



Cash Drawer Overview: Keys and Locks Description and Use

A cash drawer provides a temporary, reasonably-secure place to store and to present sorted cash in service of retail transactions.

A cash drawer typically connects to, and is actuated by, a purpose-built point of sale cash register system. When the cash register sends the proper command, the cash drawer is unlatched and its sliding tray opens under a mechanical spring force. Once opened, its contents are presented to the retail sales associate who completes the cash exchange. Human action is required to close the cash drawer.



Cash Management

The cash drawer is the retailer's initial cash collection point and is intended to support their cash management process. The primary features of a cash drawer include:

- A means for electronic opening by a robust and responsive latching mechanism that enables rapid, successive openings and closings
- A means for monitoring the cash drawer's state.
- The primary, electronically-monitored cash drawer

states are: Connected or disconnected

- If connected, a microswitch monitors whether the cash drawer is open or closed. The drawer state may be polled by the POS application, or the POS application may be configured to listen for an opening event message from the cash drawer. This state change report can then be audited against the POS application to confirm whether the opening was expected or not
- Temporary storage of a useful quantity of bills and coins, separated by denomination, and specifically designed to facilitate rapid and successive cash exchange
- Load-bearing chassis and frame features that support a cash register, and related components, placed upon the cash drawer without adversely affecting the drawer's operation
- Chassis and frame features that support under-counter mounting where the cash drawer is placed below the plane of the retail transaction and/or concealed
- A means for manual opening by key actuation when needed

Security of the cash drawer's contents and fidelity of the cash management process requires effort and discipline by the retailer. The operational aspects of any cash management process include many environment-specific variables that must be identified, implemented, and tailored by the retailer. The cash drawer and its contents are the sole property of the retailer.

In the context of the cash drawer definition provided above, a cash drawer:

- Does not monitor or report its contents by denomination or by valuation
- Does not receive and process retail transaction data (e.g. the transaction amount)
- Does not provide for security of its contents comparable to a safe

Cash Drawer Positions

Depending on its type, a cash drawer may have three or four pre-defined positions or operating states.

Closed

The drawer's sliding tray is held closed by an internal mechanical latch. The latch releases and the sliding tray opens when 1) a proper electrical signal is received, or 2) manually actuated by the key.

Locked Closed

The drawer's sliding tray is held closed by an internal latch and the latch in turn is prevented from releasing the sliding tray (or the tray is otherwise prevented from opening outward) by an interlocked state set by the drawer's latching and locking mechanisms. This position is intentionally set by the user while the drawer is closed.

APG offers several different lock styles and grades. Most cash drawers include a standard-grade lock built into the cash drawer's face plate.

Open

The sliding tray is released and opens under the force of the drawer's ejection spring. In this position, the drawer's contents are presented and accessible for exchange.

Locked Open

While many retailers prefer this feature, not all cash drawers offer this position. In this position, the drawer's sliding tray is prevented from being closed and re-latched by an interlocked state set by the drawer's latching and locking mechanisms. This position is intentionally set by the user while the drawer is open.

The 'Locked Open' position is attractive to some retailers since a closed and unattended cash drawer can be considered an attractive nuisance in the retail environment. A cash drawer, locked open with its cash tray removed, offers no opportunity for tampering that could result in damage.

A cash drawer typically presents a lock on its front face. When the proper key is inserted and turned, the drawer's position may be changed. The key may be removed from the lock in each of these positions.



Locks and Keys - Overview

APG Cash Drawer offers many options for the key lock. These options are guided by our customer's preference. For example, we offer cash drawers that:

- Include a readily-accessible key lock for manual actuation on the drawer's face
- Do not include a key lock. These cash drawers may or may not offer a separate, concealed means of manual drawer release
- Include an obstructed key lock on the drawer's face. These cash drawers offer limited accessibility to the key lock and may require special, separate action to place the lock in a state where it will accept the key's insertion (e.g. lock cover).

APG Cash Drawer offers several different lock styles and grades. Most cash drawers include a standard-grade lock built into the cash drawer's face plate with these features:

- Each cash drawer with the same part number, or within the same production lot, is keyed alike (i.e. the same key opens all drawers)
- Each cash drawer with the same part number, or within the same production lot, is keyed differently. In this scenario, APG randomly selects a lock from a collection of available similar locks

having a pre-defined range. This range of lock codes may be relatively limited. As such, some repetition of lock codes is expected within a large enough sample size of similar cash drawers.

- A field-removable and replaceable lock assembly for optimal drawer serviceability

While few APG customers require these optional features from us, at our customer's request, APG can:

- Offer locks that include an extended range of key codes. These optional locks are intended to serve a customer's desire for additional key code dissimilarity.
- Offer higher-grade and higher security locks for complete key code uniqueness
- Allocate, associate, and preserve of a single and unique key code(s) to a particular cash drawer.

APG Cash Drawer provisions, as a matter of course, the same lock and key lock code (in the standard-grade series) to multiple products and to multiple customers.



Each product family is tested for its susceptibility to tampering. In this review, we strive to define how difficult and/or how long it takes for unauthorized entry into a closed, unattended cash drawer. While the cash drawer is not a safe, APG strives to provide products that:

- Require substantial time to enter
- Show visible signs of entry after a break-in. This feature aids in making subsequent claims

Each cash drawer's lock and locking mechanism is fully tested at APG prior to shipment. We verify prop-

er operation when turned by human action and we verify that each cash drawer, when locked, remains closed when an opening signal is sent.

Each cash drawer's lock and locking mechanism is fully tested at APG prior to shipment.

Usage of Cash Drawer Keys

As stated previously, security of the cash drawer's contents and fidelity of the retailer's cash management process requires effort and discipline by the retailer. The operational aspects of any cash management process include many environment-specific variables that must be identified, implemented, and tailored by the retailer. While the individual hardware components aid in these processes, the retailer's loss prevention team holds a lead role in securing the entire process.

Key and Lock Best Practice and Usage Recommendations:

- Secure the cash drawer keys upon receipt of each cash drawer shipment
- Assign the use of drawer keys to store management personnel only
- Employ processes that ensure control of cash drawer keys at the start and end of shift
- Maintain minimum cash balances inside the cash drawer
- Operate the cash drawer electronically, from a host device capable of opening the drawer. Retailers should not rely solely on the key to gain access to the cash drawer.
- In normal day-to-day use, do not operate the cash drawer with its key in the lock
- If the cash drawer is holding cash, the retail sales associate should lock the drawer closed and remove the key before leaving the cash drawer unattended
- Within the framework of the host POS application, include software features that monitor the drawer's status and compare opening (and disconnection) events with expectation. These

features may rely on polling or on an event report

- Augment the security of the POS software with on-premise physical security solutions.

APG Cash Drawer sees a small but growing trend in product design where customers request cash drawers without a key lock.

About APG Cash Drawer

APG manufactures highly durable and dependable cash drawers. APG has built a reputation as the supplier of choice for retail, hospitality and mobile cash drawer solutions for thousands of customers throughout the world. To learn more about APG's products, visit www.cashdrawer.com or call 763-571-5000. Follow us on Twitter at @apgcashdrawer and on Facebook.

