

**BRD03 DualRay and LED Display Traffic Detector**

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## Description

BRD03 DualRay with LED Display is a traffic detector with dual lens 3D detection that adopts 24-24.25GHz Frequency Modulated Continuous Wave (FMCW) and high-speed digital signal processing technology to calculate the target distance accurately by calculating the frequency difference between the received echo and the transmission. With LED Display, its easier to adjust all the parameters setting

It is suitable for vehicle monitoring and controlling the opening and closing of barrier gate for smooth parking access.

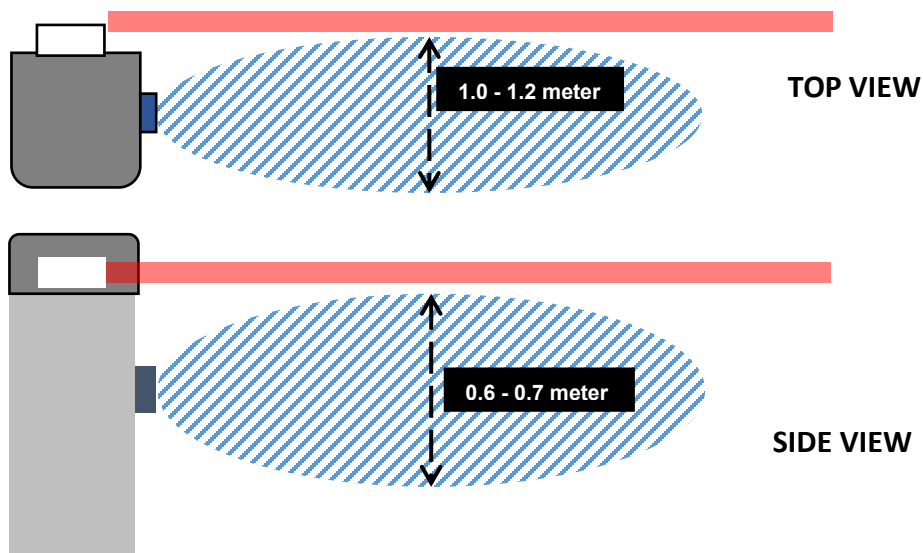
## Features

- 1. Double accuracy.** DualRay technology is enhanced with dual lens 3D detection to highly improve the accuracy and stability of the detection.
- 2. Easier installation.** Can be easily mounted on the body of barrier gate without requires ground/road surface cut and complicated wiring work. Default setting is 2.5m detection range, doesn't distinguish and low sensitivity level.
- 3. Long lasting and weatherproof.** The traffic detector have strong environmental adaptability with IP67 where it can withstand of dust, sunlight and raining. It can last longer and requires minimum maintenance. Thus, save you time and cost in long term.
- 4. Intelligent detection.** Can effectively distinguish vehicles and humans to avoid any hitting whereas loop detector can only detect metal objects/ vehicle.
- 5. Extended functionality.** It can be used to trigger detection, for example trigger camera to capture the picture, trigger the alarm in the warning zone and even trigger by long range reader to read card.
- 6. User Friendly.** With LED Display it allow users to set detection range, mode, delay output and sensitivity level more easier. With the Menu button just below the BRD03 its easier for user to configure according to the their desire setting.

## Technical Parameters

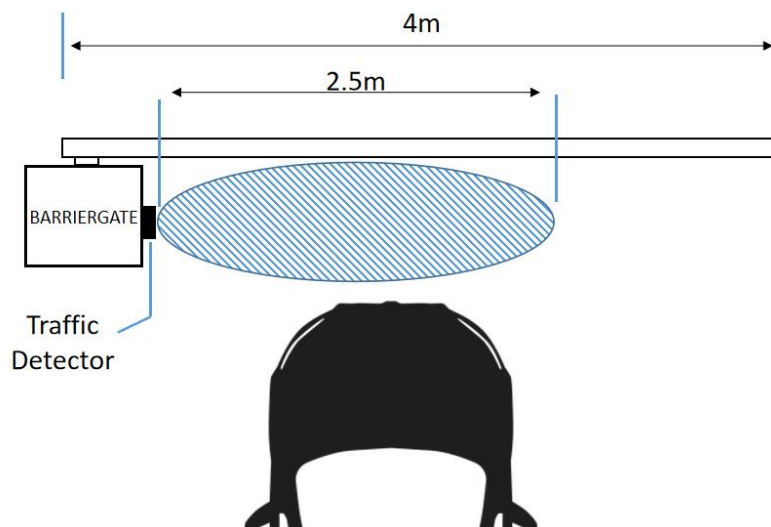
Input Voltage	DC12V, 250mA
Detection	Dual lens 3D detection
Working Frequency	24-24.25GHz
Modulation Mode	FMCW
Sending Power	10-15dBm
Detection Distance	1 - 6 meters, $\pm 0.2$ meters
Working Temperature	-40°C~+85°C
Protection Level	IP67
Dimension(L*W*H)	126mm (L) x 96mm (W) x 26mm (H)

### DualRay wave shape

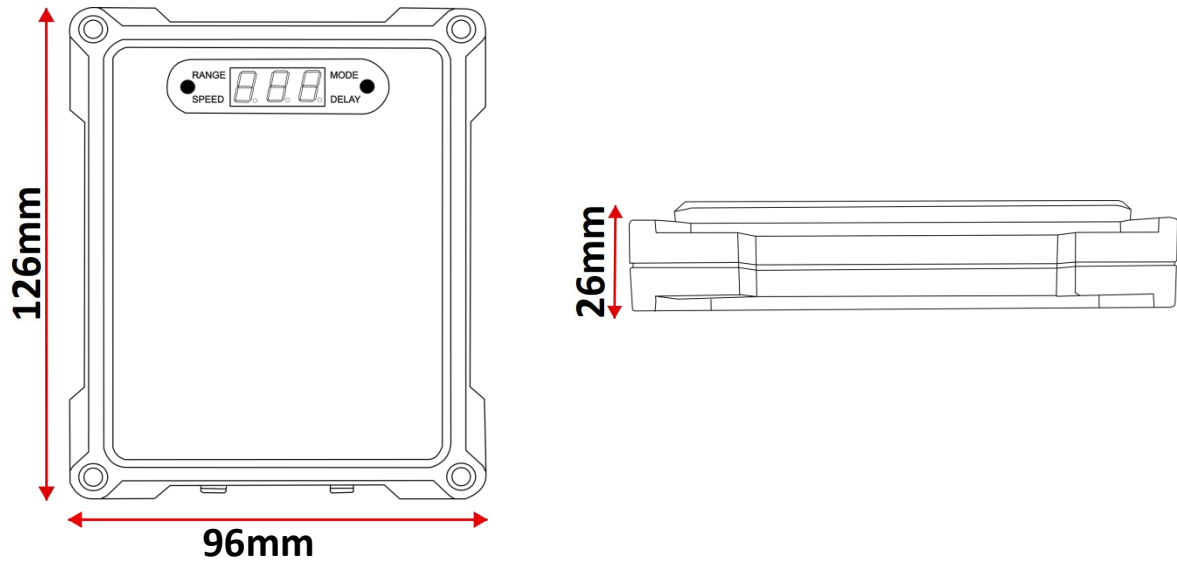


### Default detection range

Suggested to maintain default detection range 2.5m which is sufficient to accurately detect typical vehicle within 4m barrier arm



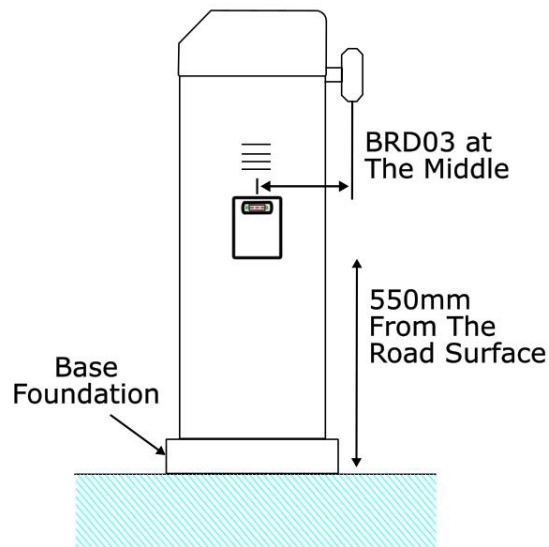
## Dimension



## Installation guide

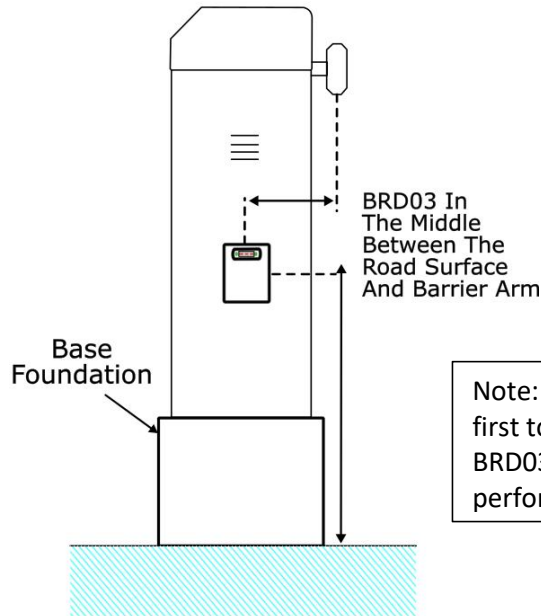
### Recommended installation height

From the road surface, traffic detector location must be in the middle between the road surface and below the barrier gate arm.its recommended 550m from the road surface

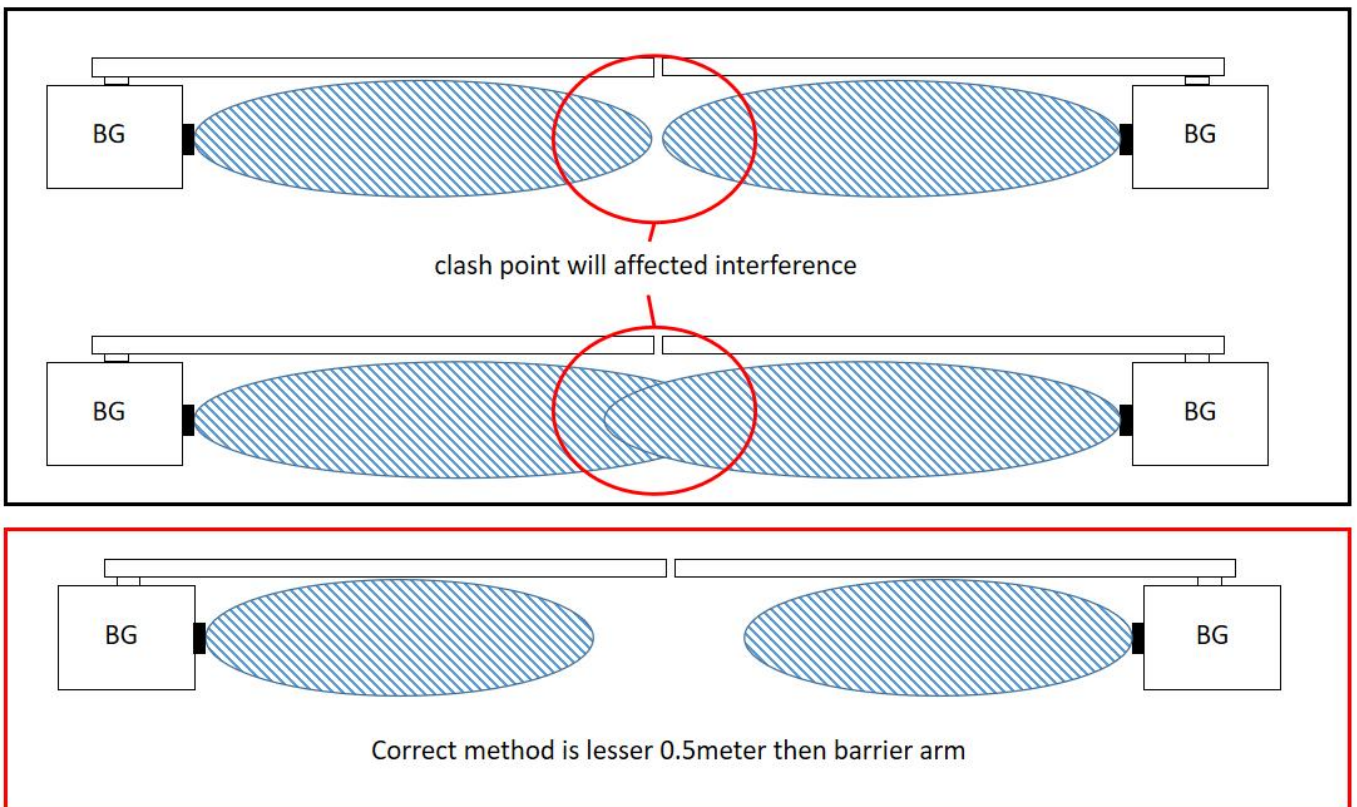


Special installation height

For higher base foundation, traffic detector location must be in the middle between the road surface and below the barrier gate arm. Approx Height Installation 550 ~ 580mm from Road Surface



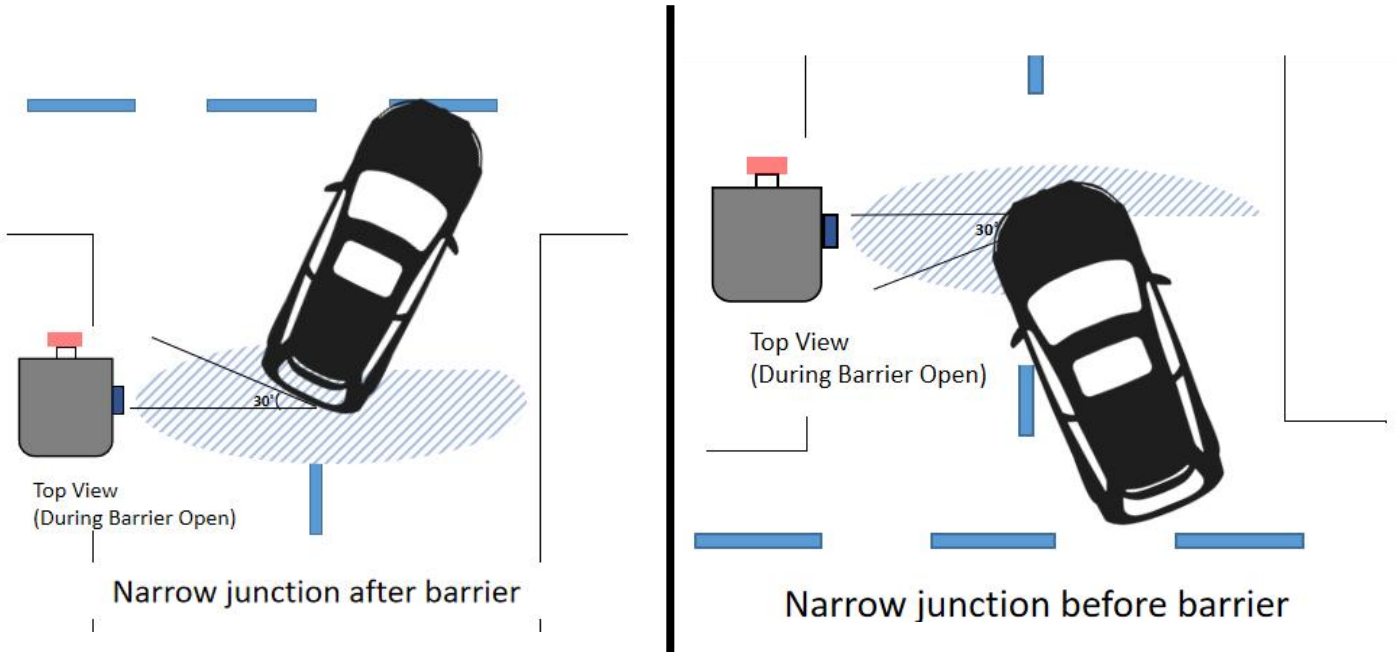
Correct detection setting



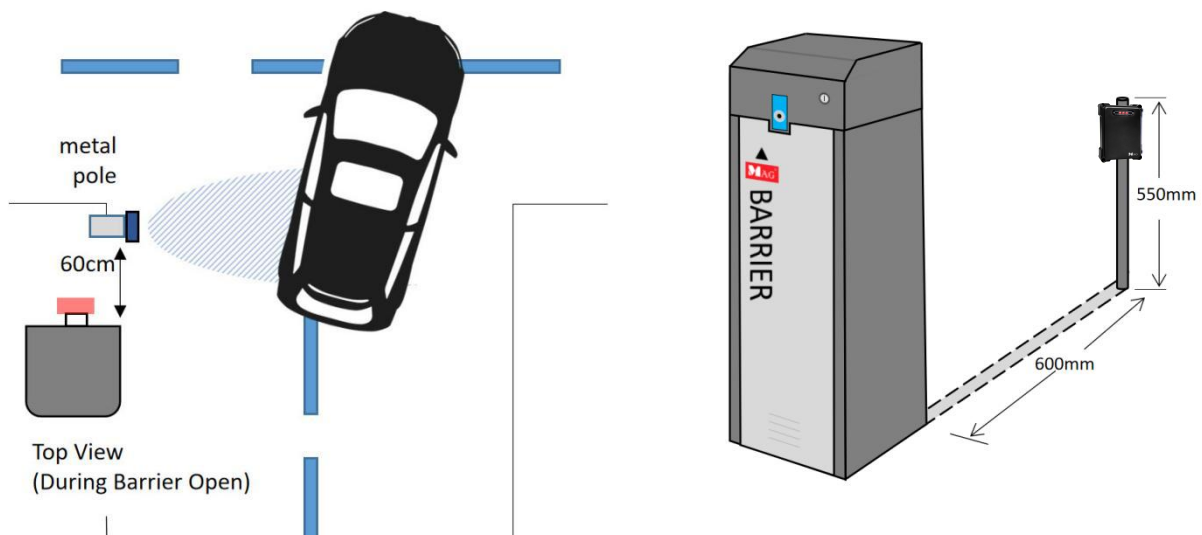
## Pre-caution

### Narrow junction road

For cases where vehicle lane that leading to a narrow junction, traffic detector will miss detect if vehicle enter or exit at 30° angle. This might cause the barrier arm come down even though the vehicle have not fully pass through.



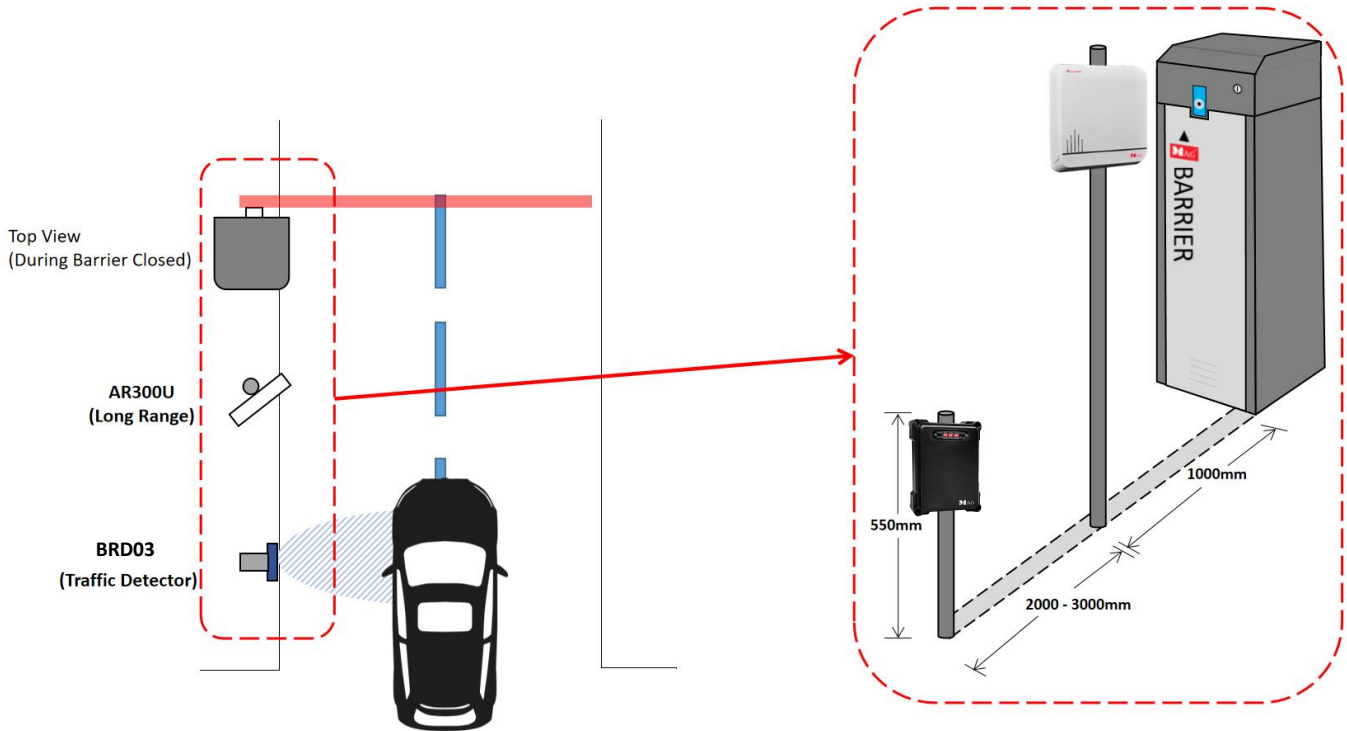
**Solution** : Traffic detector is recommended to install separately onto a metal pole. Metal pole should be 60cm away from barrier gate to prevent miss detection.



Example traffic detector install separately on a metal pole

## Trigger mode for long range reader

For trigger mode scenario, BRD03 is recommended to install at a separate metal pole that 2000mm to 3000mm away from long range access card reader metal pole.



**\*For more information please refer to our BRD03 DualRay traffic detector full installation manual.**

### Other conditions where the BRD03 may not function correctly

1. During rough weather condition (storm, heavy rain, etc.)
2. When BRD03 surface is attached with dirt/mud.

**\*Product performances is based on testing in a controlled environment. Your result may vary due to several external and environment factors.**



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