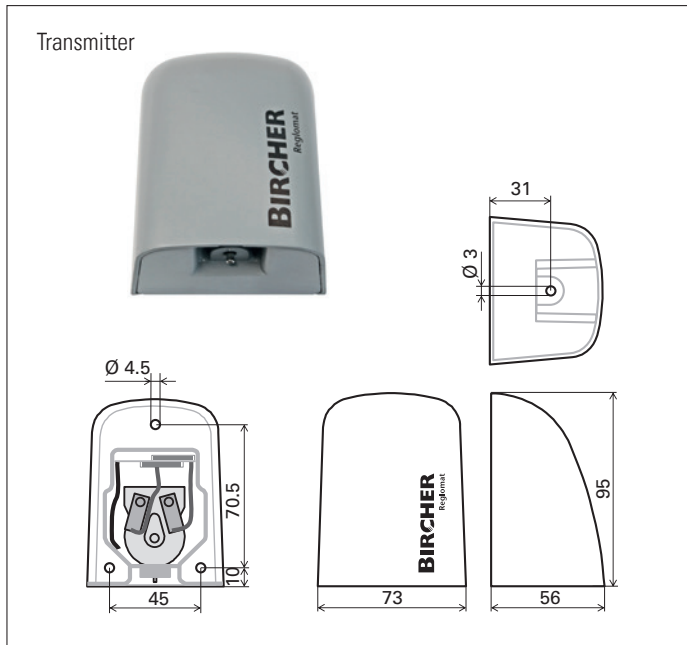


AirMission 1

Wireless signal transmission system with integrated pressure wave switch

Translation of the original operating instruction

General



1 Safety instructions

Warning: Switch off the operating voltage before working on the system. Only trained, qualified personnel may perform installation and startup. The unit may only be opened and repaired by Bircher Reglomat employees. The switching unit may only be used to protect against dangers at crushing and shearing points and at automatic industrial doors (intended use). National and international regulations on industrial door safety must be complied with. Always consider the safety functions of

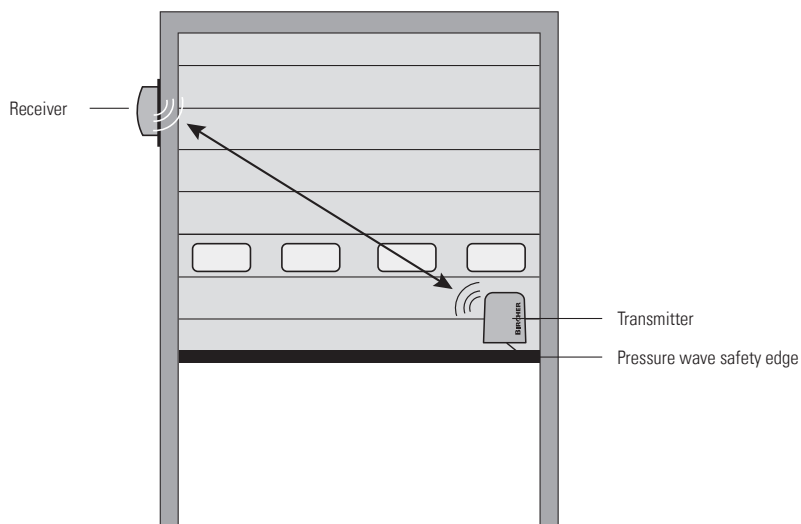
your application as a whole, never just in relation to one individual section of the system. A risk assessment in advance is mandatory. The installer is responsible for installing the industrial door system correctly.

i We recommend changing the battery every year.

2 Common application

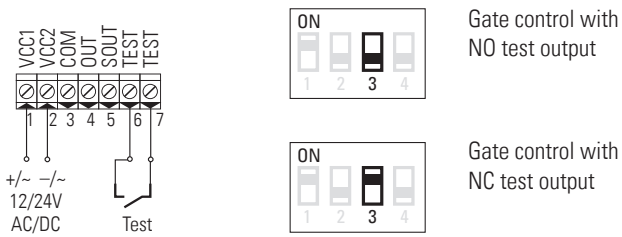
2.1 Industrial door

System for monitoring pressure wave system safety edges.



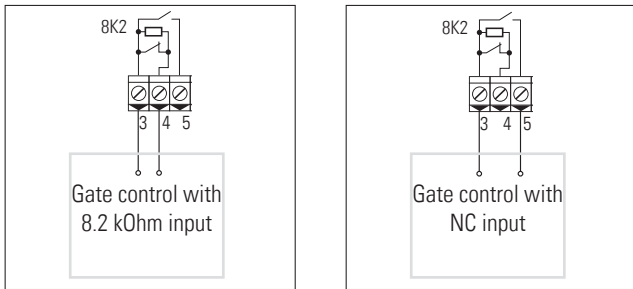
3 Receiver

3.1 Wiring: Power supply and test inputs



3.2 Wiring: Outputs and control

Relay contacts are shown unpowered



3.3 DIP switches

	<p>* Safety application Standard according to EN ISO 13849-1</p>
	<p>Inactive → no safety function! (Radio connection is not monitored)</p>
	<p>Transmission frequency 869.85 MHz: Set DIP-switch before pairing transmitter – receiver</p>
	<p>* 868.95 MHz: Set DIP-switch before pairing transmitter – receiver</p>
	<p>Test input type NC activated = contact open</p>
	<p>* NO activated = contact closed</p>
	<p>Automatic frequency adjustment Active Used only in case of severe radio disturbance</p>
	<p>* Inactive</p>

* = factory setting

4 Installation

1. Receiver: Check DIP switch settings
2. Install and wire receiver
3. Receiver: Turn on power supply
4. Transmitter: Open
5. Carefully pull out PCB
6. Insert both batteries (front/back)
7. Programming (Chapter 5.1): Pair transmitter with receiver
8. Slide PCB back into housing
9. Install transmitter
10. Close
11. Connect safety edge with transmitter (rubber hose)
12. System test: Activate safety edge, see 6.1

5 Programming

5.1 Pair the transmitter with the receiver



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

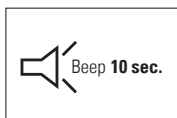
1. On the receiver		> 1.5 sec.			
	Press button		Beep	Release button	LED lights up

2. On the transmitter		> 1.5 sec.		On the receiver				
	Press and release button				Beep	Wait	2 beeps	Code saved LED goes out

5.2 Transmitter reset (clear pairing between transmitters and receiver)

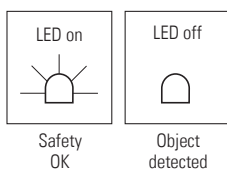
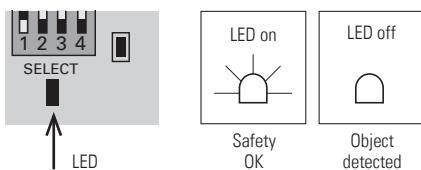
On the receiver		> 1.5 sec.			> 3 sec.					Memory cleared on all transmitters
	Press button		Beep	Hold down button		Short beeps	Release button	Wait	2x beeps	

5.3 Memory full

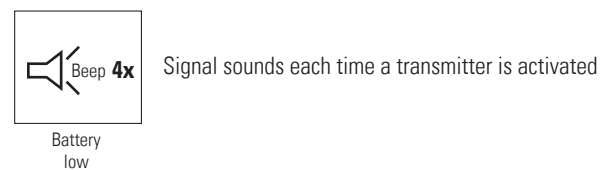


6 Operation

6.1 Receiver LED indicators



6.2 Warning indicator for low battery voltage



7 Battery replacement

1. Open			2. Carefully pull out PCB	
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3. Replace both batteries (front/back)		2x		2x	4. Slide PCB back into housing	
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5. Close			6. System test: Activate the safety edge see 6.1		OK?
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8 Technical data

System	
Frequency bands	868.95 MHz & 869.85 MHz
Range	Under optimum conditions up to 100 m
Response time	25 ms
Pollution degree	2
Working temperature	-20 °C to +55 °C

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

Receiver	
Supply voltage	12/24 V ACDC
Transmitter memory	10
Output	1 relay 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

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

The AirMission 1 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).

10 EC-Declaration of Conformity

Manufacturer:	Bircher Reglomat AG, Wiesengasse 20, CH-8222 Beringen
Authorised rep:	Bircher Reglomat GmbH, Robert Bosch Strasse 3, D-71088 Holzgerlingen
Following directives have been observed:	Machinery Directive 2006/42/EC RoHS Directive 2011/65/EU, R&TTE-Directive 1999/5/EC until 12.06.2016, RED 2014/53/EU starting 13.06.2016 E6945
Prototype test certificate:	
Notified inspection centre:	Suva, technology division, SCESp 0008, ID no. 1246
Signed:	Head of Sales & Marketing Damian Grand / Head of Operations Daniel Nef
Product variants:	AirMission

11 Contact

Danish seller

Bircher Reglomat AG
Wiesengasse 20
CH-8222 Beringen
www.bircher-reglomat.com

Swissdoor ApS
Stenhuggervej 2
DK-5471 Soendersoe
Denmark
Tel.: +45 86 28 00 00
mail@swissdoor.dk
www.swissdoor.dk

