Keyless Entry System Guide





Hardware & Wiring Setup

Begin by setting up the keypad, relay box and wiring. This involves electrical	
connections and should be installed by a qualified technician	je 2

Install Drivers for USB / Serial Adapter

IMPORTANT! Before connecting the USB / Serial Adapter to your computer,
YOU MUST install the appropriate drivers Page 6

Using the Keyless Entry Software

Learn how to install and use the software for transmitting and managing codes
for the Keyless Entry System Page 7

Need Help?

For assistance, contact Procare Technical Support.

Keyless Entry System Installation Instructions

Connecting the Keyless Entry System (KES) is not complicated; however, unless you are experienced in doing so, electrical connections should be made by a qualified technician. This unit is not intended for after-hours security. A dead bolt or similar device will be needed when the building is closed.

Each KES is shipped with the following components. Verify that your box contains:

- 1. Keypad with short attached cable, cable coupler, and long (8 wire) cable with RJ45 connectors
- 2. Relay box
- 3. Chime (doorbell) kit with: doorbell, transformer and two (2) manual override buttons
- 4. Wire with RJ11 connectors
- 5. RJ11 to Serial Adapter
- 6. USB Adapter
- 7. Getting Started Guide

Please set up and test these components on a table top prior to mounting them in their final locations.



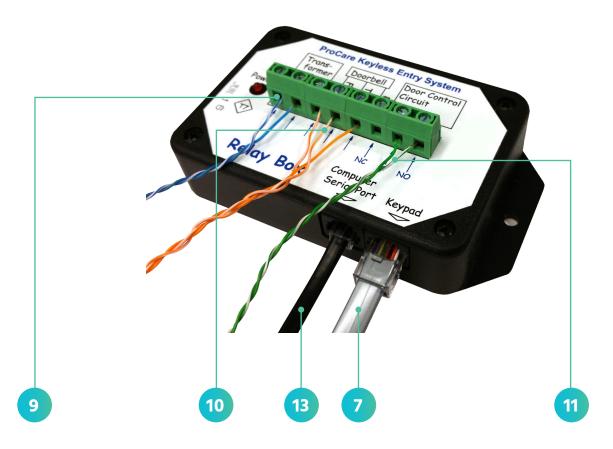
USB Adapter connected to RJ11 Adapter

Mounting the components (order is not important).

- 1. Mount the keypad in the desired location. Be sure to allow a cable feed-through hole. The keypad should be in a location (indoors or out) that does not receive direct sun or rain. Attach the short cable on the keypad to the cable coupler and then to the long RJ45 cable (supplied) or substitute your own straight through CAT5 network cable.
- **2.** Mount the relay box in a protected indoor location, such as the attic of the building. Again, keep in mind the RJ11 cable (provided) will need to reach from the relay box to the computer.
- **3.** Mount the doorbell transformer in a protected indoor location. Make sure a standard 110V power outlet is within reach of the transformer.
- 4. Mount the doorbell in an audible, central location.
- 5. Mount the center-provided door strike or magnetic lock unit per the manufacturer's instructions.
- 6. Mount the center-provided manual override button(s) in the desired location(s).

Making the electrical connections (If you have not already done so, TURN OFF ELECTRICITY).

- 7. Connect the long RJ45 cable coming from the keypad to the relay box terminal marked "Keypad."
- 8. Connect a 110V power supply to the doorbell transformer.
- **9.** Using 20-2 gauge wire, connect the doorbell transformer to the relay box using the terminal marked "Transformer."
- 10. Using 20-3 gauge wire, connect the doorbell to the relay box using the terminal marked "Doorbell."
- **11.** Using 20-2 gauge wire, connect the door strike and manual override buttons (if desired) to the relay box using the terminal marked "Door Control Circuit."
- **12.** Install driver (see page 6 for details). Then connect USB-Serial Adapter to computer's USB port. (Serial-RJ11 Adapter should already be attached).
- **13.** Connect RJ11 cable to relay box terminal marked "Computer Serial Port." Attach other end of cable to RJ11 Adapter at computer. You must install USB drivers before connecting to your computer. See page 6.

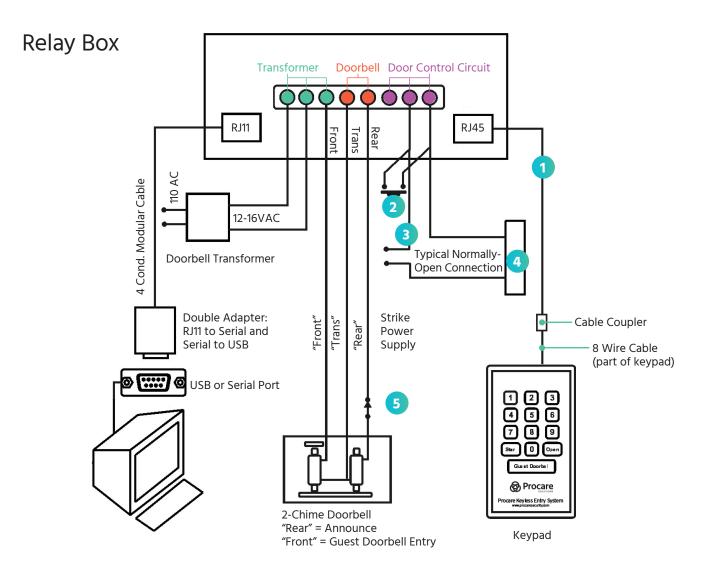


Product Specifications

Power Required	12-16 volts DC (or AC) @ 100ma supplied by attendant 16VAC doorbell transformer. Power is applied to terminal strip on relay box. Door strike requires separate power supply (by user).
Keypad/Wall frame unit	Display: 2 LEDs, Ready (red) and Accept (green) Environment: Indoor and sheltered outdoor Dimensions: length 7.4", width 4.1", height 2.43" (including wall frame) Keypad case material: black ABS Wall frame material: .075" black anodized aluminum Weight: 14.7 oz.
Relay Box	Provides interfaces to power transformer, computer, keypad, doorstrike and doorbell. Display: 1 LED power (red) Environment: Indoor use only. 3 Relays rated at 10 amp. Actual current used: approx 0.1 amp. Dimensions: length 5.1" (including mounting flanges), width 2.8", height 1.6" Case material: black ABS Weight: 5.5 oz.
RS232 port	RJ11 jack. Standard modular phone type cable to PC serial port, fitted with RJ11 to DB9 serial converter and serial to USB Adapter. Hardware handshake is continually jumper wired to on within the converter. Data rate is set to 9600bp



Wiring Diagram*



- **8 Wire Cable.** With RJ45 connectors. Use the supplied cable or substitute your own straight through CAT5 network cable.
- **2** Manual Open. Allows staff person inside to manually 'buzz' the door open so people without codes may enter the building.
- **3 Disable Key Switch.** Not supplied. Disables the keypad. Prevents the door from being opened after hours. Not necessary if a dead-bolt is used for after hours security.
- **4 Door Strike.** Diagram assumes an Electric Door Strike with typical Normally Open connection. For Magnetic Locks, wiring must be handled appropriately. The door strike, its transformer and wire are not supplied. 14-20 ga. wire is recommended.
- **5 Doorbell On/Off Switch.** Optional, not supplied. Disables the announcement bell. Allows the doorbell to be turned off during periods of heavy use.

*Warranty VOID if wiring is altered in any way.

IMPORTANT:

Install Drivers Before Connecting the USB / Serial Adapter To Your Computer

Why does the Keyless Entry need an Adapter?

USB devices are limited to a cable length of 10-15 feet. The Keyless Entry uses a serial connection so your computer can be farther away from the Relay Box. Using a USB / Serial Adapter allows you to connect to a USB port on your computer. If your computer has a serial port, then it is not necessary to use an adapter.

How does the Adapter connect to the Keyless Entry Hardware?

The cable with RJ11 ends, which comes from the Relay Box, connects to the gray RJ11 Adapter (Figure 1) which in turn connects to a blue USB Adapter (Figure 2).

Can I connect to a Procare Touch Computer?

This is not recommended. Since assigning and transmitting ID codes to the Keyless Entry is done through the main part of Procare, not through the check-in screen, it's best to connect to a standard desktop computer. If your situation requires connection to a Procare Touch, a special adapter is needed. Search for article <u>KB0193</u> at ProcareSupport.com.

Install Driver First, then Connect USB Adapter to Computer

You MUST install the driver BEFORE you connect the USB Adapter to your computer.

- 1. For any current version of Windows: Download and install the latest driver from the USB Gear website. Go to ProcareSupport.com and search for article #KB0250 which contains a link. Once the driver is installed continue with step 3 below.
- 2. Plug the blue adapter into a USB Port on your computer. The blue adapter should have come pre-attached to a gray-colored RJ11 Adapter (Figure 2).

OPTIONAL: If needed, attach the silver USB extension cable to the blue RJ11 Adapter and plug the extension cable into your computer (Figure 3).



FIGURE 1 RJ11 Serial Adapter Only



FIGURE 2 USB Adapter connected to RJ11 Serial Adapter



FIGURE 3 Optional silver extension cable connected to USB Serial Adapter

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Using the Keyless Entry System (KES) Software Instructions

Before You Begin

Software for the Keyless Entry System (KES) must be installed and run from a computer as follows:

- The computer must be connected to a cable from the relay box by following the wiring installation instructions.
- The computer must have Procare version 10.2.4000 or higher. To make sure you are on the latest version, begin at your **Procare Home screen** and click **Utilities** > **Check for Online Update**.

Installation

Download:

- 1. Log on to your computer with local administrator privileges and close all programs.
- 2. Go to procaresoftware.com/extras.
- **3.** Click the link to download the Keyless Entry Software and choose **Run** (Internet Explorer) then follow the on screen prompts to complete the installation.

NOTE: If you use Firefox, choose **Save File** then, once the download is complete, dbl-click the file named **kes_setup.exe** on your Firefox **Downloads** list to install it.

Enable the Keyless Entry & Set Options

- Once the software is installed, log in to Procare. From the Procare Home screen go to Utilities > Procare Extras > Keyless Entry System.
- 2. At the Keyless Entry screen check the Enable KES box.

🗹 Enable KES

3. Click the **Options** button and choose the following settings:



a. Number of Digits in Entry Code (optional): By default, the codes you assign to people will be 4 digits, which allows for 10,000 possible combinations. If you wish to change this (to 3, 5, or 6 digits) it's best to do so is right away, before you have assigned codes to anyone.



To make a change, click in the white box (right side) and type the phrase **"I am sure"** (without quotes). This will enable the settings.

KES Options		X
Serial Port The KES Unit is connected to COM1	Number of Digits in Entry Code If you reduce the number of digits in a code to fewer digits, the leading digit(s) will be erased! Type 'I am sure' to activate selections:	
Code Entry Delay Reset the Code Entry Process if a Key is not pressed in 4 seconds	 3 Digits (1,000 Possible Codes) 4 Digits (10,000 Possible Codes) 	
Door Bell	5 Digits (100,000 Possible Codes)	
Guest Door Bell is	6 Digits (1,000,000 Possible Codes)	_
Working 💌		
Announcement Bell is	Door Controller Save	
Turned Off 🛛 🗸 🗸	When a correct code is entered:	
Ring the Door Bell if user enters	Wait for Unlock Door for	٦
an incorrect code 2 times 💌	1 second V 3 seconds V	

- **b. Serial Port:** Choose the ComPort used to connect the KES hardware to your computer. In most cases the connection is made to a USB Port that will still be identified as COM1, or COM2, etc.
- **c.** Code Entry Delay: This will reset the keypad to accept a new code if someone begins to enter a code then walks away. Choose the number of seconds to wait before reset occurs.
- **d. Guest Door Bell:** The keypad has a Guest Door Bell button a person may push to alert you they need help getting into the building. This may be a person without a code, someone who forgot their code, etc. You may turn the guest bell on (select Working) or off (select Turned Off).
- e. Announcement Bell: The announcement bell may be set to ring after a person successfully enters their code so you know someone is entering the building. Choose the length of delay (1 second means wait 1 second after the code is entered before sounding the bell) or choose to turn it off.
- f. Ring Bell if User Enters Incorrect Code: Choose the number of attempts a person may make before the bell rings.
- **g. Door Controller Wait For (delay):** Choose how long to wait after a correct code is entered for the door to buzz open. The farther the keypad is from the door the longer the "Wait For" setting should be.
- **h. Door Controller Unlock Door For (duration):** Choose how long the door should continue to buzz, allowing entry. Make it long enough so people have time to open the door, but short enough that others behind them cannot slip in without entering their own code.
- 4. Click Save > Exit to leave the Options screen. Click Exit once more. You may be asked if you want to save. If so, answer Yes.
- **5.** At your **Procare Home** screen click **Logout**. Then Log in again. This will enable the **KES Code** option, allowing you to assign codes for people to enter the building.

Assign Codes to People in Procare

You'll go to the **Person Information** screen for each person in Procare who will need a code to enter the building. This may include parents and other authorized pick-up persons, as well as Procare Users and employees, and perhaps certain vendors such as those involved in maintenance, yard work or janitorial services. Later, you'll also have the option to include **Additional Codes** for persons not entered in Procare.

- **1.** Getting to the **Person Information** screen varies depending on where that person is entered in Procare. For this example, we'll assume the person is set up as an authorized pick-up for a child. Begin by looking up a family.
- 2. Select a child in the family, then click the **Information & Relationships** icon to display pick-up people for that child.



- 3. Dbl-click the name of a pick-up person to open their Person Information screen.
- **4.** On the **Person Information** screen, the new **KES Code** box will appear on the right-hand side just below **Gender**. Enter a code this person will use to enter the building. This could be the last four digits of their cell phone or Social Security number. It must be something unique to them.

NOTE: Remember, the number of digits you enter should correspond to the number selected when you first enabled the Keyless Entry software. It is not advisable to change the number of digits after you have begun entering codes.

5. Click Save > Exit. Continue assigning codes to other related people in this family. Then move to the next family, etc. You'll also assign codes to anyone else in Procare, like employees, etc. who need access to the building.



Using the Keyless Entry Software

Now that each person in Procare has been assigned a code, you may want to enter additional codes (for people not in Procare) then transmit codes to the keypad. Once the codes are transmitted, people may begin using the keypad. You may also monitor the codes used to enter the building.

Getting There

From the Procare Home screen go to Utilities > Procare Extras > Keyless Entry System.

Transmit Codes

When you transmit, the codes are sent to and stored on the keypad. Once the codes are transmitted, people may begin using the keypad to enter the building. Any time you add new codes, be sure to transmit again in order to activate those codes.

1. Choose what to transmit:

a. Import Codes from Procare: To import family, staff, or vendor codes, mark the appropriate choices under Family Data, Employee Data and Expenses & Ledger. The most common option is to include **People on Visible Accounts Only**.



 b. Additional Codes: To include codes for other people (who are not entered in Procare), mark the Include Additional Codes checkbox. To add people to the additional codes, list click Edit Codes and enter their information. To add new lines, for more additional codes, click Save or tap Enter (on your keyboard).



c. Restricted Codes: To block codes, you may place them on the restricted list. Mark the Include Restricted Codes checkbox. To add codes to the restricted list, click Edit Codes and enter the information. To add new lines, for more restricted codes, click Save or tap Enter (on your keyboard).



NOTE: Other ways to block a code are to delete the code from the **Person Information** screen in Procare or to check the **Disabled** box on the **Additional Codes** screen. In order for the changes to take effect, you must TRANSMIT the CODES.

Next, click the Transmit button. At the Transmit screen, click Start to transmit codes to the keypad.
 Or, use the Inquire button to get information from the keypad including the serial number, KES name, firmware date, and number of codes stored.



- **4.** When the transmission, or inquiry, is complete, you may use the **Notepad** button to view or print the on screen information (optional).
- 5. Click Exit to leave the Transmit screen.

How to Enter Your Code

- **1.** Press **Start.** The "Ready" light will come on indicating you may enter your code.
- 2. Enter your ID Code.
- **3.** Press **Open** to activate the door. The "Accept" light will come on if the code is accepted, if not you'll hear a long beep.

Guest Doorbell

If you do not have an ID code, or have trouble getting your code to work, press **Guest Doorbell** to alert someone that you need assistance.

Monitor Codes

Use **Monitor Codes** to track each code as it is used to enter the building. The monitor feature must be running for the tracking to occur and can run in the background (just minimize the monitor screen). When you open the monitor, the rest of the Keyless Entry software is automatically closed. The monitor and main Keyless Entry screens cannot be run at the same time.

Notepad



IMPORTANT! When you exit the monitor screen, the list of codes used is not saved. Before exiting, click **Notepad** (optional) which allows you to:

- 1. Print a list of the codes used. From the File menu of Notepad, choose Print.
- 2. Save a list of the codes used. From the **File** menu of Notepad, choose **Save As**. Give the file a new name such as "Monitor-Jan-15-2016.txt" and save it to a convenient location where you'll be able to find it again.

NOTE: Always choose **Save As** and not just **Save**. Do not use the default file name of **monitor.txt**. This file is overwritten (erased) the next time you click the **Notepad** button.



Software Warranty

Procare Solutions warrants that, for a period of ninety (90) days from the date of delivery to you, as evidenced by the date on your invoice, the media on which the program is furnished under normal use will be free from defects in materials and workmanship, and the program under normal use will function without significant errors that make it unusable. If you notify Procare Solutions within the warranty period of any such defects, the media will be replaced.

The sole remedy for breach of this warranty is limited to replacement of defective materials and does not include any other kinds of damages. Procare does not issue refunds on software.

The entire risk as to the performance of the programs is with the purchaser. Procare Solutions does not warrant that the operation of the programs will be uninterrupted or error-free. Procare Solutions assumes no responsibility or liability of any kind for errors in the program or documentation or for the consequences of any such errors. In no event will Procare Solutions be liable for any damages, including loss of data, lost profits, or other special, incidental, consequential or indirect damages from the use of the program or accompanying documentation, however caused and on any theory of liability. You acknowledge this allocation of risk.

Hardware Warranty

Hardware directly from Procare Solutions carries a one (1) year warranty against defects in materials or workmanship from the date of delivery, as evidenced by the date on your invoice. Warranty is for repair or replacement only. Procare does not issue refunds on hardware. Warranties do not cover cosmetic damage or damage by weather, negligence, misuse or accident, or repair or modification by unauthorized persons.

ATTENTION: Warranty VOID if wiring is altered in any way.

Hardware from one of our distributors is warranted for the length of time offered by the distributor. Any warranty issues related to this hardware must be handled directly with the distributor.

NOTE: Terms of the above warranties are subject to change without notice.

