# GJD SAPPHIRE MK3
## LIGHTING CONTROLLER

221199

The GJD SAPPHIRE is a single zone, multi-sensor security lighting controller designed for indoor use only and is compatible with:
GJD OPAL XL and GJD ELITE outdoor detectors.
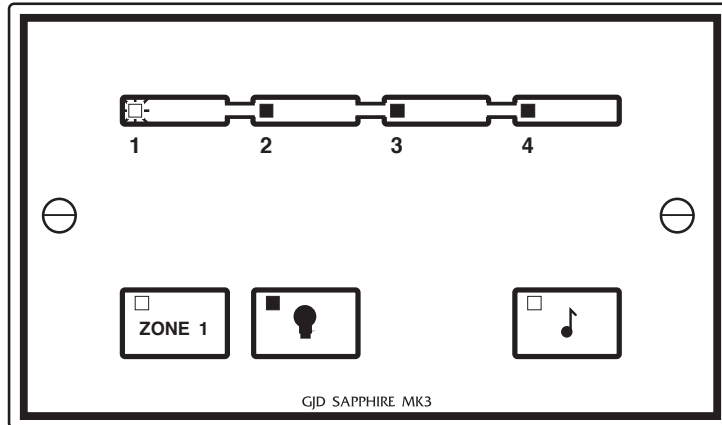GJD RADIUS LUX indoor detector.



Illustration shows normal button selection - zone 1 detector 1 active

**SPECIFICATIONS:** CE CLASS 2 independently mounted control.

SUPPLY:          230Vac 50Hz via ELCB/MCB. - unit fused at 10A

INDICATION:      4 x 24 hr detector indicators per zone - pulsed during detection - and steady after detection for the duration of the light on timer.

AUDIBLE:         Internal sounder - button selectable sounds with detection day and night.

CONTROL:         3 x Selection buttons with individual indicators.

OPTIONS:         AUX output.

SIZE:            146 x 86 x 56 mm

MOUNTING:        Mount in a clean dry location on a secure flat surface.
Indoor use only

TEMPERATURE:     -10 to + 55 centigrade.

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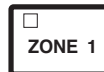## OPERATING THE GJD SAPPHIRE MK3 LIGHTING CONTROLLER

When the unit is first connected or if the electrical supply is interrupted, indicators 1 and 4 will flash for 1 minute whilst the system settles.
Pressing any button during this time will start normal operation.

When a detection takes place day or night the relevant detector indicator flickers and the beep sounds, if selected, whilst detection takes place. Multiple beeps indicate that more than one detection has taken place. Detector indicator/s will stay lit for a preset time after detection.

During darkness, lighting is automatically controlled on detection.

Pressing any button will toggle the respective indicator on and off.

□ = lit      ☼ = flashing      ■ = off

 Detector indicators.

Automatic operation.
Detection will flash the corresponding red detector indicator/s.

Lighting and beep off.
Cancels any detector indicators.

Manual lighting override if the zone is selected.

Lighting in automatic.

Detection has automatically turned the selected zone lighting on.

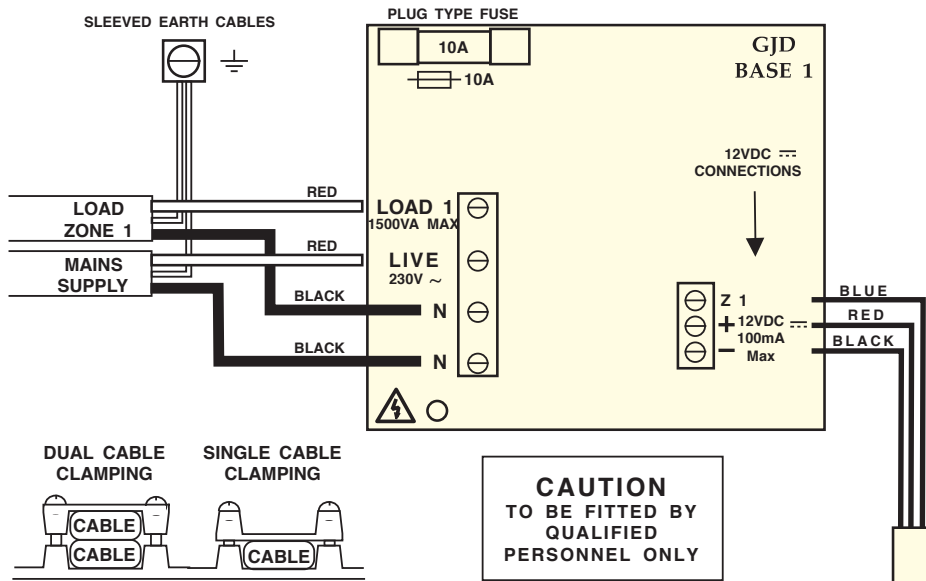Beep selected - zone button also requires selecting to function.

Beep off.

Other features of the controller are set from the rear of the unit:-
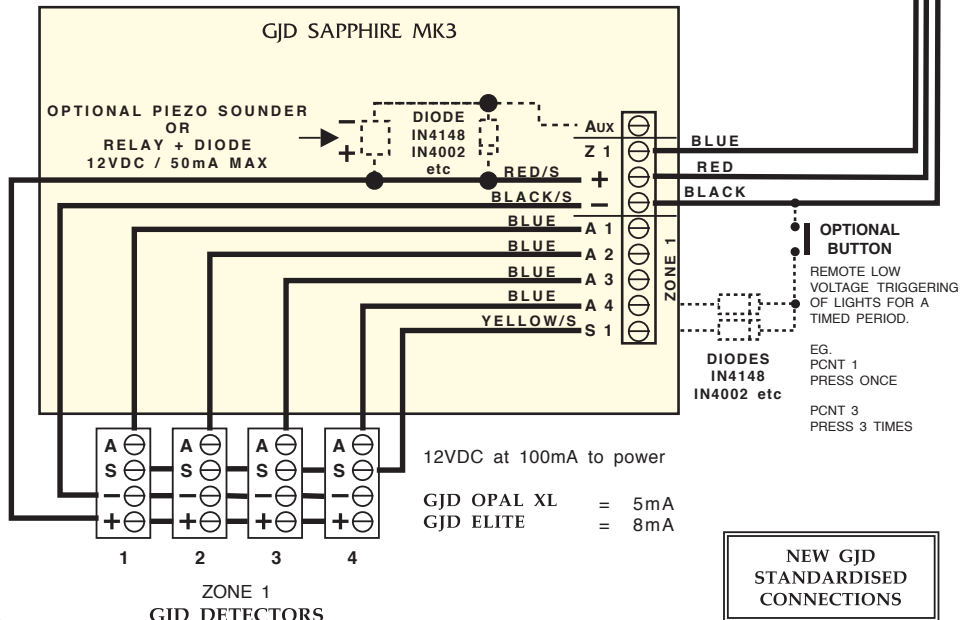
# GJD SAPPHIRE MK3 LIGHTING CONTROLLER
## MAINS VOLTAGE CONNECTIONS
### RECOMMENDED CABLE 1.5mm FLAT TWIN & EARTH

SLEEVED EARTH CABLES

PLUG TYPE FUSE

10A

10A

GJD
BASE 1

12VDC
CONNECTIONS

LOAD
ZONE 1

RED

LOAD 1
1500VA MAX

RED

MAINS
SUPPLY

LIVE
230V ~

BLACK

N

BLACK

N

Z 1
12VDC
100mA
Max

BLUE
RED
BLACK

DUAL CABLE
CLAMPING

SINGLE CABLE
CLAMPING

CABLE
CABLE

CABLE

CAUTION
TO BE FITTED BY
QUALIFIED
PERSONNEL ONLY

## LOW VOLTAGE CONNECTIONS
### RECOMMENDED CABLE 4/6 CORE 7/0.2mm

GJD SAPPHIRE MK3

OPTIONAL PIEZO SOUNDER
OR
RELAY + DIODE
12VDC / 50mA MAX

DIODE
IN4148
IN4002
etc

Aux
Z 1
+
RED/S
BLACK/S
BLUE      A 1
BLUE      A 2
BLUE      A 3
BLUE      A 4
YELLOW/S  S 1

BLUE
RED
BLACK

ZONE 1

OPTIONAL
BUTTON

REMOTE LOW
VOLTAGE TRIGGERING
OF LIGHTS FOR A
TIMED PERIOD.

DIODES
IN4148
IN4002 etc

EG.
PCNT 1
PRESS ONCE

PCNT 3
PRESS 3 TIMES

A
S
–
+

A
S
–
+

A
S
–
+

A
S
–
+

12VDC at 100mA to power

GJD OPAL XL   = 5mA
GJD ELITE     = 8mA

1      2      3      4

ZONE 1
GJD DETECTORS

NEW GJD
STANDARDISED
CONNECTIONS

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# GJD SAPPHIRE MK3 LIGHTING CONTROLLER

## INTERNAL ADJUSTMENTS

5
3        10
1            24

1        2
3

LIGHT ON
TIME MINS

PULSE
COUNT

Factory settings shown.

### AUX = AUXILARY OUTPUT

The internal sounder and AUX output is active during detection when ♪ is selected. On detection the internal sounder emits a steady tone for Zone 1.

### LIGHT ON TIME MINS

**1 to 24 mins**    The red detector indicators will stay on for this time after the last detection. During darkness the yellow indicator will flash indicating the external lighting has been automatically activated.
The lighting will stay on for this time.

### PULSE COUNT

🚶 Setup only    The detector coverage can be monitored using the external lighting day or night. The lighting on time is automatically reduced to 6 seconds.

**1, 2 or 3**    The number of beams that have to be crossed to trigger the system..
1 will give a fast response.
2 gives better immunity with good response.
3 gives highest immunity to false activations in poor environments but is less responsive.

Caution if this equipment is intended for applications not specified please contact GJD before installation.
GJD reserve the right to alter the specification without notice.

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