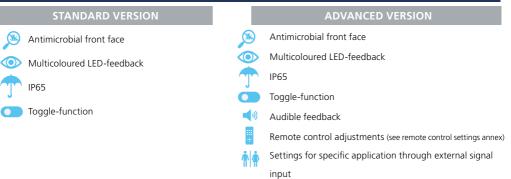
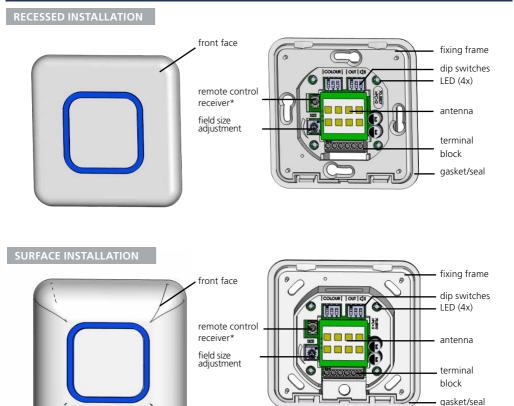
# MAGIC SWITCH CHROMA

CONTACTLESS KNOWING ACT SENSOR FOR AUTOMATIC DOORS

## VERSIONS

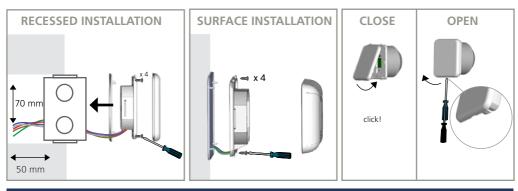


## DESCRIPTION

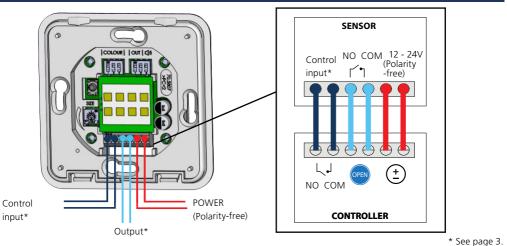


\* only available in the advanced version

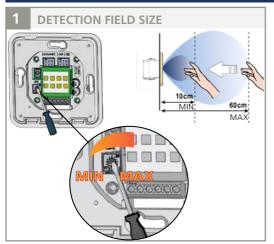
## INSTALLATION

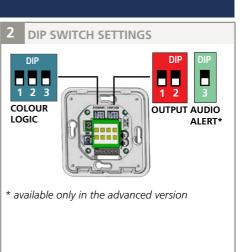


## WIRING

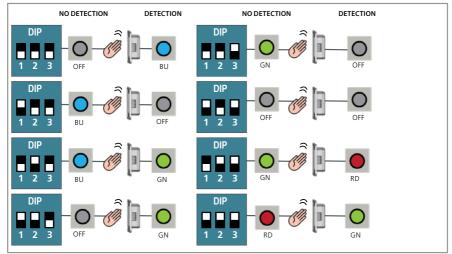


## **ADJUSTMENTS**





## LED COLOUR LOGIC



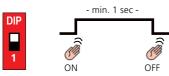
## OUTPUT MODE

#### PULSE MODE :

recommended for automatic doors applications



TOGGLE MODE: recommended for switch applications



## SETTINGS FOR ADVANCED VERSION ONLY

#### **CONTROL INPUT**

Connect the input to an external signal to lock the switch and make the LED red.

# 

#### **AUDIO ALERT**

NORMALLY CLOSED (NC)

**NORMALLY OPEN (NO)** 

DIP

2

DIP

2

Detection activates an audio alert.

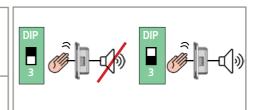
NO POWER

DETECTION

NO POWER

DETECTION

NO DETECTION



NO

NC

/\_

For restroom application, see application note for more details.

## TROUBLESHOOTING

Door does not open even when moving the hand towards the sensor.	Bad or no power supply.	Check power supply. If LED switches on or flashes, power connection is OK.
	Detection range is too short.	Adjust the detection range.
		Remove any metal plates in front of the sensor.
	Incorrect wiring / connection.	Check wiring and relay connection.
Sensor stays in detection.	The environment influences the good functioning of the sensor.	Remove any moving object around the sensor.
	Incorrect wiring / connection.	Check wiring and relay connection.
Door remains open after detection/activation.	Wrong output mode.	Switch the output mode to PULSE.
	Incorrect wiring / connection.	Check wiring and relay connection.

# **TECHNICAL SPECIFICATIONS**

Technology	Microwave motion sensor
Radiated frequency	24.150 GHz
Radiated power	< 20 dBm EIRP
Radiated power density	< 5mW/cm <sup>2</sup>
Detection range (hand)	+/- 10 to 60 cm if movement towards sensor at 90° (adjustable)*
Detection mode	Motion (bidirectional)
Speed of target to create detection	Min. 5Hz or +/- 3cm/s, Max. 200Hz or +/- 1.2m/s
Supply voltage**	12 - 24V AC +/- 10% (50 - 60 Hz). 12 - 24V DC +30% / - 10%
Power consumption	< 1.5W
Output** Max. voltage Max. current Max. switching power	Electronic relay (galvanic isolation - polarity free) 42V DC/30 VAC 100 mA 15 W
Output hold time	0.5s (in PULSE mode)
Temperature range	-20°C to +55°C
Degree of protection	IP65 with front face and gasket mounted on a smooth surface
Material	PMMA / PC Front face is treated with biomaster silver biocide tested to ISO 22196:2011. Please use biocides responsibly.
Dimensions	80 x 80 x 21mm
Wiring cable	Stranded cable up to 16 AWG - 1.5mm <sup>2</sup>

\* An adjustment of the detection field below 10 cm is possible but the detection capability of the sensor can not be guaranteed.

BEA SA | LIEGE Science Park | ALLÉE DES NOISETIERS 5 - 4031 ANGLEUR [BELGIUM] | T +32 4 361 65 65 | F +32 4 361 28 58 | INFO@BEA.BE | WWW.BEASENSORS.COM

\*\* External electrical sources must be within specified voltages, max 15W and ensure double insulation from primary voltages.

©BEA | Original instructions | 47.0381 / V4- 08.22



BEA hereby declares that this product is in compliance with European Directives : 2014/53/EU (RED) and 2011/65/EU (RoHS). The full text of the EU declaration of conformity is available on our website.

BEA

Technical specifications are subject to changes

This product should be disposed of separately from unsorted municipal waste