BLS-R188 79GHz Anti-smash Radar User's Manual

1. Usage method

Refer to the following usage methods when using the 79GHz anti-smash radar:

(1) Refer to [Detection range] in this manual to confirm whether the radar can meet the requirements for use on site.

(2) Refer to [Installation instructions] in this manual and choose a suitable location on the gate chassis to install the radar.

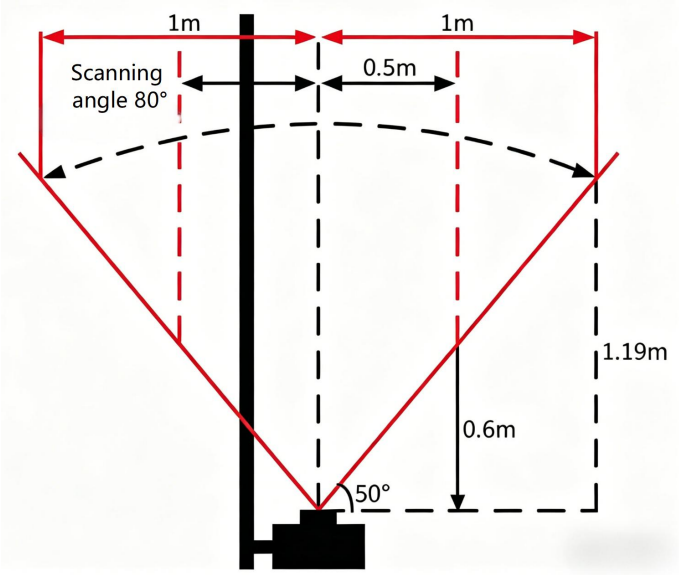
(3) Connect the radar power supply and the gate control interface correctly by referring to [Wiring harness description] in this manual --The radar should be powered by DC +9-24V independent power supply.

(4) Configure the radar parameters reasonably according to the site conditions by referring to [Configuration of parameters] in this manual, if the type of the gate pole is non-straight pole (including fence pole, advertisement pole, curved-arm pole, air drop gate, etc). Dynamic calibration must be carried out, and the specific steps refer to [Calibration method] in this manual.

(5) Refer to [Test and acceptance] in this manual, carry out test and acceptance after completing the configuration of radar parameters and dynamic calibration (for non-straight poles).

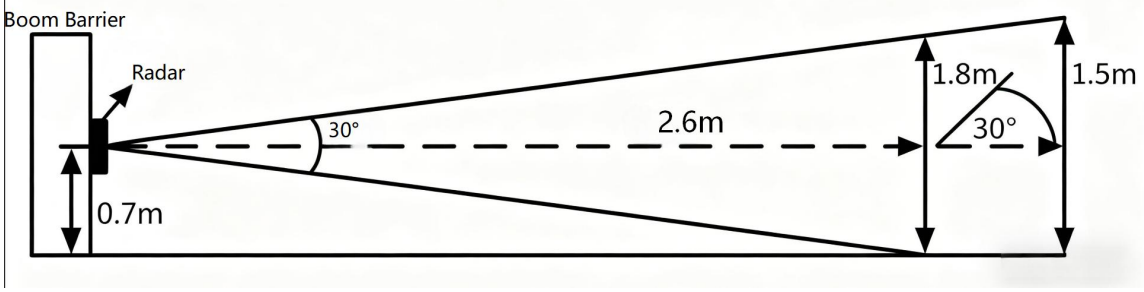
2. Detection range

(1) Top view of the detection range



Radar scanning horizontal angle 80 degrees

(2) Level view of the detection range



Installation position: the middle part of the gate chassis

Components: gate pole, ground

3. Installation instructions

(1) The radar should be powered by DC +9-24V independent power supply (strictly prohibit to use AC 220V or the main board power supply of the gate).

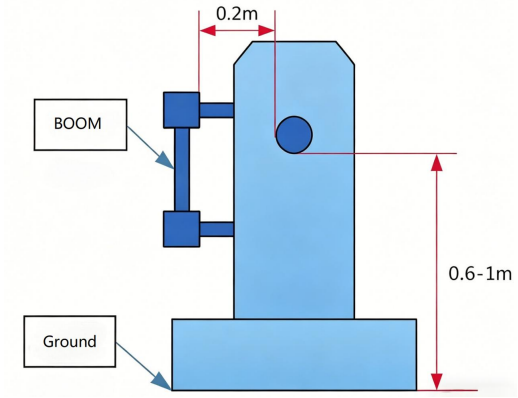
(2) Make sure the detection range has no pedestrians, vehicles and other interference targets.

(3) Power up the radar to observe the green light status.

(4) Drill an 11mm diameter hole in the side of the gate chassis.

(5) Extend the radar wire harness through the 11mm hole into the gate chassis, and fix the radar vertically on the chassis.

(6) Refer to the [Wiring harness description] to connect the wires correctly.



4. Wiring harness description

Colors	Cable	Descriptions
Red	DC12V	Positive pole
Black	GND	Negative pole
Orange	Sense coil	Access to the gate ground sensor
White	Common Port	Access to the gate common port
Green	Bluetooth wake-up press	Bluetooth will turned off after ten minutes of disconnection, it can be woken up by a short press on the wiring harness button
Yellow		

5. Indicator description

Colors	Definition	State	Instructions
Red	Functional indications	Off	Abnormal
		On	Normal
Green	Targeting instructions	Off	Aimless
		On	Aimful

6. Parameter configuration

(1) Waiting for 15 minutes, shortly press the wiring harness button, if the radar can't be searched in the WeChat applet, restart the power and try again.

(2) Remotely control the gate lever to lift, configure the radar parameters for vehicle and pedestrian discrimination mode. The green light goes on when people get into the detection

range, the green light goes off when people leave from the detection range, and the gate lever does not drop.

(3) The Bluetooth of radar turns off after ten minutes of disconnection. To wake up Bluetooth, briefly press the wiring harness button.

(4) For non-straight poles (fence pole, advertisement pole, curved-arm pole, air drop gate), configure parameters: gate pole length, outer pole length (0.3-0.5m shorter than channel), pole drop delay, pedestrian-vehicle differentiation, fixing method, pole type.

(5) Remotely control the gate lever to lift, configure the radar parameters for person and vehicle non-distinction mode. The green light goes on when people get into the detection range, the green light goes off when people leave from the detection range, and the gate lever will drop.

(6) Remotely control the gate lever to lift, configure the parameters for vehicle and pedestrian discrimination or non-distinction mode. The green light goes on when cars get into the detection range; the green light goes off when cars leave and the gate lever will drop.

(7) Advanced parameters don't need to be configured under normal circumstances. If necessary, configure under manufacturer's technical guidance.

(8) Click <Parameter Writing> button to complete parameter configuration.

7. Calibration method

(1) Dynamic calibration

A. Remotely control the gate pole to raised and remove sundries from the driveway.

B. Click <Dynamic calibration> button on WeChat applet; green light flashes quickly → calibration state.

C. Control gate lever up/down 5 times each; ensure 20m left/right detection range has no interference.

D. Click <Finish>; green light off → calibration completed.

(2) Environmental calibration

A. Raise gate pole and clean driveway.

B. Click <Environmental calibration>; green light flashes quickly → calibration state.

C. Calibration lasts 3 seconds; ensure no interference in 20m range.

D. Green light off → calibration completed.

8. Test and acceptance

(1) Scan code and follow official account for debugging steps.

(2) Ensure no interference in detection range; green light remains off during normal operation.

(3) Re-calibrate non-straight poles if installation position or parameters change.

(4) Clean radar surface regularly (rain, snow, dust) to ensure performance.

(5) Remove gate pole ice in rain, snow and freezing weather.

9. Precaution

(1) Install two radars for better anti-smash effect.

(2) Keep detection area free of interference.

(3) Regularly check installation and wiring for safety.