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Tel 800.624.5625   techsupport@securitron.com   in door opening solutions

DK-37 Installation & Operating Instructions

Introduction
The DK-37 Digital Keypads by Securitron offer Wiegand output for universal compatibility with access control systems or the Securitron Digital Keypad Controller (DKC). The outdoor-rated 12 key stainless steel 2″x6″ keypad features silicone rubber keys.

DK-37 keypads are shipped in 'Wiegand mode' from the factory. When interfacing with the DKC, please change the keypad to 'Character mode' and ensure that 'Character' is selected in the DKC Programming Tool. The advanced programming features available in Character mode allow a user to customize the operation of the DKC to fit the specific needs of their installation. Instructions on how to change from Wiegand to Character mode are found in the *Changing to Character Mode* section below.

Box Contents
Keypad with 16′ of cable
Installation & Operating Instructions
Mounting hardware pack

- (2) #8 X 1-1/2″ Screw
- (1) 8-32 X 3/8″ Phillips Pan Head Screw
- (1) 8-32 X 3/8″ Spanner Pan Head Screw

- (1) T-Nut
- (1) Mounting Bracket
- (1) Name Plate Label

Tools Needed

- Drill with 3/8″ and 1/8″ Drill Bits
- Phillips and (optional) Spanner Screwdriver
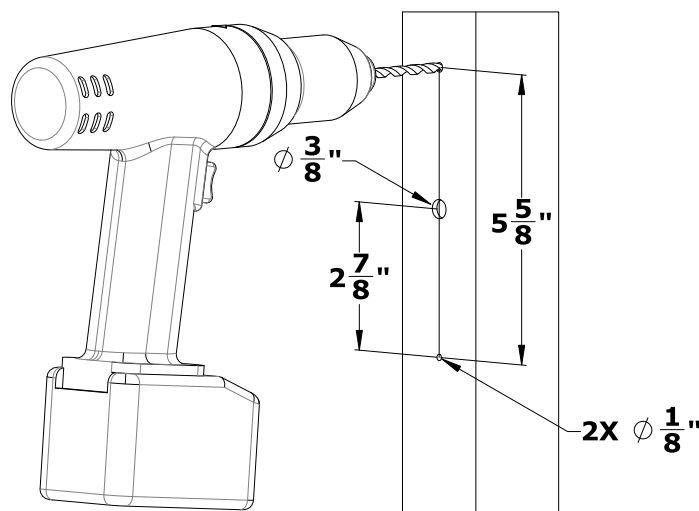
Specifications
Power Requirements

Input Voltage	Active Amperage	Resting Amperage
12 VDC	35 mA	7 mA
24 VDC	75 mA	16 mA

Environmental
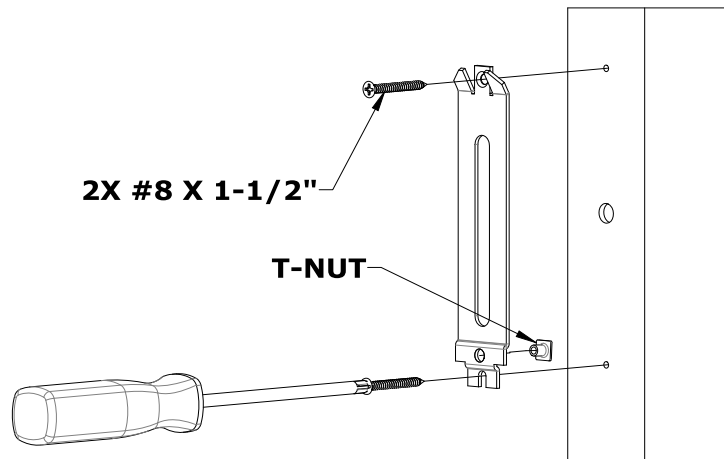Operating temperature: -22° to 158°F (-30° to 70°C) for indoor or outdoor use

Installation
Drill a 3/8″ diameter hole in the wall through which the wires will be routed. Drill two 1/8″ diameter holes for the #8 mounting plate screws as shown in Figure 1.
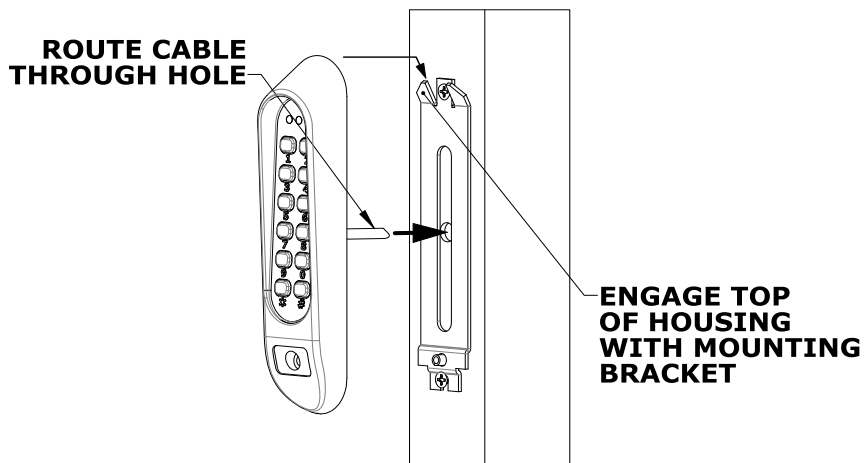

Figure 1 — Hole locations

PN# 500-20750
Rev. A, 11/13

Place the mounting plate on the mounting surface and secure in place with #8 mounting screws as shown in Figure 2. **Note:** Ensure that the T-nut is in place through the hole between the mounting surface and mounting plate.
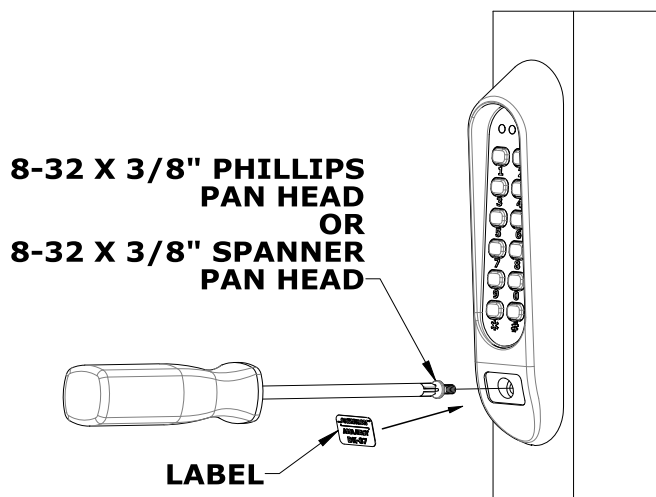
2X #8 X 1-1/2"

T-NUT

Figure 2 – Installation of Mounting Hardware

Route cable through the hole and affix the DK-37 onto the mounting bracket. Once on the mounting bracket, pull the DK-37 downwards in place as shown in Figure 3.

ROUTE CABLE THROUGH HOLE

ENGAGE TOP OF HOUSING WITH MOUNTING BRACKET

Figure 3 – Installation of DK-37

Install the 8-32 screw through the front of the DK-37. Apply the name plate label over the 8-32 screw as shown in Figure 4.

8-32 X 3/8" PHILLIPS PAN HEAD OR 8-32 X 3/8" SPANNER PAN HEAD

LABEL

Figure 4 – Installation of securing screw

Wiring Terminal Connections

DKC Terminal	DK-37 Wiring Reference	Wire Color
+12V	Positive DC supply lead	Red
D0	Wiegand data zero	Green
D1	Wiegand data one	White
LED-G	Green light	Orange
LED-R	Red light	Brown
LED-Y	Yellow light	**Blue**
BUZ	Audible buzzer	**Yellow**
TAMP	Tamper indicator	Purple
(-)	Ground	Black

Feedback and Entry Overview

The DK-37 comes with green, yellow, and red LED indicators above the keypad. These three indicator lights provide feedback during operation. When the DK-37 is in Wiegand mode there is no yellow feedback light when connected to an access controller. The yellow light is designed to work with the Securitron DKC Digital Keypad Controller. The three indicator lights are intended for operation through an access controller either through a dry-contact connection to ground or an open-collector driver. Please refer to the access controller for information about the meaning of the indicator lights.

The table below is only for use with Securitron DKC

LED	ACTION	MEANING
Red Light	Single Flash	• While in programming mode an error was made during program entry; or • A 5 second timeout occurred at any time during a programming step.
Red Light	Double Flash	• While in programming mode a confirmation that a valid program entry was made; or • During normal operation the DK-37 was put into or taken out of lockout mode.
Red Light	Continuous On	• During normal operation the relay is energized while the DK-37 is in relay timer mode.
Red Light	Continuous On	• While in normal operation the DK-37 is in passage mode; or • The DK-37 is in toggle mode and the relay is energized.
Yellow Light	Flashing	• In programming mode the LED flashes once per second
Yellow Light	Continuous On	• While in normal operation this indicates that there are no codes in memory.
Green Light	Single Flash	• Key press detected.
Green Light	Continuous On	• While in normal mode a 30-second lockout occurred after 16 wrong digits were entered; light turns off after lockout time.
Backlight	Double Flash	• While in normal mode a valid code was entered while the DK-37 was in lockout mode.

The DK-37 is provided with a beeper that can be used to indicate when a button is pressed or the relay is energized. The beeper functions are detailed in the table below and are valid for use with the Securitron DKC.

INDICATOR	MEANING
Single short beep	• A button press; or • Entry into Programming Mode
Single long beep	• While in normal operation (Wiegand Mode): • User ID entered is greater than 65535 no transmission occurred; or, • Six digits were entered; no transmission occurred • While in Programming Mode: • An error or non-acceptance of a new facility code has occurred
Double beep	• While in Programming Mode: • Acceptance of a new facility code in Wiegand mode • Changing mode from Wiegand to Character
Repeating Short Beep	• A button is being held down and/or is stuck

When entering a sequence the DK-37 has a 5 second timeout that will erase the internal buffer when a key is not pressed within 5 seconds. For example, if the correct code is 2-2-6-7 and the user enters 2-2-6 followed by a 5 second delay and then enters 7 the DK-37 will not unlock the door.

Keypad Operation
DK-37 keypads are shipped from the factory in 'Wiegand mode' of operation. To change the facility code or mode of operation, follow the steps below:

Entering into Programming Mode
1. Remove power from the keypad.
2. At the DKC, temporarily connect the 'LED-Y' terminal to the '(-)' terminal.
3. Apply power to the DKC and the yellow light will be on.
4. Without touching the keypad wait 5 seconds and the keypad will produce a single short beep to indicate that programming mode has been entered.

Changing to Character Mode
1. Enter into programming mode (see above).
2. **Within 30 seconds press the '#' key and the DK-37 will beep twice. Programming mode** will automatically exit.
3. Remove the temporary wire connecting the 'LED-Y' terminal to the '(-)' terminal.
4. Remove power from the DKC for 10 seconds.

Change to Wiegand mode and set facility code
1. Enter into programming mode (see above).
2. Within 30 seconds, enter a valid facility code of 1 to 3 digits in length. The code cannot be greater than 255.

Note: If more than 3 digits are entered programming mode will automatically terminate with an error.

3. Press the '*' key and the DK-37 will beep twice. Programming mode will automatically exit.
4. Remove the temporary wire connecting the 'LED-Y' terminal to the '(-)' terminal.
5. Remove power from the DKC for 10 seconds.

In Wiegand Mode a valid user ID must be 1 to 5 digits in length and the ID cannot be greater than 65535. If more than 5 digits are entered or if the ID entered is greater than 65535 an audible error will sound, the buffer will be cleared, and no transmission will be sent. A valid user code must be followed by pressing the '✶' key.

Technical Support
For general questions concerning this or other Securitron products please visit the Securitron website www.Securitron.com or contact Securitron Technical Support at (800) 624-5625 or email TechSupport@assaabloyems.com.

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