



Low Energy  
Operator

# DORMA ED800

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**Symbols and Abbreviations**

 . . . . . Universal accessibility symbol  
 A156.4 . . . . . ANSI standard for door controls/closers  
 A156.10 . . . . . ANSI standard for power operated pedestrian doors  
 A156.19 ANSI standard for power assist and low energy power operated doors  
 ABS . . . . . Acrylonitrilebutadiene styrene  
 ADA . . . . . Americans with Disabilities Act  
 . . . . . American National Standards Institute  
 . . . . . Builders Hardware Manufacturers Association  
 DC . . . . . Direct current  
 FS . . . . . Frame switch  
 ft . . . . . Feet  
 HH . . . . . Hand Held  
 Hz . . . . . Hertz  
 J . . . . . Jamb/top jamb  
 KC . . . . . Key Chain  
 lbf . . . . . Pounds force  
 lb . . . . . Pounds  
 M . . . . . Main arm  
 mA . . . . . Milliampers  
 mm . . . . . Millimeters  
 MS . . . . . Motion Sensor  
 NFPA . . . . . National Fire Protection Association  
 PC . . . . . Power Cord  
 pg . . . . . Page  
 PS . . . . . Presence Sensor  
 R . . . . . Regular arm  
 RFR . . . . . Radio Frequency Receiver  
 RFT . . . . . Radio Frequency Transmitter  
 RS . . . . . Remote Switch  
 T . . . . . Track  
 . . . . . Underwriter's Laboratories  
 . . . . . Underwriter's Laboratories of Canada  
 VAC . . . . . Volts Alternating Current  
 VDC . . . . . Volts Direct Current  
 WS . . . . . Wall Switch

ISO 9001:2000



The quality management system at the Reamstown, PA facility is certified to ISO-9001.\*



\*DORMA Door Controls Inc., dba: DORMA Architectural Hardware

Patents: 5,913,763/5,956,249/5,687,507

**The ANSI A156.19 DORMA ED800 is a surface closer based low energy power operator that precisely senses the door environment and responds appropriately. The ED800 is designed for manual openings that occasionally require automatic opening.**

The Americans with Disabilities Act (ADA) heightened awareness that doors present barriers to individuals with physical challenges. A major concern of door closer manufacturers is how to make doors easy to open while providing sufficient closing force. Interior doors pose a few problems, while exterior doors are exposed to a much wider array of forces. Closers with adjustable spring power can help, but cannot guarantee compliance when the adjustment must be increased in order to close the door.

DORMA has solved these problems with the ED800. It fulfills the need for constant reliable closing control of doors while providing the power to open them as needed for the physically challenged.



**Technical Details:**

- TS83 Series door closer with adjustable spring power, sweep speed, latch speed and backcheck cushioning.
- Non-handed.
- Accommodates doors 36"/100 lb to 48"/200 lb
- Push/Pull switch allows one unit for track and top jamb applications.
- Low Energy/Power Assist selector switch.
- Strike delay on/off switch.
- Push & Go on/off switch.
- Delay time, opening time/opening force, opening angle and door width selector adjustments for powered operation.
- Heavy-duty, aesthetically pleasing and easy to adjust steel arm assembly.
- Status light for diagnostic purposes.
- A full complement of accessories available for specific job requirements.
- Obstacle detection upon closing on/off switch.

| Features   |                    |
|--|--------------------|
| Adjustable Spring Size (manual/powered operation)  | 3–5                |
| Controlled Closing with two adjustment valves (manual/powered operation)                       | 115°–15°<br>15°–0° |
| Adjustable Backcheck (manual operation)  | •                  |
| Delay Time, Opening Time/Opening Force, Opening Angle, Door Width Selector (powered operation) | •                  |
| Radio Frequency Activation   | ◦                  |
| Push & Go (door movement activates operator)   | •                  |
| Electric Strike or Latch Retraction Control  | •                  |
| Vestibule Function (sequenced operation of two operators)                                      | •                  |
| 12 VDC Output for Powering Accessories   | •                  |

• yes ◦ option

**Certification:**

The DORMA ED800 Series is listed by U.L. and C.U.L. under their continuing reinspection programs. The ED800 Series is BHMA certified to the requirements of ANSI A156.19 Grade 1 for power assist and low energy power operated doors. Meets the requirements for UL10C and UBC 7.2 (1997) for positive pressure.

**Specification:**

DORMA ED800 Series low energy operators with selectable low energy or power assist. Low energy function to cycle the door open as prescribed by the four user adjustments. Power assist function to require manual opening with an adjustable force between 1/2 lbf and 5 lbf. All operators to have push & go feature to activate low energy or power assist with the door. All operators to have door closer function when low energy or power assist is not required. Door closer to have adjustable spring size, valve adjustable sweep speed, latch speed, and backcheck cushioning. All operators to have the following user adjustments for power open functions: delay time, opening time/opening force, opening angle, and door width selector. Operators to have selectable slide switch to accommodate push or pull side applications. Operators to have on/off strike delay switch when the ED800 must delay while a locking device releases. Push side (top jamb) and pull side (track) arms to be available. Operators to have vestibule function for sequencing operation of two units. Operators to have a selectable fifteen- minute hold open. All operators will be hard wired. All operators to have selectable on/off obstacle detection on closing.

**Optional Specifications:**

All operators to have remote switch wiring for tamper-resistance. Hold open function is deleted. On/off status can be controlled from a remote location. Specify RS.

All operators to be powered with a power cord plugged into a 120 VAC receptacle. Specify PC.

**Electrical Specifications:**

Power requirements: 120 VAC<sup>+10%</sup>/<sub>-15%</sub>, 50/60 Hz.

Current: 2 Amp.

Fuse: 3 Amp - type AGC - size 1/4"-1-1/4".

Auxiliary power output: 12 Volts (nominal) filtered, unregulated @ 500 mA max. Range 10–25 VDC.

Form "C" relay contact for controlling fail-secure or fail-safe locking devices: 50 VAC or DC at 1 Amp max.

When incorporating the ED800 into a system with other electrical components, DORMA's Technical Services Department offers assistance with point to point wiring diagrams. Please contact them with specific requirements.

**Finishes:****Standard Sprayed Finishes:**

Aluminum: 689.

Bronze: 691 (Dull), 690 (Statuary), or 695 (Dark Duranodic).

Gold: 696.

Black: 693.

**Optional Special Color Sprayed Finishes:** Specify code number or submit 3 color chip samples.

**Optional Plated Finishes:**

Brass: 605 (Bright) or 606 (Satin).

Bronze: 611 (Bright), 612 (Satin), or 613 (Oxidized Satin Oil Rubbed).

Nickel: 618 (Bright) or 619 (Satin).

Chrome: 625 (Bright) or 626 (Satin).

**Fire Door Applications**

The ED800 is U.L./C.U.L. listed for installation on labeled fire doors.

**Warranty:**

The ED800 is warranted for a period of two years from the date of manufacture.

**Operation and Components**

The ED800 is simple to install. It is a "low energy" operator and does not require external safety devices. The opening speeds and forces are tailored to meet the needs of the physically challenged. Opening force never exceeds 15 lbf. Closing time is never less than 3 seconds from 90° to 10°, nor less than 1.5 seconds from 10° to closed.

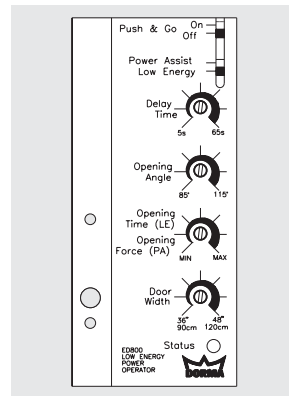
DORMA has achieved a technological breakthrough—an intelligent door closer, designed solely to provide safe, barrier free access. The ED800 goes well beyond basic requirements to assure complete user safety.

The on-board microprocessor is the brain center. It completes an initial learning cycle at the first application of power. The learning cycle communicates information about the mounting and closing force to the microprocessor. It continuously monitors door position, pushing force, resistance, wind/draft conditions, opening and closing speeds and other variables.

It will detect even the slightest deviation from the programmed norm and respond immediately. The operating system is continuously checked for system malfunctions to enhance the safety and reliability of the unit.

The microprocessor incorporates slide selector switches

and four user adjustments: delay time, opening angle, opening time/opening force, and door width.



The **push and go** slide selector switch is used to activate or deactivate the push and go feature. The door functions as an actuator when the switch is on.

The **power assist/low energy** switch selects the operational mode of the ED800. The power assist function results in the door opening approximately one inch. The door can then be opened with a reduced force. In the low energy mode, the door will cycle to the open position as prescribed by the four user adjustments.

The **strike delay** switch is used to activate or deactivate a delay of the ED800 operation. When on, it allows time for operation of the locking device controlled by the form "C" contacts.

The **push/pull** switch is used to select the side of the opening on which the ED800 will be used. Pull is for **track mount** and push is for **top jamb mount**.

The **obstacle detection upon closing** switch is used to turn obstacle detection on or off in the closing cycle only.

The **delay time** is the amount of time the door waits before closing from maximum opening or when the door detects an obstacle. Delay

time is adjustable from 5 seconds to 60 seconds.

The **opening angle** is adjustable from approximately 85° to 115°, depending on the user requirements. If damage from severe environmental conditions or abuse is possible, doors opening beyond 115° require an auxiliary stop, supplied by others.

The **opening time** of the door can be set when the ED800 is in the low energy mode. It can be adjusted, depending on door width and weight, to meet the requirements of ANSI A156.19. When the power assist mode is selected, this adjustment is used to determine **opening force**. The opening force is adjustable between 1/2 lbf and 5 lbf.

The **door width selector** is adjusted to match the width of the door that the unit is operating (36"–48").

If the ED800 encounters an obstacle, it stops and goes to a balanced state. The door is held in this condition for the length of time determined by the delay setting. The ED800 provides a power assist function while in the balanced state, making it easier for users to push the door out of the way. The ED800 will again re-enter the balanced state if the opening has not been cleared or if it encounters another obstacle.

The ED800 is a non-handed universal unit. It can easily be installed by one person. Slots in the mounting plate permit it to rest on pre-installed fasteners while securing the remaining fasteners.

Two mounting applications are available. **Track mount** is a pull side application with a single lever arm. **Top jamb mount** is a push side application with a double levered arm. A drop application of top

jamb mount is available for low ceiling conditions. This application differs only by how the frame is machined.

The ED800 unit can be changed from top jamb to track or vice versa. This change requires two things. First, the arms must be exchanged. Second, the slide switch must be placed at the correct position for the arm used. These user options make the ED800 simple to stock.

The ED800 features the TS83 door closer. This ANSI/BHMA A156.4 Grade 1 closer incorporates sweep, latch, backcheck, and adjustable spring power. The TS83 provides closing power and closing control for the ED800. In the event of a power failure or when assistance is not required, the ED800 functions as a standard door closer.

The ED800 has two field-selectable functions: low energy or power assist. The choice is made by moving the slide switch to select the desired function.

Upon activation in the **low energy** function, the door will cycle to the open position as prescribed by the four user adjustments in the microprocessor and in accordance with ANSI A156.19.

Activation in the **power assist** function results in the door opening approximately one inch to alert the user that the power assist has been activated. The door can then be opened with a reduced force. The force is adjustable between 1/2 lbf and 5 lbf. When power assist is selected, opening force is adjusted using the opening speed function of the microprocessor. Power assist remains active as long as there is door movement plus the time delay setting.

Two ED800 units can be interconnected for a vestibule function. This arrangement provides sequenced operation of the two units. Activation of either the interior or exterior unit initiates operation of only that unit. Activation of the second unit will not occur until the closing cycle of the first unit is completed.

The ED800 provides contacts for electric strike release or electric latch retraction. Activation of the ED800 sends a signal to release the strike or retract the latch. Operation of the ED800 is delayed by 1/2 second with the strike delay switch "on" to allow time for this process. The unit then operates normally. Release of the strike or retraction of the latch is initiated only when the door is closed, preventing unnecessary operation. Additionally, an external output of 12 VDC at 500 mA maximum is provided to power a variety of accessories.

External safety devices such as mats, guide rails, and sensors are not required with the ED800. However, a safety circuit is built into the unit. Use of the optional PS-1 presence sensor connected to the safety circuit prohibits initial opening of the door if an obstacle is sensed at the time of activation. The door will remain in the hold open position as long as the sensor detects traffic or an obstacle. The door will automati-

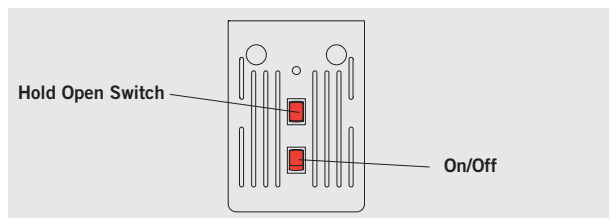
cally default to the power assist mode if it encounters an obstacle after the opening cycle commences. The PS-1 requires use of the optional accessory **transformer** for power and the PS-1 RMT remote control for setup. See page 11 for details. For additional transformers offered by DORMA, refer to the PS-500 product brochure.

The hold open switch overrides all other inputs and holds the door open approximately 15 minutes. The door then closes and the unit returns to normal operation. The door can be closed at any time during the 15 minute hold open period by pressing the hold open switch in the opposite direction. The ED800 again returns to normal operation.

The on/off switch controls power input to the ED800. In the off position, the ED800 operates as a standard door closer. In the on position, power is applied to the unit. It will first complete a learning cycle and then operate normally.

A remote switch option is available to remove the on/off switch from the endcap of the ED800. Switching must then be provided at a remote location. The hold open switch is deleted when the remote switch option is specified. This option provides more controlled operation.

Concealed wiring is standard with the ED800. The optional PC power cord eliminates the need for concealed wiring. The 15" long power cord will permit the ED800 to plug directly into a 120 VAC receptacle that is located according to the ED800 installation instructions.



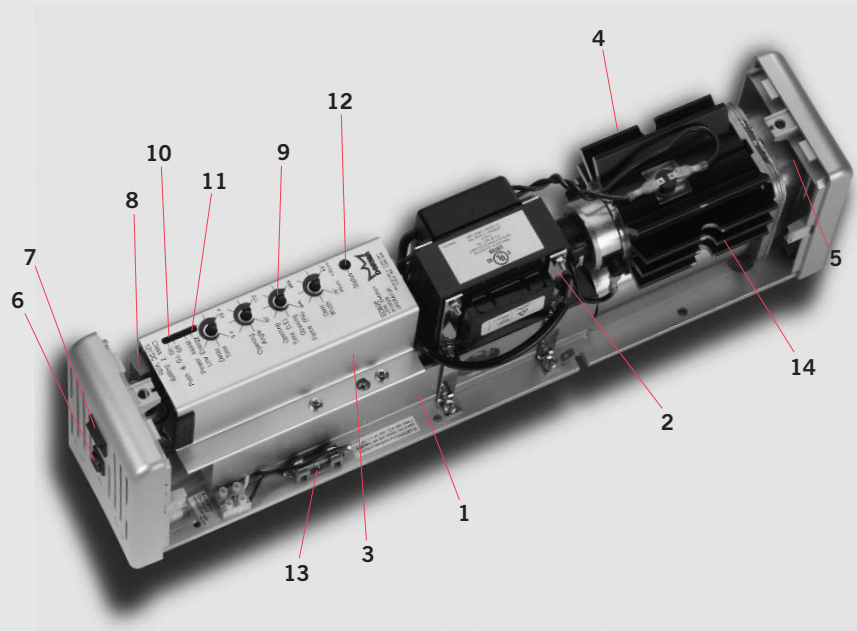
### Actuators

The ED800 has a field selectable actuator. The door can become the actuator. When the switch is set to the on position, the **push & go** feature is initiated. Push & go activates the ED800 when the door is opened more than one inch. It can be used as the sole actuator or in conjunction with other external actuators. The ED800 senses normal operation and aborts the push & go feature if there is a rapid motion that opens the door beyond 45°. Push & go is active only when the door is in the closed position.

**NOTE:** When the ED800 is placed in an installation where moderate to heavy pedestrian traffic will be present, it is recommended that the push & go feature be left in the off position.

## Parts and Assembly Details

1. TS83 Door Closer
2. Transformer
3. Microprocessor
4. Permanent Magnet DC Motor
5. Gear Assembly
6. Hold Open Switch
7. On/Off Switch
8. External Connector
9. Power Open Adjustments
10. Push & Go Switch
11. Power Assist/Low Energy Switch
12. Status Indicator Light
13. Incoming Power Fuse
14. Cooling Fins



## Top Jamb Installation

**ED800 J**

7/8 (22)      21-1/4 (540)      3/4 (19) Maximum stop      Minimum to ceiling 4-3/4" (152)      6 (152)      4-1/4 (108)      12-3/4 (324)      Reveal

12-3/8 (314)      2-1/8 (54)

ED800 J - 2"-6" Reveal (standard)  
 ED800 J x C800R - 0"-4" Reveal  
 ED800 J x C810R - 3"-8" Reveal  
 ED800 J x C812R - 8"-12" Reveal

∅ of 4-1/2" wide hinge, 3/4" offset pivot

**Minimum frame face for mounting unit 1-5/8".**

**Size Selection Chart**  
 Adjustable spring power for doors 3'0" to 4'0" wide.

| REVEAL | ARM   | APPROX. MAXIMUM OPENING | APPROX. BACKCHECK RANGE | APPROX. HOLD OPEN RANGE |
|--------|-------|-------------------------|-------------------------|-------------------------|
| 0"-4"  | C800R | 115°                    | 62°-115°                | 85°-115°                |
| 2"-6"* | C805R | 115°                    | 68°-115°                | 85°-115°                |
| 3"-8"  | C810R | 115°                    | 68°-115°                | 85°-115°                |
| 8"-12" | C812R | 115°                    | 75°-115°                | 70°-115°                |

\*Standard with ED800 J.

A floor or wall stop is recommended to limit door travel to a maximum 115° to prevent possible damage to the ED800 arm. Where this is not practical, the ED800 J x Drop Mount with a surface door stop is recommended.

## Top Jamb Drop Installation

**ED800 J Drop**

7/8 (22)      21-1/4 (540)      4-5/8 (117)      Minimum to ceiling 1-3/4" (152)      6 (152)      4-1/4 (108)      12-3/4 (324)      Reveal

12-3/8 (314)

ED800 J - 2"-6" Reveal (standard)  
 ED800 J x C800R - 0"-4" Reveal  
 ED800 J x C810R - 3"-8" Reveal  
 ED800 J x C812R - 8"-12" Reveal

∅ of 4-1/2" wide hinge, 3/4" offset pivot

**Minimum frame face for mounting unit 1-3/4".**

**Size Selection Chart**  
 Adjustable spring power for doors 3'0" to 4'0" wide.

| REVEAL | ARM   | APPROX. MAXIMUM OPENING | APPROX. BACKCHECK RANGE | APPROX. HOLD OPEN RANGE |
|--------|-------|-------------------------|-------------------------|-------------------------|
| 0"-4"  | C800R | 115°                    | 62°-115°                | 85°-115°                |
| 2"-6"* | C805R | 115°                    | 68°-115°                | 85°-115°                |
| 3"-8"  | C810R | 115°                    | 68°-115°                | 85°-115°                |
| 8"-12" | C812R | 115°                    | 75°-115°                | 70°-115°                |

\*Standard with ED800 J.

A floor or wall stop is recommended to limit door travel to a maximum 115° to prevent possible damage to the ED800 arm. Where this is not practical, a surface door stop is recommended.

## Top Jamb Drop Installation x 830 Plate

**ED800 J Drop x 830**

Side view dimensions: 7/8 (22), 21-1/4 (540), 12-3/8 (314), 4-5/8 (117).  
 Front view dimensions: 6 (152), 4-1/4 (108), 12-3/4 (324), 2" Min. top rail.  
 Minimum to ceiling 1-3/4".

ED800 J - 2"-6" Reveal (standard)  
 ED800 J x C800R - 0"-4" Reveal  
 ED800 J x C810R - 3"-8" Reveal  
 ED800 J x C812R - 8"-12" Reveal

∅ of 4-1/2" wide hinge, 3/4" offset pivot

**Size Selection Chart**  
 Adjustable spring power for doors 3'0" to 4'0" wide.

| REVEAL | ARM   | APPROX. MAXIMUM OPENING | APPROX. BACKCHECK RANGE | APPROX. HOLD OPEN RANGE |
|--------|-------|-------------------------|-------------------------|-------------------------|
| 0"-4"  | C800R | 115°                    | 62°-115°                | 85°-115°                |
| 2"-6"* | C805R | 115°                    | 68°-115°                | 85°-115°                |
| 3"-8"  | C810R | 115°                    | 68°-115°                | 85°-115°                |
| 8"-12" | C812R | 115°                    | 75°-115°                | 70°-115°                |

\*Standard with ED800 J.

A floor or wall stop is recommended to limit door travel to a maximum 115° to prevent possible damage to the ED800 arm. Where this is not practical, a surface door stop is recommended.

## Track Installation

**ED800 T**

Side view dimensions: 21-1/4 (540), 7/16 (11), 3-9/16 (90), 25 (635).  
 Front view dimensions: 6 (152), 4-1/4 (108), 13/16 (21), 1-1/4 (32).  
 Minimum to ceiling 4-5/8".

∅ of 4-1/2" wide hinge, 3/4" offset pivot

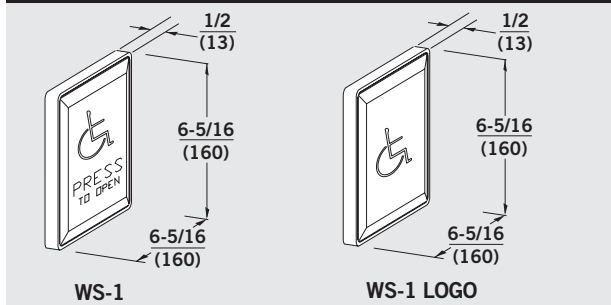
**Size Selection Chart**  
 Adjustable spring power for doors 3'0" to 4'0" wide.

| APPROX. MAXIMUM OPENING | APPROX. BACKCHECK RANGE | APPROX. HOLD OPEN RANGE |
|-------------------------|-------------------------|-------------------------|
| 105°                    | 70°-105°                | 85°-105°                |

A floor or wall stop is recommended to limit door travel to a maximum 105° to prevent possible damage to the ED800 arm. Where this is not practical, the ED800 J x Drop Mount with a surface door stop is recommended.



Wall Switch

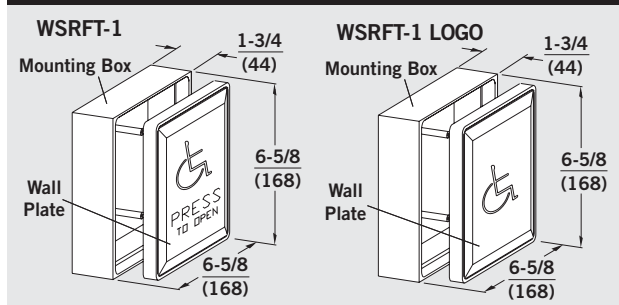


**WS-1** — Tamper-resistant 6" x 6" wall plate with a normally open switch. Includes a heavy duty injection molded black ABS mounting box. Satin stainless steel wall plate with blue engraving. Wall plate displays the accessibility symbol and "PRESS TO OPEN." Fits a standard 4" x 4" electrical box. Must be hard wired.

Flush design allows the optimum in weather resistance in surface or recessed applications.

**WS-1 LOGO** — Same as the WS-1, except that the wall plate displays the accessibility symbol only.

Wall Switch (wireless)

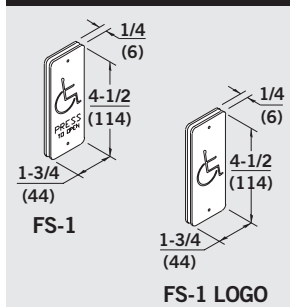


**WS/RFT-1** — Tamper-resistant 6" x 6" wall plate with a normally open wireless switch. Includes a heavy duty injection molded black ABS mounting box with a radio frequency transmitter and 9 VDC battery. Must be used in conjunction with the RFR receiver. Maximum range is 50 ft. Satin stainless steel wall plate with blue engraving. Wall plate displays the

accessibility symbol and "PRESS TO OPEN." Flush design allows the optimum in weather-resistance in surface or recessed applications. Ideal where conditions prohibit hard wiring.

**WS/RFT-1 LOGO** — Same as WS/RFT-1, except that the wall plate displays the accessibility symbol only.

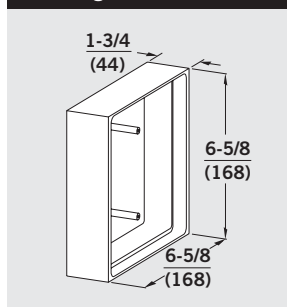
Frame Switch



**FS-1** — 1-3/4" x 4-1/2" frame plate with a normally open switch. Satin stainless steel frame plate with blue engraving. Frame plate displays the accessibility symbol and "PRESS TO OPEN." Fits a minimum 1-3/4" x 4" frame section. Must be hard wired.

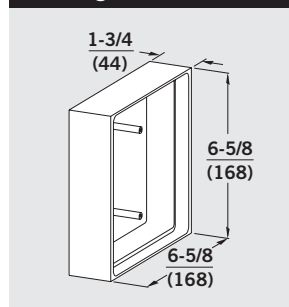
**FS-1 LOGO** — Same as FS-1, except that wall plate displays the accessibility symbol only.

Mounting Box



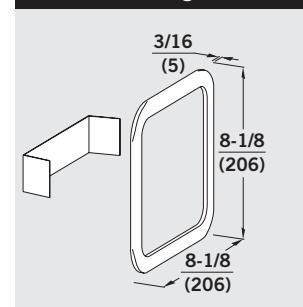
**UMB** — Black ABS universal replacement mounting box for WS-1 type switches.

Mounting Box



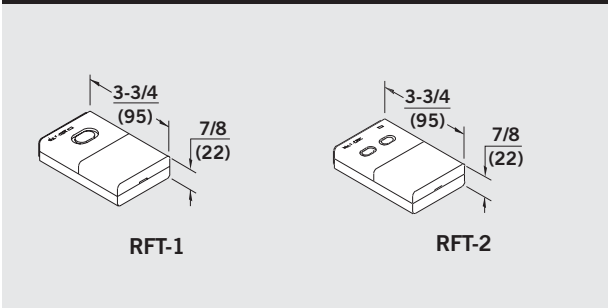
**UMB/RFT** — Black ABS universal replacement mounting box for WS/RFT-1 type switches. Includes a radio frequency transmitter.

Flush Mount Ring



**UMB Flush MNT Ring** — Black ABS flush mount ring and metal mounting bracket. The ring is designed to cover the gap between the mounting box and the switch plate cutout in the wall for a nice clean look.

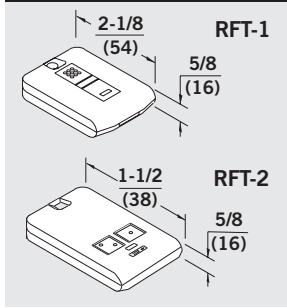
Hand Held Transmitters



**HH/RFT-1 (Single Frequency), HH/RFT-2 (Dual Frequency)** — Compact, portable switches. Must be used with RFR receiver. Maximum range is approx. 50 ft (depending on conditions). Works with, or in place of, WS/RFT-1. Powered by 9 V DC battery. Well

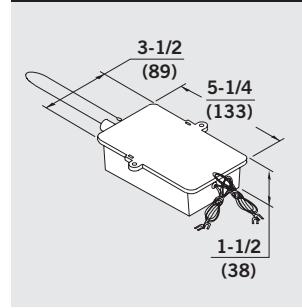
suited where multiple users must activate ED800 for accessibility, security, convenience, or where use of an exposed switch is not practical. Neutral case with grained finish. RFT-2 requires one RFR per frequency.

Key Chain Transmitter



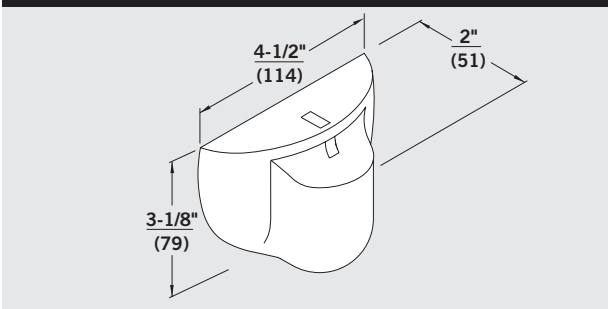
**KC/RFT-1 (Single Frequency), 800 KC/RFT-2 (Dual Frequency)** — Similar to HH/RFT-1 or HH/RFT-2, but more compact. Must be used with RFR receiver. RFT-2 requires one RFR per frequency. The small size permits the use as a key chain or in cases where the hand held transmitter is too large. Powered by a 12 VDC battery.

Receiver



**RFR** — Radio frequency receiver. Required for use with all DORMA transmitter switches. Powered from the 12 VDC accessory output of the ED800. Ideal for applications with range and signal strength problems. Maximum range typically 50 ft (conditions permitting). Surface applies remotely. Operates on 12–30 Volts AC or DC. 16 mA nominal (50 mA max. when relay is triggered).

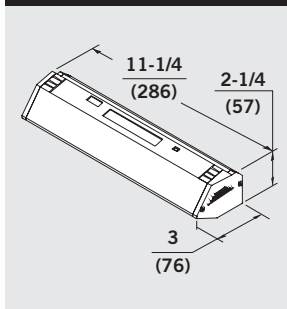
Motion Sensor



**MS-1 RV1** — Unidirectional K band sensor. **For dedicated ADA-use doors only.** Adjustable elliptical sensing pattern. Adjustments include unidirectional, unidirectional with motion tracking feature, bidirectional sensing capability, wide or narrow patterns, 3-dimensional angle adjustment, and heightened immunity to highly sensitive motion settings. Adjustments via PS-1 RMT remote control. Self-monitored ready out of the box, used with or without a self-monitored ready system.

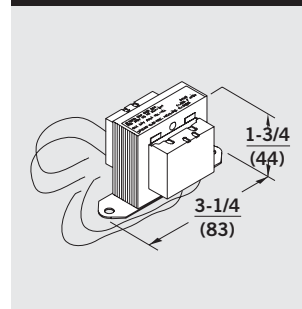
Includes 0°–90° vertical and –30°–+30° lateral tilt angle, powered by 12–24 VAC<sup>+10%</sup> or 12–24 VDC<sup>+30%/-10%</sup>. PS-1 RMT required for initial setup. Designed for use in openings designated specifically for barrier-free accessibility. **Should not be used in combination with ED800 in openings used for pedestrian traffic or where high-speed operation/opening is needed. Precise setup of the motion sensor detection area is necessary so nearby traffic is not picked up.**

Presence Sensor



**PS-1** — Ties to ED800 safety circuit for ultimate user protection. Prohibits opening of door if obstacle is sensed. Requires use of optional **transformer.** **PS-1 RMT** — Hand held remote control required to program PS-1 or MS-1 RV1. One remote programs unlimited presence or motion sensors.

Transformer



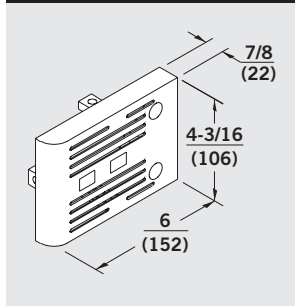
**TRANSFORMER** — 120 VAC to 24 VAC, 15 VA step-down transformer used to power accessories. Fits standard 4" x 4" electrical box. Required with PS-1. Can be used with other accessories.

**Power Cord**



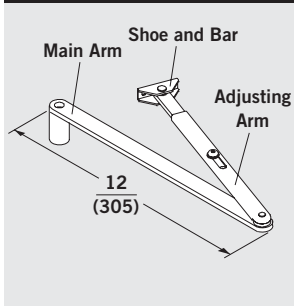
**PC** — Eliminates need for hard wiring. Permits ED800 to plug directly into 120 VAC/60 Hz receptacle. Cord measures 15" from end cap to center of plug.

**Remote Switch Option**



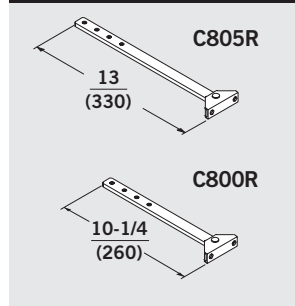
**RS** — Removes on/off and hold open switches from endcap for tamper resistance. Hold open function is deleted. On/off switch must be remotely located. Switch not provided. (Illustration depicts appearance of end cap when RS option is selected).

**Regular Arm**



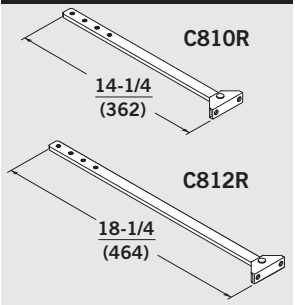
**C886** — Standard arm furnished with ED800 J applications. Non-hold open assembly complete 2"-6" (51 mm–152 mm) reveal. Arm is non-handed. **C800M** — Main arm and adjusting arm without shoe and bar. Requires use of C800R, C805R, C810R or C812R shoe and bar.

**Regular Arm Shoe and Bar**



**C805R** — 2"-6" (51 mm–152 mm) reveal — Shoe and bar only. Furnished standard with C886. Non-handed. **C800R** — 0"-4" (0 mm–102 mm) reveal — Shoe and bar only. C805R and C800R must be used in conjunction with C800M. Non-handed.

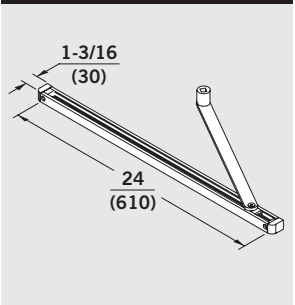
**Regular Arm Shoe and Bar**



**C810R** — 3"-8" (76 mm–203 mm) reveal — Shoe and bar only. **C812R** — 8"-12" (203 mm–305 mm) reveal — Shoe and bar only.

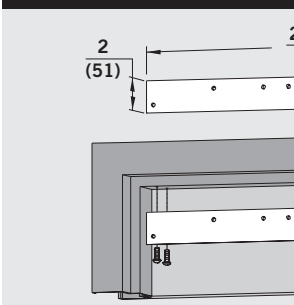
C810R and C812R must be used in conjunction with C800M. Non-handed.

**Track Arm**



**ED-T** — Standard arm furnished with ED800 T applications. Non-hold open assembly complete. Arm is non-handed.

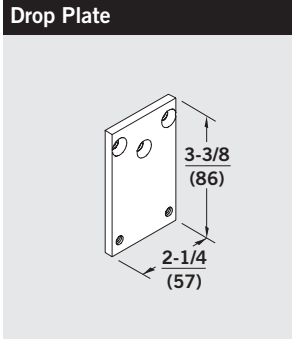
**Angle Bracket**



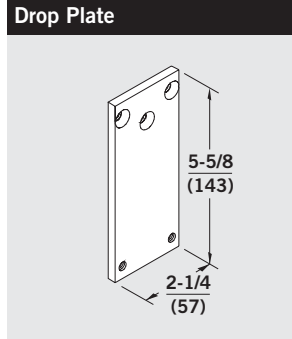
**870** — For mounting ED800 J easily on deep reveal frame conditions or when frame face is less than 1-3/4". Frame

must be properly reinforced to secure bracket. Requires 2-3/4" minimum soffit width.

**NOTE:** Refer to the **Accessories** section of the Door Controls Price List for additional accessories available.

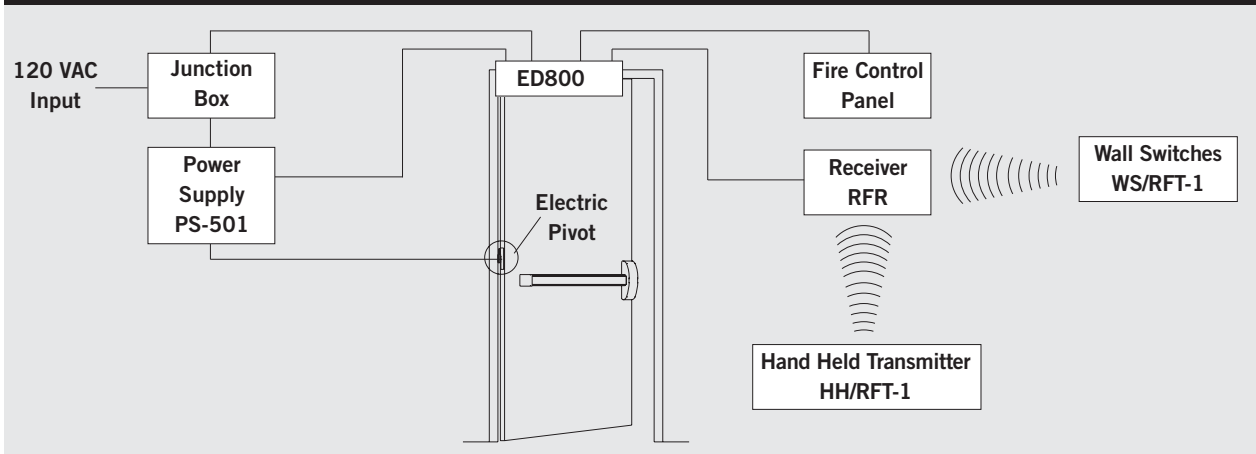


**830** — For mounting arm shoe in top jamb drop application when top door rail is less than 4-5/8" (2" minimum required).



**831** — For mounting arm shoe when ED800 J is installed with an 870 angle bracket and top door rail is less than 6-1/4" (2" minimum required).

**Example of Typical Operated Opening**



**Operation Narrative**

Door is always operable manually from either side. Operator will be triggered by hand held transmitter and wall mounted wireless switches. Actuation of low energy power operator will retract fire exit device latch bolt before initiating door movement. Retraction will only occur when door is closed. Set delay time at 30 seconds. Set operator unit to LOW ENERGY. Set operator PUSH AND GO selector to off.

**Hardware Set**

|       |  |                         |       |
|-------|--|-------------------------|-------|
| 1 EA  | Operator                               | ED800 J x 626           | DORMA |
| 1 SET | Pivot Set                              | OPF440 x 626            | DORMA |
| 1 EA  | Electric Pivot                         | 75200 x 4 Wire x 626    | DORMA |
| 1 EA  | Fire Exit Device with Latch Retraction | ES x F9300 x YR08 x 626 | DORMA |
| 1 EA  | Power Supply                           | PS501                   | DORMA |
| 1 EA  | Receiver                               | RFR                     | DORMA |
| 1 EA  | Hand Held Transmitter                  | HH/RFT-1                | DORMA |
| 2 EA  | Wall Switches                          | WS/RFT-1                | DORMA |

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