CAPTURE® A20 and CA G3 Motion Detectors

INS881EN-2

Texecom

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Texecom

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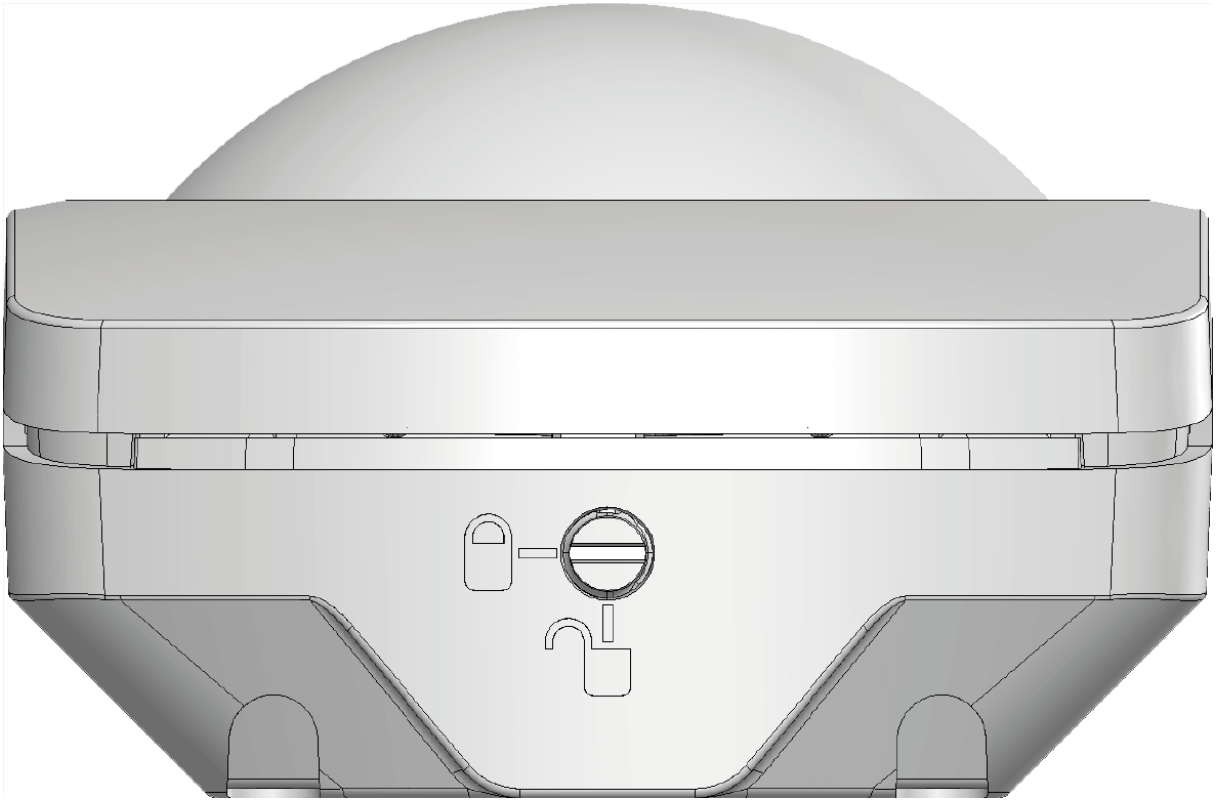
1.1 Opening the device

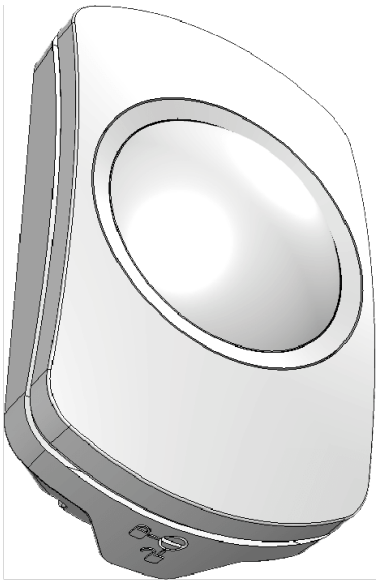
The devices are supplied in the unlocked position. If locked.

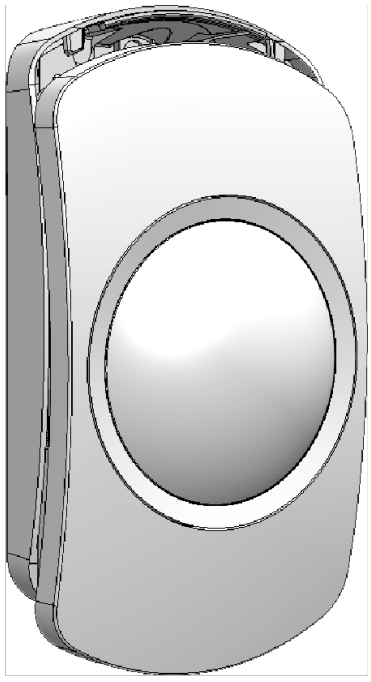
- Use a flat bladed terminal driver and turn the locking mechanism ¼ turn anti-clockwise.
- Slide the front down and towards you to remove.
- For ceiling mount devices remove the facia by turning it anti-clockwise, and then unlock as above.

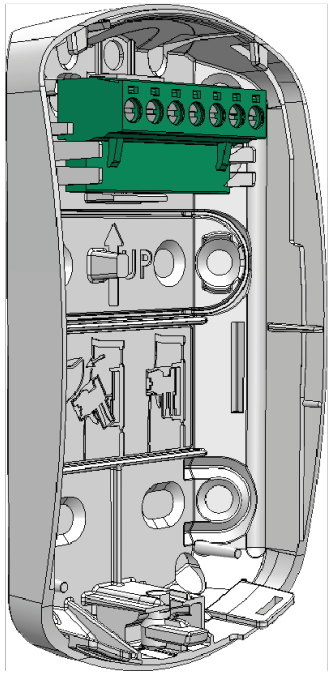
Locking mechanism

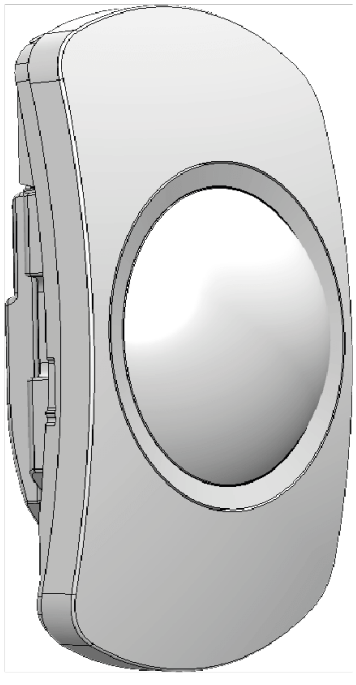


Opening the device



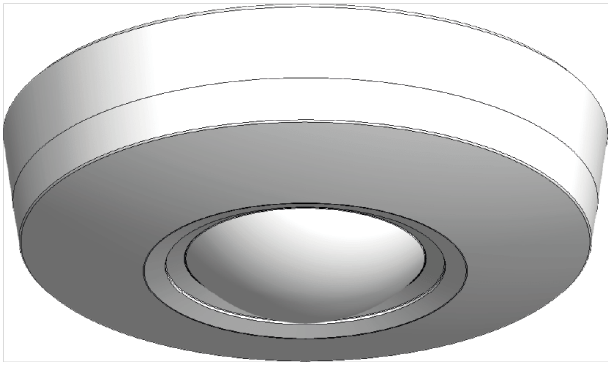






Ceiling facia removal

1



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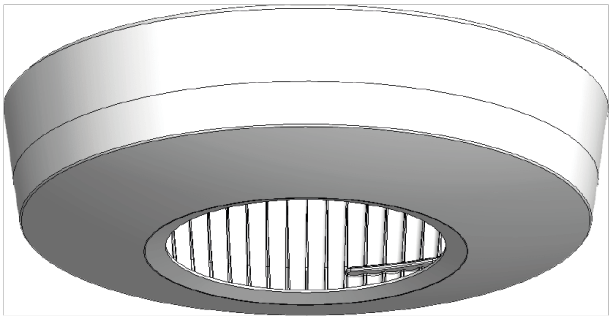
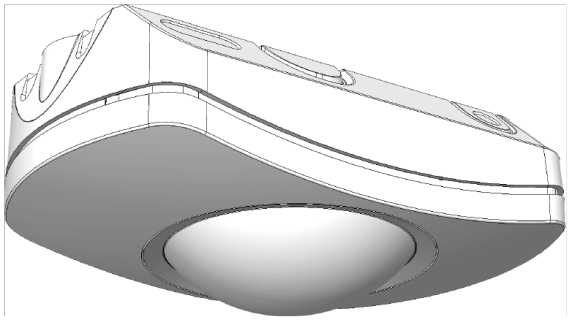




1.0 Quick Installation

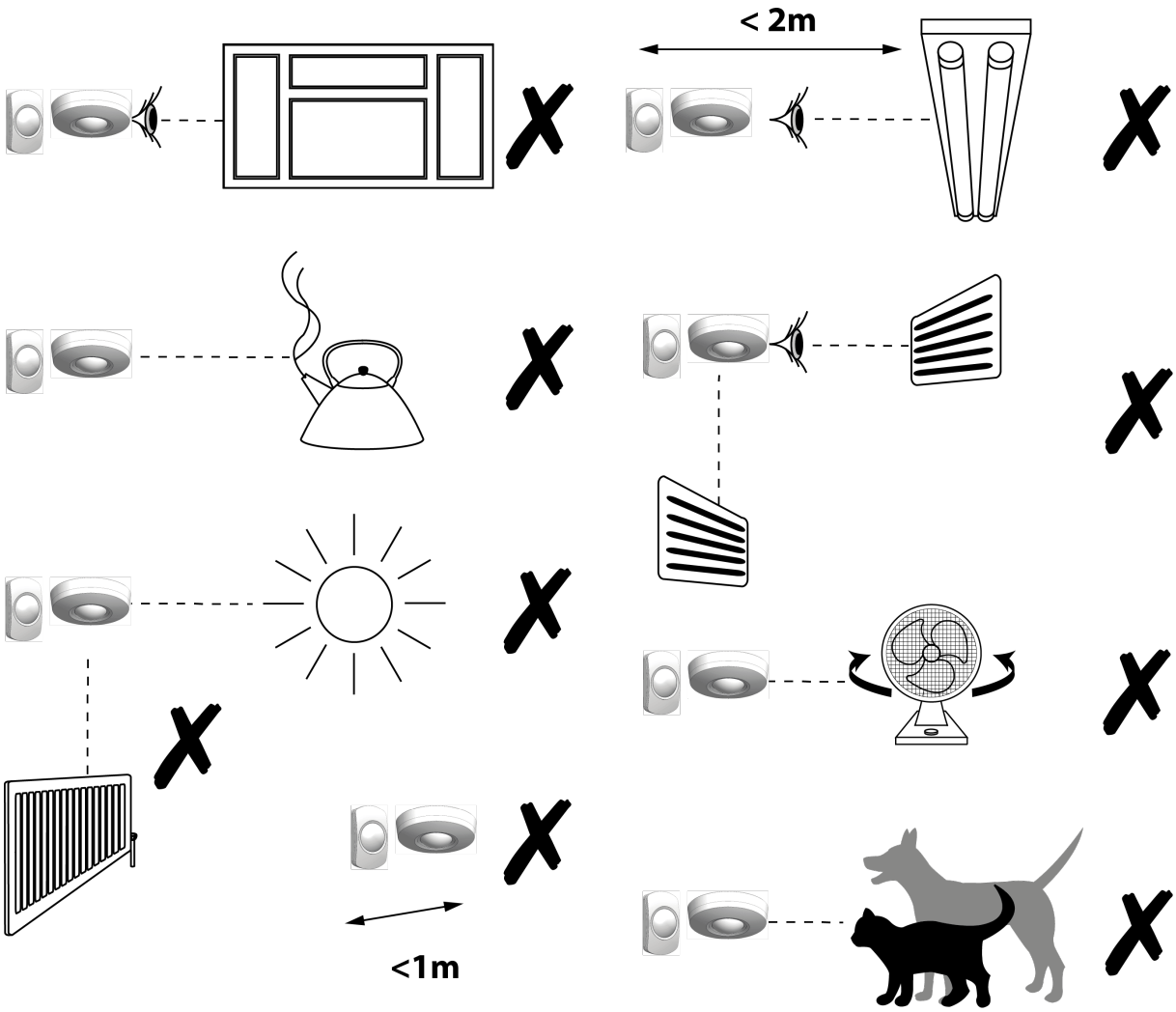
1.2 Mounting and cable entry

Location

Ensure you have the correct device for the intended application, and that it is sited correctly in the desired location. The field of view should be free from obstacles and any potential false alert causes.

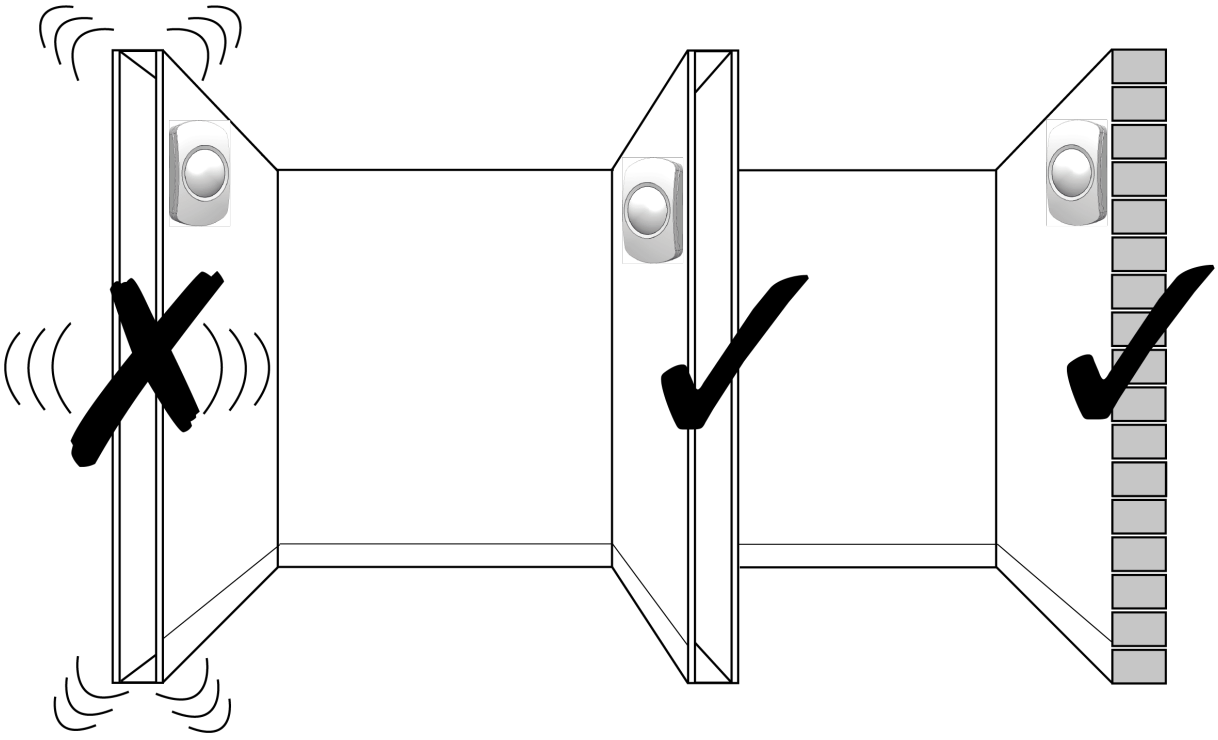
Devices should be mounted on stable internal surfaces and are NOT suitable for use externally.

Avoid common false alert causes

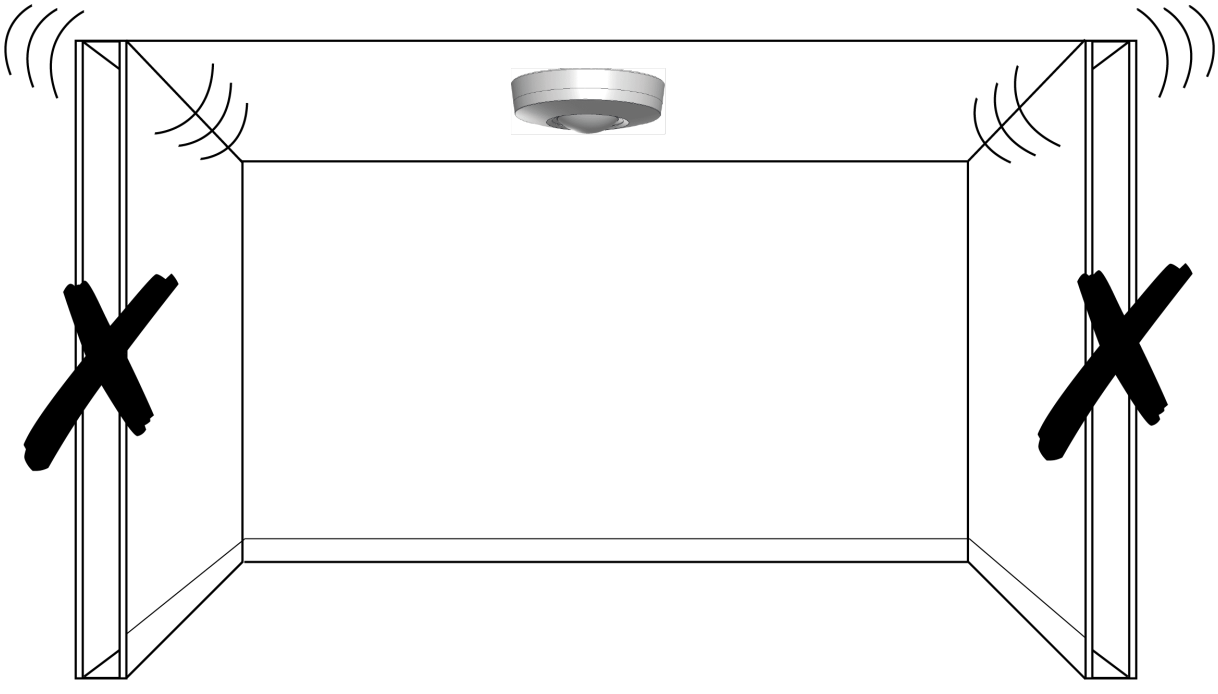


Ensure the devices field of view is not obstructed

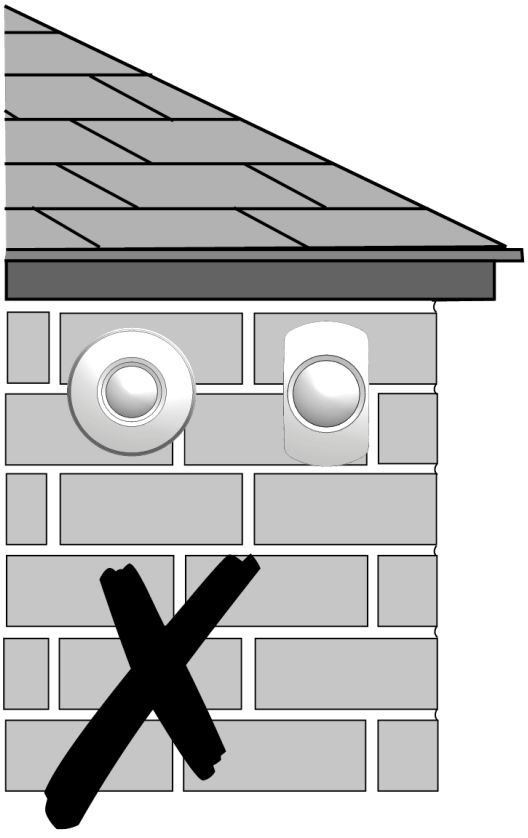
Install on a flat stable surface only

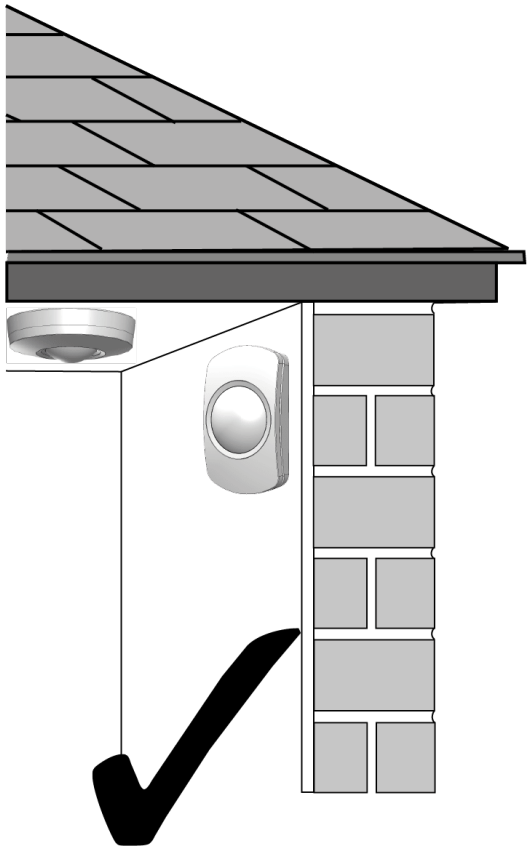


Ensure surrounding structures are stable



For internal use only





Screws & Fixings

A minimum of 2 opposing fixing holes should be used to ensure maximum stability. When corner mounting care should be taken to ensure the chassis is not twisted, if the corner is uneven then two fixings on the same side would be acceptable. Where removal from mounting detection is required you must ensure that the tamper fixing is opposite to at least one of the corner or wall fixings.

Dependent on the mounting substrate, suitable fixings may be required. The size and type will depend on the choice of fixing screw.

- Minimum screw size 3.5 X 16mm CSK
- Maximum screw size 4.0 X 70mm CSK

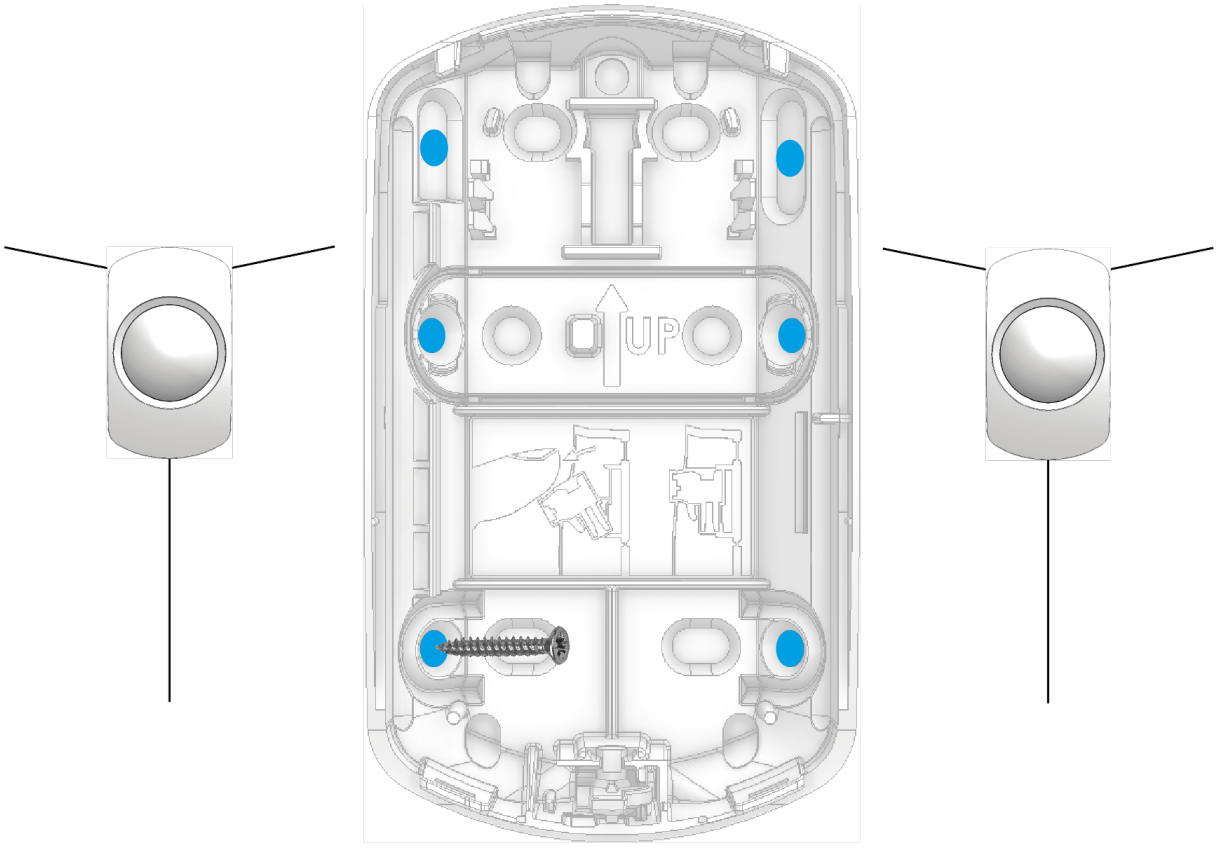
Cable Routing

If the bottom cable entries are used, care should be taken to ensure that the cable

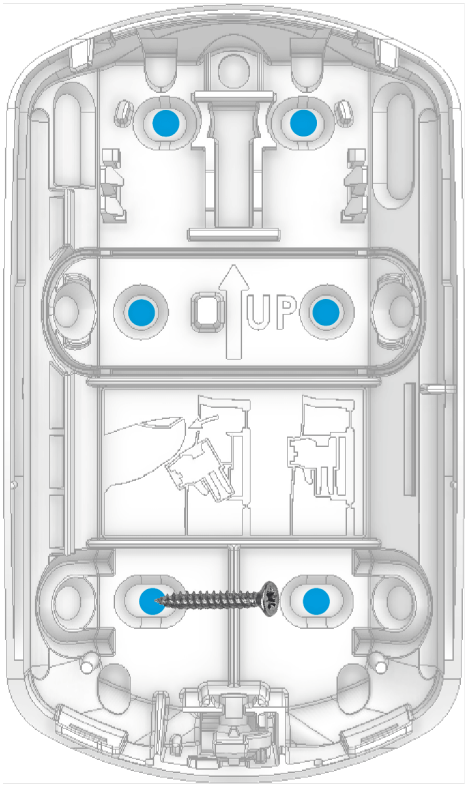
passes around the post as shown. This helps avoid cable snagging when refitting the front chassis.

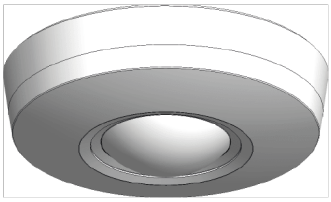
NOTE: Do not use the screw fixing points to route cable.

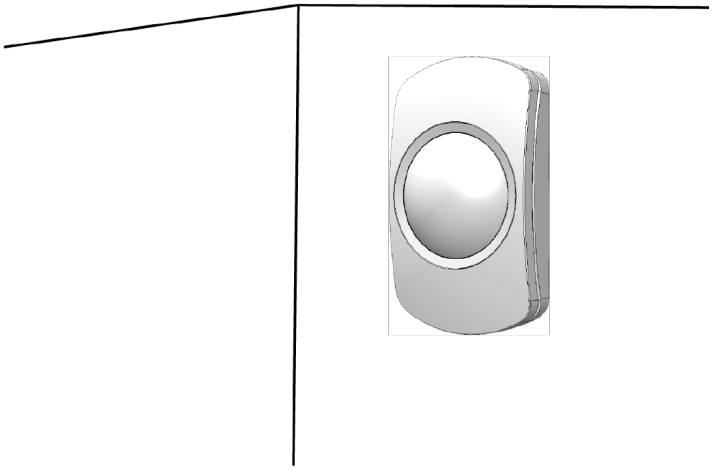
Corner mount



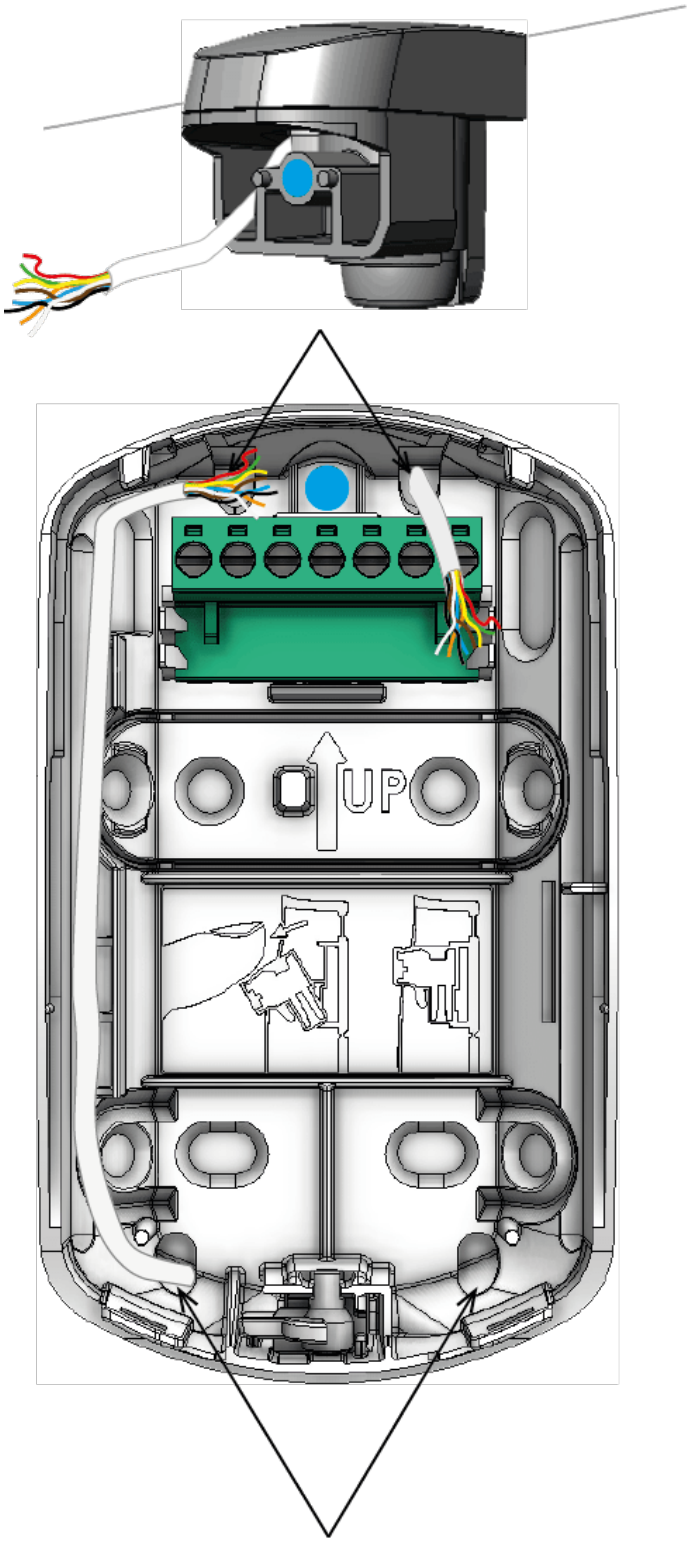
Wall, ceiling and flat surface mount



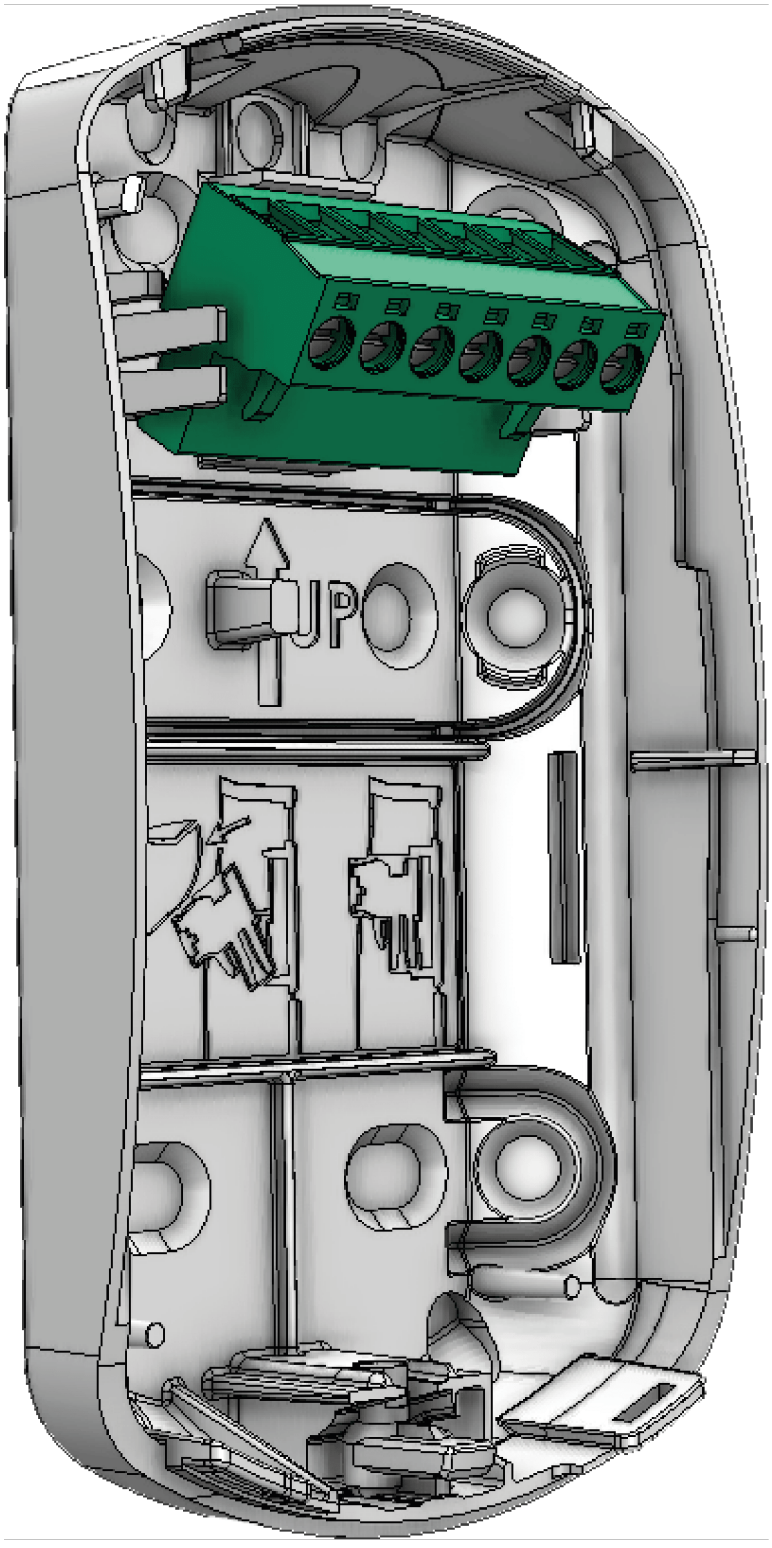




Cable routing


UP

Terminal block tilting


UP

1.3 Wiring, TEOL selection and powering up

The device allows you to wire to control equipment in several different ways. To aid wiring and inspections of cable termination the terminal block can be tilted forwards or removed entirely.

TEOL wiring is considered the most secure. The detector is designed to be connected to a single zone on control panels which feature Triple End-Of-Line compatibility. Alarm, Tamper, Fault and Masking are signalled on one pair of wires. To aid installation the resistor values can be selected via dip switches. All the connections are normally closed. **Masking is signalled by the alarm and fault relays opening simultaneously.**

The example shown assumes you are connecting to a Premier Elite control panel. For other wiring types, please refer to the manufacturer's instructions for your equipment.

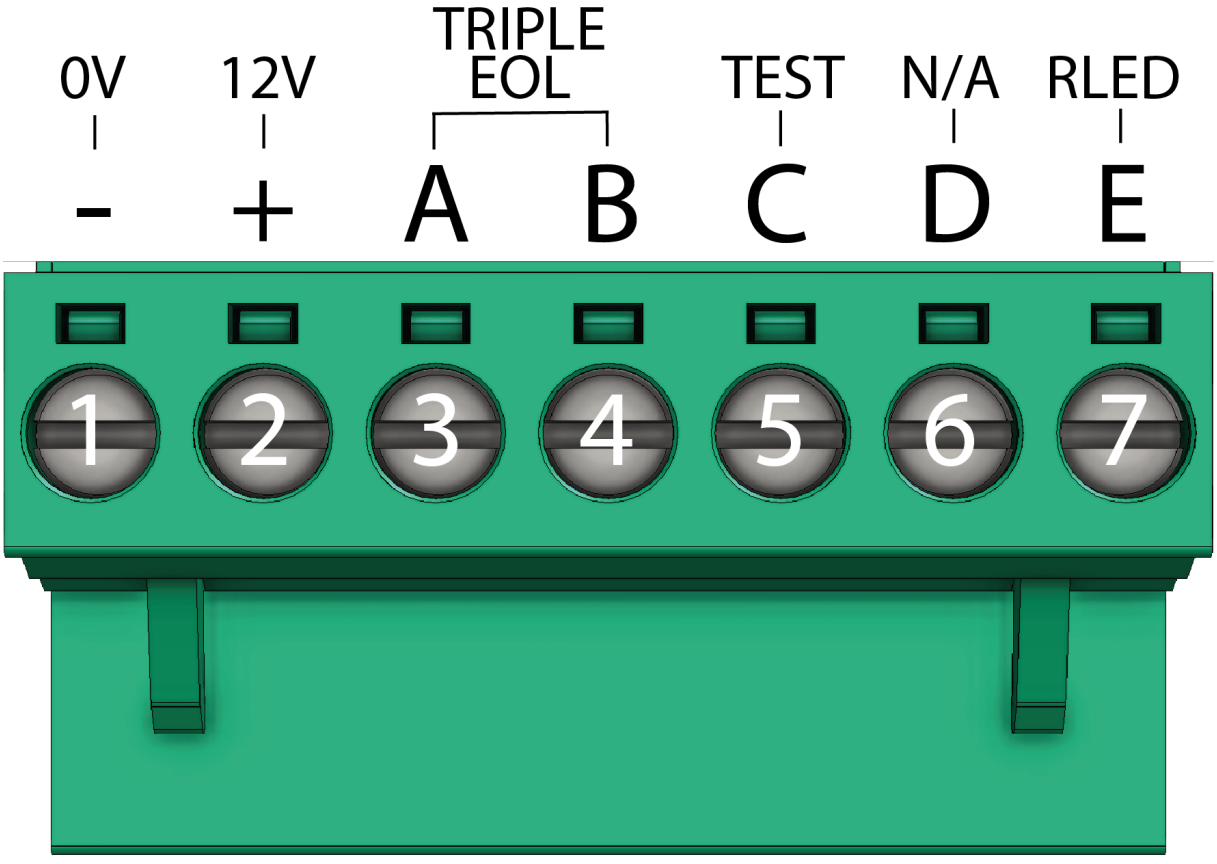
- The device is defaulted no selection.
- **You MUST change the default position of the TEOL switches to make the device function. .**
- Use a terminal driver to move the switches to the desired position.

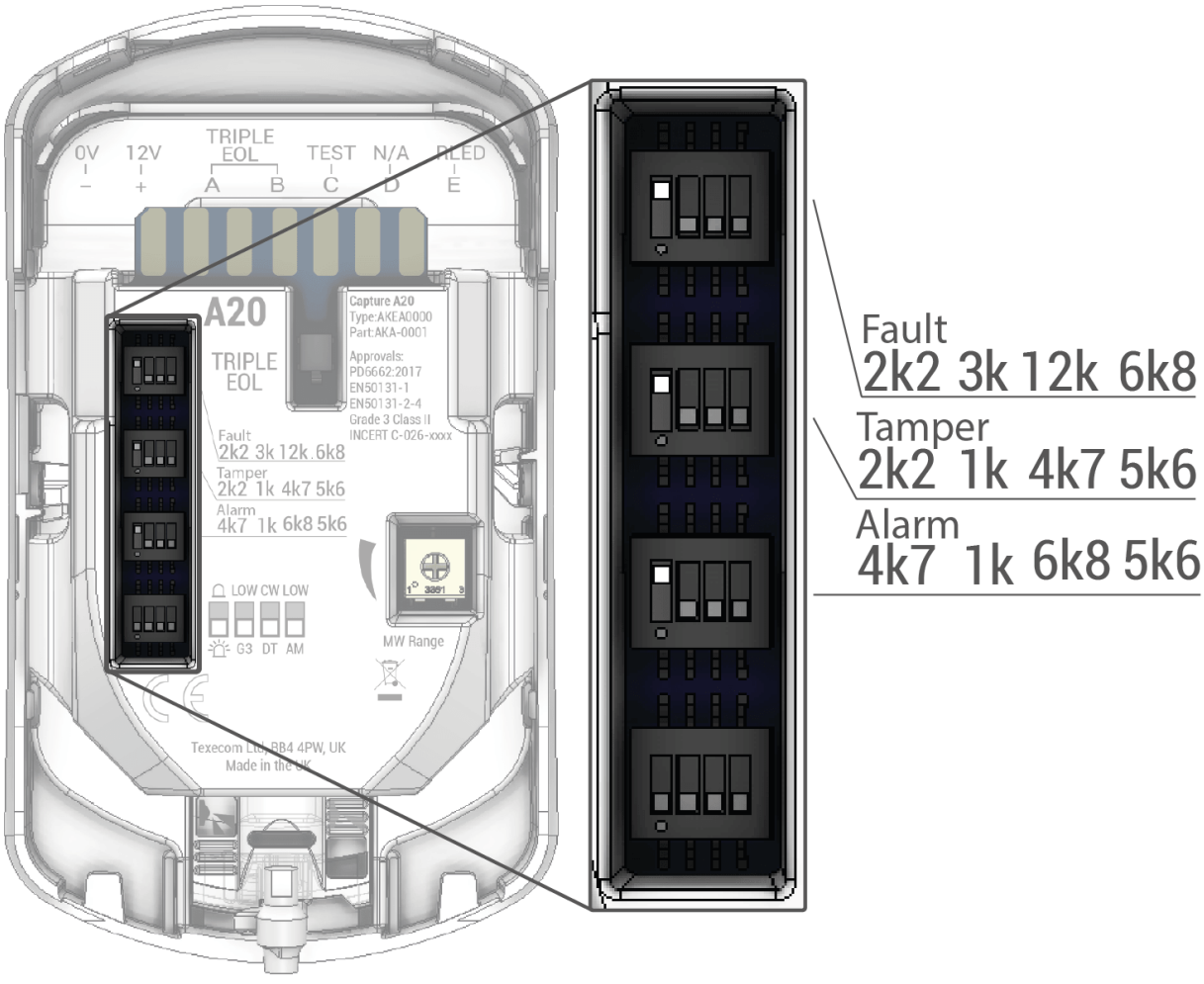
All adjustments and mode selections should be made prior to powering up the device. Anti-mask calibration takes 180s during which time there should be no activity in the protected area.

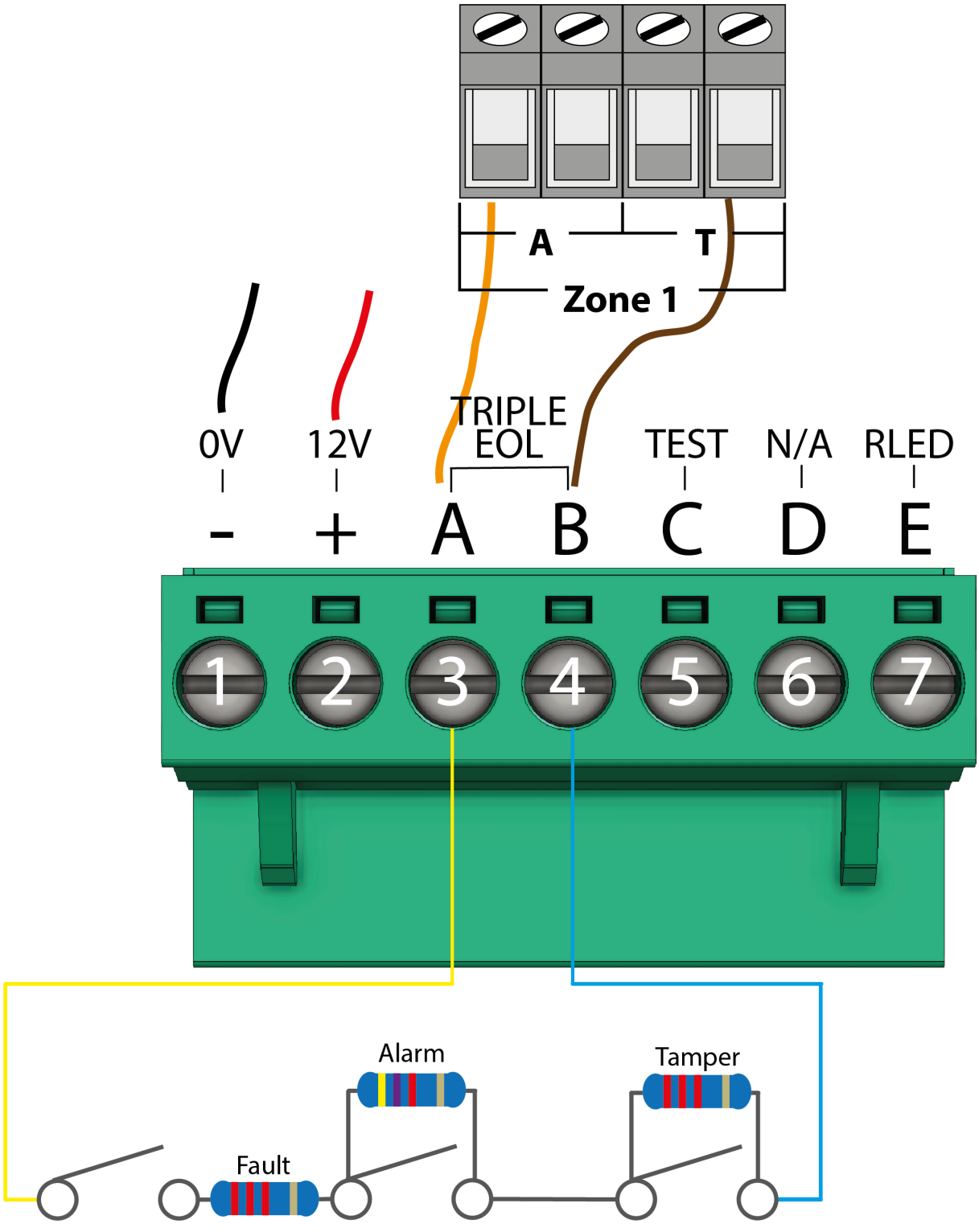
Terminal block identification

1. + to Aux 12V
2. - to Aux 0V
3. A - TEOL
4. B - TEOL
5. C – Test
6. D – N/A
7. RLED can be used to control the LED for walk testing.

Terminal block




0V
12V
TRIPLE EOL
TEST
N/A
RLED
A
B
C
D
E
A20
TRIPLE EOL
Capture A20
Type:AKEA0000
Part:AKA-0001
Approvals:
PD6662:2017
EN50131-1
EN50131-2-4
Grade 3 Class II
INCERT C-026-xxxx
Fault
2k2 3k 12k 6k8
Tamper
2k2 1k 4k7 5k6
Alarm
4k7 1k 6k8 5k6
LOW CW LOW
G3 DT AM
MW Range
Texecom Ltd, BB4 4PW, UK
Made in the UK
Fault
2k2 3k 12k 6k8
Tamper
2k2 1k 4k7 5k6
Alarm
4k7 1k 6k8 5k6


A
T
Zone 1
0V
12V
TRIPLE EOL
TEST
N/A
RLED
-
+
A
B
C
D
E
1
2
3
4
5
6
7
Alarm
Tamper
Fault

Fault Monitoring - A fault will be indicated by one of the following:

- Supply input voltage out of specification
- PIR sensor malfunction
- Microwave sensor malfunction

The fault will be cleared once the condition has been resolved.

This detector is capable of performing a self-test. There are two types of **self-test**; a local self-test and a remote self-test.

Local Self-Test

Local self-test is controlled by the detector and runs periodically to test the functionality of the circuitry. If the test is passed no indication is shown but if it fails then a fault will be signalled to the panel and the LED will flash purple (if enabled). The fault will remain until a local or remote test is passed.

Remote Self-Test

This test is initiated at the control panel. If the test is passed then the detector will signal an alarm. If the test fails then the detector will signal a fault. The fault will remain until a local or remote test is passed. There is a dedicated control type for this output on Texecom Premier panels, expanders and keypads for ease of installation. For more information on setting up an output to run this test please see the relevant manual.

Test Terminal

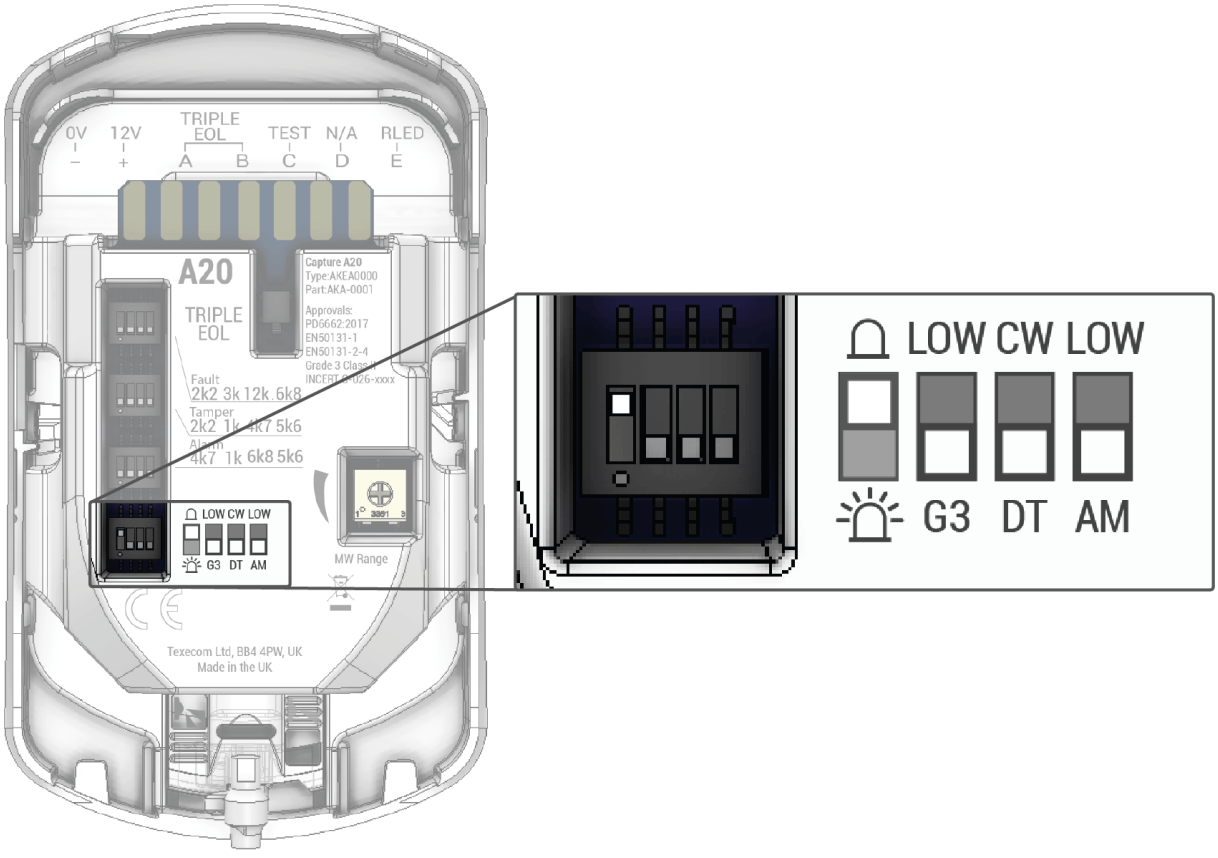
On Premier Elite systems there is a dedicated control type for this output on panels, expanders and keypads for ease of installation. Any zone with Test attribute enabled will be tested when the remote test function is initiated from the Cloud or locally. Any detector on a zone with the remote test attribute will be expected to go into alarm during the remote test, if it does not go into alarm, the detector will be reported as faulty. This facility is should be used in conjunction with system output type 47 ‘Detector Test’. The terminal should be wired to an output.

When using any other manufacturers control equipment please consult their instructions.

RLED terminal

The RLED (Remote LED) terminal can be used to control the LED for walk testing from the panel.

To use the RLED feature put switch 1 in the up position which will disable the LED. When an output is triggered 0V is applied to the RLED terminal which will enable the LED.

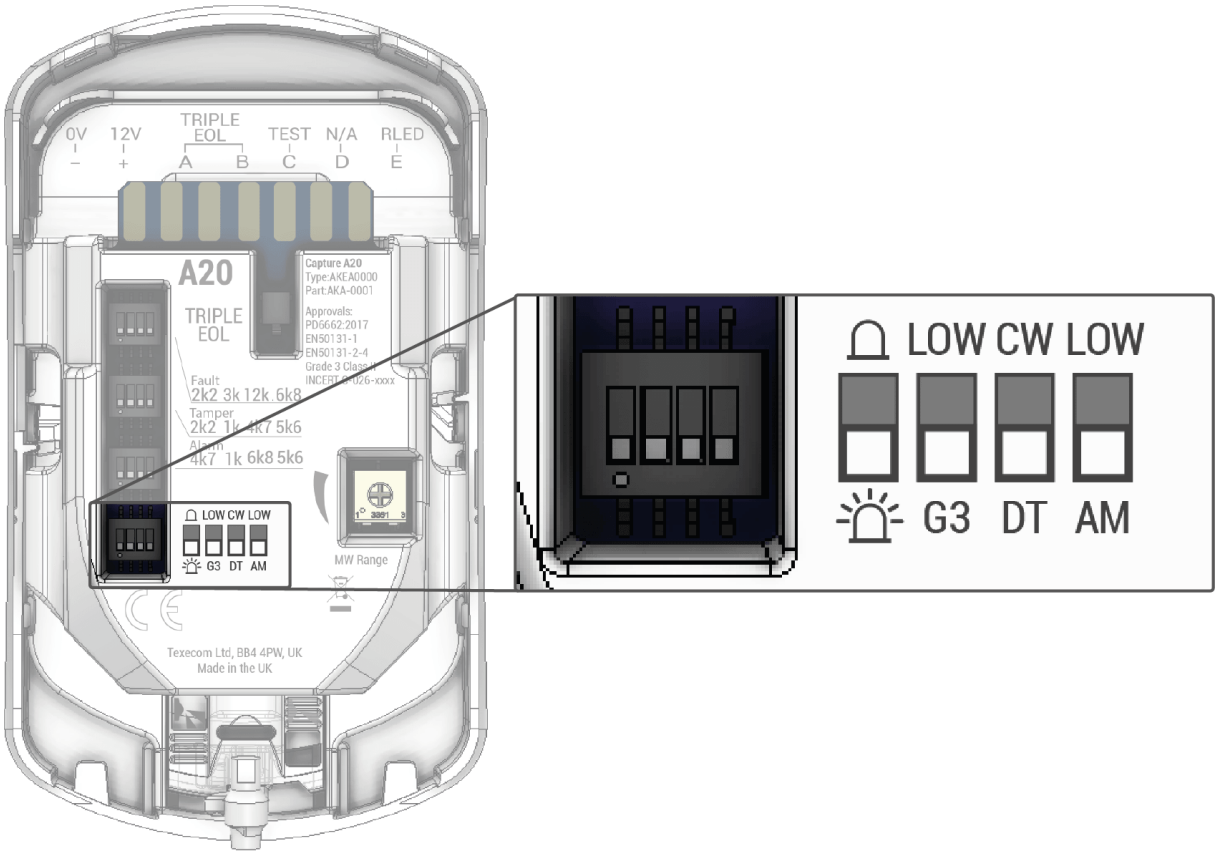


1.4 Mode selection

G3 all models

This is the default state for optimum catch performance and false activation immunity. Switch 2 should be in the down position.

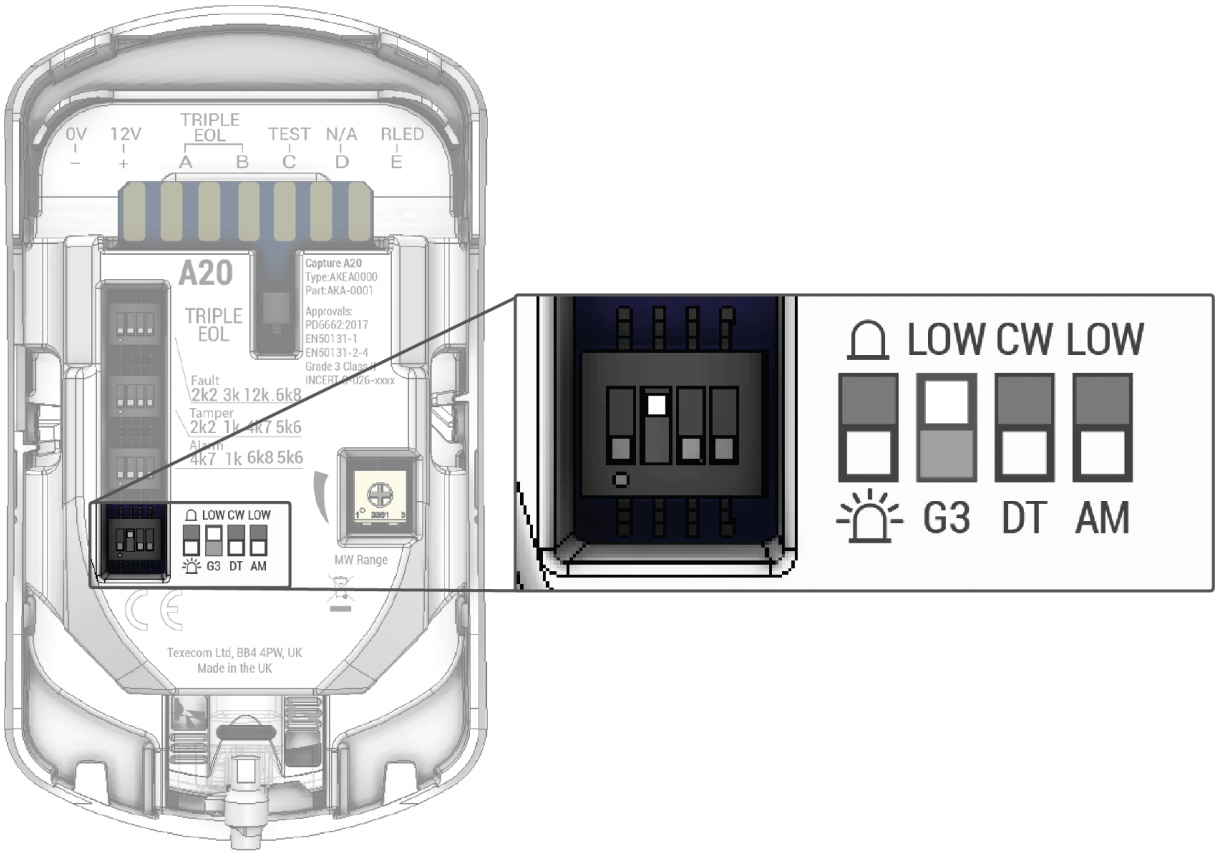
- A20 20m @ 85° compliant to EN50131-2-4, INCERT and PD6662
- CA 7m ⌀ 360° compliant to EN50131-2-4, INCERT and PD6662



LOW all models

Low mode lowers the sensitivity of the device and provides greater false alarm immunity. Thorough walk testing across the entire protected area should be carried out to ensure catch performance is as expected.

NOTE: Low mode is not EN G3 compliant

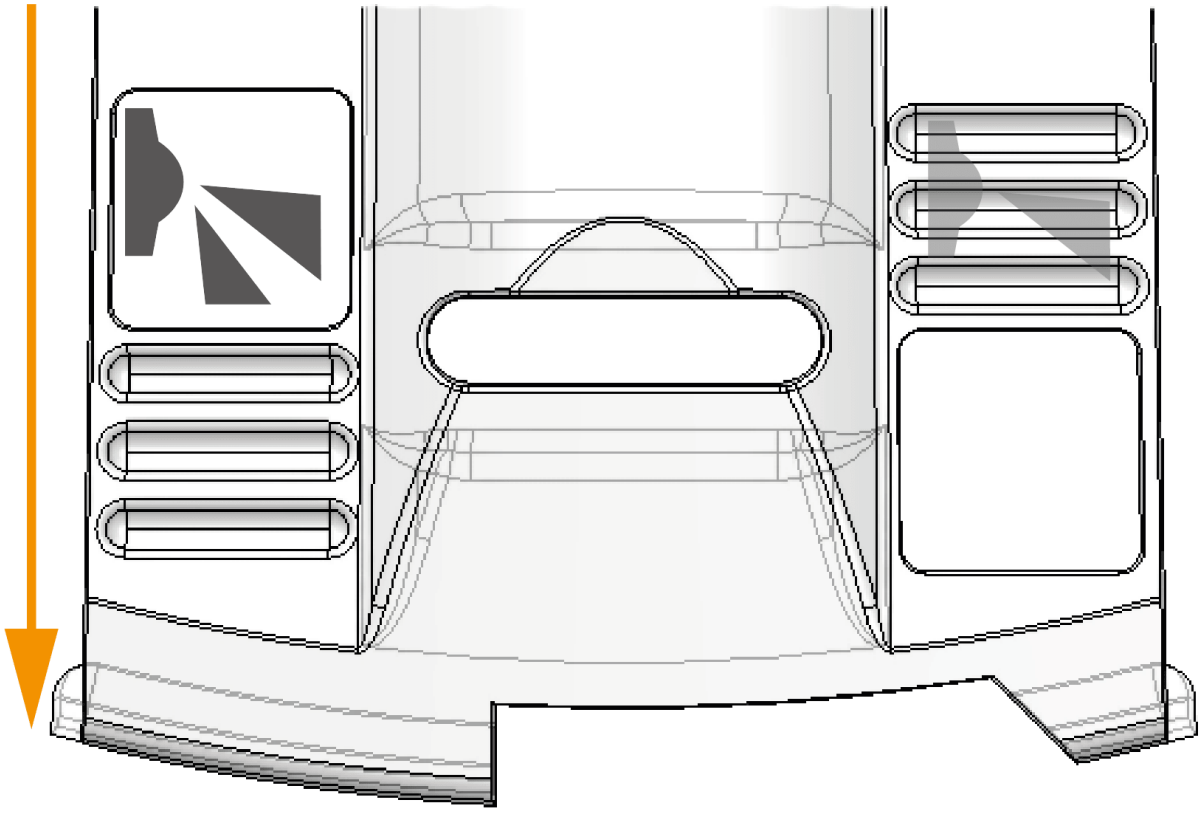


A20 Detection pattern slider

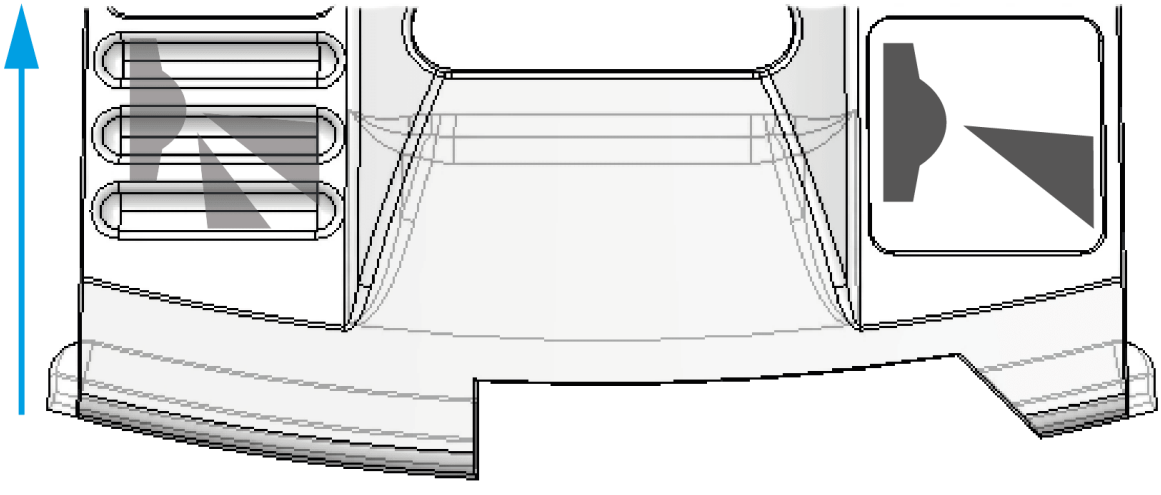
The creep zones can be removed from the detection pattern. Thorough walk testing across the entire protected area should be carried out to ensure catch performance is as expected.

NOTE: Moving the slider to the UP position is not EN G3 compliant.

G3 mode



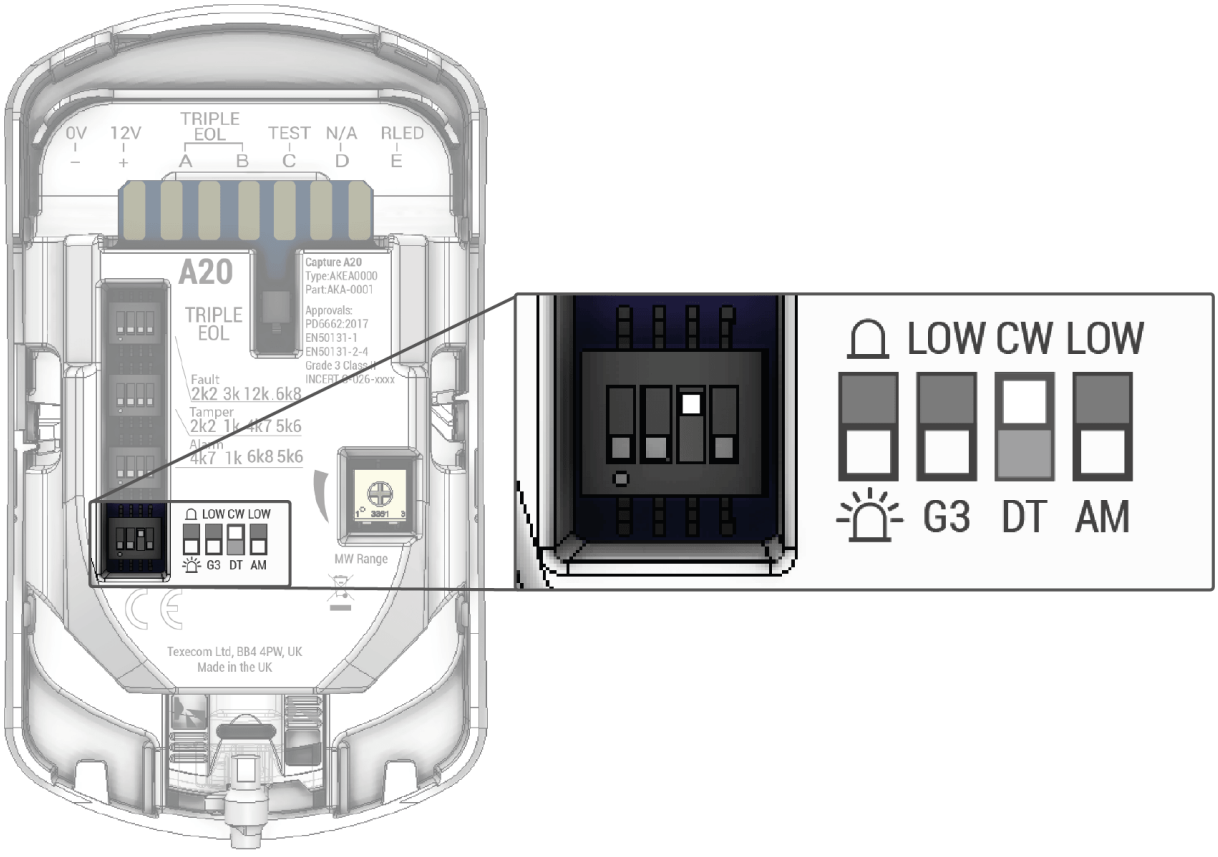
No creep zones



CloakWise™

CloakWise is a proprietary detection algorithm, unique to Texecom, that can distinguish the presence of an intruder even if the unauthorised person attempts to mask or ‘cloak’ their presence. Utilising advanced signal processing techniques to both microwave and PIR channels, the CloakWise technology can recognise cloaking attempts and detect accordingly. CW mode will also provide excellent detection when the ambient temperature is close to human body temperature.

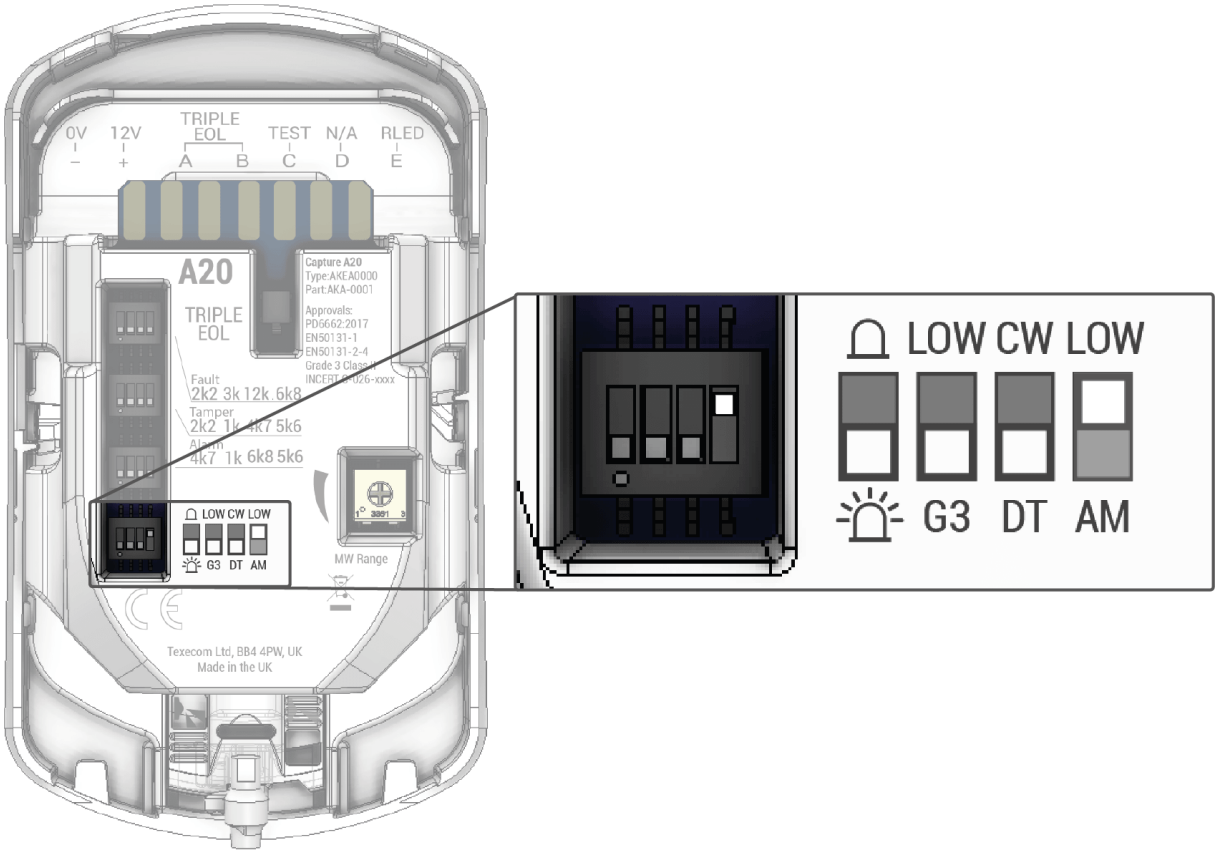
Note: Never use CloakWise with PET or LOW mode



LOW anti-mask mode

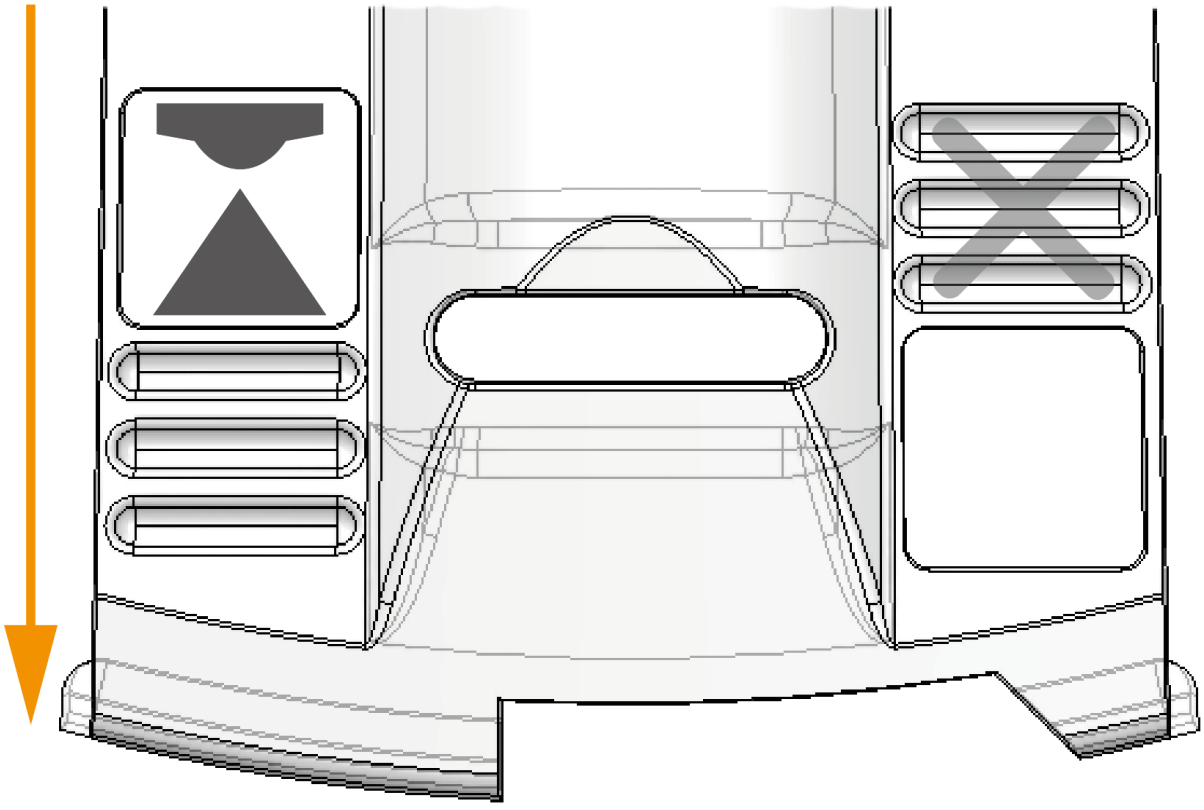
Low anti-mask mode lowers the sensitivity of the masking and provides greater false mask immunity. Thorough testing should be carried out to ensure catch performance is as expected.

NOTE: Low anti-mask mode is not EN G3 compliant.

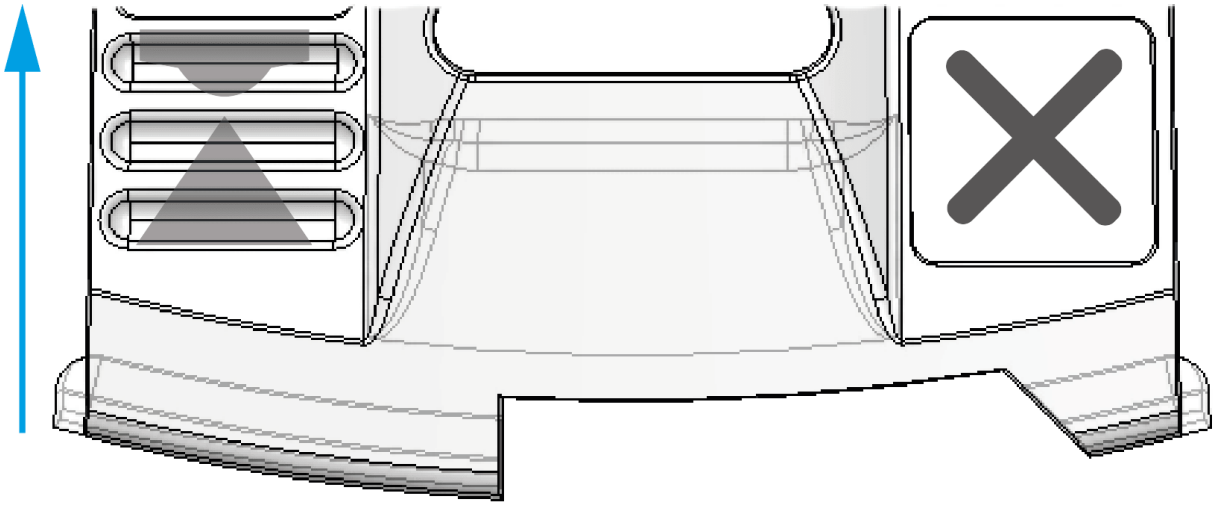


CA Slider

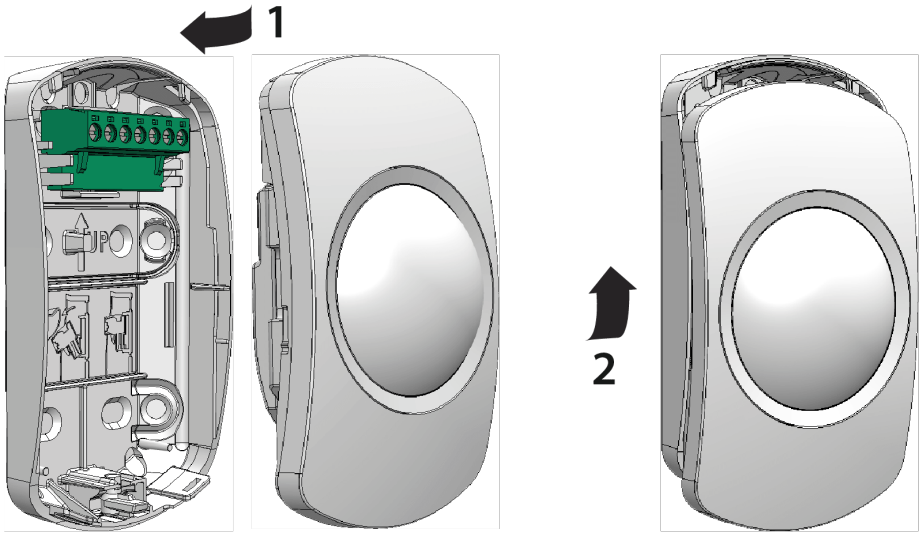
Leave in the default position

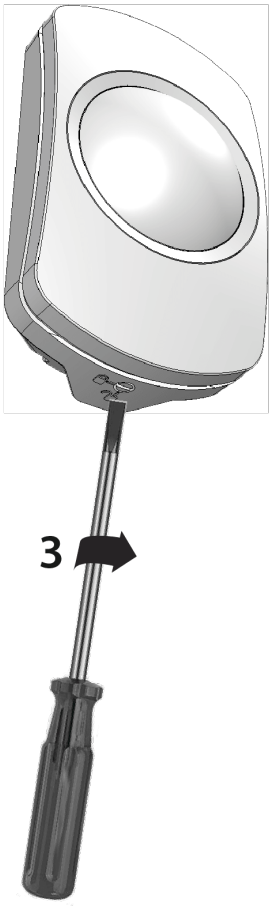


Do not use



1.5 Closing the device


1
2


3

1.6 Testing, commissioning and LED indications

Following initial power the device will take 180s to calibrate the anti-masking function. There should be no obstructions or movement in the field of view of the device whilst this calibration takes place.

When installation is complete, the device should be thoroughly walk tested to ensure the desired volumetric protection is being achieved, and any adjustments to the device are made to cater for the specific location and any local site conditions.

Note: If you need to make adjustments to any of the mode switches or the microwave range you will need to again power up the device for 180s with no activity in the protected area to allow the anti-masking to calibrate correctly.

Note: LED's are disabled during normal use if the RLED switch is ON.

State	Colour	Flash
Warm up		Flash 0.5s on 0.5s off
Alarm		
PIR only		
MW only		
Mask		Flashing
Fault		Flashing

Walk test

Walk test all devices to ensure you have adequate coverage, and that there are no obstructions in the detection area.

Microwave Range Adjustment

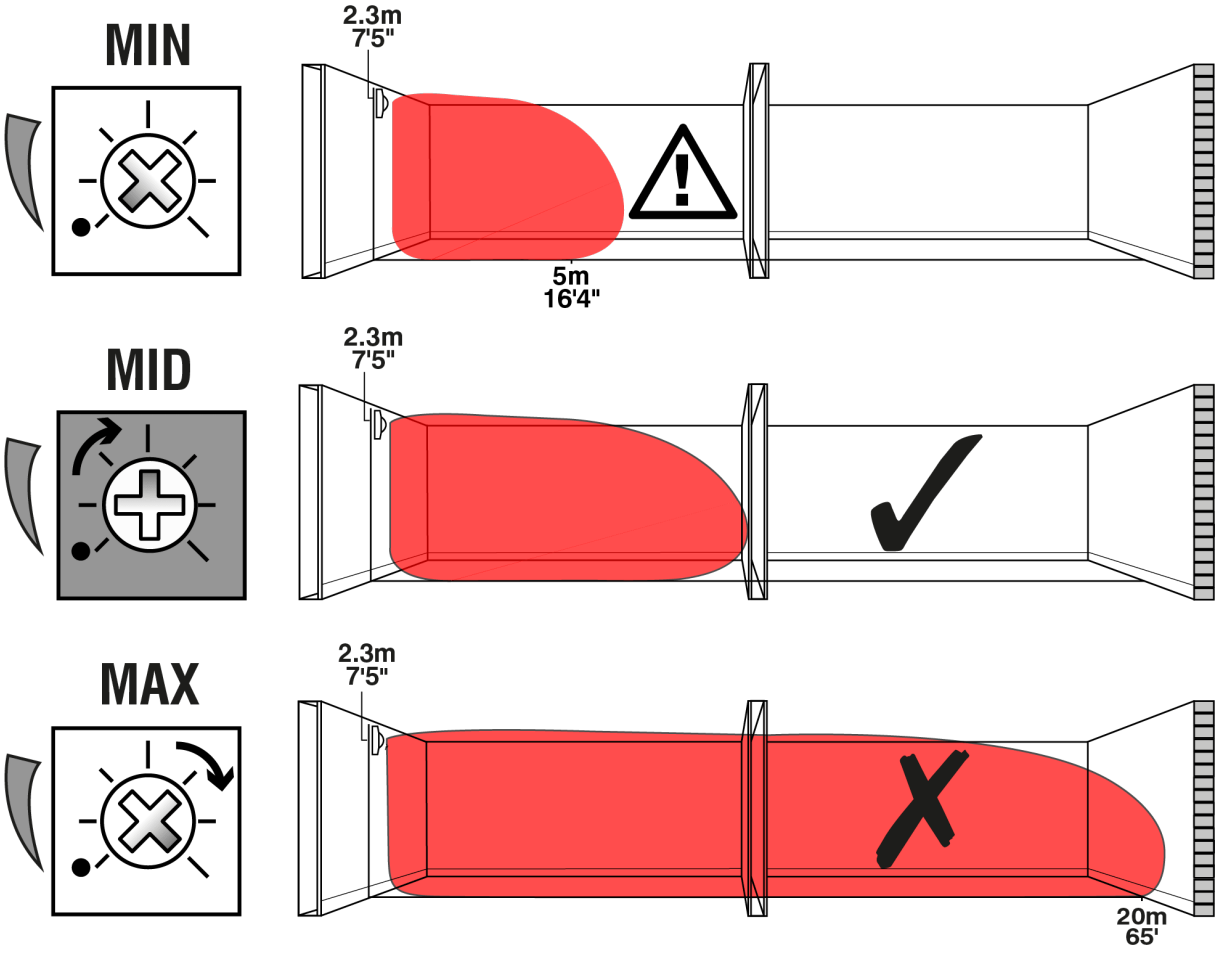
Devices are supplied with the microwave adjustment potentiometer set at the mid-point.

The microwave should be adjusted according the area to be protected, and great care should be taken to ensure the microwave cannot "see" beyond protected area. LED indication of the microwave pickup allows for accurate setting of the

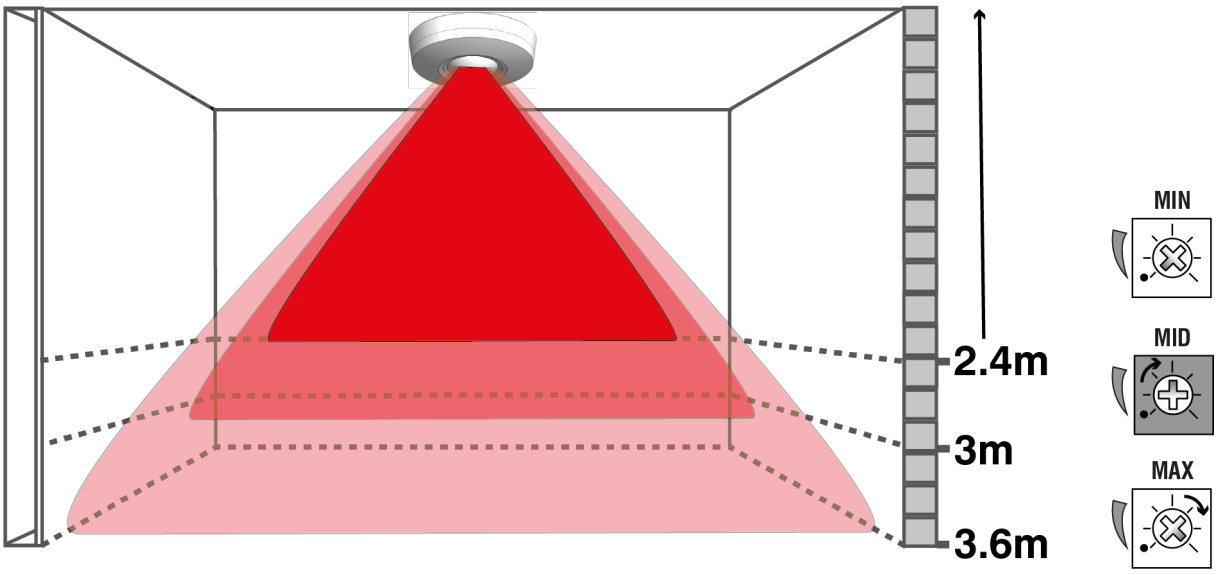
detection area.

- Power up the device (allow 180s with no activity in the protected area to allow for anti-mask calibration.)
- Walk test the device taking note of the LED indications.
- Adjust the Microwave range until the desired coverage is achieved. (you will need to calibrate the anti-mask as described previously if you remove power from the device to make adjustments.)

A20 microwave coverage



CA microwave coverage



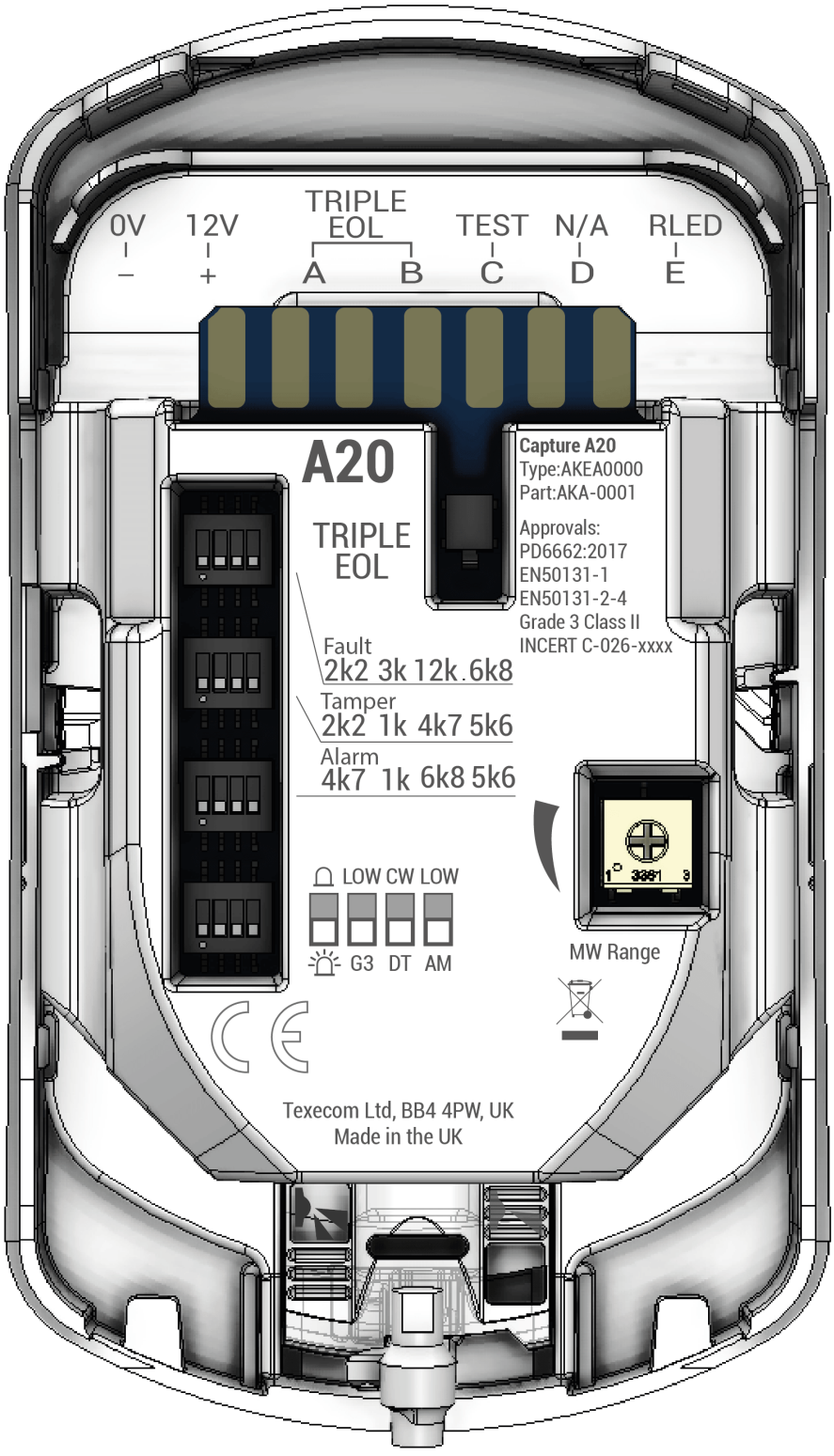
Resistance & voltage readings
Resistance and voltage readings should be recorded at the time of installation.

- Voltage readings should be taken at the device

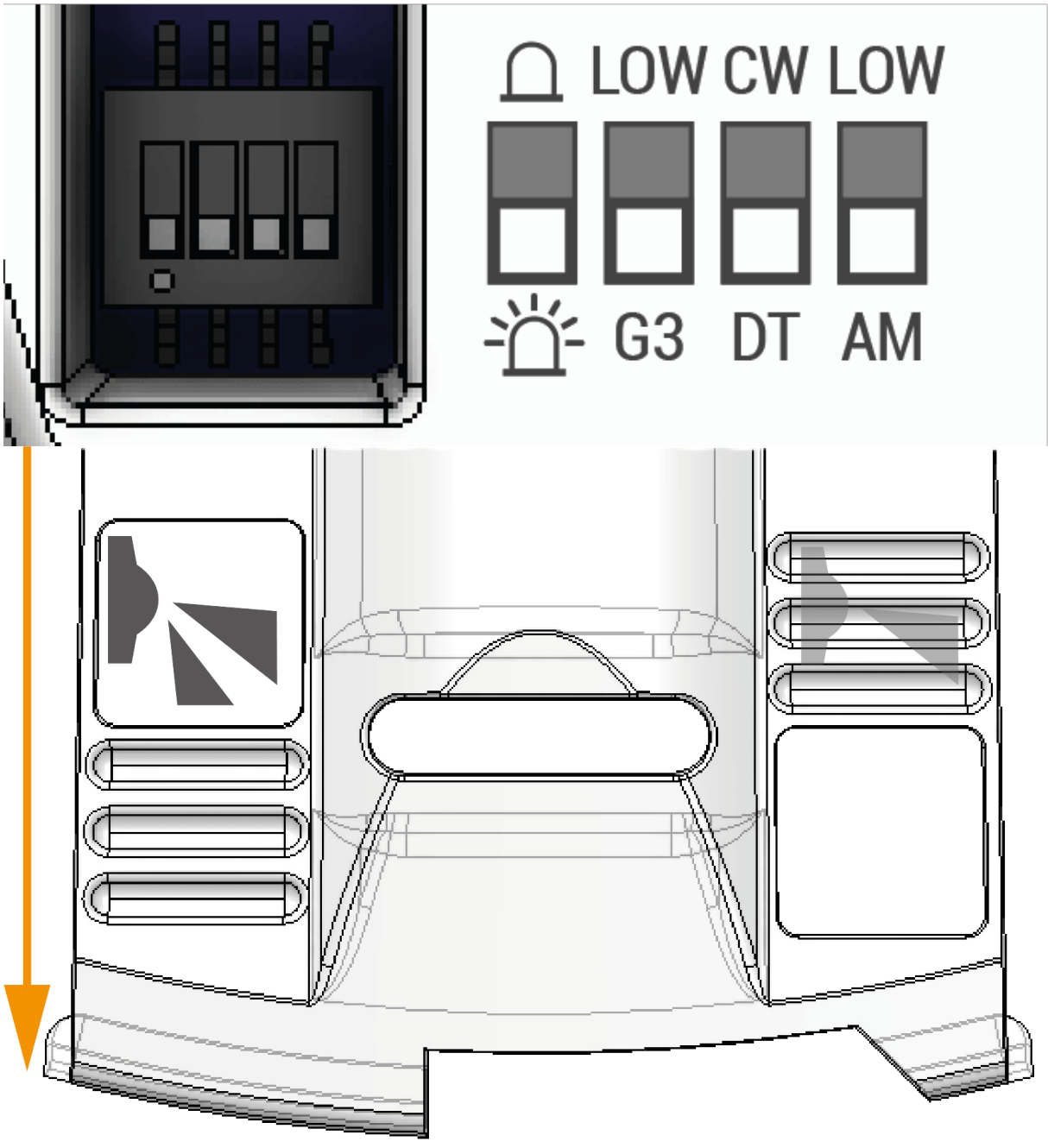
Resistance reading should be taken at the CIE or ACE where the circuit is terminated

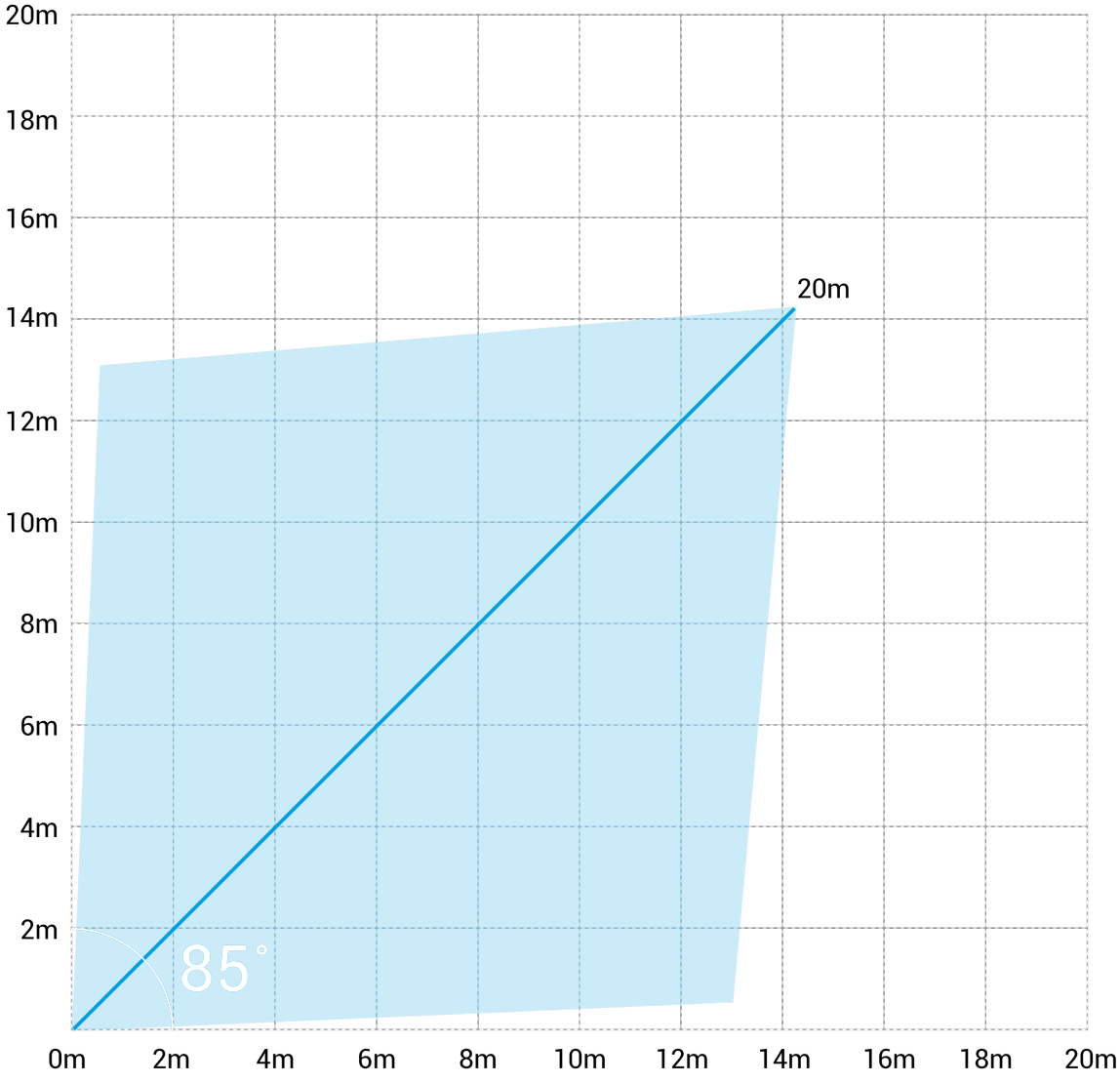
2.0 Variants

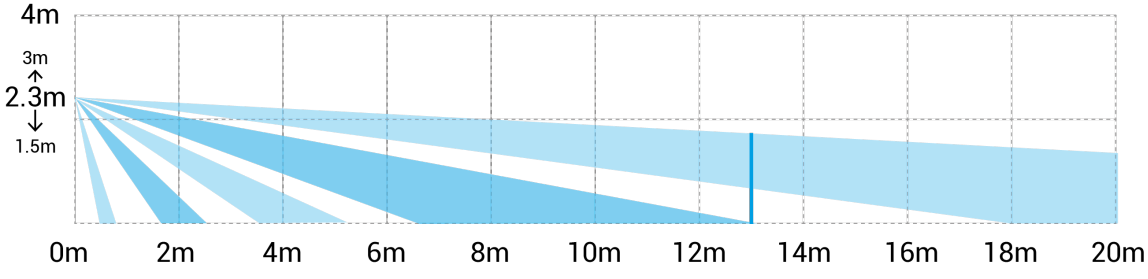
2.1 CAPTURE A20


0V
12V
TRIPLE EOL
TEST
N/A
RLED
–
+
A
B
C
D
E
A20
TRIPLE EOL
Capture A20
Type:AKEA0000
Part:AKA-0001
Approvals:
PD6662:2017
EN50131-1
EN50131-2-4
Grade 3 Class II
INCERT C-026-xxxx
Fault
2k2 3k 12k .6k8
Tamper
2k2 1k 4k7 5k6
Alarm
4k7 1k 6k8 5k6
LOW CW LOW
G3 DT AM
MW Range
Texecom Ltd, BB4 4PW, UK
Made in the UK

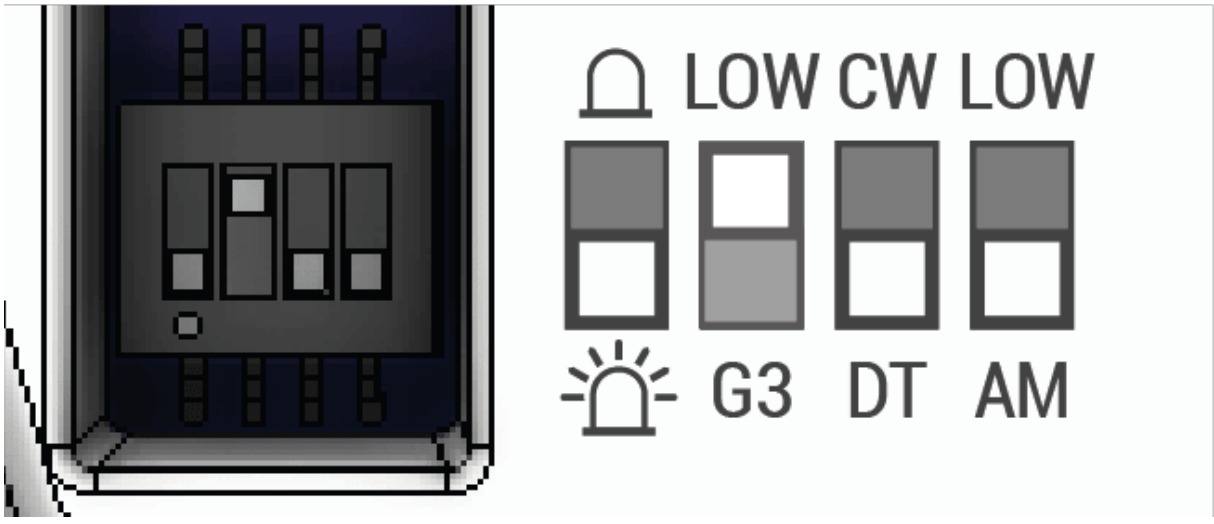
G3 coverage

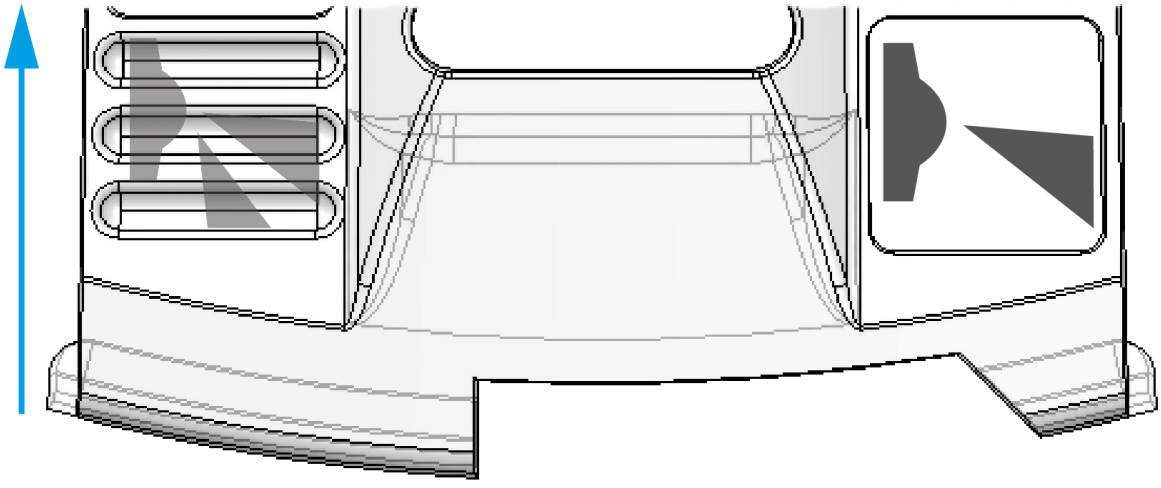


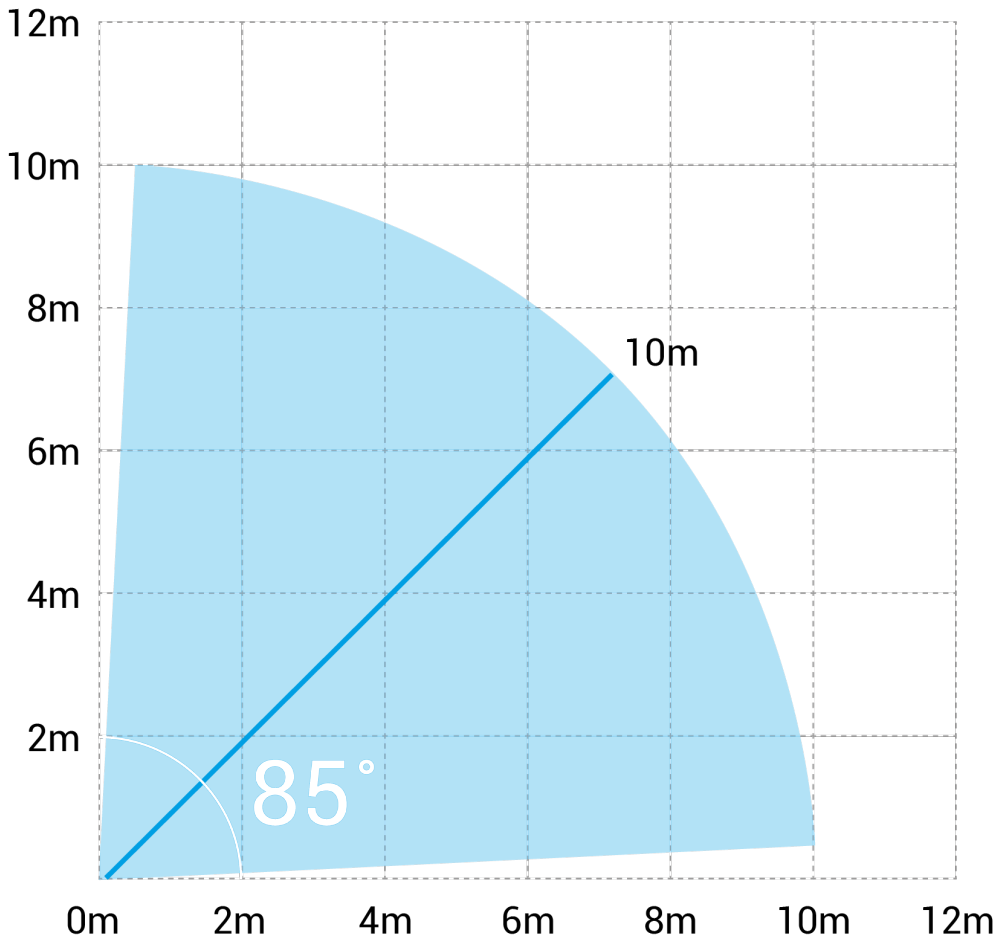

20m
18m
16m
14m
12m
10m
8m
6m
4m
2m
20m
85°
0m
2m
4m
6m
8m
10m
12m
14m
16m
18m
20m

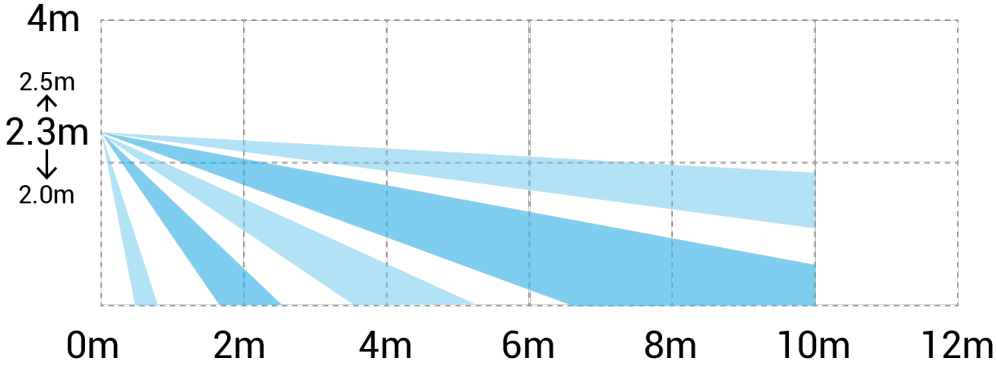

4m
3m
2.3m
1.5m
0m
2m
4m
6m
8m
10m
12m
14m
16m
18m
20m

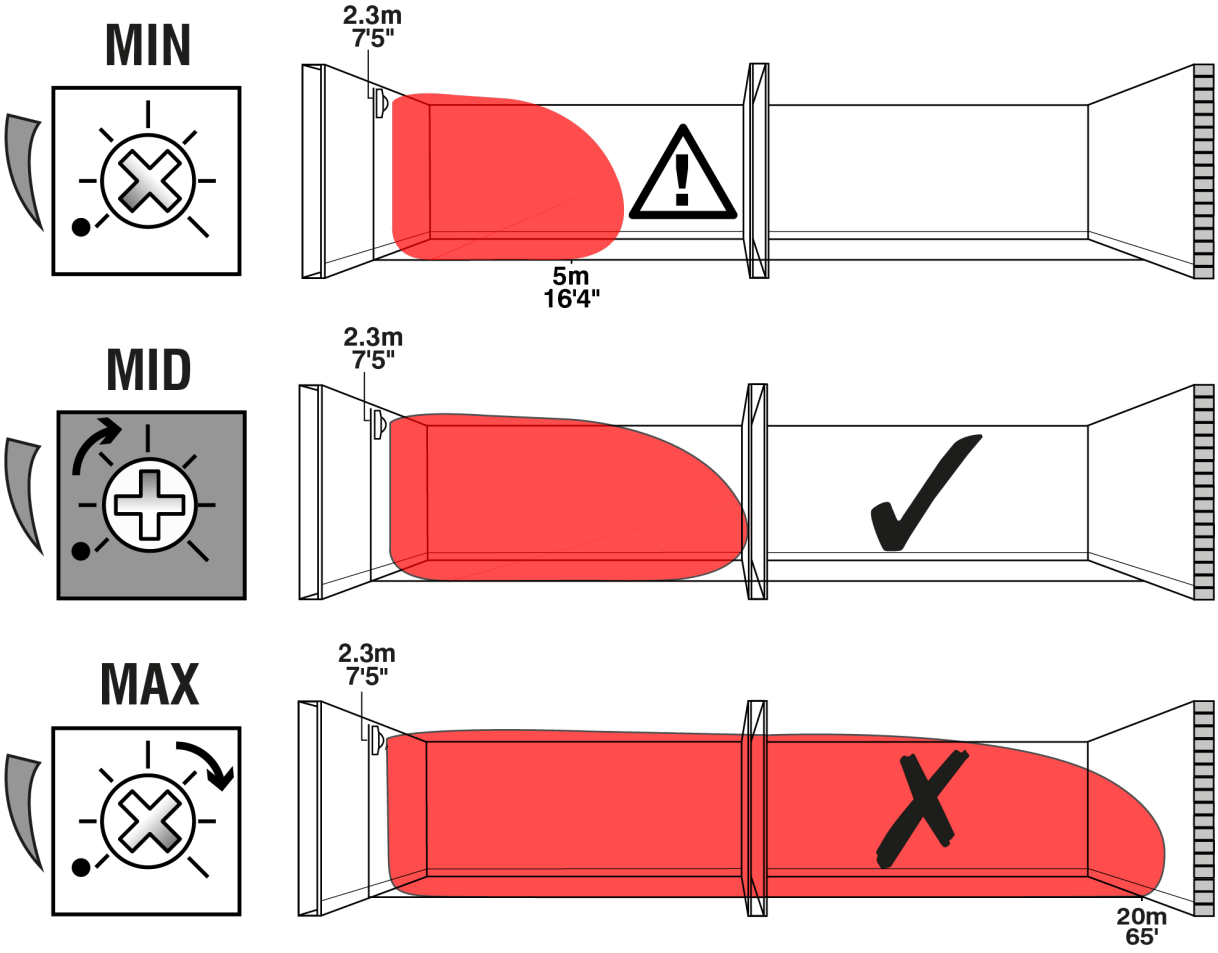
Low mode coverage



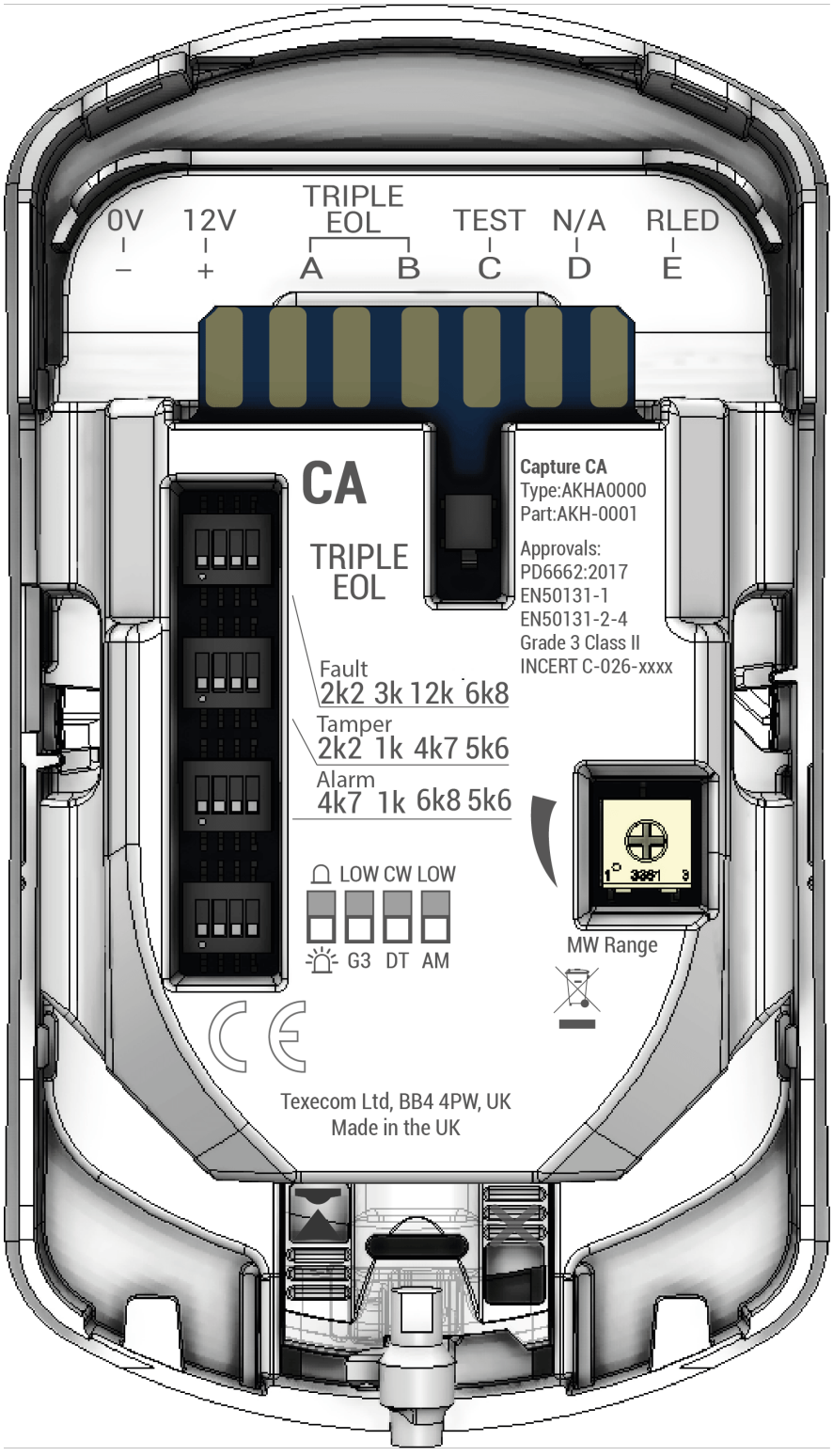



12m
10m
8m
6m
4m
2m
10m
85°
0m
2m
4m
6m
8m
10m
12m

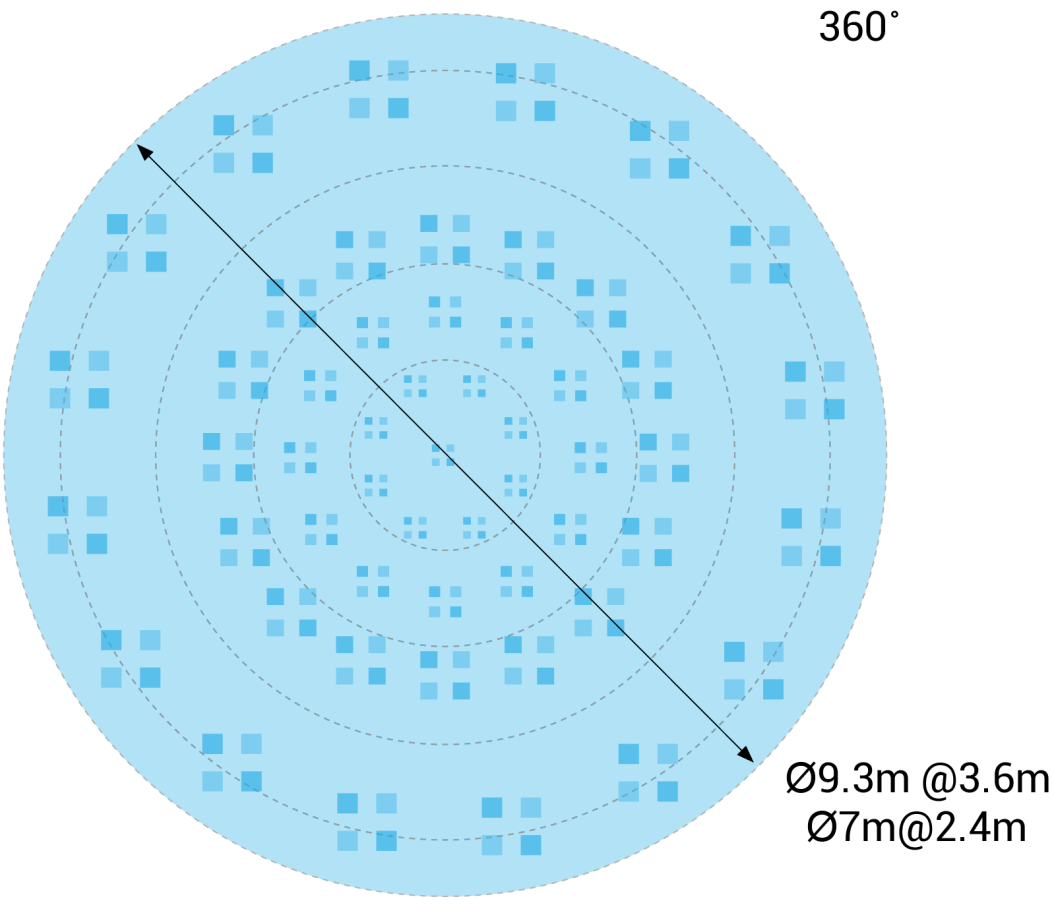

4m
2.5m
2.3m
2.0m
0m
2m
4m
6m
8m
10m
12m

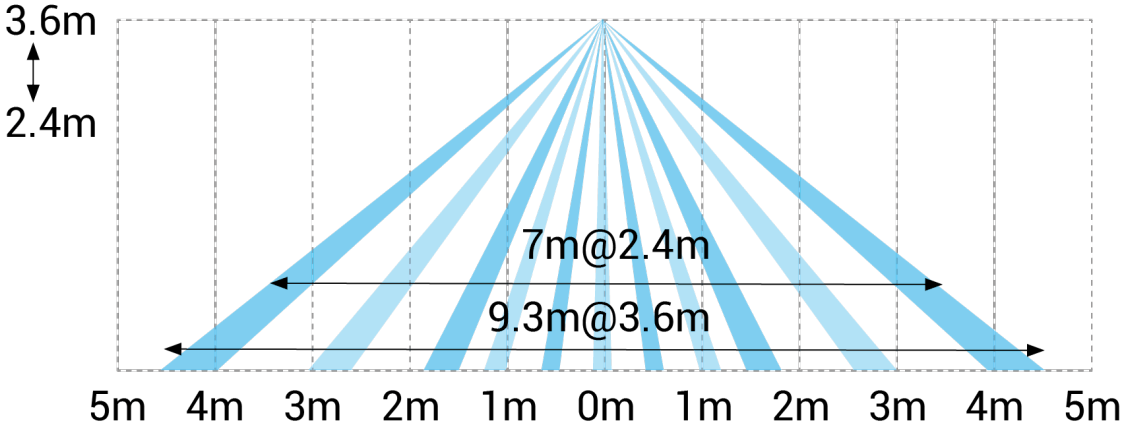


2.2 CAPTURE CA

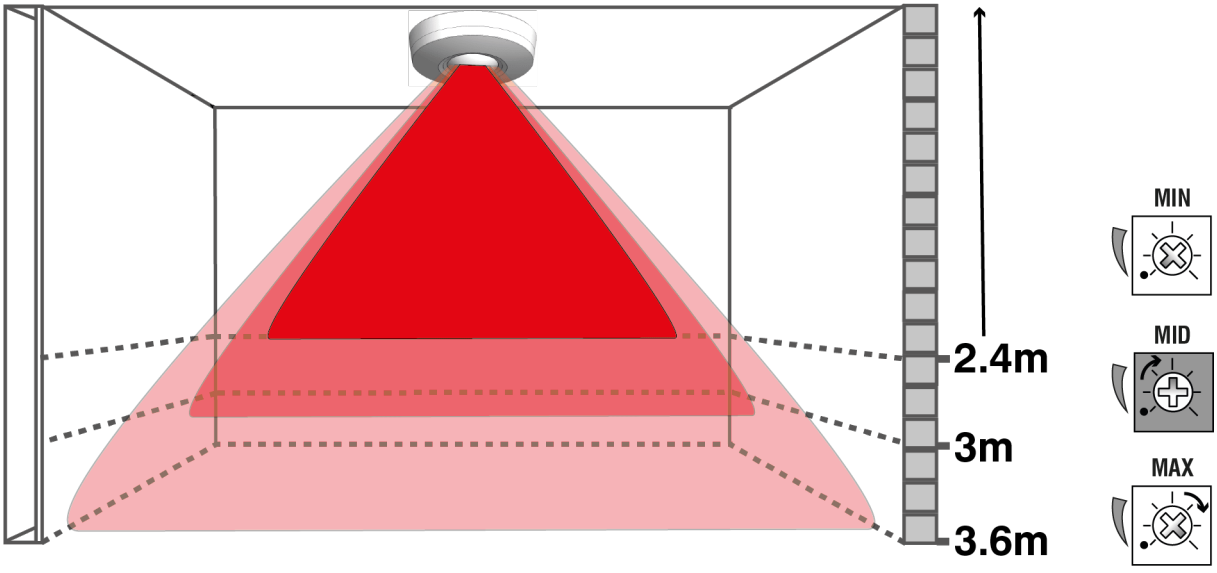

0V
12V
TRIPLE EOL
TEST
N/A
RLED
–
+
A
B
C
D
E
CA
TRIPLE EOL
Capture CA
Type:AKHA0000
Part:AKH-0001
Approvals:
PD6662:2017
EN50131-1
EN50131-2-4
Grade 3 Class II
INCERT C-026-xxxx
Fault
2k2 3k 12k 6k8
Tamper
2k2 1k 4k7 5k6
Alarm
4k7 1k 6k8 5k6
LOW CW LOW
G3 DT AM
MW Range
Texecom Ltd, BB4 4PW, UK
Made in the UK

PIR


360˚
Ø9.3m @3.6m
Ø7m@2.4m


3.6m
2.4m
7m@2.4m
9.3m@3.6m
5m
4m
3m
2m
1m
0m
1m
2m
3m
4m
5m

Microwave



3.0 Accessories

3.1 Branding

Branding is available for wall mount devices from our website CLICK HERE and consists of a printed insert and a clear cover which fits over the front of the device and holds the insert in place.

Note: The cover should be removed before sliding the front of the device off for servicing or adjustment.

ABC ALARMS

ABC ALARMS

Bespoke branding.
Captured.
ABC ALARMS

3.2 Optional wall or ceiling mount brackets

Part Numbers

Pack of 10 brackets AFU-0004 (not compliant with INCERT EN50131-2-2 and EN50131-2-4)

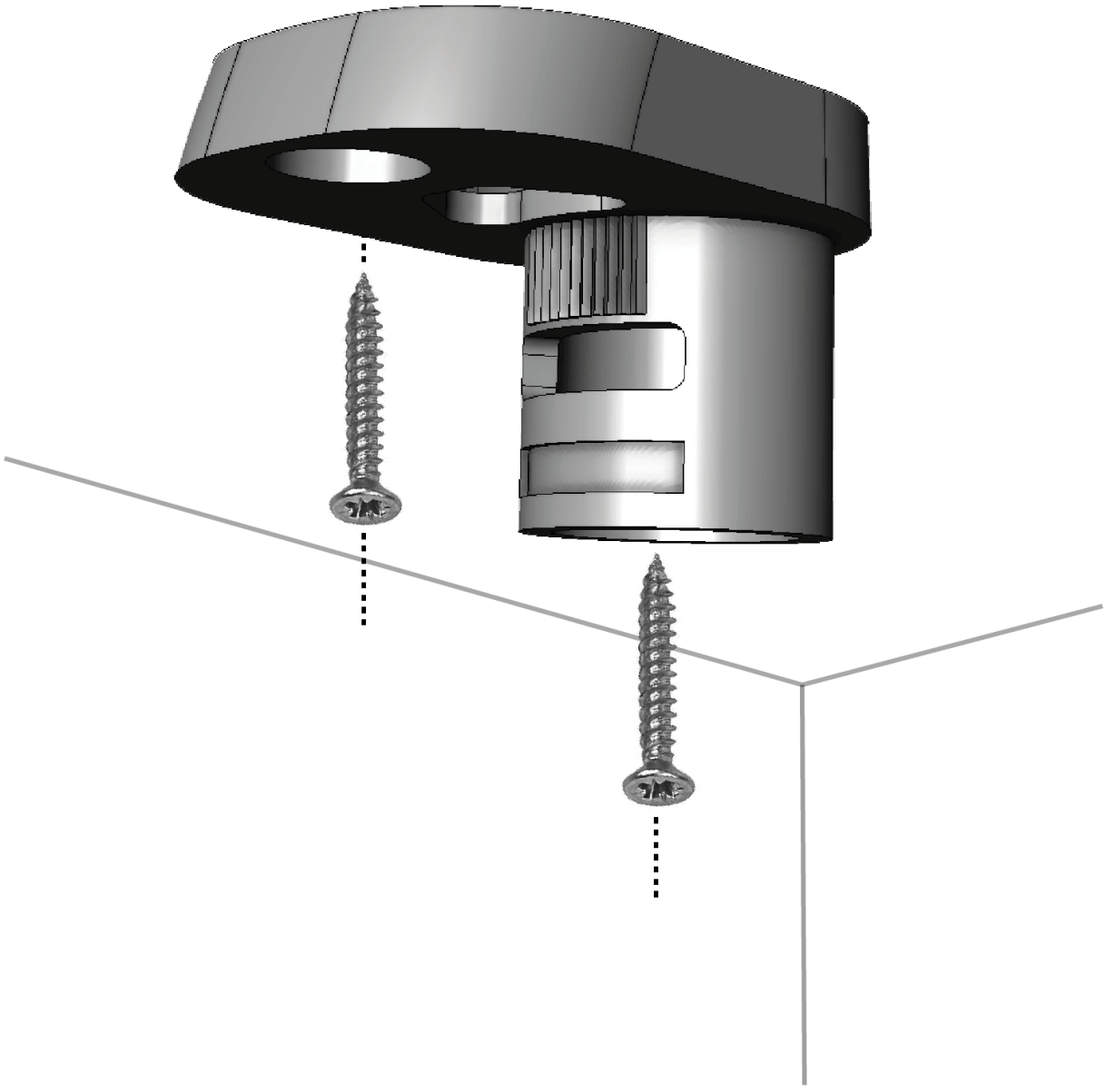
Screws & Fixings

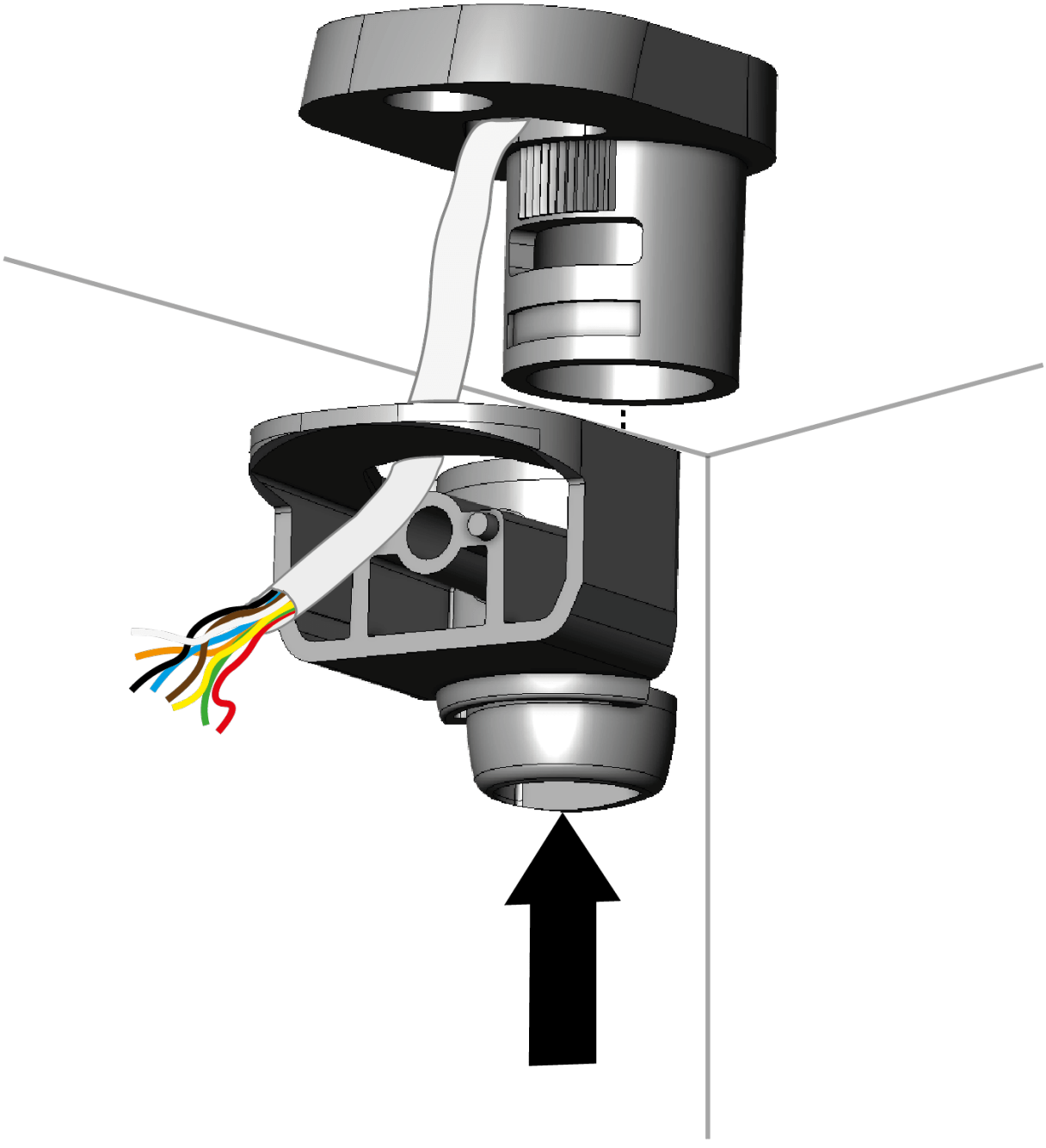
To ensure maximum stability 2 screws should be used for either mounting option.

Dependent on the mounting substrate, suitable fixings may be required. The size and type will depend on the choice of fixing screw.

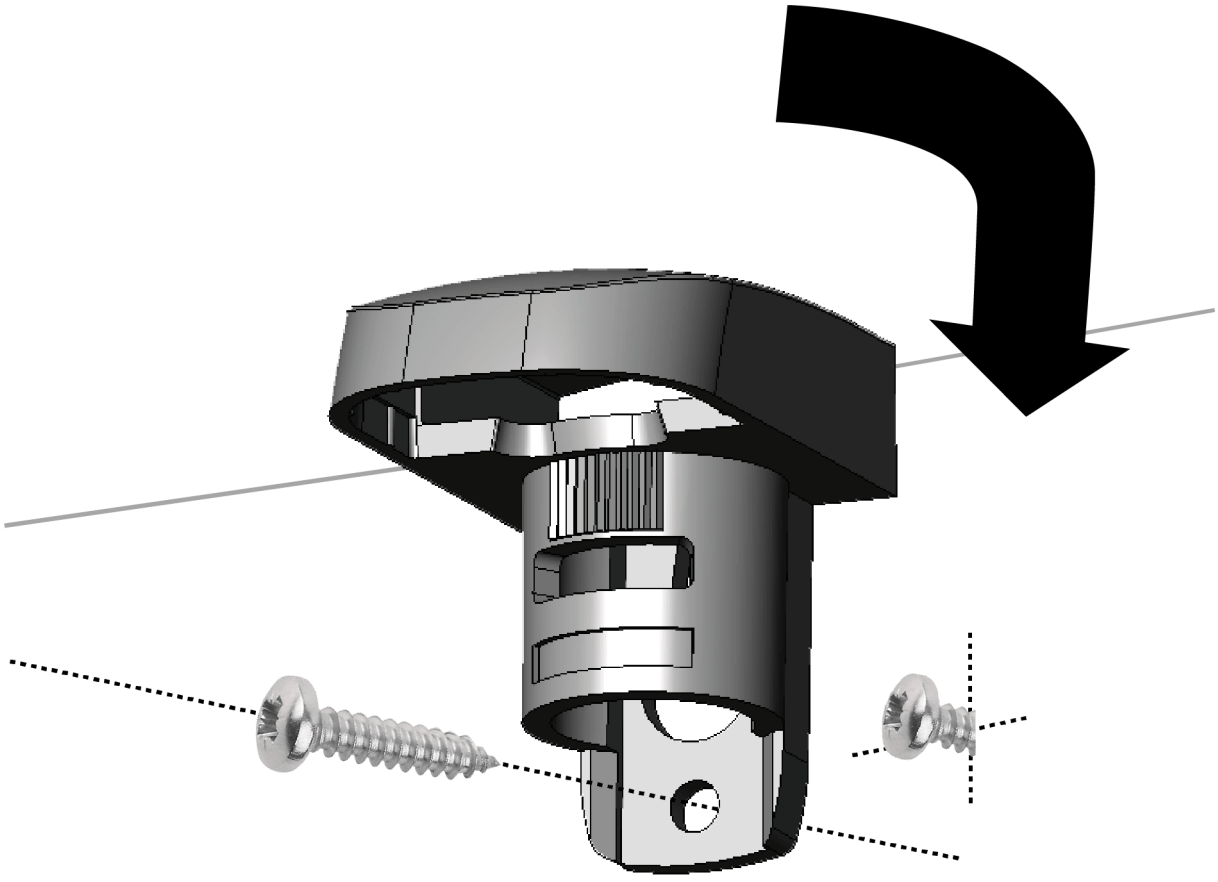
- Ceiling mount
- Minimum screw size 3.5 X 16mm CSK
- Maximum screw size 4.0 X 70mm CSK
- Wall mount
- Minimum screw size 3.0 X 12mm Pan head
- Maximum screw size 3.5 X 40mm Pan head

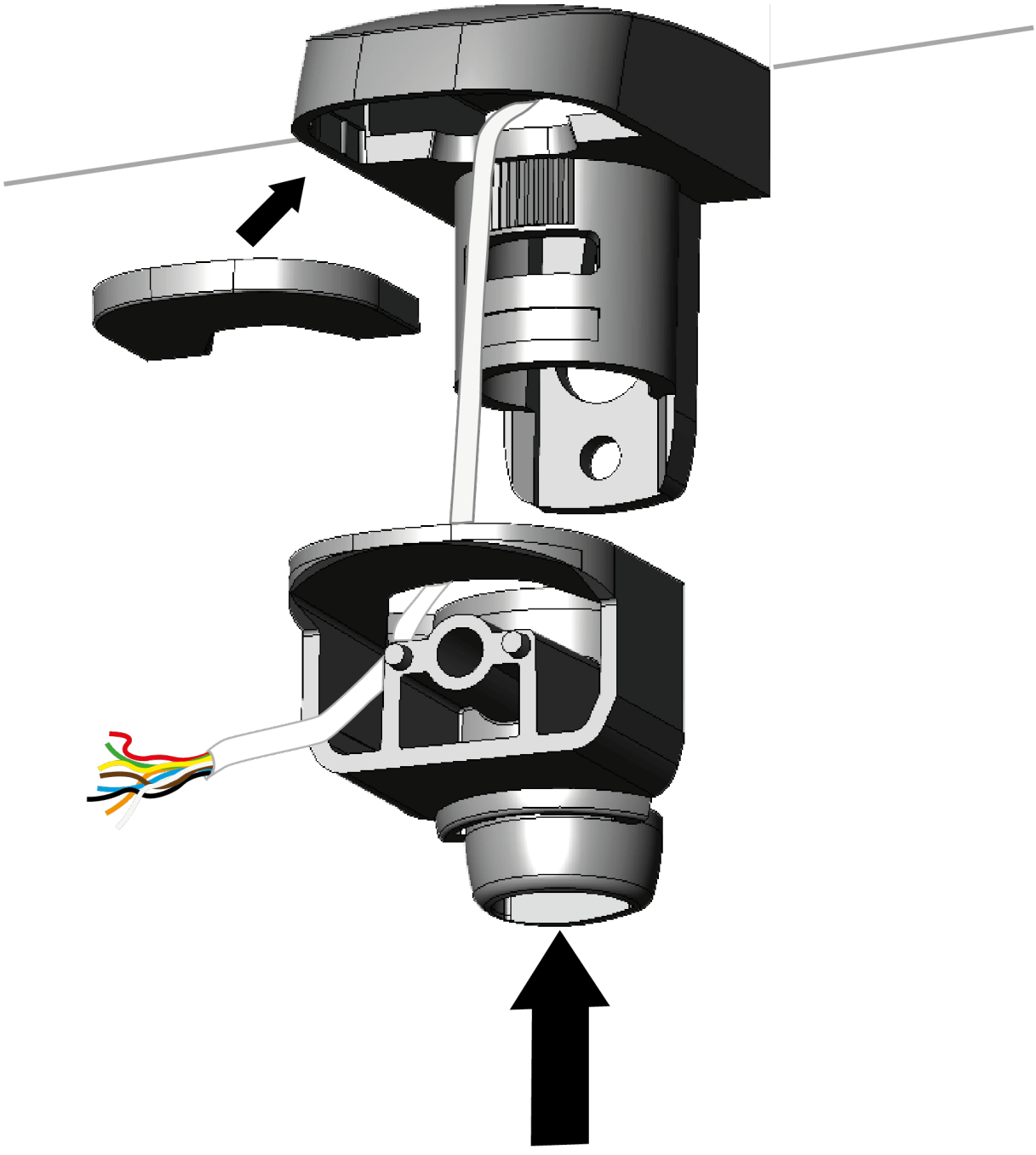
Ceiling mount installation

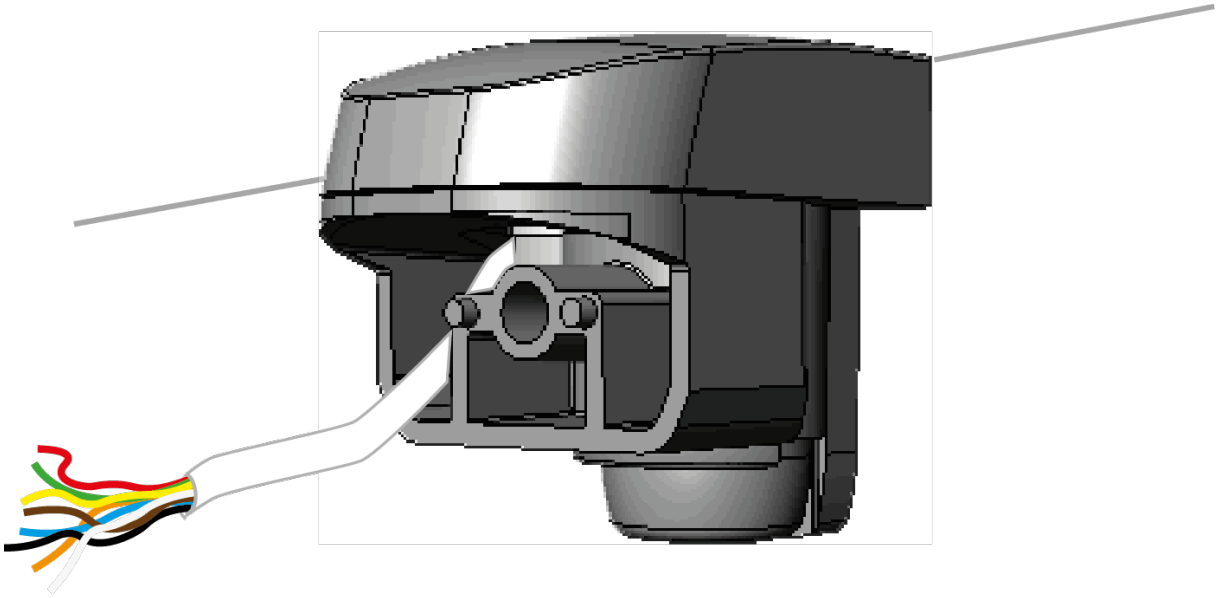




Wall mount installation







4.0 Specifications

Specifications	**A20,CA**
Alarm system	EN50131-2-4, EN50131-1, PD6662:2017 Grade 3 Class II
Product Type	AKEA0000 (A20) AKHA0000 (CA
Voltage	9-15Vdc
Maximum current (measured at 12V)	A20 – 50mA CA – 45.3mA
Quiescent Current (measured at 12V	A20 – 24mA CA – 25mA
Relative Humidity	0-95% non-condensing
Operating Temperature	-10°C to 55°C
Weight	A20, CA (no ring or fascia) – 110g A20 (with fascia and insert) – 128g CA (with ring) – 167g

Dimensions	Wall Mount: Width 65mm, Height 112mm, Depth 43mm. Ceiling Mount: 125mm Diameter, Depth 43mm.

Note: To be used with PSU's that have a current limit of 5A or below.

Note: Product is designed for indoor use only.

5.0 Legal information

5.1 Supplier

Texecom Ltd, Haslingden, Lancashire, BB4 4PW, UK.

Made in England

5.2 WEEE Directive

2012/19/EU (WEEE Directive): Products marked with this symbol cannot be disposed of as unsorted municipal waste in the European Union. To recycle, return this product to your local supplier upon the purchase of equivalent new equipment, or dispose of it at designated collection points. For more information see: www.recyclethis.info.

5.3 Maintenance

Test yearly by the installer

5.4 Warranty

Lifetime warranty. As the CAPTURE A20, CA is not a complete alarm system, but only a part thereof, Texecom cannot accept responsibility or liability for any damages whatsoever based on a claim that the CAPTURE A20, CA failed to function correctly. Due to our policy of continuous improvement Texecom reserves the right

to change specification without prior notice. Texecom provides a **10 year warranty** to end user customers who purchase new products in its Capture range (**Products**). Further details of this 10 year warranty are set out here https://www.texe.com/uk/uploads/Capture_Lifetime_Warranty_20201023.pdf A current list of products can be found here: https://www.capture.texe.com/select

Hereby, Texecom declares that the equipment type : AKEA0000 (A20) AKHA0000 (CA), are in compliance with the Electro-magnetic Compatibility(EMC) Directive 2014/30/EU. The full EU declaration of conformity is available here: https://www.texe.com/cert/doc/

Certified by KIWA (Telefication) B.V.