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Made In Britain

4 to 32 Zone Water Leak Detection Alarm Type LD 32

Standard Features

- **Up to 32 zones using 1, 2, 3 or 4 zone remote leak detection outstations**
- **Large 65mm x 115mm LCD touch screen graphic display with RGB backlight**
- **The status of all fitted zones is displayed on screen requiring no button pressing**
- **On board audible warning device to alert local operators of a problem**
- **Alarms latched until Mute operated to give indication of transient water leaks**
- **Common Alarm, New Alarm, Common Fault & Power Fault output relay contacts to BMS**
- **RS485 communications to outstations via 4 core interconnecting cable**
- **Each outstation has a common zone alarm relay for use by a BMS or other systems**
- **Power to all outstations is provided from the alarm unit**
- **Leak detected Lamps fitted inside the remote outstations giving local Alarm indication**
- **System information button showing the total number of zones, outstations alarm and faults**

Optional Equipment

- **Automatically turn of the water supply when a leak is detected**
- **Send a text or email when an alarm is raised**
- **Remote beacon or mutable sounder beacon**
- **Individual alarm relays allowing the status of each zone to be displayed on a BMS system**
- **Modbus TCP output to BMS**
- **12 hour battery backup and power fault output relay to BMS**

Size 180 x 180 x 80mm

The LD32 has been designed to continuously monitor a large number of areas for water leaks using water detection cable or spot probe sensors. Consisting of a central alarm unit and a number of outstations, areas to be monitored can be over 300m away from the main alarm unit. Fitted with a large RGB backlight, touch screen display, the main alarm panel displays a "MUTE", "LIGHT" (backlight) and "INFO" (Information) buttons, as well as the current status of all zones. Also included within the alarm panel are, "New alarm", "Common alarm" and "Common fault" relays as well as an internal audible warning device. Each outstation reports its current alarm or fault status back to the alarm panel over an RS485 data line where the zone status is display on the main screen. Outstations also contain individual zone alarm/ fault lamps for local alarm status indication and can be fitted with an optional water shutoff valve control board to allow the water supply feeding the zoned area to be turned off when a leak is detected. Outstations are powered via the four core interconnecting cable that contains both power and data communication to and from each outstation. To allow maximum flexibility, each outstation can be factory configured as a 1, 2, 3 or 4 zone unit where unused zones are ignored by the alarm unit when displaying zone numbers. When a leak is detected by one of the outstations, the controller will display the alarm ("Zone 1 ALARM"), the audible warning device will start both the New and Common alarm relays and if fitted the individual alarm relay, will change state. In the event of a cable fault, the display will show ("Zone 1 FAULT") and only the fault relay will change state. The common alarm relay being normally energised, can also be used to indicate a power fault to the system. When the control unit sees a new alarm, the on screen alarm status will start flashing and the displays backlight will flash between red and white, indicating a new unacknowledged alarm. The unit will remain locked in this condition even if the leak is removed. Only Muting the alarm will unlock the display and stop the sounder and flashing screen. If the alarm is still active after muting, the display will continue to show the alarm status but the flashing will be terminated indicating an acknowledged alarm. If the alarm was cleared before the Mute button was operated, the display will revert back to its normal mode once the Mute button has been pressed. Providing the system has no alarms or faults, the display backlight will turn off after five minutes. A "Light" button is provided, when operated, will turn on the backlight for a further five minutes. The status of the system can be interrogated by pressing the "info" button. This will display the number of system zones, the number of fitted outstations, the total number of "Alarms" and the total number of Faults. The system can also be provided with a 10 hour battery backup in the event of a mains power failure.

Standard &Valve Control Outstation

Each outstation contains a zone test alarm push button, individual "Alarm" and "Fault" lamps and removable terminals for ease of installation. The valve control outstation requires a 230VAC supply to drive the shutoff valves and is fitted with a shutdown override push button and light to allow manual opening of the water valve by maintenance staff. The manual shutdown override is cancelled automatically once the zone clears back to normal.

Specification

Housing type ……	ABS, colour light grey similar to RAL7035 rated at (IP50)
Mounting …….	Wall, flush or surface
Access into Housing …….	Bottom or bottom back
Alarm unit size …..……..	180mm wide x 180mm high x 80mm deep
Input power ……..	50/60 Hz single phase 230VAC +10% - 6%
Burden ……..	< 13VA
Power termination …….	Internal 3way terminal block
Voltage to sensor ……..	Bi-directional 5VDC
Voltage to outstations ……...	24VDC
Connections to sensor ……	Internal plug-in terminal block
New Alarm output contacts ……...	Changeover contact rated at 1amp 30VAC/DC
Common Alarm output contacts ……...	Changeover contact rated at 1amp 30VAC/DC
Common Fault output contacts …….	Changeover contact rated at 1amp 30VAC/DC
Individual Alarm output contacts ……	Changeover contacts rated at 1amp 30VAC/DC
Display ……..……	115x65mm LCD graphic touch screen with RGB backlight
Communication to outstations ……	Two wire RS 485
Maximum zones and outstations …….	32 zones over a maximum of 32 outstations