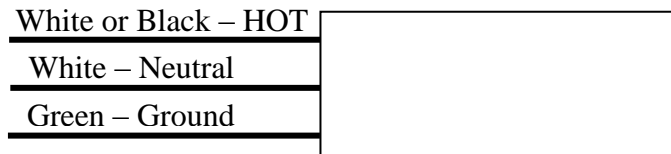


LIGHTING WIRING INSTRUCTIONS

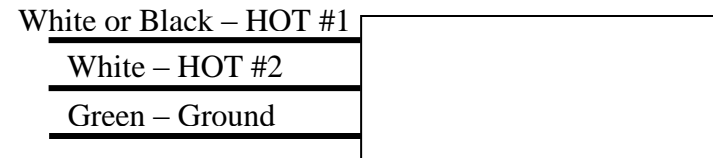
For all 120 vAC Lighting:

- All AC fixtures have three (3) wires. The green wire is always ground. On 120v fixtures, attach the black wire to 120v HOT and the white to 120v NEUTRAL. Some versions have two (2) white wires instead of one (1) black and one (1) white in that case they may be used interchangeably.



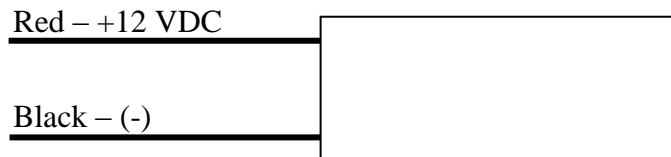
For all 240 vAC Lighting:

- All AC fixtures have three (3) wires. The green wire is always ground. On 240v fixtures, attach the black wire to 120v HOT and the white wire to a second 120v HOT. . Some versions have two (2) white wires instead of one (1) black and one (1) white in that case they may be used interchangeably.



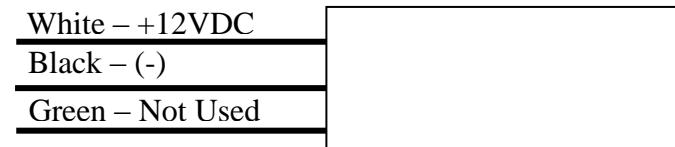
For 12 VDC Lighting provided with two wires

- All versions have two wires. Attach the red wire to positive 12 VDC and the black wire to negative.



For 12 VDC Lighting provided with three wires:

- All versions have three wires. Attach the white wire to positive 12 VDC and the black wire to negative.
- The green wire is not used and may be capped off.



For All (Optional) Indicator Switches:

- Havis, Inc. uses magnetic proximity switches to indicate if a pole is raised or lowered.
- The proximity switch has two leads. Connect one lead to ground, and connect the other lead to the indicator light relay (not supplied).
- Note that the proximity switch is SPST Normally Closed, and is rated to 12 VDC max, ¼ amp max.

Lead 1 – Ground

Lead 2 – Connect to Relay



Troubleshooting Tips for HID Lighting with Enclosed Ballast:

- Disconnect the red and black wire at the ballast (wires are located in the switch box).
- If the ballast is working, there will be continuity between the red and black wire.
- If there is no continuity, the ballast is defective.
- If there is continuity, replace the lamp.
- If this doesn't correct the problem, return for replacement.

Troubleshooting Tips for Indicator Switches:

- Note that the indicator switches are magnetic proximity switches. When the pole is lowered, a magnet will be in close enough range to trigger the switch. When the pole is raised the magnet will no longer trigger the switch.
- If the indicator light does not function correctly, it will necessary to test the switch circuit.
- Disconnect the indicator switch from the circuit and test it for continuity. When the pole is lowered the switch continuity should indicate the switch is “open” and when raised the switch should be “closed.”
- If the switch circuit passes the continuity test, then check the relay circuit for proper operation.
- If the switch circuit does not pass the continuity test, the switch can be tested for proper operation by passing a magnet over it. If the switch continuity changes when the magnet is in close range, the switch is operating correctly and the problem may be the magnet on the pole has failed and will need to be replaced.
- If the switch continuity does not change when the magnet is in close range, the proximity switch is not functioning and will need to be replaced.