

Installation Instructions



PED4000/PED5000 Series Electric Latch Retraction (MELR) Exit Devices

With Optional:

M91 - Prefix (Latchbolt Monitor Switch)

M93 - Prefix (Outside Exit Trim Lever Monitor Switch)

8910PT NE, 8930PT NE, 8903PT NE, 8905PT NE (Ecoflex Trim, Narrow)

9910PT WE, 9930PT WE, 9903PT WE, 9905PT WE (Ecoflex Trim, Wide)

VLR Option



WARNING

This product can expose you to lead which is known to the state of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65warnings.ca.gov.

For installation assistance contact Corbin Russwin
1-800-543-3658 • techsupport.corbinrusswin@assaabloy.com

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PED4000/PED5000 Series MELR Exit Devices

with optional connections

Installation Instructions



TOC	Table of Contents
1	Overview.....4
a	Description.....4
b	Functions.....4
c	Installation Notes.....4
d	Hinge Requirements.....5
e	Wire Gauge Chart5
f	Wire Locations and Positions6
g	DIP Switch Settings (4 Position Slide Type)7
h	ElectroLynx Wiring System8
2	Power Mode Wiring9
a	Installation Instructions9
b	ElectroLynx Opening Installation..... 11
c	Non-ElectroLynx Opening Installation 12
d	Typical Wiring 12
e	LED Signaling Chart..... 13
f	Power Mode Troubleshooting 13

PED4000/PED5000 Series MELR Exit Devices

with optional connections

Installation Instructions



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TOC	Table of Contents
3	Timer Mode 15
a	Installation Instructions 15
b	ElectroLynx Opening Installation..... 17
c	Non-ElectroLynx Opening Installation 18
d	Typical Wiring 19
e	Timer Mode Adjustment (Onboard Timer)..... 19
f	Configurations Instructions DIP Switch Settings..... 20
g	LED Signaling Chart 20
h	Timer Mode Troubleshooting 20
4	Appendix A - Harness Wiring Reconfiguration..... 22-26
5	Appendix B - VLR Option..... 27

For additional wire connections and operation instructions:

M92 Option - Refer to instruction book FM575

MELR Option - Refer to instruction book FM434

M97 Option - Refer to instruction book FM492

PED4000/PED5000 Series MELR Exit Devices

with optional connections Installation Instructions



1

Overview

a

Description

The Corbin Russwin Motorized Latch Retraction (MELR) works with PED4000/PED5000 Series exit devices to provide remote-controlled latch retraction. It is compatible with the following prefixes/options:

- **M91** - Latchbolt Monitor Switch: The latch monitor provides tamper resistant latch monitoring. The monitor switch is activated when there is physical movement of the latch.
- **M92** - Signal Switch (Request to Exit): This signal switch monitors the touch bar position. Touch bar monitoring can be used to detect egress, sound an alarm, send a signal to a remote location, or de-energize an electromagnetic lock.
- **M93** - Outside Exit Trim Lever Monitor Switch
- **8910PT** (Narrow Ecoflex Trim Fail Safe w/o Key Override) / **8930PT** (Narrow Ecoflex Trim Fail Secure w/o Key Override)
- **8903PT** (Narrow Ecoflex Trim Fail Safe w/ Key Override) / **8905PT** (Narrow Ecoflex Trim Fail Secure w/Key Override)
- **9910PT** (Wide Ecoflex Trim Fail Safe w/o Key Override) / **9930PT** (Wide Ecoflex Trim Fail Secure w/o Key Override)
- **9903PT** (Wide Ecoflex Trim Fail Safe with Key Override) / **9905PT** (Wide Ecoflex Trim Fail Secure with Key Override)
- Operating Temp: -40°C to 66°C (-40°F to 150.8°F)

Note: The MELR is also compatible with fire rated (A suffix) as well as M52 and M114 mechanical quick code options.

b

Functions

The MELR can be configured to work in either of two modes:

- **Power Mode** - (See Section 2): The device is not energized when locked. When electrified, the push rail and latch(es) will retract and remain in the retracted position until power is removed. Power is typically applied through a relay triggered by an access control device.
- **Timer Mode** - (See Section 3): The device is always energized and retraction is triggered by a momentary or maintain switch. In **TIMER MODE**:
 - When the timer circuit is closed using a **momentary** switch, the device retracts, remains retracted for a set duration, and releases. The duration of the retraction is set through an onboard timer setting.
 - When the timer circuit is closed using a **maintain** switch, the device retracts. The device releases when the contact is opened.



Caution: Disconnect all input power before servicing. Installer must be a trained and experienced service person. Wiring must comply with applicable local electrical codes, ordinances and regulations. Cylinder (M52) or “hex-key” (M114) mechanical dogging cannot be used on fire rated doors.

c

Installation Notes

- The MELR rail works only with Corbin Russwin PED4000/PED5000 Series exit devices.
- Always perform mechanical installation using the appropriate installation instructions, prior to electrical wiring.
- If used in conjunction with PED4000/PED5000 Series MELR Motor Kit or PED4000/PED5000 Series MELR Rail Kit, consult factory prior to using these instructions.
- **Earth Ground:** Required for electrostatic discharge (ESD) protection, unless already grounded through the metal door and frame.

PED4000/PED5000 Series MELR Exit Devices

with optional connections

Installation Instructions



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1

Overview, continued

d

Hinge Requirements

Without Timer			With Timer	
Application	Wires	Recommended Hinge	Wires	Recommended Hinge
MELR	3	QC8	5	QC12
M91 MELR	5	QC8	7	QC12
M92 MELR	6	QC8	8	QC12
M91, M92 MELR	8	QC8	10	QC12
M93 MELR	5	QC12	7	QC12
ET, M91, M93 MELR	7	QC12	9	QC12
ET, M92, M93 MELR	8	QC12	10	QC12
ET, M91, M92, M93 MELR	10	QC12	12	QC12

Note: ET = The Wide/Narrow Ecoflex Trim Fail Secure/Safe, with/without Key Override.

e

Wire Gauge Chart

Wire Gauge Information								
Total One-Way Length of Wire Run (ft.)	Load Current @ 24VDC							
	1/4A	1/2A	3/4A	*1A	1-1/4A	1-1/2A	2A	3A
100	24	20	18	18	16	16	14	12
150	22	18	16	16	14	14	12	10
200	20	18	16	14	14	12	12	10
250	18	16	14	14	12	12	12	10
300	18	16	14	12	12	12	10	-
400	18	14	12	12	10	10	-	-
500	16	14	12	10	10	-	-	-
750	14	12	10	10	-	-	-	-
1,000	14	10	10	-	-	-	-	-
1,500	12	10	-	-	-	-	-	-

*When calculating voltage drop, use 1A as the recommended current draw for the MELR

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with optional connections

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1

Overview, continued

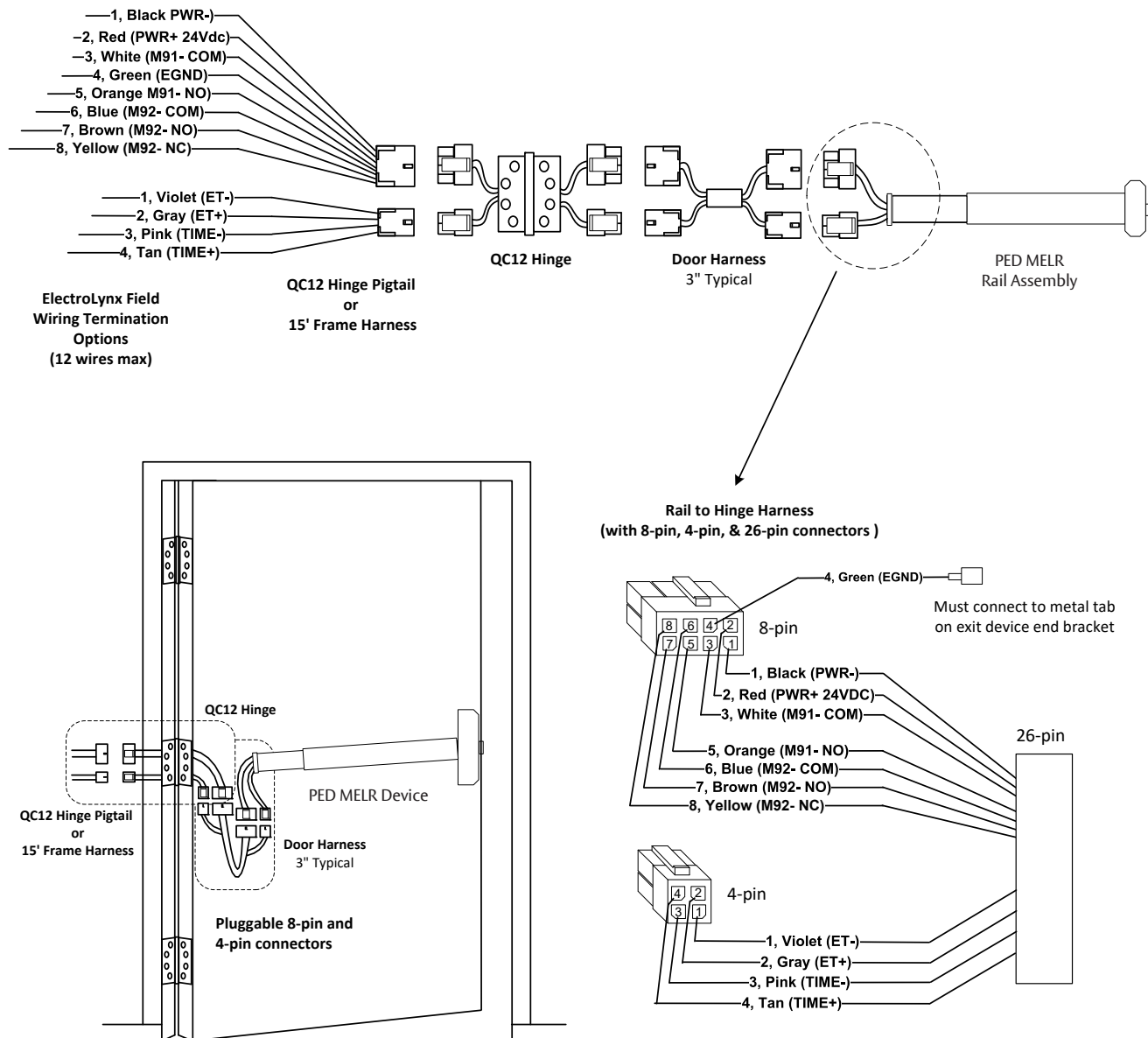
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Wire Locations and Positions

ElectroLynx System Default Wiring Options for MELR QC12 Hinge (12 wires)

Pluggable 8-pin & 4-pin connectors

Default wiring shown. Refer to Appendix A for other wiring options



*If M91NC contact is required, refer to Appendix A-Wiring re-configuration section.

PED4000/PED5000 Series MELR Exit Devices

with optional connections
Installation Instructions



1

Overview, continued

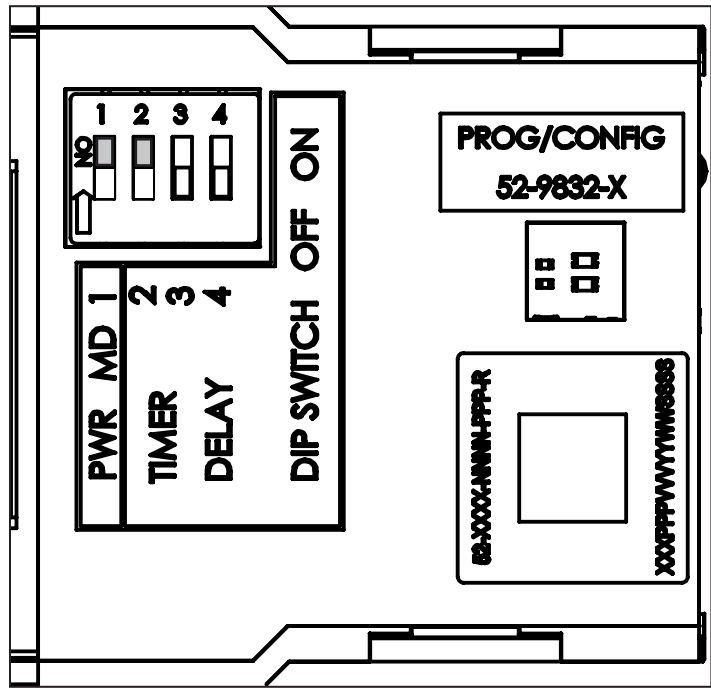
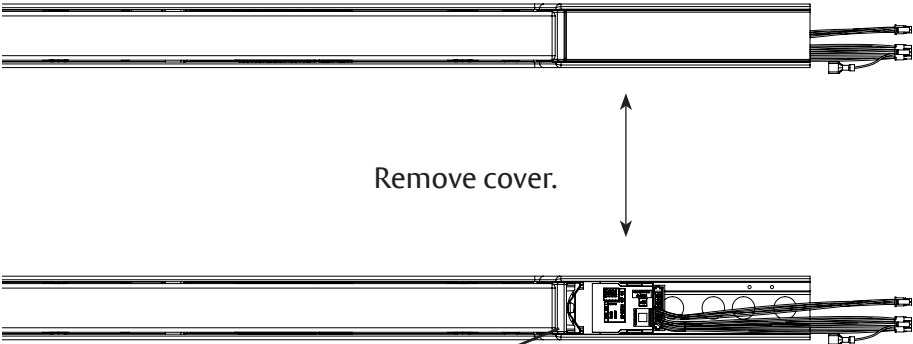
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DIP Switch Settings (4 Position Slide Type)

Factory default ship settings for the DIP Switch are shown below.

Default Setting: **POWER MODE** set to **ON**.

Note: Timer Delay settings are inactive with Power Mode ON. If Timer Mode is desired, refer to Timer Mode, Section 3 for Timer Mode Configuration.



PCBA Module

Note: DIP Switch settings can be changed using a small flat blade screwdriver with the PCBA Module left in the rail assembly.

Dip Switch	Default Factory Settings
1. PWR/TMR	ON = Power Mode
2. DLY1	ON
3. DLY2	OFF
4. DLY3	OFF

PED4000/PED5000 Series MELR Exit Devices

with optional connections

Installation Instructions

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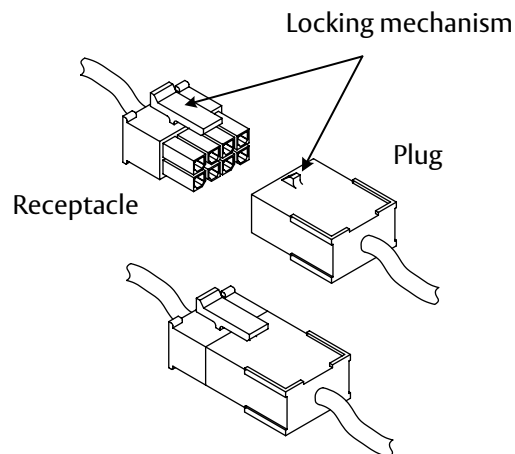
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Overview, continued

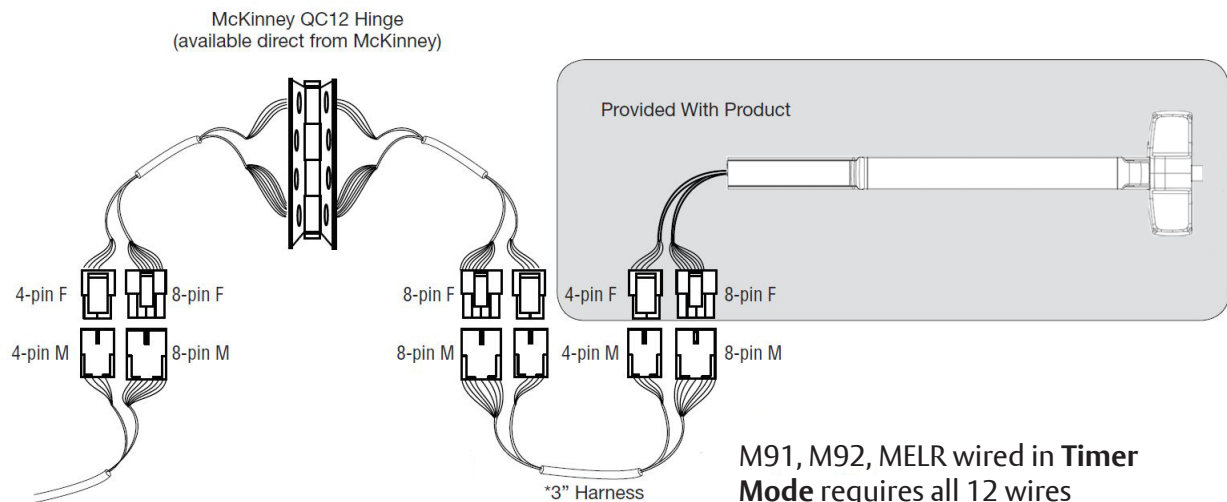
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ElectroLynx Wiring System

Important: ElectroLynx connectors plug and lock together in only one way. DO NOT force connectors together.



Typical ElectroLynx Wiring Harness Connections



Note: The three inch harness is not included with the product, door, or hinge, and must be ordered separately. (Part number available in **Power Mode** Wiring section)

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with optional connections

Installation Instructions

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2

Power Mode Wiring

In this configuration, the device is not energized when locked. When energized with a 24 volt input, the push rail and latch(es) will retract and remain in the retracted position until power is removed. Power is typically applied through a relay triggered by an access control device. For installations using the onboard timer circuit, refer to Section 3: **Timer Mode**.

a

Installation Instructions

How it works: Rail retracts when power is applied and releases when power is removed.

1. Mount PED4000/PED5000 Series exit device using mechanical installation instruction sheet(s) provided.

Note: Ensure proper mechanical function before attempting electrical retraction:

- Verify the push rail can be fully depressed and the latch is fully retracted.
- On vertical rod exit devices, verify the latchbolts do not enter hold-back position until the push rail is fully depressed.
- Adjust device mechanically, as required, before applying power.

2. Connect the ElectroLynx harness in the door - see ElectroLynx **Power Mode** Wiring Figure 4 on page 11.

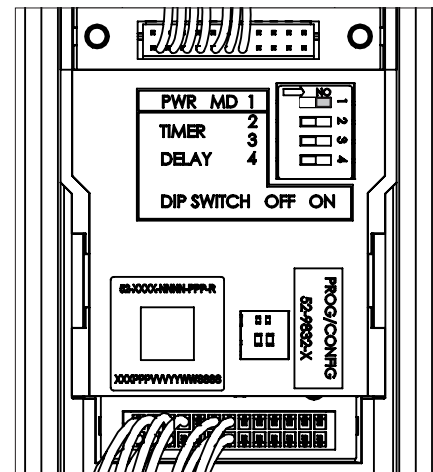
- a. Plug the 8-pin ElectroLynx connector from the rail into the 3" ElectroLynx harness or splice into non-ElectroLynx harness (Figure 5 on page 12 Non-ElectroLynx **Power Mode** Wiring).
- b. Feed the 3" harness through the 1" hole in the door and secure the rail to the door using the mounting bracket and two supplied screws. (See Figure 2 on page 10 Power Mode Installation.)
- c. Plug P5 connector into the end bracket metal tab and then tuck wires into rail, end bracket are, and into 1" diameter in door. Then install end bracket cover. (See Figure 3 on page 10)

Note: Do not install the end cap until electrical operation is verified in order to confirm LED signalling. Do not discard the end cap and hardware.

3. Ensure DIP switch (**position 1 is ON**) enables **Power Mode** (See Figure 1).
4. Connect the ElectroLynx harness to the hinge and secure the electric hinge to door.

Notes: Make sure no wires are pinched or damaged in the process. Refer to detailed wiring instructions under **Power Mode** wiring.

5. Apply 24V according to MELR input requirements (See page 11):
Confirm that the LED is blinking, that the system fully unlocks, and that all bolts clear the strikes.
Troubleshoot the device if issues are observed using the steps outlined at the end of the **Power Mode** section.
6. Store excess wiring under end cap and assemble with provided screws. Avoid pinching wires.



DIP Switch Setting
for Power Mode
Installation

Figure 1

PED4000/PED5000 Series MELR Exit Devices

with optional connections
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2

Power Mode Wiring, continued

a

Installation Instructions, continued

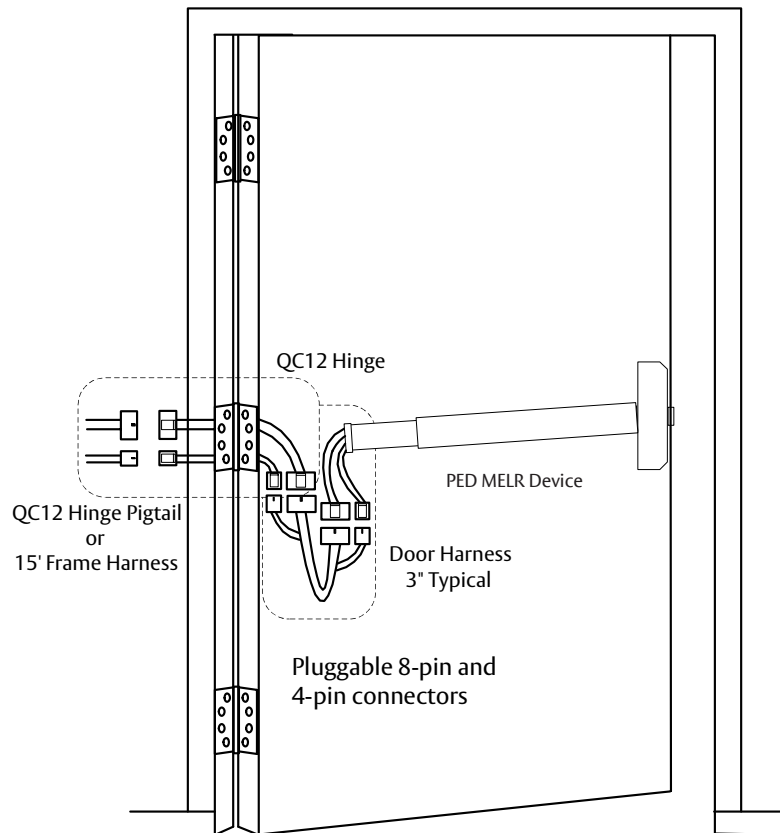


Figure 2 Power Mode Installation

M92, MELR (including A suffix for fire rated) PED4000/PED5000 Series Rail with 8-pin & 4-pin Connectors

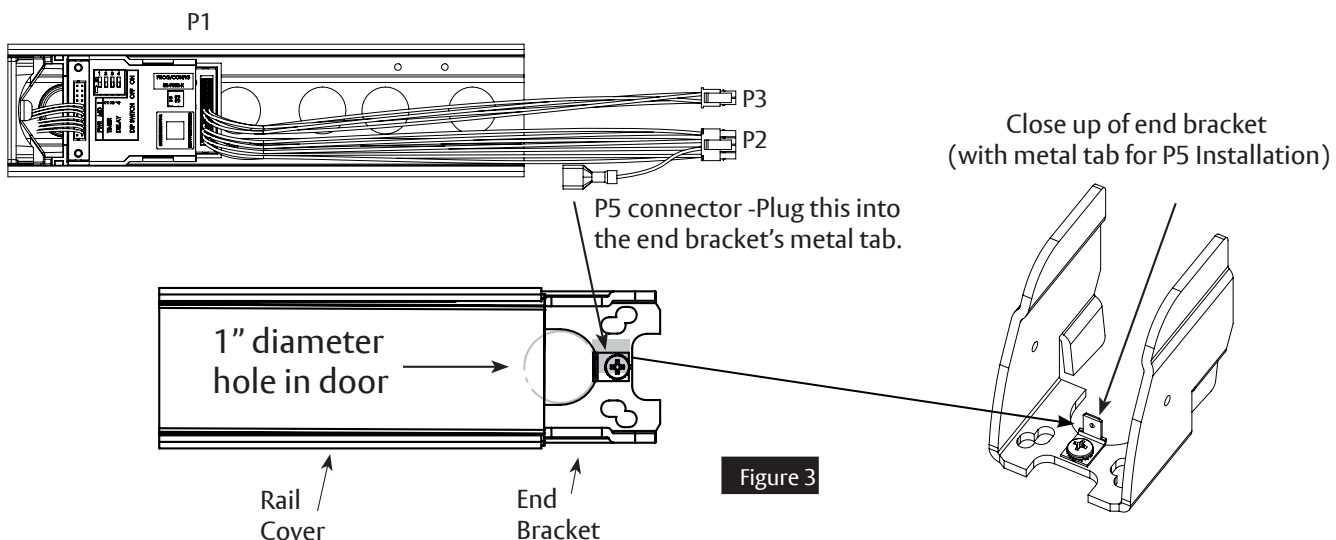


Figure 3

For installation assistance contact Corbin Russwin
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2

Power Mode Wiring, continued

MELR Input Requirements

Switches	M92REX	M91 Latch Bolt
Contact Rating (Resistive)	300mA max @30VDC	300mA max @30VDC

Voltage: 24VDC

- Filtered and regulated power supply
- Motor operating current: 750mA
- Motor hold current: 300mA

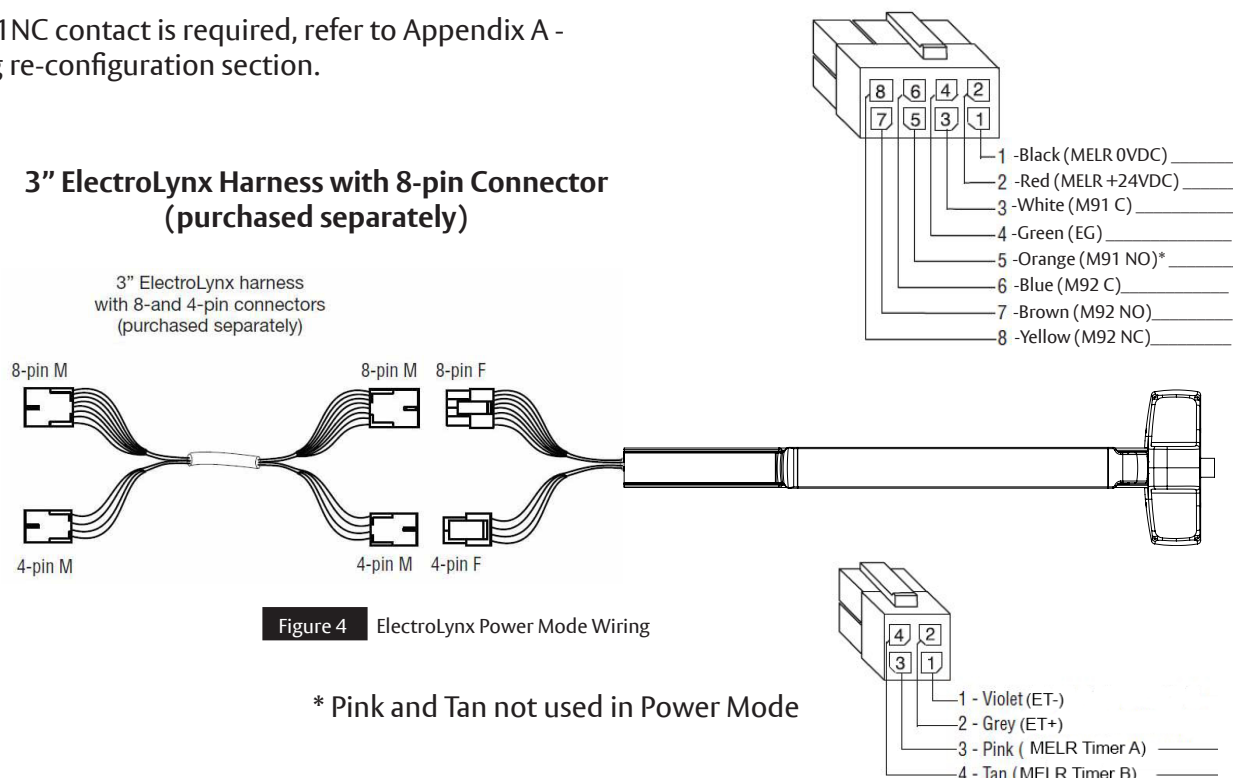
Note: Earth Ground is required for Electrostatic Discharge (ESD) protection unless the metal door and frame are already earth grounded; otherwise, earth ground wiring is required at pin 4 (Figure 7 on page 16 ElectroLynx Power Mode Wiring).

b ElectroLynx Opening Installation

This is the simplest installation method, requiring the installer to plug the ElectroLynx connectors from the exit device to the harness to the hinge and then to the pigtail, which is connected to the access control system.

- MELR exit device
- 3" ElectroLynx connector harness (not supplied with MELR device)
- McKinney QC ElectroLynx hinge (type of hinge depends on the application)
- ElectroLynx door

*If M91NC contact is required, refer to Appendix A - Wiring re-configuration section.



PED4000/PED5000 Series MELR Exit Devices

with optional connections Installation Instructions

2

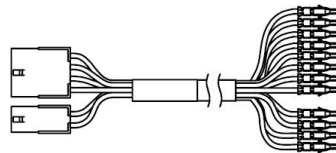
Power Mode Wiring, continued

c

Non-ElectroLynx Opening Installation

Standard door with standard electric hinge: Molex® connectors with flying leads can be purchased separately.

	MOLEX BOTH ENDS	MOLEX TO PINS
3 INCH	QC-C003	QC-C003P
6 INCH	QC-C006	QC-C006P
12 INCH	QC-C012	QC-C012P



**Molex with 12-pin
Connector Pinned**

To identify part numbers and order harness(es), visit the McKinney website, www.mckinneyhinge.com, and search the catalog for ElectroLynx.

If Molex pinned connectors are not available, remove the ElectroLynx connector from the MELR Exit Device and wire nut the MELR wires to the wires from the electric hinge (color coordinating wire colors is recommended).

Non-ElectroLynx Power Mode Wiring MELR Wires with ElectroLynx Connector Removed

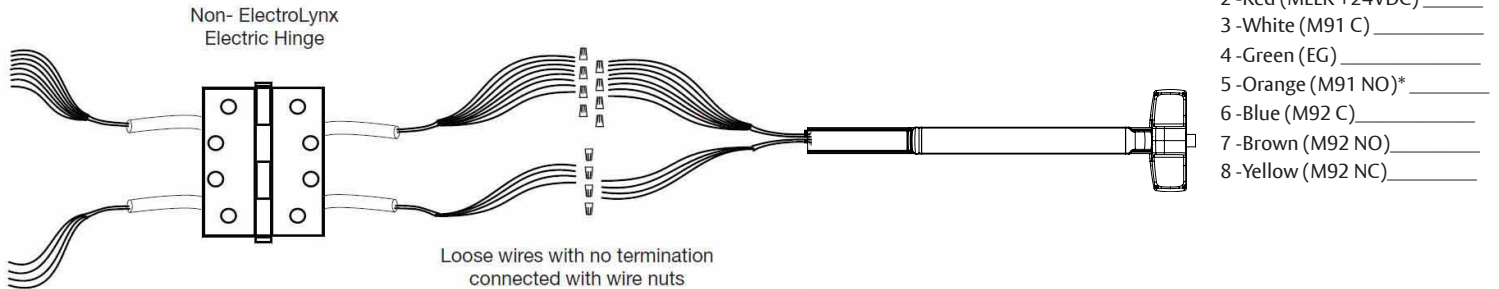


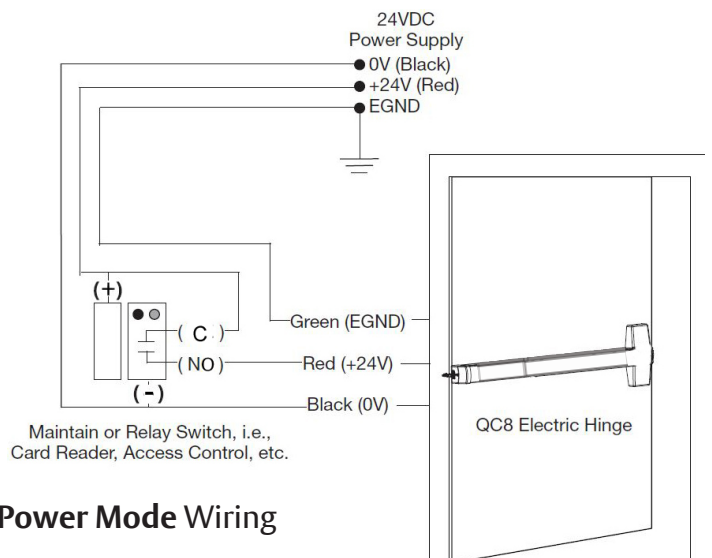
Figure 5 Non-ElectroLynx Power Mode Wiring

d

Typical Wiring

For use when wiring in **Power Mode**.

- Onboard timer will not function in POWER MODE. Add external time delay if necessary.
- The switch is wired between the power supply and the load. Do not cycle the power supply.



MELR PED4000/PED5000 Series Exit Device Typical Power Mode Wiring

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2

Power Mode Wiring, continued

e

LED Signalling Chart

Signal	Cause	Troubleshooting
Dark / Unlit	Controller microprocessor is not active	Confirm connections and incoming power
Steady/Flashing	Normal operation	Check that POWER MODE switch is set
Solid Light	Input voltage is dropping out of operating range	Check wire run and power supply output
2 Flashes Followed by Pause	Retractor sensor, mechanical or hall board problem	Call 800-810-WIRE for assistance
3 Flashes Followed by Pause		

f

Power Mode Troubleshooting

Prior to electrical troubleshooting, confirm that the mechanical system properly functions; i.e., that the push bar fully retracts all latches and the door opens freely. Refer to applicable Corbin Russwin PED4000/PED5000 Series Exit Device product instruction sheet to correct mechanical installation issues.

Important: ALWAYS disconnect power before making any mechanical adjustments to the system.

The push rail does not move when 24V input is applied:

- Check inputs to confirm proper voltage and wiring orientation (See Figure 1 on page 9: ElectroLynx **Power Mode** Installation).
- Remove end cap from rail and confirm that LED is blinking steadily when power is applied. If not, refer to LED signaling.

Note: When configured in **Power Mode**, power is released to lock the device (LED will not blink when power is released).

- Confirm DIP switch position 3 is set to ON.

The push rail does not fully retract or push rail retracts completely and holds but does not open door:

- Verify mechanical installation and correct as necessary:
 - Is excessive force required to depress the push bar?
 - Are latches fully clearing the strikes when mechanically cycled?

The push rail retracts and unlocks electrically but does not relock:

- Physically disconnect power from rail and confirm that input is off.
- Check for mechanical interference (e.g., warped door, lack of shims, misalignment of rail, etc.).
- Was a PED4000/PED5000 Series motor kit installed? Verify the rail assembly.

Rail behaves abnormally (multiple cycles, clicking, delayed retraction, etc.):

- Remove end cap from rail and confirm that LED is blinking steadily when power is applied. If not, refer to LED signaling.

Note: When configured in **Power Mode**, power is released to lock the device - LED will not blink when power is released.

2

Power Mode Wiring, continued

f

Troubleshooting, continued

For applications using automatic operator(s): Door(s) fail to unlock before doors begin to open:

- Adjust timing of operator to allow 850ms for the rail to fully retract.

M91 switch wiring: The design requires normally open functionality and the circuit is normally closed (or vice versa):

- M91C NO contact is default, if NC contact is required refer to Appendix A Wiring Re-configuration section.

For additional installation assistance, please contact 1-800-810-WIRE (9473). When calling, please provide the following information to improve our service (provide what you can):

- Your name and contact number
- Corbin Russwin PED4000/PED5000 Series Exit Device product type (e.g. PED5210 MELR M92)
- Location and identification of the affected opening (e.g., site, building, and door number)
- Corbin Russwin order number (located on product box), if available
- Power supply manufacturer and rated output (i.e., voltage and current)
- Method of operation (e.g., **Power Mode**)
- The number of devices connected to the power supply
- Symptoms of problem (i.e., observed behavior)

PED4000/PED5000 Series MELR Exit Devices

with optional connections

Installation Instructions

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3

Timer Mode

In this configuration, the device is always energized with a 24 volt input, and a timer circuit is opened or closed to control rail retraction. A momentary or maintain switch is typically used to perform this operation. For installations where the power input is cycled to retract the device, refer to Section 2: Power Mode.

a

Installation Instructions

How it works: Rail retracts when timer input circuit is closed.

1. Mount PED4000/PED5000 Series exit device using mechanical installation instruction sheet(s) provided.

Note: Ensure proper mechanical function before attempting electrical retraction:

- Verify the push rail can be fully depressed and the latch is fully retracted.
- On vertical rod exit devices, verify that the latchbolts do not enter hold-back position until the push rail is fully depressed.
- Adjust device mechanically, as required, before applying power.

2. Ensure DIP Switch switch (position 1 is OFF for Timer Mode) disables **Power Mode** (Figure 6). Set to OFF to disable.

3. Connect the ElectroLynx harness in the door (Figure 9 ElectroLynx **Timer Mode** Installation):
 - Plug the 8-pin and 4-pin ElectroLynx connectors from the rail into the 3" ElectroLynx harness or splice into a non-ElectroLynx harness (Figure 8).
 - Feed the 3" harness through the 1" hole in the door and secure the rail to the door using the mounting bracket and two supplied screws (Figure 7 **Timer Mode** Installation).

Note: Do not install the end cap until electrical operation is verified in order to confirm LED signaling. Do not discard the end cap and hardware.

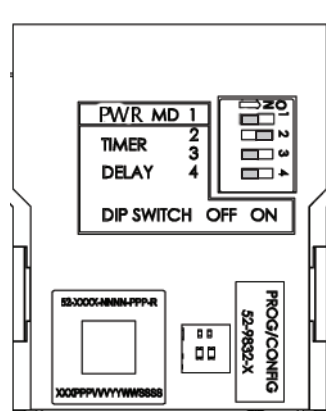
MELR Input Requirements

Switches	M92REX	M91 Latch Bolt
Contact Rating (Resistive)	300mA max @30VDC	300mA max @30VDC

Voltage: 24VDC

- Filtered and regulated power supply
- Motor operating current: 750mA
- Motor hold current: 300mA

Note: Earth Ground is required for Electrostatic Discharge (ESD) protection unless the metal door and frame are already earth grounded; otherwise, earth ground wiring is required at pin 4 (Figure 10 ElectroLynx **Timer Mode** Wiring).



DIP Switch Setting for Timer Mode Installation

Figure 6

1. OFF = Timer Mode
 2. ON
 3. OFF
 4. OFF
- Dip Switch: 2,3,4
Timer Delay
Setting = 5 seconds

PED4000/PED5000 Series MELR Exit Devices

with optional connections Installation Instructions

3

Timer Mode, continued

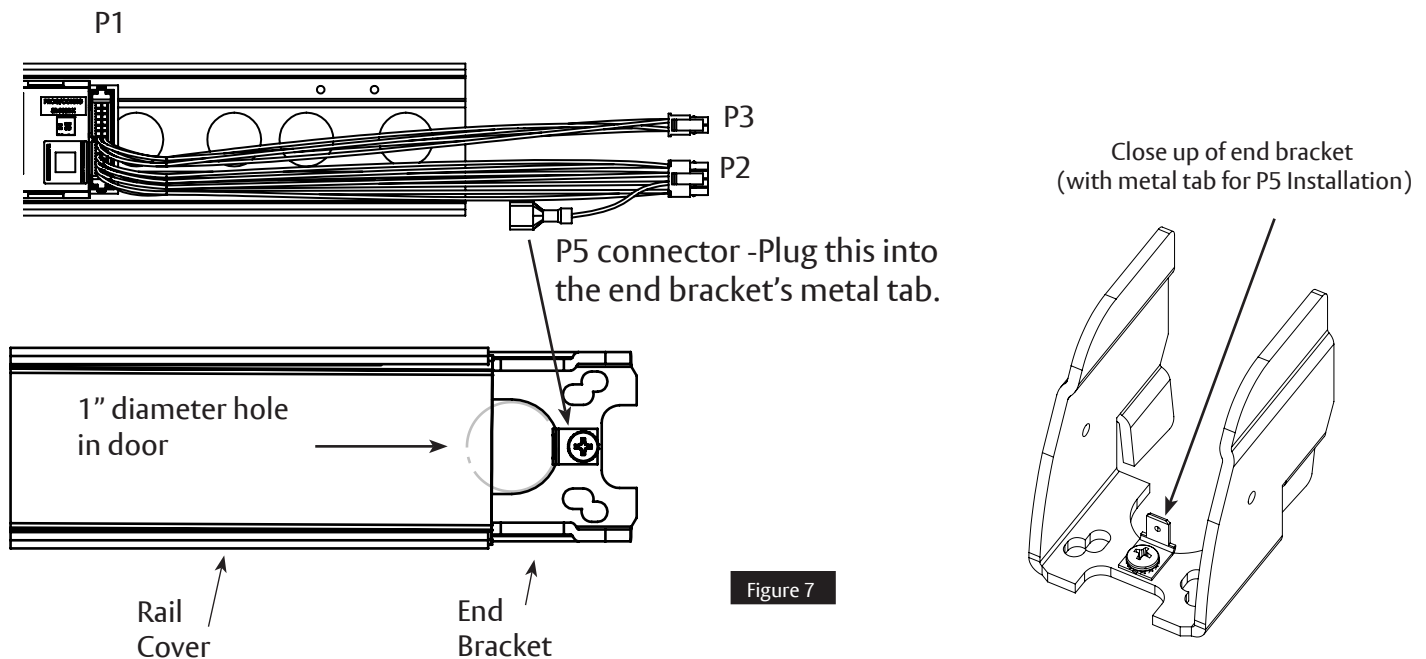
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Installation Instructions, continued

4. Connect the ElectroLynx harness to the hinge:

- Plug the door harness's 8 pin and 4-pin connectors into the hinge's ElectroLynx connector.
- Secure the electric hinge to the door.

Note: Make sure no wires are pinched or damaged in the process. Refer to detailed wiring instructions under **Timer Mode** wiring.

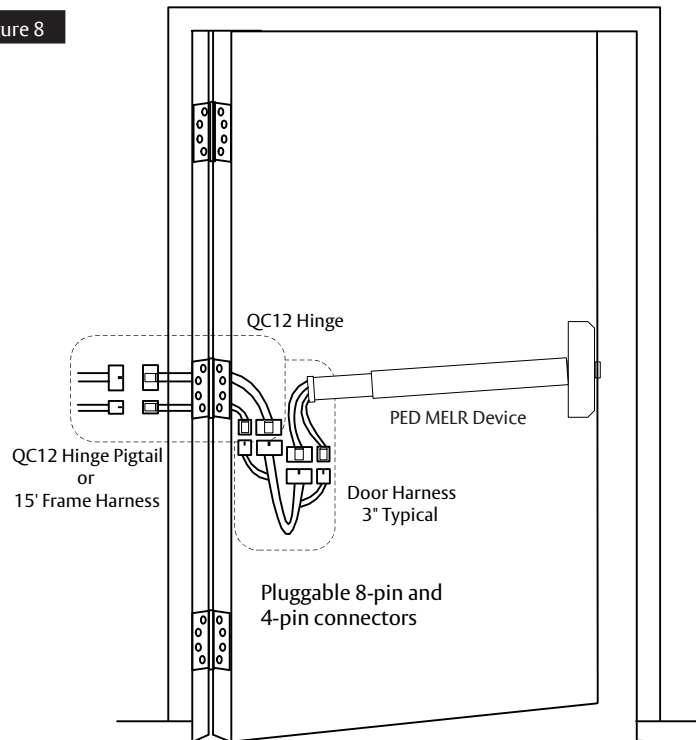


5. Plug P5 connector into the end bracket metal tab and then tuck wires into rail, end bracket are, and into 1" diameter in door. Then install end bracket cover.
6. Apply 24V according to MELR input requirements:
- Confirm that the LED is blinking and close the timer input circuit to retract the device. When the system retracts electrically, confirm that it fully unlocks and that all bolts clear the strikes. Troubleshoot the device if issues are observed using the steps outlined at the end of the **Timer Mode** section.
7. Store excess wiring under end cap and assemble with provided screws. Avoid pinching wires.

3

Timer Mode, continued

Figure 8



b ElectroLynx Opening Installation

This is the simplest installation method, requiring the installer to plug the ElectroLynx connectors from the exit device to the harness to the hinge and then to the pigtail, which is connected to the access control system.

Requirements

- MELR exit device
- 3" ElectroLynx connector harness (not supplied with MELR device)
- McKinney QC ElectroLynx hinge - (type of hinge depends on the application)
- ElectroLynx door

3" ElectroLynx harness
with 8-and 4-pin connectors
(purchased separately)

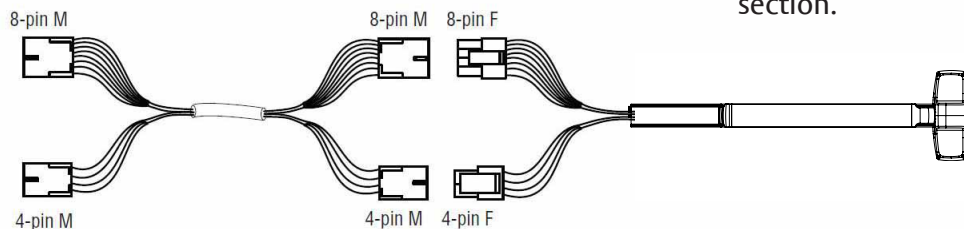
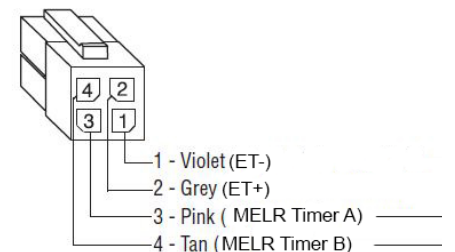
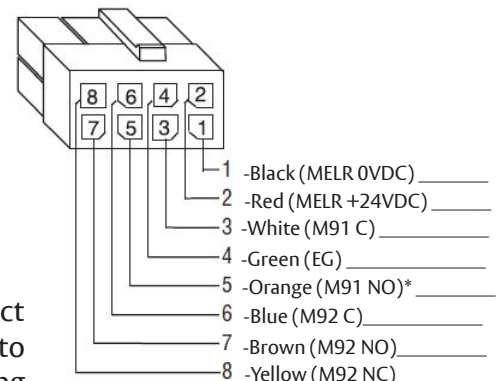


Figure 9 ElectroLynx Timer Mode Installation

*If M91 NC contact is required, refer to Appendix A-Wiring re-configuration section.



PED4000/PED5000 Series MELR Exit Devices

with optional connections Installation Instructions



3

Timer Mode, continued

c

Non-ElectroLynx Opening Installation

Standard door with standard electric hinge: Remove the ElectroLynx connector from the MELR Exit Device and wire nut the MELR wires to the wires from the electric hinge (color coordinating wire colors is recommended).

	MOLEX BOTH ENDS	MOLEX TO PIN OUT
3 INCH	QC-C003	QC-C003P
6 INCH	QC-C006	QC-C006P
12 INCH	QC-C012	QC-C012P

To identify part numbers and order harness(es), visit the McKinney website, www.mckinneyhinge.com, and search the catalog for ElectroLynx.

- 1 -Black (MELR 0VDC) _____
- 2 -Red (MELR +24VDC) _____
- 3 -White (M91 C) _____
- 4 -Green (EG) _____
- 5 -Orange (M91 NO)* _____
- 6 -Blue (M92 C) _____
- 7 -Brown (M92 NO) _____
- 8 -Yellow (M92 NC) _____

*If M91 NC contact is required, refer to Appendix A-Wiring re-configuration section.

Non-ElectroLynx Timer Mode Connection MELR Wires with ElectroLynx Connector Removed

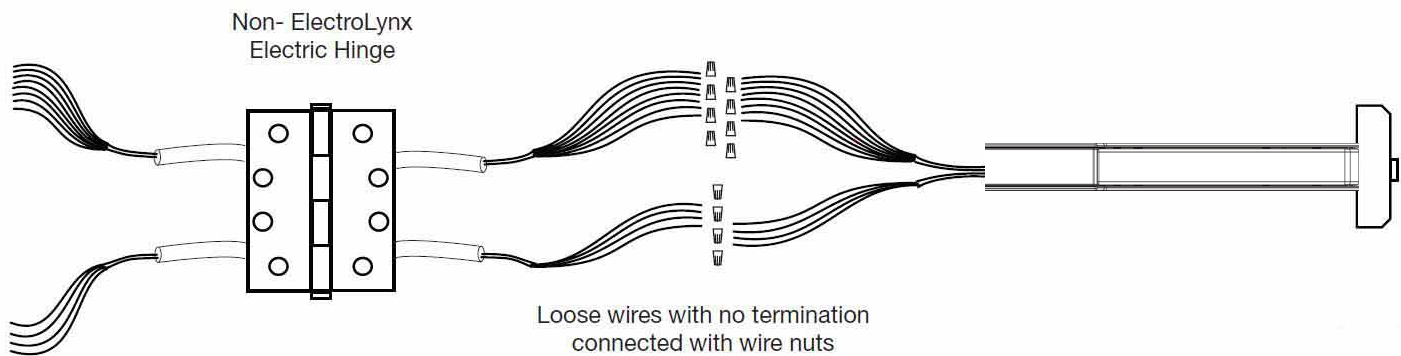
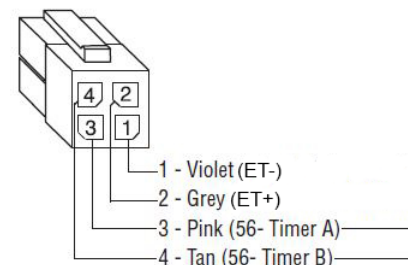


Figure 10 Timer Mode Installation



PED4000/PED5000 Series MELR Exit Devices

with optional connections Installation Instructions



3

Timer Mode, continued

d

Typical Wiring

For use when wiring in **Timer Mode** (using the onboard timer). If more than 20 seconds timed delay is necessary, an external timer delay relay is required (not provided).

Note: 24V supply is constant in **Timer Mode**. Refer to settings in Section 3-g Configuration Instructions DIP Switch Settings (for M91 and timer duration).

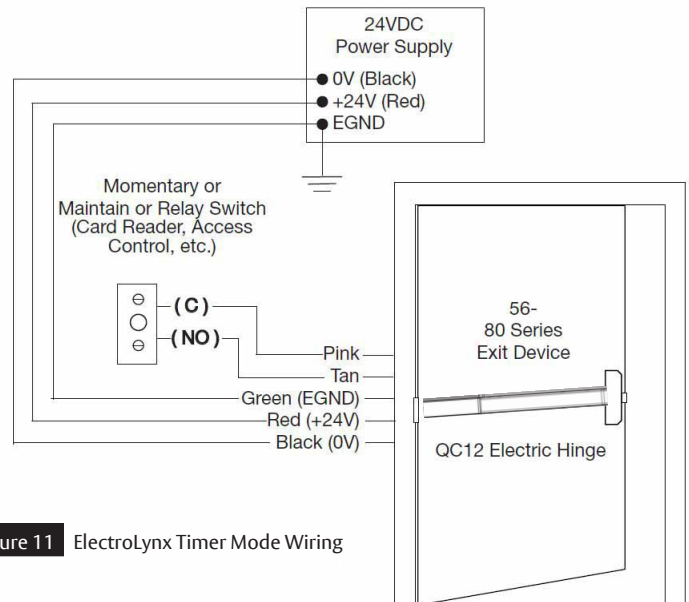


Figure 11 ElectroLynx Timer Mode Wiring

e

Timer Mode Adjustment (Onboard Timer)

How it works: The 24 volt input is always energized and the system retracts when the timer input circuit is closed.

- When the timer circuit is closed utilizing a momentary switch, the device retracts, remains retracted for a set duration, and releases. The duration of the retraction is set using an onboard timer setting (0 - 20 second timer adjustment).
- The countdown begins when the rail is first retracted.
- When the timer circuit is closed using a maintain switch, the device retracts.
- The device releases when the circuit is re-opened.

Notes:

- 24V supply is constant in **Timer Mode**. The duration of retraction is determined by whichever is longer: the maintain switch closure or the onboard timer delay.
- If more than 20 seconds delay is necessary (exceeding the maximum setting), an external timer delay relay is required (not provided).
- Refer to settings in Section 3-g (Fig. 18-20) for DIP Switch timer delay settings.

with optional connections
Installation Instructions

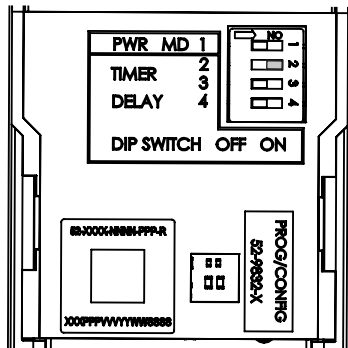
3

Timer Mode, continued

f

Configuration Instructions DIP Switch Settings (for M91 and timer duration)

For MELR applications using the optional M91 latchbolt monitor switch (M91, MELR).



1. OFF = Timer Mode
2. ON
3. OFF
4. OFF
Dip Switch: 2,3,4
Timer Delay
Setting = 5 seconds

Dip Switch Settings

Time	2	3	4
0 Sec	OFF	OFF	OFF
2 Sec	OFF	OFF	ON
3 Sec	OFF	ON	OFF
4 Sec	OFF	ON	ON
5 Sec	ON	OFF	OFF
10 Sec	ON	OFF	ON
15 Sec	ON	ON	OFF
20 Sec	ON	ON	ON

MELR Timer Mode

Dip switch 2, 3, 4 are used to configure the timer delay in timer mode.
Timer Delay Settings = 5 seconds

gg

LED Signaling Chart

Signal	Cause	Troubleshooting
Dark / Unlit	Controller microprocessor is not active	Confirm connections and incoming power
Steady/Flashing	Normal operation	Check that TIMER MODE switch is set
Solid Light	Input voltage is dropping out of operating range	Check wire run and power supply output
2 Flashes Followed by Pause	Retractor sensor, mechanical, or hall board problem	Call 800-810-WIRE for assistance
3 Flashes Followed by Pause		

h

Timer Mode Troubleshooting

Prior to electrical troubleshooting, confirm that the mechanical system properly functions; i.e., that the push bar fully retracts all latches and the door opens freely. Refer to applicable Corbin Russwin PED4000/PED5000 Series Exit Device product instruction sheet to correct mechanical installation issues.

Important: ALWAYS disconnect power before making any mechanical adjustments to the system.

The push rail does not move when 24V input is applied:

- Check inputs to confirm proper voltage and wiring orientation. When configured for **Timer Mode**, 24V must be applied and the timer circuit must be closed to cycle the device
- Remove end cap from rail and confirm that LED is blinking steadily when power is applied. If not, refer to LED signaling.

3

Timer Mode, continued

i

Timer Mode Troubleshooting, continued

The onboard timer duration adjustment is not working:

- Remove power when making adjustments to timer delay settings (DIP Switches).
- When a momentary signal is applied to the timer circuit, the circuit must be reopened for the timer to function.

The push rail does not fully retract or push rail retracts completely and holds but does not open door:

- Verify mechanical installation and correct as necessary:
 - Is excessive force required to depress the push bar?
 - Are latches fully clearing the strikes when mechanically cycled?

The push rail retracts and unlocks electrically but does not relock:

- Confirm that the **Timer Mode** contact is opened (the rail will remain depressed until the contact is opened and the delay has expired).
- Physically disconnect power from rail (while electrically retracted) to verify if the issue is mechanical.
- Check for mechanical interference (e.g., warped door, lack of shims, misalignment of rail, etc.).
- Was a motor kit installed? Verify the rail assembly.

Rail behaves abnormally (multiple cycles, clicking, delayed retraction, etc.):

- If a momentary contact is applied to the timer circuit, adjust the onboard timer to a longer duration.
- Remove end cap from rail and confirm that LED is blinking steadily when power is applied. If not, refer to LED signaling.

For applications using automatic operator(s): Door(s) fail to unlock before doors begin to open:

- Adjust timing of operator to allow 850ms for the rail to fully retract.
- If a momentary contact is applied to the timer circuit, adjust the onboard timer to a longer duration to prevent the device from locking prior to operator actuation.

M91 switch wiring: The design requires normally open functionality and the circuit is normally closed (or vice versa):

- M91 C, NO contact is default, if NC contact is required refer to Wiring Re-configuration section.

For additional installation assistance, please contact 1-800-810-WIRE (9473). When calling, please provide the following information to improve our service (provide what you can):

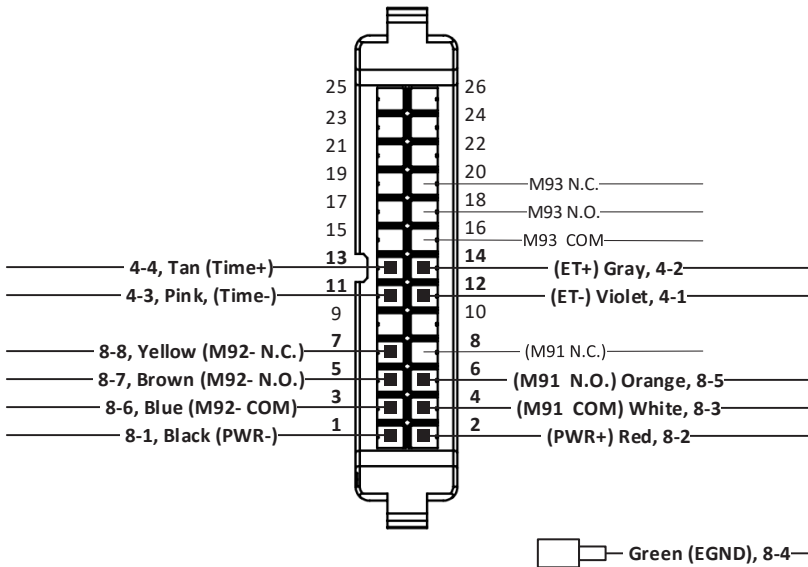
- Your name and contact number.
- Corbin Russwin PED4000/PED5000 Series Exit Device product type (e.g. PED5210 MELR M92).
- Location and identification of the affected opening (e.g., site, building, and door number).
- Corbin Russwin order number (located on product box), if available.
- Power supply manufacturer and rated output (i.e., voltage and current).
- Method of operation (e.g., **Timer Mode**).
- The number of devices connected to the power supply.
- Symptoms of problem (i.e., observed behavior).

PED4000/PED5000 Series MELR Exit Devices

with optional connections
Installation Instructions

4 Appendix A: Harness Wiring Reconfiguration

PED Series Exits MELR
PCBA to QC12 Hinge Side Harness
26-pin connector to 8 & 4-pin Elynx connectors



12 + 4 = 16 total wiring selections

PED Series Exits MELR
ElectroLynx QC12
Factory Default Ship Configuration

26-1	PWR-	Black	8-1
26-2	PWR+ (24VDC)	Red	8-2
26-4	M91 COM	White	8-3
Quick Conn	EGND	Green	8-4
26-6	M91 N.O.	Orange	8-5
26-3	M92 COM	Blue	8-6
26-5	M92 N.O.	Brown	8-7
26-7	M92 N.C.	Yellow	8-8
26-12	ET-	Violet	4-1
26-14	ET+	Gray	4-2
26-11	TIME- (Timer A)	Pink	4-3
26-13	TIME+ (Timer B)	Tan	4-4
26-8	M91 N.C.	No wire	
26-16	M93 COM	No wire	
26-18	M93 N.O.	No wire	
26-20	M93 N.C.	No wire	

LEGEND – PED4000/PED5000 Series Exits MELR
M91 Latch Monitor Switch (Form C) in Chassis
M92 Push Bar Switch (Form C) in Rail
EGND Earth Ground connection to metal rail, required

Power Mode Retracts push bar/latch when 24VDC power is applied, releases when power is removed
Timer Mode Device is powered, a momentary closure from external switch across Time+ to Time- retracts push bar/latch for dip switch setting of 0 to 20sec, or remains retracted until switch is opened then push bar/latch releases after (0-20sec)

ET Electrified Exit Trim (Fail Safe or Fail Secure) Ecoflex 10 to 28VDC
M93 ET Outside Lever Monitor Switch (Form C)
Type: 12/24VDC, Continuous Duty

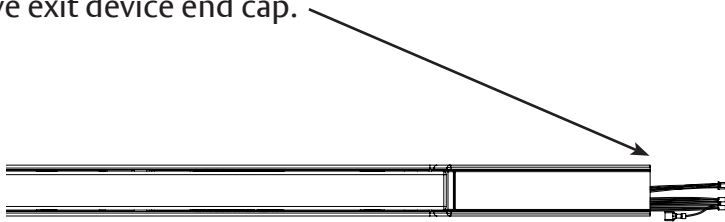
4

Appendix A: Harness Wiring Reconfiguration, continued

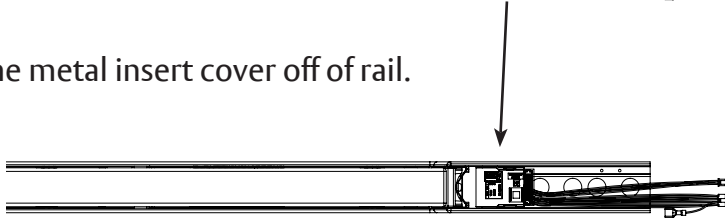
a

Wire Configuration

1. Remove exit device end cap.

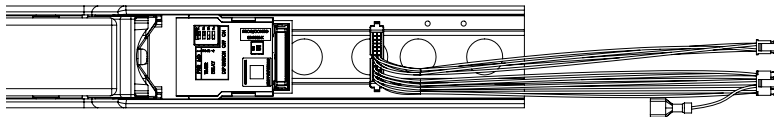


2. Slide the metal insert cover off of rail.



NOTE: Wire lengths are not to scale

3. Unplug the harness 26-pin connector from mating PCBA 26-pin connector.



The factory ships the rail to hinge side harness with 12 default wires terminated from the 26-pin connector to 8-pin & 4-pin connectors.

There are a total of 16 wiring choices (4 additional wiring choices):

- M91 N.C.
- M93 COM
- M93 N.O.
- M93 N.C.

See page 22 for wire table.

4

Appendix A: Harness Wiring Reconfiguration

b

If the M91 N.C. contact is required instead of M91N.O. (26-6, Orange wire):

1. Use small tool with pointed tip and position it at orange wire on 26 pin connector position 6, as shown in Figure 12 .
2. Lift up plastic lance, as shown in Figure 12, slowly pull orange crimped terminal/wire assembly out of connector.
3. Refer to Figure 13 and install crimped terminal/orange wire assembly into the new M91 N.C. location 26-8 (26-pin connector position 8).

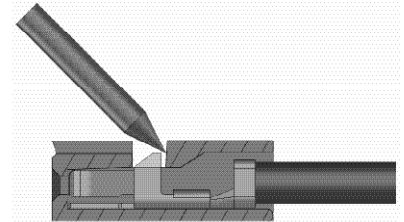


Figure 12

c

Inserting crimped contact/wire assembly into new connector position.

Follow correct Horizontal Insertion view when inserting crimped terminal/wire into socket (26-pin connector), as shown below.

Insert female pins into male housing

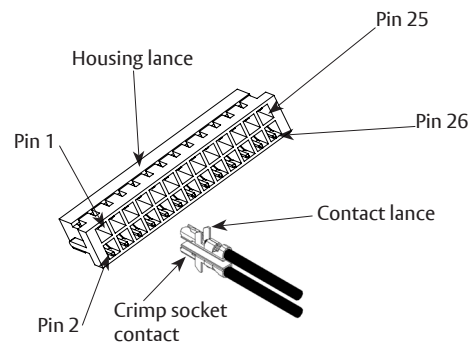
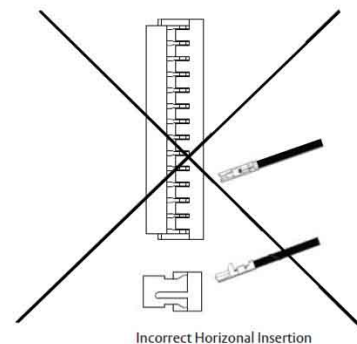
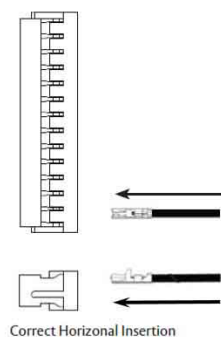


Figure 13

Do not tilt crimped terminals during insertion.



4

Appendix A: Harness Wiring Reconfiguration, continued

d

Inserting crimped contact/wire assembly into new connector position.

If the M93 COM and M93 N.O. (or M93 N.C.) contact is required for your application, select 2 of the 12 wires that are not being used.

Example: If Timer A (pink wire 26-11), and Timer B (tan wire 26-13) aren't being used, move wire assemblies to M93 COM (pink wire to 26-16) and tan wire to 26-18 for M93 N.O. (or tan wire to 26-20 for M93 N.C.).

1. Use small tool with pointed tip to remove pink and tan crimped terminal/wire assemblies from 26 pin connector positions 26-11 and 26-13, as shown in Figure 14.
2. Lift up plastic lance, as shown in Figure 14, slowly pull orange crimped terminal/wire assembly out of connector.
3. Refer to Figure 15 and install crimped contact/wire assemblies into the new locations.
4. Insert pink wire into 26-16 (M93 COM).
5. Insert tan wire into 26-18 for (M93 N.O.), or 26-20 for (M93 N.C.).

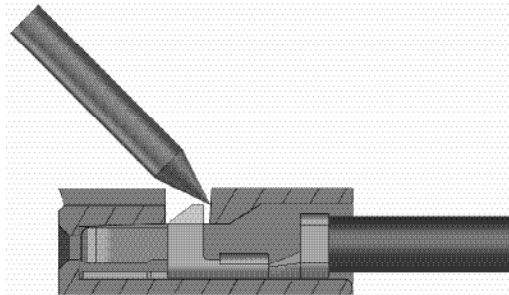


Figure 14

PED4000/PED5000 Series MELR Exit Devices

with optional connections

Installation Instructions

Corbin
Russwin

ASSA ABLOY

4

Appendix A: Harness Wiring Reconfiguration

d

Inserting crimped contact/wire assembly into new connector position, continued

Follow correct Horizontal Insertion view when inserting crimped terminal/wire into socket (26-pin connector), as shown below.

Insert female pins into male housing

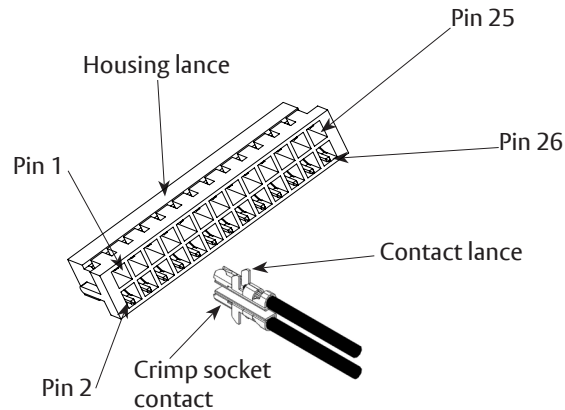
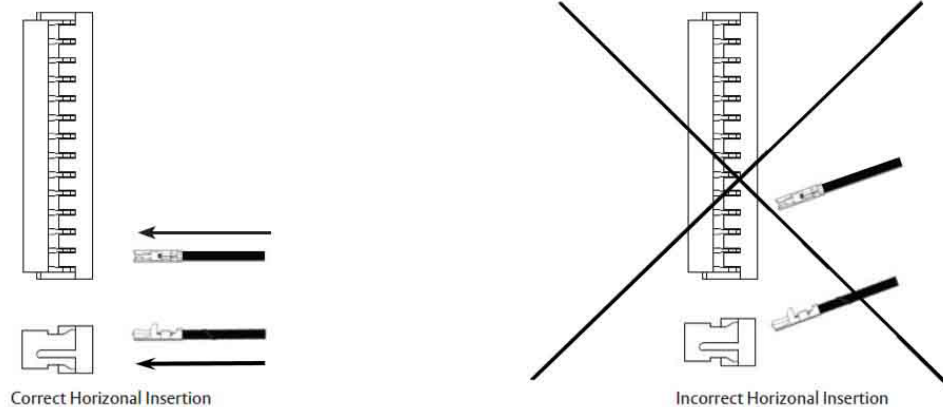


Figure 15

Do not tilt crimped terminals during insertion.



5

Appendix B: VLR Option

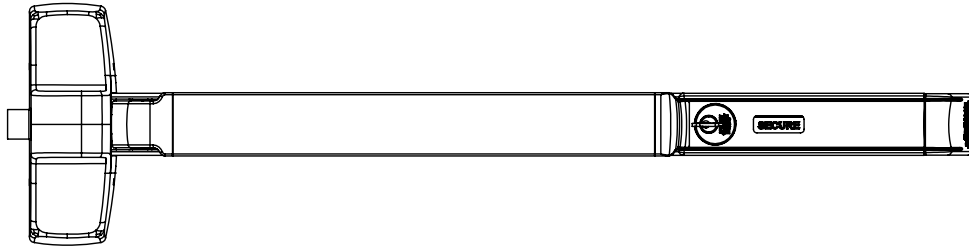
a

Description

The VLR option is an advanced solution built upon the base electronic latch retraction (MELR) mechanism, powered by 24 VDC. This innovative feature integrates an indicator to display status, and a cylinder which allows users to undog an electronically dogged device, to secure the entry. The indicator, in the undogged or lockdown state, will display the "SECURE" lettering, illuminated by a red LED backlight. When the device is in the dogged or unlocked state, the indicator will show a "BLANK" label. Additionally, the VLR option does not affect the normal day to day operation of the device. When the touch bar is depressed, the indicator display will cycle, if the device is in an undogged state, temporarily switching from "SECURE" to "BLANK".

NOTE: for 910, 930, 903, 905 functions – Exterior trim may not remain secure/locked.

- Order prefix VLR MELR
- VLR works with all additional options that MELR currently offers.
- If you are purchasing the VLR unit, it will install the same as the MELR units.
- If you are replacing the MELR unit with the VLR unit, follow MELR instruction as well as the below instruction.
- VLR to be used with Power Mode only. See MELR Section 2, page 10.

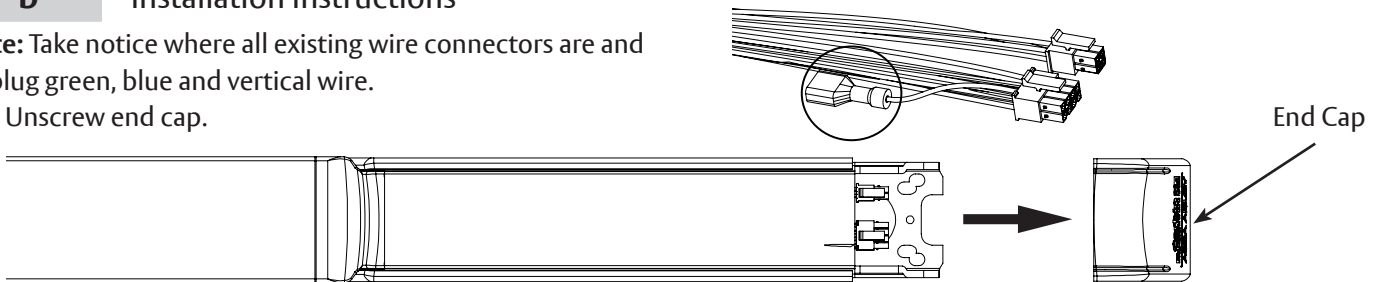


b

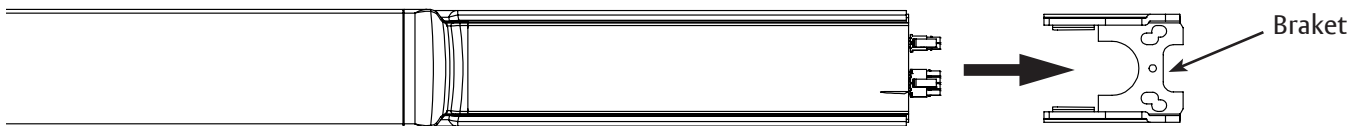
Installation Instructions

Note: Take notice where all existing wire connectors are and unplug green, blue and vertical wire.

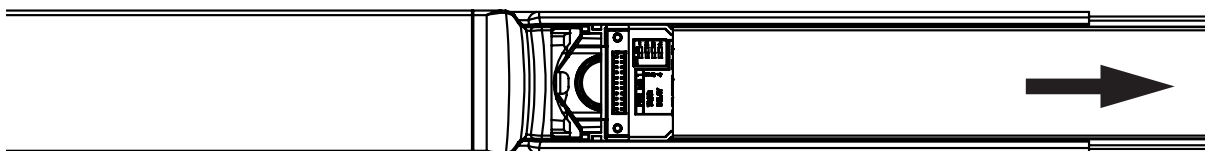
1. Unscrew end cap.



2. Unscrew bracket.



3. Slide insert assembly out.



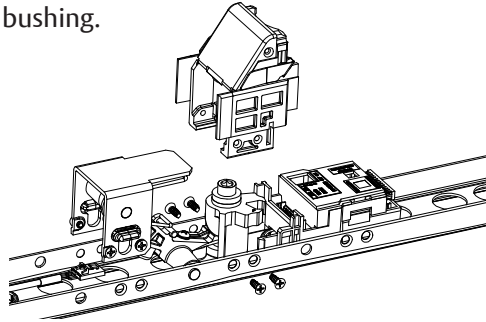
PED4000/PED5000 Series MELR Exit Devices

with optional connections Installation Instructions

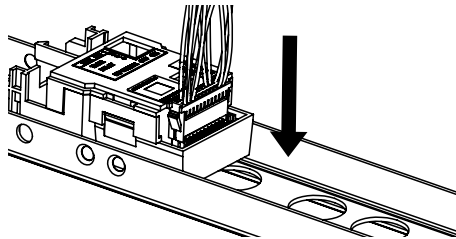
5

Appendix B: VLR Option, continued

4. Unplug MELR harness from controller.
5. Remove dogging slope and install VLR cam & bushing.



6. Plug in new VLR harness to controller.

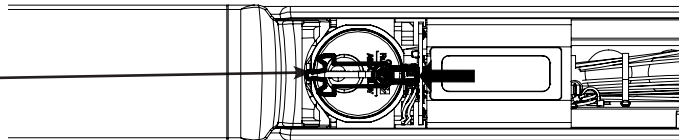


- Line up insert assembly arm centrally to dogging cam and push connection together.

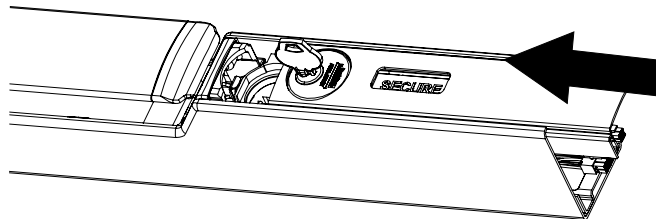
Note:

Some parts are hidden for clarity.

Dogging
Cam



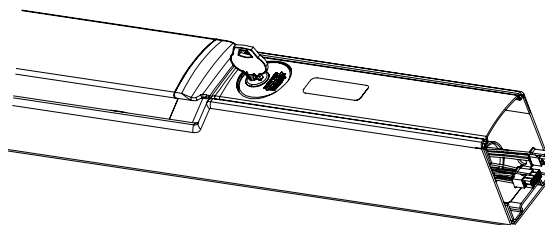
- Slide insert forward all the way.
- Slide insert forward all the way.



7. Reinstall bracket.



DO NOT FORCE EXCESS WIRE BACK INTO
RAIL SO THAT IT CREATES A POTENTIAL
JAM HAZARD



8. Reinstall end cap.
9. Depress the push to check the indicator.

PED4000/PED5000 Series MELR Exit Devices

with optional connections Installation Instructions



5

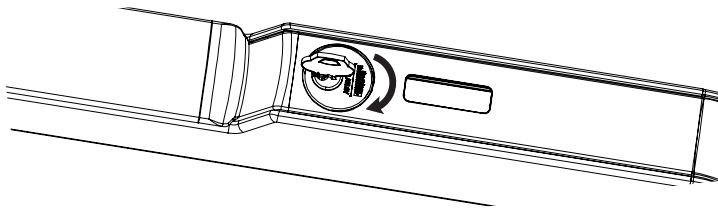
Appendix B: VLR Option, continued

c

Operation

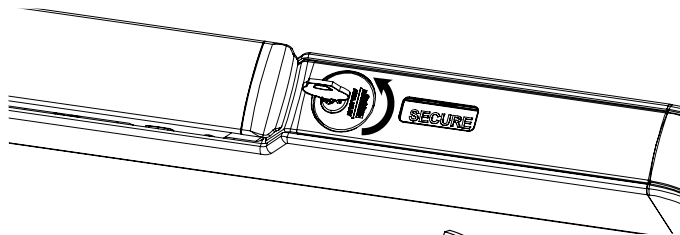
1. Insert key and turn CW to activate VLR dogged state. Door opening state is considered open and unsecured.

Activate Dogging



2. Insert key and turn CCW to enable VLR SECURE state. Door opening state is considered locked or secure from the exterior trim.

To Secure

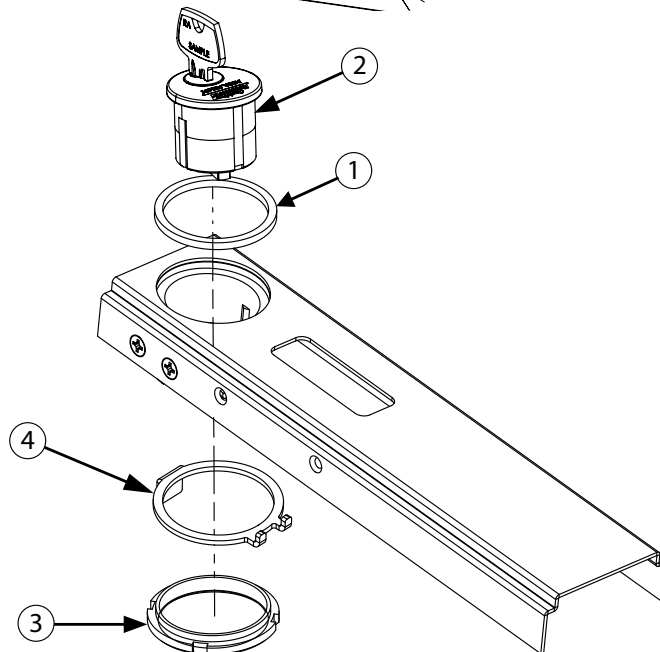


NOTE: With regular usage and pass-through, each time the touch pad is pressed the attached indicator will change status momentarily.

d

Cylinder Installation

1. Install Cylinder Collar (1) as required.
2. Install Cylinder (2); note orientation.
3. Install Switch Ring (4); note orientation.
4. Thread on Cylinder Nut from bottom (3).



PED4000/PED5000 Series MELR Exit Devices

with optional connections

Installation Instructions



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PED4000/PED5000 Series MELR Exit Devices

with optional connections

Installation Instructions



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