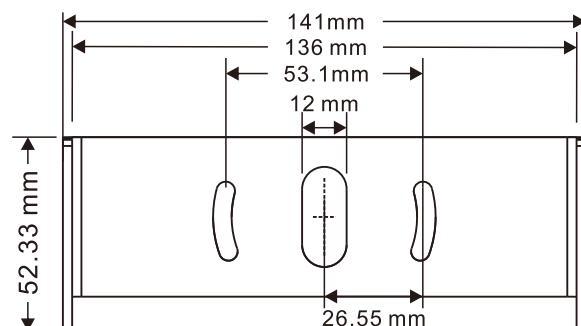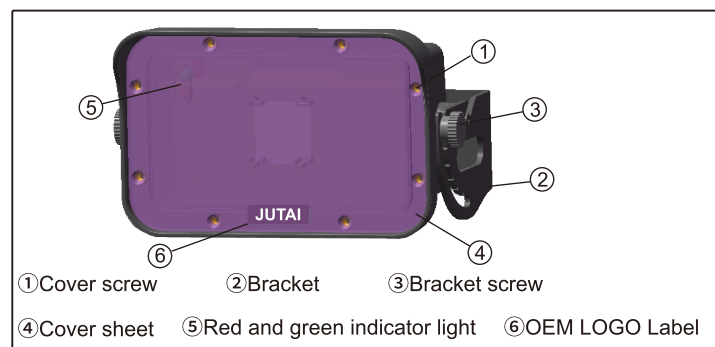# RVP42-9ME/RVP42-9MG Industrial Door Sensor User Manual
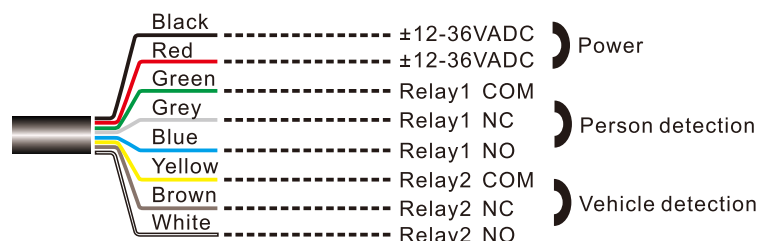
User's Guide

RVP42-9ME / RVP42-9MG is a high-performance motion radar detector for vehicle detection and human detection, specially developed for industrial doors, garage doors, cold storage doors, road gates, and other industries. It is with dual relays of vehicle-detection and pedestrian-detection, and can also open the corresponding relay output as needed. Meanwhile, RVP42-9ME / RVP42-9MG has a recognition and filtering function for horizontally moving vehicles or pedestrians.
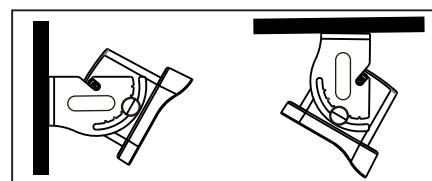
The Appearance And Dimension

①Cover screw   ②Bracket   ③Bracket screw

④Cover sheet   ⑤Red and green indicator light   ⑥OEM LOGO Label

141mm
136 mm
53.1mm
12 mm
52.33 mm
26.55 mm

Wiring And Installation

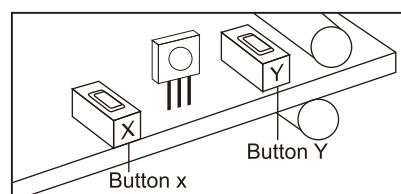| Wire	Connection	Group
Black	±12-36VADC	Power
Red	±12-36VADC	Power
Green	Relay1 COM	Person detection
Grey	Relay1 NC	Person detection
Blue	Relay1 NO	Person detection
Yellow	Relay2 COM	Vehicle detection
Brown	Relay2 NC	Vehicle detection
White	Relay2 NO	Vehicle detection

Notes：Detect Human（The Red Light is on）
Detect Vehicle（The Green Light is on）

- The sensor should be firmly installed on a flat surface to eliminate vibration effects.
- Avoid distracting objects (such as banners, plants, etc.) from blocking the detection area.
- Avoid all metal objects covering the sensor front cover.
- Avoid installing the sensor near fluorescent lights.

Setting

▶ Operation steps: Press X and Y at the same time to enter the functional Settings.

▶ Basic functions: Press X and Y buttons at the same time and hold for 2 seconds, The green LED flashes once and then release.

▶ Deep function: Press X and Y buttons at the same time and hold for 4 seconds, The red LED flashes once and then release.

▶ Restore factory: Press X and Y button at the same time and hold for 8 seconds, Red and green LEDs flash once and then release.

Button x   Button Y

Operation:
Press the button X and Y at the same time for the function setting

Setting	Function Key (X : green LED)	Function No. (Green LED flashing times)	level key(Y: Red LED)	Function description and default settings (Red LED flashing times)	
Basic function	Test level	1	1-8	1: Standards, all objects (pedestrians and vehicles)	
				2: Medium speed, all objects (pedestrians and vehicles)	
				3: High speed, all objects (pedestrians and vehicles)	
				4: Detect low-speed movement, all objects (pedestrians and vehicles)	
				5: Standard, distinguish between pedestrians and vehicles.	
				6: Medium speed, distinguish between pedestrians and vehicles.	
				7: High speed, vehicle detection, pedestrian suppression.	
				8: Detect low speed movement and distinguish between pedestrians and vehicles.	
				Default setting: 5	
	The installation height	2	1-7	1: 2.0-3.0m	2: 3.0-4.0m
				3: 4.0-5.0m	4: 5.0-6.0m
				5: 6.0-7.0m	6: 7.0-8.0m
				7: 8.0-9.0m	Default setting: 4

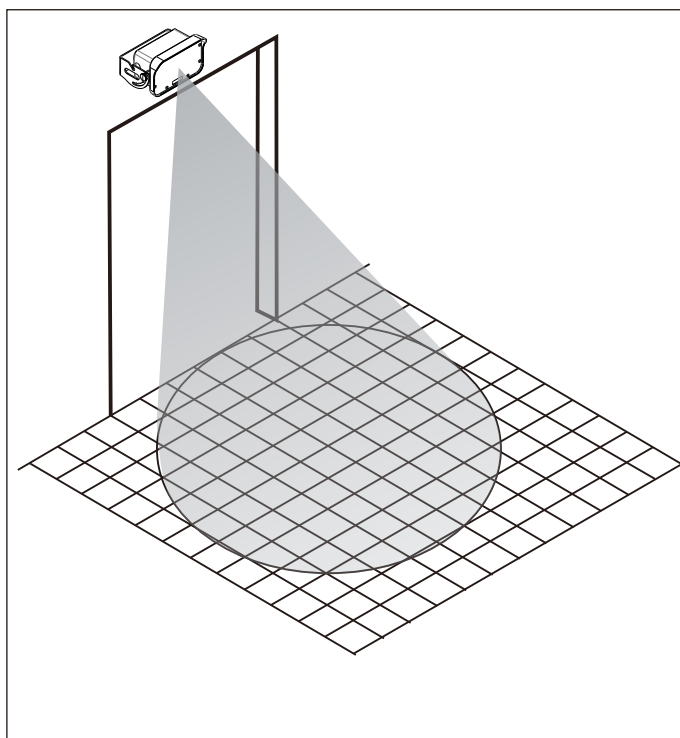|					
	Relay parameter setting	3	1-8	1: Standard industrial door, distinguish between pedestrians and vehicles, different relay output.	
				2: Standard industrial door, test vehicle only, relay 2 output.	
				3: Standard industrial door, only detect pedestrian, relay 1 output.	
				4: Standard industrial doors, pedestrians and vehicles, relay 2 output.	
				5: Standard industrial doors, pedestrians and vehicles, different relay outputs.	
				6: High speed industrial door, test vehicle only, relay 2 output.	
				7: High speed industrial doors, pedestrians and vehicles, relay 2 output.	
				8: High speed industrial doors, pedestrians and vehicles, different relay outputs.	
				Default setting: 1	
	Detection area	4	1-9	1-3: Small range of detection area 4-6: Medium range detection area 7-9: A wide range of detection areas	Default setting: 4-6
Deep function	Relay holding time	1	1-5	1: 0.2s; 2: 0.5s 3: 1.0s; 4: 2.0s; 5: 5.0s	Default setting: 4
	Direction recognition	2	1-3	1: Motion forward and close to the sensor. 2: Backward movement away from the sensor. 3: Forward and backward.	Default setting: 1
	Lateral motion recognition	3	1-9	1: Close, 2-3: Low, 4-6: Medium, 7-9: High	Default setting: 1
	Wide detection area	4	1-2	1: Close, 2: Open	Default setting: 1
	Slow motion detection level	5	1-9	1: Close slow motion detection 2-5: Lower sensitivity 6-9: Higher sensitivity	Default setting: 1
	Slow motion detection	6	1-9	1: Small detection area 9: Wide detection area	Default setting: 1
	Anti-interference function	7	1-2	1: Turn off the filtering function 2: Activate the filtering function	Default setting: 1

Change function: Press X key, each press button, function number value increases 1;Once the last function is reached, the program jumps back to the first function.

Change the level: Press the Y key, each press the key, the level value increases 1;Once the final level is reached, the program jumps back to the first level.

To exit Settings: Short press X and Y simultaneously to exit Settings.

Technical Data

Application technology	Doppler radar
Transmission frequency	24.125GHz
Transmission power	<20dBm
Detection height	2.0m~9.0m
Angle adjustment	0°-90°longitudinal
Detection speed	5cm/s ~ 25km/s
Detection area(30° Angle)	3.0m*3.5m@height: 2m 6.5m*8.5m@height: 9m
Operation voltage	12~36VADC
Operation current	<100mA
Power frequency	50Hz
Temperature range	-30 ℃ ~ + 60 ℃
Relative humidity	0% to 95%, no condensation
Protection grade	IP65
Relay output	24VDC@1A 125VAC@0.5A
External dimensions	164mm x 111mm x 94.5mm
Cable length	7m
Sensor weight	650g

Noted: It also can use remote control for setting parameter.