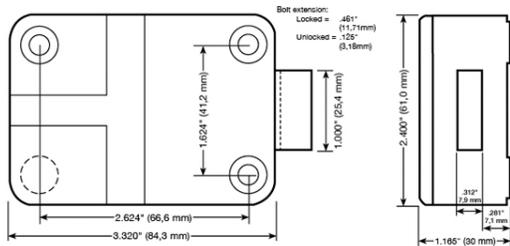


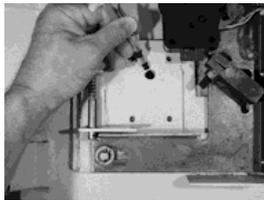
## Installation Instructions for the S&G 6128 ASERIES

Modifications to the lock (including lock bolt attachments) are not recommended, and will void the manufacturer's warranty. A minimum distance of .150 inch (3,8 mm) is required between the end of the lock case containing the bolt and the closest approach of the safe's blocking bar or cam plate that is normally blocked by the lock bolt. Do not allow the safe's blocking bar or cam plate to press the electronic lock's bolt farther into the lock case than it retracts on its own during normal motor operation. This can lead to inconsistent lock operation or failure. If your lock does not have cables already connected to the keypad and keypad extension, temporarily connect them now as indicated in these instructions. You should install fresh alkaline batteries in the keypad (S&G recommends Duracell® alkaline batteries) and check the function of the lock prior to installation by pressing 10101010# and observing the lock bolt retract, then extend 6 seconds later. After this check, disconnect the cables from the extension base and keypad by pulling on the connectors (NOT on the cables themselves). The installer should wear a properly grounded ESD wrist strap while handling the lock to avoid ESD damage.

### IMPORTANT DIMENSIONS . . .



1. The mounting surface for the lock should be smooth and flat, with 1/4-20 (or M6) mounting screw holes. The wire channel (spindle hole) must have a minimum diameter of 5/16 inch (8 mm). Use a reamer or file to remove any sharp edges from the wire channel (spindle hole) that might damage the wire cables. Do this on the inside and outside of the safe door.



2. Run both cable connectors through the wire channel. Gently pull the connectors to ease the cables through the hole. Pull 6" to 8" of cable to the front of the safe door. Later in the installation, excess keypad extension cable will be pulled back inside the safe door. **Make sure cables are not crimped or stressed at any point.**



3. Using two of the 1/4-20 (or M6) screws in the kit, loosely attach the lock body to the safe's mounting plate. This is just to hold it in place during cable attachments to the keypad and keypad extension. Be very careful to avoid crushing or crimping the cables. Note the black/red/green wire bundle. This is for the *bolt position*

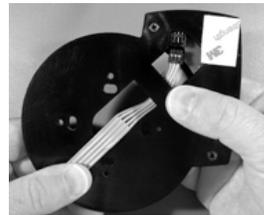
*indicator*, a dry contact switch (200VDC, 0.5 amp max.) The black wire is common, the green wire completes a circuit to the black wire when the lock bolt is retracted, and the red wire completes a circuit to the black wire when the lock bolt is extended. The *BPI* can be used to trigger any switch-activated device.

Note the blue wire loop. This is the *secure loop*. This is a closed circuit that may be used in applications requiring switches or other devices to signal the lock that boltwork is thrown, the door is closed, or some other action has taken place. The lock bolt will NOT retract if the circuit formed by the blue wire loop is open.

Both sets of wires should be bundled and placed where they will not interfere with moving boltwork components if not used.



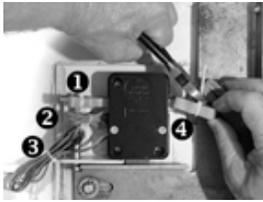
4. Clean the front surface of the safe door so the number plate will adhere. Remove the clear protective film from the front of the plate, and affix the included serial number label as shown. Next, remove the protective paper backing on the underside of the plate, then run both cables through the center hole of the plate. Place the plate on the front of the safe, carefully lining up the mounting screw holes in the plate with the mounting screw holes in the safe door. The plate will stick in place when pressed against the door.



5. From the front of the safe, connect the five-conductor cable (the larger one) to the keypad extension base. The connector and receptacle are "keyed," so the connector will only seat when oriented correctly. Route the cable as shown here. Make sure the connector is fully seated in the keypad extension receptacle. Note the self-adhesive pad to the right of the cable receptacle. Once the connector is plugged in, remove the protective backing from this pad. Pull all excess cable through the center opening to the front of the extension base. Then line up the base's mounting screw holes with those in the door, and press the extension against the door. The extension can be mounted in four different orientations. Pick the one that best suits your particular application.



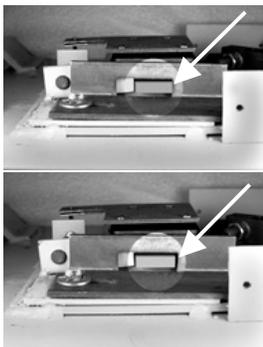
6. Place the keypad base over the keypad extension, pull all excess cable through the center hole (as shown), line up the keypad base mounting screw holes with those in the door, and use the included 8-32 (or M4) machine screws to securely fasten the mounting base to the door. It will also hold the keypad extension and number plate (if used) firmly in place. The raised, circular post near the edge of the base will be very near the bottom of the keypad. Use this feature as a reference to help you orient the base correctly before you fasten it into place.



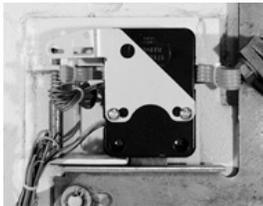
7. Remove the lock mounting screws so you can carefully pull the excess extension base cable inside. It is important to make sure the keypad and extension cables are within the recessed channels underneath the lock case before the case is securely attached by the three mounting screws. Once placed in the

most convenient channel, each cable should be protected underneath the case by a self-adhesive foam or vinyl pad. **It is very important that cables are not folded, crimped, or crushed beneath the lock case.** There are four sets of wires that must be carefully placed where they will not interfere with or be damaged by moving boltwork. These are:

1. excess keypad cable (4-conductor)
2. secure loop (1-conductor blue wire)
3. bolt position indicator (BPI) wires
4. excess keypad extension cable (5-conductor)



8. Make sure the lock bolt doesn't bind against the safe's boltwork. The top photo shows binding of the edge of the cutout in the safe's blocking bar, even though the boltwork is fully thrown to the locked position. In the bottom photo, the binding has been relieved by removing a small amount of material from the side of the blocking bar cutout. It is important that there is clearance on all sides of the lock's bolt when the boltwork is in the fully locked position. Binding will impair the lock's performance. Any necessary modifications should be made to the boltwork, not the lock body.



9. If your safe incorporates a relock device, you will need to attach the plate that normally holds it in check to the lock body. This is usually done at the lock's cover screw locations. Remove the cover screws. Typically, they will be replaced with longer 8-32 machine screws. Your replacement screws must engage the threaded holes in

the lock body by at least four threads. Relock device designs vary from safe to safe. No matter what style is used, you must make sure the replacement cover screws hold the lock cover firmly against the lock body, and that the relock device plate holds the device securely in check. Otherwise, there is risk of a lockout. After the plate is installed, once again check to make sure wires and cables are secured so that they will not come into contact with moving boltwork or anything else that can damage them.



10. At the front of the safe, install a new 9-volt battery in each of the keypad's two battery holders. Duracell® brand batteries are recommended. **Support the top of each holder with a thumb or finger as each battery is inserted. This will help prevent bending or breaking the holder posts.**



11. The keypad cable connector is shaped so that it will fit into the keypad receptacle only when aligned correctly. Insert the connector into the receptacle in the underside of the keypad. If it does not seat easily, do not force it. This means you need to turn it 180° before attempting to insert it again.



12. Place the keypad over the base. Make sure the keypad cable is clear of the pad's two spring clips as you push the keypad firmly onto the base. It should snap into place. If you need to remove the keypad, pull the bottom (area nearest the S&G logo) away from the mounting base first. Never allow the keypad to hang by the attached cable. The installation is complete, but do not close the safe door until successfully completing the following lock test.



13. The following check should be performed three times with the door remaining OPEN.

At the keypad, enter 10 10 10 10 #. The lock will BEEP three times and its bolt will retract. Turn the safe handle to verify that the lock is unlocked. Turn the safe handle to the locked position. The green STATUS 1 LED on the keypad extension will light briefly. The safe door should remain open for the three operational checks.

You can close the safe door and turn the handle to the locked position after the third operational check. The lock bolt will extend, and the lock will BEEP three times. In addition, the green STATUS 1 LED on the keypad extension will light briefly. Test the safe's handle to make sure it is securely locked.