STANLEY

021.0329

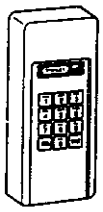
Codekey Entry System

Programmable Wireless Garage Door Opener Access Control

Installation and Operating Instructions

FEATURES

READ ALL INSTRUCTIONS CAREFULLY BEFORE BEGINNING



The Codekey Entry System is a wall-mounted, battery-operated keypad that allows anyone to operate the garage door opener as long as that person enters a specific 4-digit ACCESS CODE which is programmed by the owner.

The keypad is back lit with LEDs which are normally off. Pressing ANY key lights the keypad. Each keystroke causes a separate indicator to "blink."

The correct "Access Code" must be entered within 20 keystrokes, otherwise the unit will stop operation for 5 minutes. The user has 25 seconds between keystrokes to enter the correct code, otherwise you must start over.

The entry of the fourth correct (in sequence) "Access Code" key will activate the Codekey. The Codekey sends a radio signal to the power unit to open, close or stop the garage door. The LED light will stay on for one second indicating a radio signal is being sent to the door opener. See Figure 1.

After the Codekey has activated by entering the correct "Access Code," the Stanley Safe-T-Close mode allows ANY key on the Codekey to be used to open, stop, or close the door, for a period of about 30 seconds.

A LOW BATTERY condition is indicated when the keypad lights on the Codekey go off after the first keystroke entry instead of remaining on.

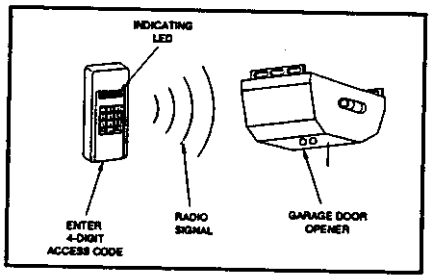


Figure 1

IMPORTANT: The installer MUST program the RADIO CODE and ACCESS CODE before the Codekey will operate the door opener.

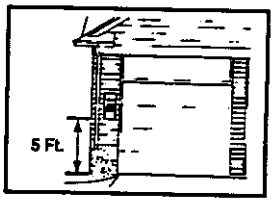
⚠ WARNINGS:

1. Mount the Codekey OUT OF THE REACH OF CHILDREN at least five (5) feet from the ground.
2. NEVER allow children to operate the Codekey unit.
3. Disconnect power from opener before any installation or repairs.
4. Wear safety glasses to protect your eyes.

INSTALLATION & MOUNTING LOCATION

Tools Required: Drill with 1/8" bit
Flat head screwdriver

Choose a convenient location that doesn't interfere with the normal operation of the door. A wooden door jamb or the wall adjacent to the door makes an excellent location. Alternate fasteners can be substituted if the Codekey is going to be secured to brick or aluminum siding.



1. Hold the Codekey where you wish to mount it; then make a small mark on the wall at the top of the unit near the center. Drill a 1/8" hole 3/4" directly below this mark. See Figure 2.

2. Tighten a screw in the hole until the head is about 1/16" above the mounting surface. Hang the Codekey on the screw. Adjust screw as required.

3. Open the battery compartment and remove battery. See Figure 3. Mark the second hole position and drill another 1/8" hole. Secure the Codekey into place with the second screw. Replace and connect battery, and close the case.

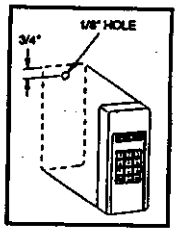


Figure 2

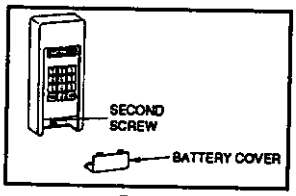


Figure 3

IDENTIFYING YOUR "RADIO CODE" TYPE

Before setting any codes you need to identify the type of receiver that is in your door opener. You do this by looking at the rear of the power unit hanging in your garage and comparing it to the illustrations shown in the following panel.

If your opener has a "LEARN" button on the back as shown in illustration "A," you have a **Secure Code** type of opener. If your opener has a series of small toggle switches or jumper wires as shown in illustration "B," you have a **Digital** type of opener. Identify the type of opener you have at this time.

HSX101T
Model 5701
One Channel Transmitter with Rolling Code or User Selectable Fixed 10 Bit Format

DESCRIPTION:

The Model 5701 transmitter is a low power communication device operating on a fixed frequency of 310 MHz. The operating frequency is factory set by proper selection of a range of components which fix the operating frequency.

The radio signal is binary coded with pulse width modulation of one of two types. The modulation type is selected by user programming utilizing the matrix keypad and is one of the following:

A. *Rolling Code:* (PWM) type A1D modulated transmission which has an information rate of approximately 1570 bits per second (bps). Each transmitter is factory programmed with a unique manufacturers code, one of 4 billion possible codes.

B. *Fixed User Selectable 10 Bit* A1D modulated transmission with 1024 possible code selections.

The Model 5701 transmitter is designed to work with compatible rolling code receivers. These include, but are not limited to, the Stanley Model 5800 discrete self-contained receiver, the Stanley circuit board Model 3318 garage door operator control and radio receiver, and other numerous other Stanley fixed format discrete radio receivers.

FUNCTION:

The installation and operating instructions are enclosed for this transmitter. The instructions are directed primarily at the coding of the transmitter and companion receiver and the selection of the modulation type. The transmitter is activated by proper entry of a four digit sequence (PIN) through the entry keypad.

Selection of the Rolling Code mode of operation through keypad entries automatically selects the microprocessor logic to generate the proper encrypted data for each successive radio activation.

Another selection sequence corresponding to the 10 bit radio is also set by the keypad entry. The radio code corresponds to the code setting of the matching radio receiver and thus sets the selection of one of the 1024 code selections for the transmitter device. No other user adjustments are possible.

The model 5701 transmitter is a wall mounted device used for general purpose radio remote control, with primary application to garage door and gate control. The transmitter is activated by proper entry of the personal PIN code sequence through the external keypad. Upon proper entry of the personal sequence, the transmitter sends the proper radio code for as long as the last key in the sequence is depressed. Upon release of the last key the transmitter ceases to send the radio code.

For a period of approximately 25 to 30 seconds after the last key entry of a proper entry sequence is made, the entire keypad is active and depression of any key will cause the transmitter to send the radio code to the receiver. At the end of this period, re-entry of the proper PIN sequence is necessary to reactivate the transmitter.

The transmitter contains a small on-board coil printed on the PCB material as a radiating structure for the transmitted signal. This antenna is a simple loop set to the operating frequency by a surface acoustic wave (SAW) device.

The plastic transmitter housing is shown in the enclosed photographs along with photographs of the printed circuit board assembly.

With reference to the enclosed schematic, modulation to the oscillator is provided by the custom microcontroller device, U1, after the proper PIN sequence is entered via the keypad. The basic period of the modulation is controlled by the microprocessor. As such, this period (duty factor) is not field adjustable. The custom microcontroller circuit provides simple pulse width modulation to the RF oscillator circuit.

When modulated by the custom encoder device, the oscillator then creates and radiates a signal consistent with the data bit stream applied to the circuit. Radio energy is then radiated by the small inductor loop contained on the printed circuit board. Proper frequency of operation is selected by tuning capacitors C4, C5, and the SAW. Data rate is solely determined by the custom encoder device. The duty factor is solely determined by the custom encoder device and is as presented later in this document.

Illustration "A"
Secure Code type)

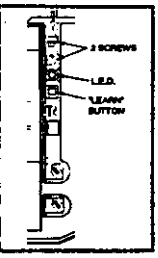
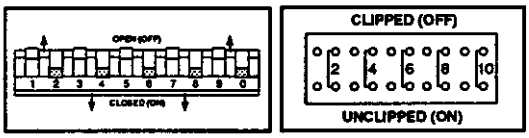
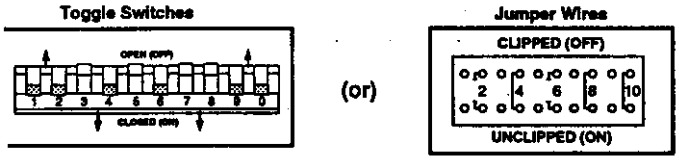


Illustration "B"
(Digital types)



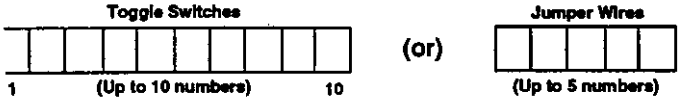
f you have a **Secure Code** type of opener, go immediately to the **Setting the Access** Code section. If you have a "Digital" type of opener, you first will have to write down the ode setting of the opener. Each toggle switch that is turned ON (closed) or jumper wire that s not cut determines the Radio Code your Codekey system must be programmed to send. Here are examples of codes that are determined by toggle switches and jumper wires.



(Radio Code 1-2-4-6-9-0 shown)

(Radio Code 4-8-0 shown)

rite your "RADIO CODE" in the boxes shown below at this time. A "RADIO CODE" ith ALL positions open (OFF) or ALL jumper wires clipped can NOT be used.



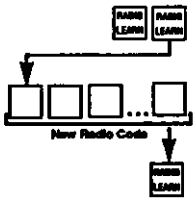
ETTING THE "RADIO CODE"

the keypad enter the code as follows:

Press the **RADIO LEARN** key two (2) times. The red indicating light will blink each time the key is pressed, then it will stay on.

Enter the radio code that you determined is set on your power unit. f you have a "Digital" type of opener, enter the code you wrote down. (Up to 10 digits.)

Press **RADIO LEARN** one more time. The red LED should turn off. If the LED flashes quickly for a few seconds, you will have o re-enter the data because it was not entered correctly.



SETTING THE "ACCESS CODE"

The ACCESS CODE is a 4-digit code picked by you which is used to activate the Codekey unit. The FACTORY SET access code is 1-2-3-4. To change the access code, follow these steps:

A. Press the **ACCESS LEARN** key two (2) times. The red indicating light will blink each time the key is pressed, then it will stay on.

B. Enter the **PRESENT** access code.

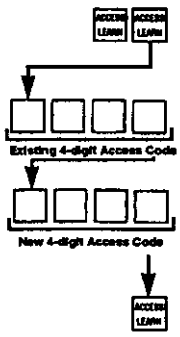
IMPORTANT:

If this is the first time the Codekey is being programmed, enter the **FACTORY SET** code of 1-2-3-4.

If you are changing to a NEW access code, enter the 4-digit access code that was previously programmed.

C. Enter the **NEW** 4-digit access code you selected.

D. Press **ACCESS LEARN** one more time. This eliminates the old access code and installs your new code. If the LED flashes quickly for a few seconds, you will have to re-enter the data because it was not entered correctly.



TO OPERATE YOUR GARAGE DOOR

CAUTION: Door opener will activate during the following steps. Keep pathway of garage door clear.

Plug in your door opener at this time. If you have a **DIGITAL** type of opener, entering the four-digit **ACCESS CODE** you selected will activate your door opener. If you have a **SECURE CODE** type of opener, you must first follow these steps to teach the opener the radio code the Codekey system is sending.

A. Press and release the **LEARN** button located on the rear of the power unit. The red LED indicator above the **LEARN** button and lights on the power unit will come on, indicating the power unit is now in the **LEARN** mode.

B. Immediately enter the four-digit **ACCESS CODE** you selected into the Codekey keypad. The Codekey will send a radio signal to the power unit, then the lights on the power unit will blink two times then turn off.

C. Press ANY key on the Codekey keypad. This will activate the power unit. The power unit "learned" this new radio code.

D. Once the Codekey has been activated, ANY key on the keypad can be used for up to 30 seconds to control the door opener.

TROUBLESHOOTING

If at any time you get confused or forget the existing ACCESS CODE, you can RESET the Codekey to the factory set codes. You do this by pressing both the **ACCESS LEARN** and **RADIO LEARN** buttons together for ten (10) seconds. This will automatically set the ACCESS CODE to 1-2-3-4, and the RADIO CODE to 0-0-0-0. (This is the Secure Code type setting.) To continue, go back to the "SETTING THE RADIO CODE" and SETTING THE "ACCESS CODE" sections of these instructions.

BATTERY REPLACEMENT

The Codekey will always "remember" the last codes you programmed even if the battery is removed. A 9-volt Alkaline battery is used.

F.C.C. STATEMENT

Any changes or modifications in intentional or unintentional radiators which are not expressly approved by the manufacturer could void the user's authority to operate this equipment. This applies to intentional and unintentional radiators certified per part 15 of the F.C.C. rules and regulations.