

# **INSTALLATION & PROGRAMMING GUIDE**

# **MPC COBRA SERIES**



**Manually Programmable Cylindrical Lock** 



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## Introduction

The MPC Cobra is a battery-powered manually programmed access control system. Up to 100 individual codes can be programmed right at the keypad. A red and green LED on the keypad provide visual indication for programming and access events. Mechanical key override is possible when a 7-pin small-format interchangeable core (not included) is installed in place of the cylinder plug, which comes standard. Either the plug or the IC core must be installed for the lock to operate. When the cylinder is removed (using the cylinder control key) the lock will unlock. Manual key override should only be necessary if the low battery output indications have been ignored. (See also *BATTERY INFORMATION:* **on page 10**). The design allows for mounting on doors from 1-1/2" to 2" thick. A shim is available to mount the lock to a 1-3/8" door. An exterior gasket (EG option) is available for application to exterior sides of doors.

## **Tools and Materials Needed**

- 1. Philips head screwdriver set
- 2. Allen wrench set
- 3. Loctite 242
- 4. 4 "AA" Batteries (provided)

#### The following will also be needed <u>only</u> for new installations:

- 5. Full size door template (provided)
- 6. Pencil
- 7. Center Punch
- 8. Hammer
- 9. Chisel
- 10. Square
- 11. Level
- 12. Masking tape
- 13. Drill w/chuck for up to 1" drill bits
- 14. Drill bit set
- 15. 2-1/8" Hole saw

## COBRA INSTALLATION AND PROGRAMMING GUIDE Frame and Door Preparation for Lock

## **Frame and Door Preparation for Lock**



## **Installing the Cobra**

## 1) Install the Strike Components into the Door Frame:

- Insert strike box (a) into door frame.
- Place strike (**b**) over strike box.
- Secure in place with 2 screws.



## 2) Install the Cylindrical Latch:

• Insert the cylindrical latch into the edge of the door. *NOTE:* Sloped side of latch (a) should face door strike.

• Secure in place with 2 screws.



## 3) Change Handing if Necessary:

Outside escutcheon is shown in figure.

- Remove and retain 5/32" socket cap screw (a).
- Remove lever.
- Rotate lever (b) to opposite position.
- Apply thread lock compound \* to screw.
- Reinstall screw.
- Repeat for inside escutcheon (not shown).
- \* Loctite 242 is recomended.



## COBRA INSTALLATION AND PROGRAMMING GUIDE Installing the Cobra

#### 4) Remove the Latch Guard From the Retractor:

- Remove and retain the screw that secures the latch guard to the retractor.
- Remove and retain the latch guard.



#### 5) Install the Retractor:

• From the inside of the door, slide retractor (a) into 2-18" hole. *IMPORTANT: Make sure latch tabs engage with retractor jaws. See Detail A.* 



#### 6) Install the Latch Guard:

- Install latch guard (a) onto retractor.
- Secure latch guard with screw.





# COBRA INSTALLATION AND PROGRAMMING GUIDE Installing the Cobra

#### 7) Install the Outside Escutcheon:

- If necessary, apply exterior gasket (EG option) to surface (a).
- Insert the round end of the spindle\* (b) into the outside escutcheon's hub assembly (c).
- Dot on cam (d) must be at the 6 o'clock (bottom) position.
- From outside of door, feed outside escutcheon's battery wire harness (e) through hole (f) in door.
- Slide escutcheon against door.

# \* Refer to the chart below to determine the correct spindle to use.



Door Thickness	Use
(1-1/2" - 1-3/4")	Short Spindle
(1-7/8" - 2")	Long Spindle*
	*Long Spindle has band

## 8) Install the Inside Baseplate Assembly:

- Observe the polarity markings inside the battery holder (a) and install the 4, AA batteries (provided) accordingly.
- From inside of door, feed battery wire harness (b) through hole in spacer (c) if needed \*.
- Feed battery wire harness through hole in inside baseplate assembly (d).
- Press baseplate (and spacer, if there is one) against door.

#### \* Spacer required on doors thinner than 1-1/2".

spacer required on doors thinner than 1-1/2" Order P/N: MPC-SK



## 9) Secure the Baseplate:

- Apply Loctite 242 to the three provided baseplate screws.
- Secure the baseplate with the three screws.



## 10) Install the Inside Spindle:

- Install spring (a) into spindle (b) \*.
- Insert square end of spindle into retractor.





## \* **DOOR THICKNESS**:

1-3/8"	to	1-3/4"	USE YELLOW SPINDL	E
1-7/8"	to	2"	USE BLACK SPINDLE	

## 11) Connect the Battery:

• Connect the battery wire harness.

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#### 12) Install the Inside Escutcheon Cover:

- Place the inside escutcheon (a) over the inside baseplate.
- Using the spanner screw tool (pictured below), secure the inside escutcheon cover with the 4 provided spanner screws.





## COBRA INSTALLATION AND PROGRAMMING GUIDE Installing the 6 or 7-Pin IC Core for Manual Key Override

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#### 1) Install the 7-Pin Small-Format IC Core for Manual Key Override:

- Hold lock in horizontal position.
- Remove tape (a) if present.
- Push in plug (**b**) until pin (**c**) until it falls out.
- Remove plug.

• Insert cylinder control key (a) into core (b) and turn clockwise to retract locking pin.

- Push cylinder core into lock *NOTE: Resistance will be noticeable.*
- Turn key counterclockwise to engage locking pin.
- Remove key. Lock is now operational.

#### NOTE:

6-PIN IC CORE CYLINDERS REQUIRE THAT THE ADAPTER IS INSTALLED TO MAKE THEM AS LONG AS A 7-PIN CYLINDER. THE ADAPTER IS INCLUDED IN THE SCREW PACK. DO NOT INSTALL THE ADAPTER IN A 7-PIN IC CORE CYLINDER.

#### **Operation:**

Either the cylinder plug or the IC core must be installed for the lock to operate. Removal of the core or plug automatically unlocks the lock. It is recommended that an IC core be installed in case it ever becomes necessary to unlock the lock using mechanical means.

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#### **CODE FUNCTIONS:**

The MPC Cobra is manually programmable to have up to 100 codes. The codes can have different functions as described below. Several types of functions have factory default values which are operational as soon as the lock is installed. It is highly recommended that the Programming Code be changed (this will delete all factory default codes) and new codes be added. In addition, it is recommended that at least one Freeze/Lockout Code be added - in case the batteries get completely drained. (See "Battery Information" on below.) All codes can be 3-8 digits in length (except the Programming code which must be 5-8 digits.) Keep a log of all issued codes. Issue codes exclusively with all odd or all even numbers - this practice will make it easier to spot duplicate codes, since each keypad button represents two numbers (for example, code 246 is identical to code 135.)

FUNCTION	FACTORY DEFAULT	DESCRIPTION
PROGRAMMING	97531	The programming code puts the lock into a programming mode. It will not unlock the lock. When a Programming code plus "*" is entered the LEDs alternately flash several times indicating the lock is in a programming mode. If more than 30 seconds pass in between programming entries, the lock returns to a normal operational state.
NORMAL	1 3 5 7 9	<b>Normal codes</b> unlock the lock for the relock time delay. While the lock is unlocked the green LED will flash. The LED will stop flashing and the lock will relock.
TOGGLE	1 3 5 1 3 5	<b>Toggle codes</b> unlock the lock indefinitely. When the same (or another) toggle code is entered, the lock will immediately relock. When a toggle code is entered, the green LED will flash once. The LED will stop flashing and the lock will relock.
FREEZE/LOCKOU	9115	<b>Freeze/Lockout codes</b> prevent other codes from working. The lock can be locked or unlocked when one is entered. If it is locked, a Pass Thru code will unlock it but all other codes will not. Only another Lockout code will reverse the effect.
ONE USE		<b>One Use codes</b> unlock the lock for the relock time delay. They will only work once and then are deleted from memory. They can used again if they are programmed (added) into memory again.
	·	Supervised codes require that two different supervised codes entered in order to unlock
SUPERVISED	NONE	Pass Thru codes will unlock the door for the relock time delay even if the door is in the lockout mode.
PASS THRU	NONE	

#### **BATTERY INFORMATION:**

The MPC Cobra uses four, standard AA batteries. The batteries should provide enough life for approximately 80,000 lock/unlock cycles. When the batteries are running out the lock provides two different modes of low battery indication: First, when a code is entered, the red LED will flash twelve times before the lock executes the command of the code. This is an indication that it is time to replace the batteries. The lock will go for about 500 cycles in this condition. After it reaches a certain point the lock will go into "Low Battery Lockout" mode. A Freeze/Lockout code will need to be entered in order gain access. If the batteries are not changed, the lock will eventually not work and manual key override (if installed) will need to be used.

#### **CLEARING MEMORY:**

Clearing memory will delete all programmed codes and restore factory default codes. If the memory ever needs to be erased follow the steps below:

- 1. Remove the inside escutcheon. Remove one of the batteries.
- 2. Press any key.
- 3. Hold down the "\*" key and reinstall the battery. Continue holding the "\*" key down. The red LED will flash a few times and then stay on.
- 4. Release the "\*" key.
- 5. Install the inside escutcheon.

Note: to return the lock to the factory default relock time delay, do steps 1-4 twice in a row.

# COBRA INSTALLATION AND PROGRAMMING GUIDE Programming Steps

Use the steps on this page to program codes into the lock. The "\*" key is used like the <ENTER> key is on a computer. After pressing the "\*" key, wait for the red and green LEDs to stop flashing before proceeding to the next step. If at any time the red LED stays on while the green LED flashes an error has occurred. The flashing message will repeat three times. Count the number of flashes and consult the error code chart below.

#### FLASHES ERROR CODE DESCRIPTION

- Code too long Maximum digits
  6 • 12 button keypad
  - 8 6 button keypad
- 3 Memory full, delete some codes
- 4 Use Change Prog. code procedure
- 5 Prog. Code entries do not match, code not changed
- 6 Invalid entry, start over
- 7 Code for deletion not found
- 8 Code too short Prog. code 5 digit minimum User Code 3 digit minimum
- 9 Duplicate code



## COBRA INSTALLATION AND PROGRAMMING GUIDE Confirming the Contents of the Box

