

D309



Fire Systems

EN | Operating Instructions
Alignment Light

BOSCH

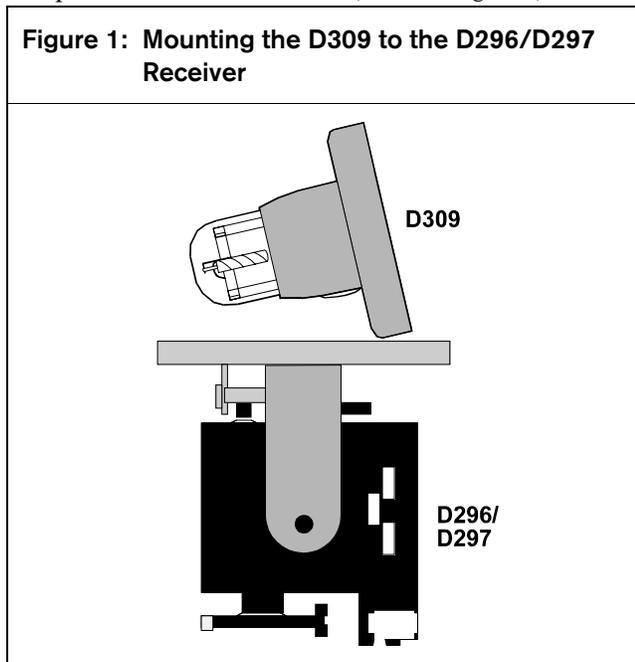
1.0 Description

The D309 Alignment Light is a flashing strobe light intended for use with the D296/D297 Series Beam Smoke Detector. When temporarily mounted at the D296/D297 receiver, it provides a visual aid in alignment purposes.

2.0 Mounting

1. Mount the D309 as close to the receiver as possible, preferably on top of the receiver, and pointed at the transmitter (refer to *Figure 1*).

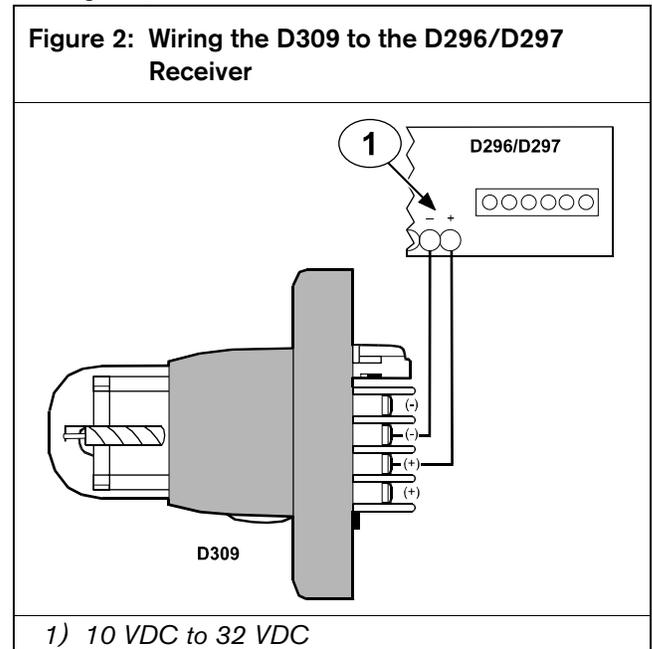
Figure 1: Mounting the D309 to the D296/D297 Receiver



3.0 Wiring

1. Connect the D309 (+) Terminal to the D296/D297 Receiver (+) Terminal.
2. Connect the D309 (-) Terminal to the D296/D297 Receiver (-) Terminal (refer to *Figure 2*).

Figure 2: Wiring the D309 to the D296/D297 Receiver



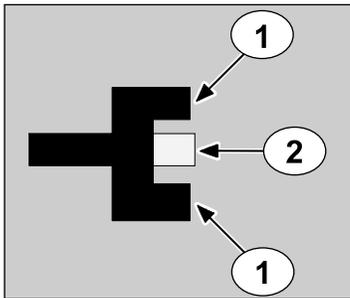
4.0 Aligning

4.1 Initial Alignment

Each D390 optical module is equipped with two alignment mirrors (one on each side) for initial alignment.

1. Look into either mirror from a side angle at least 2 ft (0.6 m) from the module. The optical module is pointed at objects seen in the mirror with the orange colored front bore sight even with the rear bore sights (refer to *Figure 3*).

Figure 3: Correct Bore Sight Alignment



- 1 – Rear bore sight
- 2 – Front bore sight



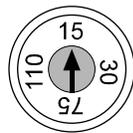
Use alignment sights like aiming a gun.

2. Grasp the transmitter's optical module and rotate through the detents left and right until the image of the D309 is visible in the mirror.



For longer distances or dark conditions, adjust the D309's intensity from 15 cd to 110 cd (refer to *Figure 4*).

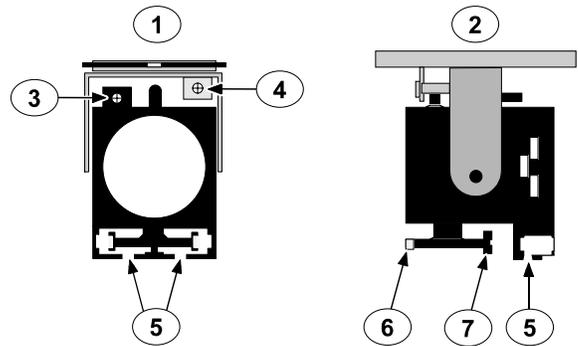
Figure 4: Adapter Selector Switch Detail



4.2 Fine-Tuning Alignment

1. Use the allen wrench (supplied with the D296/D297) and the vertical fine tuning adjustment allen screw to slightly adjust the module up or down until the image is found (refer to *Figure 5*).

Figure 5: D296/D297 Optical Module



- 1 – Front view
- 2 – Side view
- 3 – Vertical fine tune
- 4 – Horizontal fine tune
- 5 – Alignment mirror
- 6 – Front bore sight
- 7 – Rear bore sight

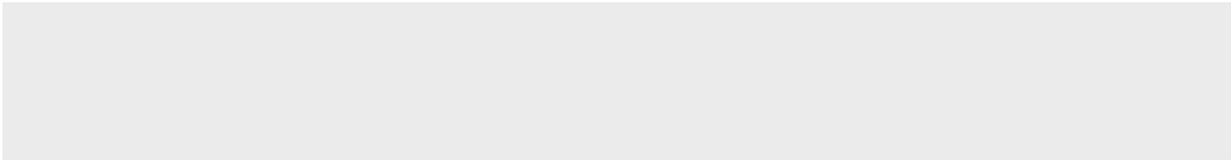
2. Use the vertical fine tuning adjustment screw and the horizontal fine tuning adjustment screw to fine tune the image at the center of the mirror (in line with the front and rear bore sights).
3. Replace and secure the transmitter's cover.
4. Check the transmitter's green LED indicator. It should be flashing.
5. Replace and secure the transmitter's access door.
6. Complete the installation of the D296/D297 as described in the *D296/D297 Series Installation Instructions* (P/N: 31344).

4.3 Aligning the Receiver



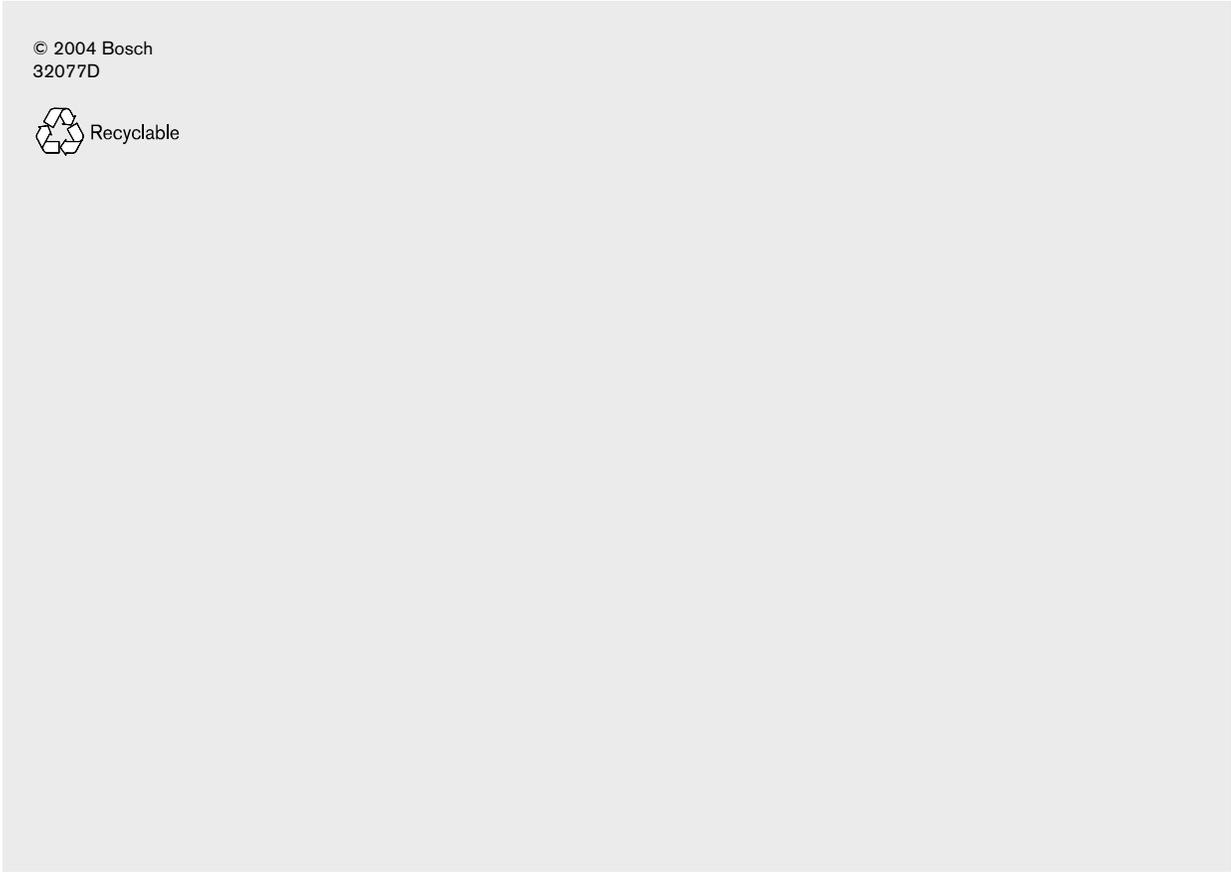
For greater distances, use the D309 to aid in aligning the receiver.

1. Mount the D309 aiming light as close to the transmitter as possible.
2. Connect the D309 (+) Terminal to the D296/D297 Transmitter (+) Terminal.
3. Connect the D309 (-) Terminal to the D296/D297 Transmitter (-) Terminal.
4. Align the receiver as described in *Section 4.1 Initial Alignment* and *Section 4.2 Fine-Tuning Alignment*.



Bosch
130 Perinton Parkway
Fairport, NY 14450-9199
Customer Service: (800) 289-0096
Technical Support: (888) 886-6189

© 2004 Bosch
32077D



BOSCH