Contractor Quick Start Guide for Vive Integral Fixture Controls

Part of the Vive System

041657
Rev. B
07/2018

Please read before installing fixture

DFCSJ-OEM-OCC Vive Integral Fixture Control with Sensor

DFCSJ-OEM-RF Vive Integral Fixture Control (RF only)

9.5–20.5 V⎓
250 mA max

IEC SELV/NEC® Class 2
UL2043 Plenum Rated

NOTE: Lutron recommends as best practice that this information be provided with the fixture to the electrical contractor.

Important Notes about Initial Fixture Power-up:

When power is applied to the fixture, the fixture will run through a 10-second self-test described below before normal operating mode commences unless the fixture was previously powered for an hour or more continuously, or is associated to a Vive hub.

1. While the self-test is in progress, the status LED alternates between green and red. During the test, the Vive integral fixture control will not respond to button presses or commands from other Lutron Clear Connect devices.
2. Fixture will turn ON to full intensity for 5 seconds and then will turn OFF for 5 seconds.
3. Once the self-test is complete:
   A. If the fixture passes, the status LED blinks green twice, repeating every 2 seconds, and the fixture will turn ON.
   B. If the fixture fails, the status LED blinks red twice, repeating every 2 seconds, and the fixture will remain OFF. See **Important Installation and Startup Notes** section for managing a self-test failure.
4. The LED and load state will continue to display the self-test result (from #3 above) for 5 minutes unless the button is pressed or until the unit is associated to a Vive hub.

   Note: Do NOT disconnect power to the fixture until the pass/fail determination has been made.
5. See video at https://youtu.be/LS6MmjqhH2M

Reset Factory Defaults

Note: In some instances, it may be necessary to reset the Fixture Control back to factory default settings. Before beginning, make sure the Fixture Control is connected and powered.

A Rapidly tap the button on the Fixture Control three times and hold on the fourth until the green LED begins to flash rapidly; release button.

B Within 1 second of releasing the button, again rapidly tap the button three times and the green LED will flash slowly indicating that the unit has been reset to factory defaults.

Note: Any associations or programming previously set up with the Fixture Control will be erased and will need to be re-programmed. Upon successful completion of Reset Factory Defaults, the fixture control will commence with the self-test as described above in **Important Notes about Initial Fixture Power-up**.

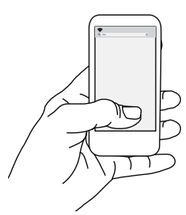
Important Installation and Startup Notes

1. If access to the fixture is required in order to supply power:
   A. Minimize the length of wires (incoming power) that can bundle up in close proximity to the Vive Integral Fixture Control.
   B. Keep incoming power wires separated from the wires that run between the driver and the fixture control.
2. Fixture will run through the self-test as described to the left.
   A. If at the end of that self-test the fixture control LED turns green and the fixture is ON, the fixture passes the test. Proceed with commissioning.
   B. If at the end of that self-test the fixture control LED turns red and the fixture is OFF:

   i. Adjust wiring as described in Step 1 above. Ensure incoming power wires and LED wires are separated from the sensor wires. Wires may have shifted during shipping/installation or may have been bundled together when closing up the driver channel.
   ii. Repeat the self-test by doing one of the following:
      a. Toggle power to the fixture (at the breaker or fixture quick connects).
      b. With fixture powered, Reset Factory Defaults for fixture control. See the **Reset Factory Defaults** section.
   iii. ***If the self-test still results in a red LED the range of the fixture may be reduced in certain installations.*** Work with whomever is doing the commissioning of the system to test performance (i.e. still able to control the fixture with a Pico remote? Still able to properly associate the fixture to the Vive System? etc.)
      a. If the above yields satisfactory results, the evaluation is done.
      b. If the above yields unsatisfactory results, consult the fixture manufacturer and/or Lutron.

Programming with a Vive Hub

A Use an iOS® or Android® compatible device.



B Download the Lutron Vive app.

Download on the App Store

GET IT ON Google Play

C Open the app and follow the instructions.

Note: For further information on set up, programming, and troubleshooting with a Vive system, please refer to the installation instructions included with the Vive hub or visit www.lutron.com/vive

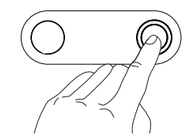
Note: For programming the Vive Integral Fixture Control without a Vive Hub see section to the right.

Programming without a Vive Hub (Associating transmitters to Fixture Control)

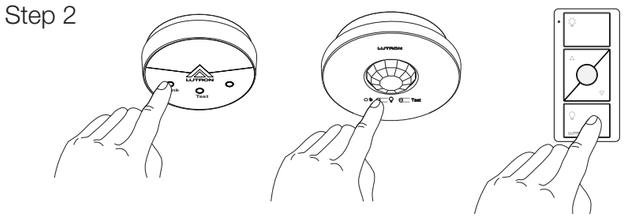
1. Press and hold the button on the Integral Fixture Control for 6 seconds until the load attached to the Fixture Control starts flashing (every 2 seconds).

   Note: Multiple Fixture Controls can be placed into association mode by repeating Step 1 prior to moving to Step 2.
2. Hold the indicated button on each transmitter for 6 seconds. The fixture will flash at a different rate than in Step 1 to show that wireless transmitters have been associated. Alternatively, for Radio Powr Savr occupancy/vacancy and daylight sensors, the green laser pointer can be used. See the **Using a Green Laser to Program Lutron Ceiling and Wall-Mounted Devices** App Note #407 (048407) on www.lutron.com for more information. To associate another transmitter, repeat Steps 1 and 2 above.

Step 1



Step 2



Default Sensor Settings for DFCSJ-OEM-OCC (adjustable ONLY via the Vive hub user interface unless otherwise noted)

- Occupancy sensor timeout: 15 minutes
- Occupancy sensor sensitivity: Medium
- Mode: Occupancy detection (auto-ON, auto-OFF)
- Occupied light level: 100% (note this can also be changed with a Pico remote and Radio Powr Savr sensor. See App Note #556 [048556] at www.lutron.com)
- Daylighting: Enabled
- Daylighting dims lights to OFF from low light level when sufficient ambient light is present for 15 minutes or more

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Testing occupancy sensor functionality (Occupancy Test Mode) (does not apply to DFCSJ-OEM-RF):

1. Apply power to the fixture.
2. Wait for fixture control self-test to complete (10 seconds) and press the button to exit the self-test.
3. Press and hold button for 3 seconds until red LED turns on solid to enter occupancy test mode.
   A. The sensor requires a 2 minute “warm up” period after applying power. Red LED will blink during the “warm up” period in occupancy test mode.
4. Provide motion in front of sensor - lights will turn ON.
5. Lights will not turn off automatically until 5 seconds after last motion detection.
6. Test mode will automatically exit after 5 minutes of inactivity or by tapping the button.

Testing daylight sensor functionality (does not apply to DFCSJ-OEM-RF):

1. Apply power to the fixture.
2. Wait for fixture control self-test to complete (10 seconds) and press the button to exit the self-test. Press the button until the light is in the ON state.
3. Shine a light source (flashlight) directly into daylight sensor lens. Fixture lights will dim down over 1 minute (hold flashlight steadily in place).
4. Cover daylight sensor lens/button with an opaque material. Fixture light will brighten over 1 minute (hold opaque material steadily in place).

FCC information and IC information

This device complies with part 15 of the FCC Rules and Industry Canada license-exempt RSS standard(s). Operation is subject to the following two conditions: (1) This device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation. Modifications not expressly approved by Lutron Electronics Co., Inc. could void the user’s authority to operate this equipment.

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Re-orient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.

Troubleshooting

www.lutron.com/support

Symptom	Solution
Sensor does not respond to motion.	• Fixture control is in self-test feedback mode (sensor will not respond to occupancy detection) for 5 minutes after power up unless button is pressed or it gets associated to a Vive system. • If self-test feedback mode has been exited by one of the two methods above, sensor will not respond to occupancy detection until 2 minutes after the power reset.
Lights do not dim or turn ON as expected. Vive Integral Fixture control does not toggle the load. Vive Integral Fixture Control LEDs do not respond.	• Ensure that control lines are wired properly. • Verify that the driver with self-powered DALI link has the DALI power supply activated. See driver manufacturer for details.
Lights are unstable at low-end.	• Adjust low-end trim. Refer to Vive documentation on www.lutron.com/vive
The “Raise” button on the Pico remote control does not increase the light level.	• The lights cannot be raised above the daylighting light level using a Pico remote control. If it is critical to override the daylight level, disable daylighting from the Vive application.
Fixture control self-test ends in blinking red LED. This means RF performance of the product in this fixture may not meet Lutron’s specifications.	• Review wiring and construction guidelines in the **Vive Integral Fixture Controls** App Note #642 (048642) at www.lutron.com. Modify as necessary and repeat the fixture control self-test. See **Important Installation and Startup Notes** section on page 1.
Wireless transmitter(s) cannot be associated to Vive Integral Fixture Control.	• The maximum number of wireless transmitters have been associated to the Vive Integral Fixture Control. To remove a previously set up wireless transmitter, tap the button used for association on the wireless transmitter three times, on the fourth tap hold for three seconds and then tap three more times.
Fixture does not appear to perform daylighting function.	• Auto-calibration may not have completed successfully. Reset the device using 3x-tap and hold for 15 seconds, then let the sensor time out. • Change the daylighting target brightness in the Vive application.
Sensor turns on and/or stays on when space is unoccupied.	**Possible sources:** RF interference, flowing air (HVAC vent, blowing shades, fan, baseboard heat, etc.). • Reduce the sensitivity (through the Vive User Interace app). • Rotate the fixture 180 degrees to create more distance from the WiFi router, other source of RF interference, or HVAC diffuser/return. • Cover the PIR lens on the Vive Integral Fixture Control with a PIR-opaque tape or label.

Daylighting Auto-Calibration

The Vive Integral Fixture Control (DFCSJ-OEM-OCC) will run through an automatic calibration process for its daylighting feature, when the sensor first goes vacant after being occupied and when the ambient light level is low (<5 ft-candles – typically at night).

The procedure executes as follows: Upon first vacancy and low ambient light level, the sensor first turns the fixture full ON for 85 seconds, then turns the fixture to OFF for 20 seconds. If the calibration was successful, the lights will remain OFF. If it fails, the fixture will attempt to do this 5 times before aborting.

If the space is occupied during auto-calibration, it will exit and try again in the next vacant transition.

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