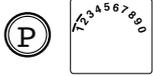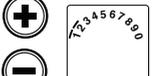# VTA Series

Continuous Duty DC Powered Commercial Direct Drive
Door Operator for Spring Balanced Sectional Doors

1. Advanced Programming Options

1	Begin with door in closed position	on
2	To begin advanced programming, press and hold the (P) button for at least 12 seconds. A display of numbers 1-10 appears in an arch across the screen. Number 1 and 2 will have a line above it. This indicates Level 1 and 2	(P) 1234567890
3	Using the (+) and/or (-) buttons, select the desired level. (The example shown is Level 2)	(+) (−) 1234567890
4	When the desired Level setting is selected, press the (P) button to save the level setting and enter the Menu selection mode. The number 1 will now be underlined.	(P) 1234567890 16
5	Using the (+) and/or (-) buttons, select the desired Menu. (The example shown is Menu 3)	1234567890 8
6	When the desired Menu setting is selected, press the (P) button to save the Menu setting and enter the Set Parameter mode.	(P)
7	Using the (+) and/or (-) buttons, select the desired Parameter Settings.	(+) (−) 1234567890 7
8	Press the (P) button. The control changes to the level display.	(P)
9	To end advanced programming mode, press and hold the (P) button for a minimum of 6 seconds. All changed parameters are now saved. Drive is now in operating mode.	on

NOTE: Always Complete 3 Cycles After Emplimenting Advance Progaming Changes.

2. VTA Basic Programming

Step 1

- Begin with door in closed position
- Press and hold **(P)** button until the LCD screen displays the number 5.
- Release **(P)** button.
- LCD screen shows blinking icon of an open door on the right.
- Press and hold the **(+)** button until the door reaches the desired open position.
- Press the **(P)** button.
- LCD screen shows blinking icon of a closed door on the left.
- Press and hold the **(–)** button until the door reaches the desired closed position.
- Press the **(P)** button.
- LCD screen shows a blinking icon of a radio signal.
- If a receiver is installed, press the transmitter button to activate with receiver, then press **(P)** button.
- If no receiver is being used, press the **(P)** button to skip this step.
- The VTA exits the programming mode, and the LCD screen indicates the normal standby mode with the word "**ON**".

Step 2

- Cycle opener two times.
- In order to store the programmed settings, and learn the force required to move the door, the VTA opener must be cycled two complete times. One complete cycle is considered an open and close.
- Basic programming is complete.

3. Fine Limit Adjustments

Fine Adjustment on Open Limit – Level 1 Menu 9

- Press and hold **(P)** button for 11 seconds. A display of numbers 1-10 appears on the screen.
- The numbers 1 and 2 will have a line above it.
- Press the **(–)** button as many times necessary until 1 has a line above them. (Level 1)
- Press the **(P)** P button once. The number 1 will have a line under it (Menu 1)
- Press the **(+)** button as many times necessary until 1-9 have a line underneath them (Menu 9)
- Press the **(P)** button once.
- Use the **(+)** or **(–)** to change the value shown in the middle of the screen. Increasing the value will drive the door more into the up position. Decreasing the value will drive the door more into the center position.
- Exit cycle counter by holding the **(P)** button for 5 seconds.

Fine Adjustment on Close Limit – Level 1 Menu 10

- Press and hold **(P)** button for 11 seconds. A display of numbers 1-10 appears on the screen.
- The numbers 1 and 2 will have a line above it.
- Press the **(–)** button as many times necessary until 1 has a line above them. (Level 1)
- Press the **(P)** P button once. The number 1 will have a line under it (Menu 1)
- Press the **(+)** button as many times necessary until 1-0 have a line underneath them (Menu 10)
- Press the **(P)** button once.
- Use the **(+)** or **(–)** to change the value shown in the middle of the screen. decreasing the value will drive the door more into the down position. increasing the value will drive the door more into the center position.
- Exit cycle counter by holding the **(P)** button for 5 seconds.

4. Force Adjustments

Open Force – Level 2 Menu 1

- Press and hold **(P)** button for 11 seconds. A display of numbers 1-10 appears on the screen.
- The numbers 1 and 2 will have a line above it.
- Press the **(+)** button as many times necessary until 1-2 have a line above them. (Level 2)
- Press the **(P)** button once. The number 1 will have a line under it (Menu 1)
- Press the **(P)** button once.
- The large blinking number in the middle of the screen is the force setting.
- Use the **(+)** to increase the open force (Max 16) or use the **(–)** button to decrease the open force.
- Exit programming by holding the **(P)** button for 5 seconds. Cycle two complete times.

Close Force – Level 2 Menu 2

- Press and hold **(P)** button for 11 seconds. A display of numbers 1-10 appears on the screen.
- The numbers 1 and 2 will have a line above it.
- Press the **(P)** P button once. The number 1 will have a line under it (Menu 1)
- Press the **(+)** button one time until 1-2 are underlined. (Menu 2)
- Press the **(P)** button once.
- The large blinking number in the middle of the screen is the speed setting.
- Use the **(+)** to increase the close force (Max 16) or use the **(–)** button to decrease the close force.
- Exit programming by holding the **(P)** button for 5 seconds. Cycle two complete times.

5. Sensitivity Adjustments

Open Sensitivity – Level 2 Menu 3

- Press and hold **(P)** button for 11 seconds. A display of numbers 1-10 appears on the screen.
- The numbers 1 and 2 will have a line above it.
- Press the **(P)** P button once. The number 1 will have a line under it (Menu 1)
- Press the **(+)** button one time until 1-3 are underlined. (Menu 3)
- Press the **(P)** button once.
- The blinking number in the center of the screen is the sensitivity setting.
- Use the **(+)** to increase the setting making the opener less sensitive.
- Use the **(–)** to decrease the setting making the opener more sensitive.
- Exit programming by holding the **(P)** button for 5 seconds. Cycle two complete times.

Close Sensitivity – Level 2 Menu 4

- Press and hold **(P)** button for 11 seconds. A display of numbers 1-10 appears on the screen.
- The numbers 1 and 2 will have a line above it.
- Press the **(P)** P button once. The number 1 will have a line under it (Menu 1)
- Press the **(+)** button one time until 1-4 are underlined. (Menu 4)
- Press the **(P)** button once.
- The blinking number in the center of the screen is the sensitivity setting.
- Use the **(+)** to increase the setting making the opener less sensitive.
- Use the **(–)** to decrease the setting making the opener more sensitive.
- Exit programming by holding the **(P)** button for 5 seconds. Cycle two complete times.

6. VTA Variable Speed Setting Instructions

Open Speed – Level 6 Menu 1

- Press and hold **(P)** button for 11 seconds. A display of numbers 1-10 appears on the screen.
- The numbers 1 and 2 will have a line above it.
- Press the **(+)** button as many times necessary until 1-6 have a line above them. (Level 6)
- Press the **(P)** button once. The number 1 will have a line under it (Menu 1)
- Large number in middle of screen is your current speed setting.
- Press the **(P)** button once.
- The large blinking number in the middle of the screen is the speed setting.
- Use the + to increase the open speed travel (Max 16) or use the **(–)** button to slow the open speed travel.
- Exit programming by holding the **(P)** button for 5 seconds. Cycle two complete times.

Close Speed - Level 6 Menu 4

- Press and hold **(P)** button for 11 seconds. A display of numbers 1-10 appears on the screen.
- The numbers 1 and 2 will have a line above it.
- Press the **(+)** button as many times necessary until 1-6 have a line above them. (Level 6)
- Press the **(P)** P button once. The number 1 will have a line under it (Menu 1)
- Press the **(+)** button three times until 1234 are underlined. (Menu 4)
- Large number in middle of screen is your current speed setting.
- Press the **(P)** button once.
- The large blinking number in the middle of the screen is the speed setting.
- Use the **(+)** to increase the close speed travel (Max 16) or use the **(–)** button to slow the close speed travel.
- Exit programming by holding the **(P)** button for 5 seconds. Cycle two complete times.

7. VTA Soft-Stop Open & Close Speed Instructions

Open Soft-Stop Speed – Level 6 Menu 2

- Press and hold **(P)** button for 11 seconds. A display of numbers 1-10 appears on the screen.
- The numbers 1 and 2 will have a line above it.
- Press the **(+)** button as many times necessary until 1-6 have a line above them. (Level 6)
- Press the **(P)** button once. The number 1 will have a line under it (Menu 1)
- Press **(+)** button as many times necessary until 1-2 have a line below them. (Menu 2)
- Press the **(P)** button once.
- The large blinking number in the middle of the screen is the soft stop speed setting.
- Use the **(+)** button to increase the soft time speed open setting (Max 16) or use the **(–)** button to decrease the soft start time open setting. (Min 1)
- Exit programming by holding the **(P)** button for 5 seconds. Cycle two complete times.

Closed Soft-Stop Speed – Level 6 Menu 6

- Press and hold **(P)** button for 11 seconds. A display of numbers 1-10 appears on the screen.
- The numbers 1 and 2 will have a line above it.
- Press the **(+)** button as many times necessary until 1-6 have a line above them. (Level 6)
- Press the **(P)** button once. The number 1 will have a line under it (Menu 1)
- Press **(+)** button as many times necessary until 1-6 have a line below them. (Menu 6)
- Press the **(P)** button once.
- The large blinking number in the middle of the screen is the soft stop speed setting.
- Use the **(+)** button to increase the soft start speed close setting (Max 16) or use the **(–)** button to decrease the soft start speed close setting. (Min 1)
- Exit programming by holding the **(P)** button for 5 seconds. Cycle two complete times.

8. VTA Soft-Start Time Duration Instructions

Open Soft-Stop Duration – Level 6 Menu 9

- Press and hold **(P)** button for 11 seconds. A display of numbers 1-10 appears on the screen.
- The numbers 1 and 2 will have a line above it.
- Press the **(+)** button as many times necessary until 1-6 have a line above them. (Level 6)
- Press the **(P)** button once. The number 1 will have a line under it (Menu 1)
- Press **(+)** button as many times necessary until 1-9 have a line below them. (Menu 9)
- Press the **(P)** button once.
- The large blinking number in the middle of the screen is the soft start time setting.
- Use the **(+)** button to increase the soft start time open setting (Max 5) or use the **(–)** button to decrease the soft start time open setting. (Min 1)
- Exit programming by holding the **(P)** button for 5 seconds. Cycle two complete times.

Closed Soft-Start Duration – Level 6 Menu 10

- Press and hold **(P)** button for 11 seconds. A display of numbers 1-10 appears on the screen.
- The numbers 1 and 2 will have a line above it.
- Press the **(+)** button as many times necessary until 1-6 have a line above them. (Level 6)
- Press the **(P)** button once. The number 1 will have a line under it (Menu 1)
- Press **(+)** button as many times necessary until 1-0 have a line below them. (Menu 10)
- Press the **(P)** button once.
- The large blinking number in the middle of the screen is the soft stop time setting.
- Use the **(+)** button to increase the soft start time close setting (Max 5) or use the **(–)** button to decrease the soft start time close setting. (Min 1)
- Exit programming by holding the **(P)** button for 5 seconds. Cycle two complete times.

9. VTA Soft-Stop Duration by Position Instructions

Open Soft-Stop Position -Level 6 Menu 3

- Press and hold **(P)** button for 11 seconds. A display of numbers 1-10 appears on the screen.
- The numbers 1 and 2 will have a line above it.
- Press the **(+)** button as many times necessary until 1-6 have a line above them. (Level 6)
- Press the **(P)** button once. The number 1 will have a line under it (Menu 1)
- Press **(+)** button as many times necessary until 1-3 have a line below them. (Menu 3)
- Press the **(P)** button once.
- The center of the screen will display a **1/2**.
- Press the **(+)** or the **(–)** button to drive the door to the position where you would like the soft stop to begin on the open actuation.
- Press the **(P)** button once.
- Exit programming by holding the **(P)** button for 5 seconds. Cycle two complete times.

Close Soft-Stop Position -Level 6 Menu 8

- Press and hold **(P)** button for 11 seconds. A display of numbers 1-10 appears on the screen.
- The numbers 1 and 2 will have a line above it.
- Press the **(+)** button as many times necessary until 1-6 have a line above them. (Level 6)
- Press the **(P)** button once. The number 1 will have a line under it (Menu 1)
- Press **(+)** button as many times necessary until 1-3 have a line below them. (Menu 8)
- Press the **(P)** button once.
- The center of the screen will display a 1/2.
- Press the **(+)** or the **(–)** button to drive the door to the position where you would like the soft stop to begin on the close actuation.
- Press the **(P)** button once.
- Exit programming by holding the **(P)** button for 5 seconds. Cycle two complete times.

10. VTA Hard Reset & Programming Instructions – Level 1 Menu 8

Step 1

- Move the door halfway into the opening by hand and re-engage operator.
- Press and hold **(P)** button for 12 seconds. Display of numbers 1-10 appears across the screen.
- Numbers 1 and 2 will have a line above it. (Level 2)
- Press the **(–)** once till the line is above 1.
- Press the **(P)** button. 1 will be underlined. Number 8 appears in center of the screen. (Menu 1)
- Press and release the **(+)** button as many times until 12345678 are underlined. (Menu 8)
- Press the **(P)** button. The '1' will be blinking in the middle of the screen.
- Change the setting from '1' to '2' by pressing the **(+)** button once. 2 will appear on the screen.
- Press the **(P)** button once. The screen will begin counting down from 24 to 0.
- Following the countdown, the green light on control board will briefly flash off and on.
- VTA is back to factory settings and is now automatically in programming mode.

Step 2

- Press and hold the **(+)** button until the door reaches the desired open position.
- Press the **(P)** button.
- Press and hold the **(–)** button until the door reaches the desired closed position.
- Press the **(P)** button.
- If a receiver is installed, press the transmitter button to activate with receiver, then press **(P)** button.
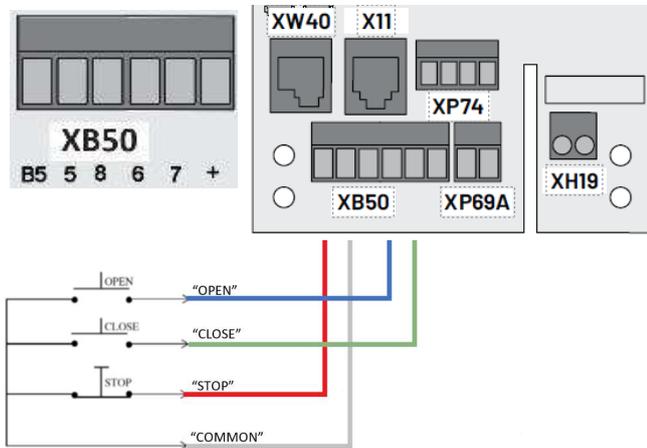- If no receiver, press the **(P)** button to skip this step.

Step 3

- Cycle opener three times.
- In order to store the programmed settings and learn the force required to move the door, the VTA opener must be cycled three complete times. One complete cycle is considered an open and close.
- Programming is complete.

SELECT ONE of the following parameter settings		
Parameter	**Purpose**	
1	No Reset	
2	Reset back to original Factory Settings	
3	Removes all programmed radio Transmitters	
4	Resets Any programmed timer to close	
5	Resets expanded drive functions (Menus 2,3,5 and 7)	
6	Reset of Safety Elements (Code 43, 5)	
7	Reset of MS BUS (Error code 36)	
8	Reset of end positions (limits) only	

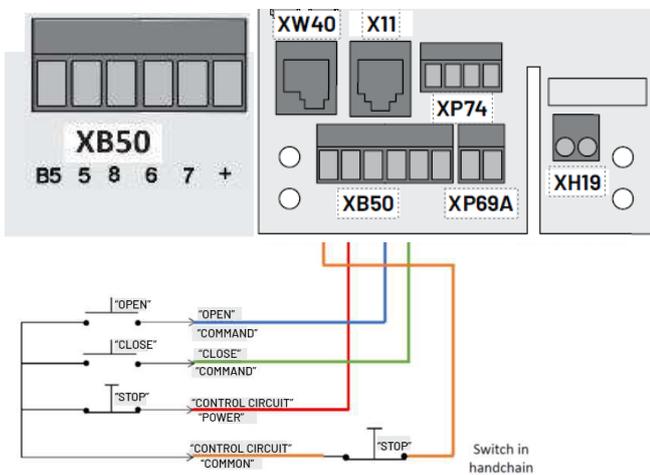# 11. Button Wall Control Wiring Instructions

Quick Release Model (E)

Control Board Wiring Diagram – Connection Port XB50 (E).

1. Run wire from close on wall station to close terminal on operator (Terminal 7 - second from right).

2. Run wire from open on wall station to open terminal on operator (Terminal 6 - third from right).

3. Run wire from stop on wall station to stop terminal on operator (Terminal B5 – first on the left).

4. Run wire from common side of the wall station to impulse terminal on operator (Terminal 5 – second from left.
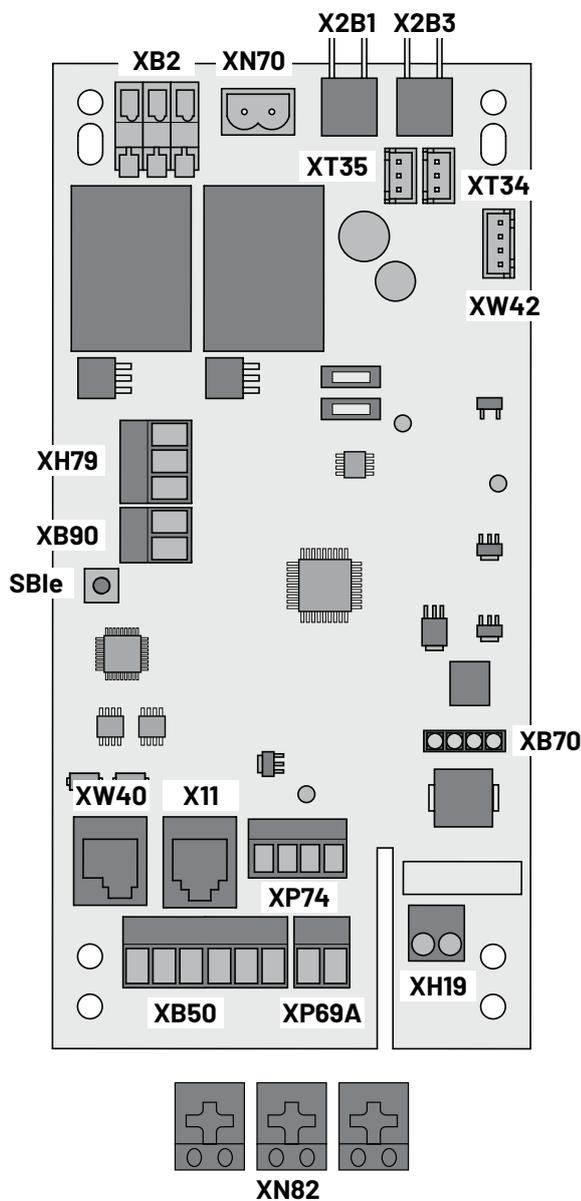
Emergency Chain Hoist Model (KE)

Control Board Wiring Diagram – Connection Port XB50 (KE)

1. Run wire from close on wall station to close terminal on operator (Terminal 7 - second from right).

2. Run wire from open on wall station to open terminal on operator (Terminal 6 - third from right).

3. Remove existing wire from Terminal 5 on operator and run wire from stop on wall station to impulse on operator (Terminal 5 – fifth from right).

4. Run wire from common on wall station and splice with the wire removed from Terminal 5 on operator.

5. Leave existing wire in Terminal B5 on operator.

12. Control Board Connections

Connector	Description
SBLe	Button for Bluetooth connection
X2B1	Connection: switching power supply 1
X2B3	Connection: switching power supply 2
X11	Connection: external controls with system wiring (DO NOT REMOVE)
XB2	Motor connection
XB50	Connection: external control for emergency operation safety switch (optional) Programmable dry contact
XB70	Module receiver connection
XB90	Programmable Dry contact
XH19	Connection: External light/ dry contact.
XH79	Connection: Electric lock & signal light (XH79/XB90)
XN70	Connection: battery backup
XN82	power supply input
XP74	Connection: closing edge protective device and 8k2 hold circuit, door
XP69A	Connection: Pulsing secondary entrapment safety device running direction CLOSE
XT34	Connection for 2nd transformer (VTA 11 models)
XT35	Connection: switching power supply 1, control cable
XW40	Connection for Command 108 Programming Device (MS-BUS)
XW42	Connection position sensor (pre-wired)

Emergency Operation Safety Switch (Optional) (XB50)

NOTE: Risk of property damage due to external voltage and improper installation connection port XB50 can short the logic board. Only connect the terminals B5, 5, 8, 6, 7 of XB50 to NO contact state.

13.   VTA Error Codes

Code	Issue	Solution
Code 5	8.2K safety edge connected at XP74 was actuated in the down cycle.	Check door and remove obstacle. If no safety edge is connected at XP74, make sure the 8.2K resistor is inserted in the terminal.
Code 7	No activity or buttons pressed for 120 seconds while in programming mode.	Restart and complete the programming process.
Code 9	Limit position sensor is unable to reach programmed end position.	Check door for balance and running easily by hand. Check or increase open and closing force (Level 2, Menu 1 and 2).
Code 10	Door moving to sluggish or jammed.	running easily by hand. Increase open and/or closing force (Level 2, Menu 1 and 2).
Code 11	Run time limit/excess travel.	Make sure the end positions are set correctly. Reset end positions (Level 1 Menu 8 Parameter 8).
Code 13	Test of safety edge failed or closing edge programming turned on without safety edge connected.	Test safety edge. Deactivate or connect safety edge.
Code 14	Number of cycles required to store force after setting end positions not met.	Run 3 full cycles if possible. If not, reset end position (Level 1 Menu 8 Parameter 8) and run three full cycles.
Code 15	Photo eye or pulsed safety device interrupted or defective.	Remove obstacle, check wiring and alignment.
Code 16	The current sensor for monitoring motor overload is defective.	Hard reset the operator (Level 1 Menu 8 Parameter 2). If problem persists, replace operator.
Code 26	Input voltage error.	Check external power supply.
Code 28	Door movement too irregular.	Check door for obstruction, proper balance and manual operation. Increase open or close sensitivity (Level 2 Menu 3 and 4).
Code 30	MS-BUS Error. (Bad signal from Command 108).	Perform BUS module reset (Level1 Menu 8 Parameter 7).
Code 33	Thermal overload protection triggered.	Make sure door is balanced and running easily by hand. Unplug power supply and allow operator to cool down.
Code 35	Control board issue.	Perform factory reset (Level1 Menu 8 Parameter 2). If problem persists, replace control board.
Code 36	Connection terminals for stop button interrupted or chain hoist safety switch wired incorrectly.	Check 3 button and wiring at XB50. Reset Bus module (Level1 Menu 8 Parameter 7)
Code 39	Limit position sensor (Encoder) defective.	Hard reset operator (Level 1 Menu 8 Parameter 2). If problem persists, Replace limit position sensor.
Code 40	Limit positions improperly or previously set.	Run door towards halfway position manually and reset end positions (Level1 Menu 8 Parameter 8).
Code 41	Limit position sensor speed error.	Check to see that door is balanced and running smoothly. Check operational speeds (Level 6).
Code 43	Cable protection triggered.	Check to make sure cables are set correctly. Reset safety elements in advanced settings (Level1 Menu 8 Parameter 6).
Code 44	8K2 hold circuit or connection terminals for the door hold circuit interrupted.	Check wires at WT and STOP on XP74. If nothing is wired, replace 8K2 resistor in WT and STOP.
Code 48	Setting on the close door position detective.	Make sure door is balanced and running easily by hand. Adjust the close limit with fine limit adjustment (Level 1 Menu 10).