**Keypad must first be in Programme Mode for all programming to ensure changes are saved.**

| | LED Indication | | |
|---|---|---|---|
| **1. HOW TO PROGRAMME A USER CODE** | RED | AMBER | GREEN |
| You can have 1000 different user codes, 001 = 1st, 002 = 2nd, etc.<br>Example: Set 1st user code as 4567<br>Press: **1 — 0—2 – 001—4567—#**<br>User Code is now: 4567#<br>For a new user change ID number and user code but follow the process above. | | ● | |
| To Exit Press ✱✱(Keypad Is now back in **Standby Mode**) | | ☼ | |
| **2. HOW TO PROGRAMME A FOB OR EM CARD (KPX50 & KPX75 ONLY)** | | | |
| You can have 1000 different EM Cards or Fobs, 001 = 1st, 002 = 2nd, etc.<br>Example: Set 1st EM Card<br>Press: **1 — 0—1 – 001—PRESENT CARD FOR DETAILS—#**<br>For a new user change ID number and user code but follow the process above. | | ● | |
| To Exit Press ✱✱(Keypad Is now back in **Standby Mode**) | | ☼ | |
| **3. DELETE INDIVIDUAL USER CODES OR CARDS** | | | |
| Example: Deleting user in position 001<br>Press: **1 — 0—5 – 001—Enter user code or present card—#**<br>User Code is now deleted. | | ● | |
| To Exit Press ✱✱(Keypad Is now back in **Standby Mode**) | | ☼ | |
| **4. INHIBIT KEYPAD—TO TURN KEYPAD OFF (DURING WORKING HOURS)** | | | |
| **4a. FIRST CREATE A MANAGEMENT CODE** | | | |
| Press: **0 — 2—Enter management code (eg. 2369) — #** | | ● | |
| To Exit Press ✱✱(Keypad Is now back in **Standby Mode**) | | ☼ | |
| **NOTE—the management code can also be used as a door open code as follows:** | | | |
| Example: Management code as 2369#<br>Press: **2369 — # — 1**<br>The door will now open using the set Management Code. | | | |
| **4b. TO ACTIVATE INHIBIT KEYPAD (OPEN DOOR)** | | | |
| Press: **Management Code (eg. 2369#) — 7**<br>**The door/ lock will now be open for an *indefinite period.*** | | ● | ● |
| To Exit Press ✱✱(Keypad Is now back in **Standby Mode**) | | ☼ | |
| **4c. TO REINSTATE KEYPAD (LOCK DOOR) REPEAT INSTRUCTION ABOVE**<br>**The door/lock will now only *open via keypad*.** | | | |

# SELF-CONTAINED
# STANDALONE ACCESS CONTROL KEYPAD

KP50

KPX50

KPX75

## Programming & Installation Manual

- **WEATHERPROOF: IP65 RATED**
- **BACKLIT METAL KEYPAD BUTTONS**
- **VANDAL RESISTANT RUGGED METAL HOUSING**
- **PROXIMITY EM CARD READER 125Mhz (KPX50 & KPX75)**
- **SUITABLE FOR EXTERNAL GATES AND BARRIERS (POLE MOUNT)**
- **COMPLETE WIRING DIAGRAMS FOR A RANGE OF INSTALLATION NEEDS**

## KP50/KPX50/KPX75 Programming Instructions


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# Customer Operating and Programming Instructions

**To open door or gate, enter 4 digit access code followed by # or present a key fob or EM card to the reader.**

**E.g. Entering — 1234 — # — Door Open (Green LED Lights up)**

**Choosing the right Security Level for you**

**1) Security Level 1—User Code Only—** A general way for access control, just simply enter a code to open the door. Security level is moderate but it is user convenient. **(KP50)**

**2) Security Level 1—EM Card Only—**A general way for access control, just simply read a card to open the door. Security level is moderate but it is user convenient. **(KPX50 & KPX75)**

**3) Security Level 2—EM Card + Common User Code—**The keypad requires both Card and Common User Code to grant an entry. Common User Code is a user code for all the cards. Two media security levels are used in door control. The security level is better than just card or user code alone. **(KPX50 & KPX75)**

**4) Security Level 3—Individual User Codes + EM Card or Fob —**The keypad accepts programming with each card having its own individual user code to work. It prevents any other people using the lost card to open the door. This is ideal for the area that high security is the main concern. **(KPX50 & KPX75)**

This operation mode can also report Duress Alarm by keying in the duress code instead of secondary user code in emergency when the user is forced to open the door.

| KEYPAD PROGRAMMING | LED Indication | | |
|---|---|---|---|
| | RED | AMBER | GREEN |
| Keypad must be in **programme mode** to enter all codes, timings and features as per these instructions. | | | |
| To enter **Programme Mode** | | | |
| Press **0000** (Engineer programme code) | | ☼ | |
| Press ** | | • | |
| Keypad is now ready to be programmed | | • | |

**NOTE– When programming any instruction, pressing # saves information to memory**

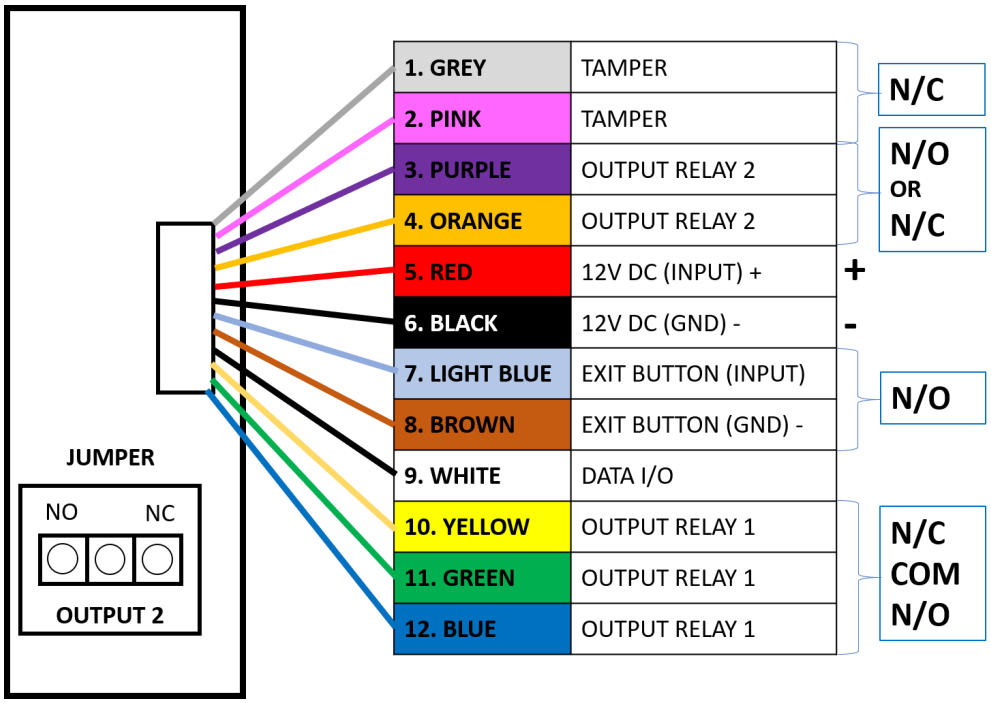
If you have followed instructions correctly - pressing # will give 2 short beeps (DO NOT USE THE SAME CODE TWICE)

Once programming has finished, you will need to exit **Programme Mode** and go back to **Standby Mode.** Keypad can only be operated from standby mode.

| | | | |
|---|---|---|---|
| To Exit **Programme Mode** | | • | |
| Press ** (Keypad is now in **standby mode**) | | ☼ | |

**NOTE— When entering user codes, they can be 4—5—6—7—8 digits long.**
**Codes can be any length as long as it is followed by #.**

## KPX75 PCB DIAGRAM




## CHANGING THE KEY BACKLIGHT OPERATION (ALL KEYPADS)

In order to select the key backlight options on the keypad you must move the "Back-Lit Jumper" to the desired setting.

**FULL BACKLIGHT:**

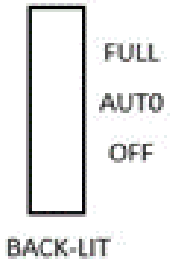
The keypad remains dimly lit in standby. It turns bright when a key is pressed and reverts back to a dimmed state 10 seconds after the last key press.

**AUTO BACKLIGHT:**

The keypad is not lit in standby. It turns bright when a key is pressed and reverts back to an unlit state.

**OFF BACKLIGHT:**

The keypad backlight is completely switched off.





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# KP50 / KPX50 / KPX75 Technical Specification

## THE LED INDICATORS

**RED**— It lights up when Output 2 is activated (KP50 & KPX50 ONLY)

**AMBER**— This is a status indicator. (Flashes in standby.) Its signal is in synchronization with the keypad tones from the build in buzzer.

**GREEN**— It lights up when Output 1 is activated

## KEYPAD TONES

| STATUS | BEEPS | LED SIGNALS |
|---|---|---|
| In programming Mode | - - - | ON |
| Successful Key Entry | 1 Beep | 1 Flash |
| Successful Code Entry | 2 Beeps | 2 Flashes |
| Unsuccessful Code Entry | 5 Beeps | 5 Flashes |
| Power up Delay | Continuous Beeps | Continuous Flashes |
| In Standby Mode | - - - | 1 Flash in 1 Seconds Interval |
| System Refreshing | - - - | Fast Flashing for 2.5 Minutes |
| Card or Code Already Stored in System | 1 Long Beep | - - - |
| Keypad link– up with decoder failed | Continuous 1 Beep/ 1 Second | - - - |
| Real-time-clock stopped after power failure | Continuous 3 Fast beeps/ 5 Seconds | - - - |
| Output Relay Activation | 1 Second Long Beep | - - - |

**NOTE**

All keypad tones can be enabled or disabled through programming options at Item number 5.



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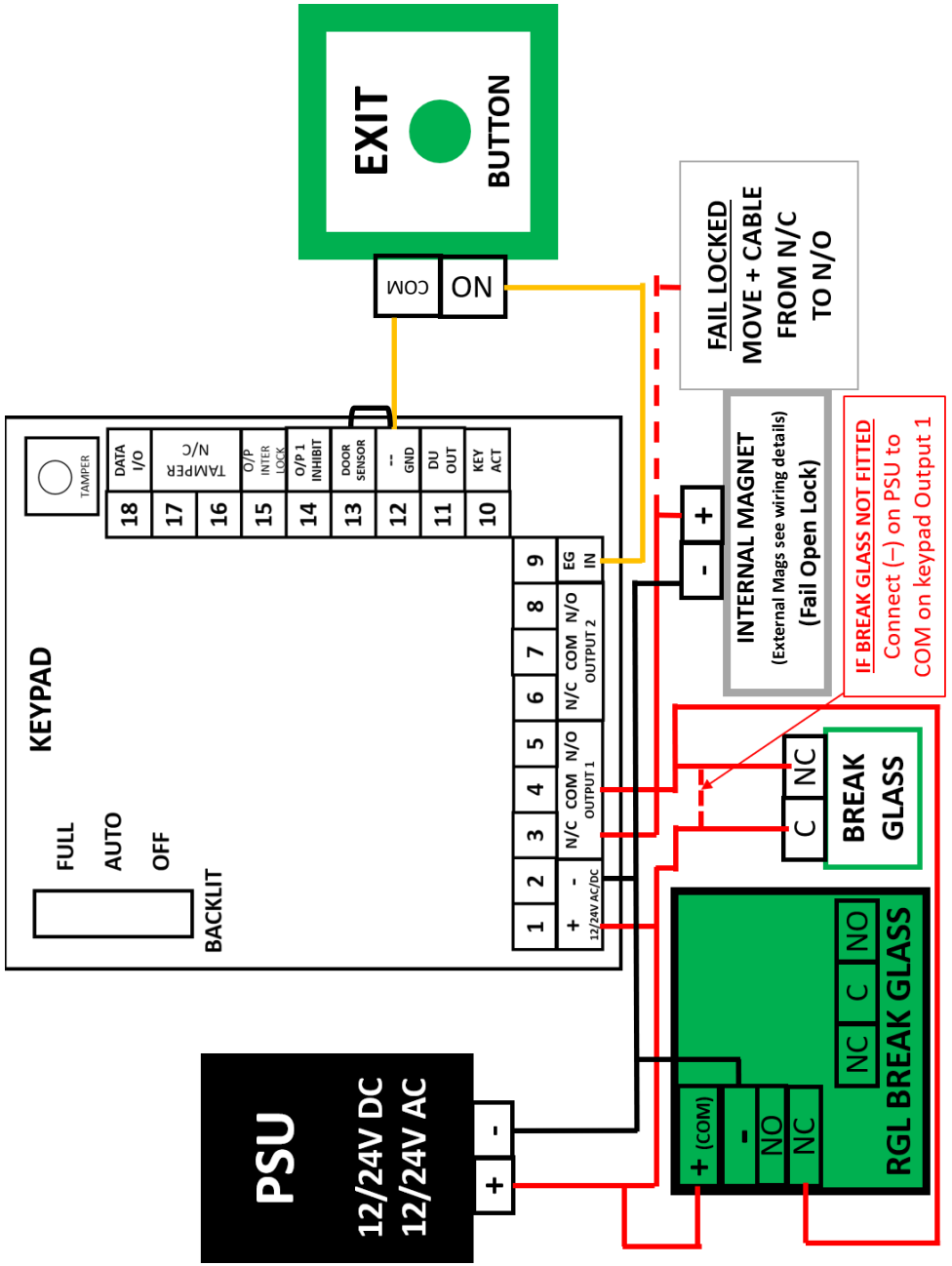
## KP50 & KPX50 WIRING DIAGRAM



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## KPX50 & KPX75 CARD PROGRAMMING INSTRUCTIONS

| SECURITY LEVEL 2<br>26. HOW TO PROGRAMME A COMMON USER CODE | LED Indication | | |
|---|---|---|---|
| | RED | AMBER | GREEN |
| Keypad must be in programme mode | | ● | |
| Press **0 — 3** for Output 1 (Press 0 4 for Output 2) | | ● | |
| Enter new code (4 Digits) | | ● | |
| Press **#** (Save to memory) | | ● | |
| To Exit Press ✱✱(Keypad Is now back in **Standby Mode**) | | ☼ | |
| **27. HOW TO PROGRAMME A FOB OR EM CARD FOR A COMMON USER CODE** | | | |
| Keypad must be in programme mode | | ● | |
| Press **1 — 0** for Output 1 (Press 2 0 for Output 2) | | ● | |
| Press **4** (Card and code only) | | ● | |
| Press 001<br>Enter user position (User I.D. positions 000—999 for output 1<br>001—100 for output 2) | | ● | |
| Present the card to read card details | | ● | |
| Press **#** (save to memory) | | ● | |
| To Exit Press ✱✱(Keypad Is now back in **Standby Mode**) | | ☼ | |
| To activate the relay, present card to the keypad and enter the common user code | | | |

| SECURITY LEVEL 3<br>28. HOW TO PROGRAMME AN INDIVIDUAL PROXIMITY CARD OR FOB AND AN INDIVIDUAL | | | |
|---|---|---|---|
| To activate the relay, you will need an individual user code and an individual proximity card/fob. This means that they share the same user I.D. | | | |
| Keypad must be in programme mode | | ● | |
| Press **1 — 0** for Output 1 (Press 2 0 for Output 2) | | ● | |
| Press **3** | | ● | |
| Press **001**<br>Enter user position (User I.D. positions 000—999 for output 1<br>001—100 for output 2) | | ● | |
| Read card | | ● | |
| Enter individual user code (4 digits) | | ● | |
| Press **#** (save to memory) | | ● | |
| To Exit Press ✱✱(Keypad Is now back in **Standby Mode**) | | ☼ | |
| To activate the relay, present individual card to the keypad and enter the individual user code | | | |


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# KP50 and KPX50 Technical Specification

**Operating Voltage:**
12V—24V AC/DC, Auto adjusting

**Operating Current:**
62mA (quiescent) to 130mA @ 12VDC
30mA (quiescent) to 61mA @ 24VDC

**Storage and Operation Temperature:**
$-20^0$C to $+70^0$C

**Working environment & Ingress Protection:**
All Weather, IP-66 Rated

**Number of Users:**
Output 1—1000 Codes and/or Cards
+50 Duress Codes
Output 2—100 Codes and/or Cards
+10 Duress Codes

**Proximity Card:**
Standard EM Card or Key fob, 125Khz

**Number of Visitor Codes:**
50, programmable for one time or with time limit

**Timings for Code Entry and Card Reading:**
10 seconds waiting for next digit entry
30 seconds waiting for code entry after card reading

**Egress Button:**
Programmable for Instant, Delay and Warning

**Dimensions:** 125H x 79W x 46-54D (mm)
**Weight:** 520g net

**The Timers:**
1—99,999 Seconds
(Over 24 Hours possible)
Independent Programmable Timers for O/P1&2
Momentary or Holding Contact for Exit Delay

**Input Sensing Terminals:**
A) Door Position
B) Egress
C) O/P 1 Inhibit

**Output Control Terminals:**
Transistor Open Collector 24VDC/ 100mA sink Max for the following out-puts
A) Duress
B) Key Active
C) Inter-Lock

**Output Contact Ratings:**
Output Relay 1—NC & NO dry contacts
5A/ 24VDC Max
Output Relay 2—NC & NO dry contacts
1A/ 24VDC Max
Tamper Switch—NC dry contact
50mA/ 24VDC Max

**Housing:**
Die-Case aluminium, Powder-paint coating

**Faceplate Material:**
1.5mm stainless steel


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# KP50 & KPX50 Connection Terminals

**1—2: 12—24V DC/AC (Power Input Terminal)**

Connect to 12V DC power supply. The (-) supply and (-) GND (terminals 2 & 12) are the common grounding points of the keypad system. No selection jumper is required for the full input voltage range. Connect DC power with the (+) and (-) polarity indicated; and there is no polarity discrimination for AC input.

**3—4—5: OUTPUT 1 (Output Relay 1)**

2 Amp relay dry contact controlled by Group 1 User Codes/Cards.

**6—7—8: OUTPUT 2 (Output Relay 2)**

1 Amp relay dry contact controlled by Group 2 User Codes/Cards.

**9: EG IN (Egress Input)**

A Normally Open (NO) input terminal referring to (-) ground. With the help of connecting a normally open button to activate Output 1 for door opening using Codes/ Cards. Egress Button is usually put on Secure Side near the door. More than one egress button can be connected in parallel to this terminal. Leave this terminal open if not used.

**10: KEY ACT O/P (Keypad Active Output)**

An NPN transistor open collector output with maximum power rating of 24VDC/ 100mA sink. It is equivalent to an NO (Normally Open) terminal switching to (-) ground after the Duress Code is entered. Use it to trigger an alarm zone of a security system, or turn on a buzzer to notify a guard.

**12: (-) GND (Common Ground)**

A grounding point of the keypad that is common to terminal 2.


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## KPX50 & KPX75 CARD PROGRAMMING INSTRUCTIONS

YOU ARE ADVISED TO READ THESE INSTRUCTIONS FULLY AND ENSURE YOU UNDERSTAND ALL PROCEDURES & FEATURES BEFORE YOU BEGIN.

The KPX50 and KPX75accept proximity cards or fobs for authorized access, this is in addition to the user codes previously mentioned in the other part of the instructions.
These keypads offer 3 levels of security.

| **SECURITY LEVEL 1** | LED Indication | | |
|---|---|---|---|
| **23. HOW TO PROGRAMME A USER CODE (SAME AS ITEM 7)** | **RED** | **AMBER** | **GREEN** |
| Keypad must be in programme mode | | ● | |
| Press **1—0** for Output 1 (Press 2 0 for Output 2) | | ● | |
| Press **2** (Code only) | | ● | |
| Press **001**<br>Enter user position (User I.D. positions 000—999 for output 1<br>001—100 for output 2) | | ● | |
| Enter new code (4-8 Digits) | | ● | |
| Press **#** (Save to memory) | | ● | |
| To Exit Press ✱✱(Keypad Is now back in **Standby Mode**) | | ☼ | |
| To activate the relay, enter the user code (e.g. 4567#) | | | |
| **24. HOW TO PROGRAMME A FOB OR EM CARD** | | | |
| Keypad must be in programme mode | | ● | |
| Press **1 — 0** for Output 1 (Press 2 0 for Output 2) | | ● | |
| Press **1** (Card only) | | ● | |
| Press **001**<br>Enter user position (User I.D. positions 000—999 for output 1<br>001—100 for output 2) | | ● | |
| Present the card to read card details | | ● | |
| Press **#** (save to memory) | | ● | |
| To Exit Press ✱✱(Keypad Is now back in **Standby Mode**) | | ☼ | |
| To activate the relay, present card to the keypad | | | |
| **25. DELETE INDIVIDUAL USER CODES OR CARDS (SAME AS ITEM 9)** | | | |
| Keypad must be in programme mode | | ● | |
| Press **1 — 0** for Output 1 (Press 2 0 for Output 2) | | ● | |
| Press **5** | | ● | |
| Press **001** (user code or card ID position, e.g. 001 = 1st, 002 = 2nd, 003 = 3d etc. Keypad allows up to 1000 different users) | | ● | |
| Press **#** and save to memory | | ● | |
| To Exit Press ✱✱(Keypad Is now back in **Standby Mode**) | | ☼ | |


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### INTELLIGENT REQUEST TO EXIT FUNCTION

Normally the Request to Exit Switch will open door instantly with one simple press. However sometimes there is a need to vary this operation due to demands from different installations. Such as:-

- Secure Areas
- Elderly Homes
- Children's Nurseries
- Emergency Exit

Therefore the function of request to exit can be programmed as follows.

| **22. HOW TO PROGRAMME INTELLIGENT REQUEST TO EXIT FUNCTION** | **LED Indication** | | |
|---|---|---|---|
| | **RED** | **AMBER** | **GREEN** |
| Keypad must be in programme mode | | ● | |
| Press **9 — 0** | | ● | |
| Press **1-5**<br>(See Options below) | | ● | |
| Press **#** (save to memory) | | ● | |
| To Exit Press ✱✱(Keypad Is now back in **Standby Mode**) | | ☼ | |

**INTELLIGENT REQUEST TO EXIT OPTIONS**

**1** **Option 1:** Press Button—Time delay with NO Warning Beep

**2** **Option 2:** Press Button—Time delay with Warning Beep

**4** **Option 3:** Press and Hold Button until Time Delay opens door with no warning beep

**5** **Option 4:** Press and Hold Button until time delay opens door with a warning beep

**0** **Option 5:** No Time Delay (Default) or 1-99 seconds time delay

| **22.1. SET OUTPUT RELAY TO LATCHING / TOGGLE**<br>(Factory default is 5 seconds) | | | |
|---|---|---|---|
| Keypad must be in programme mode | | ● | |
| Press **5 —1** for Output 1 (Press 5-2 for Output 2) | | ● | |
| Enter time in seconds (0 seconds) | | ● | |
| Press **#** (save to memory) | | ● | |
| To Exit Press ✱✱(Keypad Is now back in **Standby Mode**) | | ☼ | |



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KP50/KPX50/KPX75 Programming Instructions

# KP50 & KPX50 Connection Terminals

**13: DOOR SENSOR NC (Door Position Sensing Input—Normally Close)**

A Normally Close (NC) sensing point referring to (-) ground, with the help of a normally closed magnetic contact monitors the open or close status of the door. It initiates the following functions for the system. Connect it with jumper to (-) Ground if not used.

**A) Door Auto Re-Lock**

The system immediately re-locks the door after it is re-closed before the end of the programmed time for output 1. It prevents unwanted “tailgate” entry.

**B) Door Forced Open Warning**

The keypad generates “door forced open” warning instantly once the door is forced to open without a valid user code, card or egress button. The warning lasts as long as the time programmed (1-999 secs). It can be stopped with an user code or card for output 1 at anytime. See Item 20 for programming details.

**C) Door Propped-up Warning**

The keypad generates propped-up warning beeps while the door is left open longer than the allowable time programmed. The warning will last as long as the door is open until re-closed. See Item 21 for programming details.

**D) Inter-lock Control**

The inter-lock control output always goes to (-) while the door is open, which gives signal to disable the partner keypad in an inter-lock system. See the inter-lock terminal 15 description for more information.

**14: O/P 1 INHIBIT NO (Output 1 INHIBIT Control Input—NO/INTER-LOCK)**

A normally open (NO) sensing input point for controlling the Output 1, with this terminal connecting to (-) ground, the Egress button, the group of User PINs and Cards for Output 1 are all disabled. It is prepared mainly for the cross wire connection with the “Inter-lock O/P” point of the partner keypad in Inter-lock system.

NOTE: The inhibit function does not govern the Duress Codes and the Manager Codes. They are always valid.

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# KP50 & KPX50 Connection Terminals

**15: INTER-LOCK O/P (Inter-lock Control Output)**

An NPN transistor open collector output with maximum power rating of 24VDC/ 100mA sink. It is OFF at normal condition and it switches to (-) ground immediately for the first 5 seconds after keying in a valid User Code or reading a card to operate Output 1, then, it will keep tying to (-) ground during the Door Position Sensor is open circuit due to door opening. Use this output point to make cross wire connection with the partner keypad's "O/P 1 Inhibit" point in an Inter-lock system to prevent both doors opened at the same time.

**An Inter-lock System:**

An inter-lock system is a two-door system that always allows only one of the doors to open during the operation. While one of the doors is opened, the other door keeps closed until the open door is re-closed. It prevents the unauthorized people dashing into a protected area while he doors are in use.

An inter-lock system needs two keypads and two door position sensing switches for the two doors.

**16-17: TAMPER NC (Tamper Switch Normally Closed Contact)**

A normally closed dry contact while the keypad is secured on its box. It is open while keypad is separated from the box. Connect this NC terminal to the 24 hour protection zone of an alarm system if necessary.

**18: DATA I/O PORT (Data Communication Bus)**

Data I/O port is prepared for setting up a data bus for the connection of the auxiliary reader-keypads and the split-decoder in system expansion.


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| **20. DOOR FORCED OPEN WARNING**<br>**For this function install door position sensor (Magnetic Contact)** | **LED Indication** | | |
|---|---|---|---|
| | **RED** | **AMBER** | **GREEN** |
| Keypad must be in programme mode | | ● | |
| Press **8 — 0** | | ● | |
| Press **1** - Set Warning | | ● | |
| Enter Warning Beep Time 1—999 (seconds) | | ● | |
| Press **#** (save to memory) | | ● | |
| To Exit Press ✱✱(Keypad Is now back in **Standby Mode**) | | ☼ | |
| **This warning beep will continue for time programmed until turned off by user code or EM card/Key Fob** | | | |

| **21. DOOR PROPPED OPEN WARNING**<br>**For this function Install Door Sensor (Magnetic Contact)** | | | |
|---|---|---|---|
| Keypad must be in programme mode | | ● | |
| Press **8 — 1** | | | |
| Press **1** - Set Warning | | | |
| Enter Warning Beep Time 1—999 (seconds) | | | |
| Press **#** (save to memory) | | | |
| To Exit Press ✱✱(Keypad Is now back in **Standby Mode**) | | ☼ | |
| **This warning beep will sound if door is left open longer than output relay time and will cease when door is reclosed.** | | | |


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## REAL TIME CLOCK & INHIBITION

The keypad is capable of having an inbuilt System Real Time Clock and therefore provides the daily time base for starting and stopping the function of inhibition to output 1. I.E. The keypad can be Inhibited/Door Open for normal working hours. For example 6:00pm (1800hrs) - 8:00am (08:00hrs)

| **17. PROGRAMME REAL TIME CLOCK** | LED Indication | | |
|---|---|---|---|
| | **RED** | **AMBER** | **GREEN** |
| Keypad must be in programme mode | | ● | |
| Press **5 — 5** | | ● | |
| Enter Time (hr / hr / m / m = 24 hour clock) | | ● | |
| Press **#** (save to memory) | | ● | |
| To Exit Press ****** (Keypad Is now back in **Standby Mode**) | | ☼ | |
| **18. INHIBIT KEYPAD (Out of work hours)** | | | |
| Keypad must be in programme mode | | ● | |
| Press **5 — 6** | | ● | |
| Enter Start Time (hr / hr / m / m = 24 hour clock) | | ● | |
| Enter End Time (hr / hr / m / m = 24 hour clock) | | ● | |
| Press **#** (save to memory) | | ● | |
| To Exit Press ****** (Keypad Is now back in **Standby Mode**) | | ☼ | |
| **19. CLEAR SETTINGS** | | | |
| Keypad must be in programme mode | | ● | |
| Press **5 — 6** | | ● | |
| Press **#** (save to memory) | | ● | |
| To Exit Press ****** (Keypad Is now back in **Standby Mode**) | | ☼ | |

**In the event of total power loss the Real Time Clock and Inhibition are lost.**
Therefore the keypad will give a warning beep every 5 seconds until clock and inhibition are reprogrammed.


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KP50/KPX50/KPX75 Programming Instructions

# KPX75 Technical Specification

**Operating Voltage:**
12V DC, Normal

**Operating Current:**
60mA (quiescent) to 130mA @ 12VDC

**Storage and Operation Temperature:**
-20$^0$C to +70$^0$C

**Environmental Humidity:**
5-95% relative humidity non-condensing

**Working environment & Ingress Protection:**
All Weather, IP-65 Rated

**Number of Users:**
Output 1—1000 Codes and/or Cards
Output 2—100 Codes and/or Cards

**Proximity Card:**
Standard EM Card or Key fob, 125Khz

**Housing:**
Zinc Alloy Die Casting Housing

**Number of Visitor Codes:**
50, programmable for one time or with time limit

**Timings for Code Entry and Card Reading:**
10 seconds waiting for next digit entry
30 seconds waiting for code entry after card reading

**Egress Button:**
Programmable for Instant, Delay with Warning
And/or Alarm.
Momentary or Holding Contact for the Exit Delay

**The Timers:**
1—99,999 Seconds
(Over 24 Hours possible)
Independent Programmable Timers for O/P1

**Dimensions: 180**H x 46W x 21-25D (mm)

**Weight:** 476g net


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# KPX75 Connection Terminals

**1 - 2: TAMPER NC (Tamper Switch Normally Closed Contact)**

A normally closed dry contact while the keypad is secured on its box. It is open while keypad is separated from the box. Connect this NC terminal to the 24 hour protection zone of an alarm system if necessary.

**3 - 4: OUTPUT 2 (Output Relay 2)**

1 Amp relay dry contact controlled by Group 2 User Codes/Cards.

**5 - 6: 12V DC (Power Input Terminal)**

Connect to 12V DC power supply. The (-) GND is the common grounding points of the keypad system. No selection jumper is required for the full input voltage range. Connect DC power with the (+) and (-) polarity indicated; and there is no polarity discrimination for AC input.

**7: EG IN (Egress Input)**

A Normally Open (NO) input terminal referring to (-) ground. With the help of connecting a normally open button to activate Output 1 for door opening like using Codes/Cards. Egress Button is usually put on Secure Side near the door. More than one egress buttons can be connected in parallel to this terminal. Leave this terminal open if not used.

**8: (-) GND (Common Ground)**

A grounding point of the keypad that is common to terminal 2.

**9: DATA I/O (Data Input/ Output Port for Split-Decoded Operation**

A data bus for signal communication with the optional Access Controller in Split-decoded operation and Auxiliary Reader-Keypad in multi-station operation.

**10 - 11 - 12: OUTPUT 1 (Output Relay 1)**

5 Amp relay dry contact controlled by Group 1 User Codes/Cards.


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| 16. VISITOR CODES (OUTPUT 1 ONLY) | LED Sequence | | |
|---|---|---|---|
| | RED | AMBER | GREEN |
| The Keypad can accept up to 50 visitor codes (individual ID 01-50)<br>They can be programmed as one time only codes (00)<br>OR Codes with a time limit (01-99 hours) | | | |
| **A) PROGRAMMING A ONE TIME CODE** | | | |
| Keypad must be in programme mode | | ● | |
| Press **4 — 0** | | ● | |
| Enter Visitor ID (01 –50) | | ● | |
| Press **0 — 0** (One time only code) | | ● | |
| Enter New Visitor Code (4-8 digits) | | ● | |
| Press **#** (Save to memory)<br>This code has no time limit but can be used once | | ● | |
| To Exit Press ****** (Keypad Is now back in **Standby Mode**) | | ☼ | |
| **B) PROGRAMMING A CODE WITH A TIME LIMIT** | | | |
| Keypad must be in programme mode | | ● | |
| Press **4 — 0** | | ● | |
| Enter ID (01—50) | | ● | |
| Enter time in hours (1 hour = 01, 10 hours = 10) | | ● | |
| Enter New Visitor Code (4-8 digits) | | ● | |
| Press **#** (Save to memory)<br>Code is cleared automatically when time has expired or when a new code is entered into same ID and replaces the old code.<br>In the event of a total power loss, all visitor codes are lost. | | ● | |
| To Exit Press ****** (Keypad Is now back in **Standby Mode**) | | ☼ | |


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| 14. INHIBIT KEYPAD (OUTPUT 1 ONLY)<br>It is also possible to inhibit keypad operation, i.e. prevent unauthorized access. An example for out of office hours situation is below. | LED Sequence | | |
|---|---|---|---|
| | RED | AMBER | GREEN |
| **TO ACTIVATE INHIBIT FUNCTION (OUTPUT 1 ONLY)** | | | |
| Enter management code (Eg. 2369#) | | | |
| Press **9** | | | |
| Keypad is now locked out and will not accept any normal user code.<br>(It will still accept the management code) | | | |
| **TO REACTIVATE KEYPAD** | | | |
| Enter management code (Eg. 2369#) | | | |
| Press **9** | | | |
| Keypad will now function as normal and will be in **standby mode**. | | ☼ | |

**15. SYSTEM LOCKOUT**

There are 3 lockout options for false code entry;

A) After 10 unsuccessful attempts, keypad will lockout for 1 minute (Default).

B) After 5—10 unsuccessful attempts, keypad will lock out for 15 minutes.

C) After 10 unsuccessful attempts, the duress output will be activated (See DURESS Programme function)

| 15. SETTING SYSTEM LOCKOUT | LED Sequence | | |
|---|---|---|---|
| | RED | AMBER | GREEN |
| Keypad must be in programme mode | | ● | |
| Press **6 — 0** | | ● | |
| Press Number for Lock up Option<br>(See options below) | | ● | |
| Press **#** (save to memory) | | ● | |
| To Exit Press ****** (Keypad Is now back in **Standby Mode**) | | ☼ | |

**SYSTEM LOCKOUT OPTIONS**

**Press 1** **Default Option:** After 10 unsuccessful entries, keypad will lock out for 1 minute

**Press 2** **Option 2:** After 10 unsuccessful entries, the duress activates. The Duress Output can be released with any User Code or EM Card/Fob in Output 1 or by entering the ` Management Code.

**Press 5—10** **Option 3:** After between 5—10 unsuccessful entries, the keypad locks out or 15 minutes. The keypad can be reset with the Management Code as follows:
Press **2369 — # — 9**

**Press 00** **Option 4:** No Lock Out


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# Preparation For Programming

**CRITERIA FOR CODES**

**1) Prime Codes (KP50 & KPX50 & KPX75)**

The prime codes include the a) User Codes, b) Engineer Code, c) Duress Codes, d) Management Code, e) Common User Codes and f) Visitor Codes. All these codes MUST be unique. It is not allowed to repeat a prime code for second function.

All the codes in this system can be 4—8 digits for Normal Entry Mode which are confirmed with a #. Codes can also be used without # confirmation, however all codes including the engineer code must be the same length. See Item 8 for programming details.

**2) Prime Cards (KPX50 & KPX75)**

All the User Cards are prime cards. They are not allowed to program for second function. E.g. a card was programmed for operating output 1 is not allowed for output 2.

The cards used in this system are 125Khz proximity EM Cards.

**3) Individual User Codes + EM Card or Fob (KPX50 & KPX75)**

A Individual User Code is prepared to enhance the security of a user card, which is a code put after a card. The keypad requires both card and code are correct to grant entry. The secondary code can be repeatedly used for a group of cards; or proprietary with one code for one card.

**NOTE:** The keypad will reject repeated use of prime card or prime codes in programming and give one long beep indication.


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# Preparation For Programming KPX50 & KPX75

## SECURITY LEVEL OF THE OPRATION MEDIA

The keypad provides 3 levels of security.

**1) Security Level 1 — User Code Only**

A general way for access control, just simply enter a code to open the door. Security level is moderate but it is user convenient.

**2) Security Level 1 — EM Card Only (KPX50 & KPX75)**

A general way for access control, just simply read a card to open the door. Security level is moderate but it is user convenient.

**3) Security Level 2 — EM Card + Common User Code (KPX50 & KPX75)**

The keypad requires both Card and Common User Code to grant an entry. Common User Code is a user code for all the cards. Two media security levels are used in door control. The security level is better than just card or user code alone.

**4) Security Level 3 — Individual User Codes + EM Card or Fob (KPX50 & KPX75)**

The keypad accepts programming with each card having its own individual user code to work. It prevents any other people using the lost card to open the door. This is ideal for the area that high security is the main concern.

This operation mode can also report Duress Alarm by keying in the duress code instead of secondary user code in emergency when the user is forced to open the door.


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| **13 LATCHED OUTPUT**<br>It Is possible to inhibit the keypad for an indefinite period of time (override door lock) and then restore the operation by using a **Management Code.** | **LED Sequence** | | |
|---|---|---|---|
| | **RED** | **AMBER** | **GREEN** |
| **FIRST CREATE A MANAGEMENT CODE** | | | |
| Keypad must be in programme mode | | ● | |
| Press **0 — 2** | | ● | |
| Enter code (4 digits, eg. 2369#) | | ● | |
| Press **#** (save to memory) | | ● | |
| To Exit Press ✱✱(Keypad Is now back in **Standby Mode**) | | ☼ | |
| **NOTE—the management code can also be used as a door open code as follows:** | | | |
| Example: Management code as 2369#<br>Press: **2369 — # — 1 for Output 1**<br>Press: **2369 — # — 2 for Output 2**<br>The door will now open using the set Management Code. | | | |
| **TO ACTIVATE LATCHED OUTPUT (OUTPUT 1 ONLY)** | | | |
| Keypad must be in programme mode | | ● | |
| Enter Management Code (Eg. 2369#) | | ● | |
| Press **7** | | ☼ | ● |
| The door/ lock will now be open for an indefinite period | | ☼ | ● |
| **TO REINSTATE KEYPAD (LOCK DOOR)** | | | |
| To Exit Press ✱✱(Keypad Is now back in **Standby Mode**) | | ☼ | |
| Enter Management Code (eg. 2369#) | | | |
| Press **#** (save to memory) | | | |
| Press **7** | | ☼ | |
| The door/ lock will now only open via keypad | | | |


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| 9. DELETING INDIVIDUAL USER CODES | LED Sequence | | |
|---|---|---|---|
| | RED | AMBER | GREEN |
| Keypad must be in programme mode | | ● | |
| Press **1 — 0** for Output 1 (Press 2 0 for Output 2) | | ● | |
| Press **5** | | ● | |
| Press **001** (user code ID position, e.g. 001 = 1st, 002 = 2nd, 003 = 3d etc.) | | ● | |
| Press **#** (save to memory) | | ● | |
| To Exit Press ✱✱(Keypad Is now back in **Standby Mode**) | | ☼ | |

| 10. SET RELAY (LOCK) OPENING TIME (Factory default is 5 seconds) | | | |
|---|---|---|---|
| Keypad must be in programme mode | | ● | |
| Press **5 —1** for Output 1 (Press 5-2 for Output 2) | | ● | |
| Enter time in seconds (1—99999 seconds) | | ● | |
| Press **#** (save to memory) | | ● | |
| To Exit Press ✱✱(Keypad Is now back in **Standby Mode**) | | ☼ | |

| 11. RETURNING TO FACTORY SETTINGS (ALL CODES EXCEPT ENGINEER CODES) | | | |
|---|---|---|---|
| Keypad must be in programme mode | | ● | |
| Press **9999** | | ● | |
| Press **#** (Amber LED will flicker for 1-2 flicker for 1 to 2 minutes) | | ● | |
| Keypad returns to programme mode and is now ready to be repro-grammed | | ● | |
| To Exit Press ✱✱(Keypad Is now back in **Standby Mode**) | | ☼ | |

| 12. DELETING GROUP USER CODES | | | |
|---|---|---|---|
| Keypad must be in programme mode | | ● | |
| Press **1 — 0** for Output 1 (Press 2 0 for Output 2) | | ● | |
| Press **0999** | | ● | |
| Press **#** and save to memory | | ● | |
| To Exit Press ✱✱(Keypad Is now back in **Standby Mode**) | | ☼ | |


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KP50/KPX50/KPX75 Programming Instructions

**PROGRAMMING INSTRUCTIONS**

YOU ARE ADVISED TO READ THESE INSTRUCTIONS FULLY AND ENSURE YOU UNDERSTAND ALL PROCEDURES & FEATURES BEFORE YOU BEGIN.

| DEFAULT FACTORY CODES | |
|---|---|
| Engineer Programme code | 0000 |
| Reboot code | 2828 |
| Manager code | Programmed by user |
| User code | Programmed by user |
| Refresh code | 9999 |

**NOTE—Engineer code is neither an opening code or default code**

| 1. INITIAL POWER UP | LED Sequence | | |
|---|---|---|---|
| | RED | AMBER | GREEN |
| When power is first applied, the keypad will start bleeping for 1 minute and then goes into normal operation mode. You can shorten this delay time by following the steps below. | | ☼ | |
| Press **1— 2 — #** (The bleep should then stop) | | ☼ | |
| Keypad is now in standby mode and ready to be programmed | | ☼ | |

| 2. KEYPAD PROGRAMMING | | | |
|---|---|---|---|
| Keypad must be in **programme mode** to enter all codes, timings and features as per these instructions. | | | |
| To enter **Programme Mode** | | | |
| Press **0000** (Engineer programme code) | | ☼ | |
| Press ✱✱ | | ● | |
| Keypad is now ready to be programmed | | ● | |

**NOTE– When programming any instruction, pressing # saves information to memory**

a. If you followed instructions correctly pressing # will give 2 short beeps
b. If you have made a mistake pressing # will give 4 short beeps
c. If you have tried to enter a code already in memory pressing # will give 1 long beep
(YOU CANNOT USE THE SAME CODE TWICE, IF B OR C HAPPENS, JUST START AGAIN)

Once programming has finished, you will need to exit **Programme Mode** and go back to **Standby Mode.** Keypad can only be operated from standby mode.

| | | | |
|---|---|---|---|
| To Exit **Programme Mode** | | ● | |
| Press ✱✱ (Keypad is now in **standby mode**) | | ☼ | |

**NOTE— When entering user codes, they can be 4—5—6—7—8 digits long. Codes can be any length as long as it is followed by #.**
**If you do not wish # to be part of the Entry Code then all codes must be the same length.**
**For ease of explanation, these instructions and examples will only use 4 digits.**
**NOTE—For security reasons, it is advisable to change engineer programme code.**


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| 3. CHANGE ENGINEER CODE | LED Sequence | | |
|---|---|---|---|
| | RED | AMBER | GREEN |
| Keypad must be in programme mode | | ● | |
| Press **0 — 1** | | ● | |
| Enter new engineer code (4 digits) | | ● | |
| Press **#** (save to memory) | | ● | |
| To Exit Press ****** (Keypad Is now back in **Standby Mode**) | | ☼ | |
| If engineer code has been forgotten or unknown, then you need to assign a new one into memory and reboot keypad. | | | |

| 4. ENGINEER CODE LOST (UNKNOWN) | | | |
|---|---|---|---|
| Switch power OFF and wait 1 minute | | | |
| Switch power ON, keypad will begin to bleep | | ☼ | |
| Press EXIT button once so that bleeping stops | | ☼ | |
| Enter reboot code **2828** | | ☼ | |
| Press ****** | | ● | |
| Press **0 — 1** | | ● | |
| Enter new engineer code (4 digits) | | ● | |
| Press **#** (save to memory) | | ● | |
| To Exit Press ****** (Keypad Is now back in **Standby Mode**) | | ☼ | |

| 5.KEYPAD TONES - For quiet areas the keypad entry tones can be silenced. | | | |
|---|---|---|---|
| Keypad must be in programme mode | | ● | |
| Press **7 — 1** | | ● | |
| Press **0** - for Keypad tones OFF<br>Press **1** - for Keypad tones ON (Default) | | ● | |
| Press **#** (save to memory) | | ● | |
| To Exit Press ****** (Keypad Is now back in **Standby Mode**) | | ☼ | |

| 6. HOW TO TURN STATUS FLASHING L.E.D OFF (Option to turn of Status flashing L.E.D). | | | |
|---|---|---|---|
| Keypad must be in programme mode | | ● | |
| Press **7 — 3** | | ● | |
| Press **0** - for Status L.E.D OFF<br>Press **1** - for Status L.E.D ON (Default) | | ● | |
| Press **#** (save to memory) | | ● | |
| To Exit Press ****** (Keypad Is now back in **Standby Mode**) | | ☼ | |


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| 7. CREATING INDIVIDUAL USER CODES | LED Sequence | | |
|---|---|---|---|
| | RED | AMBER | GREEN |
| Keypad must be in programme mode | | ● | |
| 1. Press **1 — 0** for Output 1 (Press 2 0 for Output 2) | | ● | |
| 2. Press **2** | | ● | |
| 3. Press **001** (user code ID position, e.g. 001 = 1st, 002 = 2nd, 003 = 3d etc. Keypad allows up to 1000 different users) | | ● | |
| 4. Enter User Code (4-8 digits) | | ● | |
| 5. Press **#** (save to memory) | | ● | |
| You can have 1000 different user codes, 001 = 1st, 002 = 2nd, etc.<br>Example: Set 1st user code as 4567<br>Press: **10—2 – 001—4567—#**<br>User Code is now: 4567#<br>For a new user change ID number and user code but follow the process above. | | ● | |
| To Exit Press ****** (Keypad Is now back in **Standby Mode**) | | ☼ | |
| **THIS OPTION IS THE MOST SECURE AS IT ALLOWS CODES WITH MULTIPLE DIGIT LENGTH AT THE SAME TIME.** | | | |

| 8. HOW TO PROGRAMME A USER CODE WITHOUT THE # | | | |
|---|---|---|---|
| If you choose this option all codes MUST Be the same length including Engineers and Management Codes. | | | |
| Keypad must be in programming mode | | ● | |
| Press **7 — 0** | | ● | |
| Press **1** - for no # | | ● | |
| Press **#** (Save to Memory) | | ● | |
| As pervious example. 4567 is now user code without the # key | | ☼ | |


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