



Record HA8-LP Low-Energy Door Operator Controls Setup Quick Start Guide

Setting Home and Open Positions

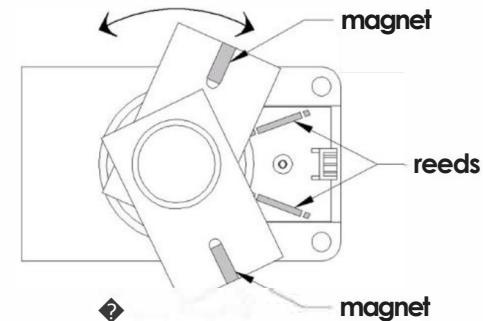
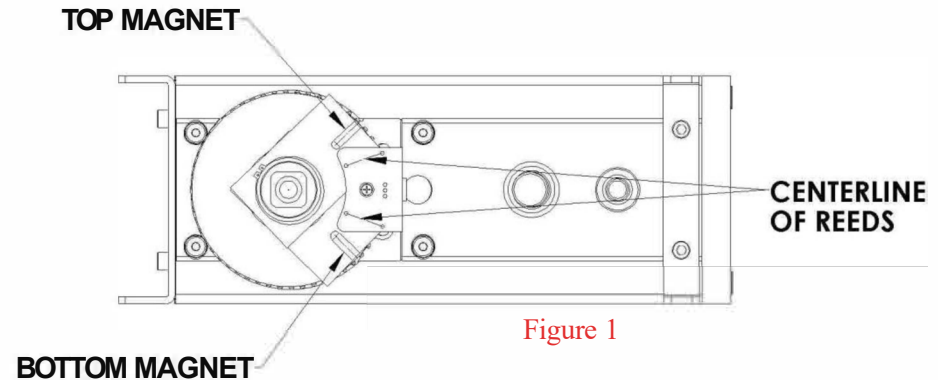
Step 1] Locate the two magnets and centerline reed switches. See figure 1

Step 2] Setting Latch and Back Check position can be achieved using a small flat head screwdriver:

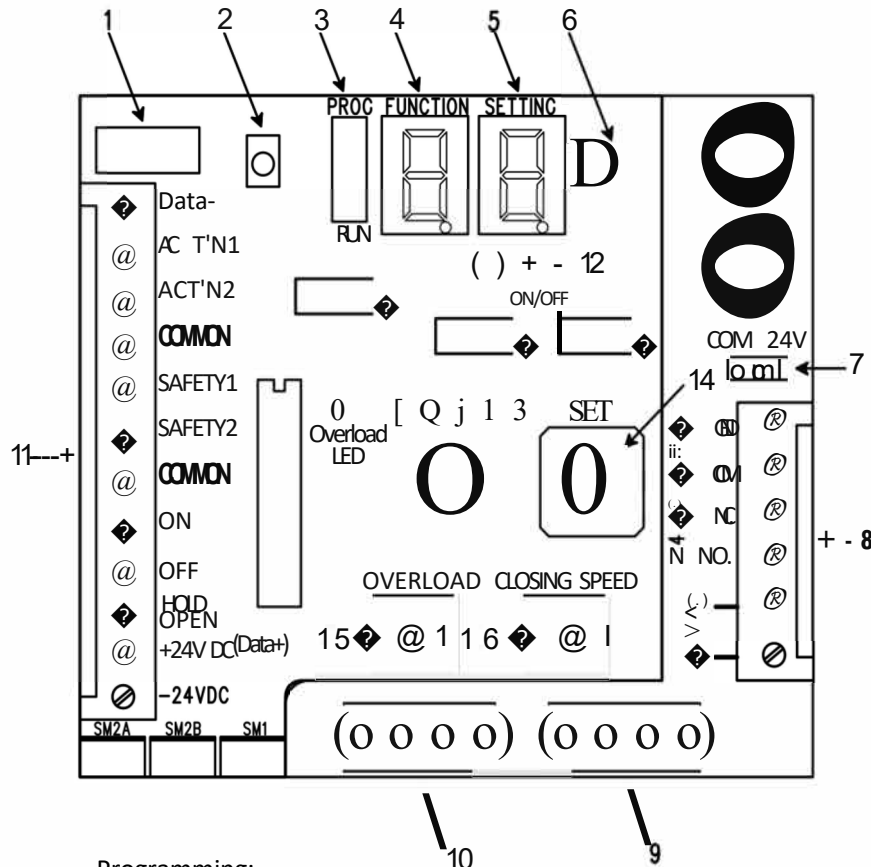
1. Set latch check Upper Magnet over the reed switch with door fully CLOSED.
2. Open door to full OPEN [90 degrees].
3. Set Back Check Lower Magnet, while holding Latch magnet in place.

TIP: At Latch and Back Check - Door should slow for the final 10 degrees of open or close movement. Back Check and Latch speed adjustment may be necessary via control panel. [LED 1/2 - 0-5 in 6 steps)

WARNING: Proximity Switch MUST engage at open or close, otherwise door will not operate correctly and power fuse may be blown [overload).



Digital Control Board Layout

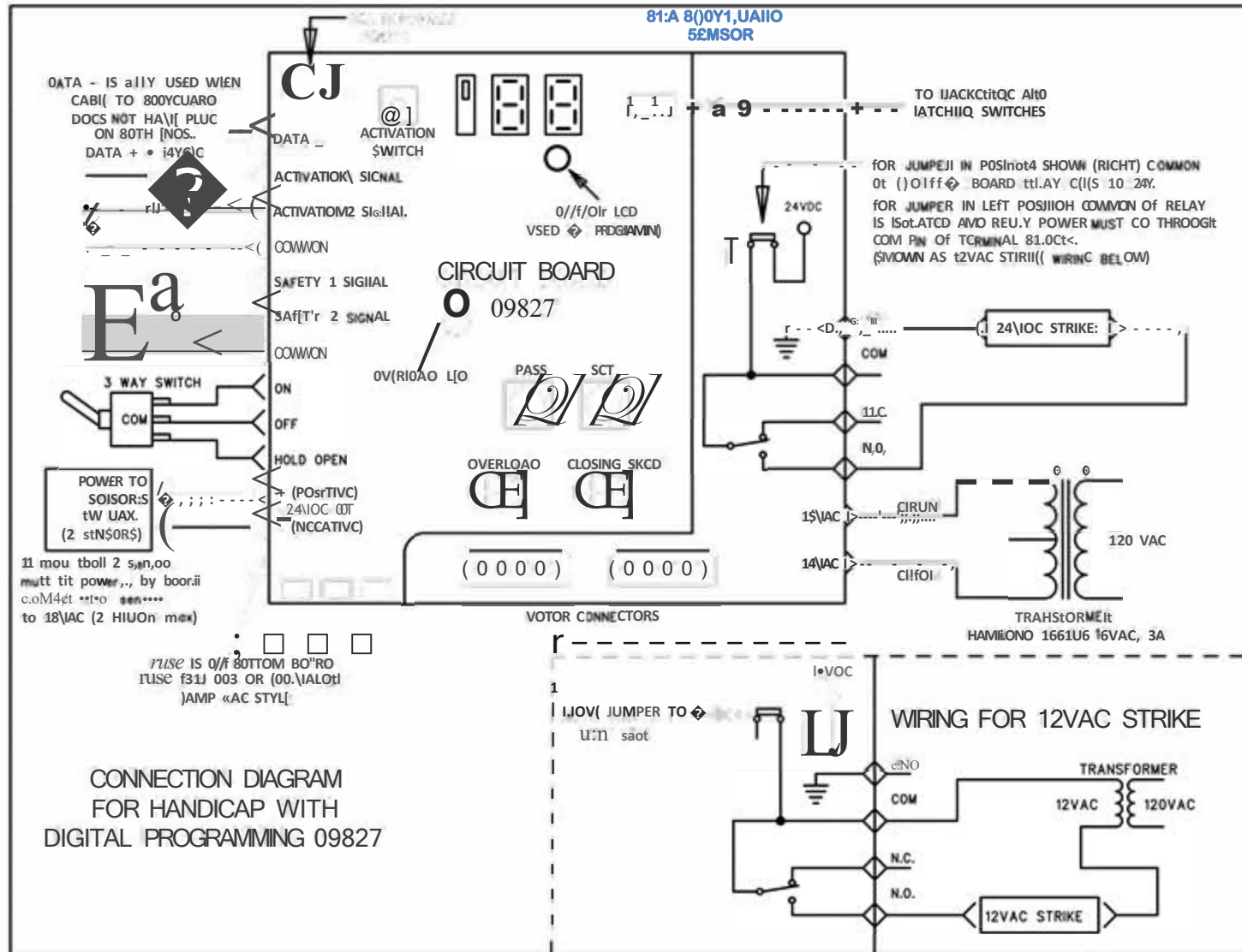


- 1 BEASensor Connector (Bodyguard)
- 2 Test Button
- 3 Program/Run Switch
- 4 Function LED
- 5 Setting LED
- 6 Latch Backcheck Connector
- 7 Strike Selection Jumper
- 8 16V and Strike Terminals
- 9 Motor 2
- 10 Motor 1 (Low profile motor always plugged in here)
- 11 Input Terminals
- 12 On/Off program LED
- 13 Pass Button
- 14 Set Button
- 15 Overload dial
- 16 Closing Speed dial

Programming:

1. Move PROG/RUN Switch to 'PROGRAM'
2. Press PASS Button to scroll through Functions
3. Press SET Button to change present function value
4. Move PROG/RUN Switch to 'RUN' when adjustment is complete
5. Press test button to test.

Digital Control Board Wiring Diagram



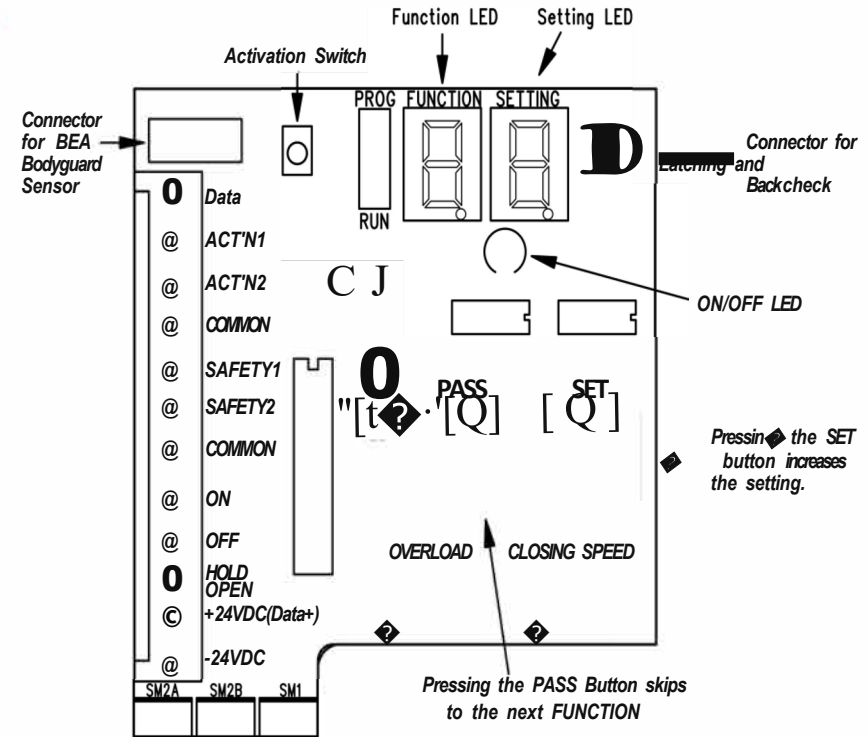
Digital Control Board-How to Change Values

Step 3]

There are two [2] seven [7] SEGMENT LED DISPLAYS used for programming. The first digit is used to indicate what function is being programmed. The second digit is used to indicate the value of that function. Of the three [3] switches that relate to programming, there is one slide switch and two push button switches. The slide switch is either in PROGRAM or RUN mode. During Program mode, the function settings can be modified. During the Run mode the function settings can be viewed but not modified.

IMPORTANT - THE DOOR WILL NOT OPEN WHEN THE SLIDE SWITCH IS SET TO PROGRAM.

The push button switches are labelled PASS and SET. Pressing the PASS button, will select the next function. Pressing the SET button, will change the present function value [when the slide switch is in PROGRAM model.



See Programming Specifications for program values

Programming Specifications Values

FUNCTION LED	SETTING LED	FUNCTION DESCRIPTION	DEFAULT SETTING for CADET
0	0 to F F = fastest 0 = slowest	OPENING SPEED	A
1	0 to 5 5 = fastest 0 = slowest	BACK CHECK SPEED	1
2	0 to 5 5 = fastest 0 = slowest	LATCH SPEED	5
3	0 to 9 9 = fastest 0 = slowest	HOLD SPEED	2
4	1 = 2sec 2 = 4sec 3 = 6sec 4 = 8sec 5 = 10sec 6 = 12sec 7 = 14sec 8 = 16sec 9 = 18sec A = 20sec b = 22sec C = 24sec d = 26sec E = 28sec F = 30sec	ACTIVATION TIME The time that the door remains open, starting when the activation trigger goes OFF. 1 to 30 sec	4
5	0 = 2 sec 1 = 4 sec 2 = 6 sec 3 = 8 sec 4 = 10 sec 5 = 12 sec 6 = 14 sec 7 = 16 sec	DELAY ON OPERATE The time delay before operating the door, starting when activation2 trigger goes ON. 2 to 16sec - This is valid when Setting A1 has the LED OFF.	1
6	0 = Instant trigger - extremely sensitive 1 = 1/8 sec - very sensitive 2 = 1/4 sec 3 = 3/8 sec - mid range sensitivity 4 = 1/2 sec 5 = 5/8 sec - not sensitive	PUSH AND GO SENSITIVITY The amount of time that a push and go trigger must be sensed before the door is triggered. A longer time makes the door less sensitive to a push and go.	3
7	1 = 1sec 12sec 2 = 2sec 14sec 3 = 3sec 4 = 4sec 5 = 5sec 6 = 6sec 7 = 7sec 8 = 8sec 9 = 9sec A = 10sec b = C = d = 15sec E = 25sec F = 30sec	PUSH AND GO ACTIVATION TIME The time that the door remains open starting when the Push and Go input is triggered.	5
8	0 = 0sec 1 = .50sec 2 = 1.00sec 3 = 1.50sec 4 = 2.00sec	SAFETY 1 INHIBIT The time that a safety1 input is ignored (inhibited), starting when the door goes into Latch. 0 to 2 sec	0
9	0 = 0.125sec 1 = 0.25sec 2 = 0.50sec 3 = 1.00sec 4 = 1.50sec 5 = 2.00sec	STRIKE DELAY The time between Strike ON and door starting to open. HA board ONLY	0

Programming Specifications Values

CODE INDICATION		ON/OFF LED = ON	ON/OFF LED = OFF	DEFAULT SETTING
FUNCTION LED	SETTING LED			
A	0	Safety 2 OFF at back check.	Safety2 always active	LED OFF
A	1	ACT□N1 is connected to a push button switch and always opens the door. ACT□N2 is connected to the door and is only active after ACT'N1 is pressed and before the door closes and gets to the Latch point.	Activation input 1 (ACT□N1) works as an instant activation. Activation input 2 (ACT□N2) works as a delayed activation (delay time programmed through Function □5□.)	LED OFF ACT□N1 = instant and ACT□N2 = delayed activation
A	2	Lockout ON – during closing Safety1 is active if the door stops moving (from hitting an obstruction for example). If door is moving then Safety1 is NOT active.	Lockout OFF Safety1 is always active	LED ON Lockout ON
A	3	Push and Go is active. Push and Go will only work with a door that DOES NOT have a clutch.	Push and Go disabled	LED OFF – Push and Go Disabled
A	4	In process of reading out □# of door opening cycles □ To obtain the number of opening cycles that the door has gone through press the set button while in the Function A, Setting 4 mode. Example: Readout of 3 2 (pause) 7 0 = 3,270 door cycles	No readout	LED OFF – no readout
A	5	Safety1 sensor mounted on closing side of door.	Safety1 sensor mounted overhead.	LED OFF – Safety1 mounted Overhead.
A5 – LED OFF (Overhead Sensor)	Door Opening Door Fully Open Door Closing - Door Fully Closed	- Safety1 sensor has no effect - Safety1 sensor ON = door will not close - A2 setting ON. Door moving = Safety1 has no effect (door will open) - A2 setting ON. Door stopped, Safety1 ON = door will not open A2 setting OFF. Safety1 ON = door will not open - Safety1 sensor ON = door will not open		
A5 – LED ON (Door mounted Sensor)	Door Opening Door Fully Open Door Closing Door Fully Closed	- Safety1 sensor has no effect - Safety1 sensor ON = door will not close - Safety1 sensor ON = door drives at HOLD speed - Safety1 sensor has no effect		

Programming Specifications Values

CODE INDICATION		ON/OFF LED = ON	ON/OFF LED = OFF	DEFAULT SETTING
FUNCTION LED	SETTING LED			
A	6	Safety1 sensor is a Normally Closed input (N.C.)	Safety1 sensor is a Normally Open input (N.O.)	LED OFF – Safety1 is Normally Open
A	7	Safety2 independent of Activation 1 Safety2 is ON = door holds Safety2 is OFF = door opens	Safety2 works with Act'n1. For Safety2 AND Act'n1 both ON = door holds. If Safety2 goes OFF = door opens If Act'n1 goes OFF = door closes.	LED OFF Safety2 works with Act'n1.
A	8	Fire door mode for California. Manually pulling the door closed while it is fully open will close the door ignoring all activation triggers including Hold Open. Turning to OFF resets this mode. See note1	Door will not shut when manually pulled closed.	LED OFF
note1: When setting up Code A8 it is important to 1. Turn the overload all the way down (counter clock wise on the Potentiometer) and 2. To make sure that the Back Check speed is slow enough that it will not trigger the overload while the door is fully open.				

RESET TO DEFAULT - Pressing both the SET and PASS buttons together, for 5 seconds, will reset the product to its original default settings.

Trouble Shooting Chart

PROBLEM	POSSIBLE SOLUTION
Programming function does not work.	1. Is there an ON/OFF switch connected? A switch must be connected from the ON terminal pin to the OFF terminal pin for programming to work.
	2. Slide switch must be moved to PROG for programming options to be modified.
Door does not open after being triggered.	1. Is power connected and ON? (7 segment LEDs will light with power ON)
	2. Is program/run switch in the Arun@ mode? (switch should be down)
	3. Which activation situation is selected? See setting A1 - If LED is ON for program setting A1, the Activation input 2 will only activate the door while it is closing and has not reached Latch.
	4. Is there an ON/OFF switch connected? A switch must be connected from the ON terminal pin to the OFF terminal pin for the doors to open.
Door does not open if triggered immediately after going into Latch.	1. Increase the Safety1 inhibit time. See Setting 9.
Push and Go function does not work.	2. Is operator equipped for Push and Go? Only an operator WITHOUT a clutch will work for push and go. Operators with a clutch cannot provide push and go.
	3. Is Push and Go function enabled? See setting A3
	4. Reduce push and go sensitivity. See setting 6
Door does not delay when triggered even when a delayed time has been set up.	1. Which activation situation is selected? See setting A1 - If LED is ON for program setting A1 this is a special activation situation and there is no delay
	1. Only Activation Trigger 2 input (ACT=N 2) will provide a delay on opening. Activation Trigger 1 input (and the push button on the board) will ALWAYS give an instant trigger regardless of how the time delay has been set up
Door opens slowly	1. Check to see that the Back Check and latching magnets are adjusted properly
	2. Increase the opening speed – Function 0
Door will not open	1. Make sure the door is unlocked and main power is on.
	2. Remove obstacle that could be causing the door not to open.
	3. Make sure the 3 position switch (I 0 II) is set to automatic mode (I)
My door will not close	1. Remove any obstacle from in front of the door, which is activating the sensor, thus keeping the door open.
	2. Make sure the 3 position switch (I 0 II) is set to automatic mode (I)

Control Board Setup Complete

