

Fire Control Panels Conventional Type EN 54 Compliant

L G M
PRODUCTS

Precept^{en}

2 to 32 Zones



Key Features

- From 2 to 32 zones (up to 32 detectors per zone)
- EN54-2 approval by LPCB
- Comprehensive end-user facilities (access level 2)
- Designed & built using the latest technology for optimum performance and consistently high quality
- Extensive configurable facilities for the engineer via DIL switches
- 4 alarm circuits as standard (4 zone panel and above)
- Up to 5 fully-functional repeaters - 2-wire RS485
- Range of EN54 compliant power supply modules,
- Zonal one-man test feature and sounder one-man test facility
- Short Circuit to fire setting for use with older type detectors
- Panel inputs for class change, evacuate, silence alarms, system reset
- 3 open collector outputs for evacuate, buzzer active, disablement active
- Auxiliary supply output - monitored fuse
- Panel expansions boards for open collector, relay and alarm outputs
- Optional timer clock/counter module

LGM PRODUCTS LTD
UNIT 18 RIVERSIDE INDUSTRIAL ESTATE
FARNHAM
SURREY GU9 7UG
UNITED KINGDOM

TEL +44 (0) 1252 725257
FAX +44 (0) 1252 727627
E-mail Sales@Lgmproducts.com
www.Lgmproducts.com

Introduction

The **Precept^{en}** range of conventional control panels is a powerful yet user-friendly series of control panels, approved by the Loss Prevention Certification Board, U. K. to EN54-2 and EN54-4.

The **Precept** range has earned a reputation over many years for quality and reliability and is recognised as market leader in many countries around the world. This latest generation, **Precept^{en}** takes advantage of the very latest technological advancements both in terms of design and manufacturing techniques to meet the exacting requirements of the latest European standards.

Each panel in this series has extensive configuration options but is easy to install, programme and operate. This is supported by comprehensive documentation on commissioning, operation & maintenance. The panels are designed for use with a wide range of manufacturers' detectors. A complete range of fully-flush and semiflush bezels can be supplied for all **Precept^{en}** control panels. There is also a comprehensive range of other compatible equipment such as repeaters, relays and power supply units, available to meet customer requirements.

General Specification

Feature	Precept ^{en} Panel				
	2 zone	4 zone	8 zone	16 zone	32 zone
Detection zones	2	4	8	16	32
Remote silence alarm I/P [non monitored]	1	1	1	1	1
Remote reset I/P [non –monitored]	1	1	1	1	1
Remote evacuate I/P [non –monitored]	1	1	1	1	1
Class change I/P [non –monitored]	1	1	1	1	1
Sounder circuits	2 @ 0.5A	4 @ 0.5A	4 @ 1A	4 @ 1A	4 @ 1A
Zonal O/Ps [open collector]	2	4	4	4	4
Disablement active [open collector]	1	1	1	1	1
Evacuate active [open collector]	1	1	1	1	1
Buzzer active [open collector]	1	1	1	1	1
Monitored Fire Routing O/P	1	1	1	1	1
Monitored Fire Protection O/P	1	1	1	1	1
Monitored Fault Routing O/P	1	1	1	1	1
Volt free reset relay	1	1	1	1	1
Aux DC Supply [fused]	1 @ 0.5 A	1 @ 0.5 A	1 @ 1 A	1 @ 1 A	1 @ 1 A
Repeater facility	Optional	Optional	Optional	Optional	Optional

Precept^{en}

Precept Facilities in Detail

Switching regulator power supplies with temperature compensated battery charging	High efficiency voltage regulation. Battery charging voltage is automatically adjusted between 28.25 and 26.72 V DC over an ambient temperature range of –10 to +50 deg C.
Battery disconnect	Protects the battery from permanent damage due to over discharge by automatically disconnecting it when the battery voltage falls to 19.5V.
Class change input	Operates all sounders for up to 5 seconds.
Configurable detection zones	Simple and flexible display-based configuration process allowing detection zones to be configured for any of the following: Latching or non-latching Fire indication. Delayed or non-delayed Output operation. Normal or Intrinsically-Safe zone monitoring. Short Circuit = Fault or Short Circuit = Fire Factory configuration: Latching, non-delay, standard [non-I.S.], S/C = Fault.
Active fault monitoring on detection zones. [Non – Intrinsically Safe applications only]	Reduces zone monitoring current and therefore reduces the required battery capacity. Maintains zone wiring continuity following the removal of a detector, while still providing a fault indication on the panel.
Selectable Zonal or General alarm sounder operation with sounders in alert or silent in adjacent zones.	Selectable via DIL switches on the motherboard. The standard sounders on the 2 and 4 zone panels can be used in General or Zonal modes. [These sounders always operate in General mode on 8, 16 and 32 zone panels regardless of DIL switch setting]. The output expansion system [later] provides additional sounder circuits for General or Zonal use on the 8, 16 and 32 zone panels.
Configurable Fire Routing, Fire Protection and Fault Routing output relays	Configuration Links on the motherboard allow each Output Relay to be individually selected to the EN54 powered/fault-monitored mode or non-EN54-compliant volt-free changeover contacts. Factory configuration:- Fully Monitored (EN54 Mode).
Reset Relay	A volt-free changeover contact operating for 10 seconds on panel fire alarm reset.
Auxiliary 24V DC power supply output	Protected by an electronic fuse. Operation of the fuse is indicated on the display. The fuse is reset by pressing the Reset button on the display.
Open collector outputs	Evacuate active. Buzzer Active. Disablement Active. Zonal fire for each zone up to zone 4 [Zonal output expansion on 8-32 zone versions via output boards later].
Remote inputs	Remote Evacuate. Remote Silence Alarms. Remote Reset.

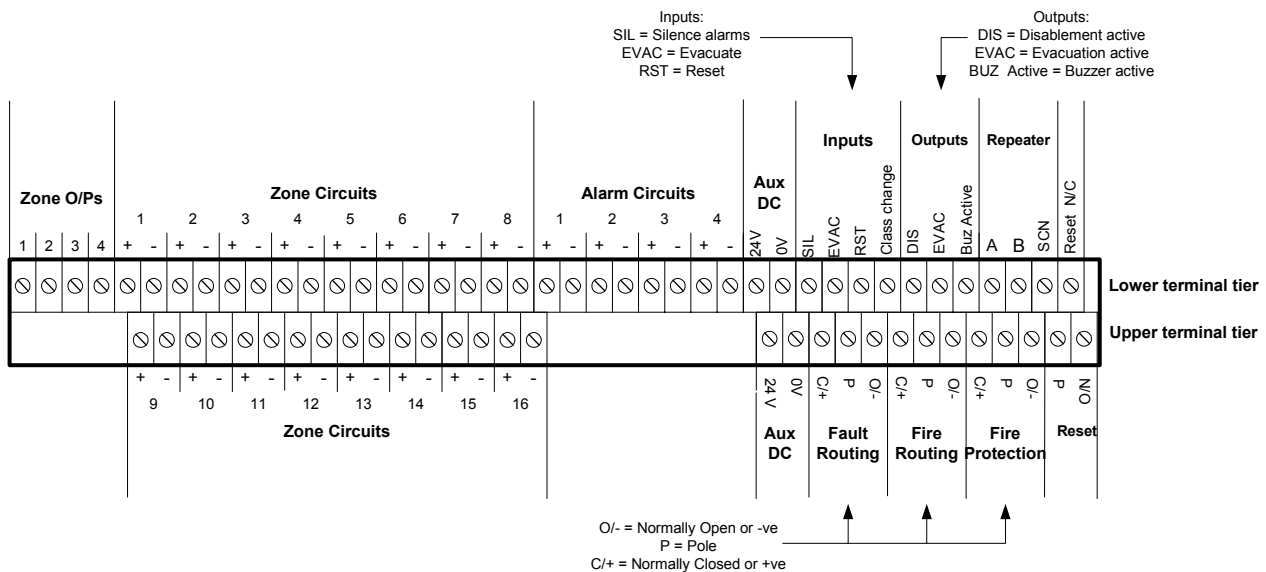
Continued on next page

Precept^{en} Facilities continued

Earth Fault monitoring	Can be disabled via link on the motherboard.
Zone/Output disablement feature	The following circuits can be independently disabled/enabled: Each Zone Fire Routing Fire Protection Fault Routing All Sounders
One Man Zone Test	Each zone can be independently set to the One Man test condition. Sounders can be configured to either operate briefly to confirm the panel has detected the test fire, or no sounder operation during the test fire.
One Man Sounder Test	Operates the sounders intermittently.
Configurable Delay Mode Facility	Flexible system allows: Any zone to be configured as a delay zone. Single-stage or two-stage delay. Selectable 1 to 10 minute delay period [for single-stage and two-stage delay modes]. Selection of the outputs to be delayed [Fire Routing and/or Fire Protection and/or Sounders] – can be any combination.
Other configuration features	<ul style="list-style-type: none">• Prevent the Fire Protection output operating from a fire condition on a “Non-Latch” zone.• Inhibit the silencing and resetting of the panel for 3 minutes following the occurrence of a fire alarm.• Set the sounders to operate only when the panel is in the Evacuate condition.• Inhibit the resetting of the fire alarm condition until the alarm sounders have been silenced.• Disable the internal panel buzzer.• Select latching fault mode where all fault conditions latch until the panel is manually reset.• Restore factory default configuration of zones and outputs to be delayed.
Repeater panels	Support for up to 5 repeater panels via two-wire RS485 serial communication.

Precept^{en}

Typical Termination Arrangement (16 zone)



Optional Enhancements

- . 4 options for 8-way output modules (See schematic diagram)
- . Semi-flush bezels
- . Fully-flush bezels
- . Matching cabinets to house enhancement boards and power supplies
- . Matching style repeater panels (Locally and panel powered)
- . Timer clock/counter module, factory set as either day/night and alarm counter or fire alarm clock display

Ordering Details

Part Number	Description
2605/100	Precept ^{en} 2 zone panel
2605/101	Precept ^{en} 4 zone panel
2605/102	Precept ^{en} 8 zone panel
2605/103	Precept ^{en} 16 zone panel
2605/104	Precept ^{en} 32 zone panel

LGM PRODUCTS LTD
UNIT 18 RIVERSIDE INDUSTRIAL ESTATE
FARNHAM
SURREY GU9 7UG
UNITED KINGDOM

TEL +44 (0) 1252 725257
FAX +44 (0) 1252 727627
E-mail Sales@Lgmproducts.com
www.Lgmproducts.com