

## Kaba Mas X-10 Lock

Type 1F High Security Electronic Lock

### Secure Tradition

The Kaba Mas X-0 Series is the trusted choice for securing the U.S. Government's most sensitive material. The X-0 Series was first introduced in 1992 and was the only lock to meet the strict requirements of Federal Specification FF-L-2740. This specification is the U.S. Government's highest security standard for electromechanical locks. The X-10 represents the latest edition to this secure tradition.

### Why the X-10?

The X-10 was designed and developed as a direct result of the latest revision to federal specification FF-L-2740, now Revision B. This revision calls for two distinctly different lock styles - Style 1 and Style 2. The X-10 is the only self-contained lock that clearly represents the best overall value. The X-10 is the only lock awarded the distinction of being approved for Style 1 Applications.

### User Friendly Features

The X-10 is designed with similar features and functions of its predecessor, the X-09. This minimizes the need for user training. The X-10 maintains the already familiar product operating features. The X-10 uses the same "Green" self-powered technology - simply rotate the dial to power-up the lock. The X-10 retains the same three security modes, along with a full complement of audit features.

### What's NEW?

The chart below lists the enhanced features of the X-10 versus its predecessor the X-09.

Feature	X-09	X-10	Comments
Lock Case	Field Assembly	Through Case Mounting	Ease of Installation, Sealed Case
Serial Number	Six Digit	Eight Digit	X-0 Series, 1 Million Sold
Lock Motor	Stepper Motor	DC Motor	New Lock Design
Lock Cable Orientation	6:00 - 3 Hours Behind Bolt	3:00 Opposite of Bolt	New Lock Design
Lock Bolt Options	Flush & Extended - 4 Options	Flush - All Bolts - 2 Options	Enhanced Design, Fewer Parts
Product ID "Dial Ring"	Factory Location, Month & Year Made	Product Id, Month & Year Made	Product Differentiation
ID Stamp Location	9:00	8:00	Product Differentiation



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## X-10 Specifications

### Hardware

Power Internal, Self-Powered PowerStar™

### Combinations - 3 Modes

Single 1 million combinations

Dual 500 billion combinations

Supervisor/Subordinate 2 million combinations

Direct Dial No need to clear before entering combination. Power will shut down 40 seconds after the dial has stopped turning.

Memory Non-volatile

LCD Limited View Liquid Crystal Display

Combination Changes (LCD indicator in change key mode) Combination changed with correct combination or serial number.

Random Number View True Scramble

Daylocking No

Back Dialing No

Lock Reset Automatic when bolt is thrown or 40 seconds after turning has stopped.

Manipulation Fail secure against high-voltage attack, robot attack, X-ray methods, magnetic, vibration and R/F.

Audit The X-10 records all openings, and the record is non-resettable. The X-10 records unsuccessful attempts after 3 incorrect combination attempts and resets after a correct opening.

Wrong Penalty 10-14 errors result in a 3 minute time out. 15 errors or more results in a 4 minute time out. Both error count and penalty time resets with valid combination.

## X-10 Specifications

### Environmental Performance (Per FF-L-2740B)

Temperature Tested -10°F to 155° F Operational Range

Salt Spray Operational after 72 hours of continuous exposure (Per UL 768 Salt Spray Conversion Test)

Cycle Test Meets or exceeds FF-L-2740B specifications

Humidity Operational after 10 days of 140°F at 98% humidity (Operational after 10 days testing per MIL-STD-810E, Method 507.3, Procedure III, Temperature Cycling 86°F to 140°F at 98%RH)

Stress Operational after 7 days in a stress chamber at 194°F (Per UL 768 Aging Stress Distortion Test)

Vibration MIL-STD-810

Shock MIL-STD-901

Electrical Discharge 250KV on Dial

Electromagnetic Pulse Meets FF-L-2740B Specification for simulation of high altitude nuclear blast

Case & Bolt Strength 600 in two directions

# Kaba Mas CDX-10 Lock

High Security Pedestrian Door Deadbolts -  
Meets FF-L-2890A

The Kaba Mas CDX-10 consists of an X-10 high security style 1 lock, Federal Specification FF-L-2740B, mounted to a deadbolt base plate. The base plate is surface mounted to the inside face of the door. The deadbolt base plate has two essential features:

First, it provides a means of latching the bolt in the retracted position. This prevents the bolt from being inadvertently extended.

Second, turning the knob on the base plate will retract the bolt to allow egress.



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