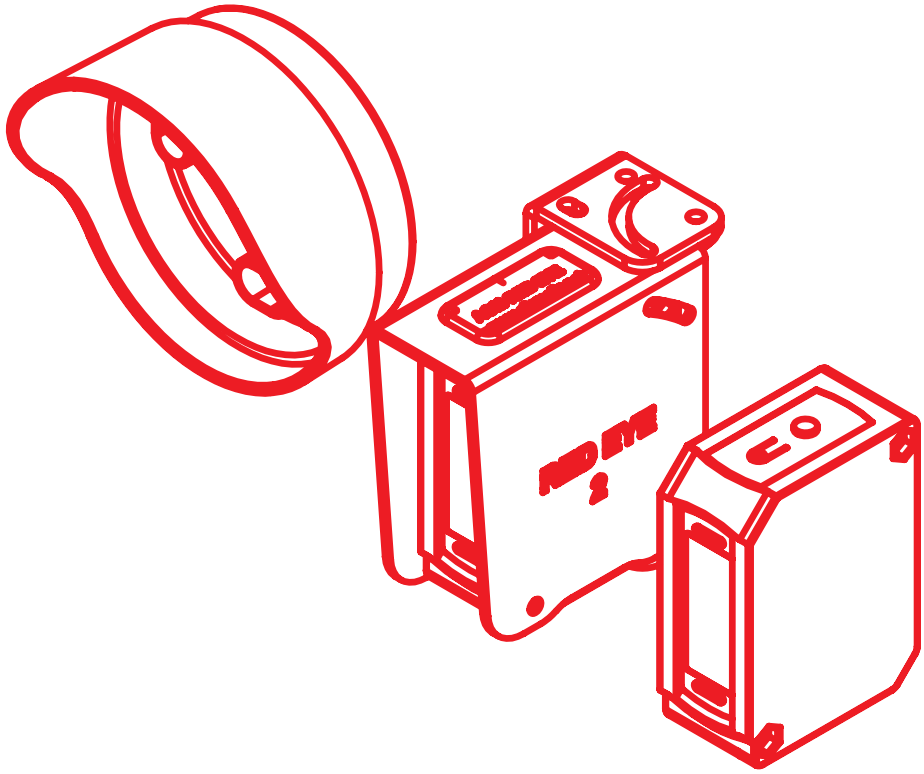
AOM-RED EYE 2 Photoelectric Sensor

Instruction Manual



AOM-RED EYE 2

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TABLE OF CONTENTS

AOM-RED EYE Features

- Visible red class2 laser beam with good aim allows installer to easily align with the reflector.
- Excellent optical performance. Sensing range as far as 55 feet (100 feet with optional 4” square reflector).
- Non-sphere optical lens totally eliminates stray light and overcomes the interference from light sources (ie: sunlight).
- Red LED detects working status for easy installation and diagnosis.
- LIGHT ON/DARK ON options.
- Protection grade: IP65(IEC)
- UL325 compliant

Safety Tips:

•Do not look directly at the laser beams

•Do not aim at a person’s eye at close range

•Mount laser beam at a height above or below eye level

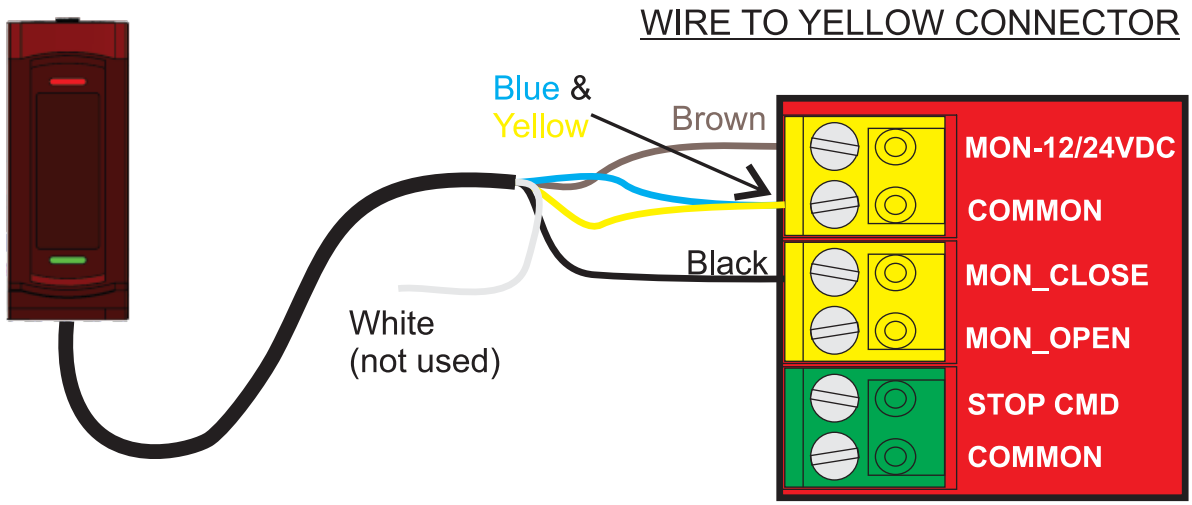
AOM-RED EYE 2 Specifications

Model	AOM-RED EYE 2
Detection object	Non-transparent objects of Min.Φ2.5”
Detection distance	55 Feet (*1)
Power supply	10-30VDC
Current consumption	Max. 60mA
Light source	Laser (Modulated:650nm)
Action mode	Light ON/Dark ON options through potentiometer
Control output	Relay output (contact rating:30VDC,1A or 120VAC,1A resistant load;contact component:1C)
Response time	Max. 20ms
Protection circuit	Overvoltage protection; Overcurrent protection; Reverse polarity protection
Indicator	Power LED: green - Action LED: red
Ambient light	Sun:60,000LuX; Incandescent lamp: 3,000LuX
Ambient temperature	-30~ +65°C (non-freezing)
Ambient humidity	35-85% RH
Material	Case:ABS - Lens:PMMA - Cable:PVC
Protection rating	IP65（IEC）
Cable Length	10 feet
Accessories	Mounting bracket and hardware (Nut: M4 × 30)

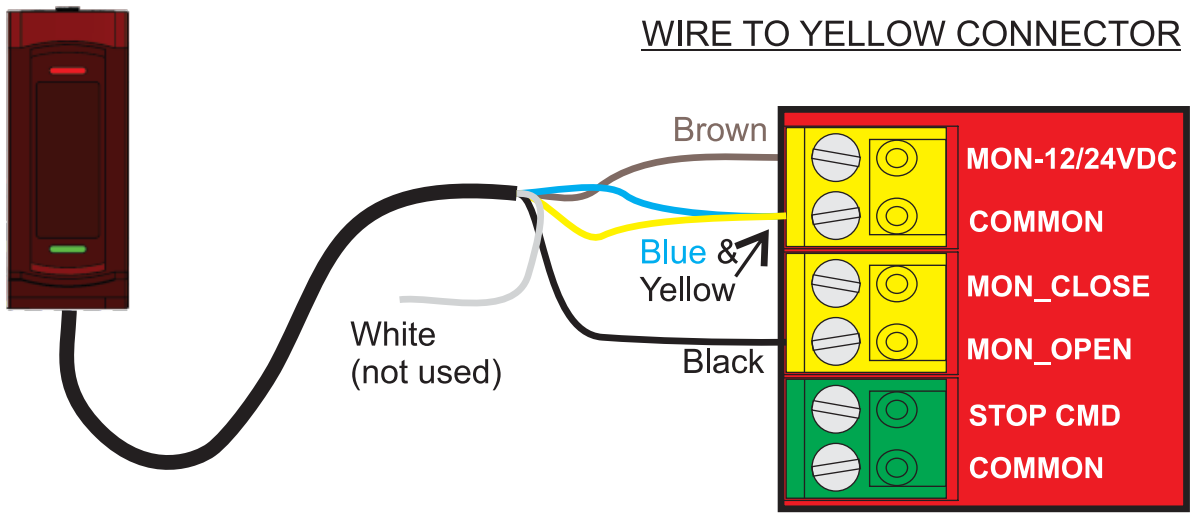
Notes: (*1) The sensing distance set range between the reflector and sensor depends on AOM-RR03. Reflector type varies with the sensing distance (refer to page 5 for optional reflector).

Wiring diagram for BLDC and TORO24 boards.
(RED, BLUE AND GOLD BOARDS)

WIRING DEVICE ACROSS DRIVEWAY / CLOSE DIRECTION (MON_CLOSE)

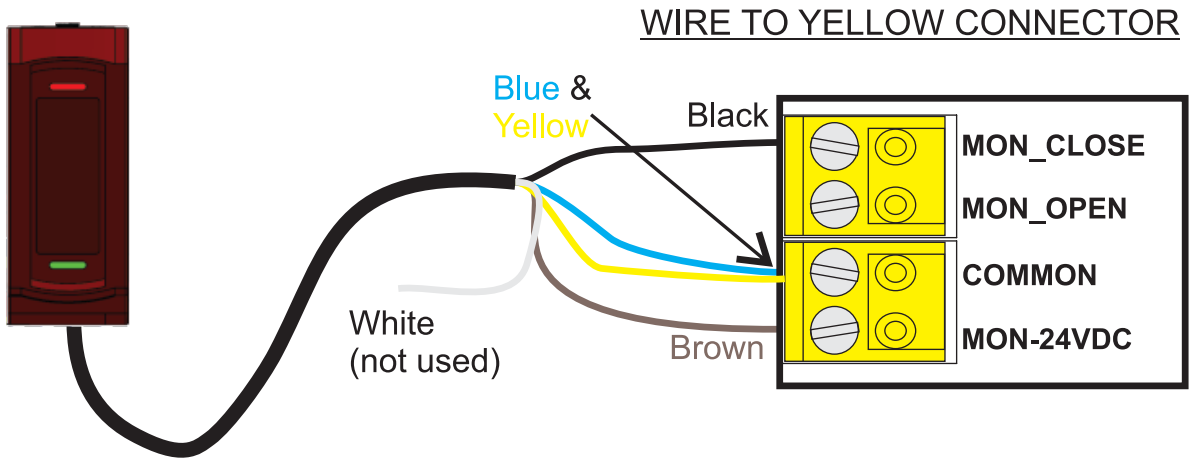


WIRING DEVICE BACK OF GATE/OPEN DIRECTION (MON_OPEN)

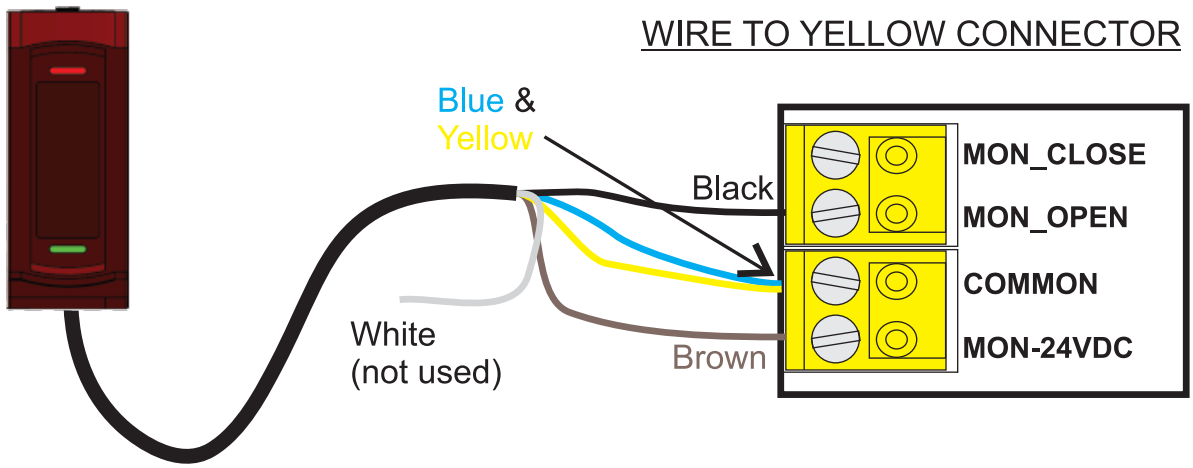


Wiring diagram for AC boards. (WHITE BOARDS)

WIRING DEVICE ACROSS DRIVEWAY / CLOSE DIRECTION (MON_CLOSE)

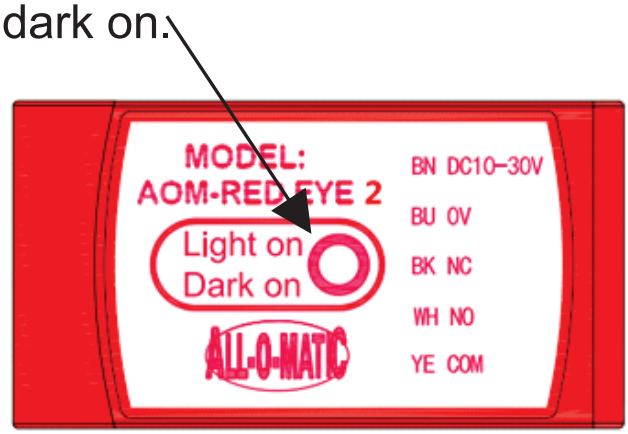


WIRING DEVICE BACK OF GATE / OPEN DIRECTION (MON_OPEN)

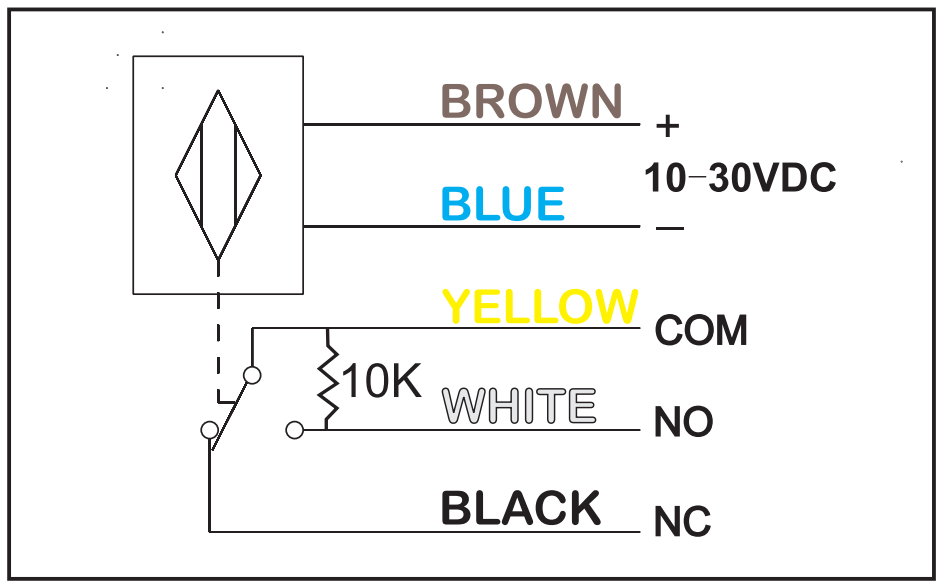


LIGHT ON Mode Relay Output

AOM-RED EYE has LIGHT ON and DARK ON functions. For UL 325 monitored function, LIGHT ON is used. By default, the sensor is set to LIGHT ON for N.C. and 10K termination.
Long press the button for more than 2 seconds to switch to Light on or dark on.

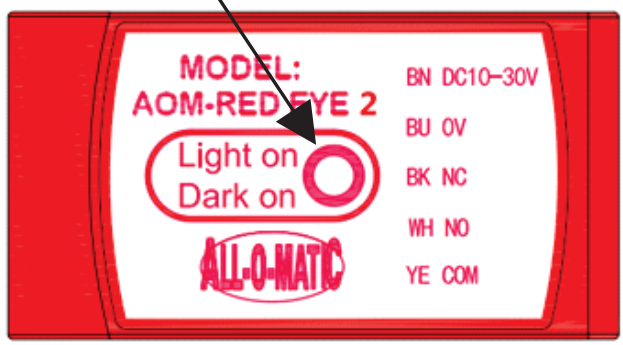


LIGHT ON Setting Wiring Diagram

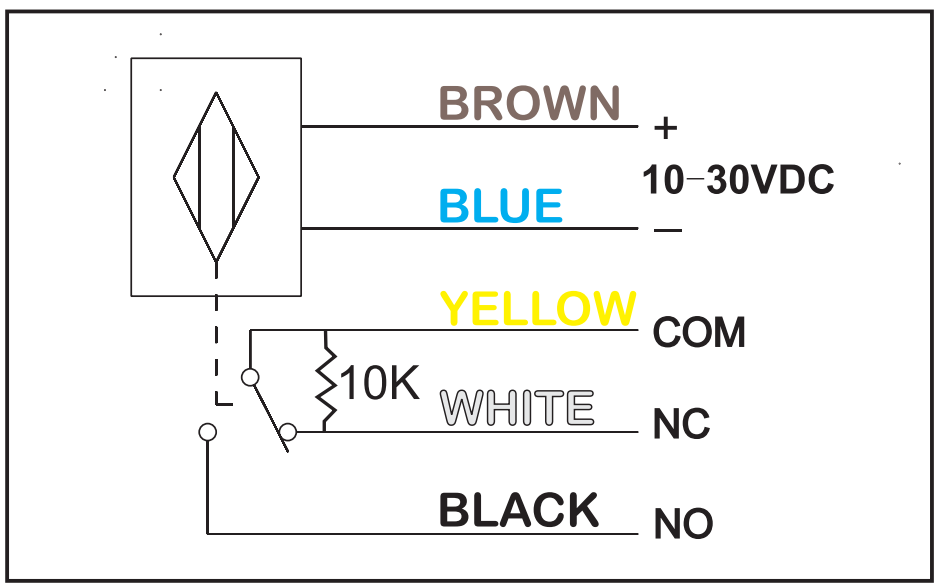


DARK ON Mode Relay Output

AOM-RED EYE has LIGHT ON and DARK ON functions. For traditional, Non-Monitored applications (N.O. without 10K resistor), DARK ON mode could be used.
Long press the button for more than 2 seconds to switch to Light on or dark on.

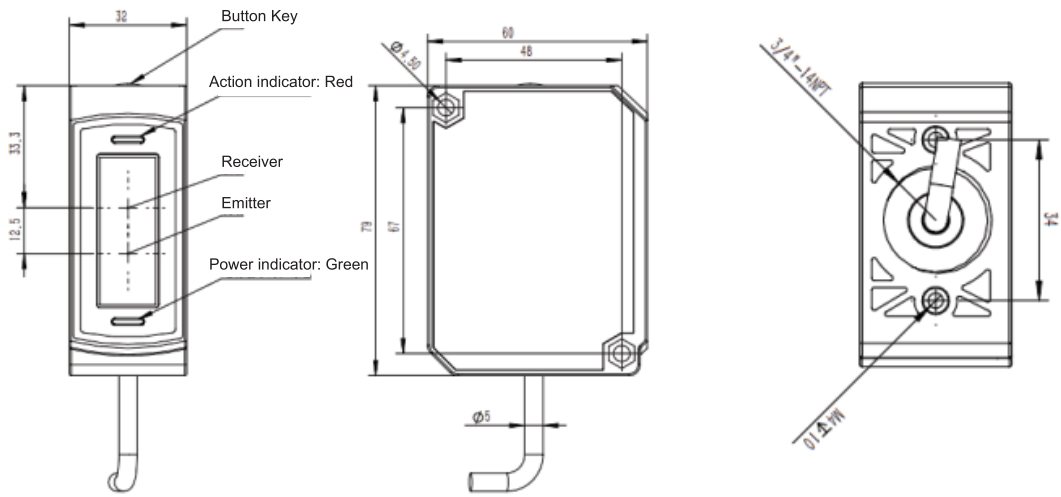


DARK ON setting wiring diagram



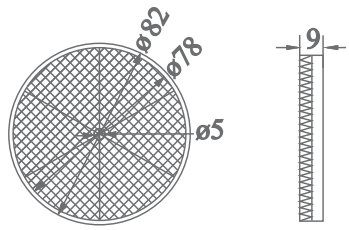
Mechanical Dimensions

Unit: mm



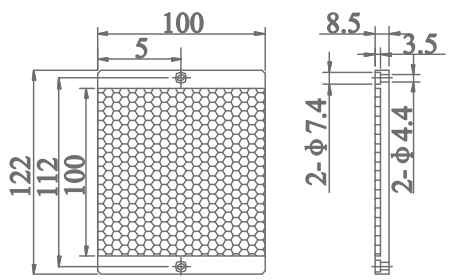
Reflector's Dimensions

AOM-RR03



Detection distance
0.33-55feet

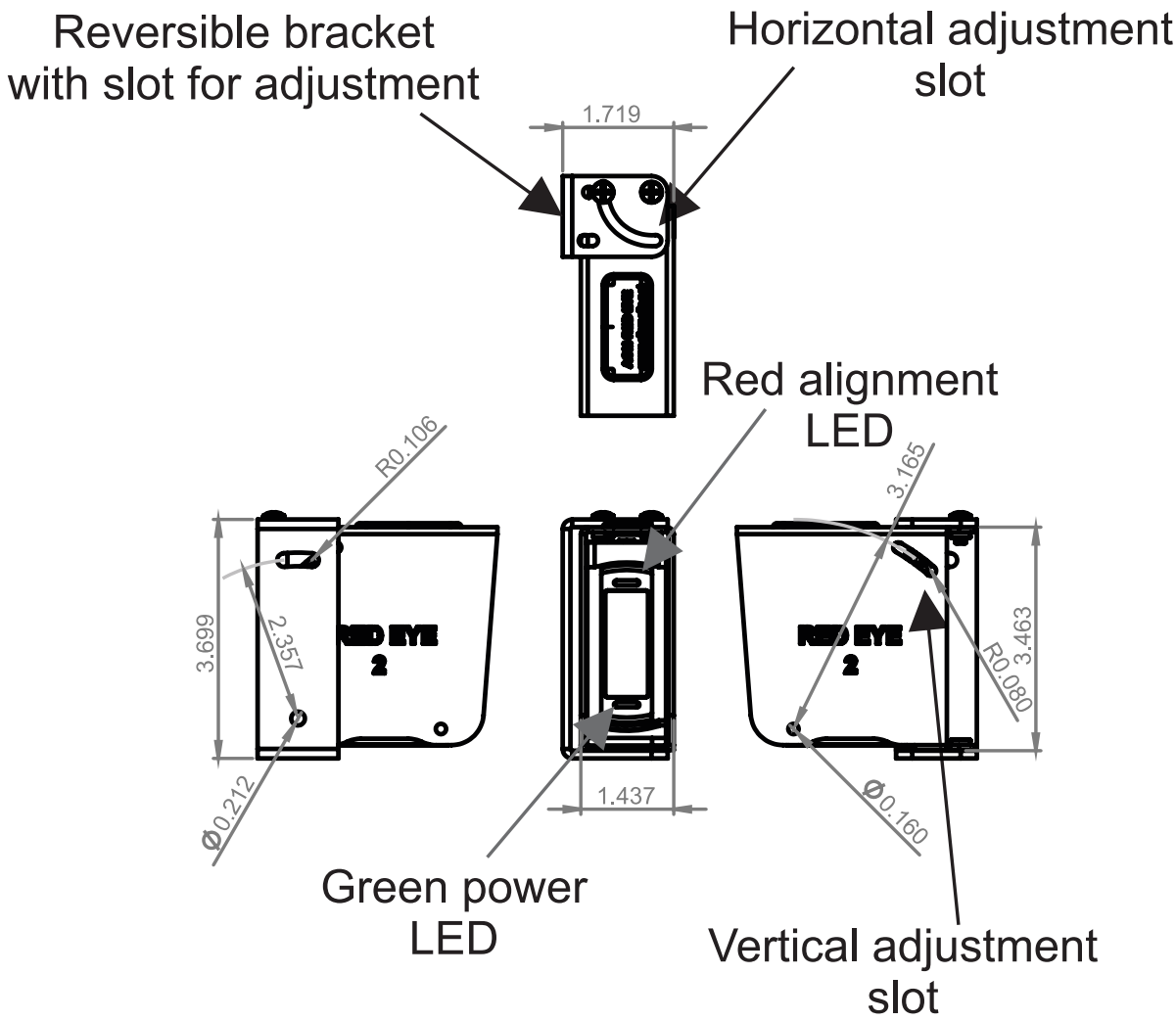
AOM-SR04
(optional)



Detection distance
0.33-100feet

Mounting

AOM-RED EYE 2 is mounted using a bracket and the hood box. The bracket is reversible and has three different mounting options for post or column mount. The sensor attaches to the hood box using two screws and hex nuts. To align the sensor use the screws on the hood box and mounting bracket that have a slotted hole for vertical and horizontal adjustment.



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