SDC SECURITY DOOR CONTROLS

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917 QUICK REFERENCE/WORKSHEET

NOTE: [ ] means press keys simultaneously
Factory Default Master Code is 1234
Make all electrical hookups per drawings in Installation Instructions

Basic Programming:

1. Enter program mode	Press [*1] Master Code *	Default Master Code is 1234
2. Program User code:	Press [*1] Master Code * [*2] User Number **# PIN Code * PIN Code ***	User Number from 2-120. PIN code up to 6 digits
3. Assign User to Main Relay 0:	Press [*1] Master Code * [*0] User Number **# 0 ***	Users can be assigned to Relay 0, & outputs 1-3
4. Set Main Relay time:	Press [*1] Master Code * [*3] User Number of seconds **# 0 ***	Time (1-225 sec.)
5. Assign REX to Main Relay:	Press [*1] Master Code * [*4] **0 ***	REX can be assigned to Relays 0, & outputs 1-3

Addtional Programming

6. Delete User:	Press [*1] Master Code * [*2] User Number **# * ***	Deletes user
7. Change Master Code:	Press [*1] Old Master Code * [*2] 1**#** New Master Code * New Master Code *	Master code is User 1 **Remember the new Master code.**
8. Reset to factory default settings: **BEWARE! ERASES MEMORY**	Press [*1] Master Code * **Press** [*9] *	Erases memory
9. Master Reset **BEWARE! ERASES MEMORY**	Press *, *red* LED will turn on Touch wire on Pin 10 (GRY/BLK) to wire on Pin 12 (ORG/BLK) *yellow* LED will turn on. Release wires. After 2-3 seconds the *green* LED will turn on.	Erases all memory & returns to factory default Master code of 1234.

Note:
If you make an input error before entering *: wait 5 seconds and the command memory will be cleared automatically (or press # to clear manually). Start again.
Five operating errors within 60 seconds will trigger the Auto Lockout function which disables the keypad for 4 minutes and 15 seconds (255 seconds).

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

917 EXAMPLE PROGRAMMING

The following steps will set the 917 to:

- **User code – 1493**
- **Unlock for 3 seconds**
- **Enable REX switch input**

NOTE: [ ] means press keys simultaneously

Programming:	**Action**
1. [*1] **1234*** [*2] **11#1493*1493***	Enters Programming Mode & Assigns User 11 the PIN code of 1493 Master code is (1234) [*1] means * and 1 keys pressed simultaneously
2. [*1] **1234*** [*0] **11#0***	Enters Programming Mode & Assigns User 11 (PIN 1493) to Main Relay 0
1. [*1] **1234*** [*3] **3#0***	Enters Programming Mode & Main Relay Timer 0 set for 3 second unlock time
1. [*1] **1234*** [*4] **0***	Enters Programming Mode & Assign REX to Main Relay 0

Try the new code: Press 1493*

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917 ENTRYCHECK STAND-ALONE KEYPAD INSTALLATION INSTRUCTIONS

Description:

The 917 EntryCheck keypad operates on 12 or 24 volts AC or DC. It offers over 1,000,000 possible user codes – from one to six digits – to it's 120 users and has a non-volatile EEPROM memory.

Understanding the LEDs:

The three colored lights above the keypad (LEDs) provide information on the state of the unit. NOTE: A 'slow' flash is once every two seconds, and a fast flash is once every second.

Green LED:

STEADY: Power on, no errors and no outputs are active.
SLOW FLASHING: No errors, at least one output is active.
FAST FLASHING: Keypad is programming mode.

Red LED:

STEADY: General error condition (usually caused by an input error such as entering an invalid user code): try again.
SLOW FLASHING: Error condition, at least one output is active.

Yellow LED: For ADA requirements, the yellow LED keypress indicator can be enabled during programming. See the **[*6]** programming option for more details.

Red & Green LEDs Alternately Flashing: Keypad is in SELF-TEST DIAGNOSTIC MODE.

Self-test Diagnostics Mode

- Enter the following sequence: **1 2 3 4 5 # 6 7 8 9 0 *.** The *red* and *green* LEDs should be alternately flashing. You do not need to be in programming mode or know the master code to run the self-test feature.
- This test the keys, the LEDs, the microprocessor, and the keypad memory.
- After the test, either the *red* LED will indicate an error or the *green* LED will show that no error was detected.
- The keypad will resume normal operation once the red or green LED status has been displayed.

Using This Manual

First, brackets and spaces are not part of the codes. They are used here to clarify the operations and group like functions. Square brackets are used to indicate that the keys inside the brackets are to be pressed at the same time (requiring two keys to be pressed simultaneously reduces the chance that someone will accidentally get into programming mode). When entering a code in brackets, first press the star key and, while holding down the star key, press the second key. Release them both together.

Using This Keypad

Each user on the system is assigned two different codes/numbers. The first code is the user number. This number (from 1 to 120) is used to keep track of who is assigned to the system. All leading zeroes are ignored. The second code is the PIN code (Personal Identification Number). This is a 1 to 6 digit programmable code that the user will enter into the keypad to activate certain functions. This code can have leading zeroes as part of the code. This information is recorded and stored in a safe place for future use. The keypad can support a total of 120 users (user number 1 belongs to the Master User with a default PIN number of **1 2 3 4**).
Recognizing the User: Because of the different PIN code lengths that can be assigned to each user, it is necessary for the user to press the (*) key after the PIN code has been entered. That tells the electronics to verify the number entered. If the number entered is validated, the outputs assigned to the user will be activated. For example, to operate the keypad using the default master code of **1 2 3 4** (the only code that is pre-programmed with the unit) enter **1 2 3 4 *.** While the door is unlocked, or whatever job your unit is to perform, the *green* LED will blink at a slow rate.

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

How to Program Your 917 Keypad

Keep careful track of user numbers, whom they are assigned to, assigned outputs, etc. as you program them. Keep the list in a safe place. Press the buttons firmly. If you will be programming many things at once, it may save time to temporarily assign a simple one-digit Master Code. Be sure to change back when you're finished to avoid compromised security. Whenever the ***** and any other character are included in brackets **[*x]**, press the ***** first and, while holding the ***** down, press the other key. Release them both together.

[*1] Enter Program Mode *(First Step)*
Press ***** and 1 at the same time. Enter the Master Code (**1 2 3 4** is the factory default) then *****. The *green* LED should now be rapidly flashing.

For example: **[*1] 1 2 3 4 *** will put you in the program mode. This must be done for each program change.

[*2] Add/Change/Delete User *(To add or change a User Code)*
First, enter program mode (see first step).
Enter [*2], then the user number you wish to add or change (from 1 to 120 inclusive) followed by **#**, then the new PIN code (up to 6 digits) followed by *, then the new PIN code again, followed by * (for verification).

For example: **[*2] 4 4 # 2 1 2 5 *2 1 2 5 *** will assign a user number of 44 and a PIN code of 2125.
NOTE: [*2] 1# 38714* 3874* will change the Master Code to 38714. Do not forget it.

To delete a User Code:
First, enter program mode (see first step).
Enter **[*2]**, then the user number you wish to delete (from 2 to 120 inclusive), then press **#**, then *****, then *****.

For example: **[*2] 7 5 # * *** will delete the PIN code and all assignments for user number 75

NOTE: The Master Code, which is the PIN code for user number 1 cannot be deleted but it may be changed.

[*3] Programming the Output (0-4) Timers
The output time is how long an output remains active when triggered. The range is 0 to 255 seconds (maximum of 4 minutes 15 seconds). If a time of 0 is entered, the output will toggle on/off each time it is triggered or give a brief pulse as noted below.

Timer OUTPUT assignments:

TIMER	TIME = 0	DEFAULT
Timer /Out0 (Main Relay)	Toggle	5 sec
Timer /Out1	Toggle	15 sec
Timer /Out2	Toggle	25 sec
Timer /Out3	Toggle	35 sec
Timer /KeypadActive	7 msec pulse	10 sec

To change an output time:
First, enter program mode (see first step).
Enter **[*3]**, then the time (0-255 seconds) followed by **#**, then the output (0-6) followed by *****.

For example: **[*3] 3 0 # 0 *** will assign a time of 30 seconds to Output 0. Please note that you may change only one output timer at a time.

[*4] Programming the Remote Trigger
The Remote Trigger activates the assigned Outputs at the press of a remote doorbell-type button (momentary contact). A typical use would be as a request-to-exit or it could be activated by a guard in response to a Panic signal (see below) after verifying a person is authorized to enter a secure area. There are four possible outputs: **0, 1, 2**, and **3**. The Remote Trigger also activates the Key-Active output like any normal key.

To select the Remote Trigger outputs:
First, enter program mode (see first step).
Enter **[*4]**, then the outputs (023, 03 or 12 etc.) you wish the Remote Trigger to activate, followed by the *. The choices for Outputs are: 0, **1, 2,** and **3**. If no outputs are entered, Remote Trigger will be disabled.

For example: **[*4] 0 2 *** will cause Remote Trigger to energize outputs 0 and 2.

NOTE: **[*4] *** will disable the Remote Trigger as no outputs are assigned to it.

Please note that the default is all outputs active (**0, 1, 2** and **3**).

[*5] Programming the Panic Outputs
The Panic function triggers up to four outputs when the (*) and the (#) keys are pressed together. If used outside the door, it can be used to alert security that someone without a valid code seeks entry. If used inside the door, it can act as a remote trigger. To comply with NBFAA false alarm guidelines, this method of triggering an output should not be used to send panic signals to a remote monitoring station.

To select the Panic outputs:
First, enter program mode (see first step).
Enter **[*5]**, then the outputs (013, 23 or 12 etc.) you wish the Panic to trigger, followed by the **(*)**. The choices for outputs are 0, 1, 2, and 3. If no output is entered, the Panic function will be disabled.

For example: **[*5] 0 1 2 3 *** will assign outputs 0-3 to the Panic function.

[*5] 3 * causes output 3 to be assigned to the Panic function.

NOTE: **[*4] *** Output 3 is active as a factory default for the Panic function.

[*6] Programming the *Yellow* LED: On/Off
When on, the yellow LED lights when any key is pressed.

First, enter program (see first step).
Enter **[*6]** then 1 or 0 (1 enables the *yellow* LED and 0 disables it), then ***.**
For example: **[*6] 0 *** will turn the *yellow* LED off (the default is ON).

[*7] Enable/Disable ALL PIN code Access
When disabled, no PIN (including the Master Code) will activate the outputs. Programming functions, Remote Trigger and Panic are not disabled. This can be used to immediately control all access while changing selected user codes in case of a security problem.

To disable all user access:
First enter program mode (see first step).
Enter **[*7]**, then 0 or 1 (0 to disable user access and 1 enables it), then ***** (the default is ENABLED).

For example: **[*7] 0 *** will disable all user codes.
[*7] 1 * will re-enable all user codes.

[*8] Programming the Keypad Active Output: On/Off
When on, the first key pressed for any reason triggers the Output 4 for the length of time set above. It is intended to activate an overhead light, surveillance camera etc..

To program the Keypad Active Output:
First, enter program mode (see first step).
Enter **[*8] 0 *** then 0 or 1 (0 for ON or 1 for OFF) then ***.**

For example: **[*8] 0 *** will disable Keypad Active (the default is ENABLED).

[*9] Erase Keypad Memory/Reset ALL to Factory Default Settings (use with caution).
This is used when most or all or the programming has to be changed, as when a keypad has been moved to a new location.

To reset all programming to factory defaults:
First, enter program mode (see first step).
Enter **[*9]** then ***.**

For example: **[*9] * will immediately and permanently clear the entire memory. There is no reprieve. Be careful.**

[*0] Assign Selected Outputs to Users
This will allow you to assign any combination of the four Outputs. If no Outputs are selected, then all Outputs will be disabled for this user number. This feature can be used to temporarily disable a user without having to delete the user from the memory.

First, enter program mode (see first step).
Enter **[*0],** then (UID code) followed by **#**, then desired Outputs, (0 to 3) followed by ***.**

For example: **[*0] 1 0 9 # 0 2 3 *** will assign Outputs 0, 2 and 3 to User 109.
[*0] 6 4 # * will assign assign no outputs to User 64.

Troubleshooting Tips:

- If you make an input error (e.g. if you enter a non-existent User Code) and press the star key, the *red* LED will light. Simply start over.
- Do not make the mistake of thinking you have to 'clear' the *red* LED if you make an error. Just re-enter the correct number. The *red* LED will clear automatically.
- If you make an input error before entering *; wait 5 seconds and the command memory will be cleared automatically (or press # to clear manually). Start again.
- Five operating errors within 60 seconds will trigger the Auto Lockout function, disabling the keypad for 4 minutes and 15 seconds (255 seconds).
- Be sure you are pressing the buttons firmly. The *yellow* LED should come on with each key pressed, unless that feature has been disabled.

Factory Default Settings:

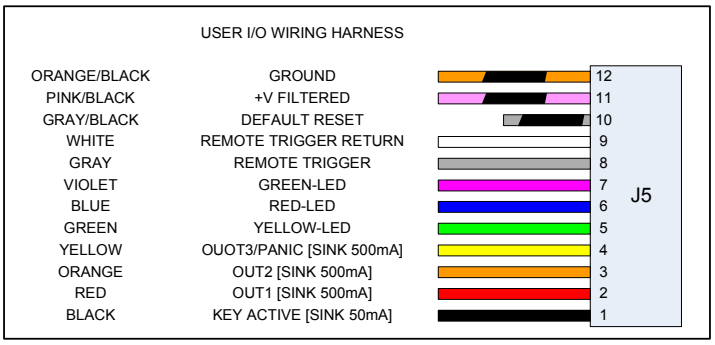
If the settings have not been changed after shipment, or if they have been reset, they are as follows:

- Master Unit #1 – Code is **1 2 3 4.**
  Remote Trigger will activate Main Relay/Output 0, Output 1, Output 2 and Output 3.
- Panic Trigger will activate Output 3.
- All Outputs are set for a timed Operation:
  Main Realy/Output 0 = 5 seconds
  Output 1 = 15 seconds
  Output 2 = 25 seconds
  Output 3 = 35 seconds
- Yellow LED/Sounder enabled.
- Keypad Active enabled.

NOTE: Whenever the ***** and any other character are included in brackets **[*x]**, press the ***** first and, while holding the ***** down, press the other key. Release them both together.

Notes:
Keeping records: the User number (1-120) is not the same as the PIN CODE. You should keep a record of your User numbers vs. User names.

The correct use of the green LED is to indicate an entry is unlocked. If the installation does not use a separate annunciator/light to indicate to the end-user the the entry is unlocked, it is important that all PIN codes be programmed to activate only one output (Door Lock). If more than one output is needed, such as an ALARM disable, then both outputs should be programmed for the same time-out to avoid any confusion by the next user.

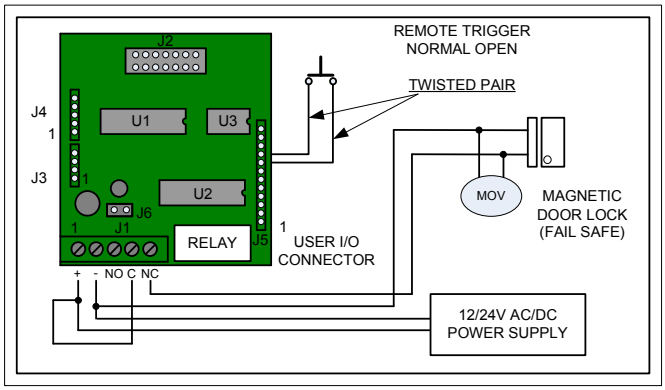


Installation Tips:

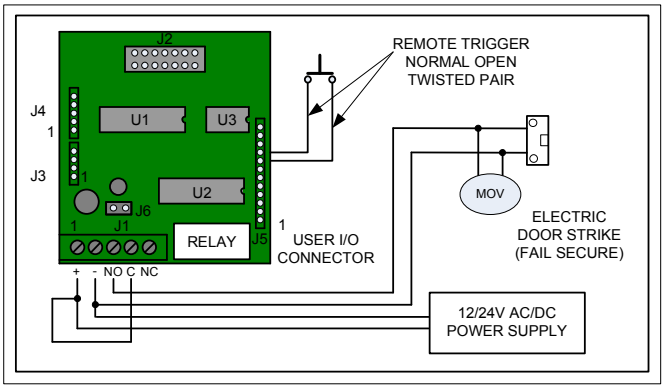
System Wiring Recommendations

- The REMOTE TRIGGER LINE should be wired with either TWISTED-PAIR wire or SHIELDED wire to reduce the chance of noise problems. If using SHIELDED wire, tie the shield to the ground at one end only – preferably the power supply ground.
- All ground and signal return line should terminate at only one place, that being the POWER SUPPLY GROUND. This will keep GROUND CURRENT noise to a minimum. This can be in the form of a common ground lug near the power supply or Alarm Control Panel.
- **Install MOV device as close to the actuator (door lock, etc.) as possible to prevent kickback voltage from damaging the keypad.**

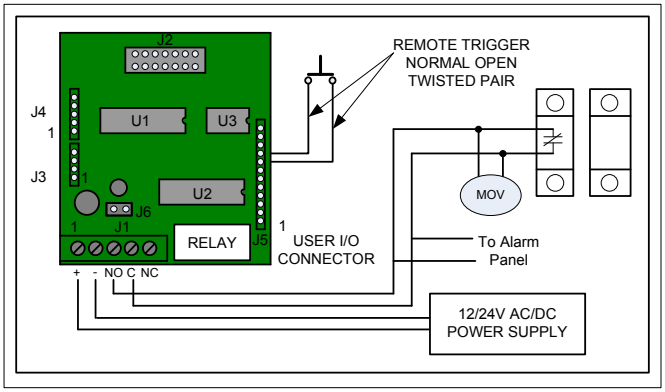
When installing the 917 keypad in a single-gang metal box (1.8"W x 2.9"H). place insulating tape on the housing near the location of J1 on the board. As the spacing is tight, this will prevent any strands of wire from shorting to the metal box. Also ensure that the FRONT of the metal box is mounted FLUSH with the front of the wall stud and NOT flush with the sheetrock. It is RECOMMENDED that all new installations be mounted in a standard plastic, single-gang box.



ELECTROMAGNETIC DOOR LOCK



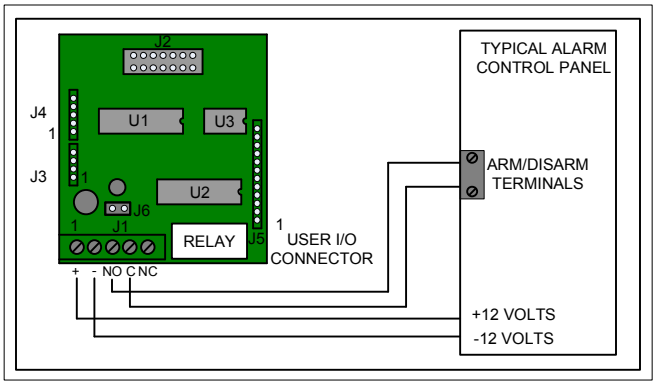
ELECTROMAGNETIC DOOR STRIKE



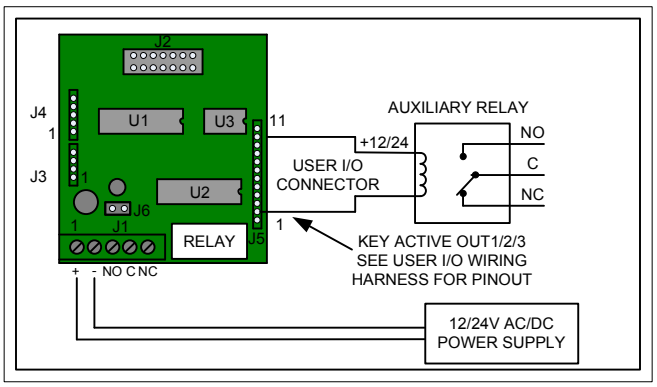
Shunting a normally closed zone

External Device Current Limits

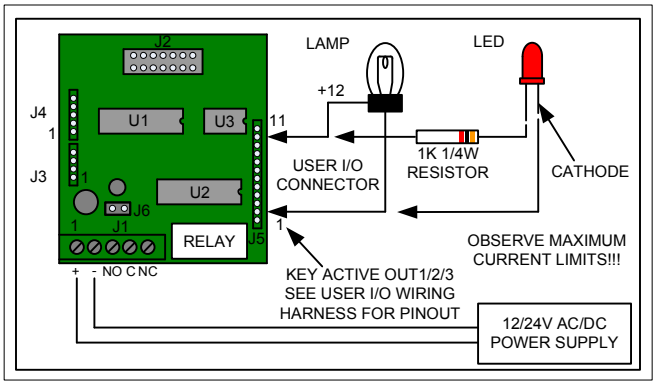
- The SINK capability of 500mA applies to 12V AC/DC or REGULATED 24VDC power and jumper J6 installed.
- For unregulated 24VDC or AC supplies, derate the SINK current to 50mA and REMOVE jumper J6.



ARMING/DISARMING
A TYPICAL CONTROL PANEL



AUXILIARY RELAY WIRING



EXTERNAL LAMP WIRING

Specifications

Mechanical

Board Dimensions: 1.75" W x 2.8" H x 1.0" D

Environmental

Temperature: -20F to +130F (-28c to + 54C)
Humidity: 90%

Features

- Low cost, Easy to Use.
- Single-Gang, Flush-mount Design
- 12-24V AC/DC Operation
- 120 Users, 1- to 6- Digit Codes
- On-Board 6 amp Form “C” Relay
- 5 individual Outputs
- 5 User-Programmable Timers
- Error Key Lockout
- Non-Volatile EEPROM Memory
- Easy-to-Use Front programming
- Indoor use

Electrical

Supply Voltage

12 or 24 volts AC or DC
@ 12 volts AC/DC – jumper J6 installed
@ 24 volts regulated DC – jumper J6 installed
@ 24 volts AC/DC unregulated – jumper J6 removed
Max. supply voltage – 28V AC/DC – jumper J6 removed

Output Current Limits

@ 12VDC 500mA (sink)
@ 24 VDC regulated 500 mA (sink)
@ 24 unregulated (J6 removed) 50 mA (sink)
MAIN-RELAY – 10amp surge, 6amp continous @ 30VDC
Maximum Wire Size for J1 – 16AWG

General Keypad Limits

Remote Trigger minimum ON time – 100ms
Keypad Debounce time – 100ms
Keypad life – 1,000,000 operations per key
User Memory write cycle limit – 1,000,000 cycles
User Memory retension > 40 years

Applications

Storage closets
Residential/Commercial Doors
Multi-Tenant Buildings
Recreation Centers
Safe Rooms
Machinery Controls
Self-Storage Facilities
Pools/Saunas
Restaurant Freezers
Computer Rooms