# Programming Key FOBs and Wireless Keypads for CommandLIFT-6

Introduction: The key FOBs and any wireless keypad can be programmed together to work together on a single CommandLIFT unit. Both types of pads, surface mount (17191) and flush mount (17192), are programmed the same. The system can be operated by switches, FOBs, and keypads all together or separately. Switches are not covered in this document. All programmed devices are stored within the radio receiver's non-volatile memory. You will need at least one key FOB with a functioning battery to put the radio receiver located within the CommandLIFT control box into programming mode. The wireless keypads cannot do this alone. To change the door open pass code, you do not need a FOB to do this if the pad was taught at an earlier time to the same vehicle.

All new CommandLIFT systems come standard with two key FOBs. These are preprogrammed at the factory. Other devices can be added in the future, if necessary, as explained below.

It is recommended that if you plan on programming wireless keypads with the FOBs, program the FOBs and keypads first before you mount the keypads. After programming, carry the pad to the general area of the vehicle where it is to be mounted and test it without mounting it yet. Mount them only when it is verified that they work at its mounting location before it is mounted at that location! Especially for flush-mounted devices where metal must be cut.

The box cover's #1-LED indicates four modes. A solid green is the idle state. Battery unloaded voltage is good. Flashing red means the battery's loaded voltage is too low. This occurs when the unit is commanded to move with a weak battery. Flashing green is the active state where the motor gears are spinning, and the door is moving. After two minutes of inactivity, the system enters sleep mode to conserve power. Both cover LEDs will be off.
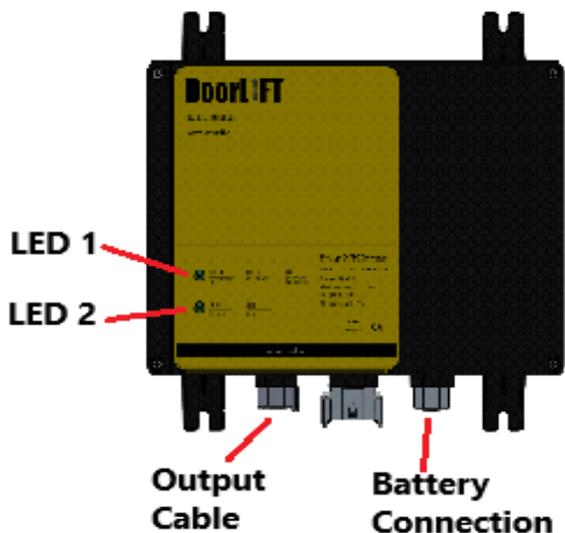
Important Notes: Whenever the radio receiver within the control box changes its mode from standard receiving mode to teach mode or vice versa or individual devices are programmed to it during the teaching mode, the radio receiver will acknowledge this and send out an open signal with an audible clicking sound to acknowledge these changes. The #2 LED on the box will momentarily flash orange as well on signal receptions and mode changes. This signal will activate the motor unit and move the door. <mark>This is not wanted during teaching!</mark> This is why the motor unit must be either electrically or mechanically disconnected during teaching mode as explained below. With the motor disabled, the door cannot move during teaching. But the LEDs will still flash. In 2022, all new installs started using heat shrink insulation around the control box electrical receptacles. This includes the battery connection receptacle, the output cable receptacle, and the auxiliary receptacle if used. The auxiliary receptacle is irrelevant here. The battery power will have to be cycled on and off during the teaching mode. The simple way is to unplug the battery connection at the control box. See above picture. If there is heat shrink on this receptacle, and you do not want to cut it, you can simply unplug the 30-amp inline fuse in the battery cable connected to the control box to act as a 'switch'. See picture below.
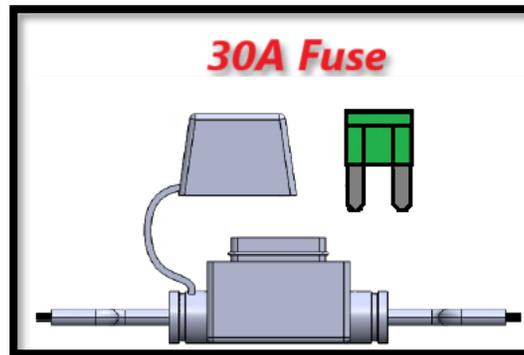
As mentioned, the motor unit should be neutralized during the teaching mode. The easy way is to simply unplug the output cable from the box receptacle to electrically isolate the motor during the teaching mode. See control box picture above. If there is heat shrink on this receptacle and you do not want to cut it, you can mechanically disconnect the motor unit by moving lever on the motor unit to manual mode. This will disengage the drive gears from the track rack gears. See picture below. Keep the motor neutralized until the end of the programming session. If the #1 LED on the box is flashing green at the end of the session, hit any button on the FOB or number code on the keypad to turn off power at the output receptacle. The #1 LED should be a solid green (idle state) after the teaching session.

There is only a coded sequence for the Open cycle and a fixed sequence for the Close cycle. The default open sequence is "1, 3, 5, 7, 9, #". This can be changed as explained later. The fixed sequence for the Close cycle is "5, 5, 5". This cannot be changed and is fixed. Note: the hash tag (#) button does not have to be pushed at the end of a close sequence just an open sequence. Push all numbered buttons on the pads firmly when entering an open or close sequence or teaching new open codes. If a button is not pushed firmly or missed in an open sequence, the hash tag (#) button will momentarily flash red four times when it is pushed at the end of an open sequence. You are only allowed three attempts before the pad will lock you out for two minutes.

Procedure:

1. Unplug the five-pin output cable from the control box. Or push the manual lever on the motor unit into manual mode.

2. Remove power from the control box by removing the 30 Amp inline fuse in the battery cable or unplug the battery connection at the control box. Wait 30 seconds or watch the #1-LED on the control box flicker from green to off. If the system is in sleep mode, wait 30 seconds as well too. If there is any residual power on the main board, the module will not go into learning mode when commanded by the FOB. This residual power comes from the capacitors on the main circuit board within the control box.

3. Power the system back up by inserting the fuse or plugging the battery cable back into the box. Press both buttons on any key FOB simultaneously. This puts the receiver into teaching mode. This mode change is indicated by the 'clicking' noise and the #2 LED on the box momentarily flashing orange. Press any single button on the FOB or FOBs you want taught. Including the FOB in your hand. Note: you only have 5 seconds between devices to teach the device. If your intent is to just program FOBs, you can wait 5 seconds after the last FOB has been taught, and the module will leave teaching mode by

sending out an unlock signal 'click'. The FOBs are now taught to the system. You can stop here if your intent is to teach FOBs only. Remember to wait 5 seconds after the last FOB has been taught so the system leaves the teaching mode. Make sure the #1 LED is solid green. If it is flashing green, hit any single button on any FOB just taught to turn power off at the output receptacle. Plug the output cable back into the box or put the motor unit back into auto mode with the lever and test the system.

Note: Whenever a CL system is first powered up from a zero-power state, a 'Close' command from a FOB or external switch or pad will be ignored by the processor. This is normal. Use the 'Open' command to test. After that, use the 'Close' command to test the system as well. This feature is for safety.

4. If your intent is to teach a wireless keypad to the system along with a FOB or FOBs, keep the output cable unplugged or the motor in manual mode and within 5 seconds of teaching the last FOB, press the close sequence on the pad 5, 5, 5. The hash tag (#) button on the pad will momentarily flash green and simultaneously the #2 LED on the box will momentarily flash orange meaning 'signal received'. The pad is now taught. Wait 5 seconds and the module will leave teaching mode with its audible click. Make sure the #1 LED is solid green. If it is flashing green, hit any single button on any FOB just taught or the "5-5-5" code on the pads to turn power off at the output receptacle. (solid green). Plug the output cable back into the box or put the motor in auto mode and walk the pad over to the general area of the vehicle where it is to be mounted and test it at that location. Use the default open sequence "1, 3, 5, 7, 9, #" or a customized open sequence and the "5, 5, 5" close sequence to open and close the door for testing. Once verified, mount the pad.

How to modify your password for the Open code for the keypad:

The default factory open passcode is "1, 3, 5, 7, 9, #". To change this default code to a custom code the system must be powered up. This is not done in learning mode. Press #, #, #, old code #, new code #. The new code must be 4-8 digits (button pushes) and not include the #-key. If the new code is accepted, the #-key will flash red two times. Four red flashes indicate the code was not accepted for whatever reason when the #-key is pressed at the end of the open sequence. The new code was probably not entered correctly. Also, make firm button pushes when entering the code. It is recommended that you write the new password down on paper first before you change it and secure it somewhere. You will always need the old password to start a new password! Write it down! See the Open Sequence example below. This is just one of many button sequences that can be used.
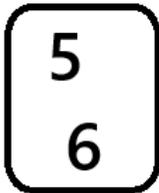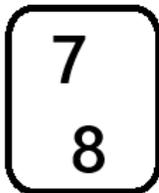
Example Open Sequence
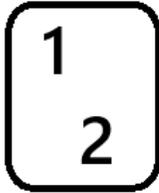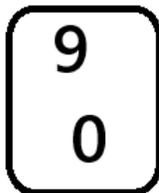
Five button pushes (not including the hash button).

1
2
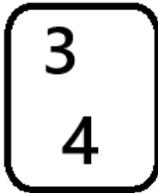
3
4 — Step 1. Push the 3/4 button twice.

5
6 — Step 4. Push the 5/6 button once

7
8 — Step 2. Push the 7/8 button once

9
0 — Step 3. Push the 9/0 button once
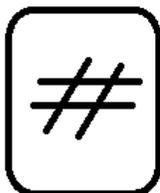
— Step 5. Push the #-key to send the signal to the control box.

What do you do if you forget your password for the keypad?

Contact the Whiting Engineering Department at 716-542-5427 Ext 1154. Alternatively, you can contact Pop Locks directly at support@poplocks.com. Instructions and troubleshooting information are available at www.poplocks.com.You will need the trailer or truck body's VIN number and the model number of the keypads. Surface-mount model number is HD009-B. Flush-mount model number is HD008-B. You will need these model numbers and the vehicle's VIN number when contacting Pop Locks.

How many times can you input a password for the keypad?

After three incorrect attempts to enter your password, the hash tag (#) button will flash red quickly for five seconds when it is pressed at the end of an open sequence and you will be locked out for two minutes. During the two minutes, the keypad will not accept any open or close codes.

How do you replace the battery for the keypad or FOB?

The battery compartment is located within the body of both types of pads. On the surface mount pad (17191), remove the six cover screws to gain access to the battery area. For the flush mount pad (17192), remove the pad from its mounting to gain access to the back cover and battery. For the FOB, carefully remove the button cover by prying it with a small screwdriver. The battery is a 12-volt dry cell A23 type for the FOBs and pads. See pictures below. These can be purchased at Home Depot, Lowes, or any battery retail center. Whiting does not supply these.

Backside of the #17192 (HD008-B) flush-mounted keypad showing battery location.

PGHD008B6PT03
S/N:1812HD 00954
QC PASS

Surface Mount 17191 battery location

How do you erase devices from the system's memory?

Follow the above procedure to program new FOBs or keypads and leave out the old FOBs or keypads. The old devices will now be erased from the memory of the receiver. Note: if you are to add a FOB or keypad to an existing system which already has other FOBs or keypads taught to this system already, all devices old and new must be taught together in one teach session if you want to use the old and new devices together. Once the wireless receiver within the control box enters learning mode, all old data is erased from its memory automatically!

Can you program keypads only and not use FOBs?

Yes. But you still need at least one FOB with a functioning battery to put the module into learning mode. Unplug the output cable from the control box or put the motor unit in manual mode. Follow the procedure above to put the module in learning mode. Once in learning mode, press the Close sequence "5-5-5" or the Open sequence on the pad. Do not press any of the FOB buttons at this point. The hash tag (#) key will momentarily flash green. Wait 5 seconds until the module gets out of learning mode. The pad is now taught and the FOB or FOBs are not. LED #1 on the box should be solid green. Reconnect the output cable or put the motor unit in the auto mode and test the system.