S&G DIRECT DRIVE / ZO3 & ROTARY DRIVE

De Raat Security Products


D-Drive


Rotary-Drive

The S&G D-Drive™ & Rotary Drive lock combines ease of operation with security and flexibility. Its advanced electronic circuit design makes it easy to open and easy to change codes. Follow these instructions carefully to get the best possible use from your lock.

Instruction — Out Of The Box

This S&G D-Drive™ and Rotary lock is shipped from the factory in multi-user mode with a factory master code of 1 2 3 4 5 6 #. This code can be used to open the lock and set or change codes. You should set the lock to your own, unique master code.

- **You must change the factory master code by following these steps if you have this lock:**

1. Key in the factory master code 123456#.
2. Turn the key pad clockwise so the blue tab moves to the open padlock icon position.

3. Turn the handle on the left to retract the bolts, pull the door open.
4. With the door open press 2 2*1 2 3 4 5 6# ♪ ♪ ♪ ♪ ♪**NEW CODE #** ♪ ♪ ♪**NEW CODE #** ♪ ♪ ♪
5. Try the new code with the door open to make sure it works.
6. a) To lock the safe, close the door turn the handle so the bolts throw into to wall. b) Turn the key pad so the blue tab returns to 12 o'clock position/locked padlock icon.
7. For the Rotary Drive version of the lock follow the same instruction except steps 2 & 6b. You cannot turn the keypad.

- All codes must contain six digits or six letters. Any digit or letter can be used as many times as you wish.
- **Do not forget your new 6 digit code as this cannot be recovered.**

- The lock can be set to accept a supervisor code, up to seven different user codes, and a time delay override code. The master code holder and the supervisor code holder (if a supervisor code is set) are responsible for maintaining the number of active users programmed into each lock. The master code holder and the supervisor code holder can create and delete user codes.
- The master code is designated as code #0. The supervisor code (if set) is designated as code #1. The user codes (if set) are designated by user position numbers 2, 3, 4, 5, 6, 7, and 8. The time delay override code (if set) is designated as code #9.
- Each time a button is pressed, the lock acknowledges it by sounding a "beep," and the LED on the keypad will light momentarily as the "beep" sounds. If it does not, check your battery (or batteries) to make sure it is fresh and connected properly, then try again.
- All codes end with #. This signals the lock that you have finished entering all digits of the code.
- If you pause more than 10 seconds between button presses when entering a code, the lock will assume you do not want to continue, and it will reset itself to the original code. To open the lock, begin the code entry sequence once again from the first step.
- If you realize you have pressed an incorrect button when entering a code, press ** or simply pause ten seconds or more, then begin entering your code again.
- If five incorrect codes are entered in a row, the lock will shut down for ten minutes. This is a security feature. Entering a code during this period will result in two long error tones (braps). Pressing any buttons during the lockout period will not affect the penalty timer. After ten minutes, the lock should operate normally.
- Avoid codes which can be easily guessed.

Note: This lock has been Listed by Underwriters Laboratories for use with the following S&G keypad(s): 6130-2XX and 6130-3XX

Troubleshooting

If your lock should fail to open when a valid code is entered, check for the following:

1. The boltwork of a safe can, under certain conditions, place pressure on the side of the lock's bolt. This is often caused by something inside the safe pressing against the door or by something caught between the safe door and its frame. When this occurs, the lock will not operate properly. To relieve side pressure on the lock bolt, move the safe's handle to the fully locked position, make sure the keypad is turned counterclockwise to stop, then re-enter a working code. The lock should open.

2. If the lock "chirps" when keys are pressed, but it will not open, the batteries may be drained to the point that they will not operate the lock's solenoid. Follow the battery replacement procedure in this manual.

3. If the lock makes no sound when any of the keys are pressed, dead batteries are likely to be the cause. Follow the battery replacement procedure in this manual.

4. Your lock may be in penalty mode. If the lock interprets your button presses as four or more incorrect codes in a row, it will lock you out for ten minutes. During this period, the lock will ignore any keypad inputs. At the end of ten minutes, enter a valid code to open the lock.

If all of the preceding remedies have been exhausted and the lock still does not open, contact a qualified safe technician in your area for professional service.

Determining Your Lock's Mode of Operation

Enter 4 3 *

The ensuing beep pattern will tell you if your lock is configured in single user, multiple user, or dual control mode.

BEEP PATTERN			
1ST SET OF BEEPS	4	4	4
2ND SET OF BEEPS INDICATES MODE	1 BEEP INDICATES SINGLE USER	2 BEEPS INDICATE MULTIPLE USER	3 BEEPS INDICATE DUAL CONTROL

Beep Pattern Reference Table

Lock Activity	Beep Pattern Emitted
A code has been entered to start a time delay	3 short high pitch beeps
An incorrect code has been entered	1 long continuous beep
A code has been entered during a penalty lockout period	2 long continuous beeps
Time delay countdown period in effect	1 short high pitch beep every 10 seconds
Time delay countdown finished	10 short high pitch beeps
Opening window period in effect	2 short high pitch beeps every 6 seconds
Low battery warning	5 sets of 2 short high pitch beeps
Battery too low for lock to function	20 short high pitch beeps (lock does not open)
Bolt extension signal	1 low/high beep sequence
Optional audit trail download completion	3 high pitch beeps
Lock is enabled in Management/Employee mode	4 high pitch beeps
Lock is disabled in Management/Employee mode	2 low pitch beeps

Quick Reference Table

Command	Function
2 2 *	Any code holder changes his own six-digit code
2 8 *	Master code holder downloads the event audit trail
3 8 *	Master code holder enables or disables the optional duress feature
4 3 *	Anyone identifies the lock type
4 6 *	Master code holder enables or disables the optional time delay override feature
7 4 *	Master code and supervisor code holder sets or deletes codes
7 7 *	Anyone interrogates the lock to identify used and unused code positions
3 2 *	Master code holder enables or disables management/employee mode
5 5 *	Enable and disable the lock in management/employee mode
5 6 *	Master code holder determines whether or not user code holders can disable the lock in management/employee mode
6 7 *	Set and use the management reset code (MRC)

Creating, Changing & Deleting Codes

Creating a New Code

The holder of the **master code** (position 0) can create new codes and delete existing codes. The **master code** can also be used to set or delete a **time delay override code**. The holder of the **supervisor code** (position 1) can create and delete **user codes** and the **time delay override code**. The **supervisor code** cannot be used for any operations affecting the **master code**. There are several code storage positions in the lock, designated 0 through 9. They store the following types of codes:

position 0 — master code
position 1 — supervisor code
positions 2 through 8 — user codes
position 9 — time delay override code

Here is the process for creating a **supervisor code**.

7 4 * master code # ♪ ♪ ♪ ♪ ♪1 # ♪ ♪ ♪new supervisor code # ♪ ♪ ♪new supervisor code # ♪ ♪ ♪

To create a new **user code**, use the following sequence. In this example, a new **user code** is being created in position 5. **7 4 * master code or supervisor code # ♪ ♪ ♪ ♪ ♪ 5 (position number) # ♪ ♪ ♪new user code # ♪ ♪ ♪new user code # ♪ ♪ ♪**

User codes can be set in any storage position from 2 through 8.

Deleting an Existing Code

The holder of the **master code** (position 0) can delete any code. The **master code** cannot be deleted under any circumstances. The holder of the **supervisor code** (position 1) can delete **user codes**. The **supervisor code** cannot be used to delete the **master code** or itself. Here is the process for deleting a **supervisor code**.
7 4 * master code # ♪ ♪ ♪ ♪ ♪1 # ♪ ♪ ♪ # ♪ ♪ ♪ # ♪ ♪ ♪

To delete a **user code** in position 5, use the following sequence.
7 4 * master code or supervisor code # ♪ ♪ ♪ ♪ ♪5 # ♪ ♪ ♪# ♪ ♪ ♪# ♪ ♪ ♪

To delete a **time delay override code**, see the time delay section.

Managing time delay

Creating, Changing, Deleting a Time Delay

Time delay is a security feature that enforces a predetermined waiting period between the entering of a valid lock code and the actual opening of the lock. The delay period can be set from 1 to 99 minutes. The *opening window* is a period of time immediately after the time delay during which you can enter a valid lock code to open the lock. The factory default opening window is 2 minutes, but it can be changed to any value between 1 and 10 minutes. *Note: Changes to an existing time delay or opening window can only be accomplished during the opening window period. This means you must enter a valid operting code for the lock, wait for the time delay to expire, then begin the appropriate programming sequence rather than opening the lock.* The programming sequence for setting, changing, or deleting a time delay period is as follows. The period can be anywhere from 1 to 99 minutes.

7 4 * master code # ♪ ♪ ♪ ♪ ♪0 0 # ♪ ♪ ♪length of desired time delay period # ♪ ♪ ♪length of desired time delay period # ♪ ♪ ♪

To delete a time delay, enter 0 for the desired time delay length.

Changing the Opening Window Duration

The length of the opening window period is set as follows. The periodcan be anywhere from 1 to 10 minutes.

7 4 * master code # ♪ ♪ ♪ ♪ ♪0 1 # ♪ ♪ ♪length of desired opening window period # ♪ ♪ ♪length of desired opening window period # ♪ ♪ ♪

Managing Time Delay Override

This optional feature determines whether or not you can override the time delay waiting period. There may be special circumstances that make it desirable to open the lock before time delay expires, such as during cash pickups by an armored car service. Time delay override only works when the lock is being operated in time delay mode. Your lock is capable of two different types of time delay override. *Single control time delay override* allows the **TDO code** holder to simply enter his code to open the lock. The delay period is completely bypassed. The other type of time delay override is *dual control TDO*. To use this type of time delay override, it is necessary to start the lock's time delay by entering any valid code other than the **TDO code**. Then, within one minute, enter the **TDO code**. The lock will open immediately. This type of time delay override places a secondary control on the **TDO code** holder, adding a measure of extra security.

Turning Single Control Time Delay Override ON

If your lock was ordered with time delay override capability, singlecontrol TDO can be turned on as follows.

4 6 * master code # ♪ ♪ ♪ ♪ ♪2 # ♪ ♪ ♪2 # ♪ ♪ ♪

Turning Dual Control Time Delay Override ON

If your lock was ordered with time delay override capability, dual control TDO can be turned on as follows.

4 6 * master code # ♪ ♪ ♪ ♪ ♪1 # ♪ ♪ ♪1 # ♪ ♪ ♪

Turning Time Delay Override OFF

4 6 * master code # ♪ ♪ ♪ ♪ ♪1 # ♪ ♪ ♪1 # ♪ ♪ ♪

When time delay override is turned off, the **time delay override code** is erased. PIN position #9 can now be used as regular **user.**

Creating the Time Delay Override Code

The TDO code is located in position 9. It is programmed as follows.

7 4 * master code or supervisor code # ♪ ♪ ♪ ♪ ♪9 (position number) # ♪ ♪ ♪new TDO code # ♪ ♪ ♪new TDO code # ♪ ♪ ♪

Changing the Time Delay Override Code

An existing TDO code can only be changed by the holder of that code, as follows.

2 2 * OLD TDO CODE # ♪ ♪ ♪ ♪ ♪NEW TDO CODE # ♪ ♪ ♪ NEW TDO CODE # ♪ ♪ ♪

Deleting the Time Delay Override Code

The TDO code is deleted as follows.

7 4 * master code or supervisor code # ♪ ♪ ♪ ♪ ♪9 (position number) # ♪ ♪ ♪# ♪ ♪ ♪# ♪ ♪ ♪

Battery Changing Instructions

Low Battery Condition

The S&G© X03 D-Drive™ & Rotary Drive lock uses one 9-volt alkaline battery, which is housed in the keypad. **Do not use rechargable batteries.** If the battery needs to be replaced, the lock will emit five double-beeps whenever it is opened. If this signal is ignored and the battery becomes so weak that it will no longer operate the lock, you'll hear twenty quick beeps when you enter a code, but the lock will not open. You will have to replace the battery before your lock can be opened.

Battery Replacement Procedure

Always perform a battery change with the container door open.

The lock will NOT forget your code(s) during battery change. The circuitry is designed to hold this information for extended periods of time even if there are no batteries installed. Codes are stored in non-volatile memory.

Step 1—Pull the yellow, spring-loaded tab at the top of the keypad (Figure 1) toward you slightly. It is not meant to separate from the keypad. Once it's pulled forward, carefully turn the keypad ring counterclockwise to stop. Then pull the ring away from its base far enough to expose the battery compartment. **Step 2**—Put your finger in the battery compartment, and carefully pull out the battery cables (Figure 2). There should be enough slack to allow you to pull the connector and old battery outside the compartment. Disconnect the old battery.

Step 3—S&G strongly recommends Duracell® brand alkaline batteries. No matter what brand is used, the battery must be alkaline. Align the battery and connector terminals, and snap the battery to the connector (Figure 3).

Step 4—Carefully slide the battery behind the keypad, into the cavity that is designed to hold it (Figure 4). Be sure the battery has dropped all the way to the bottom of the cavity.

Step 5—Gently place any excess wire into the cavity. Make sure it is not in a position to be caught between the keypad ring and the keypad base when the ring is pushed back against the base.

Step 6—Once the wires are safely positioned out of harm's way, push the keypad ring back up against the base, then turn it clockwise until the yellow tab snaps back into its normal position.

Check your lock operation at least three times with the container door open before closing it.

If you have any questions regarding this manual, please contant your supplier.

Figure 1

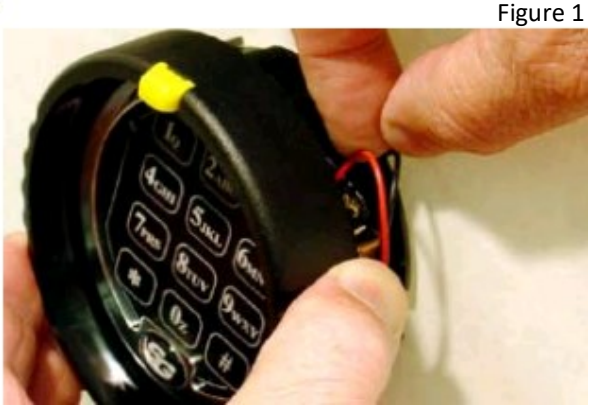

Figure 2

Figure 3

Figure 4

De Raat Security Products

STANLEY SARGENT AND GREENLEAF®