INSTALLATION INSTRUCTIONS
DE5000 & DE9000 SERIES
DELAYED EGRESS EXIT DEVICE

Specifications

85 Decibel Alarm - Standard
LED Status Indicator - Standard
Nuisance Alarm - Standard
Key Switch Control - Standard
Remote Authorized Egress - Standard
Remote Re-Arm - Standard
Remote Bypass - Standard
Door Position Input - Standard, DIP Switch Setting
Auto Reset or Manual Reset, DIP Switch Setting
Auto - Standad (Manual - in CA)
Additional Form "C" Relays For Optional Horn etc.
(Rated 1 amp @ 30 vdc)

REQUIRES DORMA ES-100 or AD100 POWER SUPPLY.

- Easily accessible slide in and out electronics.
- Meets UL, ANSI/BHMA & CBC requirements.
- SIZE A: (DE9000 Series)
  - Will fit 48" (1219 mm) door opening without cutting.
  - Can be cut to fit a 40 1/2" (1029 mm) minimum door opening.
- SIZE B: (DE9000 Series)
  - Will fit 36" (914 mm) door opening without cutting.
  - Can be cut to fit a 34 1/2" (876 mm) minimum door opening.
- SIZE AA: (DE5000 Series w/ #443 strike)
  - Will fit 48" (1219 mm) door opening without cutting.
  - Can be cut to fit a 38 3/4" (984 mm) minimum door opening.
- SIZE BB: (DE5000 Series w/ #443 strike)
  - Will fit 36" (914 mm) door opening without cutting.
  - Can be cut to fit a 31 3/4" (806 mm) minimum door opening.

Assembly

NOTE:
If cutting to length is required
- carefully remove filler and electronics for cutting. Use all grounding precautions.

Mortise Cylinder
(factory supplied)
Pt. No. 90B10SC118

Connecting Plugs

Touchbar/Rail Assembly
(Delayed Egress)

End Cap Bracket
End Cap
WIRE PIG TAIL
Filler (DE9000/DE5000)

NOTE: "Always disconnect power prior to making any connections or service!"
Observe proper static discharge grounding procedures when installing or servicing the Delayed Egress device.
Cylinder Specification

Standard 1 1/8" mortise cylinder, randomly keyed supplied by factory. Spacer required for longer cylinder such as when using an IC core.

5/16" - 11/32"

1 1/8" Standard

To Change Cylinder: Carefully remove filler from rail. Unscrew cylinder nut, remove actuator and replace cylinder. Spacer required for cylinders over 1 1/8". Insert cylinder as shown, re-install actuator & secure with cylinder nut. Do not over tighten. Re-install filler in rail and reconnect the small pigtail connectors. Use caution not to pinch or bind wires.

Note: If DIP switch settings required to be changed, do it now prior to re-installing filler in rail. (See Section below.)

DIP Switch Setting

DIP switch settings should be completed at time of initial installation; check local building code. Factory settings are as follows:

1 - ON - NOT ACTIVE
2 - OFF - LOCKED
3 - ON - 3 SECONDS
4 - OFF - 10 SECONDS

(1) DPS: (OFF) ACTIVE (ON) NOT ACTIVE
(2) POWER UP STATE: (OFF) LOCKED (ON) UN-LOCKED
(3) NUISANCE TIME: (OFF) 1 SEC. (ON) 3 SEC.
(4) AUTHORIZED EGRESS TIME: (OFF) 10 SEC. (ON) 20 SEC.
Specific project or custom wiring diagrams available on request, consult the DORMA technical service department.

NOTE: Always disconnect power prior to making any connections or service. It is recommended that the 120VAC power be supplied from an Uninterrupted Power Supply (UPS) to ensure proper operation during a power failure. Always observe proper static discharge grounding procedure’s when installing or servicing the DE device.

Wires that interconnect the remote authorized egress and remote by-pass/rearm must be located within the same room as the panic hardware (DE), or outside the door at no more than 10’ feet of distance.

For ULC installations: Some "Authorities Having Jurisdiction" also require an illumination level of 100’ feet at the door, to be provided by the emergency power supply system.

CAUTION: TURN OFF 120VAC POWER PRIOR TO MAKING ANY CONNECTIONS TO TERMINALS

120 VAC POWER LINE (1.0 AMP MAX.)
From UPS Power Source

NOTE: Always disconnect power prior to making any connections or service.
It is recommended that the 120VAC power be supplied from an Uninterrupted Power Supply (UPS) to ensure proper operation during a power failure.
Always observe proper static discharge grounding procedure’s when installing or servicing the DE device.
Wires that interconnect the remote authorized egress and remote by-pass/rearm must be located within the same room as the panic hardware (DE), or outside the door at no more than 10’ feet of distance.

For ULC installations: Some "Authorities Having Jurisdiction" also require an illumination level of 100’ feet at the door, to be provided by the emergency power supply system.

Maximum Wire Length From Power Supply To Device & Back To Supply In Feet x Wire Gage/Size

<table>
<thead>
<tr>
<th>WIRE</th>
<th>18AWG</th>
<th>16AWG</th>
<th>14AWG</th>
<th>12AWG</th>
</tr>
</thead>
<tbody>
<tr>
<td>FEET</td>
<td>25</td>
<td>50</td>
<td>75</td>
<td>100</td>
</tr>
</tbody>
</table>

* For 24VDC inputs only (red & black wires). Note: Wire run is from supply to device and back to the supply.

BLACK: (-) 24VDC IN
RED: (+) 24VDC IN
WHITE: AUTHORIZED EGRESS/AUTO RESET
ORANGE: BYPASS/RE-ARM
GREY: DPS N/C
VIOLA: ALARM RELAY COMMON
GREEN: RED OUTPUT EMITTER
BROWN: RED OUTPUT COLLECTOR
BLUE: GREEN OUTPUT EMITTER
YELLOW: GREEN OUTPUT COLLECTOR
PINK: ALARM RELAY N/C
TAN: ALARM RELAY N/O

(See Page 6 for typical wiring of control inputs and monitoring outputs.)
Key switch operation for device.

Delayed Egress Mode: Unit is armed and touch bar will not activate the latchbolt. **(LED is solid green, audible alarm is off)**. Initiated after power up, (DIP switch #2 in OFF position) authorized egress mode or re-arm mode.

Nuisance Alarm Mode: Unit is armed and touch bar will not activate the latch bolt. **(LED is solid green, audible alarm sounds a short tone)** DIP switch selectable for 1 or 3 seconds. (See page 2) Initiated by depressing touch bar.

Delay Mode: Unit is armed and touch bar will not activate the latch bolt. **(LED is solid yellow, audible alarm sounds intermittent tone)**. Unit remains in the delay mode for 15 seconds (including nuisance time). Initiated by holding the touch bar depressed past the nuisance alarm time (30 second delay mode option available.) Once started, the delay mode is irreversible and automatically initiates the alarm mode.

Alarm Mode: Unit is disarmed and touch bar will activate the latch bolt **(LED is solid red, audible alarm sounds continuous tone)**. Initiated automatically from the delay mode and is irreversible. Unit remains in the alarm mode until manually reset with key.

By-Pass Mode: From the delayed egress mode; unit is continuously disarmed and touch bar will activate the latch bolt **(LED slowly flashes green, audible alarm is off)**. Initiated by rotating the key clockwise until switch activates **(approximately 180 degrees)**. DPS input is disabled.

Re-arm Mode: From alarm mode; unit goes to the delayed egress mode. Initiated by rotating the key clockwise until switch activates (approximately 180 degrees). From the bypass mode; unit goes to the delayed egress mode. Initiated by rotating the key clockwise until the switch activates (approximately 180 degrees.) **The LED will return to solid green**.

Authorized Egress Mode: Unit is disarmed for 10 or 20 seconds (DIP switch selectable) and touch bar will activate the latch bolt **(LED quickly flashes green, audible alarm is off)**. After the authorized egress time unit returns to the delayed egress mode automatically. **The authorized egress mode is initiated by rotating the key counter-clockwise until switch activates (approximately 180 degrees)**. DPS input will not initiate during the 10 or 20 second egress time, but will terminate the egress time if the DPS closes before the end of the egress time. DPS input will initiate an alarm after the 10 or 20 second egress time, if the DPS is opened.

NOTE: The By-pass mode and Re-arm mode (orange wire) may be initiated externally from the terminal connector. (Normally open dry contact to ground.) The Authorized Egress mode (white wire) may be initiated externally from the terminal connector (Normally open dry contact to ground). See page 6 for additional details.
After all wire connections are made and device checked for operation, install the chassis cover, end cap and label as shown below.

**NOTE:** Compliance with the California Building Code (CBC) requires different label than supplied. The CBC label is shown below. If required, order through Service Parts, model number CBCLBL. Consult with local code & "authority's having jurisdiction". See CBC Secton 1003.1.10 Paragraph 6.

**KEEP PUSHING. THIS DOOR WILL OPEN IN 15 SECONDS. ALARM WILL SOUND.**

**NOTE:** To enable the device to power up in the unarmed mode, set Dip switch #2 in the “ON” position. A green blinking light will appear. Device will required to be manually armed with a key at the device or from the remote console. (See page 4 under rearm mode, for key operation.)

LED light codes:
- Solid Green - Delayed Egress Mode
- Slow Flashing Green - Bypass Mode
- Fast Flashing Green - Authorized Egress Mode
- Solid Yellow - Delay Mode
- Solid Red - Alarm Mode

For added security a latch guard is supplied with the delayed egress device. Install along with the standard #463 strike as shown. Correct reference dimension of 2 3/8" from edge of stop or mullion must be maintained.

It is recommended that the following routine maintenance checks be performed at intervals of not less than once a month, and as a requirement by the local authority having jurisdiction, by the occupant or his approved representative:

a) Inspect and operate the panic device to ensure that all components are in satisfactory working condition.

b) Ensure that all strikes are free from obstruction.

c) Ensure that the fire alarm system and electronic function of device are in working order.

This product meets or exceeds the following standards:
- ANSI/BHMA 156.3, CBC Section 1003.1.10, California State Fire Marshal,
- NFPA 80 &101 and UL Listed FWAX, FWAX7
REMOTE CONTROL & MONITORING INPUT
DORMA CC-400-D CONTROL CONSOLE
SWITCH MOMENTARY-RESET-MOMENTARY
(LED ON CONTROL PANEL WILL EMIT
SAME COLOR STATUS AS DE9000 DEVICE)

REMOTE CONTROL INPUT
DORMA K708 KEYSWITCH

AUTHORIZED EGRESS
MO (LEFT)
BY PASS
MA (RIGHT)

FROM DE9000 EXIT DEVICE
FROM 24VDC +

TAN
PINK
GRAY
VIOLET
GREEN
BROWN
BLUE
YELLOW
ORANGE
WHITE
BLACK
RED
**OPERATION:**

*Armed Delay Egress Mode:* Release of latch bolt via the DE9300 touchbar is prevented. If touchbar is depressed longer than the Nuisance Delay Time (1 or 3 seconds, jumper selectable), an irreversible Audible Alarm Sequence is initiated at the DE9300 and B400-RMB Remote Buzzer. After the Delay Time (15 or 30 seconds), the touchbar is enabled to retract the latch bolt. The audible alarm will sound continuously until door is closed (monitored by the MC-4 Door Position Switch) and Delayed Egress is re-enabled locally with touchbar key switch. (See DE9300 Installation Instructions for additional operational information).

*Authorized Egress:* When the touchbar keyswitch is rotated counter-clockwise or when valid key code is entered on Interior AC-217 Keypad, the DE9300 is disarmed for 10 or 20 seconds (jumper selectable) and the touchbar is enabled to retract the latch bolt without initiating the Audible Alarm Sequence. If door is held open longer than 10 or 20 seconds the MC-4 Door Position Switch will initiate the Audible Alarm of the DE9300 device and B400-RMB Remote Buzzer.

**Entrance:** Turning lever of Exterior YR23 Passage Trim retracts the DE9300 latch bolt without initiating Audible Alarm Sequence however, the MC-4 Door Position Switch will initiate Audible Alarm of the DE9300 and B400-RMB Remote Buzzer when door is opened.

**NOTE:**

1) Interior AC-217 Keypad Output #1 should be set for 1 second which initiates the DE9300 Authorized Egress cycle. (See AC-217 Instructions for additional information).
2) ES100 Power Supply must be controlled by UL Listed Fire Alarm Panel. During Fire Alarm power is disrupted to DE9300 allowing immediate egress through door.
3) Door is closed automatically by the 8900-series surface mount door closer.

**PARTS LIST:**

<table>
<thead>
<tr>
<th>Part</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 EA.</td>
<td>ES100 Power Supply, 24VDC, 5AMP Surge, 5AMP Continuous (DORMA)</td>
</tr>
<tr>
<td>1 EA.</td>
<td>DE9300 x YR23 Delayed Egress Exit Device, 6 Safety Trim, 24VDC, 5AMP Surge, 5AMP Continuous (DORMA)</td>
</tr>
<tr>
<td>1 EA.</td>
<td>MC-4 Door Position Switch, SPDT 30VDC, 25AMP (DORMA)</td>
</tr>
<tr>
<td>1 EA.</td>
<td>B400-RMB Remote Buzzer 24VDC (DORMA)</td>
</tr>
<tr>
<td>1 EA.</td>
<td>ES105 Power Transfer Condut (DORMA)</td>
</tr>
<tr>
<td>1 EA.</td>
<td>8915 Series Surface Door Closer (DORMA)</td>
</tr>
</tbody>
</table>

**NOTE:** This wiring diagram is provided to assist in interfacing DORMA Architectural Hardware products into a system as described by the customer. Compatibility of components not supplied by DORMA Architectural Hardware is not guaranteed. However, every effort has been made to provide the system function requested. Component failures resulting in improper wiring is not covered by warranty. Refer to individual device product information sheets and installation instructions for wire gauge sizes and additional information.
SINGLE DOOR: DE9300 DELAYED EGRESS EXIT DEVICE w/ ELECTRIC TRIM (FAIL SECURE) x ES100 POWER SUPPLY x B400-RMB REMOTE BUZZER x (2) CARD READERS x MC-4 DOOR POSITION SWITCH

OPERATION:
Armed-Delay Egress Mode: Release of latch bolt via the DE9300 touchbar is prevented. If touchbar is depressed longer than the Nubance Delay Time (1 or 3 seconds, jumper selectable), an Inevitable Audible Alarm Sequence is initiated at the DE9300 and B400-RMB Remote Buzzer. After the Delay Time (15 or 30 seconds), the touchbar is enabled to retract the latch bolt. The audible alarm will sound continuously until door is closed (monitored by the MC-4 Door Position Switch) and Delayed Egress is re-armed locally with touchbar key switch. (See DE9300 Installation Instructions for additional operational information).

Authorized Egress: When the touchbar keyswitch is rotated counterclockwise or when valid card is presented at Interior Card Reader, the DE9300 is disarmed for 10 or 20 seconds (jumper selectable) and the touchbar is enabled to retract the latch bolt without initiating the Audible Alarm Sequence. If door is held open longer than 10 or 20 seconds the MC-4 Door Position Switch will activate the Audible Alarm of the DE9300 device and B400-RMB Remote Buzzer.

Authorized Egress: When a valid card is presented at Interior Card Reader, the DE9300 is disarmed for 10 or 20 seconds (jumper selectable) and the Exterior YR98LFS Electric Trim is unlocked and is able to retract the latch bolt without initiating Audible Alarm Sequence. If the door is held open longer than 10 or 20 seconds the MC-4 Door Position Switch will activate Audible Alarm of the DE9300 and B400-RMB Remote Buzzer.

Emergency Egress is possible with Exterior YR98LFS Electric Trim by key over ride however, MC-4 Door Position Switch will initiate Audible Alarm when door is opened.

NOTES:
1. Exterior Card Reader N.O., relay closure times must be set to allow sufficient time to manually operate unlocked Exterior YR98LFS Electric Trim and open door.
2. Interior Card Reader N.O., relay closure time should be set for 1 second which initiates the DE9300 Authorized Egress cycle.
3. ES100 Power Supply must be controlled by UL Listed Fire Alarm Panel. During Fire Alarm power is disrupted to DE9300 allowing immediate egress through door.
4. Door is closed automatically by the 8900-series surface mount door closer.

PARTS LIST:
1. EA - ES100 Power Supply, 24VDC, 6AMP Surge (.6 sec), 1.3AMP Continuous (DORMA)
2. EA - DE9300 x YR98LFS Electric Trim Elect (Fail Secure Exit Device, Fail Secure Electric Trim, Exit: 24VDC, 6AMP Surge, 1.3AMP Continuous; Electric Trim: 24VDC, 1.45AMP (DORMA)
3. EA - B400-RMB Remote Buzzer 24VDC (DORMA)
4. EA - ES100 Power Transformer 24VDC (DORMA)
5. EA - ES100 Remote Buzzer 24VDC (DORMA)
6. EA - Card Readers (BY OTHERS)

NOTE: This wiring diagram is provided to assist in interfacing DORMA Architectural Hardware products into a system as described by the customer. Compatibility of components not supplied by DORMA Architectural Hardware are not guaranteed. However, every effort has been made to provide the system function requested. Component failure resulting from improper wiring is not covered by warranty. Refer to individual device product installation information and installation instructions for wire gauge sizes and additional information.
PAIR OF DOORS: DE9100 DELAYED EGRESS EXIT DEVICE W/ ELECTRIC TRIM 
(FAIL SECURE) X ES100 POWER SUPPLY X B400-RMB REMOTE BUZZER X 
CARD READER X MC-4 DOOR POSITION SWITCH

OPERATION:
Armed-Delay Egress Mode: Release of latch bolts via the either DE9000 touchbars is prevented, if either touchbar is depressed longer than the Nubiance Delay Time (1 or 3 seconds). (Jumper selectable), an irreversible Audible Alarm Sequence is initiated at the DE9100 and B400-RMB Remote Buzzer. After the Delay Time (1s or 3s), the touchbar is disabled to retract the latch bolts. The audible alarm will sound continuously until the door is closed (monitored by the MC-4 Door Position Switch) and Delayed Egress is re-armed locally with toucher key switch. (See DE9100 Installation Instructions for additional operational information). 

Authorized Egress: When the local keyswitch is rotated counterclockwise the DE900 is disarmed for 10 or 20 seconds (Jumper selectable) and the touchbar is enabled to retract the latch bolts without initiating the Audible Alarm Sequence. If the door is held open longer than 10 or 20 seconds the MC-4 Door Position Switch will activate the Audible Alarm of the DE9100 device and B400-RMB Remote Buzzer.

Emergency Entrance: When a valid card is presented at Exterior Card Reader, Active Leaf DE9100 is disarmed for 10 or 20 seconds (Jumper selectable) and the Exterior YE902/BFSC Electric Trim is unlocked and is able to retract DE900 latch bolts without initiating Audible Alarm Sequence. If the door is held open longer than 10 or 20 seconds the MC-4 Door Position Switch will activate Audible Alarm of the Active Leaf DE9100 and B400-RMB Remote Buzzer.

NOTE: 1) Exterior Card Reader 2.0N, relay closure times must be set to allow sufficient time to manually operate unlocked Exterior YE902/BFSC Electric Trim and open door. 
2) ES100 Power Supply must be controlled by UL Listed Fire Alarm Panel. During Fire Alarm power is disrupted to DE900 devices allowing immediate egress through door. 
3) Door is closed automatically by the 8R60-series surface mount door closer.

PARTS LIST:
1 EA. - ES100 Power Supply, 24VDC, 6AMP Surge (8 sec), 1.3AMP Continuous (DORMA)
1 EA. - DE9100 x YE902/BFSC Delayed Egress Exit Device, w/*T Secure Electric Trim, Exit 24VDC, 5AMP Surge, 5AMP Continuous; Electric Trim: 24VDC, 140AMP (DORMA)
1 EA. - DE9100 x YE902/BFSC Delayed Egress Exit Device, w/Dummy Trim, 24VDC, 5AMP Surge, 5AMP Continuous (DORMA)
2 EA. - MC-4 Door Position Switch, SPDT 30VDC, 25AMP (DORMA)
1 EA. - B400-RMB Remote Buzzer 24VDC (DORMA)
2 EA. - ES105 Power Transfer Cord (DORMA)
1 EA. - #818 Series Surface Door Closer (DORMA)
1 EA. - Card Reader (BY OTHERS)
Latch Guard Installation
With #463 Strike

For added security a latch guard is supplied with the delayed egress device. Install the latch guard along with the standard #463 strike as shown below. If (2) shims supplied are required to meet correct reference dimension the latch guard is the same thickness as (1) shim.

NOTE:
Prior to installing (2) strike securing screws, install chassis cover, ensure bolt fully engages strike, & chassis cover does not hit edge of latch guard as door swings open or closed.