

Synergy RDD

QUICK INSTALL AND
TROUBLESHOOTING GUIDE



Warning: Refer to the manual for all warnings

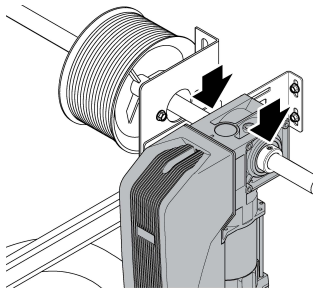
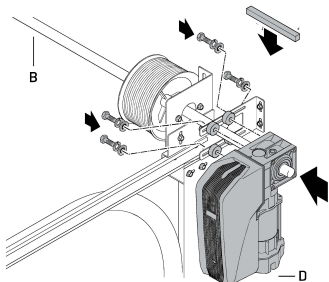


1. Installation

Instructions for Installation

Installation can only be performed by a qualified door operator professional. Electrical work must be performed by qualified and licensed electricians.

- Install the torque bracket on either side of the operator using the 4 washers and bolts included in hardware bag. Spacers will need to be installed under the torque bracket on the RDD 25 only to keep it off the gearbox for adjustment.
- (Please note the torque bracket can be installed on either the inside or outside of the Synergy RDD. In most cases, mounting it on the outside gives more room.)
- For solid shaft installation: Slide on the collar with the single set screw provided. For hollow shaft installation: The following step can be skipped.
- Slide the drive onto the shaft leaving a minimum of 1/2" exposed on each end. For solid shafts install, line up the key-way on the shaft and gearbox and insert the correct size key completely into the gearbox. For hollow shaft install, slide the key along the shaft and through the key-way of the gearbox leaving at least 1/2" of key exposed on each side
- Adjust the operator so it is straight up and down and move the torque bracket so it is sitting flush against your mounting surface. Tighten the mounting bolts and attach the torque bracket to the mounting surface. (You may need to use the manual disconnect to move the operator once the key is in.)
- Slide the collar with multiple set screws on the end of the shaft. For hollow shaft install: Place the key-way on the collar over the exposed flat key and against the gear box. Tighten all set screws. This will tie the key and shaft into the gearbox.
- For solid shaft installs: This will serve to keep the key from moving out of the gearbox. Tighten the inside and outside collar against the gearbox.
- Please note: Wall control and transmitters are preprogrammed for you out of the box. If you need to reprogram, reset, or remove these or any additional wireless accessories, please see the full manual for directions.



2. RDD 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 RDD 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 RDD opener must be cycled two complete times. One complete cycle is considered an open and close.
- Basic programming is complete

3. Advanced Programming Options

1	Begin with door in closed position	
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	
3	Using the (+) and/or (-) buttons, select the desired level. (The example shown is Level 2)	
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.	
5	Using the (+) and/or (-) buttons, select the desired Menu. (The example shown is Menu 3)	
6	When the desired Menu setting is selected, press the (P) button to save the Menu setting and enter the Set Parameter mode.	
7	Using the (+) and/or (-) buttons, select the desired Parameter Settings.	
8	Press the (P) button. The control changes to the level display.	
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.	

NOTE: Always Complete 3 Cycles After Implementing Advance Programing Changes.

4. 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)** 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)** 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.

5. 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)** 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.

6. 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)** 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)** 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.

7. RDD 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.
- RDD 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 RDD 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	

8. RDD 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 (Level 1 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 (Level 1 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 (Level 1 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 (Level 1 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 (Level 1 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 defective.	Make sure door is balanced and running easily by hand. Adjust the close limit with fine limit adjustment (Level 1 Menu 10).



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