## Modern Door Automation: Plain and Reliable.



#### **Ideal For:**

- Retail Stores
- Office Buildings
- Institutions
- Churches
- Health Care Facilities
- Restored Sites
- Government Buildings
- Universities/Schools
- Independent Living Centers
- Retirement Homes
- Facilities for the disabled
- Rest Rooms
- Residential
- ADA Approved



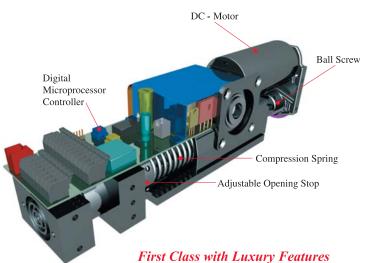
# SWINGDOOR

TORMAX TTX II Low Energy Swing Door Operator is a low cost, easily adjustable automatic door system. It delivers exceptional long lasting performance, and meets ANSI standard A156.19 that specifies opening and closing speeds as well as force requirements. Using reliable rack and pinion mechanics and state-of-the-art digital programmable microprocessor, the TTX II is the best solution on the market for conformance with ADA (Americans with Disabilities Act) requirements. The UL and ULC listed operator comes fully assembled and shipped as a complete unit and is available in all finishes and colors in a highly stylized enclosure. Available in both side and bottom load design.

The TTX II is both an automatic and manual swing door operating system. It is adaptable to virtually any existing swing door and thereby provides barrier free access to assist the physically challenged. The power open and spring close operator is applicable to interior and exterior doors up to 48" in width and weighing up to 220 pounds.

The TTX II electro-mechanical drive system eliminates costly maintenance features associated with messy fluids from hydraulic units, and hidden costs of pneumatic units such as the need for remote air compressors and pneumatic tubing.

## The Operator System



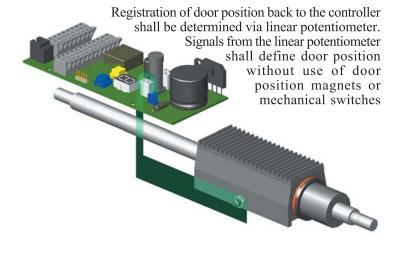
Pinion



By means of the user-friendly teach-in program you can dial-in the drive to meet your specific application requirements. At what speed should the door open? How wide should it open? How long should it remain open? How fast should it close? All this without a single additional setting device. TORMAX TTX II Swing Door operator is the all-in-one drive of prime TORMAX quality with its unmatched features.

The TTX II has several outstanding features. It is a non-handed operator which results in application flexibility. The TTX II is available in both a side and bottom load design. The TTX II side load unit is surface mounted for quick and easy installation. The side load design provides for convenient operator access from header face. The TTX II bottom load unit provides the solution to maintaining the Architectural design for applications that have little or no headroom above the door. The operator is accessible from the underside, thus allowing for the header case to be partially or fully concealed into the ceiling above the door. Both design types provide for ease of maintenance and adjustment. Silent operation is achieved through the use of rubber vibration isolation pads.







# TTX II Side Load Design

The door cannot be free-wheeled in windy conditions because the operator employs a unique rack and pinion compression spring design. Also, a unique conical/hexagonal shaped output shaft design eliminates arm slippage and minimizes costly repairs commonly found on competitive operators. Design control feature will accommodate 24 VDC radio control receivers, push plates, operate and safety sensors, as well as 24 VDC electric strikes and magnetic locks.

TORMAX Technologies offers a comprehensive line of automatic door systems including slide door systems, swing door systems and industrial door systems. TORMAX products are available throughout North America through authorized TORMAX Technologies distributors.

For buildings that meet the Historic Preservation Society guidelines, specify the Tormax TN concealed in-floor low energy swing door operator.

To find out more about the TTX II low energy swing door operator, other TORMAX products, or the MAX national and regional account program, please contact us for immediate attention.



For added convenience and accessibility the door operator can be activated by a push button switch, a manual push or pull of the door "Push and Pull", a remote control or simply use it as a manual door. This creates a barrier free access to assist the physically challenged.

#### **Manual Controls**

- Push Plate
- Push Pads
- Push Buttons





#### **Wireless Manual Controls**

- Push Plate
- Push Buttons
- Hand Held Transmitters



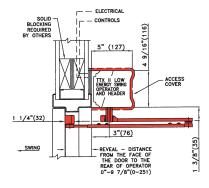
### **Mechanical Operator Feature Benefit**

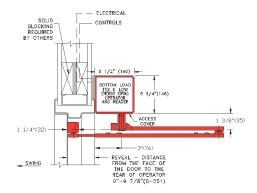
- Non-Handed Electro-Mechanical Operator Reduces on Hand Inventory
- Power Open Spring Close Functions as a Manual Door Closer With Loss of Power
- Rack and Pinion With Compression Spring Design Eliminates Free-Wheeling of the Operator in Windy Environments
- Unique Re-Circulating Ball Screw Drive Provides the Ultimate in Automatic and Manual Door Control (no gears to wear or leaking oil)
- Fractional DC Motor With Built-In Motor Protection Circuit -Interrupts Current to Motor if Door is Blocked
- Rubber Pads Isolate the Operator Mechanism From the Aluminum Back Plate - Provides for Smooth and Silent Operation (less than 70 DB)
- Unique Conical/Hexagonal Shaped Stainless Steel Output Shaft - Eliminates Door Arm Slippage
- Rated for Interior and Exterior Doors up to 48" Wide x 220 Lbs.
- Factory Assembled, Tested and Shipped as a Complete Unit
- Models Available to Automate Single, Simultaneous Pair and **Double Egress Applications**
- Side Load Back Plate Design (SL) Factory Prepared for Quick and Easy Installation
- Side Load Design (SL) For Convenient Operator Access
- Durable Steel End Plates (SL) For Structural Integrity
- Compact Visible Side Load Design (SL) Header Profile 4 9/16" H x 5" W x 31 1/2" L
- Optional Bottom Load Design (BL) The Ultimate Solution to Maintaining the Architectural Design for Doors That Have Little or No Head Room
- Bottom Load Design (BL) Factory Prepared for Quick and Easy Installation
- Operator is Accessible From the Underside (BL) Allows for the Header Case to be Partially or Fully Concealed Into the Ceiling Above the Door
- Aluminum "L" End Cap Mounting Brackets (BL) For Ease of Unit Mounting
- Compact Visible Bottom Load Design (BL) Header Profile 5 3/4" H x 5 1/2" W x 31 1/2" L
- Built-In Adjustable Operator End Stop No External Door Stop Required
- Three Operating Modes (On/Off/Hold Open) Pre-wired Switch as Standard With Each Unit
- No Mechanical Switches and/or Magnets Required for Door Position - Eliminates Costly Services and Down Time

# Digital Microprocessor Controller Feature Benefit

- Microprocessor Controller With On-Board Digital Programming
- Electronic Reversing for Door Obstruction in the Opening Direction and Closing Direction
- Selectable (on/off) "Push and Pull" Operation
- Primary "Teach-In" Self-Learning Program for "Push and Pull" and Automatic Door Operation. Establish Door Opening and Closing Speeds, Opening Angle and Hold Open Time by Manually Opening and Closing the Door
- Establish Separate and Unique Door Operating Parameters for "Push and Pull" and Automatic Door Operation Through a Secondary "Teach-In" Self-Learning Program.
- Fine-Tune Door Motion Elements (door speeds, opening angle and hold open time 0-6000s) Independently After "Teach-In".
- Adjustable Latch Check Speed Positioning
- Adjustable Opening Force Limitation
- Adjustable Opening and Closing Speed Limitation
- Sequential Operation (Push to Open/Push to Close)
- On-Board Power Supply Output With Overload Protection (24VDC .75A Max.) for Radio Control Receiver – No Auxiliary Transformer Required
- On-Board Output for 24VDC Electric Strike With Adjustable (.2-3.6S) Delay
- On-Board Output for 24VDC Magnetic Lock
- On-Board Output for Door Open or Door Closed Position Status
- On-Board Input for Key Switch
- On-Board Inputs for Swing Side and Approach Side Door Mounted Presence Sensors, Swing Side Overhead Mounted Presence Sensor and Swing Side Door Mounted Presence Sensor or Safety Carpet
- Built-In Safety Circuit With Stall Logic No Auxiliary Modules Required
- Global Power Supply Selectable 115-230VAC 50-60 HZ, Single Phase

 Standard Push Application Telescoping Door Arm will accommodate door reveal from 0 - 9 7/8"



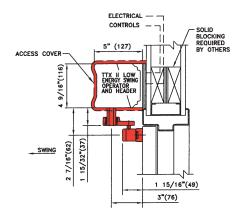


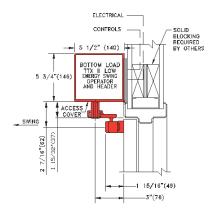
**TTX II Side Load Design** 

**TTX II Bottom Load Design** 

Standard Pull Application

Inswing door arm and slide track assembly for butt hung or offset pivot doors, with 0" reveal



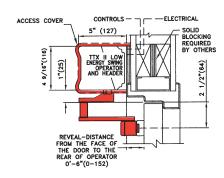


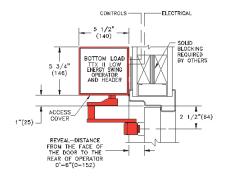
TTX II Side Load Design

**TTX II Bottom Load Design** 

Standard Deep Reveal Pull Application

Inswing door arm and slide track assembly will accommodate door reveal from 0-6"





**TTX II Side Load Design** 

**TTX II Bottom Load Design** 



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