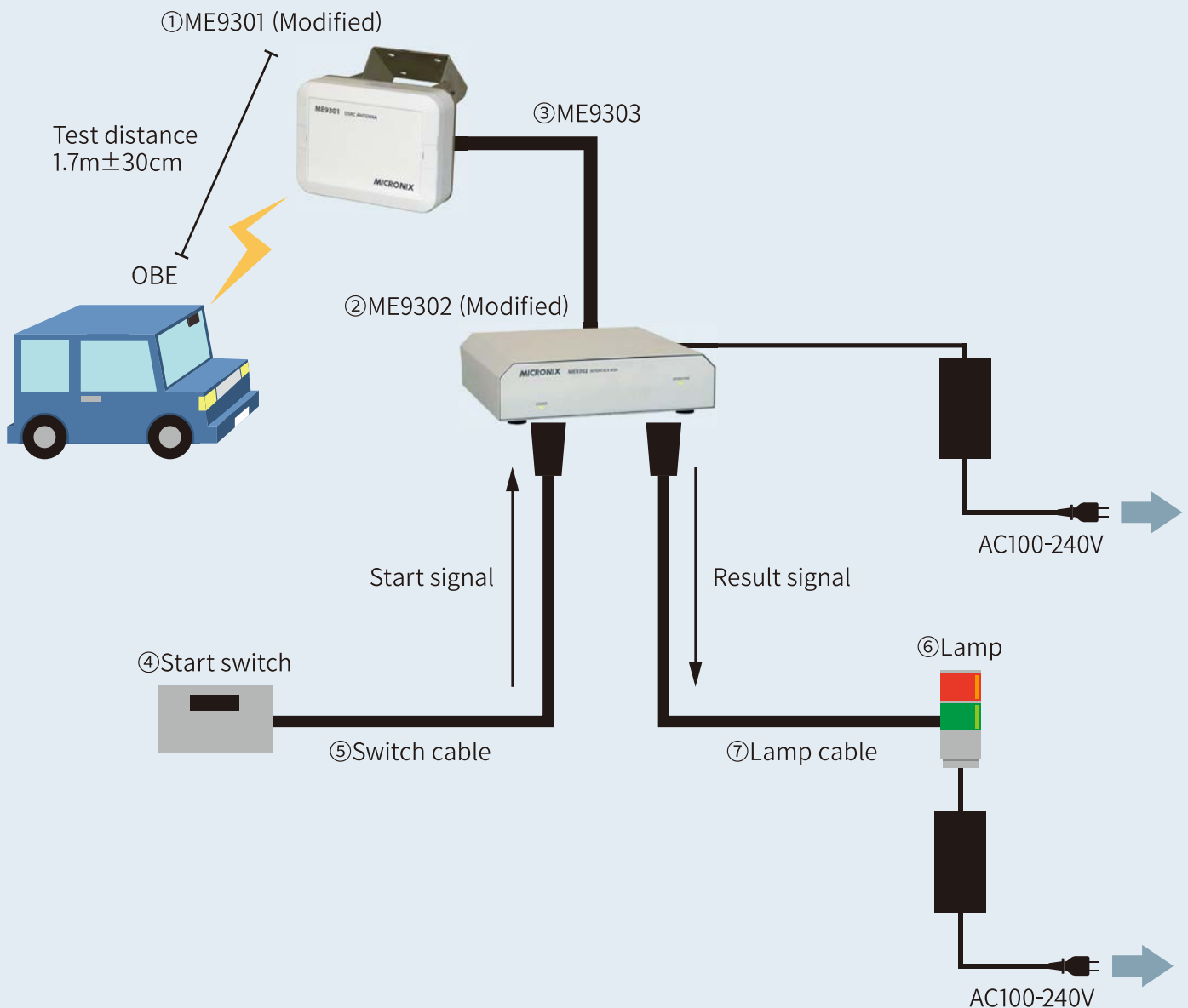


This system is used for conducting tests after ETC OBE  
is installed in car.  
It is optimum for a production line.

### System diagram



※The above is a typical example.

# Specifications

## 1. System configuration

The system consists of the following segments. Refer to "System diagram"

- ① DSRC antenna ME9301 (Modified)
- ② Interface BOX ME9302 (Modified)
- ③ Dedicated I/F cable ME9303
- ④ Start switch
- ⑤ Switch cable (For connecting to the DI connector of modified ME9302)
- ⑥ Lamp
- ⑦ Lamp cable (For connecting to the DO connector of modified ME9302)

## 2. DSRC antenna (modified ME9301)

Performs a test by wirelessly communicating with ETC/OBE.

Wireless section	Transmission frequency	5.795GHz(CH1), 5.805GHz(CH2)
	Transmission power	0.6mW -50%/+20%
	Modulation method	ASK modulation
	Communication standard	ARIB STD-T75 compliant
Power supply	Input voltage	approx. 6.6VDC
	Power consumption	approx. 1.5W
Interface	RS-422A compliant to connect with modified ME9302	
Other	Operating temperature	-20 to 50°C
	Dimensions(WxHxD)	175x130x45mm(excluding mounting bracket)
	Weight	approx. 1kg (including mounting bracket)
	Water proof	IP67 equivalent, suitable for outdoor installation

## 3. Interface BOX (modified ME9302)

Register and control a dedicated scenario in modified ME9302.

Interface	RS-422A compliant to connect with modified ME9301	
Power supply	Input voltage	approx. 9VDC (Using dedicated AC adaptor MA400. Input voltage from 100 to 240VAC.)
	Power consumption	approx. 3.5W (including power consumption of modified ME9301)
Operating LED	<ul style="list-style-type: none"> <li>• Normal : Low speed (0.5Hz) blinking</li> <li>• Stop : Off</li> <li>• Error : Solid</li> <li>• RSU carrier detection : High speed (2Hz) blinking</li> </ul>	
DI (digital input)	Number of inputs	1
	Input form	Photo coupler
	On-state voltage	+9V (Supplied inside modified ME9302)
	Input current at on-state	approx. 4mA
DO (digital output)	Number of outputs	2
	Output form	Photo MOS relay
	Maximum load voltage	60V (AC/DC)
	Max. continuous load current	210mA (150mA@50°C)
	On resistance	2.3Ω typ., 4Ω max
	Off leakage current	1μA max
	Operating time	0.6ms typ., 2ms max @ only Photo MOS relay
Recovery time	0.06ms typ., 0.2ms max @ only Photo MOS relay	
Other	Operating temperature	0 to 50°C
	Dimensions	240(W)x60(H)x210(D)mm
	Weight	approx. 1.6kg

## 4. Dedicated I/F cable ME9303

Length	25m (Optional up to 100m max.)
--------	--------------------------------

# Operation

## 1. Test operation

Power is turned on by connecting each device and connecting the AC adapter of modified ME9302 to the power supply. After that, the scenario recorded internally is activated and the test can be started. The test is started by pulling the start switch.

## 2. Lamp result

	Pass	Fail
Green	Blinking for 5 seconds	Off
Red	Off	Blinking for 5 seconds

## 3. Modified ME9302 LED

Power LED

State	Description
Solid	Power ON
Off	Power OFF

Operating LED

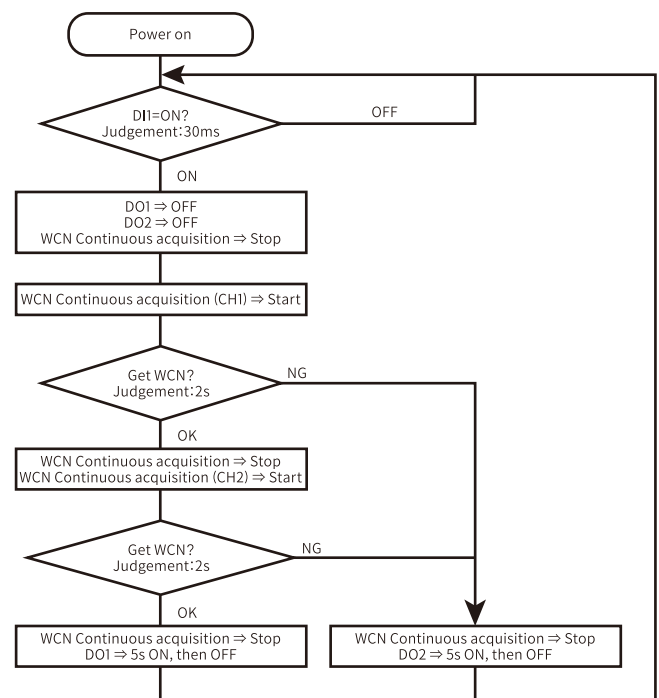
State	Description	Troubleshooting
Low speed (0.5Hz) blinking	Normal	—
Solid	Abnormal	Check that the ME9303 is securely connected to the modified ME9301 and ME9302, and then turn on the power again.
High Speed (2Hz) blinking	RSU carrier detection	Check if another DSRC tester (RSU) is running in the test area.

# Test contents

## 1. Outline

By input to DI1 from the start switch, CH1 (TX: 5.795GHz / RX: 5.835GHz) test start and then CH2 (TX: 5.805GHz / RX: 5.845GHz) test start continuously. The result is output to DO1 if it passes, and to DO2 if it fails. If CH1 test fails, CH2 test will not start.

## 2. Flow



※MICRONIX Corporation reserves the right to make change in design, specification and other information without prior notice.

# MICRONIX

## MICRONIX CORPORATION

2987-2, KOBIKI-CHO, HACHIOJI-SHI, TOKYO 193-0934 JAPAN  
 TEL : +81-42-637-3667 FAX : +81-42-637-0227  
 URL : <http://www.micronix-jp.com> E-mail : [micronix\\_e@micronix-jp.com](mailto:micronix_e@micronix-jp.com)

AGENCY