

# SimpleSwing Installation Instructions



The manufacturer's specifications for this product require the installation to be approved by an AAADM certified inspector.

record -USA

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The record-usa SimpleSwing Operator has been carefully designed, built, and tested to provide years of service.

The life of the operator package is directly related to how carefully the installation is accomplished and how accurately the instructions are followed. Installation of this operator package should be done by properly trained and knowledgeable installers with a knowledge of local code requirements and the requirements of A156.19 Standards for Low Energy and Power Assisted Pedestrian Doors. The authorized service / installation dealer must perform all measure- ments for forces, speeds, and times to insure proper and safe operation.

Verify that the door may be opened without power applied to the unit.

Verify that the force required to open the door with the power disconnected shall not be greater than 30 pounds.

Verify that the door does not close with a force greater than 15 pounds at the latch side of the closing stile, and does not close the final 10 degrees in less than 1.5 seconds.

record-usa is not responsible for improperly adjusted or maintained automatic doors or activation / safety systems and assumes no responsibility for damages caused by automatic door systems that have not been properly installed, tested, and adjusted.

#### OWNER INFORMATION TO BE PROVIDED BY THE DISTRIBUTOR / INSTALLER

- \* After the installation instruct the owner on the safe operation of the door.
- \* Location and proper use of the power switches.
- \* Location of the main cutoff breaker.
- \* Necessary warnings not covered in general instructions.
- \* Owners Manual and Daily Safety Checklist.
- \* Phone number(s) for the local servicing dealer.
- \* What to do in the event that a dangerous situation should occur, and how to shut the doors down and call for service.

#### READ INSTALLATION INSTRUCTIONS BEFORE INSTALLING.

The sequence of installation and adjustment is in order, however some sections will not apply. Review this instruction manual and determine those sections that do apply. Be sure all doors swing freely and clear all objects before attaching arms.

Special attention needs to be given to installations with parallel and slide arms when an adjacent wall is perpendicular to the door frame.

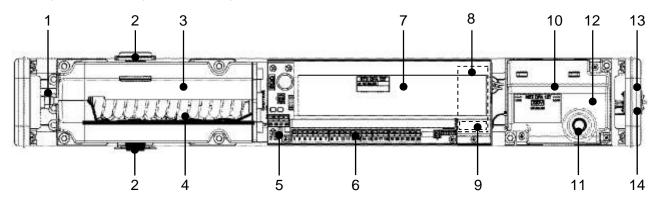
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#### **Product Description**

The record Series SimpleSwing Operator is a power-open, spring-close unit providing full functionality conforming to ANSI A156.19 requirements. The self- monitoring microprocessor-based control maintains precise regulation throughout the door open / close cycle. Two operators can be connected together in configuration providing synchronized operation. Safety is additionally increased by the use of a redundant force limitation.



- 1 Adjusting screw for spring tension
- 2 Output Shafts for Arms & Stop
- 3 Drive Unit
- 4 Closing Spring
- 5 Multifunction Pushbutton / Control
- 6 Terminal Blocks for I/O
- 7 Microprocessor Control

- 8 Motor Drive Circuit Board
- 9 Slide switch S1 (rotating direction)
- 10 Power Supply
- 11 Fuse (2.0A, 5X20mm, Slo-Blo)
- 12 Power Supply Circuit Board
- 13 On / Off / Open Rocker Switch
- 14 Status LED and Reset Pushbutton

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**Drive Arms** 

The Slide Track Arm –
Inswing (pull) reveals to 6"
Outswing (push) reveals to 3"



An extension adapter is included with each arm assembly, connecting the drive arm to the operator output shaft. The Slide Track Arm includes a 20 mm adapter, mounting the drive arm approximately 1/2" below the bottom of the header.

Layouts for the different arm / installation configurations are attached. Check the arm assemblies prior to unit installation and verify dimensions and clearances.

#### Instructions to the Installer

This unit is to be installed and commissioned by a trained technician with knowledge of ANSI A156.19 Standards for Power Operated Doors, applicable local codes, and record- USA installation recommendations.

After installation, verify the door can be opened without power applied, and the force required to open the door does not exceed 30 pounds-force.

#### Information to provide to the owner

The Owner's Manual with training and explanation of the daily safety check.

Specific information pertinent to the proper operation of the installation.

#### **Electrical preparation**

Before preparing jambs, determine the method and requirements for the electrical wiring involved and type of activation that is used.

Power requirements — 115 VAC, 60 Hz, 15 Amp Service.

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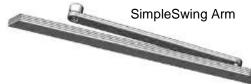
#### **Mechanical Installation**

The door panel must move freely throughout its entire opening and closing rotation. The door frame must provide a stable base, structurally sufficient to support automatic operation. Typically the operator baseplate will overlap the door jambs by 1-1/2".

Verify the installation conditions and select the arm configuration that most closely matches the installation. As a general rule, the operator output shaft will mount 4" away from the hinge jamb, measured parallel to the closed door. For Slide Track arm assemblies, the door mounted track will mount with one end located 4" from the hinge jamb. Consult the attached layout drawings for additional details.

Securely attach the unit baseplate to the door frame; Hex Head Tek Screws are included - #14 X 2" for unit mounting to door frame, and #10 X 1-1/2" for Arm mounting to door.

Typically, the drive arm is attached to the operator with the unit in the closed position. Additionally, the arm is positioned on the splined output shaft with a slight pre-load, pushing the door against the door closed stop. The spline provides incremental adjustment of 6°; typically, one spline index for pre-loading is sufficient.



The drive arm is attached to the lower operator output shaft using the extension adapter supplied with the arm assembly. Track arms, install the arm with the outer end of the arm against the closed door. Do not tighten the bolt; using the arm, pull the operator open and during the slow, controlled closing, insure the splines seat correctly and tighten the 6mm socket head bolt.

Verify all fasteners are securely tightened.

#### **Operator Swing Direction**

If the operator does not close slowly (with either arm), the handing selection switch should be changed. It is located behind a slot in the sheet metal cover for the operator control –

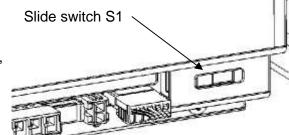
With no power applied, the operator should be capable of being easily pushed open and when released, will close the door at a controlled speed.

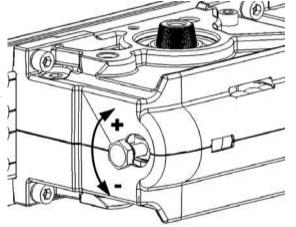
#### **Closing Spring Adjustment**

The closing force provided by the spring is adjustable.

Do not adjust the force so low that the door will not consistently close under spring power.

On a typical 3'-0" door with a standard arm assembly, the spring closing force can be adjusted from less than 5 pounds force to more than 20 pounds force, measured at the leading edge of the door.

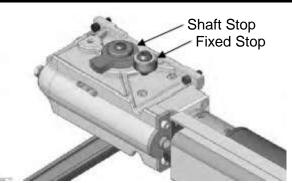






#### **Open Stop**

The unit is provided with an adjustable full open stop. Rotate the door to the full open position; mount the Shaft Stop onto the upper output shaft and against the Fixed Stop. The spline of the output shaft allows indexing in 6° increments. For finer adjustment, the Fixed Stop is slightly eccentric; loosen and rotate until the desired stop location is achieved and re-tighten.



For installations where severe physical abuse may occur (such as extreme wind conditions), it is suggested a floor mounted stop be installed at full open. Additionally, the operator full open stop can be set at 100 degrees or more of opening, and program the operator to electronically stop at the 90 degree full open position. This can be accomplished by manually stopping the door at 90 degrees during a calibration run, or by reducing the opening angle under the parameter "Drive / Opening angle" (using the SimpleLynk Control Panel).

### **Power Supply Connection**

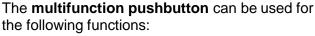
Connect 115VAC, 60 Hz, 10A, to Power Supply terminal strip

115VAC "Hot" (Line) to "L" terminal; 115VAC "Neutral" to "N" terminal

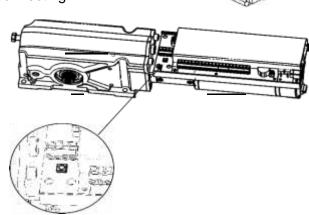
The second "L" and "N" terminals provide a convenient junction for dual operator systems.

Proper grounding must be provided for the unit. A grounding tab and screw are located adjacent to the Power Supply terminal strip.

The power supply cover must be installed after connecting 115VAC primary service.



- 1 flash of the red LED will actuate a standard open cycle (if the rocker switch is on).
- 3 flashes of the red LED will initiate a calibration run.
- 8 flashes of the red LED will reset the unit's parameters to factory defaults.
- 15-17 flashes will cause the unit to reset without affecting any of the field set parameters.

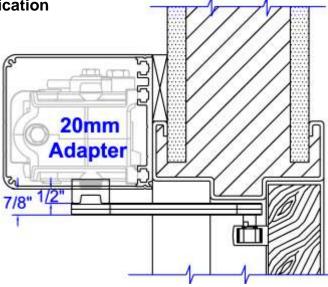


After completion of the mechanical installation and prior to adjusting the parameters, always initiate a calibration run by pressing and holding the pushbutton for 3 flashes of the red LED. This will insure proper door operation by calibrating the unit to the installation conditions

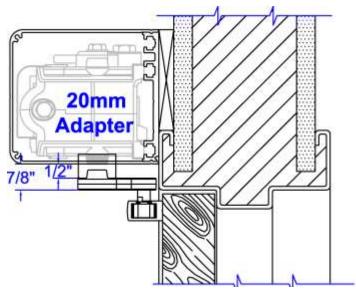


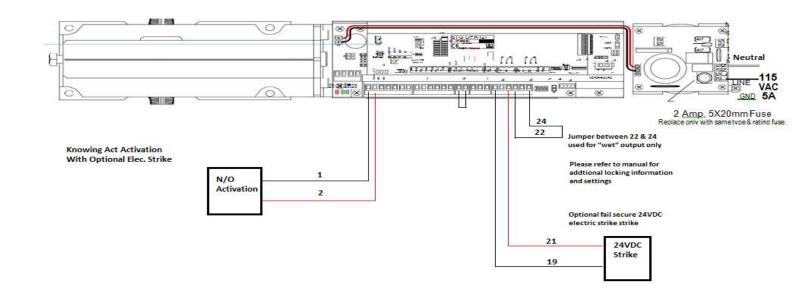
# **SimpleSwing Arm Installation**

Typical arm installation for outswing (push side) application



### Typical arm installation for inswing (pull side) application



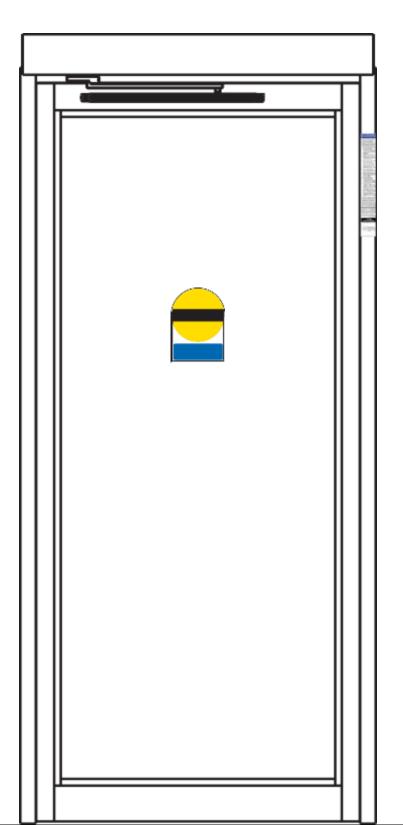


# **SimpleSwing Typical Wiring Diagram**





Installed at 58" +/- 5" from floor on both sides of the door



# SimpleSwing - SimpleSetup

Make sure mechanical installation and wiring is complete. Test the door manually!

# **Basic Set Up**

- 1. Perform a calibration run. (press and hold blue button on control for 3 flashes) Door will open and door will go through a complete learn cycle and door weight check.
- 2. Test door with push plates. Insure both push plates cycle the door fully open and closed.
- 3. Test Compliance with ANSI A156.19

### **Advanced Set Up**

- 4. Enter programming mode on the SimpleLynk pad. (press and hold the blue button on control for 4 flashes) SimpleLynk is now in programming mode.
- 5. Scroll down to "Parameters" (the + button moves down, the button moves up, the E button is for select, C button is for go back)

#### Locking

6. Inside parameters scroll down to select "locking". Select lock function. Then select "always locked". This will engage the electric lock functions. Now scroll down to select VRR Start Delay. Change this setting to 1. Note: lock type should be standard for electric strikes and Mag for magnetic locks.

#### **Adjusting Speeds**

7. Inside Parameters scroll down to select "Driving Cycle". Here you will find both opening and closing speeds. Adjust if needed but make sure ANSI A156.19 standards are met. 40 is the fastest speed and 0 is the slowest.

#### **Adjusting Time Delay**

- 8. Inside Parameters scroll down to select "Time Delay Open". Select "Time Delay Open" and adjust the time delay. The minimum setting is 5 seconds. Adjust up as needed.
  - \*Once all settings are complete the SimpleLynk will default back to standard mode functions.



**SimpleLynk**