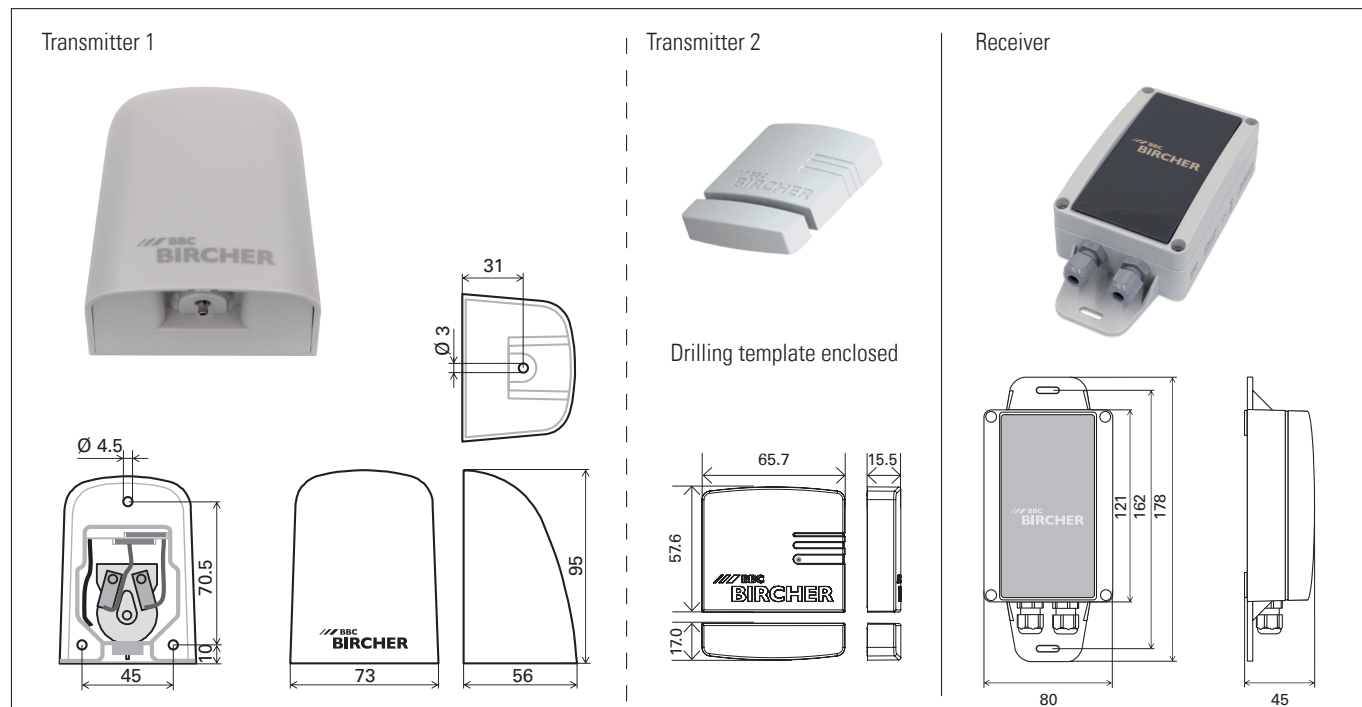


AirMission 2.W2

Wireless signal transmission system with integrated pressure-wave- and wicket-door-switch

Translation of the original operating instruction

General



1 Safety instructions



- Read these operating instructions thoroughly before putting the device into operation and keep them for future reference.
- The assembly, commissioning, modifications and extensions may only be completed by an experienced electrician!
- Before commencing work, remove the power supply from the device/installations!
- During the operation of electrical components
 - e. g. in the case of a short circuit hot and ionised gases can be emitted
 - protection covers must not be removed!
- Pay attention to all local relevant electrical safety regulations!
- Disregard of the safety regulations can cause death, severe injuries or extensive damage!
- Devices that are classified as Category 2 according to EN ISO 13849-1 must be tested regularly – at least once per cycle.
- It is the responsibility of the equipment manufacturer to carry out a risk assessment and to install both the detector and the equipment in compliance with

applicable national and international regulations and safety standards, as well as the Machinery Directive 2006/42/EC, should this apply.

Before commencing the installation or assembly complete the following safety precautions:

- Check the voltage data on the label of the switching device.
- Ensure that the device/installations can not be switched on!
- Determine that the power supply is disconnected!
- Protect the device with a housing against contamination or aggressive environments!
- Connect all operating and switching voltages to the same fuse.
- Connect the operating voltage to the same circuit as the industrial door controller.
- Disconnect device from mains in the event of a fault.

Limited protection against accidental contact!

It is recommended to change the batteries every year.

2 Common application

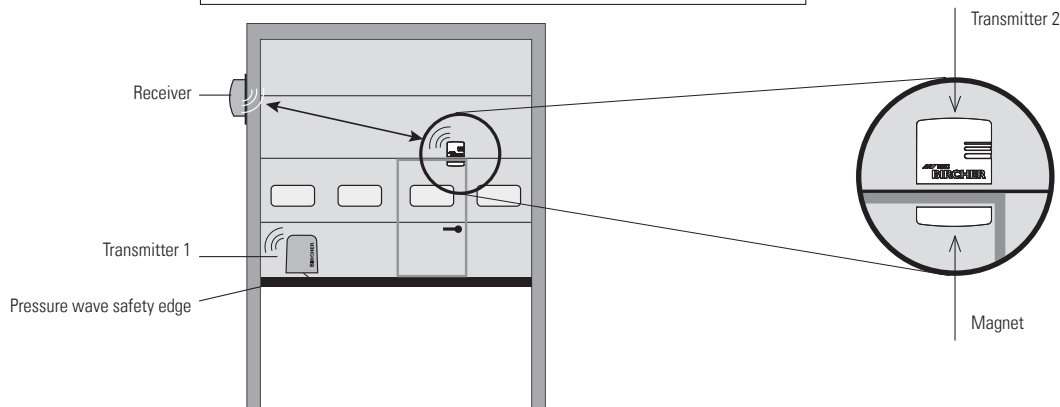
2.1 Industrial door with wicket door

Receiver

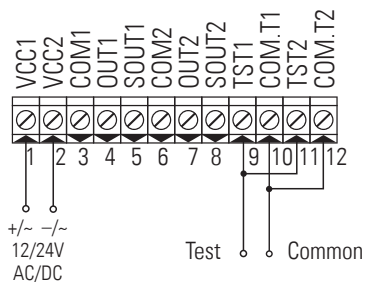


DIP switch 5 ON

Transmitter 1 input 1 corresponds to receiver output 1
Transmitter 2 input 1 corresponds to receiver output 2

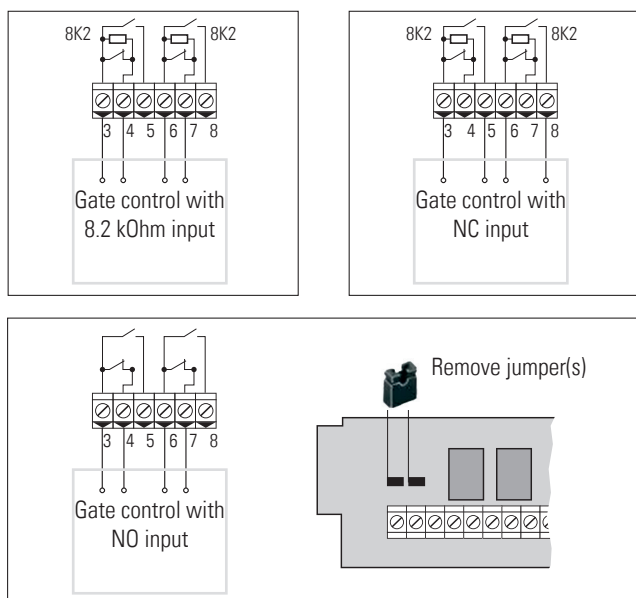


3.1 Wiring: Power supply and test inputs



3.2 Wiring: Outputs and control

Relay contacts are shown unpowered



3.3 DIP switches

ON 1 2 3 4 5	* Safety application Standard according to EN ISO 13849-1
ON 1 2 3 4 5	Inactive → no safety function (Radio connection is not monitored)
ON 1 2 3 4 5	Transmission frequency 869.85 MHz: Set DIP-switch before pairing transmitter – receiver
ON 1 2 3 4 5	* 868.95 MHz: Set DIP-switch before pairing transmitter – receiver
ON 1 2 3 4 5	Test input type NC activated = contact open
ON 1 2 3 4 5	* NO activated = contact closed
ON 1 2 3 4 5	Automatic frequency adjustment Active Used only in case of severe radio disturbance
ON 1 2 3 4 5	* Inactive
ON 1 2 3 4 5	* Programming (2 transmitters) Transmitter 1 corresponds to output 1 Transmitter 2 corresponds to output 2
ON 1 2 3 4 5	Programming (for 2-channel transmitter) Not for this application

* = factory setting

4 Installation

1. Receiver: Check DIP switch settings

2. Install and wire receiver, see 3

3. Receiver: Turn on power supply

4. Transmitter 1 Open

5. Carefully pull out PCB

6. Insert both batteries (front/back)

7. Transmitter 2 Insert batteries

8. Programming (Chapter 5.1): Pair both transmitters with receiver

The distance between the transmitter and receiver and additional transmitters must be at least 1 m

9. Transmitter 1 Slide PCB back into housing

10. Install transmitter

11. Close

12. Connect safety edge with transmitter (rubber hose)

13. System test: Activate safety edge

14. Mount transmitter 2 and magnet

15. Note: Distance magnet / transmitter when doors are closed

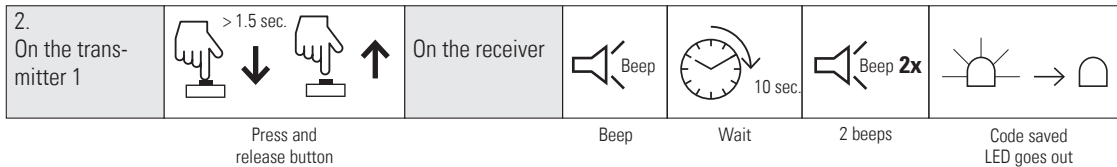
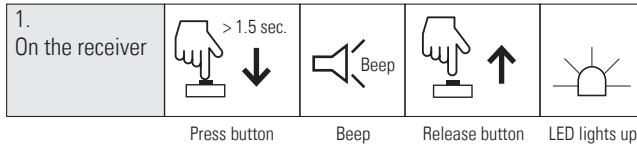
16. System test: Open and close wicket door

5.1 Pair transmitter with receiver

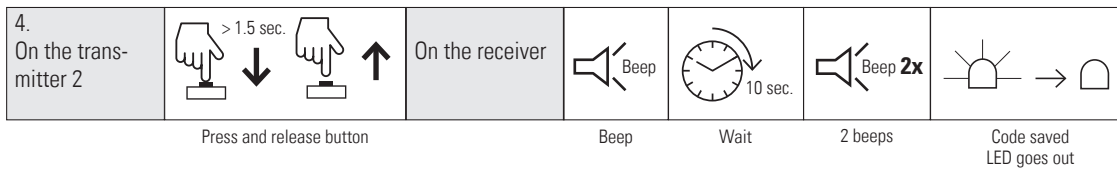
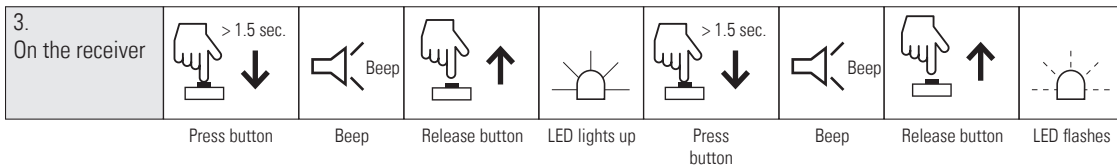


i The distance between the transmitter and receiver and additional transmitters must be at least 1 m

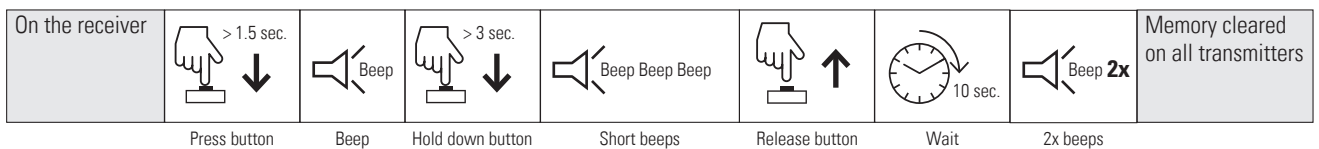
Channel 1:



Channel 2:



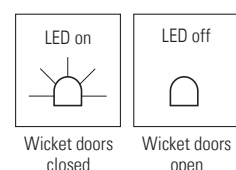
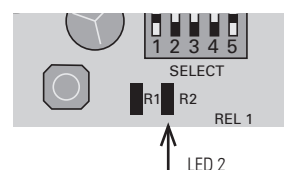
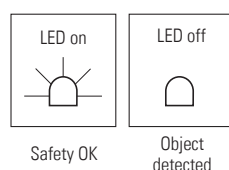
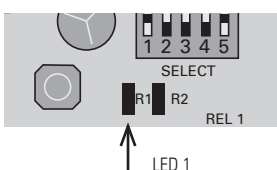
5.2 Transmitter reset (clear pairing between transmitters and receiver)



5.3 Memory full



6.1 Receiver LED indicators



6.2 Warning indicator for low battery voltage



Signal sounds each time a transmitter is activated

Low Battery

7 Battery change

7.1 Transmitter 1

1. Open

2. Carefully pull out PCB

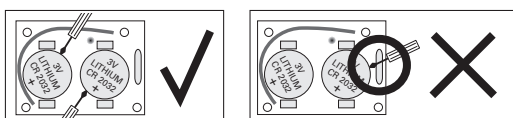
3. Replace both batteries (front/back)

4. Slide PCB back into housing

5. Close

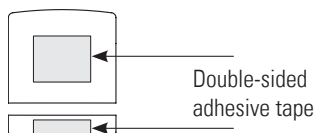
6. System test: Activate safety edge

7.2 Transmitter 2



8 Alternative installation with double sided tape (not supplied)

View of transmitter 2 (bottom)



Caution!

Ensure surfaces are clean, dry and free of dust and grease.

9 Technical data

System	
Frequency bands	868.95 MHz & 869.85 MHz
Range	Under optimum conditions up to 100 m
Pollution degree	2
Working temperature	-20 °C to +55 °C

Receiver	
Supply voltage	12/24 V ACDC
Transmitter memory	7 + 7
Output	2 relays 24 V, 0.5 A; micro-disconnection 1B
Power consumption	0.5 W @ 12 V; 1.2 W @ 24 V
Test signal input	12/24 VACDC
Protection class IEC 60529	IP55

Transmitter 1	
Battery power	2 x Lithium 3 V Type CR2032
Power consumption	Transmitting: 17 mA, standby: 16 µA
Protection class IEC 60529	IP54

Transmitter 2	
Battery power	2x Lithium 3 V type CR2032
Power consumption	Transmitting: 17 mA, standby: 16 µA
Protection class IEC 60529	IP65

10 Standards EN ISO 13856-2 and EN ISO 13849-1

The AirMission 2.W2 system itself is not able to check the function of the sensor in response to a pressure pulse. In accordance with D 3.5 of EN ISO 13856-2, a pressure wave system according to category 2 of EN ISO 13849-1 can be designed by checking the pressure wave system

at every machine cycle. On the doors and gates the door/gate control must assure this function in order to satisfy category 2. (→ Figure A.4 of EN ISO 13856-2).

11 EC-Declaration of Conformity

See attachment

12 WEEE



Devices with this symbol must be treated separately during disposal. This must be done in accordance with the laws of the respective countries for environmentally sound disposal, processing and recycling of electrical and electronic equipment.

13 Contact

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Designed in Switzerland / Made in Switzerland