BBC BIRCHER
Smart Access

ENGLISH

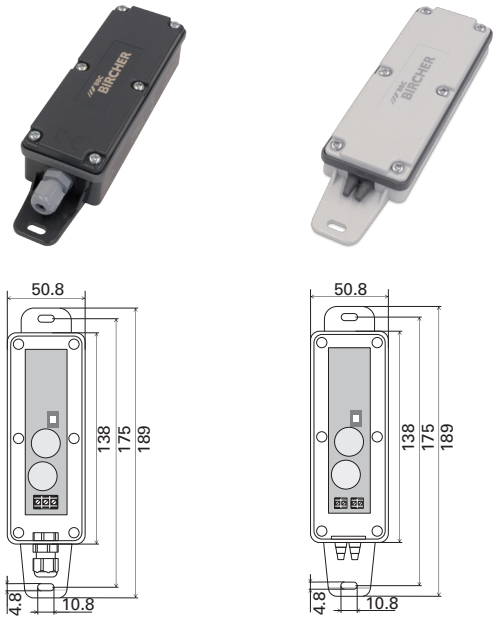
RFGate 2.2.A

Wireless signal transmission system for safety edges, two channels

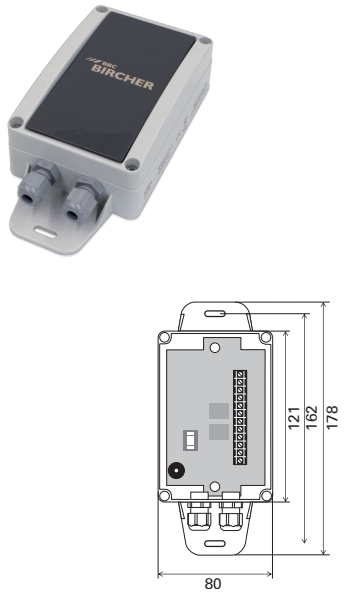
Translation of original operating instructions

General

Transmitter



Receiver



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 repaired by the manufacturer. The switching unit may only be used to protect against dangers on crushing and shearing points and on automatic industrial doors and gates (intended use). National and international regulations on industrial door and gate 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. The installer is responsible for carrying out a risk assessment and installing the industrial door system correctly.

It is recommended to change the batteries every year.

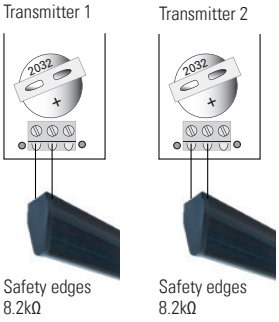
2 Common application

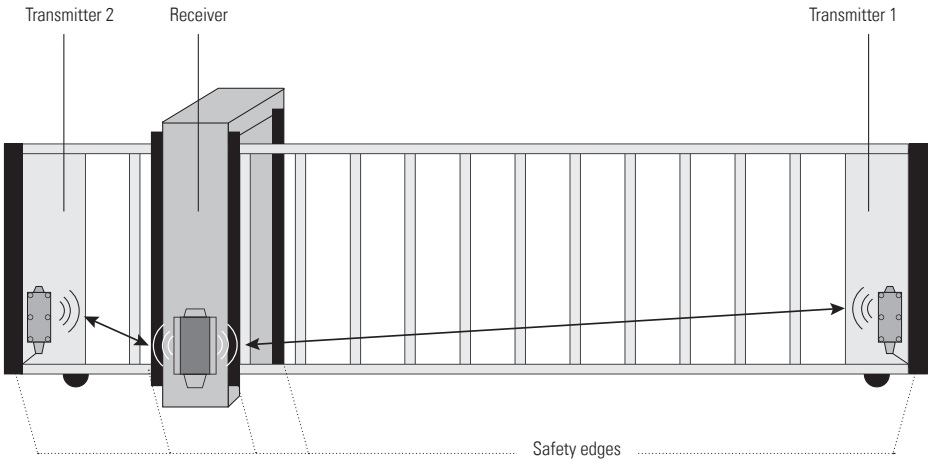
2.1 Site entrance gate

Receiver

DIP switch 5 ON

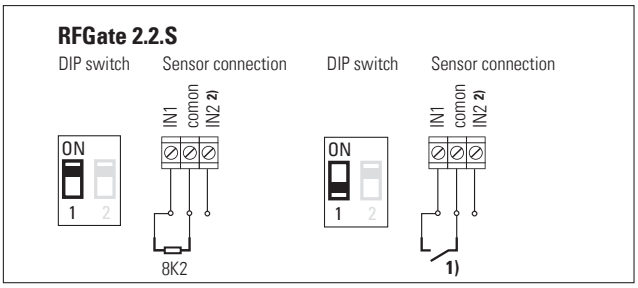
Transmitter 1 input 1 corresponds to receiver output 1
Transmitter 2 input 1 corresponds to receiver output 2

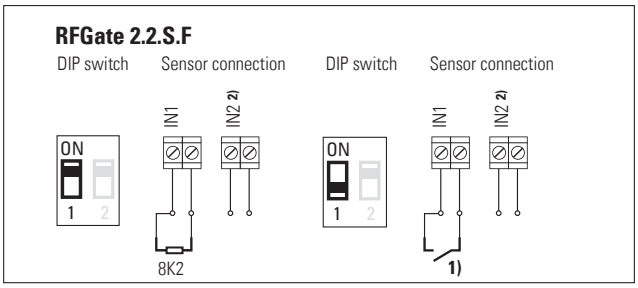




3 Transmitter

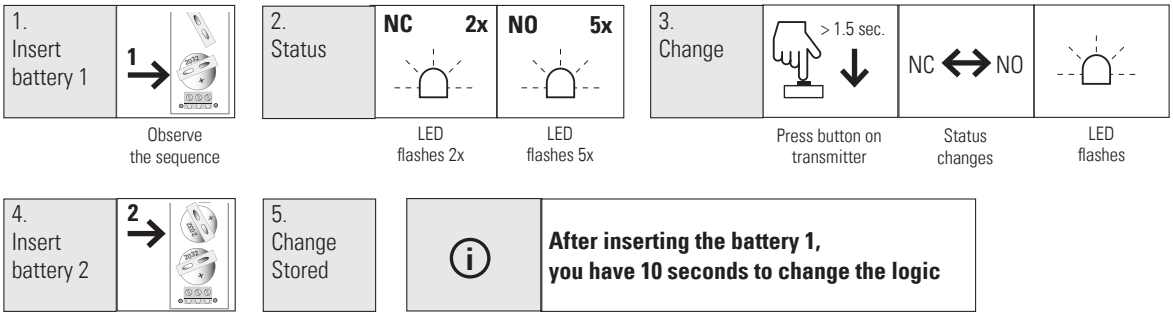
3.1 DIP switch setting according to sensor (safety edge, switch contact)





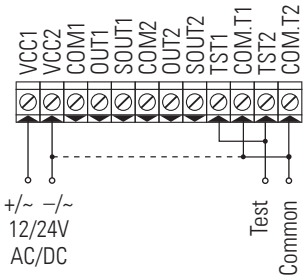
1) Change from NC to NO, see chapter 3.2
2) ⓘ IN2 has no function

3.2 Change input from NC to NO (factory setting = NC)



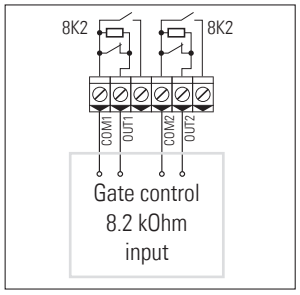
4 Receiver

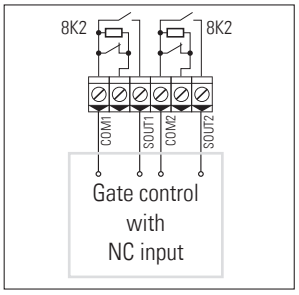
4.1 Wiring: Power supply and test inputs

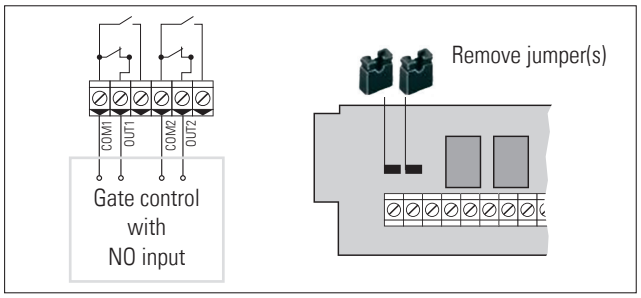


4.2 Wiring: Outputs and control

Relay contacts are shown unpowered







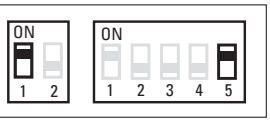
4.3 DIP switches

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 radio disturbances
ON 1 2 3 4 5	*	inactive
ON 1 2 3 4 5		**Programming of RF Gate 2.2.A** (2 transmitters) Transmitter 1 corresponds to output 1 Transmitter 2 corresponds to output 2
ON 1 2 3 4 5	*	**Programming of RF Gate 2.2.NG** (1 transmitter) Input 1 corresponds to output 1 Input 2 corresponds to output 2

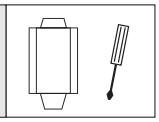
* = factory setting

5 Start-up

1. Check DIP switch settings

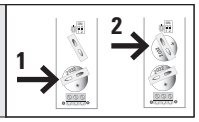


2. Install and wire receiver



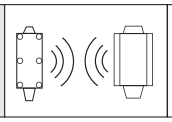
3. Turn on power supply

4. Transmitter: insert batteries



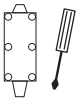
Observe order

5. Programming (Chapter 6.1): pair transmitter with receiver

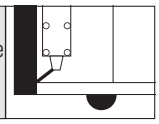


The distance between transmitter and receiver and further transmitters must be at least 1 m

6. Transmitter: install



7. Transmitter: wire



Please observe the torque when fastening the cover: Max. 45 N cm

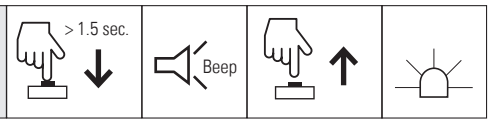
8. System test of safety edge on gate

Status	Terminals COMx – OUTx	Terminals COMx – SOUTx
Sensor not activated (operating mode)	8K2	closed
Sensor activated (security system activated)	closed	open
No supply voltage	closed	open
Transmitter and receiver not paired	closed	open
Broken cable between sensor and transmitter	closed	open
Transmitter batteries low	closed	open

6 Programming

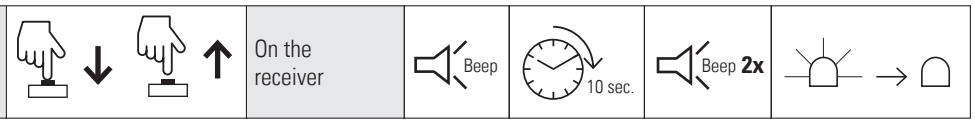
6.1. RFGate 2.2.A, pairing transmitter with receiver

1. On the receiver



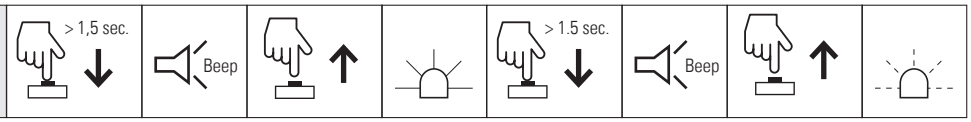
Press button | Beep | Release button | LED lights up

2. On the transmitter for channel 1



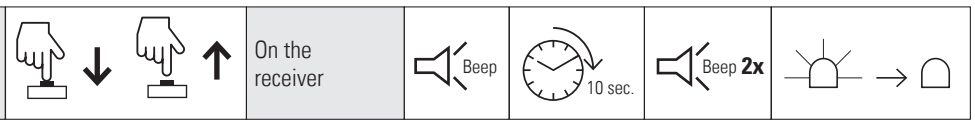
Press and release button | Beep | Wait | 2 beeps | Code saved LED goes out

3. On the receiver



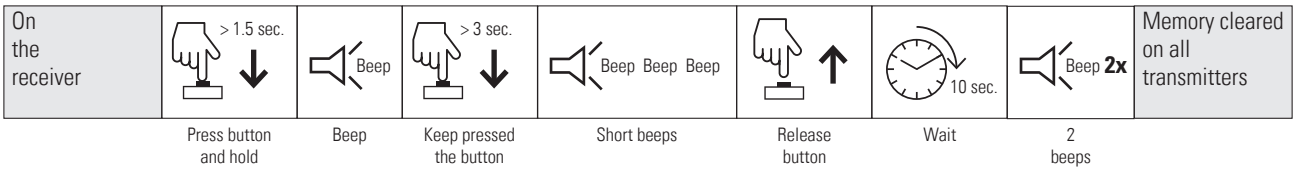
Press button | Beep | Release button | LED lights up | Press button | Beep | Release button | LED flashes

4. On the transmitter for channel 2

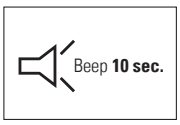


Press and release button | Beep | Wait | 2 beeps | Code saved LED goes out

6.2 Transmitter reset

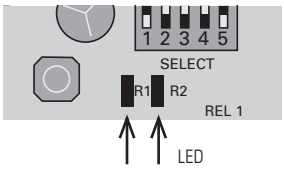


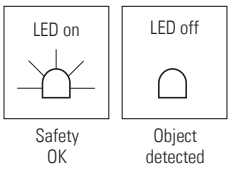
6.3 Memory full



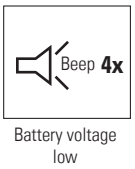
7 Standard operation

7.1 Receiver LED indicators





7.2 Warning indicator for low battery voltage



Receiver: Signal sounds at each activation

8 Technical data

Receiver	
Supply voltage	12/24 V ACDC
Transmitter memory	7
Output	2 relays 24 V, 0.5 A; micro switch-off 1B
Power consumption	0.5 W @ 12 V; 1.2 W @ 24 V
Test signal input	12/24 VACDC

Transmitter	
Battery power	2 x Lithium 3 V Type CR2032
Power consumption	Transmitting: 17 mA standby: 16 µA

System	
Frequency bands	868.95 MHz & 869.85 MHz
Range	under optimum conditions up to 100 m
Protection class IEC 60529	IP55
Pollution degree	2
Working temperature	-20 °C to +55 °C

9 EU Declaration of Conformity

CE See attachment

10 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.

11 Contact

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