

Pearl™ Intelligent addressable fire alarm control panel

Data Sheet



Pearl - Simply more intelligent

The Pearl fire alarm control panel from Notifier by Honeywell is a robust and easy to use networkable 1 or 2 loop panel. It exploits Notifier's class leading Opal digital protocol to maximise the speed and efficiency of fire detection and alarm.

The large display with its intuitive interface and menu driven features allows quick and easy operation of the system. Coupled with more power and devices on the loop than other panels in its class, the simple design will allow for trouble-free first fix installation.

With advanced networking capabilities the Pearl uses a new version of Notifier's powerful ID²net network enabling the creation of networks consisting of up to 16 Pearl panels. The Pearl panel is supported by an integrated tools suite to enhance and simplify the system management.

Extended capacity

- The Pearl supports up to 636 loop devices (159 detectors plus 159 modules per loop)
- Longer loops, but fewer of them, give the opportunity to save on installation time, cost and wiring
- Highly resilient Opal system, able to pinpoint a loop fault whilst maintaining full system operation
- Powerful networking capability - Up to 16 Pearl panels, controlling over 10,000 devices, can be networked via a new version of Notifier's superfast ID²net; prioritising a fire signal to communicate across a network in under three seconds.

Ease of use

- Intuitive on-site management - backlit buttons for fast, error free situation management, and large display giving complete information at a glance
- Simpler diagnostics and maintenance - panel control of detector LEDs enabling confirmation of detector status
- Text programming via MS Excel spreadsheet
- User permissions set per individual password

Flexibility

- Unique first fix bracket with adaptations for 19" rack or flush mounting.
- Extension boxes in various configurations to accommodate batteries up to 38Ah.
- Fast system set up and commissioning via the panel, loop "Autolearn" and advanced PC tools suite
- Comprehensive "Cause & Effect" programming capability
- Panel sounder and beacon synchronisation
- System extensions and adaptations can be made quickly without compromising fire cover and without extensive re-cabling
- Separate text change without risk to "Cause & Effect" or system configuration.
- Type B Dependency programming and support for local silence button for HMO applications.

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System Features

- 1 or 2 loop models available
- 159 intelligent Opal detectors per loop
- 159 modules (AV, MCP, input/output interface modules) per loop
- 64 zones of fire detection with LED indication per zone
- 2 programmable outputs – monitored for open and short circuits
- 2 programmable inputs
- 4 soft keys programmable to the needs of the user
- Advanced Cause and Effect programming
- Cable entry through punched holes - no need to knock out blanks
- Custom logo on quiescent screen Day/Night mode configurable for site specific requirements
- Class change facilities
- Loop auto-learn function
- Backlit buttons and on screen help for user guidance
- CPD approved by LPCB (BRE)
- Approved for control of 512 fire devices to EN54-2
- 6 line text repeater for event control - uses built in communications port if network card not fitted



Specifications

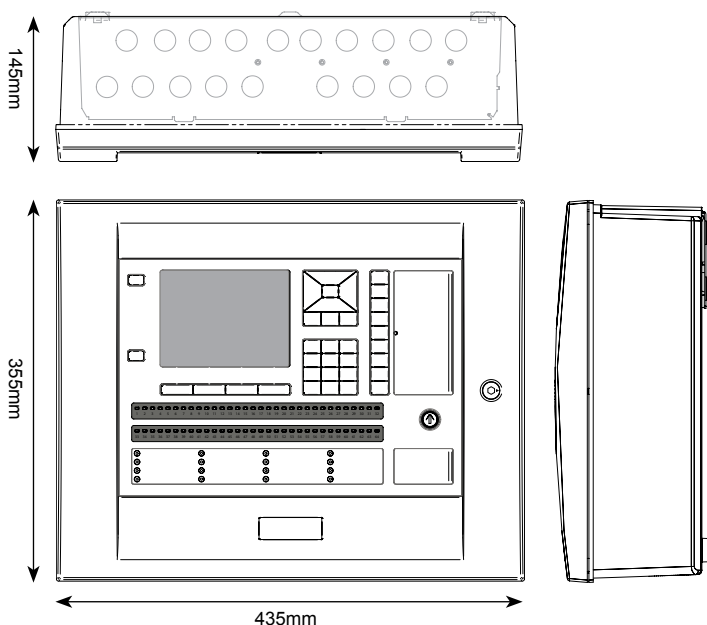
Pearl - Addressable Fire Alarm Control Panel

Mechanical Specification

- Dimensions
 - Height: 355 mm
 - Width: 435 mm
 - Depth: 145 mm
- Weight: 6 kg without batteries
12 kg with 12Ah batteries (standard battery size)
- Construction: ABS UL94-HB40 plastic front cover and main enclosure
- Mounting Holes: 4 (on first fix bracket)
- Cable entry holes (20mm): 20 (top), 2 (bottom)
- External Connections: plug-in screw terminals
0.5mm² to 2.5mm² (14-22AWG)

Mechanical Description

- All displays and controls are carried on the enclosure door.
- Door is hinged on the left and opened using a 4mm Allen Key
- Door removable through fast clip hinges



Electrical Specification

- Operating Voltage: 230Vac 50Hz
- Voltage Tolerance: +10%, -15%
- Incoming Mains Fuse: 1.6 A T5AH250V (20mm HRC anti-surge fuse in PSU)
- Battery Charger Output Voltage: 27.2 V nom @ 20°C (temperature compensated and current limited)
- Aux DC Output: 27.5 V ± 0.5V, 500mA max.
- Power Supply Output Rating: 3A (continuous)
- Standby Batteries (24Vdc sealed lead-acid): Min. 12Ah
Max. 38Ah (using PRL-BOX)

Loop Specification

- Maximum loop current: 750mA per loop
- Max loop length screened cable: 3500m*
- Max number of detectors: 159/loop
- Max number of modules: 159/loop

*usable length may be less depending on loop loading

Environmental Specifications

- Climatic Classification: 3K5, (IEC 721-2-3)
- Operating Temperature: 0°C to +40°C
- Relative Humidity: 5% to 95% non condensing
- Height above sea level: 2000m max.
- Panel Sealing: IP30 (EN60529)
- Vibration: EN60068-2-6, 10-150Hz at 0.981ms-2
- EMC Emissions: EN61000-6-3
- Immunity: EN50130-4
- Safety: EN60950













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Mounting Options















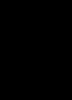
The Pearl's innovative mounting system gives the installer easier access to terminate wiring to the back plate before the panel is even installed. Various mounting options are available to allow for larger battery capacity for longer standby time and to enable flush mounting of the panel.



Extension Boxes

Part Number	Description	Battery Capacity	Flush Mounting accessory
 PRL-EXT-BOX-17	Extension back box for existing surface mounted Pearl installations. Includes cover, panel dress plates and space for 17Ah batteries. Only one can be used with each panel and is not suitable for flush mounting. H:222mm W:436mm D:110mm.	up to 17Ah	NA
 PRL-BOX-17	Extension back box for new Pearl installations, Surface or Flush mounting, includes cover and space for 17Ah batteries. For flush mounting use PRL-BEZEL-17. H:592mm W:447mm D:110mm.	up to 17Ah	 PRL-BEZEL-17
 PRL-BOX-38	Extension back box for new Pearl installations, Surface or Flush mounting, includes cover and space for 38Ah batteries. For flush mounting use PRL-BEZEL-17. H:592mm W:447mm D:203mm.	up to 38Ah	 PRL-BEZEL-17
 PRL-BOX	Large box to receive a complete Pearl panel, allows 38Ah batteries to be fitted. H:727mm x W:447mm x D:203mm	up to 38Ah	 PRL-BEZEL-16U
 PRL-BEZEL	The PRL-BEZEL Flush Mount Dress Ring offers a practical way of flush mounting the Pearl panel. It is designed for use in combination with the rack mount kit and is also available as a stand alone part. H:437mm x W:518mm x D:47mm (internal aperture H:357mm x W:438mm)		
 PRL-BEZEL-17	Flush mounting bezel for PRL-BOX-17 and PRL-BOX-38 H:674mm x W:529mm x D:47mm (internal aperture H:594mm x W:449mm)		
 PRL-BEZEL-16U	Semi-flush mounting bezel for the Pearl extension back box, PRL-BOX. H:808.5mm x W:529mm x D:47mm (internal aperture H:728.5mm x W:449mm)		
 PRL-RM19	19" Rack Mount Kit for Pearl panel. The PRL-RM19 rack mount kit enables the Pearl to be mounted in a 19 inch rack (recessed dimensions H: 336 x W:445)		
 PRL-FM	Flush Mount Dress Ring (inc 19" Rack kit)		

Product Range at a Glance

Pearl Product Range		Part Number
	1 Loop with 64 zone fire LEDs, English Language	PRL-LED-EN-1
	2 Loop with 64 zone fire LEDs, English Language	PRL-LED-EN
	Large box to receive a complete Pearl panel, allows 38Ah batteries to be fitted. H727mm x W447mm x D203mm	PRL-BOX
	Extension back box for existing surface mounted Pearl installations including cover, panel dress plates and space for 17Ah batteries. H:222mm W:436mm D:110mm. Only one can be used with each panel and is not suitable for flush mounting.	PRL-EXT-BOX-17
	Extension back box for new Pearl installations, Surface or Flush mounting, includes cover and space for 17Ah batteries. H:592mm W:447mm D:110mm. For flush mounting use PRL-BEZEL-17.	PRL-BOX-17
	Extension back box for new Pearl installations, Surface or Flush mounting, includes cover and space for 38Ah batteries. H:592mm W:447mm D:203mm. For flush mounting use PRL-BEZEL-17.	PRL-BOX-38
	Flush mounting bezel for PRL-BOX-17 and PRL-BOX-38	PRL-BEZEL-17
	Semi-flush mounting bezel for the Pearl extension back box, PRL-BOX.	PRL-BEZEL-16U
	19" Rack Mount Kit for Pearl panel	PRL-RM19
	Flush Mount Dress Ring only	PRL-BEZEL
	Flush Mount Dress Ring (inc 19" Rack kit)	PRL-FM
	ID ² net Network Card	PRL-P2P
	Communication Card. Provides third party protocol (RS232 & RS485)	PRL-COM
	Pearl 6 line text repeater with basic controls	PRL-IDR6A
	Notifier Local Silence Button	