

KP165 / KP165M / KP165S

USER MENU



KP165



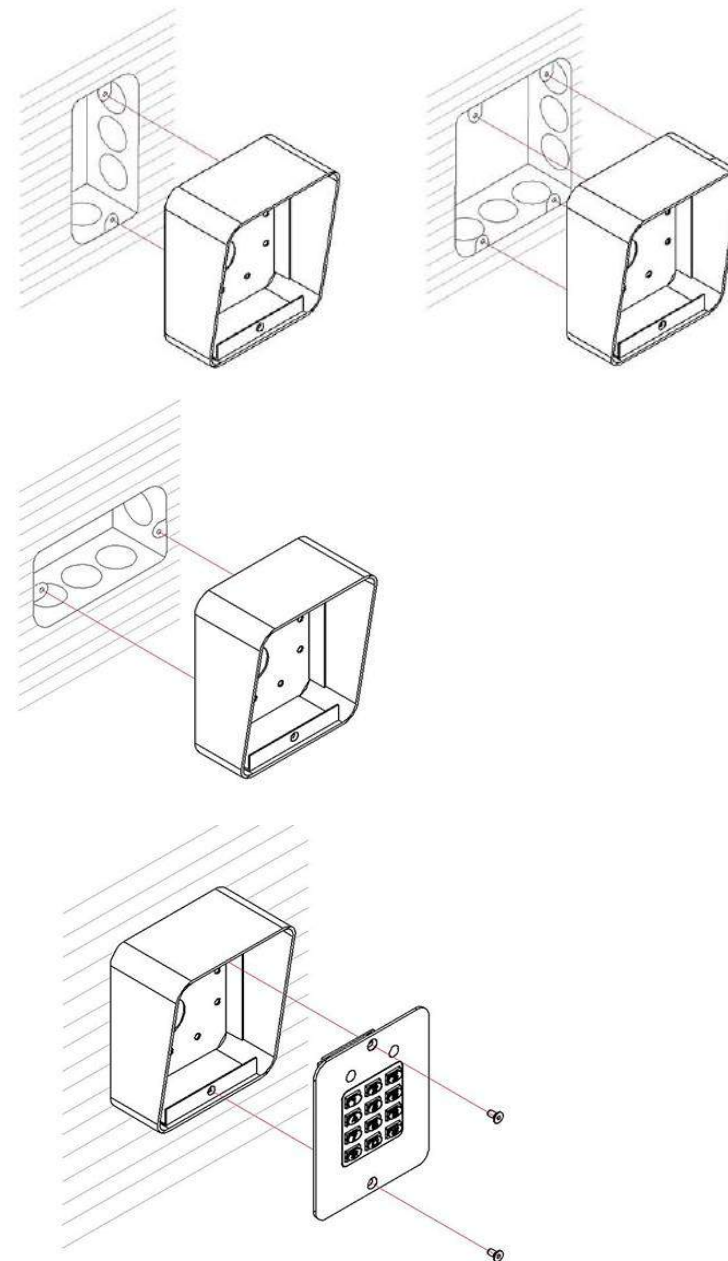
KP165S



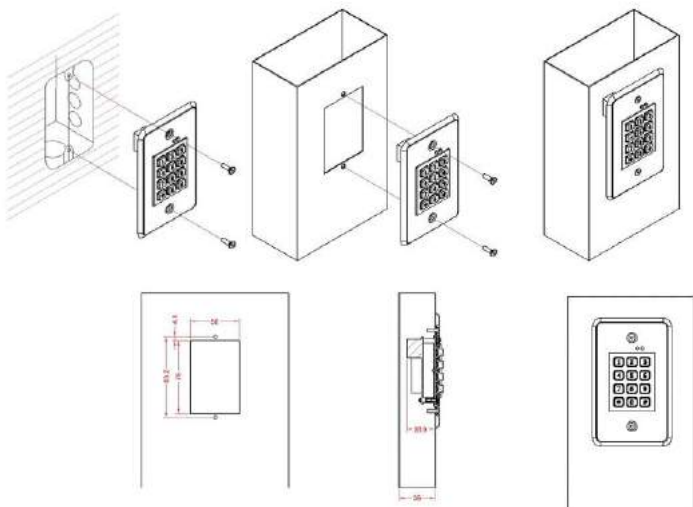
KP165M

- Information about the product
- Notes on these operating instructions
- Operating instructions
- Installation for the product

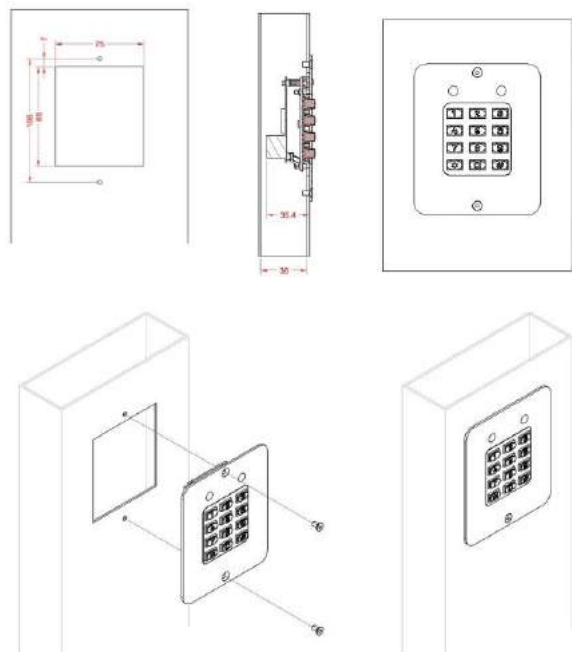
INSTALLATION FOR KP165S



INSTALLATION FOR KP165



INSTALLATION FOR KP165M



The KP165S Series is a digital, code-operated keypad for access control or for remote-control applications. Operating on 12/24VDC, the KP165S Series purpose is to keep unauthorized people off restricted premises, while permitting authorized people to enter. When any one of the correct codes is identified by the keypad, it energizes a relay which unlocks a door or performs any desired switching functions.

SPECIFICATIONS

| Model No | KP165 | KP165S | KP165M |
|-----------------------|--|----------------------|------------------------|
| Surface Mounted | Surface mounted | Surface mounted | Flush mounted |
| Dimensions (mm) | 120H x 76W x 34.9D | 125H x 105W x 60D | 120H x 100W x 37.4D |
| Input Voltage | 12V~24VDV | | |
| Operating Current | 30 mA typical, 150 mA maximum | | |
| Outputs | ★Relay #1, SPDT, 5 Amps @ 28VDC maximum ★Relay #2, SPDT, 1 Amp @ 28VDC maximum ★Output #3 and #4, solid state open collectors, short to common 100 mA @24VDC maximum | | |
| Contact rating | 2A 30VAC/VDC | | |
| Humidity | 5% to 95%, non-condensing | | |
| Operating Temperature | -25°C ~55°C | | |

| Features | Operating Features |
|--|---|
| <ul style="list-style-type: none"> ◆ Keypad programmable ◆ 480 user codes ◆ 1 to 6 digit user codes ◆ 4 independent outputs ◆ 4 independent timers ◆ 2 Form C relay contacts ◆ 2 solid state open collector outputs ◆ Program entry codes to activate one or two relays ◆ Disable input ◆ Door sense input ◆ Request-to-exit/enter input ◆ Keypad tamper lockout ◆ Timed anti-passback (Prevents using same code again before the programmed time elapses) ◆ Anti-tailgate ◆ Two LED status indicators (Green/Red and Yellow) ◆ Tactile key feel ◆ Audible code entry verification ◆ 12 or 24V, DC operation | <ul style="list-style-type: none"> ◆ System reset ◆ Entry code length, 1 to 6 digits ◆ Adding a new PIN ◆ Erasing a single PIN ◆ Erasing all PINs ◆ Changing the master programming code ◆ On-time for each of the four outputs ◆ Beep sounds on key presses ◆ Beep sound during each of the four outputs activation time ◆ Keypad lockout after specified number of incorrect PIN attempts, from 2 to 7 ◆ Anti-passback time period from 1 to 4 minutes or no anti-passback protection ◆ Anti-tailgate ◆ Alarm shunt output ◆ Forced entry output ◆ Door ajar output ◆ Door sense/inhibit input ◆ Keypad lockout output ◆ Keypad active output |

| KP165 Series Basic Programming | | | | | | | |
|--------------------------------|------------------------------------|---|------|--------------------|---|---------|---|
| NO | Programm-ing Mode | Programming Code | | | | Default | Instruction |
| | | Press | Code | | | | |
| 24 | Keypad Lockout Count | | 51 # | Attempts (2 - 7) # | Seconds (1 - 60) # | 3 , 60 | <ul style="list-style-type: none"> ● Press: 51# Attempts # Seconds # ● Sets the number or incorrect entry code attempts allowed before the keypad "locks out" |
| 25 | Select Door Sense or Inhibit Input | | 52 # | INPUT (0 , 1) # | Input=0 for Door Sense Input=1 for Inhibit | 0 | <ul style="list-style-type: none"> ● Press: 52# Input # ● The input (gray wire) can be programmed for DOOR SENSE or INHIBIT. |
| | | When programmed for DOOR SENSE, if an open condition on the input occurs before access is granted (with an entry code or with the request-to-enter input) a FORCED ENTRY output will occur. If an open condition remains 60 seconds after a relay activation for access, a DOOR AJAR output will occur. When programmed for INHIBIT, a closed condition on the input will prevent Relay #1 from activating when access is requested with an entry code. This mode is typically used with an external timer to disable the access device at certain times. | | | | | |
| 26 | Anti-Pass Back Time | | 53 # | Minutes (1 - 4) # | Minutes=Time in minutes (1-4) 0=No Anti-passback | 0 | <ul style="list-style-type: none"> ● Press: 53 # Minutes # ● Sets the length of time an entry code will not function after it is used. |
| 27 | Keypad light | | 54 # | INPUT (0 - 2) # | 0 = always off 1 = normal 2 = always on | 1 | <ul style="list-style-type: none"> ● Press: 54 # INPUT # ● INPUT=(0 - 2) |

| KP165 Series Basic Programming | | | | | | | |
|--------------------------------|------------------------------------|------------------|---|------------------|---|---------------------------------------|---|
| NO | Programm-ing Mode | Programming Code | | | | Default | Instruction |
| | | Press | | Code | | | |
| 16 | Auxiliary Relay On-time | 32 | # | Seconds (0 - 60) | # | Seconds=Output time in seconds (0-60) | 5 ●Press: 32# Seconds # ●Sets the length of time the Auxiliary Relay activates when triggered. |
| 17 | Solid-state Output #3 On-time | 33 | # | Seconds (0 - 60) | # | Seconds=Output time in seconds (0-60) | 5 ●Press: 33# Seconds # ●Sets the length of time Output #3 activates when triggered. |
| 18 | Solid-state Output #4 On-time | 34 | # | Seconds (0 - 60) | # | Seconds=Output time in seconds (0-60) | 5 ●Press: 34# Seconds # ●Sets the length of time Output #4 activates when triggered. |
| 19 | Beep Sounds on Keystrokes | 40 | # | Sound (0 , 1) | # | Sound=1 for Yes Sound=0 for No | 1 ●Press: 40# Sound # ●Selects whether or not the keypad beeps as each key is pressed. |
| 20 | Beep Sounds During Main Relay | 41 | # | Sound (0 , 1) | # | Sound=1 for Yes Sound=0 for No | 0 ●Press: 41# Sound # ●Selects whether or not the keypad beeps during Main Relay activation. |
| 21 | Beep Sounds During Auxiliary Relay | 42 | # | Sound (0 , 1) | # | Sound=1 for Yes Sound=0 for No | 0 ●Press: 42# Sound # ●Selects whether or not the keypad beeps during Auxiliary Relay activation. |
| 22 | Beep Sounds During Output #3 | 43 | # | Sound (0 , 1) | # | Sound=1 for Yes Sound=0 for No | 0 ●Press: 43# Sound # ●Selects whether or not the keypad beeps during Output #3 activation. |
| 23 | Beep Sounds During Output #4 | 44 | # | Sound (0 , 1) | # | Sound=1 for Yes Sound=0 for No | 0 ●Press: 44# Sound # ●Selects whether or not the keypad beeps during Output #4 activation. |

Entry codes:

- 1) Up to 480 user entry codes
- 2) 1 to 6 digits user codes
- 3) can be programmed
- 4) Keypad users request access by entering their code
- 5) Users of the SDC have up to 40 seconds to key in their entry code
- 6) Up to eight seconds are allowed between each keystroke
- 7) All digits of the entry code must be entered.
Example: if the code is 0042, the user must enter "0 0 4 2".
- 8) If the wrong key is pressed, pressing the * key will reset the keypad
- 9) After a correct code is entered, the red indicator will turn green and the programmed relay will activate for the programmed time
- 10) If the number of incorrect codes entered exceeds the keypad lockout count, the yellow indicator will light, indicating that the keypad is locked out.
- 11) The lockout will remain for one minute
- 12) After a valid code has been entered, it will be unusable until the anti-pass back time expires.
- 13) They can activate either, or both of the relay outputs
- 14) The EEPROM memory retains all entry codes and programming, even without power.
- 15) An internal jumper is provided to reset the master code

Indicators (LEDs):

- 1) The left indicator lights red to indicate power
- 2) The left indicator turns green when access is granted
- 3) The right indicator lights yellow when the keypad is in "lockout" condition (from too many incorrect code entries)

Internal sounder:

- 1) An internal sounder beeps when each key is pressed
- 2) An internal jumper sets the sounder volume high or low

The Door SENSE / Inhibit input

- 1) SENSE terminal (gray wire) can be programmed for either a door sense or inhibit input. Both features cannot be used at the same time.
- 2) If programmed for “door sense” the input is wired to a normally closed switch on the door to detect when the door is opened or closed. Forced entry or door ajar situations can then be detected.
- 3) Route two wires from the switch to the keypad box. Connect the door switch to the keypad’s SENSE terminal (gray wire E8) and COM terminal (any black wire)
- 4) Using door sense, the “Auto-relock” feature will prevent “tailgating” by turning off the Main Relay output immediately when the door is closed after access has been granted.
- 5) If it is programmed for “inhibit”, the input can be wired to a “service” switch or automatic timer that will disable the Main Relay when required.
- 6) Route two wires from the switch or timer to the keypad box. Connect the inhibit switch/timer normally open terminals to the keypad’s SENSE (gray wire E8) and COM (black wires) terminal.

| KP165 Series Basic Programming | | | | | | | |
|--------------------------------|-------------------------------|------------------|------|--------------------|---|---------|--|
| NO | Programm-ing Mode | Programming Code | | | | Default | Instruction |
| | | Press | Code | | | | |
| 9 | Select Request-to-Exit Output | | 21 # | OUTPUT (0 - 4) # | Output 1=Main Relay 2=Auxiliary Relay 3=Output #3 4=Output #4 0=No Output) | 1 | ●Press: 21# Output # ●Output=Output to Activate(0-4) ●Sets which output activates when the Request-to-Exit input is grounded. This output may be timed or toggled |
| 10 | Select Forced Entry Output | | 22 # | OUTPUT (0 - 4) # | Output 1=Main Relay 2=Auxiliary Relay 3=Output #3 4=Output #4 0=No Output) | 0 | ●Press: 22# Output # ●Output=Output to Activate(0-4) ●Sets which output activates if the DOOR SENSE input opens before access is granted. This output is not timed. |
| 11 | Select Door Ajar Output | | 23 # | OUTPUT (0 - 4) # | Output 1=Main Relay 2=Auxiliary Relay 3=Output #3 4=Output #4 0=No Output) | 0 | ●Press: 23# Output # ●Output=Output to Activate(0-4) ●Sets which output activates if the DOOR SENSE input stays open 60 seconds after access is granted. This output is not timed |
| 12 | Select Keypad Lockout Output | | 24 # | OUTPUT (0 - 4) # | Output 1=Main Relay 2=Auxiliary Relay 3=Output #3 4=Output #4 0=No Output) | 0 | ●Press: 24# Output # ●Output=Output to Activate(0-4) ●Sets which output activates when the keypad is "locked out" after too many incorrect entry code attempts. The lockout time is 60 seconds. |
| 13 | Select Keypad Active Output | | 25 # | OUTPUT (0 - 4) # | Output 1=Main Relay 2=Auxiliary Relay 3=Output #3 4=Output #4 0=No Output) | 0 | ●Press: 25# Output # ●Output=Output to Activate(0-4) ●Sets which output activates when any keys are pressed. This output is timed. If toggle mode is selected for the output, the timer value defaults to 2 seconds. |
| 14 | Select Alarm Shunt Output | | 26 # | OUTPUT (0 - 4) # | Output 1=Main Relay 2=Auxiliary Relay 3=Output #3 4=Output #4 0=No Output) | 0 | ●Press: 26# Output # ●Output=Output to Activate(0-4) ●Sets which output activates during the time access is granted. (Use this output of shunt alarm contacts attached to the access door.) This output may be timed or toggled. |
| 15 | Main Relay On-time | | 31 # | Seconds (0 - 60) # | Seconds=Output time in seconds (0-60) | 5 | ●Press: 31# Seconds # ●Sets the length of time the Main Relay activates when triggered. |

| KP165 Series Basic Programming | | | | | | | | | | |
|--------------------------------|--------------------------------------|------------------|------|---|-----------------------------------|---|--------------------------|---------|-------------|--|
| NO | Programm -ing Mode | Programming Code | | | | | | Default | Instruction | |
| | | Press | Code | | | | | | | |
| 6 | Adding a New Entry Code | | 12 | # | user code (1 - 6 digits) | # | user code (Repeat) | # | 4 digits | <ul style="list-style-type: none"> ● Press: 12 # Code # Code # OUTPUT # ● Code=The new entry code: 1-999999, depending on code length ● OUTPUT =Relay output entry code will activate <p>OUTPUT (a b c d) 1000=Main Relay 0100=Auxiliary Relay 0010=#3 OUTPUT 0001=#4 OUTPUT 1100=Both Relays 1110=Both Relays & #3 1111=ALL OUTPUT</p> |
| 7 | Erasing a Single Entry Code | | 13 | # | user code (4 - 6 digits) | # | user code (Repeat) | # | 4 digits | <ul style="list-style-type: none"> ● Press: 13 # Code # Code # ● Code=the entry code to delete ● The yellow indicator will flash quickly while its memory for the code to erase. The green indicator will light when the code is deleted. |
| 8 | Erasing All Entry Codes | | 14 | # | 00000 0 | # | 000000 | # | | <ul style="list-style-type: none"> ● Press: 14# 000000 #000000# ● Performing this command will remove all entry codes from the memory ● The green indicator will light while the memory is being deleted. This may take up to 15 seconds. |

The **REQUEST-TO-EXIT** input

- 1) The input can be wired to a pushbutton to provide codeless activation of Main Relay, Auxiliary Relay, Output #3 or Output #4 (programmable).
- 2) Route two wires from the keypad box to a normally open pushbutton mounted on the secure side of the door. Connect the wires to the pushbutton and to the keypad's EXIT (violet wire E6) and COM (black wires) terminals.

The **ALARM SHUNT** output

- 1) The output activates when access is granted.
- 2) It can be wired to shunt alarm contacts on the access door/gate to prevent triggering of an alarm when authorized access occurs.

Relay / solid state outputs

- 1) 4 independent outputs
- 2) 4 independent timers
- 3) 2 Form C relay contacts
- 4) The Main Relay has a 5 Amp capacity
- 5) The Auxiliary Relay has a 1 Amp capacity
- 6) Program entry codes to activate one or two relays
- 7) 2 solid state open collector outputs
- 8) Two solid state outputs, capable of switching 100 mA to common, are programmable to signal forced entry, door ajar, lockout, alarm circuit shunting, request-to-exit, and keypad active conditions.
- 9) The two solid state outputs can be used to activate indicators or sounders.

Door Strike Wiring

- 1) Install a low voltage electric door strike for unlocking the door
- 2) Route two wires between the door strike and the keypad box
- 3) Connect one of the door strike wires to the keypad's MAIN RELAY N.O. terminal (TB1 #3)
- 4) Connect the other door strike wire to the keypad's AC/DC+ terminal (TB #1)
- 5) Connect a wire between the keypad's AC/DC- terminal (TB #2) and the MAIN RELAY COM terminal (TB #4)

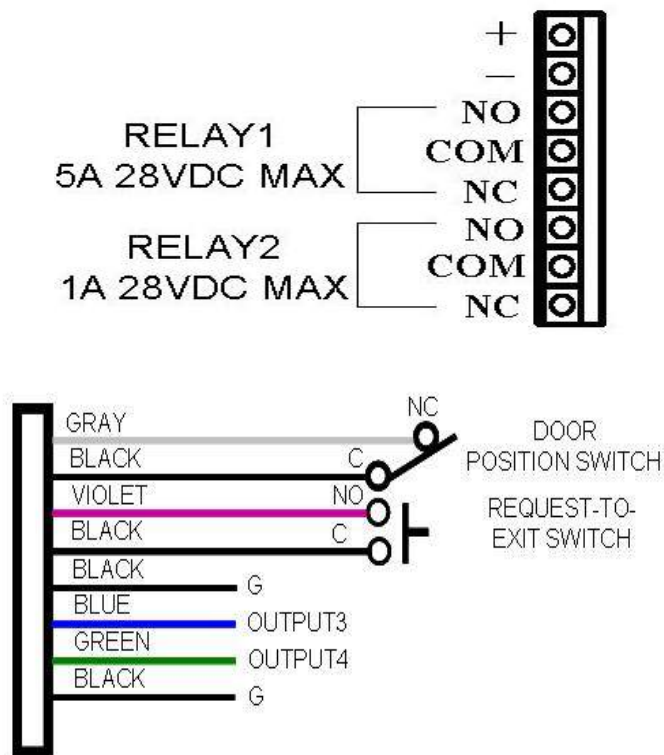


Fig. 7 Basic Door Installation Wiring

BASIC PROGRAMMING

- 1) When in Programming Mode, both indicators will turn off until programming begins
- 2) After a programming option number is entered, the yellow indicator will blink. This shows that it is ready to accept the new programming data.
- 3) After the new data entry is complete, the yellow indicator will flash while the data is being stored. The green indicator will light if the data is accepted. The red indicator will light if any programming data is entered incorrectly, and the command will have to be fully re-entered.

KP165 Series Basic Programming

| NO | Mode | Programming Code | | | Default | Instruction | | | |
|----|--|------------------|-------------|-----------------------------------|---------|---|---|---------|--|
| | | Press | Code | | | | | | |
| 1 | Enter Programming | #9# | MASTER CODE | | 123456 | <ul style="list-style-type: none"> ● Press: # 9 # Master Code (Default 123456) ● It is used to enter Programming Mode. | | | |
| 2 | Exit Programming | **# | | | | <ul style="list-style-type: none"> ● Press: * * # ● The red indicator will light after exiting Programming Mode | | | |
| 3 | Re-entering a Command after a Mistake | *9# | | | | <ul style="list-style-type: none"> ● Press: * 9 # ● If the red indicator lights, signaling an incorrect entry or an incorrect key is pressed during programming, to clear the keypad and re-enter the command | | | |
| 4 | Changing the 6-Digit Master Programming Code | | 10 # | MASTER CODE (6 digits) (Old Code) | # | MASTE R CODE (NEW) | # | 123456 | <ul style="list-style-type: none"> ● Press: 10# Master Code# Master Code# ● Master Code=The new 6 digit Master Programming Code ● It is used to change Master Programming code |
| 5 | Setting Entry Code Length | | 11 # | Length (1 - 6) | # | | | 4digits | <ul style="list-style-type: none"> ● Press: 11 # Length # ● Length : 1-6 for entry code length ● If the Entry Code Length is going to be changed from the factory default of 4 digits, make this change first before programming any entry codes. |