

## Unpacking and Inspection

When unpacking and inspecting your system components, you need to do the following:

1. Check all materials in the container against the enclosed packing list.
2. Carefully unpack and inspect all components for visible damage.
3. Save all packing materials, including the carrier's identification codes, until you have inspected all components and find that there is no obvious or hidden damage.

If you find damage, contact the carrier and LumaSense Technologies.

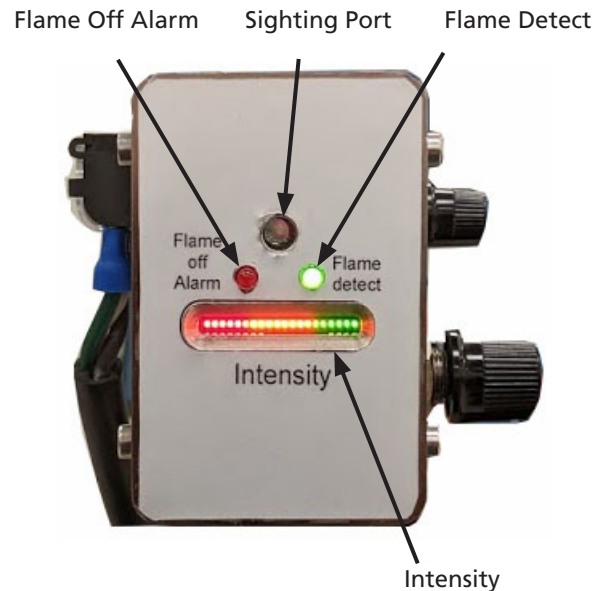
## Installation & Start-Up

1. Remove housing cover.
2. Align the Quasar 2 on the flare tip using the sighting port.
3. Connect power as described on page 2.
4. Initial Pot settings:
  - Setpoint pot set for approximately 50%
  - Gain Pot full clockwise
  - Delay Pot full counterclockwise
  - Decay Pot full counterclockwise (Advanced Model Only)



## 5. Gain Adjustment

Adjust Gain Pot clockwise as far as possible while assuring alignment of the Quasar 2 on flare tip using the sighting port for maximum output on the intensity led bar. The green "flame detect" LED should illuminate. If the intensity falls below Setpoint setting, the red "flame off" LED should illuminate after the delay has timed out.



6. Delay setting for switched analog output. Once the instrument is aimed at the pilot flame adjust the Delay Pot full clockwise for maximum delay (approximately 2.0 minutes).

Adjust the Delay Pot full counterclockwise for minimum delay (approximately 2 seconds). Determine the duration of delay by covering lens and measuring the elapsed time until the red light illuminates.

7. Decay setting for the continuous analog output (Advanced Model Only). Adjust Decay Pot until you get a continuous output signal with the response required for your control or monitoring interface.
8. After adjustment check mA output 4 mA / 20 mA. Switched output & 4 / 20 mA continuous output (Advanced Model Only).
9. Reattach housing back.

## Connecting the Power Supply

The Quasar 2 can be powered by 24 V DC and 115/230 V AC.

**Caution:** Only one of the three power supply possibilities should be connected!

All electrical connections are made through terminal strips on the left side of the housing (wire range 14 – 22 AWG (0.4 mm<sup>2</sup> - 2 mm<sup>2</sup>)).



Connect wires as shown in Figure 1. Wires should be routed to the unit through the 3/4" NPT threaded conduit port located on the left side of the housing.

Connect 24 V DC or 115/230 V AC 50/60 Hz as indicated.



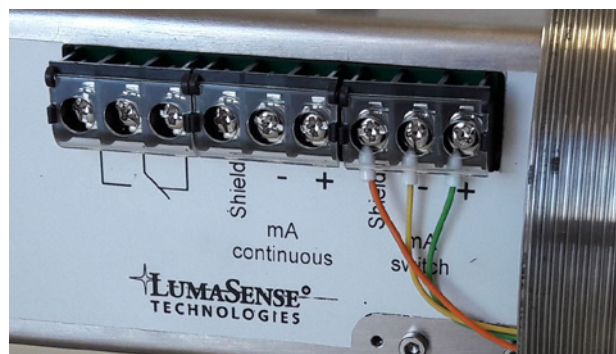
Figure 1 (left side view)

## Connecting the Outputs

All electrical connections are made through terminal strips on the right side of the housing (wire range 14 to 22 AWG (0.4 mm<sup>2</sup> - 2 mm<sup>2</sup>)). Wires should be routed to the unit through the 3/4" NPT threaded conduit port located on the right side of the housing.

Connect lines for the relay to the terminal, as shown in Figure 2.

Connect the 4 / 20 mA current output to the terminal for switched and/or continuous output (Advanced Model Only), as shown in Figure 2.



Positive mA to mA (+)  
Negative mA to mA (-)



Figure 2 (right side view)

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