vour code number (without pressing \*) and the relav activates. To use this feature, the user codes must be the same length as the master code. Please remember to access program mode when auto entry is on, do not press the \* key (Press: 99 # master code), however the \* is required while entering programming commands.

## **AUDIT TRAIL**

Using the 250 Printer Interface (not included), you can get an accurate real-time audit trail. Up to 8 keypads can be monitored simultaneously. The 250 comes with a power supply and a printer cable and it easily connects to any parallel printer. This output is not available on all models.

\*Voltage Outputs may be converted to 1 Amp, Form-C relays by adding the 293 Auxiliary Relay Board (Model # 0219000).

#### If this product does not seem to operate properly, please call our Technical Support Department toll free at 1-800-343-9502 (or 781-821-5566) Monday-Friday 8:00 A.M. - 7:00 P.M. EST. We understand your time is valuable and we know that calling our Technical Support Department will ensure that you'll make the most profit possible with your IEI product. Thank you for your purchase. We appreciate your business.

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# **TESTING THE KEYPAD**

- 1. Connect the positive (+) lead of your power supply to the terminal strip (TS1) V+ input.
- 2. Connect the negative (-) lead of your power supply to the terminal strip (TS1) V- input.
- 3. Turn on your power supply.
- 4. Press 7890#123456 \*. If all 12 keypresses are verified, the keypad enters self-test mode.

  The yellow LED flashes/sounder beeps 3 times, then turns on solid for 3 seconds.

**Note:** Self-test mode can be used to troubleshoot a keypad in the field. If you do not get the continuous light, the memory has been corrupted and should be re-programmed with the default command (see option #19).

5. Enter the master code (default = 1234) followed by the \* key and the relay energizes. Refer to programming section to program your keypad.

#### NOTE:

You can program your keypad in your shop or at the installation site. Programmed information is stored in non-volatile memory so it won't be lost if power is removed.

# COMMAND AND CONTROL DEFAULTS

Door • Gard Command and Control keypads are designed for easy installation in a minimum amount of time. The following default settings are factory programmed:

Master Code (user 1): 1234 Main Relay Time: 5 seconds **Auxiliary Output Time:** 5 seconds Panic Output: Output 4 Keypad Active Output: Off **REX Triggers:** Main Relay Keypress Feedback: On LED - Normal State Red LED - Relay Energized Green Auto-Entry

If you must change the default settings or additional functions are desired, please refer to the Programming Options Chart after you are familiar with the Programming section.

2

# **PROGRAMMING**

1. Enter programming mode
Press 99 # (master code) \*

Indicator
Flash/Beep Slowly

2. To Change master code<sup>2</sup>

Press 1 # (new master code) \*
Press (new master code) \*
If you must change the Main Relay time, see option 2 on the
Programming Options chart.

Flash/Beep Fast Flash/Beep Slowly

3. To Add/change second code

Press 2 # (new user code) \*
Press (new user code) \*

Flash/Beep Fast Flash/Beep Slowly

4. To Add/change third code

Press 3 # (new user code) \*
Press (new user code) \*

Flash/Beep Fast Flash/Beep Slowly

5. Up to 120 codes may be added in this fashion

6. Exit programming mode Press \*

Off

#### NOTES:

- Door 

  Gard Command and Control keypads are factory programmed with a master code of 1234.
- <sup>1</sup>Indicator refers to either the yellow LED or sounder.
- <sup>2</sup>The master code is always stored in user location
   1.
- The master code allows access to programming mode and activates the main relay.
- By default (auto-entry is off), all codes must be followed by the \* key.
- Codes may be from 1-6 digits in length, and digits may be repeated.
- If you forgot the master code or it is not working, momentarily push SW1, (see wiring diagram for location) to enter programming mode and go to option #19 on the Programming Options chart to default keypad.
- If the yellow LED lights solid or sounder is on steady while in programming mode, an error has occurred.
   Press \* to clear (yellow LED should start flashing) and start over from step 2 or 3 above.

3

# PROGRAMMING OPTIONS CHART

If the pre-programmed default values must be changed or additional functions are desired, the following options may be programmed.

1.	Enter programming mode	Press	99 # (master code) *
2.	Change master code/set main relay time <sup>1</sup> Example: Master code of 4321/relay time of 10 seconds	Press Press	(time) # 1 # (new code) * (new code) * 10 # 1 # 4321 * 4321 *
3.	Add/change user code	Press	(user number) # (new code) * (new code) *
4.	Add/change user code to toggle main relay <sup>1</sup>	Press	(00) # (user number) # (new code) * (new code) *
5.	Delete user codes	Press	(user number) # * *
6.	Set output 2 time <sup>1</sup>	Press	12 # (Relay Time) # 0 # **
7.	Set output 3 time <sup>1</sup>	Press	13 # (Relay Time) # 0 # **
8.	Set output 4 time <sup>1</sup>	Press	14 # (Relay Time) # 0 # **
9.	Set outputs for Remote Triggering Input	Press	17 # (outputs: 1, 2, 3 and/or 4) # 0 # **
10.	. Set outputs for Panic	Press	18 # (outputs: 1, 2, 3 and/or 4) # 0 # **
11.	. Turn keypress feedback/audible keypress on	Press	30 # 0 # 1 # * *
12.	. Turn keypress feedback/audible keypress off	Press	30 # 0 # 0 # * *
13.	. Turn yellow LED/sounder on with relay	Press	30 # 1 # 1 # * *
14.	. Turn yellow LED/sounder off with relay	Press	30 # 1 # 0 # * *
15.	. Turn auto entry on	Press	30 # 2 # 1 # * *
16.	. Turn auto entry off	Press	30 # 2 # 0 # * *
17.	. Turn keypad active on <sup>2</sup>	Press	43 # 0 # 99 # * *
18.	. Turn keypad active off	Press	43 # 0 # 00 # * *
19.	Erase keypad memory/reset defaults	Press	46 # 00000 # 00000 # * *
20.	Energize selected output(s) with a user code <sup>3</sup>	Press	59 # (outputs 1, 2, 3 and/or 4) # user location # (new code) * (new code) * Press 59 # 23 # 2 # 4321 * 4321* *
	ample: User 2; code 4321; energize outputs 2 & 3 . Exit programming mode	Press	

## NOTES:

- 1. Relay times must always be represented by 2 digits. Example: 5 seconds = 05. Latching /toggle is accomplished by entering a time of 00.
- 2. Keypad active is a negative voltage output (sink) available on terminal (or wire) marked WB (see wiring diagrams for location).
- 3. This feature does not work with the master code.

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