SDC SECURITY DOOR CONTROLS
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INSTALLATION INSTRUCTIONS
Model 931 EntryCheck™

The 931 EntryCheck™ is an easy to program, easy to use, stand alone, self-contained system with features suitable for basic access control requirements. Providing either a voltage output or dry contact closure, the 931 is designed to control any fail-safe or fail-secure electric locking device.

The 931 EntryCheck™ features one master code and five user codes. Two relay outputs are available to provide a variety of access control configurations including single door operation with an auxiliary output for a CCTV/Light Controller, Gate/Garage Door controller or Doorbell activation.

Any suggestions or comments to this instruction or product are welcome. Please contact us through our website or email engineer@sdcsecurity.com

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SYSTEM SPECIFICATIONS

Input Requirements:	12 to 24V AC/DC
Standby Current Draw:	12V → 10 mA 24v → 25mA
Outputs:	2 SPDT Relay contacts at 6 Amps (120VAC) Voltage or Dry Contact Fail Safe or Fail Secure Replay Configuration
Programmable Output (Door Open Time)	1 to 120 seconds Default → 5 seconds
Latching:	Manual (Toggle On/Off)
# of User Codes:	6 Codes (1 Master, 5 User)
Code Length:	3 to 8 Digits
Default Master Code:	1-3-5-7-9
Tamper Alarm:	25 Incorrect Key Presses
Access Code Protection:	Non-Volatile Memory
Keypad Operating Environment:	-40°C to + 70°C (-40°F to + 160°F) 100 % Relative Humidity
Keypad Dimensions: **5 Pad Non Illuminated** **12-Pad 3x4** **Thinline 2x6**	 KP-2U → 6 ⅝" x 2 ¼" x ½" KP-4U → 5 ⅛" x 3 ⅜" x $^{7}/_{16}$" KP-3U, KP-3Y → 7 ⅛" x 1 ¾" x ¾"
Control Module Operating Enviroment:	-40°C to + 49°C (-40°C to + 120°F) 100 % Relative Humidity
Control Module Dimensions:	7 ½" x 5 ½" x 2 ½"

INPUT REQUIREMENTS

The 931 EntryCheck™ accepts 12 to 24 volts AC/DC. System current draw (maximum):
Standby: 10mA at 12 volts, 25mA at 24 volts
During Operation: 250mA max (with illuminated Keypad)

IMPORTANT: The maximum output current allowed is 1 Amp. Check the specifications of your locking device. Make sure that the locking device and the 931 (250mA) combined draw less than 1 Amp. For locking devices that draw more current, a separate power supply is required. (See Appendix B pg 14)

Note: If connecting DC, make the connections to "DC IN/OUT" instead of "12-24V AC/DC IN" (see Circuit Board Layout pg 13). Make sure the polarity is correct.

OUTPUT CAPABILITIES

The 931 EntryCheck™ provides two SPDT dry contact relays (rated at 6 Amps at 120 VAC). Each relay can be configured to perform one of many different functions depending on the specific access control requirement. User Authorization to control each relay is determined by Setting Relay Options (see System Hardware Setup pg 8). Each relay can be configured for one of the following options:

1. Voltage Output – Fail Safe or Fail Secure Locking Device
2. Dry Contact Output – Control a Gate Operator/Garage Door
3. CCTV OR Light Controller – First key press triggers a 10 second output
4. Doorbell – Press * at the keypad to trigger a 1 second output for a doorbell (not included). This function is only available with a 12 Pad 3x4 or Thinline 2x6.
5. Auxiliary Output – Momentary or Manual Control of an electronic device.

OPERATING TEMPATURES

Operating temperatures can range from -40°C to +70°C (-40°F to 160°F). The 931 is compatible with any of the following Keypad styles/configurations:

KP-4U

KP-2U

KP-3U

KP-3Y

PREPARING FOR INSTALLATION

SYSTEM COMPONENTS

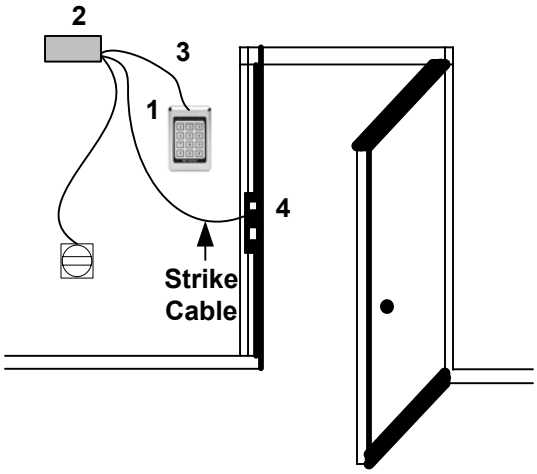
There are four primary components to be installed:

1. The 931 EntryCheck™ should be mounted on the wall adjacent to the door. It should be on the same side as the door strike and about 4 feet above the floor.

2. The Control Module should be mounted inside the building near a power source. Typically the control module is hidden in a false ceiling or closet. The control module must be located in an environmentally controlled area where the temperature remains between -40°C and +49°C (-40°F and 125°F)

3. The Wiring Cable connects the keypad to the control module. It is important not to locate the cable adjacent to any wiring that carries line voltage. Included with the system is a 15-foot TWC-15 12 conductor jacketed wiring cable of which only 11 wires are used. If the Control Module must be located further than 15 feet from the Keypad, additional cable may be spliced. The maximum distance between the Keypad and the Control Module must not exceed 1,000 feet. For runs over 200 feet, 18 gauge wire should be used. Under 200 feet, 20 gauge is acceptable.

4. The Electric Strike/Other Locking Device (not included) connects to the 931's Main Relay output via the strike cable. (See Appendix B - Typical Wiring Diagrams pg 14)



Typical Installation

THE INSTALLATION PROCEDURE

REQUIRED TOOLS

You will need the following tools:

- Medium Phillips screwdriver
- ⅛" standard screwdriver
- Drill
- ⅞" or 1" (25mm) drill bit
- ½" (16mm) drill bit
- $^{5}/_{32}$" (4mm) drill bit (For 12 Pad 3x4)
- $^{3}/_{16}$" (6mm) drill bit (For 5 Pads & Thinline 2x6)

PREPARE THE KEYPAD FOR INSTALLATION

There are different procedures for mounting each Keypad. Locate the Keypad part number on the back of the Keypad and follow appropriate mounting instructions below. Keypad templates are included with each Keypad (except KP-4U) to assist with the installation.

Mounting Instructions 5 Pad Non Illuminated: KP-2U

1. Select flat mounting surface 3" X 7".
2. Use “Template A” (included with the Keypad) to mark locations of holes A, B, and C.
3. Locate and drill the large hole marked “A”. Hole must be at least ⅞" (22mm) diameter.
4. Hold the Keypad against the wall with the connector through hole “A”. Check markings for hole “B”. Re-mark if required. If using plastic anchors, drill hole “B” using $^{3}/_{16}$" (6mm) bit. NOTE: Plastic anchors are provided for some mounting applications. If anchors are not used, holes “B” and “C” must be smaller than $^{3}/_{16}$".
5. Using the template, verify the hole marked “C” is aligned and then drill hole “C”.
6. Install the metal mounting bracket into hole “C” with the screw provided.
7. Do NOT mount Keypad at this time.
8. Proceed to Install the Wiring Cable.

Mounting Instructions 12 Pad 3x4: KP-4U

The 3x4 keypad is designed to mount to a single gang switchbox or on a wall, pedestal or any flat surface of at least 3 ½” by 5 ¼”. The composition of the mounting surface will determine the fastening method required. If mounting to a surface other than a switchbox:

1. Select a flat surface (3 ½” by 5 ¼”) near the door where you wish to install the keypad.
2. Drill the large hole for the Keypad connector using a ⅞” (25mm) drill bit.
3. Place the connector on the back of the keypad in the large hole. Mark the keypad mounting holes.
4. Drill clearance holes in accordance with fastening method used. (If mounting to wood, drill small pilot holes and use #6 flat head wood screws provided. If mounting to metal, drill two $^{5}/_{32}$" clearance holes for #6 flat head machine screws provided.)
5. Do NOT mount the keypad at this time.
6. Proceed to Install the Wiring Cable.

Mounting Instructions Thinline 2x6: KP-3U and KP-34

The KP3 2x6 is designed for mullion mount applications. It can also be mounted on a wall, pedestal or any flat surface of at least 1 ¾” by 7”. The composition of the mounting surface will determine the fastening method required:

1. Select a flat surface (1 ¾ ” by 7”) near the door where you wish to install the keypad.
2. Using the Thinline template, mark location of holes.
3. Drill the large hole using a 1” (25mm) drill bit.
4. Place the connector on the back of the keypad in the large hole to verify that the mounting holes are aligned. Make adjustments if necessary.
5. Drill mounting holes in accordance with fastening method used. If mounting to wood, drill small pilot holes and use #6 flat head wood screws provided. If mounting to metal, drill two $^{5}/_{32}$" clearance holes for #6 flat head machine screws provided.
6. Do NOT mount the keypad at this time.
7. Proceed to Install the Wiring Cable.

INSTALL THE WIRING CABLE

1. Drill a ½" hole in the inside wall or ceiling where you want the cable to come through.

2. Pull cable through hole so the connector end goes to keypad. Route so there is minimal cable at the keypad.

Note: Supplied with the system is a 12-conductor cable designed to connect keypad to control module. You will also need a 3-conductor cable (not included) to connect control module to electric strike or other locking device.

MOUNT THE KEYPAD

1. Attach the wiring connector to the Keypad.

2. Attach the Keypad to the wall.

3. Do NOT mount the Keypad until the system is programmed and tested.

PREPARE THE DOOR FOR THE ELECTRIC STRIKE

Follow these instructions only if you are using an electric strike to unlock the door. If you are using the relay to activate a garage door, automatic gate, etc., skip this section. The new electric strike should be checked to verify compatibility with existing door hardware prior to installation.

1. Remove existing strike.

2. Follow directions included with the strike for preparing the doorjamb.

3. Do NOT mount the strike at this time.

INSTALLING THE CONTROL MODULE

1. Connect the Wiring Cable to Terminal Strip "A" following the color sequence on the circuit board. (see Appendix A pg 13) NOTE: If the wiring cable has been cut shorter than 15 feet, the tan wire will become exposed. The tan wire is NOT used with the 931 EntryCheck™.

2. Connect 12 to 24 Volts AC to Terminal Strip "B" to screws marked "12-24V AC/DC IN". If using an external AC Adaptor, connect BLUE and BROWN to the 12-24V input screws. Connect GREEN to the "EARTH" screw on Terminal Strip "A". Plug adapter into a grounded (three terminal) receptacle.

Note: If connecting DC, make connections to "DC IN/OUT" instead of "12-24V AC/DC IN". Be sure polarity is correct.

IMPORTANT: The "EARTH" screw terminal on Terminal Strip "A" should be connected to a true earth ground for proper system protection and operation.

CONNECTING THE LOCKING DEVICE

Connect the electric locking device to Terminal Strip "B" as outlined in the Typical Wiring Diagram (see Appendix B pg 14). Any 3 conductor, 18 gauge wire can be used to connect the Control Module to the Locking Device. Included with each system are two MOV's (metal oxide varistor). The function of the MOV is to absorb any inductive kickback from the locking device, protecting the circuit board. The MOV's have been installed under the relay contact screws and can be left there for normal "FAIL SECURE" lock operation. For "FAIL SAFE" locks, move one leg from the "N.O." screw to the "N.C." screw (see Appendix B). **If possible, install the MOV closer to the electric lock.** If switching voltages higher than 36V, remove the MOV. To provide proper grounding, connect the 3rd wire from the body of the locking device to the "EARTH" screw on Terminal "A"

BATTERY BACKUP

Battery backup is NOT required for User Code retention, however, you may wish to connect a SDC Power Supply with battery backup to provide operation during a power interruption.

SYSTEM HARDWARE SETUP

REMOTE BY-PASS

In some cases, it may be necessary to control the door from a remote area such as a security station or reception desk. The 931 EntryCheck™ provides for a Remote By-Pass (Exit Switch) or Keypad override. This can be accomplished by connecting a normally open switch to the "REMOTE" screw terminals on the circuit board (See Appendix A pg 13). When the Remote By-Pass switch is depressed, the contact bypasses the Keypad and activates the relay tied to "1, 2 UNLOCK" (see Setting Relay Options). The relay is activated for the same time length as the programmed Door Open Time (see Programming Door Open Time pg 11).

ANTI-TAILGATING

Some security applications require stricter door monitoring. Anti-tailgating can be accomplished by installing a normally closed door monitor switch to the "DOOR MONITOR" screw terminals on the circuit board (Appendix A). This switch may be the output of a latch monitor switch, a monitor maglock or an alarm switch that senses door movement. When this switch opens, it will relock the door.

(**Note:** If door monitor switch is NOT used, you must jump the "MONITOR" screw terminals with factory installed wire.)

SETTING RELAY OPTIONS

The 931 provides a variety of options for configuring both relays. These options include User Unlock Authorization, Latching Authorization and CCTV/Doorbell setup. Configuring these options is accomplished by setting jumpers on the Control Module circuit board. To set relay options, first locate the relay jumpers (3 rows of 7 pins). Next to each set of three pins, there is a description of the option to be configured. Placing jumpers across the 1st & 2nd pins, the 2nd & 3rd pins or no pins at all determines how each option is configured.

To set an Option for **Relay #1** Place jumper across 2nd & 3rd pins.
To set an Option for **Relay #2** Place jumper across 1st & 2nd pins.
To set an Option for **No Relay** Don't place jumper across 1st & 2nd or 2nd & 3rd pins.

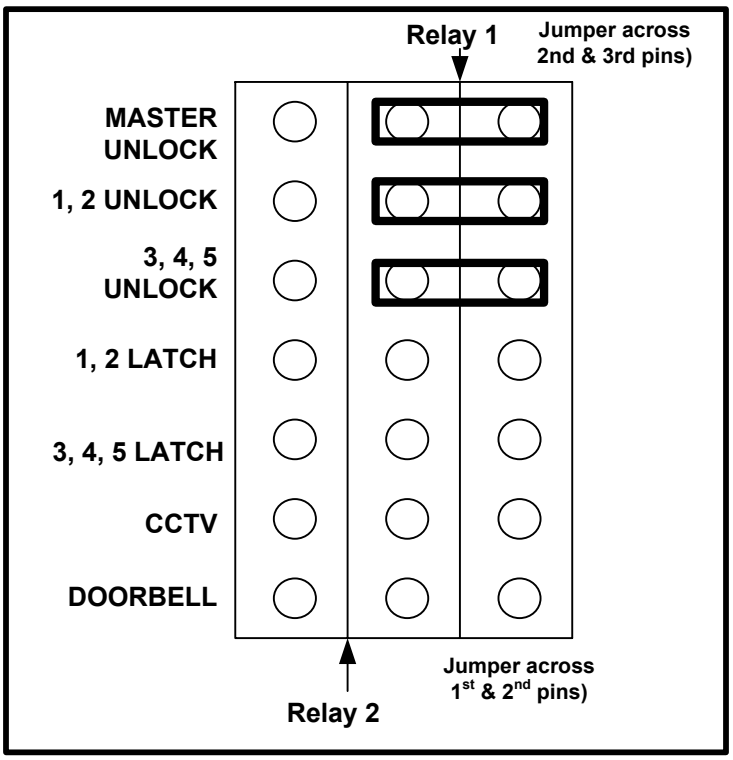
The Factory Default Settings are shown here:

1. All User Unlock Authorization is configured for Relay #1 (Master Code and Users 1,2 and Users 3,4,5).

2. No Code is set for Latching Authorization of either relay.

3. Neither CCTV nor DOORBELL is active.

Factory Default Settings



USER UNLOCK AUTHORIZATION

Placing jumpers across the first 3 sets of pins (MASTER UNLOCK, 1,2 UNLOCK or 3,4,5 UNLOCK) determines which relay (if any) each User Group is authorized to activate. When a valid code is entered, the door will remain unlocked for the programmed Door Open Time. (See Programming Door Open Time pgs 13-14)

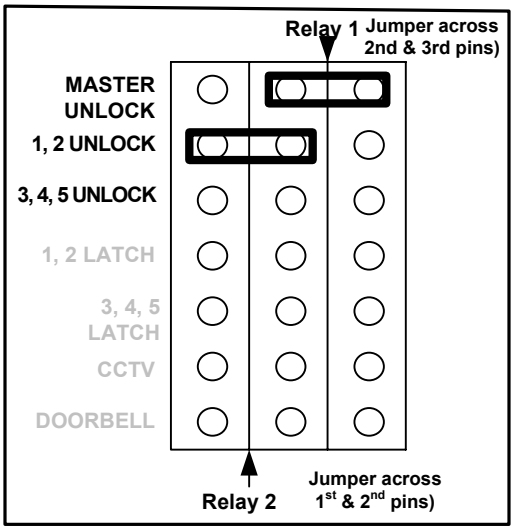
Example:

1. Placing a jumper across the 2nd and 3rd pins of the "MASTER UNLOCK" option allows the master code to activate (unlock) Relay #1.

2. Placing a jumper across the 1st and 2nd pins of the "1,2 UNLOCK" option allows User Code 1 and User Code 2 to activate Relay #2.

3. Leaving a jumper off the "3,4,5 UNLOCK" option prevents User Code 3, User Code 4 and User Code 5 from activating either relay.

Ex: User Unlock Authorization



LATCHING AUTHORIZATION

Placing jumpers across the 4th and 5th set of pins (1,2 LATCH or 3,4,5 LATCH) determines which relay (if any) each User Group is authorized to manually latch.

How to Latch

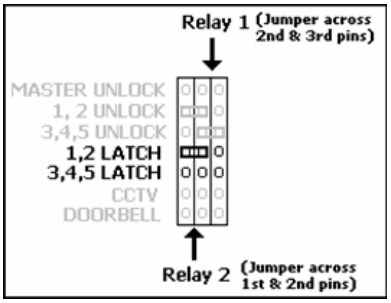
When a valid code is entered on the keypad followed by "7", the Latch Authorization relay for that particular User Group will energize and remain energized until a valid code followed by "7" is entered again.

Example:

1. Placing a jumper across the 1st and 2nd pins of the "1, 2 LATCH" option allows User 1 and User 2 to Latch Relay #2.

2. Leaving a jumper off the "3,4,5 LATCH" option prevents User 3, User 4 and User 5 from latching either relay.

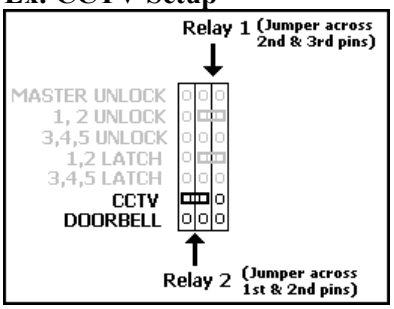
Note: Because the Master Code is primarily used to program User codes, the Master Code does not have Latching Authorization.



CCTV/Doorbell Setup

Placing jumpers across the 6th or 7th set of pins (CCTV or DOORBELL) determines which relay (if any) will be used to activate a CCTV or Doorbell.

Ex: CCTV Setup



CCTV Operation

If either relay is configured to activate a CCTV, any key press on the Keypad triggers a 10 second output.

Doorbell Operation

If either relay is configured to activate a doorbell, pressing * at the Keypad triggers a 1 second output. (Doorbell only functions with KP-4U, KP-3U, and KP-3Y.

TAMPER ALARM LOCKOUT

A person attempting to gain entry by guessing the code and pushing 25 wrong digits will cause the 931 EntryCheck™ to go into tamper alarm mode. The Keypad will beep constantly for 30 seconds during which time the door will remain locked and no keypad functions can be performed.

SYSTEM PROGRAMMING

OVERVIEW OF SYSTEM CODE PROGRAMMING

1. There are TWO levels of codes for the 931 EntryCheck™ system.
   a. The Master Code (used to open the door and for programming User Codes)
   b. User Codes (used by personnel to open the door)
2. All codes must be 3 to 8 digits.
3. All codes must be different from each other.
4. 5-Pad Keypads have two digits on each pad. The system reads these numbers as the same. For example: 1-3-5-7-9 is the same as 2-4-6-8-0.
5. Do not program codes, which are part of other codes. For example: User Code 1 ⟶ 1-2-3-4-5 and User Code 2 ⟶ 1-2-3
6. During programming, the system resets after 5 seconds if a number is not entered. Do not let more than 5 seconds elapse between entries or the system will reset and you will have to start over.

OVERVIEW OF THE MASTER CODE

Knowledge of the Master Code is the highest privilege granted to a user of the 931 EntryCheck™ system. There is only one master code, which is used to program each of the 5 User Codes. The factory default Master Code, "1-3-5-7-9", can be used for initial programming but should be changed to a unique 3 to 8 digit code.

The Master Code can be configured to activate either Relay #1 or Relay #2 depending on how the system hardware is set up (Setting Relay Options pgs 8-9). However, the Master Code cannot be configured to Latch either relay.

PROGRAMMING THE MASTER CODE

To Program/Change the Master Code:

1. Select a 3 to 8 digit code that will be used for the Master Code.

   ___ ___ ___ ___ ___ ___ ___ ___

2. Locate the Control Module, remove the cover and locate the "PROGRAM" switch on the circuit board.
3. Press the PROGRAM switch once. (The Keypad will beep rapidly 4 times) Once the PROGRAM switch has been pressed, you have 2 minutes to begin programming.
4. At the Keypad, enter 1-1-1-9 to open the memory (you will hear three rapid beeps) and immediately enter your new Master code. (Do not let more than five seconds elapse between entries or the system will reset!!!)
5. After entering your new code, wait five seconds for the 3 reset beeps.

OVERVIEW OF USER CODES

There are a total of 5 User codes (also called Secondary Codes) that can be programmed into the 931 EntryCheck™. User Codes can vary in length from 3 to 8 digits. Each User Code is programmed into one of 5 User Locations. These Locations are as follows:

User #		User Location
User Code 1	⟶	1-1-1
User Code 2	⟶	1-1-3
User Code 3	⟶	1-1-5
User Code 4	⟶	1-1-7
User Code 5	⟶	1-1-9

Once a User Code has been programmed into a User Location, the User Code can be easily changed or deleted from the system.

Latching and User Code Unlocking Authorization is determined by how each relay is configured. (Setting Relay Options pgs 8-9)

PROGRAMMING USER CODES

To Program a New User Code or Change an Existing User Code:

1. Choose a new 3 to 8 digit code that will be used for this User Code. ___ ___ ___ ___ ___ ___ ___ ___
2. Decide which User Location to place this User Code (see Overview of User Codes)
3. Enter the Master Code, followed by the User Location (you will hear three rapid beeps) and immediately enter the new User Code. (Do not let more than five seconds elapse between entries or the system will reset!!!) Example: (Master Code: 1-3-5-7-9) (User Code: 1-1-1) (User Location: 1-2-3-4)
4. After entering your new code, wait five seconds for the 3 reset beeps.

TO DELETE A USER CODE

1. Enter the Master Code, followed by the User Location of the User Code you want to delete (you will hear three rapid beeps). Example: (Master Code: 1-3-5-7-9) (User Location: 1-1-1)
2. Wait five seconds for the 3 reset beeps (Do not enter <u>any</u> digits until you hear 3 reset beeps)

PROGRAMMING DOOR OPEN TIME **Default 5 seconds**

To Program/Change the Door Open Time for the Master Code and User Code 1 and 2:

1. Determine the length of time you wish to program as the Door Open Time for these users. This is the length of time the door will remain open after a valid Master Code, User Code 1 or User Code 2 has been entered.

Note: For controlling a garage door or electric gate, you will need to set the door open time to 1 second

2. Locate the Control Module, remove the cover and locate the "PROGRAM" switch on the circuit board.
3. Press the PROGRAM switch once*****. (The Keypad will beep rapidly 4 times)
4. At the Keypad, enter 1-1-1-7 to open the memory (you will hear three rapid beeps) and enter a combination of "1's" (for every one second increment) and "5's" (for every five second increment) that equal your desired Door Open Time. Each valid key press (a "1" or a "5") will generate a double beep. (Do not let more than five seconds elapse between entries or the system will reset!!!)

Example: (Function Code: 1-1-1-7) (Time Code: 5-5-5-1-1) ⟶ 17 seconds

5. After entering your Door Open Time, wait five seconds for the 3 reset beeps.

To Program/Change the Door Open Time for User Code 3, 4 and 5: (Rev B and later)

1. Determine the length of time you wish to program as the Door Open Time for these users. This is the length of time the door will remain open after a valid User Code 3, User Code 4 or User Code 5 has been entered.

Note: For controlling a garage door or electric gate, you will need to set the door open time to 1 second

2. Locate the Control Module, remove the cover and locate the "PROGRAM" switch on the circuit board.
3. Press the PROGRAM switch once*****. (The Keypad will beep rapidly 4 times)
4. At the Keypad, enter 1-1-1-5 to open the memory (you will hear three rapid beeps) and enter a combination of "1's" (for every one second increment) and "5's" (for every five second increment) that equal your desired Door Open Time. Each valid key press (a "1" or a "5") will generate a double beep. (Do not let more than five seconds elapse between entries or the system will reset!!!)

Example: (Function Code: 1-1-1-5) (Time Code: 1-1-5) ⟶ 7 seconds

5. After entering your Door Open Time, wait five seconds for the 3 reset beeps.

***** Once the PROGRAM switch has been pressed, you have 2 minutes to begin programming. You will hear a double beep with each valid key press. Once you begin entering the combination of 1's and 5's do not let more than five seconds elapse between entries or the system will reset!!! Maximum Door Open Time is **120 seconds**.

TROUBLESHOOTING

These are a few troubleshooting suggestions to help assist with any problems you may experience. If the problem continues or is not answered here, please call Security Door Controls (SDC) technical support at (800) 413-8783. You can also visit SDC anytime at www.sdcsecurity.com.

I Changed or Deleted a code, but the old code still unlocks the door
Remember there are a total of 6 User Codes for the 931 EntryCheck™. Make sure you changed the desired code. If you changed the Master Code, the other User Codes will still work. If in doubt, it is recommended you reprogram the master code and delete all 5 user codes. Then program any new user codes. (See System Programming Pg 12)

The Keypad beeps normally but the door does not unlock

For a new installation:

1. Check the specifications of your power supply and locking device. (See Input Requirements pg 4.)
   Note: If you are connecting 12/24VDC, make the connections to "DC IN/OUT" instead of "12-24VAC/DC IN" (see Circuit Board Layout - pg 13). Make sure polarity is correct.

2. Test the wiring hookup to the primary locking device (the device connected to User Code 1, 2 Unlock).
   On the control module circuit board, locate and momentarily short the screws for "REMOTE" (See pg 13). This will activate the output (same as if you enter a valid programmed code at the Keypad).

If this test does not activate the lock, check the lock wiring (see Typical Wiring Diagrams pg 14). If your wiring is correct, check the 931 relay settings (see Setting Relay Options pgs 8-9). If this test does activate the output (you should hear the relay click and the locking device should unlock), reprogram the Master Code and User Codes. Review Overview of System Code Programming (pg 12). Remember that all six codes have to be different from each. It is also important not to let more than 5 seconds elapse between button presses or the system will reset and you will have to start over.

For an existing Installation:
There are typically two reasons for code loss: static or inductive kickback. There is no way to determine if the system has been affected by either of these, however, you can reprogram the system codes as described in User Code Programming. It is very important the system is properly grounded and the MOV has been installed, otherwise static and code loss may be an ongoing problem.

The Door opens with the first press on the Keypad
If the unit has just been installed, check the CCTV jumper (see Setting Relay Options pg 8-9). If you do not have a CCTV connected to the 931 EntryCheck™, make sure the CCTV jumper is NOT installed across the 1st and 2nd pins or the 2nd and 3rd pins.

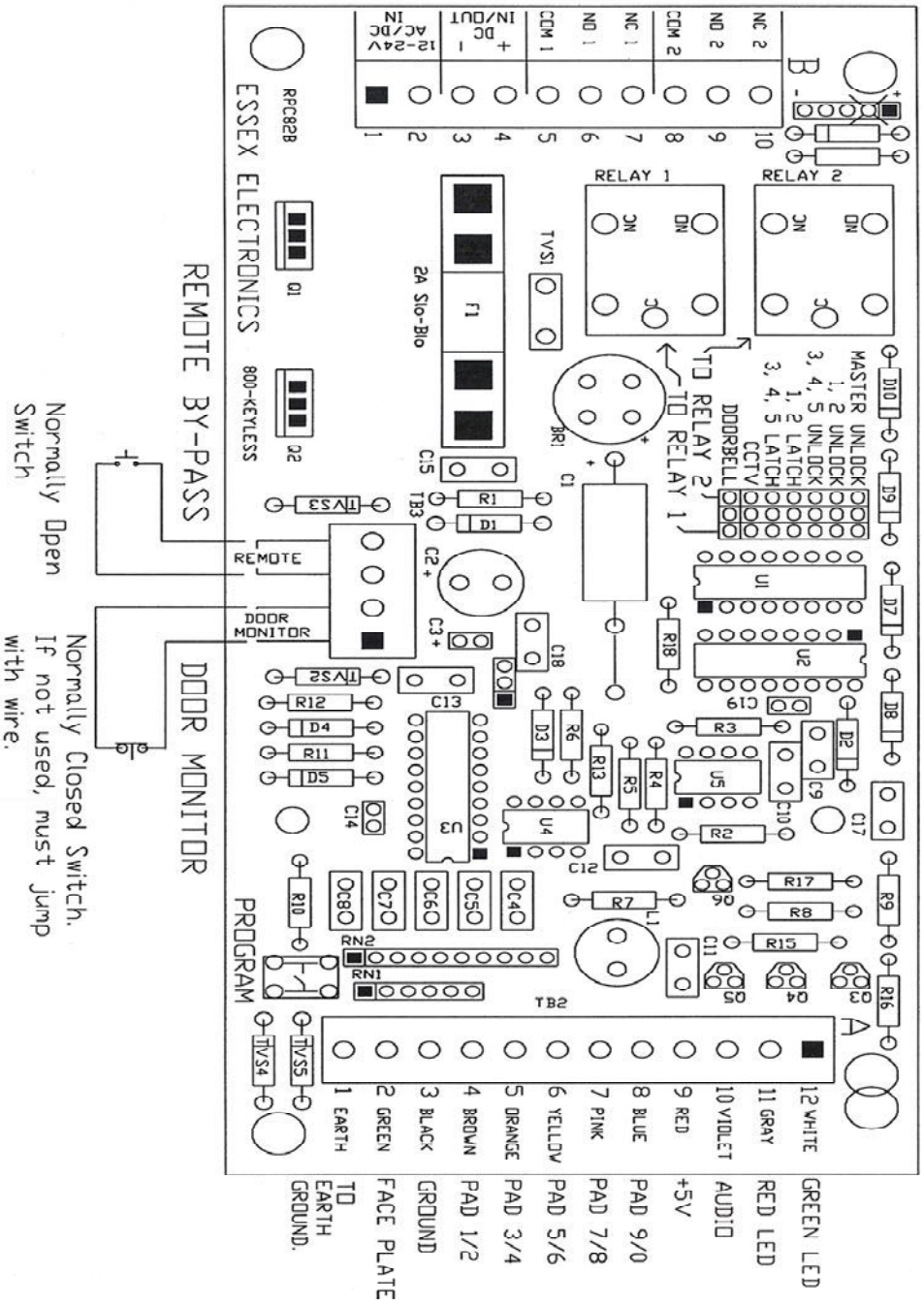
Keypad is completely dead
Interrupted Power - First check your power supply to see that power has not been cut off. Using a voltmeter, check the incoming voltage on terminal strip “B” (12-24V AC/DC IN). If the voltage reads low, the electric locking device may be drawing too much current. To test, remove the wires to the device and recheck the voltage. If the voltage now reads normal, check the current draw of the locking device and make sure it falls within the system specifications (see Input Requirements pg 4).

Blown Fuse - Check the fuse on the circuit board. The purpose is to protect the power supply and circuitry. If your locking device is drawing too much current or there is a short, the fuse will blow. Replace with 2 Amp Slo Blo only. A spare fuse is provided in the spare parts kit. Although the fuse may appear intact, it is best to check with a voltmeter.

Keypad beeps all by itself
Constant Beeping - If the beep is consistently every 5 seconds, put a **.**1*uf* 16v (or higher) ceramic capacitor across wires 3 & 10 (black, violet) on terminal strip “A”.

Random Beeping - Check for bad circuit ground going to the keypad. Is the black wire from the wiring cable securely fastened to screw #3 on Terminal A? Check for bent pins on the back of the keypad. Also check EARTH ground.

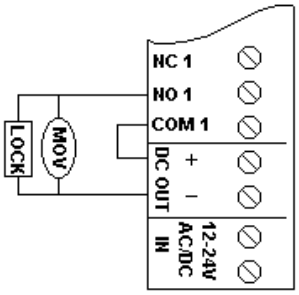
APPENDIX A – CIRCUIT BOARD LAYOUT



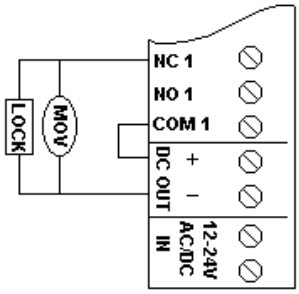
APPENDIX B – TYPICAL WIRING DIAGRAMS

Note: Some low current strikes or relays will cause relay chatter due to inductive kickback. Attach MOV across strike or relay to eliminate chatter.

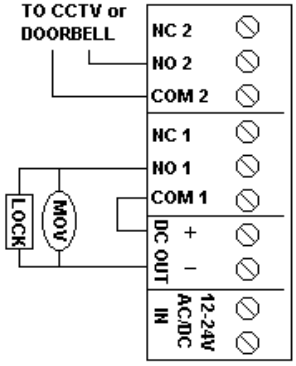
Fail Secure Lock



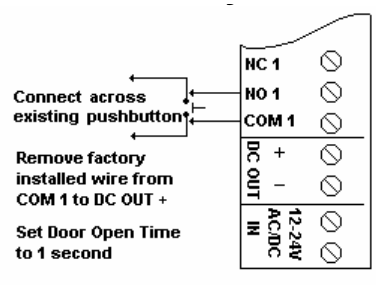
Fail Safe Lock



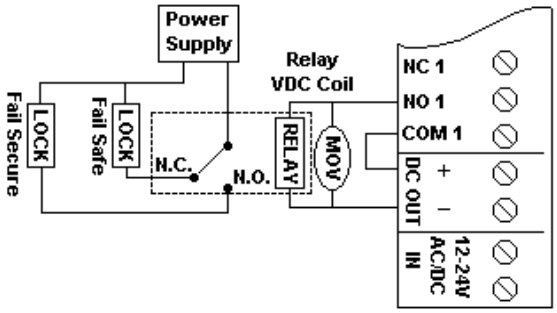
CCTV/DOORBELL and Fail Secure Lock



Garage Door/Gate Drive



Fail Safe or Fail Secure Lock Powered by External Power Supply



NOTES

Master Code __ __ __ __ __ __ __ __ User Name_____

Master Code 1 __ __ __ __ __ __ __ __ User Name_____

Master Code 2 __ __ __ __ __ __ __ __ User Name_____

Master Code 3 __ __ __ __ __ __ __ __ User Name_____

Master Code 4 __ __ __ __ __ __ __ __ User Name_____

Master Code 5 __ __ __ __ __ __ __ __ User Name_____