

# Guardall Detectors GP15, GQ20, GD20, GCQ and GCD Installation Manual

**Quick Installation** 

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.

### Figure 1: Locking Mechanism



#### Figure 2: Ceiling facia removal



# 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





#### Screws & Fixing

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 & flat surface mount





#### Cable routing



#### **Terminal Block tilt**



### Wiring and EOL selection

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.

EOL wiring is considered the most secure. 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 O/C position can be used for other wiring types, including use of resistor values which are not included on the device Terminal block identification.

#### **Terminal block identification**

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

#### **Terminal block**







#### **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.



### **Mode selection**

#### G2 all models

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

- GP15 15m @ 90° compliant to EN50131-2-2, INCERT and PD6662
- GQ20 20m @ 90° compliant to EN50131-2-2, INCERT and PD6662
- GD20 20m @ 85° compliant to EN50131-2-4, INCERT and PD6662



#### Pet Mode (GP15, GQ20 & GD20)

When using Pet mode, switch 2 and the lens obscuration slider should both be placed in the UP position.

- GP15 10mtr @ 90° up to 35kg pet immunity
- GQ20 12mtr @ 90° up to 20Kg pet immunity
- GD20 12mtr @ 85° up to 20Kg pet immunity

#### Note: Never use CloakWise with PET mode.



#### CloakWise™ GD20 & GCD

CloakWise is a proprietary detection algorithm 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.

GCQ & GCD Slider

Leave in the default position





Do not use



### Testing, commissioning & LED indications

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

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 on GD20/GCD		
MW only on GD20/GCD		

#### Walk test

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

#### GD20 & GCD 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
- Walk test the device taking note of the LED indications.
- Adjust the Microwave range until the desired coverage is achieved.

#### **GD20 Microwave Coverage**



**GCD 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.

### Variants Guardall GP15

Guardall GP15



#### G2 Coverage







Guardall GQ20



#### G2 Coverage





Pet Coverage



Guardall GD20



G2 Coverage







### Guardall GCQ







### DO NOT USE









## Optional wall or ceiling mount brackets

#### Part Numbers

Pack of 10 brackets AFU-0004

#### **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 No.6-No.8 CSK 15-25mm

Wall mount No.6 Pan head 15-25mm

#### **Ceiling mount installation**



. Boundary

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### **Specification**

	Specifications	GP15, GQ20, GD20, GCQ, GCD
	Alarm System	EN50131-2-2 (GP15, GQ20, GCQ) EN50131-2-4 (GD20, GCD), EN50131-1, PD6662:2017 Grade 2 Class II
	Product Type	AKB-0004 (GP15) AKC-0004 (GQ20) AKD- 0004 (GD20) AKF-0004 (GCQ) AKG-0004 (GCD)
Bay	Operating Voltage	9-15Vdc (12V + - 25%)
	Maximum Current (measured at 12V)	GP15, Q20, GCQ – 12mA GD20 – 13mA GCD – 17mA
	Quiescent Current (measured at 12V)	GP15, GQ20, GCQ – 9.3mA GD20 – 11.5mA GCD – 15.5mA
	Relative Humidity Operating Temperature Weight	0-95% non-condensing
		-10°C to 55°
-		GP15, GQ20, GCQ (no ring or fascia) $-106g$ GP15, GQ20 (with fascia and insert) $-124g$ GCQ (with ring) $-163g$ GD20, CD (no ring or fascia) $-110g$ GD20 (with fascia and insert) $-128g$ GCD (with ring) $-167g$
	Dimensions	Wall Mount: Width 65mm, Height 112mm, Depth 43mm. Ceiling Mount: 125mm Diameter, Depth 43mm.

## **Regulatory information**

Manufacturer	Made in U.K for Carrier Fire & Security Australia Pty Ltd
	10 Ferntree Place, Notting Hill, VIC, 3168, Australia
Year of manufacture	The first two digits of the product serial number (located on the product identification label) are the year of manufacture.
Compliance	

### Disclaimer

The customer is responsible for testing to determine the suitability of this product for specific applications. In no event is Carrier Fire & Security Australia Pty Ltd. responsible or liable for any damages incurred by the buyer or any third party arising from its use, or their inability to use the product.

Guardall is a Carrier brand.

## **Contact information**

For contact information, see www.firesecurityproducts.com.au