

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 relays

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).

OTHER DOOR♦GARD PRODUCTS FROM IEI

CONTROL PANEL ACCESS CONTROL SYSTEMS

- | | |
|------|--|
| 240 | Battery Operated Keypad-Direct
keyswitch replacement (for indoor use) |
| 262B | The Partitioner Self-Contained 2-zone control |

SELF-CONTAINED ACCESS CONTROL SYSTEMS

- | | |
|--------|---------------------------|
| 232i | Indoor Keypad |
| 232w | Weather-Resistant Keypad |
| 232se | Sealed Environment Keypad |
| 232r | Ruggedized Keypad |
| 232iLM | Mullion Keypad |
| 233 | Card Reader System |
| 234 | Card Reader/Keypad System |

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.

International Electronics, Inc. (IEI) warrents its products to be free from defects in material and workmanship when they have been installed in accordance with the manufacturer's instructions and have not been modified or tampered with. IEI does not assume any responsibility for damage or injury to person or property due to improper care, storage, handling, abuse, misuse, normal wear and tear or an act of God.

IEI's sole responsibility is limited to the repair (at IEI's option), the replacement of the defective product or part when sent to IEI's facility (freight and insurance charges prepaid), after obtaining IEI's Return Merchandise Authorization. IEI will not be liable to the purchaser or any one else for incidental or consequential damages arising from any defect in, or malfunction of, it's products.

This warranty shall expire two years after shipping date. Except as stated above, IEI makes nor warranties, either expressed or implied, as to any matter whatsoever, including, without limitation to, the condition of its products, their merchantability, or fitness for any particular reason.



International Electronics, Inc.
427 Turnpike St, Canton, MA 02021 U.S.A.
800-343-9502, 781-821-5566, 781-821-4443 (FAX)
Fax Information Center 781-821-0734 (From Your FAX machine)

DOOR♦GARD™

FEATURES AND PROGRAMMING GUIDE
COMMAND AND CONTROL SERIES

DOOR♦GARD COMMAND AND CONTROL SERIES keypads offer field proven reliability and cost effective solutions anywhere limited control or access is desired. Designed for individual control of up to four devices, Door♦Gard 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.

FEATURES:

- **4 INDEPENENT OUTPUTS**
- **4 INDEPENENT TIMERS**
- **ALL OUTPUTS ASSIGNABLE BY CODE**
- **ON BOARD MAIN RELAY**
- **120 USERS**
- **REMOTE TRIGGERING INPUT**
- **KEYPAD PROGRAMMABLE**

MEMORY

Non-volatile EEPROM memory means your codes and instructions will be there whether you remove power for 5 minutes or 5 years.

PROGRAMMING

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 codes.

CODES

The Door♦Gard Command and Control keypads allow up to 120 individual user codes. Codes can be 1 to 6 digits in length and digits may be repeated. The Master Code is always stored in user location one (1).

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.

AUXILIARY OUTPUTS

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

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)

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 yellow 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 your code number (without pressing *) and the relay 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).**

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	Off

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.

PROGRAMMING

- | | | |
|--|-------------------|------------------------|
| 1. Enter programming mode | | Indicator ¹ |
| Press 99 # (master code) * | | Flash/Beep Slowly |
| 2. To Change master code ² | | |
| Press 1 # (new master code) * | Flash/Beep Fast | |
| Press (new master code) * | Flash/Beep Slowly | |
| If you must change the Main Relay time, see option 2 on the Programming Options chart. | | |
| 3. To Add/change second code | | |
| Press 2 # (new user code) * | Flash/Beep Fast | |
| Press (new user code) * | Flash/Beep Slowly | |
| 4. To Add/change third code | | |
| Press 3 # (new user code) * | Flash/Beep Fast | |
| Press (new user code) * | 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.
- ¹Indicator refers to either the yellow LED or sounder.
- ²The 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.

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 ¹	Press	(time) # 1 # (new code) * (new code) *
Example: Master code of 4321/relay time of 10 seconds	Press	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 ¹	Press	(00) # (user number) # (new code) * (new code) *
5. Delete user codes	Press	(user number) # * *
6. Set output 2 time ¹	Press	12 # (Relay Time) # 0 # **
7. Set output 3 time ¹	Press	13 # (Relay Time) # 0 # **
8. Set output 4 time ¹	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 ²	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 ³	Press	59 # (outputs 1, 2, 3 and/or 4) # user location # (new code) * (new code) *
Example: User 2; code 4321; energize outputs 2 & 3	Press	59 # 23 # 2 # 4321 * 4321 *
21. 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.