The Detex EAX-500 is designed for applications that require an alarmed exit device on secured doors. The alarm, with approximately 100dB, will sound when someone attempts an unauthorized exit. The EAX-500, with its smaller size makes it the choice for quick and easy installations on emergency exit and restricted doors.

Should you have any Question/Problem with your Detex device please call Detex Technical Support from the job site at 1-800-729-3839 and choose option 2 on our menu. Please do not return the product to the distributor.

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For device installation videos, scan code below or go to www.detex.com/videos

For WARRANTY information, scan code below or go to www.detex.com/warranty

Owner's Copy
Mortise Cylinder with standard Yale cam required (sold separately)

EAX-500SK installation only

Locate this component for Step 7

<table>
<thead>
<tr>
<th>Item</th>
<th>Order Part #</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>105428-1</td>
<td>Cover, gray</td>
</tr>
<tr>
<td></td>
<td>105428-2</td>
<td>Cover, black</td>
</tr>
<tr>
<td>2</td>
<td>PP-5572</td>
<td>Cover Lock, Nut &amp; 2 Keys</td>
</tr>
<tr>
<td>3</td>
<td>MS-1039S</td>
<td>Mag Switch (surface mount) (see STEP 8)</td>
</tr>
<tr>
<td>4</td>
<td>PP-5567</td>
<td>9 Volt Battery</td>
</tr>
<tr>
<td>5</td>
<td>102606</td>
<td>Battery Retainer</td>
</tr>
<tr>
<td>6</td>
<td>100783</td>
<td>Cylinder Nut</td>
</tr>
<tr>
<td>7</td>
<td>102655</td>
<td>Cam Assembly Kit</td>
</tr>
<tr>
<td>8</td>
<td>102627-15</td>
<td>8-32 Truss Head Screw</td>
</tr>
<tr>
<td>9</td>
<td>102656-1</td>
<td>Circuit Board Kit, Standard</td>
</tr>
<tr>
<td></td>
<td>105838-1</td>
<td>Circuit Board Kit, Weatherized</td>
</tr>
<tr>
<td>10</td>
<td>PP-5374-46</td>
<td>#4 x 3 /4&quot; Screw, PPH</td>
</tr>
<tr>
<td>11</td>
<td>102715</td>
<td>Backplate</td>
</tr>
<tr>
<td>12</td>
<td>102665</td>
<td>Magnet Kit</td>
</tr>
<tr>
<td>13</td>
<td>102607</td>
<td>Magnet Locator</td>
</tr>
<tr>
<td>14</td>
<td>102633</td>
<td>Hardware Kit (includes keystop parts)(not shown)</td>
</tr>
</tbody>
</table>

Your particular part or configuration may not be shown:
Contact Detex technical support at 800-729-3839 (option 2)
### HARDWARE LIST

<table>
<thead>
<tr>
<th>SYMBOL</th>
<th>P/N &amp; DESCRIPTION</th>
<th>DRILL SIZE</th>
</tr>
</thead>
</table>
| ![Screw Icon](image) | P/N: PP-5183-29  
#8 x 1-1/4" PPH, TYPE AB THREAD FORMING (SMS) | #35 (7/64") |
| ![Screw Icon](image) | P/N: 100980  
1/4-20 x 1" PPH MACHINE SCREW | #7 (.201") |
| ![Screw Icon](image) | P/N: 103276-63  
#14 x 1" PPH TYPE AB, SELF-DRILLING THREAD FORMING | 7/32" or 3/16" (OPTIONAL) |
| ![Screw Icon](image) | P/N: PP-5360-108  
6-32 x 1/2" PPH TYPE C THREAD FORMING (ROLLING) | #32 (.116") |
| ![Anchor Icon](image) | P/N: 102642-3  
1/4" x 1-3/16" ANCHOR | 1/4" |

### STEP 1: REMOVE COVER FROM BACK-PLATE

Turn key CCW to UNLOCK cover  
(Approximately 8 times)

### STEPS 2-6: PREP DEVICE

(If Key Stop is required, see OPTIONAL KEY STOP page 6)

2: Remove cam assembly from cover

3: Install mortise cylinder (sold separately) with cylinder nut provided

Unfasten (2) screws  
Mortise cylinder

Cam orientation as shown with key removed

If 7-pin cylinder is used - OBSERVE

Collar required if distance is greater than 5/16"  
Optional collar can be ordered from Detex (p/n: ECL-1595)

4: Re-install cam assembly

5: Set slide selector switch functions (See Table A on page 4)

4-Set OKC cam as shown  
AUTO REARM (OFF)  
STATUS INDICATOR (OFF)

6: Connect 9-volt battery and install as shown

101321 Page 3
### Table A: Selector Switch Functions

<table>
<thead>
<tr>
<th>STATUS INDICATOR (Switch B)</th>
<th>OFF*</th>
<th>ON</th>
</tr>
</thead>
</table>
|                             | No indication that device is armed or disarmed. | ARMED - red LED blinks approximately every 3 seconds. **
|                             |      | DISARMED - green LED blinks approximately every 3 seconds. **|

<table>
<thead>
<tr>
<th>AUTO REARM (Switch A)</th>
<th>OFF*</th>
<th>ON</th>
</tr>
</thead>
<tbody>
<tr>
<td>Key required to reset the alarm after it has been activated.</td>
<td>Extended Bypass (see OPERATIONS page)</td>
<td>Alarm will automatically rearm 2 minutes after alarm has been activated and door closed. Custom settings can be programmed by DETEX. Non-Extended (Timed) Bypass (see OPERATIONS page)</td>
</tr>
</tbody>
</table>

### STEP 7: For Door Mounting - Door Prep & Backplate / Magnet Mounting (for Wall mounting (SK) go to step 7B)

Place Backplate and Magnet locator on door as shown below. Mark Backplate and Magnet holes on door and frame/mullion. Remove Backplate and Magnet locator **before** drilling holes.

- **Backplate holes**
  - Drill #7 (.201") for 1/4-20 machine screws
  - Drill 7/32" or 3/16" for #14 sheetmetal screws (2 places)

- **Magnet holes**
  - Drill #32 (.116") for 6-32 machine screws
  - Drill #35 (7/64") for #6 sheetmetal screws (2 places)

**OKC**
- For OKC ONLY, mark TOP hole center & drill 1/4" dia. pilot hole through door
- See OKC INSTALLATION below

LHR installation shown for reference only

**Install magnet and backplate**

(installer option depending on base material)

Skip to Step 9 to continue non SK installation

### Outside Key Control (OKC) Installation (if required) (all models except SK)

**IMPORTANT!**

- **Cylinder Side:**
  - Drill 1-1/4" hole through outside door face

- **Device Side:**
  - Drill 1-3/8" hole through inside door face

Rim cylinder - Detex P/N: ECL-445K-7

101321 Page 4
STEP 7B: For **Wall Mounting (SK)** - Backplate Mounting

(installer option depending on base material)

STEP 8: **NOT FOR USE ON EAX-500W**

Multi-door & SK function wiring connection (if required).

8a: Remove board

Remove (2) screws

8b: Drill hole

Recommended hole size:
Drill 7/8 dia, (1) place

8c: Reassembly

Fitting or nut NOT included
(1/2" connector P/N PP-5107)

---

8d: SK Wire connections

Screw wires to (P1) terminal block
(18ga Max wire dia) (not available on weatherized)

Disconnect power & cut (JP1) jumper

Diagram shown typical for two door magnetic switches:
MS-1039S & MS-1059S wire in series.
MS-2049 (Red wire not used)
Weatherized not available for SK installations

See instruction 103137 for magnetic switch mounting procedure

NOTES:
1. If wire runs longer than 10 feet, must use twisted pair.
2. 1/16" slotted jeweler screwdriver required.
STEP 9: INSTALL DEVICE

Appliying a small amount of lube to threads will aid when removing the cover in the future.

Hook at bottom, then tilt cover over backplate

Turn key CW to lock cover
CAUTION: Do not over tighten

OPTIONAL KEY STOP INSTALLATION
(Not required for normal operation)
(if required, key stop included in hardware kit)

Install key stop
P/N: 101976-1
#4 x 3/8" PFH
Rotate key to this position before reinstalling cam assembly

KS shown p/n 105770-1
KS used with standard Yale style cam

KS2 shown p/n 105770-2
KS2 used with Adams Rite small style cam

Front View
(KEY STOP POSITIONS)

"ON" position
(Key can be removed)

"OFF" position
(Key cannot be removed)

Key and cams shown in 90° stop
"ON" position

Key and cams shown in "OFF" position

Optional Accessories

Cylinder Nut Tool
P/N: 103779

Inswing Door Kit
P/N: 102644
SPECIAL NOTES and DEFINITIONS:
1. The door needs to be closed to test the unit.
2. When operating the ON/OFF switch, there is a slight delay.
3. The key is inserted and removed only in the vertical position (home position).
4. Key function: counter clockwise (CCW) = Armed; clockwise (CW) = Disarmed
5. Outside Key Control (OKC)
   The bottom left hand switch is only used when the outside key control function is used. This allows
   entry from outside. It bypasses the alarm & rearms in 15 seconds after the door closes. The OKC
   will not arm or completely disarm the alarm as the inside key does. When in Extended Bypass mode
   (Switch A, OFF) the unit will not rearm until 15 seconds after the door closes. The door can
   remain open if desired. When in the Timed Bypass mode (Switch A, ON) the unit will arm
   after 15 seconds & go into alarm if the door remains open.

MAGNET HANDING/RE-HANDING PROCEDURE: Magnet handing is where the
device determines if the left, right or an external reed switch will be used to indicate if the door is
opened or closed. When the battery is initially installed, the device simultaneously flashes the LEDs
and chirps the siren a total of five times indicating the memory is cleared.
This indicates that the device is in the magnet handing process but not yet selected:
   Step 1: Turn the key CW to the ‘OFF’ position.
   Step 2: If re-handing is necessary, remove the unit from the door and momentarily short the
         Mag Rst (or Test) jumper contacts. The device simultaneously flashes the LEDs and chirps
         the siren a total of five times.
   Step 3: With the door open, install the device on the door.
   Step 4: Turn the key CCW to the ‘ON’ position. The red LED blinks twice.
   Step 5: Close the door or bring the external magnet into position with the external door switch.
          The siren chirps and the LED flashes on the selected side of the device (red LED flashes
          for the left side or external; green LED flashes for right side).

The device will now operate normally, and the selected reed switch side is stored in memory so
changing the battery does not require re-handing.

OPERATIONS: To arm the system, close the door and turn the key CCW to the ‘ON’ position.
The red LED will blink twice followed by the green LED flashing for the remainder of the arming
time (default 15 seconds). After the arming time, the green light will turn off and the siren chirps/
red LED flashes three times. The device is now armed and if the door is opened the alarm will
sound and the red LED turns on.

DISARMING: To turn off the alarm or disarm the system, turn the key CW to the 2 o’clock position.

AUTO REARM: With Switch A ‘ON’, alarm shuts off two minutes after closing the door.

EXTENDED/NON-EXTENDED (TIMED) BYPASS: With Switch A in the ‘OFF’ position, the unit operates
in the extended bypass mode. This mode prevents the unit from arming while the door is open. Conversely, with Switch A
in the ‘ON’ position, the unit operates in the non-extended (timed) bypass mode. This mode allows the unit to arm regardless
of the doors position. If the door is not closed at the end of the arming delay, the unit will go into alarm.
LOW BATTERY ALERT: Simultaneous siren chirps and red LED flashes occur at 45 second intervals when the battery reaches approximately 7 volts. Cut LV Opt jumper if low battery alert is not desired.

STATUS INDICATOR: With the Status indicator switch (Switch B) 'ON', red LED flashes every three seconds when armed; green LED flashes every three seconds when disarmed.

ACTIVATE / DEACTIVATE SILENT ARMING: NOTE: Device must be magnet handed.
1. Turn the key CW to disarm and remove the unit from the door if installed.
2. Remove the battery.
3. Turn the key CCW to the 'ON' position. Hold the OKC switch lever (see detail view below) closed and install the battery. The unit chirps twice when silent arming is turned 'ON', and chirps once when silent arming is turned 'OFF'. Repeat the process to change between settings.
4. Release the OKC lever and turn the key CW. Reinstall the unit on the door.

TROUBLESHOOTING

<table>
<thead>
<tr>
<th>Problem</th>
<th>Probable Cause</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>Device is not powering up.</td>
<td>Battery is dead.</td>
<td>Replace battery.</td>
</tr>
<tr>
<td>Device not arming.</td>
<td>1) Needs to be rehanded.</td>
<td>1) Rehand</td>
</tr>
<tr>
<td></td>
<td>2) Cylinder microswitch lever broken.</td>
<td>2) Microswitch needs to be replaced.</td>
</tr>
<tr>
<td></td>
<td>3) Cylinder installed incorrectly.</td>
<td>Remove PCB and return to Detex repair.</td>
</tr>
<tr>
<td></td>
<td>4) Magnet not aligned correctly.</td>
<td>3) Check cylinder installation. Make sure key is turned counter-clockwise all the way to ON.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>4) Use magnet locator to install magnet.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>See magnet handing.</td>
</tr>
<tr>
<td>Chirp every 45 seconds</td>
<td>Low Battery.</td>
<td>Install new battery.</td>
</tr>
<tr>
<td>No status indicator</td>
<td>Status indicator (Switch B) is OFF.</td>
<td>Slide Status Indicator (Switch B) slide switch to the ON position.</td>
</tr>
<tr>
<td>Unit is not Auto Rarming.</td>
<td>Switch A is OFF.</td>
<td>Slide Switch A slide switch to the ON position.</td>
</tr>
<tr>
<td><em>For wall mounting</em></td>
<td>Device is not modified for external wired magnet switch.</td>
<td>1) Remove battery, cut JP1 jumper. With battery connected, short &quot;Test mode&quot; pins, listen for 5 chirps. See RE-HANDING section.</td>
</tr>
<tr>
<td>Wired magnet switch not working</td>
<td>2) MS-2049 not wired correctly. Red wire should not be used.</td>
<td>2) Use MS-2049 black and white wires to green connector on PCB.</td>
</tr>
<tr>
<td>One side does not work.</td>
<td>Unit is handed on the wrong side.</td>
<td>See RE-HANDING section.</td>
</tr>
<tr>
<td>The alarm sounds after the time delay</td>
<td>1) Door not closed.</td>
<td>1) Close door and rearm the alarm.</td>
</tr>
<tr>
<td></td>
<td>2) magnet not aligned.</td>
<td>2) Use magnet locator to install magnet.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Shim as needed. Adjust as necessary.</td>
</tr>
<tr>
<td>Chirps 5 times when battery is plugged in.</td>
<td>Device needs to be handed.</td>
<td>See magnet handing procedure</td>
</tr>
</tbody>
</table>