

SDC SECURITY DOOR CONTROLS

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INSTALLATION INSTRUCTIONS 917 EntryCheck™ Stand-Alone Keypad

Features

The SDC 917 Entrycheck Standalone Keypad is designed to control electric locking devices such as electric door strike, magnetic locks or electrified locksets.

Up to 99 different user codes may be programmed into the 917, making it possible to allow or deny entry to any one user, without affecting the codes used by the other 98.

Choice of latching or timed output;

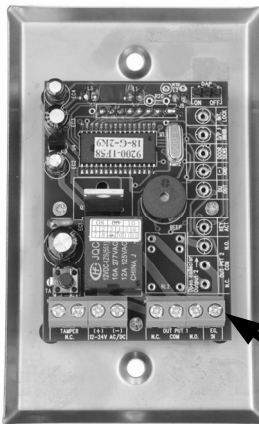
Timed output: When an authorized PIN code is entered, the relay is activated, unlocking the door per programmed time from 1 to 999 seconds. A momentary dry contact connected to the (EG) Request-to-Exit input activates the timed output. PIN codes will not activate the latching function when the keypad is programmed for timed operation.

Latching Output: Entering an authorized PIN codes latches the relay output ON or OFF.

A momentary dry contact connected to the (EG) Request-to-Exit input will also activate the latching output. The lock is maintained in the ON or OFF mode until a PIN code is re-entered or (EG) Request-to-Exit input is actuated. PIN codes will not activate timed output when the keypad is programmed for latching operation.

Request-To-Exit Input: A Request-to-Exit device with a momentary, N/O dry contact can be used for timed egress operation without entering an access code. The device may be an Exit Switch, Sense Bar or Request-to-Exit PIR sensor and is typically located within the secured area. When latching operation is chosen, a maintained or momentary, N/O dry contact switching device located remotely or adjacent to the door may be used for ON/OFF latching without entering an access code.

Installation



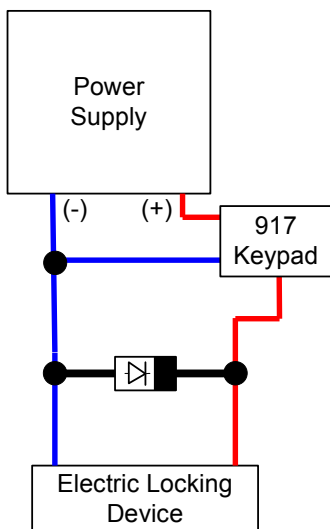
12-24V AC/DC: Connect 12 or 24V (AC or DC, 50 or 60Hz) to these two terminals to provide the power necessary to operate the keypad. For most installations, the keypad and electric lock will share the same power supply.

Output 1: Electric locking device control relay (3 terminals). Connect the positive (+) lead from the power supply that is being used to power the locking device to the **(COM)** terminal. If the locking device is a Fail Safe (power to lock) type, connect the positive lead of the locking device to the Normally Closed **(N.C.)** terminal. If the locking device is a Fail Secure (power to unlock) type, connect the positive lead of the locking device to the Normally Open **(N.O.)** terminal. Connect the negative wire of the locking device to the negative (-) lead of the power supply that is being used to power the locking device.

EG.: This terminal is for connection to an Request-To-Exit Egress device. Connect one lead from the egress button to the EG terminal, and the other lead to the negative power supply output that is powering the keypad. The egress device must provide a N/O momentary contact. Multiple devices can be wired in parallel.

Tamper N.C.: These terminals are not used.

Inductive Kickback Protection: Inductive Kickback is a strong electric pulse (up to 500v) generated by electric locks when power is removed. It is strong enough to destroy the relay contacts in the 917 keypad, unless a protective device is added to the circuit. Included with the 917 keypad is a diode that can provide this protection for DC-powered electric locks (except magnetic locks). For magnetic locks and all AC-powered locks, use an MOV instead. Wire it into the circuit as seen in the diagram to the left, taking note of the polarity for the diode (identified by the silver band) and locating it as close as possible to the electric lock.



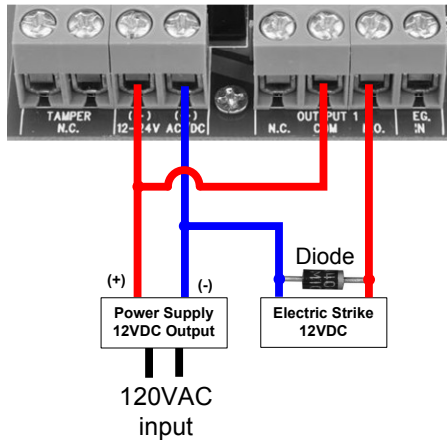
Install a diode or MOV to protect against inductive kickback.

Installation Examples

The examples below represent common installation methods.

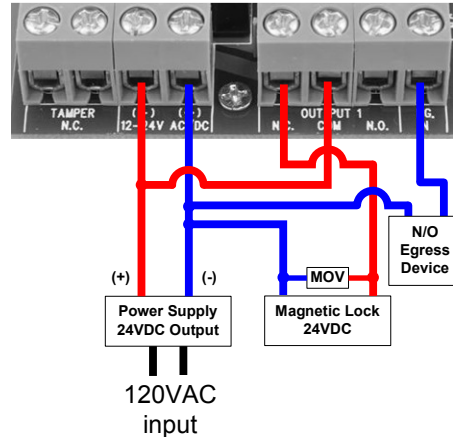
Example #1

This example uses a single 12VDC power supply to power both the 917 keypad and a 12VDC **Fail Secure** electric door strike. The N.O. output terminal is used to connect a fail secure device such as a fail secure electric strike.



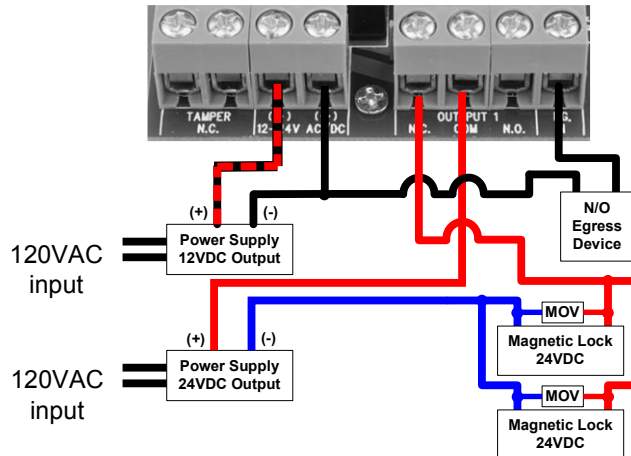
Example #2

This example uses a single 24VDC power supply to power both the 917 keypad and a 24VDC **Fail Safe** magnetic lock. The N.C. output terminal is used to connect this device. Connection of a N.O. egress device is also included in the circuit.



Example #3

This example uses separate power supplies for the 917 keypad and two electric locks. This is the preferred method when there are multiple locks being controlled, to help protect the keypad from increased inductive kickback surges caused by the multiple locks.



ASSOCIATED PRODUCTS – TIMED EGRESS CONTROLS

Code Compliant Fixed Time Egress of Entrance Egress Doors. For Keypads Programmed for Timed Entry or On/Off Latching:

The two following devices are required to comply with National, State and Local Code Criteria per Code Section Titled "Access Controlled Egress Doors" *Both device contacts are wired in series with the failsafe lock power input. Loss of power to either egress device unlocks door.*

SDC 423MU or 413MNU Failsafe exit switch with fixed 30 sec. timer
SDC 42MD-31DW Failsafe PIR sensor.

Adj. timed Egress for ON/OFF latching Keypads:

Wire contacts in series with lock power.
SDC MSB55V-10TD or PSB560V-10TD Egress Bars with timer module
SDC 423U or 413NU Exit Switch with adjustable timer.
SDC 2MD-31D-W Timed PIR Exit Sensor with adjustable timer.
SDC 10TD Mini Timer Module for REX devices without timers.

Adj. Timed Egress for Timed Entry Keypads:
Keypads programmed for timed entry, connect to (EG) REX input.

SDC MD-31D-W PIR Exit Sensor
SDC MSB55V or PSB560V Egress Bar
SDC 423U or 413NU Exit Switches.

ASSOCIATED PRODUCTS – REMOTE ON/OFF CONTROL

For Keypads Programmed for ON/OFF Latching:

Connect momentary contacts to (EG) REX input
Pulse on, Pulse off.

SDC 423MU or 413NU Exit Switches.

For Keypads Programmed for ON/OFF Latching or Timed Entry:

Wire contacts in series with lock power.

SDC 491 or 492 Blue Emergency Release Stations.

SDC 14-2 or 492 7 Day Timer, Scheduled Daily Locking/Unlocking

Access Control Power Supplies

1 Amp Class 2 Power Supply/Chargers

621PJ Power Supply, with Enclosure and Plug-In Transformer.

621J Power Supply, with Enclosure, less Transformer.

602RF UL 294, Power Supply, 12"x12"x4" Cabinet, built-in Transformer.

Programming

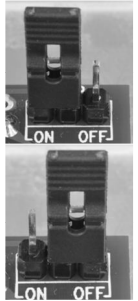
All program settings are protected by a Master Code, to prevent unauthorized changes.

When setting up the 917 keypad for the first time (or if the Master Code has been lost) the first step is to program the Master Code you'd like to use.

Master Code, Initial Setup:

- 1) Disconnect power from the keypad.
- 2) Set the DAP jumper to "ON" →
- 3) Connect power to the keypad. The keypad should start beeping continuously, and the yellow LED flashing continuously.
- 4) Move the DAP jumper to "OFF". The keypad should stop beeping, and the yellow LED lit steady.
- 5) Enter: **0 MMMM #*** into the keypad, where "MMMM" is the four-digit Master Code you'd like to use.

Example: **0 1234 #*** would set the Master Code to "1234"



Other Programming:

Description	Keypad Entry	Example
(1) Set User Code	MMMM* 1 DD UUUU #* MMMM = Master Code DD = User ID Number, 01-99 UUUU = User Code, 4-8 digits	1234* 1 47 7890 #* Using a Master Code of "1234" set User ID "47" to a User Code of "7890"
(1) Delete User Code	MMMM* 1 DD #* MMMM = Master Code DD = User ID Number, 01-99	1234* 1 21 #* Using a Master Code of "1234" delete the User Code for User ID "21"
(40) Set Relay Time	MMMM* 40 TT #* MMMM = Master Code TT = Relay Time, 01-999 seconds	1234* 40 05 #* Using a Master Code of "1234" set the Relay Time to 5 seconds
(41) Set Relay to Latch	MMMM* 41 # * MMMM = Master Code	1234* 41 # * Using a Master Code of "1234" Set the relay to toggle (on/off) mode.
(0) Change Master Code	MMMM* 0 MMMM #* MMMM = Master Code MMMM = New Master Code	1234* 0 4321 #* Change the Master Code from "1234" to "4321"
(8901) Reset All Settings to Factory Defaults (Not incl. Master Code)	MMMM* 8901 #* MMMM = Master Code	1234* 8901 #* Using a Master Code of "1234" Reset all settings to the factory defaults.

Programming Pattern: As you can see, all programming entries follow the same pattern:

[Master Code *] + [number] + [information to enter, if any] + [#*]

[Master Code *] sets the keypad into programming mode. Programming mode is identified by the keypad's yellow LED being lit steady.

[Number] tells the keypad which feature to change. 0=Master Code; 1=User Code; etc.

[#*] completes the programming sequence.

Note: All of the programming examples use a Master Code of "1234" but that's not advisable in actual practice, because it's too easy for unauthorized personnel to guess.

User Operation

The yellow LED will flash to indicate that the 917 is ready to accept a command.

To release the lock, simply enter one of the User Codes programmed into the keypad, followed by the pound symbol (#):

UUUU #

Where "UUUU" is a 4-8 digit User Code

Example: if a valid User Code were "7890", then entering "7890#" would activate the relay to release the lock.

The green LED is lit while the relay is activated.

If an invalid code is entered, the keypad will return 5 beeps and 5 flashes of the yellow LED. After 10 invalid codes have been entered, the keypad will not allow any more entries for 30 seconds.

Specifications

Keypad Power Requirements:

Voltage:

12 or 24 volts, DC or AC (50/60hz).

Amperage:

Standby: 10mA @ 12/24Vdc

During key press: < 30mA @ 12/24Vdc

During relay activation: < 80mA @ 12/24Vdc

Output 1: SPDT Relay

Relay Contact Rating: (Output 1) 5A@ 28Vdc
(Resistive)

Factory Default Settings:

Master Code: 0000

Relay Time: 1 second

User Codes: None -- All are cleared.

Access Code Worksheet

Master Code: ___ ___ ___ ___

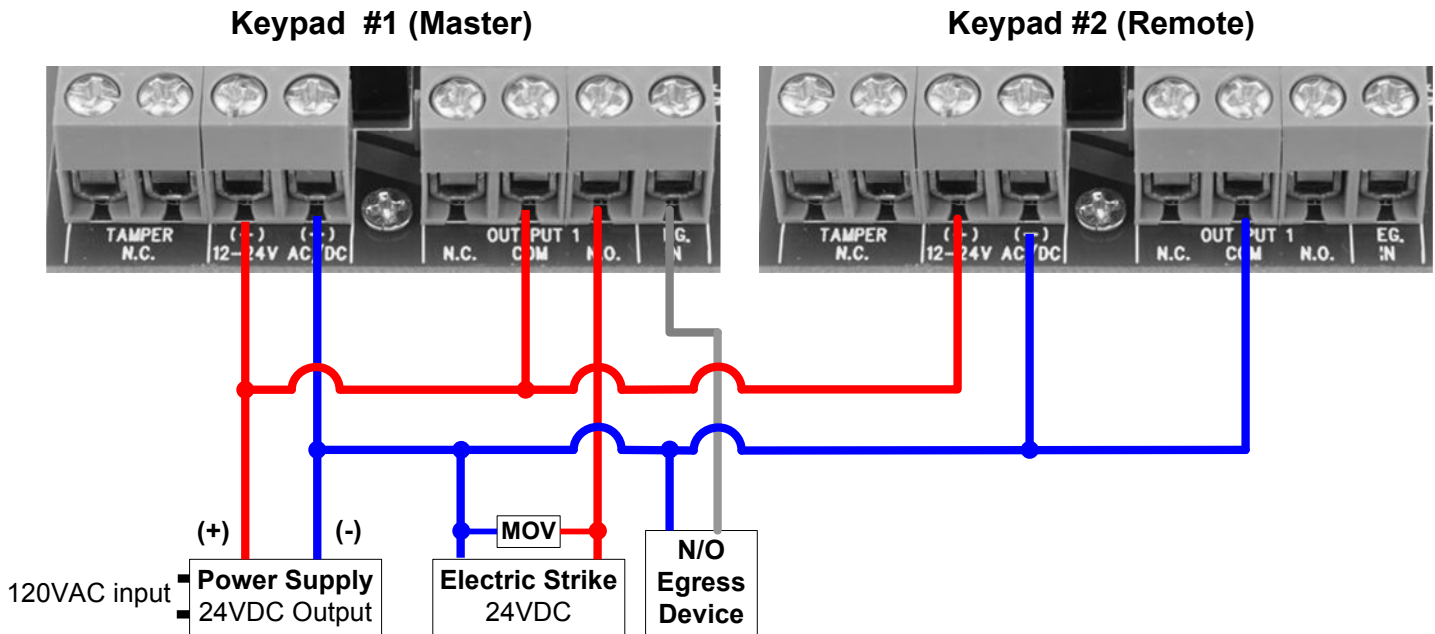
User Codes:

ID	Code	ID	Code	ID	Code	ID	Code	ID	Code	ID	Code	ID	Code
01		15		29		43		57		71		85	
02		16		30		44		58		72		86	
03		17		31		45		59		73		87	
04		18		32		46		60		74		88	
05		19		33		47		61		75		89	
06		20		34		48		62		76		90	
07		21		35		49		63		77		91	
08		22		36		50		64		78		92	
09		23		37		51		65		79		93	
10		24		38		52		66		80		94	
11		25		39		53		67		81		95	
12		26		40		54		68		82		96	
13		27		41		55		69		83		97	
14		28		42		56		70		84		98	

Example #4

This example uses two 917 keypads to operate the same electric locking device. 917 #1 is considered the master unit and should be located within in the secured area. 917 #2 is the considered a remote egress device and is connected remote egress device terminal (EG) of the master unit.

When programming 917 #2, set the Relay Time (programming option 40) to 1 second. Use the Set Relay Time (programming option 40) on 917 #1 to set the unlock time when accessed by either keypad. The latching function (programming option 41) is only available at the master keypad.



Example #5

This example uses two 917 keypads to operate the same electric locking device. Power for the electric locking device is wired through both keypads.

All programming functions of each keypad are independent from each other. Set Relay Time (programming option 40) must be set on each keypad. The latching function (programming option 41) is available at both keypads.

