The SDC EA Series offers Exit Alarm, Forced Door Alarm, and Door Propped/Held Open Alarm monitoring capabilities to any controlled opening. It may be used as a standalone device or easily integrates with any access control system. Units are typically mounted adjacent to the opening, and provide local visual and audible alarm annunciation. An integral key switch is available for local bypass & alarm reset controls. A built-in alarm relay is also included for remote monitoring.

**FEATURES**

- Exit alarm on door opening
- Door prop alarm after adjustable timed delay
- Manual or automatic alarm reset
- Local 85dB Piezo buzzer alarm
- Integral LED status indicator
- Main relay output for remote alarm notification
- Auxiliary relay output for door position status or bypass/alarm status
- Optional key reset/bypass switch
- Compact universal mounting

**EA SERIES TECHNICAL SPECIFICATIONS**

<table>
<thead>
<tr>
<th>Specification</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Input Power</td>
<td>60mA @ 12 or 24VDC (Auto-sensing)</td>
</tr>
<tr>
<td>Mounting</td>
<td><strong>EA-SN</strong>: Single Gang, 1/4&quot; Thick aluminum plate w/ security screws</td>
</tr>
<tr>
<td></td>
<td><strong>EA-708, -728</strong>: Double Gang, 1/4&quot; Thick aluminum plate w/ security screws</td>
</tr>
<tr>
<td>(2-1/8&quot; depth recommended)</td>
<td></td>
</tr>
<tr>
<td>Alarm Sound Level</td>
<td>85dB @ 3ft, Piezo Buzzer</td>
</tr>
<tr>
<td>Status Indicator</td>
<td>Bi-color LED</td>
</tr>
<tr>
<td>Trigger (DPS) Input</td>
<td>Dry, N/C or N/O, field selectable</td>
</tr>
<tr>
<td>Reset/Bypass (Control) Input</td>
<td>Dry, N/O or N/C, field selectable</td>
</tr>
<tr>
<td>Alarm (Main) Output</td>
<td>Form C, 2A @ 30VDC (Resistive)</td>
</tr>
<tr>
<td>Auxiliary Output</td>
<td>Form C, 2A @ 30VDC (Resistive)</td>
</tr>
<tr>
<td>Wiring</td>
<td>Screw terminals</td>
</tr>
<tr>
<td>Overall Dimensions</td>
<td><strong>EA-SN</strong>: 5&quot;h x 3.25&quot;w x 1.625&quot; d</td>
</tr>
<tr>
<td></td>
<td><strong>EA-708, -728</strong>: 5&quot;h x 5&quot;w x 1.875&quot; d</td>
</tr>
</tbody>
</table>
EA Series Board Layout (Back View):

1. **Configuration Jumpers** – Numbered 1 through 5. By default, all jumpers have been set to OFF. Use the (5) supplied jumpers, as required. See the table below for a functional description of each jumper.

<table>
<thead>
<tr>
<th>Configuration Jumpers</th>
<th>Jumper OFF</th>
<th>Jumper ON</th>
</tr>
</thead>
<tbody>
<tr>
<td>1= Latching Alarm</td>
<td>Disabled (Alarm resets on door closure)</td>
<td>Enabled. (Requires use of Control Input to reset an alarm OR Jumper #2)</td>
</tr>
<tr>
<td>2= Alarm Auto Reset</td>
<td>Disabled</td>
<td>Auto-reset 60 sec. after door closure. (Requires Jumper #1 to be ON)</td>
</tr>
<tr>
<td>3= Control Input Polarity</td>
<td>Normally Open</td>
<td>Normally Closed</td>
</tr>
<tr>
<td>4= DPS Input Polarity</td>
<td>Normally Closed</td>
<td>Normally Open</td>
</tr>
<tr>
<td>5= Aux. Relay Function</td>
<td>Follows DPS Input</td>
<td>Follows Bypass/Alarm State</td>
</tr>
</tbody>
</table>

2. **Adjustable Alarm Timer** – Determines the amount of time a door can be propped open before an alarm is activated. Adjustable from 1 to 60 seconds. Turn clockwise to increase time.

3. **Input Power Terminals** – Requires a 12 or 24VDC +/- 10% power supply (auto-sensing).

4. **Control Input Terminals** – Dry input used for bypass & alarm reset. Field-selectable as normally open (default) or normally closed. In a secure state, a held input will bypass the unit. In an alarm state, a momentary input will reset the alarm providing the door is closed.
   This input is factory pre-wired for key switch model EA-728.

5. **Door Contact Input** – Required for all models. Monitors the open/closed status of the door. Field-selectable as normally open or normally closed (default).

6. **Alarm Relay Output** – Relay is energized when the unit is powered. An alarm state or loss of power will de-energize the relay.

7. **Auxiliary Relay Output** – Relay may be configured to follow the DPS input OR to follow a bypass/alarm state.

*The state of the Main & Aux. relays are shown when the unit is not powered.*
**LED Status Indicator:**

<table>
<thead>
<tr>
<th>Door Status</th>
<th>Unit Condition</th>
<th>LED Status</th>
<th>Main Relay</th>
<th>Aux. Relay* (Jumper 5 OFF)</th>
<th>Aux. Relay* (Jumper 5 ON)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Closed</td>
<td>Secure</td>
<td>Solid Green</td>
<td>Energized</td>
<td>De-energized</td>
<td>Energized</td>
</tr>
<tr>
<td>Open</td>
<td>Pre-alarm (1-60 sec.)</td>
<td>Solid Green</td>
<td>Energized</td>
<td>Energized</td>
<td>Energized</td>
</tr>
<tr>
<td>Open</td>
<td>Alarm</td>
<td>Solid Red</td>
<td>De-energized</td>
<td>Energized</td>
<td>De-energized</td>
</tr>
<tr>
<td>Closed</td>
<td>Bypassed</td>
<td>Flashing Green</td>
<td>Energized</td>
<td>De-energized</td>
<td>De-energized</td>
</tr>
<tr>
<td>Open</td>
<td>Bypassed</td>
<td>Flashing Green</td>
<td>Energized</td>
<td>Energized</td>
<td>De-energized</td>
</tr>
</tbody>
</table>

*Relay state shown with N/C Door Contact

**Key Switch Operation (EA-708 or 728 only):**

**NOTE:** Unit must be Secure to be Bypassed. Door must be closed to reset an alarm condition.

- **Bypass (Maintained) – 90° Counter-clockwise.** Key may be removed. Return to vertical position to re-secure.
- **Alarm Reset (Momentary) – 45° Clockwise.** Key returns to vertical position upon release.

**EA Series Operational Modes:**

**Wiring Example #1 – Non-latching (auto-resetting) Exit Alarm or Door Prop Alarm.** Opening the door will initiate the pre-alarm timer. Closing the door before the timer expires resets the timer. If the door remains open and the timer expires, an audible alarm will sound and the Main Relay will trigger. Alarm resets on door closure. Bypass the alarm by activating the integral key switch or via remote bypass switch.

(a) All jumpers are set OFF (default)
(b) Adjust the alarm delay timer (1-60 seconds), as required.
(c) Install & terminate a N/C door contact.
(d) Install & terminate optional output relays, as needed. See page 2 for relay descriptions.
(e) Apply power & test.

**Diagram:**

![Diagram](P:\INSTALLATION INST\Accessories\INST-DOOR PROP.vsd Rev A 07-17 Page 3)

**Legend:**
- **Power Supply:** SDC Model TR-12, TR-24, or 600 Series
- **Door Contact:** SDC Model MC-4 or similar
- **Auxiliary Relay follow DPS input**
- **Alarm Relay for remote monitoring**
- **EA-SN: Optional Remote Bypass; Pre-wired for model EA-728**

**Key Switch Operation:**

- **See Page 5 for Mortise Key Cylinder installation**
- **Bypass (Maintained) –** Turn counter-clockwise until ON/OFF switch is activated. Reactivate the switch to re-secure.
- **Alarm Reset (Momentary) –** Turn clockwise until momentary switch is activated.

**Notes:**
- Unit must be Secure to be Bypassed.
- Door must be closed to reset an alarm condition.

**LED Status Indicator:**

- **Closed Secure Solid Green Energized De-energized Energized**
- **Open Pre-alarm (1-60 sec.) Solid Green Energized Energized Energized**
- **Open Alarm Solid Red De-energized Energized De-energized**
- **Closed Bypassed Flashing Green Energized De-energized De-energized**
- **Open Bypassed Flashing Green Energized Energized De-energized**

*Relay state shown with N/C Door Contact*
**Wiring Example #2 – Latching (Manually Reset) Exit Alarm/Door Prop Alarm.** Opening the door will initiate the pre-alarm timer. Closing the door before the timer expires resets the timer. If the door remains open and the timer expires, an audible alarm will sound and the Main Relay will trigger & latch. Alarm must be reset by using the integral key switch (EA-708 or EA-728 only), or by remote control switch. Bypass the alarm by activating the integral key switch or via remote switch.

1. **Power Supply:** SDC Model TR-12, TR-24, or 600 Series
2. **EA-SN:** Requires Remote Reset Switch; Pre-wired for model EA-728
3. **Door Contact:** SDC Model MC-4 or similar
4. **Auxiliary Relay changes state when the unit enters bypass mode or alarm mode**

(a) Jumpers 1 & 5 are installed. Jumpers 2, 3, & 4 are set OFF.
(b) Adjust the alarm delay timer (1-60 seconds), as required.
(c) Install Remote reset switch. Required for EA-SN; Optional for EA-708 or EA-728.
(d) Install & terminate a N/C door contact.
(e) Install & terminate optional output relays, as needed. See page 2 for relay descriptions.
(f) Apply power & test.

**Wiring Example #3 – Double-Door Latching Exit Alarm/Door Prop Alarm with Timed Reset.**
Opening the door will initiate the pre-alarm timer. Closing the door before the timer expires resets the timer. If the door remains open and the timer expires, an audible alarm will sound and the Main Relay will trigger & latch. The alarm will automatically reset 60 seconds after door closure. The alarm may also be reset by using the integral key switch (EA-708 or EA-728 only), or by remote control switch. Bypass the alarm by activating the integral key switch or via remote bypass switch.

1. **Power Supply:** SDC Model TR-12, TR-24, or 600 Series
2. **EA-SN:** Requires Remote Reset Switch; Pre-wired for the EA-728
3. **Door Contacts:** SDC Model MC-4 (x2)
4. **Auxiliary Relay changes state when the unit enters bypass mode or alarm mode**

(a) Jumpers 1, 2 & 5 are installed. Jumpers 3 & 4 are set OFF.
(b) Adjust the alarm delay timer (1-60 seconds), as required.
(c) Install Remote reset switch. Required for EA-SN; Optional for EA-708 or EA-728.
(d) Install & terminate N/C door contacts in series.
(e) Install & terminate optional output relays, as needed. See page 2 for relay descriptions.
(f) Apply power & test.
EA-708 Mortise Key Cylinder Installation:

ASSEMBLY DETAIL

Key Cylinder
SDC Part# CYL-KD

Or supply compatible 1” to 1-3/8” standard or interchangeable core mortise key cylinders (not included)

Use tailpiece supplied with SDC Part# CYL-KD, or lico 863G-00-10 Standard Cam equivalent.

Ensure that the cam makes contact with the center of the switch plunger

4. Complete the wiring connections by carefully routing the (2) white & (2) yellow wire leads behind the board. Terminate the (2) yellow wires to Control terminal “A”. Terminate the (2) white wires to Control terminal “B”.

SOUND DAMPENER

All Exit Alarm Assemblies are shipped with a sound dampening cap loose in the box.

Install the unit without the cap for full volume.

Install the unit with the cap as shipped for complete dampening.

Install the unit with the center hole punched out for partial dampening

Switch Wiring

(WHT) (WHT)
(YEL) (YEL)

(Rest) (Bypass)