January 25, 2010 (Version 7.04K)

MENU OPERATION (Controller Keypad/LCD)

Setup is performed with the use of the unit's 4 buttons, LCD panel and menu system. The menu system has five groupings of access to the setup parameters and this document will describe the menu items in the order that they appear on the menus. There are two different methods in which the buttons operate. Initially, the unit is in menu selection mode, as can be determined by the lack of a cursor. In menu selection mode, the UP and DOWN buttons scroll through the menu options of the current group. To pick an option press the ENTER button.

Once an item has been selected with the ENTER button, value selection mode is indicated by the flashing cursor. In value selection mode, the UP button sequences through the value range and the DOWN button changes the value in reverse sequence. If the UP or DOWN button is held down, the rate of change will accelerate. The displayed value is accepted by pressing the ENTER button, which will return to the menu selection mode. Alternatively, ESCAPE can be pressed to abort changing the value and return to menu selection mode, redisplaying the initial value.

All menus require entry of a password (see page 8). Once password entry is selected (by pressing the ENTER button), the next 8 buttons pressed are used as the password (including ESCAPE). If the value entered does not match any known password, the system will return to "Setup Menu" and display or company name. If no button is pressed within 3 minutes, the system will return to "Setup Menu."

Calibration:
The first open signal (loop sensor, pull cord, etc.) after power is applied to the unit will activate the door calibration sequence. This will open and close the door using the open profile's crawl speed. If the door cannot move during the calibration, or is found to be under a foot in size, the system will report a calibration fault and will shut down. Otherwise, the next time a door open signal occurs, the door will operate at full speed. On the first full-speed close cycle, the system will record the current profile as a baseline for future closings. **This first high speed cycle must be done without any obstructions or the baseline profile will be set incorrectly**. See the Startup Guide for details.

STARTUP MENU ACCESS

Startup Menu

a) COMPANY	Company name	
b) V7.XX DDMMMYY	Software version identification	
c) Manual Calibrate	If hard open/close end-stops not used, manually calibrate to set limits	
d) Door Location	Reports the location of the door in 100ths of an inch from fully closed (for a single-part door); step size depends on operator model	
e) Sensor Status	Report Sensor Status provides general 'health' check of operation; value may slowly increase over time without concern; increased values of Sensor Status with each door movement may be caused by loose wiring; a general indication of operational problems; may require call for Technical Support	
f) Input status	press ENTER here to go to the Input-Status sub-menu; scroll through this menu using the down/up buttons to show the type 'Activation' type for each of the 8 Inputs and whether the 'dry-contact switch' to each input is Closed (1) or Open (0); ***very useful to check switches or other sensors which may be stuck in the Closed(1) or Open(0) position as when looking at an Input (works for each one of the 8 Inputs), the Open/Close status should change with the open or closure of the control 'dry-contact switch'	
g) Enter password	Press Enter, then the 6 'button' password to access other menus	
	allow to change to a different group	

Input Status Sub Menu – *[display input will show status of input switch; 0=open, 1=close]*

a) Input 1	Reports the Activation type has been selected for Input 1, and the status of the 'dry-contact switch' to this Input ***definition of Activation type in table below	144
b) Input 2	Reports the Activation type has been selected for Input 2, and the status of the 'dry-contact switch' to this Input ***definition of Activation type in table below	145
c) Input 3	Reports the Activation type has been selected for Input 3, and the status of the 'dry-contact switch' to this Input ***definition of Activation type in table below	146
d) Input 4	Reports the Activation type has been selected for Input 4, and the status of the 'dry-contact switch' to this Input ***definition of Activation type in table below	147
e) Input 5	Reports the Activation type has been selected for Input 5, and the status of the 'dry-contact switch' to this Input ***definition of Activation type in table below	148
f) Input 6	Reports the Activation type has been selected for Input 6, and the status of the 'dry-contact switch' to this Input ***definition of Activation type in table below	149
g) Input 7	Reports the Activation type has been selected for Input 7, and the status of the 'dry-contact switch' to this Input ***definition of Activation type in table below	150

h) Input 8	Reports if door lock enabled and the status of the 'dry-contact switch' to this Input	151
	***definition of Activation type in table below	
i) Exit Input Status	Return to parent menu	

Description of Activation for Inputs 1 to 7; Only 'Lock Enable/Disable ' for Input 8

Activation 0	Not used ; input is disabled	
Activation 1	re-open/remain open when input is open (eg. N/C Photo detector)	
Activation 2	open/remain open when input is closed (eg. N/O Loop sensor)	
Activation 3	re-open/remain open when input is closed (eg. N/O Edge detector or N/O photo detector) – acts as an obstruction	
Activation 4	open/re-open when input is closed (eg. N/O Open only pull cord)	
Activation 5	close door when input is closed (eg. N/O Close only pull cord)	
Activation 6	If door is closed, will open door. If door is open, will close door. If door is closing, will open door. If door is opening, will ignore input. (eg. N/O-edge normal pull cord)	
Activation 7	Open door to partial open position (eg. N/O Partial open)	
Activation 8	Emergency Stop when input is open. Stops the door and then removes power from the motor.	
Activation 9	Open limit switch (N/O)	
Activation 10	Close limit switch (N/O)	
Activation 11	Open limit switch (N/C)	
Activation 12	Close limit switch (N/C)	

User Profile Setup Menu   *[Numbers in brackets are {min:max}]*

a) Close delay {0:240}	Set the close delay timer, in seconds, that the door will remain fully open for before automatically closing. A value of 0 disables the close delay timer.	128
b) Re-Open delay {0:20}	Set the re-open delay in seconds, to control the length of time a door remains in a stop position before reversing from an obstruction or any "reopen" activation (ie, toggle, photoeye).	120
c) Close over curr% {0:2000}	During the first high-speed cycle after calibration, the system records the current usage over the profile and uses this as a baseline for future closings. If on a future closing the current required is more than this percentoid over the baseline, the door will detect a collision and re-open with all close timers disabled.	156
d) Close decel I% {200}	same as item group C-d above, but is the percentoid during the door closing deceleration portion of the profile (just before the closing crawl gap).	165
e) Close clear +I% {0:2000}	Boost amount to apply to the above two parameters when clearing a previously detected collision. This parameter can help prevent detection of new collisions when accelerating after clearing a previous collision	171
f) Open top speed {1:400}	target speed for high speed door movement on opening	6
g) Close top speed {1:400}	target speed for high speed movement of the door on closing	15
h) Dir Flip {0:1}	Flips the direction of what is considered open and closed in the event that the motor is mounted in the opposite orientation than normal.	129
i) dynamic brake {0:1}	Enable (1) / disable (0) dynamic braking action	124
j) noPause {0:1}	Enable(1) / disable (0) return to obstruction on close from REopen after obstruction. When **enabled:** on close after obstruction, system will **close to obstruction point**, pause to check for presence of obstruction and reopen or close from the point as appropriate. When **disabled:** system performs **close profile without pause** from REopened position.	121
k) Enter password	Allow to change to a different group	

User Profile Setup Menu:
ENT, DOWN, DOWN, ENT, ESC, ESC, ESC, ESC

DETAILED MENU ACCESS

NOTE TO OEM & DISTRIBUTOR: A simplified menu system is provided to the dealer. The DETAILED MENU ACCESS can be restricted to the OEM & Distributor's technical support group.

Calibrate Speed and Torque Setup Menu *[Numbers in brackets are {min:max}]*

a) Calibrate speed {0:60}	Speed at which system calibration is performed	170
b) Calibrate torque {0:250}	maximum torque to use during calibration cycle	196
c) Enter password	allow to change to a different group	

End Position Opening and Closing Setup Menu *[Numbers in brackets are {min:max}]*

a) Soft close timer {0:200}	door release timer. After the Close hold timer expires (see next item), the power holding the door shut is released over 16 increments of this timer (is milliseconds). This parameter helps to stop the door from popping open from releasing the compressed gaskets suddenly. **This must be set to 0 if using a close limit switch (e.g. if there is no hard close position).**	164
b) Close hold timer {0:1000}	door hold timer indicates the number of milliseconds to hold the door at full power when fully closed to ensure that the gaskets are compressed.	166
c) Open crawl torque {0:250}	maximum torque to use in the open crawl region	198
d) Close crawl torque {0:250}	maximum torque to use in the closing crawl region including final seal compression	199
e) Enter password	allow to change to a different group	

OEM Setup Menu *[Numbers in brackets are {min:max}]*

a) Input setup	press ENTER on this item to view and edit the input setup	
b) Output setup	press ENTER on this item to view and edit the output setup	
c) Close warn {0:20}	Set the time before an automatic door close to turn on the warning buzzer. A value of 0 disables the warning timer. Not used if brake release timer is not = 0.	154
d) Lock enable	Door lock enable status. Set to 0 for disable or 1 to enable the door lock input	151
e) Partial Open {0:32767}	The size of the door for partial openings (in 100ths of an inch for a single-part door)	152
f) Part close delay {0:240}	Set the close delay timer, in seconds, that the door will remain open for after a partial opening before automatically closing. A value of 0 disables the close delay timer.	153
g) Hit keep cls del	Normally the close delay and part close delay timers are disabled after a collision. Setting this parameter to 1 will keep the close delay timers after a collision, 0 will perform the normal disable.	191
h) Assist open len	Length (in 100ths of an inch) that the door is required to be pulled	

{0:1000}	open before an assisted open is triggered. Set this value to 0 to disable assisted open	169
i) Enter password	allow to change to a different group	

OEM Setup Sub Menu I –
Input setup

a) Input 1	Setup what input 1 is used for by pressing ENTER then using the UP or DOWN keys to scroll between the following options:	
Activation 0	Not used; Input is disabled	
Activation 1	re-open/remain open when input is open (eg. N/C Photo detector)	
Activation 2	open/remain open when input is closed (eg. N/O Loop sensor)	
Activation 3	re-open/remain open when input is closed (eg. N/O Edge detector or N/O photo detector) – acts as an obstruction	
Activation 4	open/re-open when input is closed (eg. N/O Open only pull cord)	
Activation 5	close door when input is closed (eg. N/O Close only pull cord)	
Activation 6	If door is closed, will open door. If door is open, will close door. If door is closing, will open door. If door is opening, will ignore input. (eg. N/O-edge normal pull cord)	
Activation 7	Open door to partial open position (eg. N/O Partial open)	
Activation 8	Emergency Stop when input is open. Stops the door and then removes power from the motor.	
Activation 9	Open limit switch (N/O)	
Activation 10	Close limit switch (N/O)	
Activation 11	Open limit switch (N/C)	
Activation 12	Close limit switch (N/C)	
b) Input 2-7	see input 1 for setup	
c) Exit inputs	return to parent menu	

Note:
If there are physical limits in the system (e.g. a hard door stop) that stop the door(s) from moving, limit switches are not required. If there are no physical limits a limit switch is required to indicate the end of travel. It is possible to use limit switches in one direction and physical stops in the other direction.

OEM Setup Sub Menu II –
Output setup

a) Output 1	setup what output 1 is used for by pressing ENTER then using the UP or DOWN keys to scroll between the available options.	211
b) Output 2	see output 1 for setup	212
c) Brake release timer {0:32000}	time (in ms) to hold door while releasing brake (0 if no brake is used)	176
d) Brake engage timer {0:32000}	time (in ms) to hold door when brake engages	177
e) Exit inputs	return to parent menu	

Open & Close Profile Detailed Setup

a) AutoCalib ON/OFF {0:1}	Enables(1) / Disable(0) - forces calibration cycle after a power up upon the initial trigger for a door movement	136
b) Manual calibrate {0:1}	Set to (1) to force manual calibrations of door size. Used when there are no physical end-stops or limit switches	209
c) Close re-referencing AUTO/manual {0:1}	*after power is cycled and having already calibrated -* set to (1), via any activation after power on user is prompted to use DOWN keypad button to jog the door to CLOSE reference position ("jog door to close"). Set to (0), via any activation after power on, door is automatically re-referenced to CLOSE position.	135
d) Open profile	press ENTER on this item to view and edit the open profile sub-menu	
e) Close profile	press ENTER on this item to view and edit the close profile sub-menu	
f) Enter password	allow to change to a different group	

Open & Close Profile Detailed Setup Sub Menu I –
Open profile   *[Numbers in brackets are {min:max}]*

a) Open start speed {1:60}	velocity to start the door moving at until the starting gap is cleared	5
b) Open start size {1:1000}	length, in 100's of an inch, of the open starting region	4
c) Open accelerate {1:100}	rate of acceleration of the door when opening	0
d) Open top speed {1:400}	target speed for high speed door movement on opening	6
e) Open decelerate {1:75}	rate of deceleration of the door when opening	2
f) Open crawl speed {1:60}	speed of the door in the final crawl region when opening	1
g) Open crawl gap {0:1000}	length at the end of open profile for door crawl in 100's of inch	3
h) Door size reduce {0:4000}	How much under fully open should the door open. This value is used during calibration to determine how much before the end-stop should the door actually stop (in 100ths of an inch).	140
i) Exit profile	return to parent menu	

Open & Close Profile Detailed Setup Sub Menu II –
Close profile   *[Numbers in brackets are {min:max}]*

a) Close start spd {1:60}	velocity to start the door moving at until the close starting gap is cleared	14
b) Close start size {1:1000}	length, in 100ths of an inch, of the close starting region	13
c) Close accelerate {1:100}	rate of acceleration of the door when closing	9
d) Close top speed {1:400}	target speed for high speed movement of the door on closing	15

e) Close decelerate {1:75}	the rate of deceleration of the door when closing	11
f) Close crawl spd {1:60}	the speed of the door in the final crawl region when closing	10
g) Close crawl gap {0:1000}	length at the end of close profile for door crawl 100's of inch	12
h) Exit profile	return to parent menu	

Detailed Menu Passwords:

Calibrate Speed and Torque Setup Menu:
ESC, ESC, ENT, ENT, ENT, ENT, ENT, DOWN

End Position, Opening and Closing Effects Setup Menu:
DOWN, ENTER, UP, UP, UP, ESC, ESC, DOWN

OEM Setup Menu:
ESC, ENT, UP, UP, UP, DOWN, UP, DOWN

Open/ Close Profile Detailed Setup Menu:
UP, UP, UP, DOWN, DOWN, DOWN, DOWN, ESC

Door Size Range Setup Menu:
DOWN, DOWN, UP, DOWN, ENT, UP, DOWN, ESC