

Emerald 3000 MK3

GJD010 Lighting Controller



The GJD Emerald is a dual area security lighting controller which enables external areas to be accurately monitored.

It automatically switches up to 3000 Watts of resistive lighting at night for a pre-set period and can be manually overridden when required. The controller incorporates an audible warning tone and features six detector indicators which illuminate when activated by detection day and night.

OPERATING INSTRUCTIONS

When a detector is activated day or night the relevant detector indicator flickers and will remain on for the length of the timer setting. During darkness the lighting will be switched on automatically while the detector is receiving activation signals, and will automatically turn off after the pre-set timer period.

The 'Zone 1' and 'Zone 2' green indicator have to be selected for automatically controlled lighting on detection during darkness.



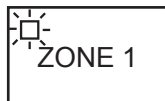
ZONE 1

Green indicator is 'on'. This mode must be selected for automatic lighting during darkness.



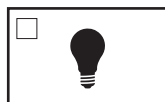
ZONE 1

Indicator 'off'. Lighting and tone are switch off for this zone.



ZONE 1

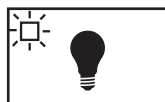
Green indicator flashing. A detector has activated the lighting.



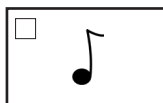
Manually selecting this yellow indicator will turn the lighting 'on'. Turning the indicator 'off' will return to automatic mode.



Indicator 'off'.



Yellow indicator flashing. A detection has automatically activated the lighting.



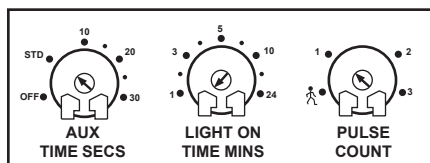
Red indicator 'on'. Audible warning tone selected. Zone 1 and/or Zone 2 indicator to be selected to function.



Indicator 'off' Audible warning tone is switched off.

ADJUSTMENT TO FACTORY SETTINGS

When connecting the unit to the electrical supply or when the supply is interrupted, the indicators will flash for one minute whilst the system settles. Pressing any button during this time will start normal operation.



Internal adjustments panel
The factory settings are shown.

AUX - Auxiliary Output (50mA maximum)

OFF - Internal sounder and auxiliary output disabled

STD - Internal sounder and auxiliary output active and will emit a warning tone on each detection when the tone button is selected.

10-30 Seconds - The auxiliary output time after last detection. The internal sounder is as the STD

LIGHT ON TIME IN MINUTES

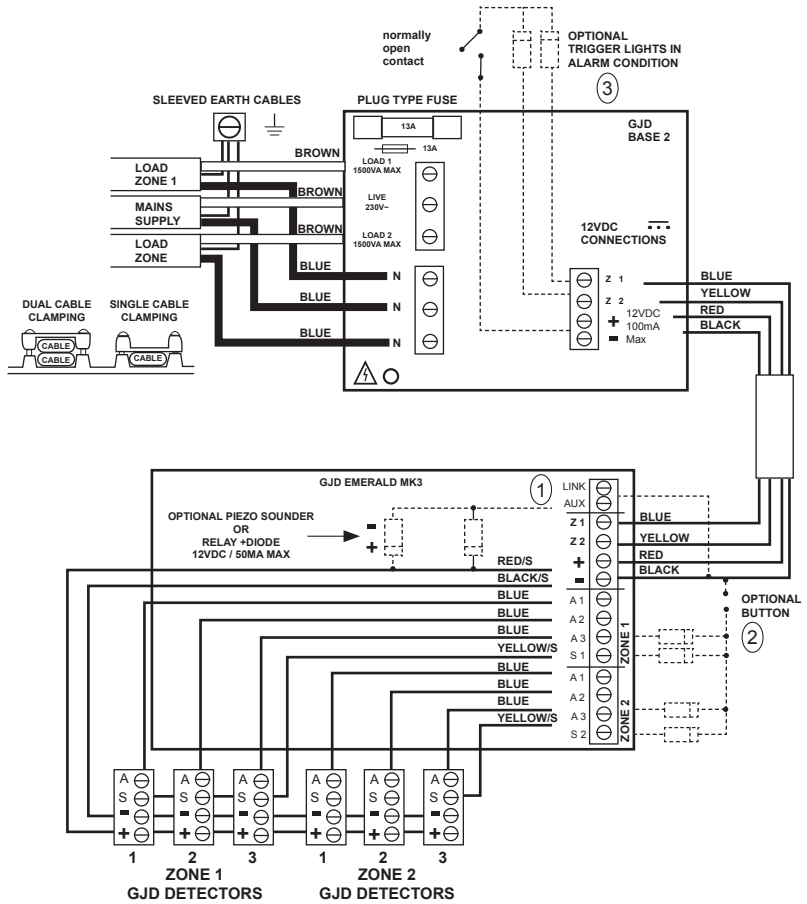
1 to 24 minutes - The length of the time after last detection during darkness. The red detector indicators will stay on for this time after the last detection day and night.

Pulse Count / Walk Test - Select the symbol to assist in location/alignment of the detector beams during daylight installations. When the detector beams are activated the external lights will stay on for a period of 6 seconds.

1,2 or 3 - After completing the 'walk test' function, set the pulse count to the required level. The pulse count is the number of detector beams that have to be crossed to trigger the system.

1. will give fast response
2. gives better immunity with good response
3. gives highest immunity to false activation in poor environments but is less responsive.

CAUTION: To be installed by qualified personnel only:



1. Link both lighting areas together (except in walk test) connect 'LINK' to "-".
 2. Remote triggering of lights for the timer period. Pulse Count '1' must be selected.
 3. Activate zone lighting for alarm period when linked to an intruder alarm panel.
- All diodes: IN4148, IN4002 etc.

EXCHANGING EMERALD 3000 WITH AND EMERALD MK3

If it becomes necessary to exchange an original Emerald 3000 (DX10) lighting controller with an Emerald MK3 lighting controller then the following connection changes need to be applied.


230 Volt A.C Connections

Emerald 3000 (DX10)	EMERALD MK3
LIVE	LIVE
LIGHT A	LOAD 1
LIGHT B	LOAD 2
NEUTRAL	N

12 Volt D.C Connections

S1	S1 ZONE1
S2	S1 ZONE1
S3	S1 ZONE1
S4	S2 ZONE2
S5	S2 ZONE2
S6	S2 ZONE2
AA	A1,A2, OR A3 ZONE1
AB	A1, A2 OR A3 ZONE2
→ -	AUX

SPECIFICATIONS

SUPPLY	230 Vac 50Hz via ELCB/MCB - unit fused at 13A
12VDC@ 100mA	GJD Opal XL (6mA) or Elite Detectors (10mA) Optional external 12VDC piezo sounder up to 50mA
LOAD:	Each expansion unit switches two channels each up to 1500W of resistive load or 1000 Watts of inductive load. The inductive load may require a 'snubber' (suppressor) to manage the lamp discharge current.
INDICATION:	Six 24 hour detector indicators which pulse during detection and are steady after detection for the duration of the light on timer setting.
AUDIBLE	Internal warning tone which sounds on detection day and night, and is button selectable. It has a steady tone for zone one and pulsed tone for zone two.
CONTROL	Controls up to 12 x GJD detectors. Switches two independent areas of lighting with manual override when required.
OPTIONS	Ability to link both lighting areas together. Ability to have a time auxiliary output. Ability to active lighting when linked to an intruder alarm panel.
DIMENSIONS	146(W) x 86(H) x 56(D) mm
MOUNTING	Indoor use only. Mount in a clean dry location on a secure flat surface.
TEMPERATURE	-10 to +55 Centigrade
CERTIFICATIONS	
Self contained - Class 2 independently mounted control	

ENGINEER NOTES

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