

MODEL KP-200

VANDAL RESISTANT & WEATHERPROOF FLUSH MOUNT DIGITAL KEYPAD



DESIGNED FOR ACCESS CONTROL APPLICATIONS

- OPERATES ON 12 OR 24 VOLTS AC/DC, AUTO VOLTAGE SENSING
- FULLY PROGRAMMABLE FROM THE KEYPAD
- CONFORMS TO IP66 CODE, DUSTPROOF AND WATERPROOF
- VANDAL PROOF DIE CAST HOUSING WITH STAINLESS STEEL FACEPLATE
- FLUSH MOUNT, MOUNTS ON STANDARD SINGLE GANG ELECTRICAL BOX
- 100 USER CODES WITH CODE LENGTHS FROM 4 TO 8 DIGITS
- BACKLIT KEYS FOR VISIBILITY IN DARK AREAS, BACKLIGHTING IS ADJUSTABLE
- DIE CAST METAL KEYS WITH AUDIBLE AND VISUAL KEY PRESS
- TWO PROGRAMMABLE OUTPUTS, ONE 5 AMP. RELAY, ONE TRANSISTOR OUTPUT
- BUILT-IN TAMPER SWITCH, BUILT-IN BUZZER
- REQUEST TO EXIT INPUT WITH ADJUSTABLE RELAY TIME
- RED, YELLOW AND GREEN LEDS INDICATE KEYPAD STATUS
- LIFETIME LIMITED WARRANTY



ALARM CONTROLS CORPORATION

DEER PARK, NEW YORK

11729

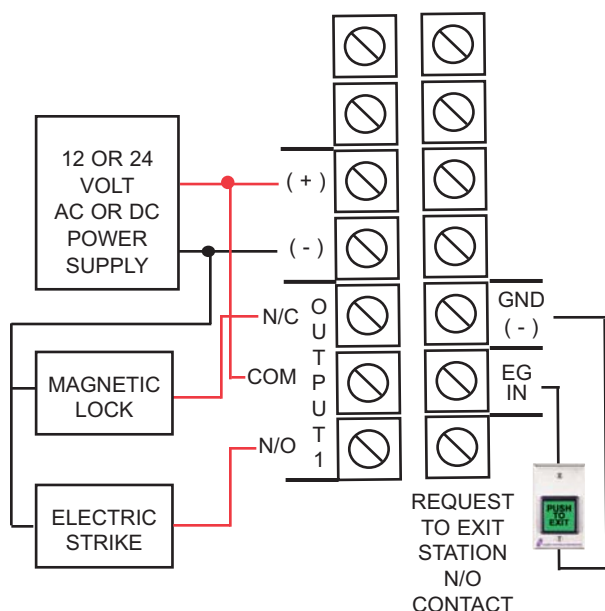
MODEL KP-200 DIGITAL KEYPAD

FOR ACCESS CONTROL APPLICATIONS

SPECIFICATIONS

OPERATING VOLTAGE: 12 OR 24 VOLTS AC/DC, AUTO VOLTAGE SENSING
ACTIVE CURRENT DRAW : 100 MA. @ 12 VOLTS, 120 MA. @ 24 VOLTS
IDLE CURRENT: 10 MA. MAX. @ 12 VOLTS, 22 MA. MAX. @ 24 VOLTS
OUTPUT 1 CONTACT RATING: S.P.D.T., 5A. @ 28 VDC/120 VAC
OUTPUT 2 NPN OPEN COLLECTOR: 100 MA. SINK @ 24 VDC MAX.
TAMPER SWITCH CONTACTS: N/C DRY CONTACTS, 50 MA. MAX.
OPERATING TEMPERATURE: -4F TO 158F, (-20C TO +70C)
AMBIENT HUMIDITY: 5 TO 95% RELATIVE HUMIDITY
ENVIRONMENT: CONFORMS TO IP66 CODE, DUSTPROOF AND WATERPROOF FROM POWERFUL WATER SPRAY
EGRESS INPUT: NORMALLY-OPEN CONTACTS
100 USER CODES, OPERATES OUTPUT 1, CODE LENGTH FROM 4 TO 8 DIGITS
10 USER CODES, OPERATES OUTPUT 2, CODE LENGTH FROM 4 TO 8 DIGITS
KEYPAD LOCKOUT FEATURE, AFTER 10 FALSE CODE ENTRIES KEYPAD LOCKS FOR 30 SECONDS
RELAY CAN BE SET FOR MOMENTARY OR LATCHING MODE
ADJUSTABLE RELAY ON TIME FROM 1 TO 999 SECONDS
KEYPAD BEEPER CAN BE SILENCED IF REQUIRED
KEYPAD CAN BE PROGRAMMED FOR OUTPUT ANNUNCIATION
DIE CAST METAL BACKLIT KEYS FOR VISIBILITY IN DARK AREAS
FLUSH MOUNT, MOUNTS IN STANDARD SINGLE GANG ELECTRICAL BOX

TYPICAL WIRING DIAGRAM



KEYPAD FEATURES

N/C TAMPER SWITCH CAN PROVIDE A REMOTE ALARM SIGNAL.

DOOR SENSOR INPUT CONNECTED TO A N/C MAGNETIC CONTACT MOUNTED ON THE DOOR WILL PROVIDE THE FOLLOWING FUNCTIONS:

- DOOR AUTO RELOCK TO PREVENT "TAILGATING"
- DOOR FORCED OPEN ALARM
- DOOR PROPED OPEN ALARM
- DOOR INTERLOCK, (MANTRAP), REQUIRES 2 KEYPADS

KEY ACTIVE OUTPUT SWITCHES TO GROUND FOR 10 SECONDS WHEN A KEY IS PRESSED. CAN BE USED FOR A REMOTE LED, BUZZER OR RELAY.

DURESS OUTPUT SWITCHES TO GROUND WHEN A DURESS CODE IS ENTERED. CAN BE USED FOR REMOTE SIGNALING.

OUTPUT 1 INHIBIT PREVENTS OUTPUT 1 AND EGRESS BUTTON FROM OPERATING

INTERLOCK CONTROL OUTPUT THIS OUTPUT IS USED TO CONTROL A SECOND KEYPAD IN AN INTERLOCK SYSTEM TO PREVENT BOTH DOORS FROM OPENING AT THE SAME TIME.

ALARM CONTROLS CORPORATION

"QUALITY SECURITY EQUIPMENT SINCE 1971"

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**SELF-CONTAINED DIGITAL
VANDAL RESISTANT/WEATHERPROOF
FLUSH MOUNT BACKLIT
ACCESS CONTROL KEYPAD
MODEL KP- 200
OPERATING INSTRUCTIONS**



ALARM CONTROLS CORPORATION

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The KP-200 is a self-contained vandal resistant weatherproof digital keypad with field proven reliability that operates on 12 or 24 volts AC or DC. This dual output keypad is suitable for residential, industrial and commercial installations and is compatible with all electric locking devices. Durable backlit metal keys and rugged metal housing protect the keypad from harsh environments and high traffic areas. Keypad flush mounts on standard single gang electrical boxes.

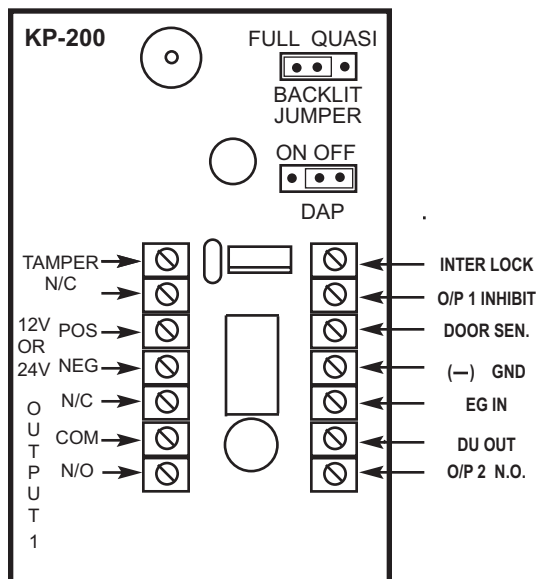
IMPORTANT FEATURES

- OPERATES ON 12 OR 24 VOLTS AC/DC, AUTO VOLTAGE SENSING
- FULLY PROGRAMMABLE FROM THE KEYPAD
- HEAVY DIE CAST HOUSING WITH BRUSHED STAINLESS STEEL FACE PLATE
- METAL KEYS ARE BACKLIT FOR VISIBILITY IN DARK AREAS
- BACKLIGHTING IS ADJUSTABLE
- ONE PROGRAMMABLE S.P.D.T., 5 AMP RELAY OUTPUT
- ONE PROGRAMMABLE NPN TRANSISTOR OUTPUT
- OUTPUT 1: 100 MULTI-USER CODES, CODE LENGTH 4 TO 8 DIGITS
- OUTPUT 2: 10 MULTI-USER CODES, CODE LENGTH FROM 4 TO 8 DIGITS
- BUILT-IN TAMPER SWITCH, BUILT-IN BUZZER
- REQUEST TO EXIT INPUT WITH ADJUSTABLE RELAY TIME FROM 1-999 SEC.
- RED, YELLOW AND GREEN LEDS INDICATE THE CONDITION OF THE KEYPAD
- LIFETIME LIMITED WARRANTY

SPECIFICATIONS

- OPERATING VOLTAGE: 12 OR 24 VOLTS AC/DC, AUTO VOLTAGE SENSING
- ACTIVE CURRENT DRAW: 100 MA. MAX. @ 12 V, 120 MA. MAX. @ 24 V
- IDLE CURRENT DRAW: 10 MA MAX. @ 12 V, 22 MA MAX. @ 24 V
- OUTPUT 1 CONTACT RATING: 5A @ 28 VDC
- OUTPUT 2 NPN OPEN COLLECTOR: 100 MA.SINK @ 24 VDC MAX.
- RELAY CONTACT ARRANGEMENT: SINGLE POLE-DOUBLE THROW
- EGRESS INPUT: NORMALLY-OPEN CONTACTS
- TAMPER SWITCH CONTACTS: NORMALLY-CLOSED DRY CONTACTS
- DURESS, INTERLOCK AND KEY ACTIVE OUTPUT RATINGS: NPN OPEN COLLECTOR SWITCHES TO GROUND WHEN ACTIVE, 24 VDC/100 MA. SINK.
- AUTO REFRESH TIME DURING CODE ENTRY: EACH DIGIT 10 SEC. MAX. EACH CODE 30 SEC. MAX.
- OPERATING TEMPERATURE: -4F TO 158 F, (-20C TO +70C)
- AMBIENT HUMIDITY: 5 TO 95 RELATIVE HUMIDITY
- ENVIRONMENT: CONFORMS TO IP66 CODE DUSTPROOF AND WATERPROOF
- DIMENSIONS: 3.187" W x 4.750" L x .593 D, DEPTH BEHIND PLATE 1.250"

KEYPAD TERMINALS

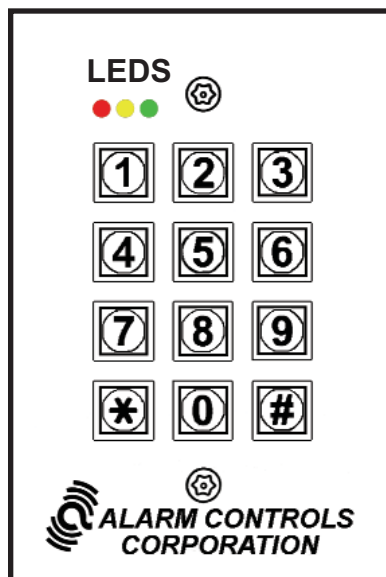


NOTE:

REMOVE THE FOUR CORNER SCREWS TO REMOVE THE BACK COVER TO ACCESS THE KEYPAD TERMINAL BLOCKS.

THE WEATHER-PROOF FEATURE WILL BE MAINTAINED ONLY IF THE BACK COVER IS IN PLACE.

FRONT OF KEYPAD



LED INDICATORS

RED ON WHEN OUTPUT 2 IS ACTIVE

GREEN ON WHEN OUTPUT 1 IS ACTIVE

YELLOW MONITORS POWER & PROGRAM STATUS

12 - 24 VOLT AC/DC (POWER INPUT)
CONNECT 12 OR 24 VOLTS AC OR DC TO THESE TERMINALS. CONNECT DC POWER WITH THE (+) AND (-) POLARITY AS INDICATED. AC POWER DOES NOT REQUIRE POLARITY OBSERVANCE. THE KEYPAD IS AUTO VOLTAGE SENSING. WHEN USING AC ELECTRIC STRIKE USE AC POWER ONLY.

OUTPUT 1 (RELAY 1)
OUTPUT RELAY 1 HAS S.P.D.T. DRY CONTACTS RATED 5A@ 28 VDC. THIS RELAY CAN BE PROGRAMMED FOR LATCHING MODE OR MOMENTARY TIME DELAY MODE FROM 1 TO 999 SECONDS.

OUTPUT 2 (O/P 2 N.O.)
THIS IS AN NPN TRANSISTOR OUTPUT CONTROLLED BY USER CODE 2. THE NPN OPEN COLLECTOR OUTPUT SWITCHES TO GROUND AFTER THE USER CODE IS ENTERED. IT CAN BE PROGRAMMED FOR LATCHING MODE OR MOMENTARY TIME DELAY MODE FROM 1 TO 999 SECONDS. OUTPUT IS LIMITED TO 100 MA. @ 24 VDC.

EG IN (EGRESS INPUT)
A NORMALLY-OPEN REQUEST TO EXIT STATION CONNECTED TO THIS TERMINAL AND GROUND, (-) WILL OPERATE OUTPUT 1 FOR THE SAME TIME PERIOD AS THE USER CODE. MULTIPLE REQUEST TO EXIT STATION CAN BE CONNECTED IN TO THESE TERMINALS. LEAVE THIS TERMINAL OPEN IF IT IS NOT USED.

■ **KEY ACT** (KEY ACTIVE OUTPUT)
THIS IS AN NPN TRANSISTOR OPEN COLLECTOR OUTPUT THAT SWITCHES TO GROUND, (-) FOR 10 SECONDS WITH EACH KEY PRESS. THIS CAN BE USED TO TURN ON A BUZZER, TURN ON LEDS OR OPERATE A LOW CURRENT RELAY. THE RATING OF THIS OUTPUT IS LIMITED TO I_c MAX. 100 MA. SINK, V_c MAX. 24VDC.

■ **DU ACT** (DURESS OUTPUT)
THIS IS AN NPN TRANSISTOR OPEN COLLECTOR OUTPUT THAT SWITCHES TO GROUND, (-) AFTER THE DURESS CODE HAS BEEN ENTERED. THIS CAN BE USED TO TRIGGER AN ALARM ZONE OR TURN ON A BUZZER. THE RATING OF THIS OUTPUT IS LIMITED TO I_c MAX. 100MA. SINK, V_c MAX. 24VDC.

■ **DOOR SENS** (DOOR POSITION SENSOR INPUT)
A NORMALLY-CLOSED MAGNETIC CONTACT CONNECTED TO THIS TERMINAL AND GROUND, (-) WILL MONITOR THE POSITION OF THE DOOR. *THIS TERMINAL MUST BE CONNECTED TO GROUND, (-) IF NOT USED.* THE FACTORY INSTALLED JUMPER MUST BE REMOVED WHEN USING THIS FEATURE.

THE DOOR POSITION SENSOR WILL PROVIDE THE FOLLOWING:

1. **DOOR AUTO RE-LOCK**

THE KEYPAD WILL IMMEDIATELY RE-LOCK AFTER THE DOOR CLOSSES AND BEFORE THE END OF TIME PERIOD THAT HAS BEEN PROGRAMMED FOR OUTPUT 1. THIS PREVENTS "TAILGATE" ENTRIES.

2. **DOOR FORCED OPEN ALARM**

THE KEYPAD WILL GENERATE A DOOR FORCED OPEN ALARM INSTANTLY IF THE DOOR IS FORCED OPEN WITHOUT A VALID USER ENTRY CODE OR EGRESS INPUT. THE ALARM WILL LAST FOR 60 SECONDS AND CAN BE TURNED OFF WITH ONE OF THE USER CODES IN GROUP 1 AT ANYTIME.

3. **DOOR PROPPED OPEN ALARM**

IF THE DOOR IS LEFT OPEN LONGER THAN THE PRE-SET TIME THE KEYPAD WILL GENERATE A DOOR PROPPED OPEN ALARM UNTIL THE DOOR IS CLOSED. THE DOOR OPEN TIME IS PROGRAMMABLE FROM 1 TO 999 SECONDS.

4. **INTER-LOCK CONTROL**

THE INTER-LOCK CONTROL OUTPUT GOES TO GROUND, (-) WHEN THE DOOR IS OPEN IN ORDER TO DISABLE THE SECOND KEYPAD IN THE INTER-LOCK SYSTEM.

■ **O/P 1 INHIB.** (OUTPUT 1 INHIBIT)
THIS IS A NORMALLY-OPEN INPUT TERMINAL WHICH IS USED IN A CROSS WIRE CONNECTION IN AN INTER-LOCK APPLICATION.

■ **INT. LOCK** (INTER-LOCK CONTROL OUTPUT)
THIS IS AN NPN TRANSISTOR OPEN COLLECTOR OUTPUT THAT SWITCHES TO GROUND, (-) FOR 5 SECONDS AFTER ENTERING A VALID USER CODE. USE THIS OUTPUT TO CONTROL THE SECOND KEYPAD IN A "MANTRAP" APPLICATION.

A "MANTRAP" SYSTEM IS A TWO DOOR SYSTEM THAT ALLOWS ONLY ONE DOOR TO OPEN AT A TIME. THIS PREVENTS ACCESS THRU DOOR 2 WHILE DOOR 1 IS OPEN. ACCESS THRU DOOR 2 IS ALLOWED WHEN DOOR 1 IS CLOSED.

■ **N.C TAMPER**
THIS CONTACT IS NORMALLY-CLOSED WHILE THE KEYPAD IS SECURE TO THE BACK BOX. WHEN THE KEYPAD IS SEPARATED FROM THE BACK BOX THE CONTACTS OPEN. CONNECT THESE NORMALLY-CLOSED CONTACTS TO THE PANIC INPUT OF AN ALARM PANEL IF REQUIRED.

LED INDICATORS

| | |
|------------|---|
| RED LED | ON WHEN OUTPUT 2 IS ACTIVE |
| YELLOW LED | MONITORS POWER INPUT AND KEY PRESS, (SEE CHART BELOW) |
| GREEN LED | ON WHEN OUTPUT 1 IS ACTIVE |

YELLOW LED INDICATOR AND TONES

THE YELLOW LED AND BUILT-IN BUZZER GIVE THE FOLLOWING SIGNALS AND TONES

| LED SIGNALS | TONES | STATUS |
|---------------------|-----------------|----------------------------|
| ON | NONE | IN PROGRAMMING MODE |
| 1 FLASH | 1 BEEP | SUCCESSFUL KEY ENTRY |
| 2 FLASHES | 2 BEEPS | SUCCESSFUL CODE ENTRY |
| 5 FLASHES | 5 BEEPS | FAULTY CODE ENTRY |
| CONTINUOUS FLASHING | CONTINUOUS TONE | DAP JUMPER NOT REPLACED |
| CONTINUOUS FLASHING | NONE | 1 FLASH IN 2 SEC. INTERVAL |
| NONE | 1 LONG BEEP | OUTPUT RELAY ACTIVATED |

TONES AND BEEPER CAN BE ENABLED OR DISABLED THROUGH PROGRAMMING

DAP JUMPER (*DIRECT ACCESS TO PROGRAMMING*)

If the Installer Code is forgotten, use the DAP jumper to override the forgotten code permitting the keypad direct entry into the programming mode. Do the following as described:

1. Disconnect the power supply.
2. Move the DAP jumper from OFF to ON position.
3. Reconnect the power supply, (the buzzer turns ON).
4. Move the DAP jumper back to the OFF position, (the buzzer turns OFF).
5. The keypad is now in the programming mode and ready to receive new programming data.
6. Since the old Installer Code was forgotten repeat # 2 in the Program Mode section.

BACKLIT JUMPER

1. **FULL POSITION** The keypad is dim backlit. It turns to full backlit when a key is pressed, then returns to dim backlit 10 seconds after the last key is pressed.
2. **AUTO POSITION** The keypad is not backlit. It turns to full backlit when a key is pressed, then turns off 10 seconds after the last key is pressed.

EASY START UP

Connect power to keypad. Voltage can be 12 or 24 AC or DC. When using DC voltage polarity must be observed. Keypad has an auto voltage sensing circuit that detects the applied voltage. **THE FOLLOWING STEPS MUST BE TAKEN TO ACTIVATE THE KEYPAD !**

STEP 1 ACTIVATING THE PROGRAM MODE

An Installer Code must be entered in order to activate the Program Mode the first time.

1. Enter **[0][0][0][0]** then press the **[*]** key. The Yellow Led will be on steady, you will hear two beeps. You will now be able to enter an Installer Code.
2. Press **[0]** then enter an Installer Code that can be 4 to 8 digits in length, (digits can be repeated), then press the **[#]** key. The Yellow Led will be on steady, you will hear two beeps. You are now in the **Program Mode**. Please record the Installer Code for future use.

The Installer Code may be changed by entering the old Installer Code and repeating # 2.

STEP 2 KEYPAD INITIATION MODE

The Keypad Initiation Mode 1 allows 100 user codes in code lengths from 4 to 8 digits with more than 100 million code combinations. ***THIS PROCEDURE MUST BE FOLLOWED !*** To activate Keypad Initiation Mode enter **[8] [9] [0] [1]** then press the **[#]** key. The Yellow Led will flash twice and you will hear two beeps. You are now in **Keypad Initiation Mode**.

STEP 3 ENTERING THE USER CODES

You must be in the Program Mode

The User Codes can be from 4 to 8 digits in length, (digits can be repeated).
The User Codes must not be the same as the Installer Code !

User Codes Group 1 - There are 100 User Codes in Group 1
Group 1 operates Relay 1

User Codes Group 2 - There are 10 User Codes in Group 2
Group 2 operates a NPN transistor

TO PROGRAM GROUP 1

Press the **[1]** key then enter the User Number, this number is two digits long and ranges from **00** to **99**, then enter the user code, then press the **[#]** key. The Yellow Led will flash twice and you will hear two beeps.

TO PROGRAM GROUP 2

Press the **[2]** key then enter the User Number, this number is one digit long and ranges from **0** to **9**, then enter the user code, then press the **[#]** key. The Yellow Led will flash twice and you will hear two beeps.

EXAMPLE OF ENTERING A FOUR DIGIT USER CODE

| LOCATION | USER NUMBER | USER CODE | TO ENTER PRESS |
|------------|----------------|------------------------|----------------|
| [1] | [0] [2] | [5] [3] [8] [1] | [#] |
| [2] | [3] | [6] [4] [9] [2] | [#] |

DELETING A USER CODE

You must be in the Program Mode.

In the event a User Code must be deleted do the following, press the Location Number then enter the User Number then press the **[#]** key. The Yellow Led will flash twice and you will hear two beeps. The selected User Code has been deleted.

CONFIGURATION OF OUTPUT MODES

Output 1 in Momentary Mode

You must be in the Program Mode.

Press the **[4] [0]** keys then enter the relay "on" time. This time can be from 1 to 999 sec. then press the **[#]** key. The Yellow Led will flash twice and you will hear two beeps. **The Momentary Mode for Output 1 has been entered.**

Output 1 in Latching Mode

You must be in the Program Mode.

Press the **[4] [1]** keys. Follow the directions above to enter Output 1 Latching Mode but do not enter the relay "on" time.

Output 2 in Momentary Mode

Press the **[5][0]** keys then enter the relay “on” time. This time can be from 1 to 999 sec. then press the **[#]** key. The Yellow Led will flash twice and you will hear two beeps. **The Momentary Mode for Output 2 has been entered. You must be in the Program Mode.**

Output 2 in Latching Mode

Press the **[5][1]** keys. Follow the directions above to enter Output 2 Latching Mode. **You must be in the Program Mode.**

TO EXIT THE PROGRAM MODE

To exit the Program Mode press the **[*]** key. The Keypad returns to normal operation.

PROGRAMMING OPTIONS

The Keypad can be programmed with additional features by using the following options. You have only 10 seconds between key entries otherwise the keypad will return to the Program Mode. The Keypad must be in the Program Mode to install these options.

FALSE CODE LOCKOUT

The Keypad can be disabled for 15 minutes after 5 successive false code entries by entering the following: Press **[7][2]** keys then press the **[5]** key then press **[#]** key. The Keypad Lock out is now enabled. To disable the Keypad Lockout press the **[7][6]** keys then press the **[0][0]** keys then press the **[#]** key. **The Keypad Lockout feature is now disabled.**

DOOR FORCED OPEN ALARM

The Keypad will generate a a door forced open alarm instantly if the door is forced open without a valid User Code or egress input. The alarm will last for 60 seconds.

To program the Door Forced Open Alarm press the **[8][0]** keys then press the **[1]** key then press the **[#]** key. **The Door Forced Open Alarm is now enabled.**

To disable the Door Forced Open Alarm press the **[8][0]** keys the press the **[0]** key then press the **[#]** key. **The Door Forced Open Alarm is now disabled.**

DOOR PROPPED OPEN ALARM

If the door is left open longer than the pre-set time the Keypad will generate a door propped Open Alarm until the door is closed.

To program the Door Propped Open Alarm press the **[9]** key then enter the door open time 1 to 999 seconds then press the **[#]** key. **The Door Propped Open Alarm is now enabled.**

To disable the Door Propped Open Alarm press the **[9]** key then press the **[0]** key then press the **[#]** key. **The Door Propped Open Alarm is now disabled.**

KEYPAD SILENT MODE

The Keypad beeper can be silenced if required. the beeper will not sound when the keys are pressed.

For silent operation press the **[8][3]** keys then press **[0]** key then press the **[#]** key. **The keypad is now in the silent mode.**

To restore to audible keypad operation press the **[8][3]** keys then press the **[1]** key then press the **[#]** key. **The keypad is now in the audible mode.**

CODE ENTRY MODES AUTO OR MANUAL

When the Keypad is programmed for **Auto Entry** mode the **#** key that follows the entered Code Number is **not** required. In this mode the User Code must be the same length as the Installer Code and the code length can be from four to eight digits.

To program the Keypad for Auto Entry press the **8** **2** keys then press the **1** key then press the **#** key. **The Keypad is now in the Auto Entry Mode.**

When the Keypad is programmed for **Manual** mode the **#** key that follows the entered User Code **is** required. In this mode the User Code can be from 4 to 8 digits in length but all the User Codes do not need the same number of digits.

To program the Keypad for Manual Mode press the **8** **2** keys then press the **0** then press the **#** key. **The Keypad is now in the Manual Mode.**

DURESS OUTPUT FUNCTION

The Duress Code does not have to be programmed. The Keypad determines it automatically when the first digit of the User Code is increased by 2 digits to operate the Duress Output.

For example: The User Code 1 is 1234 then the Duress Code is 3234. If the User Code 1 is 5862 then the Duress Code is 7862. If the User Code 1 is 8262 the the Duress Code is 0262.

When the Duress Code is entered then Output 1 will be active for the length of time set in the Momentary Mode and the Duress Output switches to ground, (-) and can only be turned off by entering the User Code 1. When the Keypad is programmed for Latching Mode then Output 1 and the Duress Output will remain on until turned off by entering User Code 1.

There is no Duress Code for Output 2.

The Keypad will not allow duplicate code numbers when using the Duress Code feature.

For example: If the User Code stored in the system is 5678 then the Duress Code will be 7678 then the Keypad will not accept User Code number 7678.

EXITING AND RE-ENTERING THE PROGRAM MODE

To exit the Program Mode press the **✕** key. Keypad exits the Program Mode and returns to normal operation. **To re-enter the program mode enter the Installer Code press **✕** key.**

USER OPERATING INSTRUCTIONS

OPERATING THE KEYPAD IN THE MANUAL MODE TO OPEN DOOR

Enter any of the programmed User Codes. (*see page 5 for programming User Codes*)

X **X** **X** **X** **X** **X** **X** **X** then press the **#** key to open the door.

Yellow Led turns on for 1 second then turns off.

OPERATING THE KEYPAD IN THE AUTO ENTRY MODE TO OPEN DOOR

Enter the User Code which can be from 4 to 8 digits long.

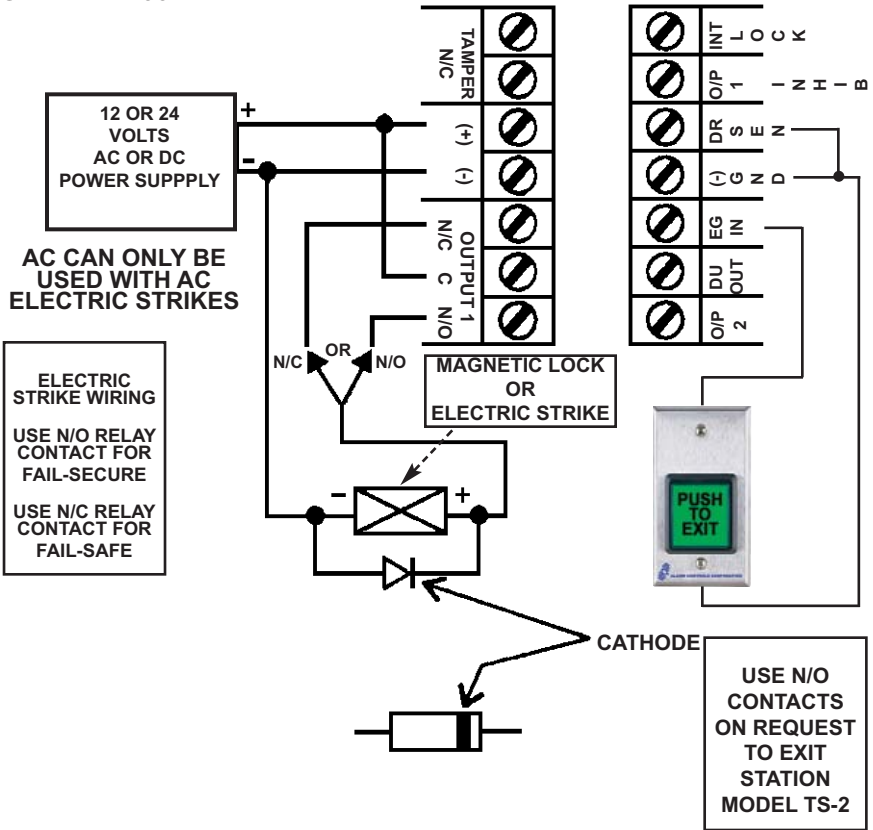
X **X** **X** **X** **X** **X** **X** **X**

Yellow Led turns on for 1 second then turns off.

APPLICATION EXAMPLES

BASIC WIRING DIAGRAM OF A MAGNETIC LOCK AND ELECTRIC DOOR STRIKE

MODEL KP-200



The Keypad must be in the Momentary Mode in order for the Magnetic Lock or the Electric Door Strike to function correctly. Use the N/C relay contacts when connecting a magnetic lock.

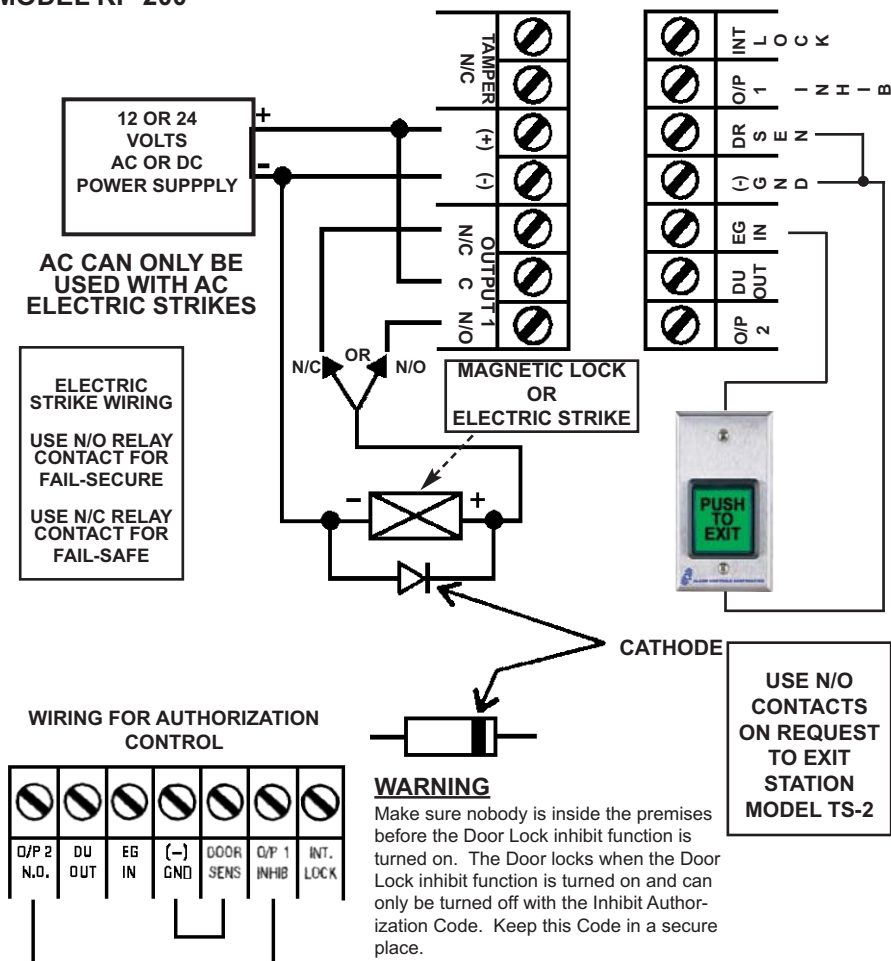
The 1N4004 diode must be connected to the Electric Door Strike as shown in the diagram above to prevent arcing across the Keypad relay contacts. The diode is not required when powering the Electric Door Strike on AC current. Use the N/O Output when operating the Electric Strike in the fail-secure mode. Use the N/C Output when operating the Electric Strike in the fail-safe mode.

The negative terminal of the Magnetic Lock must be connected to the negative terminal of the power supply.

To avoid electrostatic discharge from interfering with the operation of the Keypad always connect the negative terminal of the Keypad to an earth ground

BASIC WIRING OF A MAGNETIC LOCK AND ELECTRIC DOOR STRIKE WITH DOOR LOCK INHIBIT

MODEL KP-200



WHEN WIRING A MAGNETIC LOCK USE THE N/C RELAY CONTACTS.

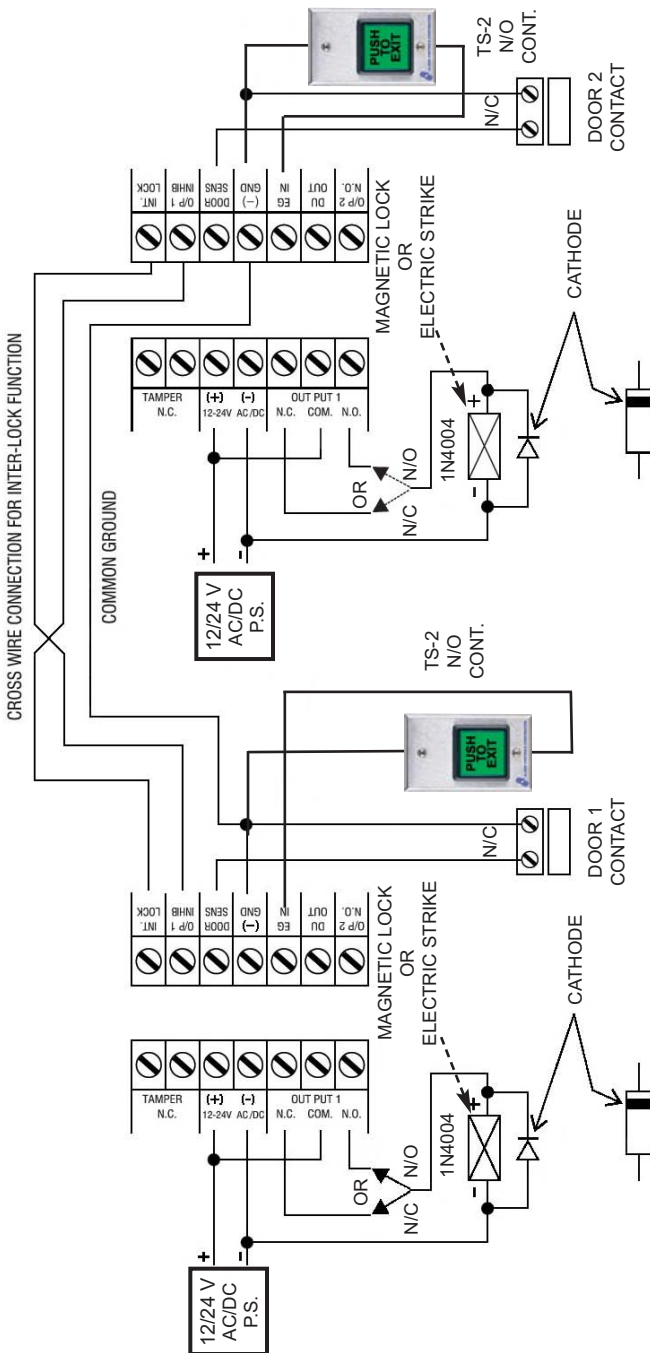
WHEN WIRING AN ELECTRIC DOOR STRIKE.

The 1N4004 diode must be connected to the Electric Door Strike as shown in the diagram above to prevent arcing across the Keypad relay contacts. The diode is not required when powering the Electric Door Strike on AC current. Use the N/O Output when operating the Electric Strike in the fail-secure mode. use the N/C Output when operating the Electric Strike in the fail-safe mode.

Use Output 2 for the Authorization control. User Code 2 is used to block the operation of the Magnetic Lock or Electric Strike when privacy is required.

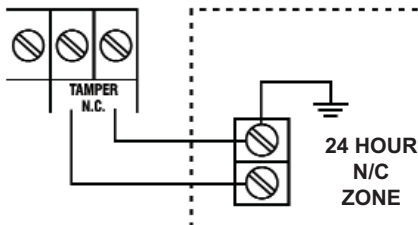
Only User Code 2 will operate the Keypad. User Code 1 will not operate the Keypad.

BASIC WIRING OF AN INTER-LOCK SYSTEM USING TWO KEYPADS



APPLICATIONS FOR THE AUXILIARY TERMINALS

NORMALLY-CLOSED TAMPER SWITCH



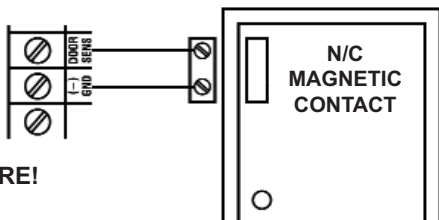
The Tamper Switch is Normally-Closed when the Keypad is installed in the back box and securely fastened with the tamper-proof screws.

Connect these terminals to a 24 hour zone of an alarm panel if required.

DOOR SENSOR

A normally-closed door contact will enable the Keypad to perform the following functions. See page 3.

NOTE: REMOVE FACTORY INSTALLED JUMPER WHEN USING THIS FEATURE!



DOOR AUTO RELOCK

The system will immediately relock the door after it closes to prevent "tailgating".

DOOR PROPPED OPEN ALARM

The Keypad will generate an alarm if the door is left open longer than the preset delay time. See page 6 for programming.

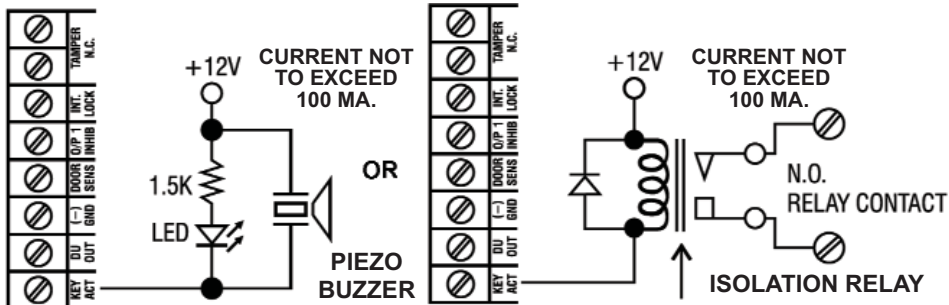
DOOR FORCED OPEN ALARM

The Keypad will generate an instant alarm if the door is forced open. See page 6 for programming.

INTER-LOCK CONTROL

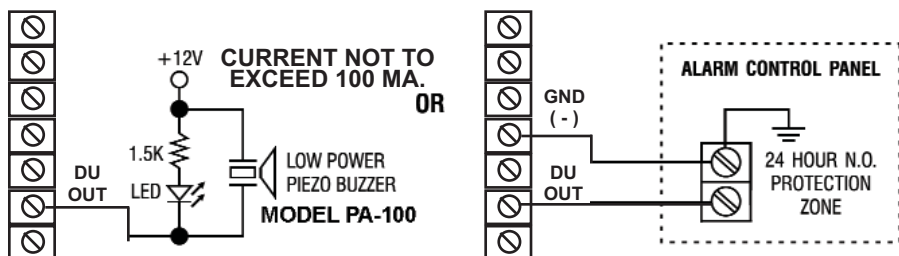
The inter-lock control output goes to ground, (-), when the door is open in order to disable the second Keypad in the inter-lock system. See page 10 for wiring diagram.

KEY ACTIVE OUTPUT



This is an NPN transistor open collector output that switches to ground, (-), for 10 seconds with each key press. this can be used to turn on a buzzer or light an LED or operate a low current relay. See page 3

DURESS OUTPUT

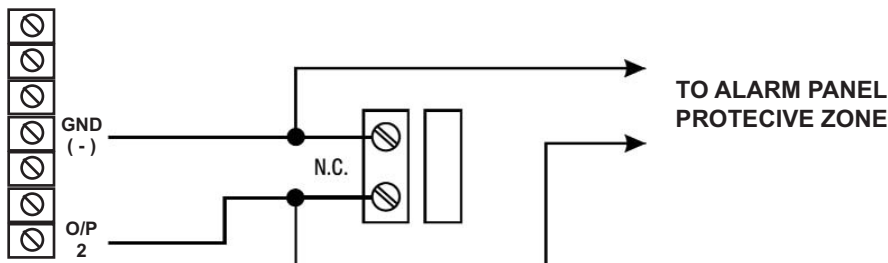


The Duress Output will switch to ground, (-), when the Duress Code is entered. This output can be used to turn on a LED or piezo buzzer. This output can be connected to a 24 hour zone of an alarm system. Only one connection option is recommended. See page 7 for details.

OUTPUT 2 APPLICATIONS

SHUNTING OF A N/C PROTECTIVE ZONE

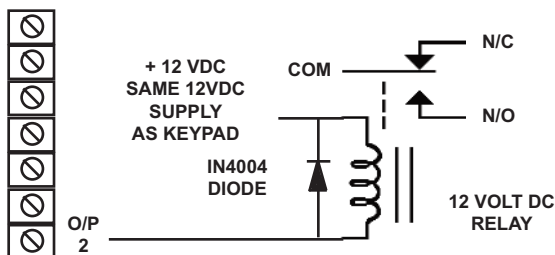
THE



Use Output 2 to shunt a N/C protective zone. Set the Keypad in Latching Mode. See page 6 for Keypad programming Latching Mode.

RELAY DRIVER CIRCUIT

THE MAXIMUM CURRENT RATING
FOR THIS OUTPUT IS
100 MA. MAX.



Use Output 2 to operate a relay. The relay can be Momentary or latching. See page 6 for Keypad programming Momentary or Latching Mode.

DEFINITIONS

DRY CONTACTS

Dry contacts do not have voltage connected to them. The Relay Output contacts in the KP-400 Keypad are dry contacts.

N/C CONTACT

The contact is closed in the static state and open in the active state. The contact is open when the circuit is active.

N/O CONTACT

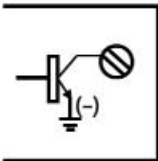
The contact is open in the static state and closed in the active state. The contact is closed when the circuit is active.

TRANSISTOR OPEN COLLECTOR OUTPUT

An open collector output is equivalent to a normally-open, (N/O), contact referring to ground, (-), the same as a relay contact connected to ground, (-). The transistor is normally turned Off, and the output switches to ground, (-), when turned On.

The Duress, Inter-lock and Key Active Outputs are open collector outputs and the current is limited to 100 Ma. maximum and 24 VDC maximum.

TRANSISTOR

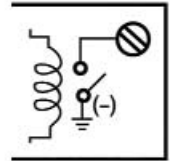


OPEN COLLECTOR OUTPUT

OUTPUT
SWITCHES
TO GROUND
WHEN
ACTIVATED

EQUIVALENT CIRCUITS

RELAY



N/O OUTPUT

OUTPUT
SWITCHES
TO GROUND
WHEN
ACTIVATED

ALARM CONTROLS CORPORATION PRODUCT LINE

U.L. LISTED MAGNETIC LOCKS

MAGNETIC LOCK MOUNTING BRACKETS

MAGNETIC LOCK DRESS-UP COVERS

MAGNETIC LOCK DRILL JIGS

SELF-CONTAINED DIGITAL KEYPADS

U.L LISTED REQUEST TO EXIT STATIONS

EXPLOSION-PROOF REQUEST TO EXIT STATIONS

MORTISE CYLINDER STATIONS

VANDAL RESISTANT REQUEST TO EXIT STATIONS

REQUEST TO EXIT STATIONS WITH BUILT-IN TIME DELAY

RELAYS AND RELAY BASES

TIME DELAY MODULES

AUDIBLE INDICATORS

DELAYED EGRESS STATIONS

CONTROL PANELS

EMERGENCY DOOR RELEASES

PUSH PLATES

ZONE ANNUNCIATORS

GRAPHIC ANNUNCIATORS

CUSTOM PLATES

LIFE TIME PRODUCT WARRANTY

