
Technical Bulletin

Testing the X and Y sensors in a Crimson projector

This bulletin provides information on how to validate if the Crimson lens mount has faulty X and Y sensors.

If a faulty sensor is found, the lens can damage the light engine.

Affected products

The following products are affected:

- Crimson HD25
- Crimson WU25
- Mirage HD25
- Mirage WU25

Required tools

The following tools are required:

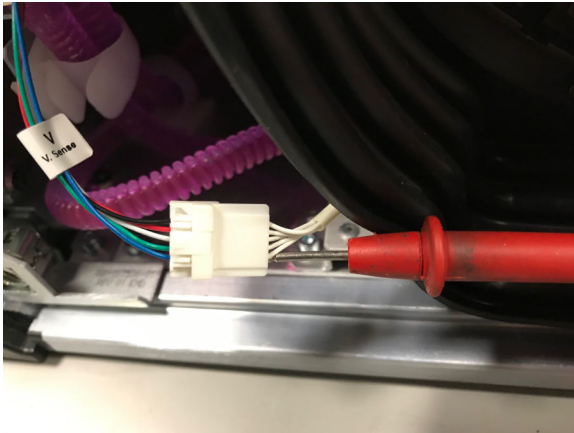
- Voltmeter
- 3 mm hex driver

Testing the X and Y sensors

Follow these steps to test the X and Y sensors.

1. To ensure the lens mount adjustment can be performed while in standby mode, while the projector is on, ensure the **Electronics On in Standby** feature is enabled.
To enable the feature, select **MENU > System Settings > Power Settings > Keep Electronics On in Standby**.
2. Disconnect the projector from power.
3. Remove the lens.
4. Loosen the four captive screws securing the front cover.
5. Facing the front of the projector, locate the VSENSE harness to the left of the lens mount.
6. Track the routing of the VSENSE harness and remove it from the P-clip to allow for more slack in the cable when connecting the voltmeter.
7. Using the voltmeter, connect the positive probe to the white wire (pin 5) on the VSENSE harness.

The white wire leads to the blue wire on the sensor.



8. To connect to a ground point, hook the negative voltmeter probe to the projector's baseplate.
9. Turn on the projector and ensure it is in Standby mode.
10. Check the values on the voltmeter.
One of two expected values should be displayed: 3.3V +/- 10% (3.63 to 2.97) or a value less than 350mV. The value is based on the position of the lens mount.
11. Using the projector user interface, move the lens mount up and down until the voltmeter displays the opposite expected value.
 - If you see 3.3V +/- 10% (3.63 to 2.97) and the second value is less than 350mV, the sensor is functioning correctly. No further action is required.
 - If you do not see 3.3V +/- 10% (3.63 to 2.97) or your second value is not less than 350mV, you have a faulty sensor.
12. Repeat steps 10 and 11 for the horizontal sensor (HSENSE) located to the left of the lens mount, using the white to blue wire connection (as shown below).
The white wire is the positive wire. On the user interface, move the lens horizontally left and right.



13. Disable the **Electronics On in Standby** feature by selecting **MENU > System Settings > Power Settings > Keep Electronics On in Standby**.
14. If you have determined you have a faulty sensor:
 - If a Christie field technician, replace the sensor(s).
 - If a Christie customer, contact Technical Support to arrange for a replacement lens mount.

Technical support

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