))) APC (((
Automation Systems

Retro-Reflective Sensor

APC-RR-11

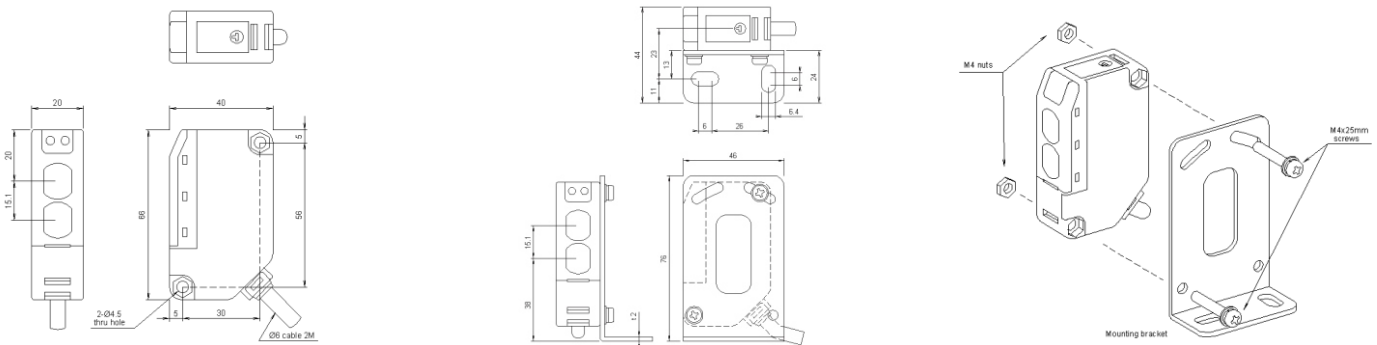| Sensing range	11m
Supply voltage	DC 12~240V +/- 10% or AC 24 ~240V +/- 10%
Response time	10ms max.
Emitting element	IR LED
Environmental protection	IP66 (IEC)
Ambient temperature	-20 to +55ºC

Features:
•Universal power supply
•IP 66 waterproof
•Highly reliable performance

Applications:
•Safety Sensor
•Entry passing detection
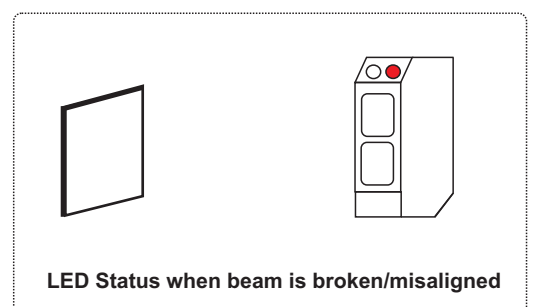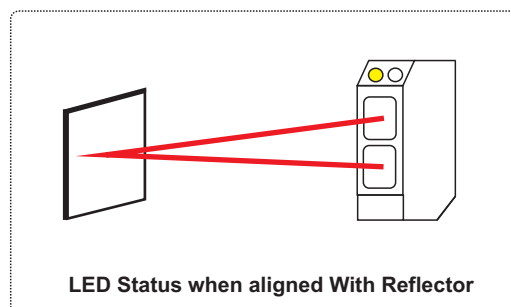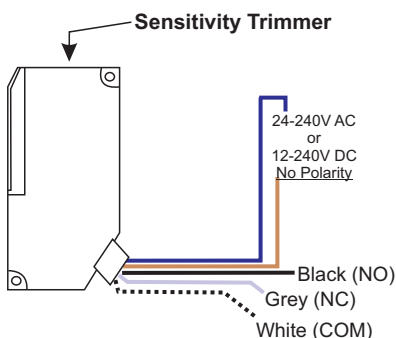•Parking positioning

Dimensions

Installation

1. Mount the reflector and the sensor so they face each other.
2. Connect power to the sensor. Typically, the red LED will turn ON indicating that the sensor and reflector are not yet properly aligned.
If the yellow LED is ON (red LED OFF), it indicates that the sensor and reflector are aligned (although it still may be necessary to slightly adjust the alignment).
3. GENTLY Turn the sensitivity trimmer to Max.
4. To find the correct alignment, slowly adjust the angles of the sensor (and/or reflector) up and down and right and left.
5. GENTLY adjust the sensitivity trimmer towards Minimum so that is it detecting smaller obstructions,
approx half way is the lowest ideal setting.

Sensitivity Adjustment

• **Min. Setting** -- The infrared signal emitted by the sensor is at its minimum or weakest. This means the sensor can be easily triggered by small obstructing objects.
• **Max. Setting** -- The infrared signal emitted by the sensor is at its maximum or strongest. This means the sensor cannot be easily triggered by small obstructing objects.
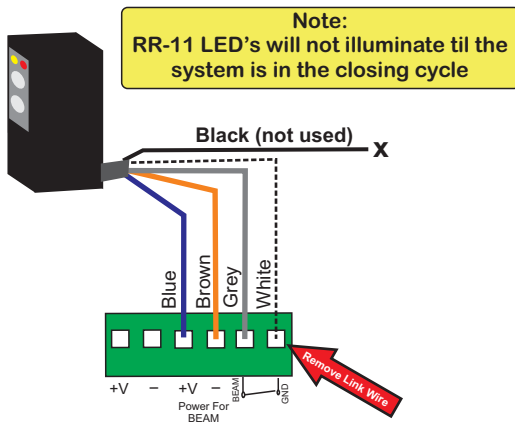
Wiring and LED's

Sensitivity Trimmer

24-240V AC
or
12-240V DC
No Polarity

Black (NO)
Grey (NC)
White (COM)

LED Status when aligned With Reflector

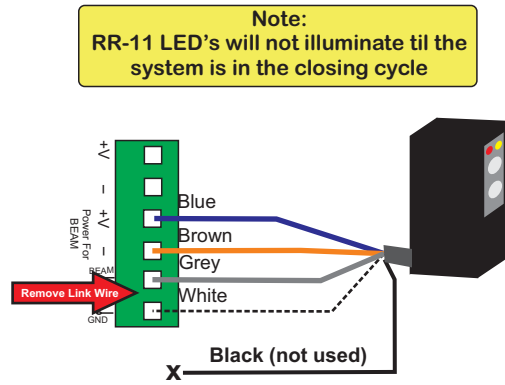**LED Status when beam is broken/misaligned**

NOTE
1. Correct alignment is reached when the red LED turns OFF and the yellow LED turns ON.
2. If both LED's are OFF, the sensor is at the edge of sensing the signal and may not work properly.
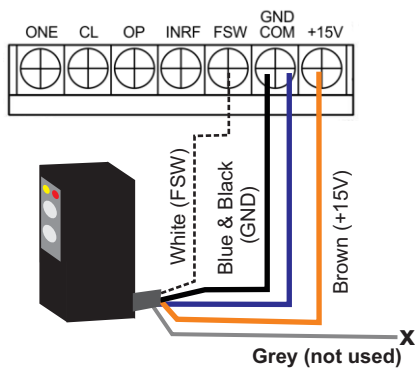
APC Specific Wiring Diagrams

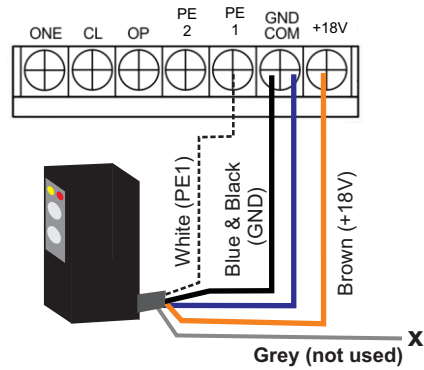## Connecting to Swing Gate Control Panel CBSW-12 and CBSW-24

Note:
RR-11 LED's will not illuminate til the system is in the closing cycle

Black (not used) X

Blue
Brown
Grey
White

+V − +V − BEAM GND
Power For BEAM

Remove Link Wire

Connecting to Sliding Gate Control Board CBSG-12 and CBSG-24 (FLOOD PROOF)

Note:
RR-11 LED's will not illuminate til the system is in the closing cycle

+V − +V − BEAM GND
Power For BEAM

Blue
Brown
Grey
White

Remove Link Wire

Black (not used) X

Connecting to Sliding Gate System APC-SG801AC / 1600AC / 3000AC

ONE | CL | OP | INRF | FSW | GND COM | +15V

White (FSW)
Blue & Black (GND)
Brown (+15V)

Grey (not used) X

Connecting to Sliding Gate System APC-SG802AC / 1602AC / 3002AC

ONE | CL | OP | PE 2 | PE 1 | GND COM | +18V

White (PE1)
Blue & Black (GND)
Brown (+18V)

Grey (not used) X

Connecting to APC-BG-AC Boom Gate

OUTPUT1: NO1 CM1 NC1
OUTPUT2: NO2 CM2 NC2
485: +V B A GND
INPUT2: PT 12V/LOOP PHO GND COM STP
INPUT1: CLS OPN

Remove Link Wire

Brown (+12V)
Grey (PHO)
Blue & White (GND)
Black (not used) X
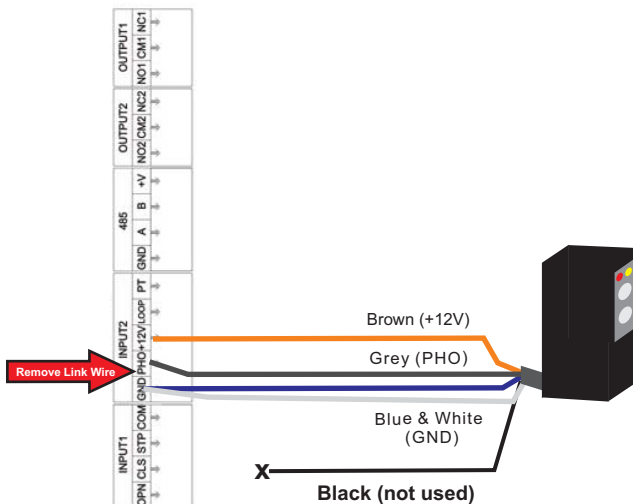
Connecting to APC-BG-DC Boom Gate

CL | GND | OL | V+ | PHOTO | GND | OPEN | STOP | CLOSE | GND | PUSH | GND

Brown (V+)
Black (Photo)
Blue & White (GND)

Grey (not used) X