**DETEx**

Electrical Dogging / Electric Latch Retraction

**RIM, SVR, CVR & MORTISE**

ED Electric Dogging
ER Electric Latch Retraction

Dwg #: 102860 RIM (S.S.)
104600 RIM (AL)
103350 MORTISE (S.S.)
104695 MORTISE (AL)
102880 SVR (S.S.)
104690 SVR (AL)
105260 CVR (60)
105280 CVR (70/80)

**Note:** Advantex device shown throughout instruction. Values Series parts similar in appearance.

**Value Series**

ED Electric Dogging
ER Electric Latch Retraction

Dwg #: 102870 RIM
102890 SVR

Fillerplate: P/N 100408-11 (3-0)
P/N 100518-11 (3-0 EXT)
P/N 100417-11 (4-0)
P/N 100554-11 (4-0 EXT)

Endcap: P/N 101822

Endcap bracket: P/N 101821

Detex Power Supply Catalog No:
90-800 ED Single Door application
80-800 ED Single Door application
81-800 ER Single Door application
82-800 ER Double Door application
83-800 ER Double Door Independent Operation application

Power Supply / Controller sold separately

Owner's Copy
CHECKING FOR DEVICE CLEARANCE
(Cut-Off procedure if required)

Slide endcap assembly onto extrusion

CAUTION:
Check for device and door frame clearance. If no cut-off needed, proceed to the next page.

Minimum Fillerplate Length

<table>
<thead>
<tr>
<th>Value Series Length (L)</th>
<th>Advantex Length (L)</th>
</tr>
</thead>
<tbody>
<tr>
<td>9&quot;</td>
<td>9&quot;</td>
</tr>
</tbody>
</table>

For aluminum Advantex finish cutdown applications:
After cutting, the baseplate extrusion can be reversed to place the cut end inside the head cover. To do so, loosen the setscrew inside the aluminum baseplate extrusion and slide extrusion out, reverse, & slide back in. Tighten setscrew.

ER CONFIGURATION

DETEX ER UNITS REQUIRE A DETEX POWER SUPPLY/CONTROLLER; DETEX P/N 81-800-X, 82-800-X, OR 83-800-X. SEE POWER SUPPLY INSTALLATION INSTRUCTIONS(PACKAGED WITH POWER SUPPLY) FOR COMPLETE INSTALLATION PROCEDURE.

<table>
<thead>
<tr>
<th>Amperage</th>
<th>Wire Color</th>
<th>Switch Position</th>
</tr>
</thead>
<tbody>
<tr>
<td>EX</td>
<td>Grey</td>
<td>Closed</td>
</tr>
<tr>
<td></td>
<td>Brown</td>
<td>Common</td>
</tr>
<tr>
<td></td>
<td>Yellow</td>
<td>Open</td>
</tr>
<tr>
<td>EXV</td>
<td>Grey/Red</td>
<td>Closed</td>
</tr>
<tr>
<td></td>
<td>Brown/Red</td>
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POWER CABLE FROM ER MODULE (CONNECT TO POWER SUPPLY)

RED (+) NOTE: POLARITY SENSITIVE

WIRES FROM EX OR EXV SWITCH (Optional)

CONNECTIONS FOR THE ER MODEL
The red and black wires should be connected to the power supply control board (81-800, 82-800 or 83-800, depending on the door configuration). See power supply instructions 101339 or 101340 as appropriate for typical connections.

RETRACTING THE LATCH
The ER device must be connected to a Detex power supply/controller, 81-800, 82-800 or 83-800. With all the connections made according to the power supply instructions, closing the contact will retract the latch. The pushpad will be pulled down as the latch is retracted. The latch is held by an internal dogging assembly until the contact is released/opened.

HOLDING THE LATCH RETRACTED
ER model holds the latch retracted as long as the control switch is maintained(closed).

RELEASING THE LATCH
ER is an electronically dogged latch. Opening the control input switch (or contacts) causes the latching mechanism to release. When an 81-800, 82-800 or 83-800 series Detex power supply is used, there is a slight delay from the opening of the switch contacts to the release of the latch. This delay is intended for external signaling and is described in the power supply instructions.
ED CONFIGURATION

DETEx ED UNITS MAY BE OPERATED FROM A 24 V AC OR DC SOURCE OR WITH A DETEX POWER SUPPLY
(NOTE: FIRE RATED DEVICES MUST USE 80-800-X OR 90-800 POWER SUPPLY)

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POWER CABLE FROM ED
(CONNECT TO POWER SUPPLY)

BLAck(-)

RED (+)

WIRES FROM EX SWITCH
(Optional)
GREY (CLOSED)
BROWN (COMMON)
YELLOW (OPEN)

CONNECTIONS FOR THE ED MODEL
The ED device can use a transformer or power supply. Use Detex part number PP-5152-2 transformer or approved 24 volt Class 2 equivalent rated at 40 VA or higher. An appropriate switch must be used to control the power to the device. Detex power supply 80-800 or 90-800 may also be used. See ED Connection Diagrams page for a typical installation. Fire rated doors must use the 80-800 or 90-800 power supply. This is because transformers cannot be controlled by the building's fire system. Connections to the building's fire system are described in the power supply instructions.

RETRACTING THE LATCH
The ED model is electrically dogged, but has no mechanism to retract the latch. Once the switch is activated/closed and power is supplied to the device, press the pushpad to open the door. As the pushpad reaches the proper amount of travel, it will automatically latch into place. The pushpad will be held in this position as long as the control switch is maintained (closed).

HOLDING THE LATCH RETRACTED
ED model holds the latch retracted as long as the control switch is maintained (closed).

RELEASING THE LATCH
ED is an electronically dogged latch. Opening the control switch (or contacts) causes the latching mechanism to release the lock.
Typical ED Connection Diagrams

Maintain switch
24VDC @ 1 Amp
OR
24VAC @ 1 Amp
minimum rating
(call Detex for model numbers)

24VAC output transformer
Detex p/n PP-5152-2
or approved equivalent

Fig. 1
ED with transformer

See 90-800-X instructions for fire loop connections & voltage selection

Fire loop input

Maintain switch
24VDC @ 1 Amp
OR
24VAC @ 1 Amp
minimum rating
(call Detex for model numbers)

Red to Positive
Black to Negative

Fig. 2
ED with power supply
RISER DIAGRAMS AND HARDWIRE TRANSFER OPTIONS

SEE POWER SUPPLY INSTRUCTIONS FOR TERMINATION

RED WIRE (+)  BLACK WIRE (-)

ELECTRIFIED HINGE INSTALLATION (MIN 18 GA WIRE)

OPTIONAL JB-1 JUNCTION BOX INSTALLATION WITH 10' FLEX CONDUIT TO DETEX POWER SUPPLY

RED WIRE (+)  BLACK WIRE (-)

HARDWIRE TRANSFER DETAIL

Electric Hinge
p/n: EWH8-X

Electric Hinge Endcap Prep
Wire chase through door
1/2" Hole through the inside door face

Flex Conduit/End Cap Kit
p/n: FCA for Advantex
(No further instructions provided)
p/n: FCV for Value Series

For Value Series only:
Drill 7/8" hole through.

Adjust for handing - all devices (LHR shown)

Fasten until hand-tight
From magnet terminals

Power Transfer
p/n: PT-5

Power Transfer Endcap Prep
Wire chase through door
1/2" Hole through the inside door face

Note: For high traffic areas an electric through-wire hinge or power transfer is recommended.
TROUBLE SHOOTING
ER & ED LATCH RETRACTION

<table>
<thead>
<tr>
<th>Problem</th>
<th>Probable cause &amp; remedy</th>
</tr>
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<tbody>
<tr>
<td>Latch drags on the strike when pushpad is manually depressed.</td>
<td>Panic bar is aligned slightly to close to the strike. Remove the shim plate from the strike.</td>
</tr>
<tr>
<td>Latch drags on the strike after removing shim or does not dog unlocked.</td>
<td>Eye bolt needs to be adjusted. See below.</td>
</tr>
</tbody>
</table>

For further assistance, contact Detex Technical Support at 1-800-729-3839

ADJUSTMENT & TEST PROCEDURE

EQUIPMENT NEEDED: Detex Controller (see instructions for connection locations)

or 24VDC power supply with leads.

Place device on table on it's side with centercase to the left to test.

1. Attach power supply to red(+) and black(-) wires on ER module. Wires are polarity sensitive.
2. Keep hands clear of pushpad assembly.
3. Turn power supply ON. Pushpad should pull down and retract.
4. Verify that latch in CENTERCASE is fully retracted.
   Latch should not stick out past deadlatch bolt more than 1/16". (See Fig. A)
5. If latch protrudes more than 1/16", remove pin & re-adjust the eyebolt by turning only 1/2 turn at a time (Fig B). Repeat test until 1/16" is achieved.
6. Turn power supply OFF. This should release the pushpad and latch. TEST IS COMPLETED.

![Diagram of Extended bolt position](image)

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**Fig. A**
Bolt Position (Rim only)

- Use hex wrench or bent wire to rotate and adjust eyebolt

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**Fig. B**
Adjusting eyebolt
## Optional Accessories

### Advantex Flex Conduit Kit
- **Catalog No:** FCA-[Specify Finish]
- **Electrical Wires Not Supplied**

### Value Series Flex Conduit Kit
- **Catalog No:** FCV (electrical wires not supplied)

<table>
<thead>
<tr>
<th>Optional Accessory</th>
<th>Catalog No.</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sex Nut</td>
<td></td>
<td></td>
</tr>
<tr>
<td>The #10-32 kit is available in (4) finishes:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Catalog No: SN2</td>
<td>Brushed Brass BHMA 606 Finish</td>
<td></td>
</tr>
<tr>
<td>Catalog No: SN2</td>
<td>Oil Rubbed Bronze BHMA 613 Finish</td>
<td></td>
</tr>
<tr>
<td>Catalog No: SN2</td>
<td>Brushed Chrome BHMA 626 Finish</td>
<td></td>
</tr>
<tr>
<td>Catalog No: SN2</td>
<td>Stainless Steel BHMA 630 Finish</td>
<td></td>
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<tr>
<td>p/n: 101617-X</td>
<td></td>
<td></td>
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</tbody>
</table>

| The #1/4-20 kit is available in (4) finishes: | | |
| Catalog No: SN1 | Brushed Brass BHMA 606 Finish |
| Catalog No: SN1 | Oil Rubbed Bronze BHMA 613 Finish |
| Catalog No: SN1 | Brushed Chrome BHMA 626 Finish |
| Catalog No: SN1 | Stainless Steel BHMA 630 Finish |
| p/n: 101616-X    |             |

| Tamper Kit (Security Kit) | Catalog No: SSK3 | p/n: 101233 |
| Security Screws |             |             |
| Security Pin TORX® Bits provided | | |

| Double Door Strike Kit | Catalog No: 94 | p/n: 102212-1 |
| Security Screws |             |             |

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The following Models in the series were evaluated by UL: Controlled Exit Panic Devices; Model 10, 40 & V40. These devices may be suffixed with 01, 02, 03, 08, 09, or 14 followed by A, AN, BN, C, CN, D, DN, DT, DNT, DNU, MN, P, PN, W or WS followed by BP1, BP2, BP3, BP4, BP5, BP6 or BP8 followed by 605, 606, 611, 612, 613, 625, 626, 628, 629, 630, 693, 695 or 711 followed by the RHR or LHR, followed by ED or ER, which may be followed by LD or CD, followed by 605, 606, 611, 612, 625, 626, 628, 629, 630, 693, 695 or 711, followed by 98 or 99, followed by 36 or 48.