

## Section # 8.0 - Electronics Controller Programming

- Programming is quick and simple via the VISUAL LED DISPLAY
- The FUNCTION is clearly shown on the display in text and words
- The VALUE or APPLICATION can easily be adjusted using the buttons on the controller face

### **SPECIAL WARNING**

**Menu Values and Settings must comply with ANSI/BHMA A156.19 Standard for Power Assist and Low Energy Power Operated Swing Doors**

- Changed menu values will automatically be saved during the next opening cycle
- Function with Value & Applications

- 8.1. Opening Speed (05-12 for Low Energy) or (05-20 for Full Automatic)
  - This setting is the door "Opening" speed from the fully closed position to the back-check position
  - Use the "UP" and "DOWN" buttons to select the desired door opening speed
  - Activate the door to check the speed is correctly adjusted
- 8.2. Back-check Speed (01-05)
  - This setting is speed when the door reaches the back-check position to the full door opening
  - Use the "UP" and "DOWN" buttons to select the desired door back-check speed
  - Activate the door to check the speed is correctly adjusted
- 8.3. Safety Speed (Hold/Crawl)
  - This setting is door speed when "Safety 2" is active during the opening cycle
  - Use the "UP" and "DOWN" buttons to select either Hold or Crawl speed
- 8.4. Closing Speed (01-15)
  - This setting is the door "Closing" speed from the fully opened position to the Latch area
  - Use the "UP" and "DOWN" buttons to select the desired door "Closing" speed
  - Activate the door to check the speed is correctly adjusted
- 8.5. Latch Speed (01-05)
  - This setting is the door "Closing" speed in the Latch area until fully Closed
  - Use the "UP" and "DOWN" buttons to select the desired door "Latching" speed
  - Activate the door to check the speed is correctly adjusted
- 8.6. Current Limit (01-20)
  - In case the door encounters an obstruction during the Opening cycle, once the maximum Current limit is reached for at least 2 seconds, the door Opening is then canceled
  - Use the "UP" and "DOWN" buttons to select the desired "Current" limit strength
  - Activate the door to Open. During the Opening cycle, physically apply pressure to stall the door for at least 2 seconds
  - Check the force needed to reach the limit at which the door Opening is canceled
  - Increase or Decrease this setting to achieve the correct strength needed
- 8.7. Activation Time (01-60 seconds)
  - This setting is the duration of the door Open cycle in seconds
  - The timer starts when the door reaches the back-check area
  - Use the "UP" and "DOWN" buttons to select the desired "Opening" time

- 8.8. Hold On Manual Open (No or 01-05 seconds)
- This setting is the length of time the door must be physically held Open, when the door is “Manually” pushed open by a pedestrian
  - The door must be opened at least 60% of the door swing, for this feature to activate
  - Use the “UP” and “DOWN” buttons to Enable or Disable this feature and set the timer value to keep open
- 8.9. Electronic Door Stop (Yes/No)
- This setting is to Enable or Disable the electronic door stop
  - This feature, when selected, will prevent the door moving during heavy wind conditions when the door reaches the fully Opened position
- 8.10. Electric Lock (Yes/No)
- This setting is to Enable or Disable the electronic Lock Delay/Output
  - Use the “UP” and “DOWN” buttons to set the proper Electric Lock/Opening Delay
- 8.11. Electric Lock Delay (0.2-2.0 seconds)
- This setting is the length of time in seconds for the Delay between activating the Electric Lock and the Start of the Opening cycle
  - Use the “UP” and “DOWN” buttons to Disable or Enable the electronic Delay/Output
- 8.12. Latch Position (2%-30%)
- This setting will adjust the door Latch position during the Closing cycle
  - Use the “UP” and “DOWN” buttons to set the starting point for the Latch position
  - Activate the door. During the Closing cycle, check the Latch starting position where the door begins to slow down
  - Check this setting is correctly adjusted
- 8.13. Backcheck Position (70%-98%)
- This setting is to adjust the door Back-check position of the Opening cycle
  - Use the “UP” and “DOWN” buttons to set the starting point for the Back-check position
  - Activate the door. During the Opening cycle, check the position where the Back-check begins and the door starts to slow down
  - Check this setting is correctly adjusted
- 8.14. Push & Go (Yes/No)
- This setting is to Enable or Disable the Push & Go feature, also known as Manual Activation, when the door is Manually pushed open by hand
  - Use the “UP” and “DOWN” buttons to Disable or Enable this feature
- 8.15. Push & Go Active Time (01-30 seconds)
- This setting is to adjust the duration of the door Open cycle in seconds from when the door is Manually pushed Open to when the Push & Go feature is enabled
  - Use the “UP” and “DOWN” buttons to select the desired Opening time
- 8.16. Power Close (Yes/No)
- **WARNING: You should always install a Presence Safety sensor when Enabling this feature**
  - This setting is to Enable or Disable the Power Close Assist feature
  - When Power Close in “ON”, should the door reach the Latch position and can not fully Close after 3 seconds, the motor will assist the spring in order to fully Close the door
    - This feature is used when the pressures on the door prevents the door from fully Closing
  - Use the “UP” and “DOWN” buttons to Enable or Disable this feature

- 8.17. Power Close Force (01-05)
- This setting will allow you to increase or decrease the amount of Closing Force needed to fully Close the door at the Latch position
    - This feature is used to counter act Stack or Wind pressures
  - **IMPORTANT: When using the Power Close Force feature, we strongly recommend to wire a Presence Safety sensor into the input "PC Cancel" on the control board terminal that Cancels out this feature when a pedestrian presence is detected. PC = Power Close**
  - Use the "UP" and "DOWN" buttons to select the desired Closing Force. Use the **lowest** Force setting needed to ensure positive Latching in these conditions.
  - Check this setting is correctly adjusted
- 8.18. Door Seal (Yes/No) **Not An Active Function**
- 8.19. Special Function Normal (Access/Access→Activate)
- This setting is used for Access Control options, including Electric Strikes/Locking devices
  - This requires a Wet Input connection to open. A Wet Input will activate the Strike/Lock and open the door simultaneously
  - Use the "UP" and "DOWN" buttons to select from Normal, Access or Access→Activate
    - Normal = default setting
    - Access = Only the Strike/Lock will release and the exterior "ACT2" button turns on, so the pedestrian will need to perform a "Knowing Act" for the door to Open
    - Access→Activate = Door and Strike/Lock activated simultaneously with a validated credentialed
- 8.20. In1 Wet Input (Normally Opened / Normally Closed)
- This feature is used with the "Special Function" feature above for external Access Control options that are either Normally Open or Normally Closed (NO/NC) using the WET-IN1 input terminal on the board
    - Typical Access Control devices are: Key Pads, Card Readers, Proximity Cards, etc.
  - Use the "UP" and "Down" buttons to select the NO/NC circuit required by the Access Control device
- 8.21. This Door Overlaps (Yes/No)
- This is used for a Double door operator application when there is a door overlap
  - This setting will Enable or Disable the Double swing door Co-ordinate feature
  - Use the "UP" and "DOWN" buttons to Enable or Disable this feature
- 8.22. Factory Reset (Yes/No)
- This setting will Restore the control unit to its original Factory settings
  - To reset the control to the original settings, push the "UP" button, then push "ENTER" button to confirm
  - After Pushing the "YES" button, the factory reset can be canceled by pushing the "MENU" or "DOWN" buttons
- 8.23. Display Light On Time (01-30 minutes)
- This feature sets the length of time in minutes the LED display light will remain on after the last button has been pushed on the control unit
  - This setting is an energy saving feature
- 8.24. Operator Type (Low Energy/Full Automatic)
- This setting is used to select which type of Operator functionality you want for this application
  - **WARNING: The "Full Automatic" mode can NOT be selected unless all requirements of this installation complies with the ANSI/BHMA A156.10 Standard for Power Operated Pedestrian Doors including, but not limited to, Safety Sensors and Guardrails**
  - Use the "UP" and "DOWN" buttons to select

- 8.25. Safety 2 Inhibit at (30%-98%)
- Safety2 will be deactivated at the point where the Safety sensor would pick up a wall or fixed object adjacent to the door
  - This setting will inhibit the Safety Sensor (back side of the door) in order to allow the door to fully open
- 8.26. Out 1 Function (Door Closed/Stairway Fan Out)
- Door Closed option = Door Closed Signal
  - Stairway Fan Out option = Door Open Signal
  - Use the “UP” and “DOWN” buttons to select the setting
- 8.27. Pull Before Open (Yes/No)
- This setting will Pull/Push the door closed for a fraction of a second before the activation to open
  - Give a clear Opening once the Strike/Lock has been released
- 8.28. Reverse on Obstruction (Yes/No)
- This setting will Enable or Disable the Re-activation feature
  - If Enabled, a Re-activation is generated if the door encounters an obstruction for at least 2 seconds during the Closing cycle, between the Back-check and the Latch areas
  - Use the “UP” and “DOWN” buttons to Enable or Disable this feature
- 8.29. Power Shut (Yes/No)
- **WARNING: You should always install a Presence Safety sensor when Enabling this feature**
  - This setting is to Enable or Disable the Power Shut feature
  - When Power Shut is “ON”, the motor will assist the spring driving the door during the Closing cycle from the 90° Open position to the fully Closed position
    - This feature is used when the application is exposed to constant high winds conditions that prevents the door from Closing properly and smoothly
  - Use the “UP” and “DOWN” buttons to Enable or Disable this feature
- 8.30. Power Shut Force (01-05)
- This setting will allow you to increase or decrease the amount of Closing Force needed to fully Close the door from the 90° position to fully Closed position
    - This feature is used to counter act High Wind conditions
  - **IMPORTANT: When using the Power Shut Force feature, we strongly recommend to wire a Presence Safety sensor into the input “PC Cancel” on the control board terminal that Cancels out this feature when a pedestrian presence is detected. PC = Power Close**
  - Use the “UP” and “DOWN” buttons to select the desired Closing Force. Use the **lowest** Force setting needed to ensure positive Latching in these conditions.
  - Check this setting is correctly adjusted
- 8.31. Software Version MSW01 vX.XX
- This menu will display the Software version in the Control unit where X equals a numeric value
  - The month and year of the Control manufacturing date will be displayed

## Basic Settings Table describing the Controls Functions, Settings, Values and Defaults

**All values & settings must comply with ANSI/BHMA A156.19 Standard  
for Power Assist and Low Energy Power Operated Swing Doors**

No.	FUNCTION DESCRIPTION	SETTING	VALUE	DEFAULT
1	OPENING SPEED Door opening speed from full closed to back check position	5 to 20	5sec = slowest 20sec = fastest	10
2	BACK CHECK SPEED Door speed at final section of opening	1 to 5	1sec = slowest 5sec = fastest	3
3	SAFETY SPEED Slow speed (crawl) or stop (hold) when safety1 is active	2 steps	HOLD / CRAWL	HOLD
4	CLOSING SPEED Door closing speed from full open to latch position	1 to 15	1sec = slowest 15sec = fastest	5
5	LATCH SPEED Door speed at final section of closing	1 to 5	1sec = slowest 5sec = fastest	1
6	CURRENT LIMIT Obstruction detection	1 to 20	1sec = more sensitive 20sec = less sensitive	10
7	ACTIVATION TIME Time begins at activation signal ON.	1 to 60	1sec = minimum 60sec = maximum	5
8	HOLD ON MANUAL OPEN Door held open when pushed by hand. Not active with push & go.	2 options	a = No b = 5 steps (1-5 sec)	No
9	ELECTRONIC DOOR STOP Setting stop position by encoder	2 options	Y = Yes N = No	Yes
10	E-LOCK Strike or Electromagnetic Lock	2 options	Y = Yes N = No	No
11	E-LOCK DELAY Time before E-Lock will release	18 steps: 0.2 sec to 2.0 sec	0.2 sec = minimum 2.0 sec = maximum	1.0
12	LATCH POSITION Position at which final section of closing begins	15 steps: 2% to 30%	2% = minimum 30% = maximum	10
13	BACK CHECK POSITION Position at which final section of opening begins	15 steps: 70% - 98%	70% = maximum 98% = minimum	80
14	PUSH & GO	2 options	Y = Yes N = No	No
15	PUSH & GO ACTIVE TIME Time door is pushed open before activation	30 steps	1sec = minimum 30sec = maximum	3

No.	FUNCTION DESCRIPTION	SETTING	VALUE	DEFAULT
16	POWER CLOSE Power assisted closing with spring	2 options	Y=Yes N = No	No
17	POWER CLOSE FORCE	1-5 steps	1 = minimum 5 = maximum	1
18	DOOR SEAL	NOT ACTIVE	N/A	N/A
19	SPECIAL FUNCTION Access Control WET Input from Strike/Lock	2 options	Access – Activated OFF Access – Activated ON	Normal
20	IN1 WET INPUT	2 options	NC = Normally Closed NO = Normally Open	NO
21	OVERLAP	2 options	Y=Yes N = No	No
22	FACTORY RESET	2 options	Y=Yes N = No	No
23	LIGHT ON TIME Time backlight remains on	30 steps	1sec = minimum 30sec = maximum	1
24	OPERATOR TYPE	2 options	FA = Fully Automatic HA = Low Energy	Low Energy
25	SAFETY 2 INHIBIT	2 options	No = Off Yes = On Yes = 34 steps	No
26	OUT1 FUNCTION	2 options	Door Closed – Door Closed Signal Stairway Fan Out – Door Open Signal	Door Closed
27	PULL BEFORE OPEN	2 options	Yes / No	No
28	REVERSE ON OBSTRUCTION	2 options	Yes/No	Yes
29	POWER SHUT	2 options	Yes/No	No
30	POWER SHUT FORCE	1-5 steps	1 = minimum 5 = maximum	2
31	SOFTWARE VERSION X.XX	NA	Mfg. Date = Month and Year	NA