

BRD02 TRAFFIC DETECTOR

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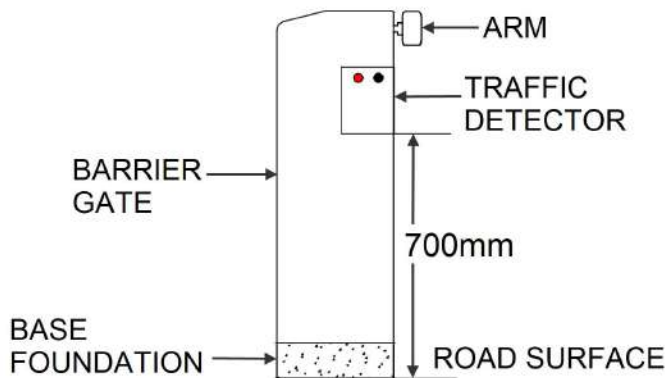
Technical Specification

Description	Parameter
Input Voltage	DC 12V, 150 mA
Working Frequencies	24 - 24.25 GHz
Modulation Mode	FMCW
Sending Power	10 - 15 dBm
Angle between Beam & Pole	Wide wave <15, Narrow wave <12
Detection Distance	1 - 6 Meter
Working Temperature	-40°C - 85°C
IP Rating	IP 67
Dimension	131mm (L) x 106mm (W) x 28.5mm (H)

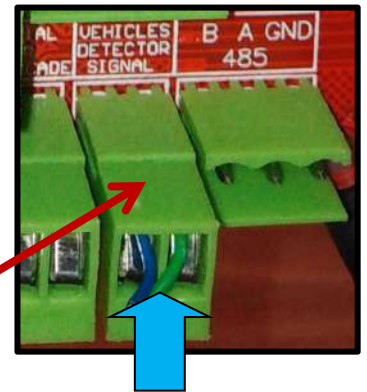
Product Description

BRD02 is a traffic detector that adopts 24 - 24.25GHz Frequency Modulated Continuous Wave (FMCW) and high speed digital signal processing technology to calculate the target distance by calculating the frequency difference between the received echo frequency and the transmission frequency. After logical operation, it performs external control and data transmission.

Installation



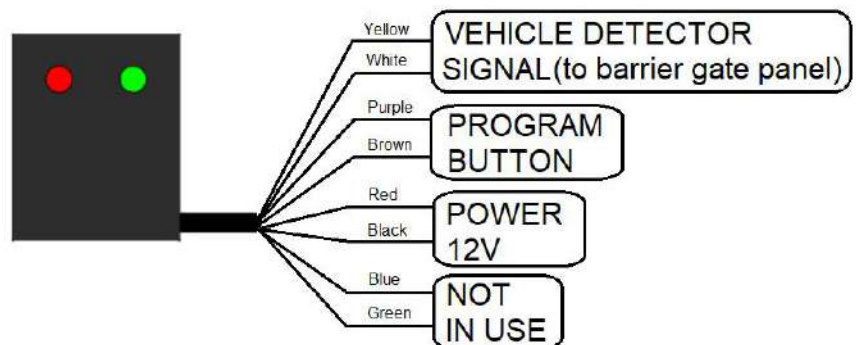
Barrier Gate Panel



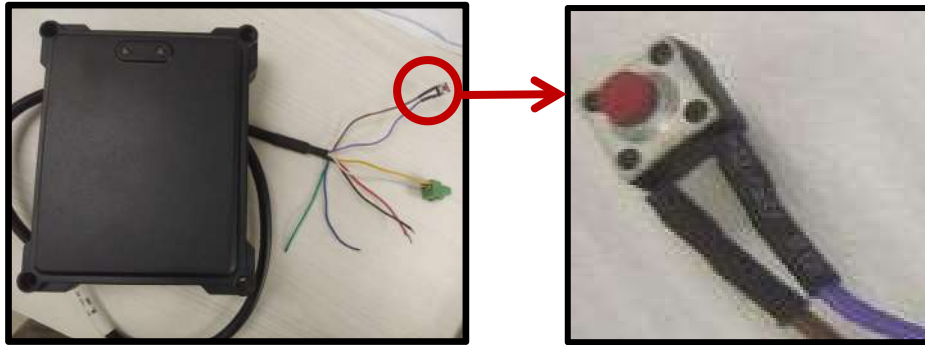
Output wires from detector (White & Yellow wires)

Wiring Description

Color	Definition
Red	Power Input +12VDC
Black	Power Input GND
Blue	Not in use
Green	Not in use
Purple	Program Button Input
Brown	Program Button Input Gnd
White	Relay Output NO
Yellow	Relay Output COM



Setting Method



Program Button

- 1) Press and hold the program button for 3 seconds.
- 2) Wait till the green light starts to blink.
- 3) Release the button when it reaches the blinking time desired. (Refer to the chart below)
- 4) Traffic Detector will then enter the corresponding function setting menu.
- 5) Edit the parameter in the setting menu by using the button.
- 6) After done editing, leave the button for more than 10 seconds, it will automatically exits the setting menu.

Traffic Detector Parameter Setting

Blinking Time	Default Value	Function Setting	Remark
2 times	/	Update Background	Whenever there is changes of setting
4 times	2.5 meters	Set maximum detection distance	Accumulate 0.5m each time

A) Update Background

- i. Press and hold the button, release it quickly after the red and green light blinks for 2 times.
- ii. Traffic detector will update the background and the green light will flashes continuously while updating.
- iii. The green light will back to normal state after the background updating has completed.

NOTE: Please keep the barrier arm at horizontal position (Close position) during the background updating.

B) Detection Distance Setting

Important: When enter the detection distance setting, the green light = button status, red light = distance status.

- Starting distance is 1 meter.
 - When detection distance is 1 meter, red light is always ON.
 - The longer the detection distance, the faster the red light blinks.
- i. Press and hold the button, release it quickly after the red and green light blinks for 4 times.
 - ii. The green light will be OFF, and the red light is always ON. (Starting distance = 1 meter)
 - iii. Press the button one time, the detection distance will be increased by 0.5 meters.
 - iv. The effective setting distance is cycled from 1 to 6 meters. (refer table below)

Button Press Times	Distance (meter)	Red Light Status
0 time	1.0 (Starting Value)	Red light always ON
1 time	1.5	The greater the distance value, the faster the red light blinks.
2 times	2.0	
3 times	2.5	
4 times	3.0	
5 times	3.5	
6 times	4.0	
7 times	4.5	
8 times	5.0	
9 times	5.5	
10 times	6.0	