

LabSense – 01

Laboratory Safety Interlock

Operating Instructions



Product Overview


The **LabSense** range of products and ancillary equipment is designed to meet the safety requirements of the classroom environment – ensuring that the gas utilities on the benches are only enabled when the person in charge requires, and that any gas leaks are detected before the system is switched on.










The system has a number of models, you have selected

LabSense-01 intelligent controller with control for gas supplies only.


The LabSense system is controlled via a series of touch pads on the fascia in conjunction with a key switch to prevent unauthorised use of the utilities within the laboratory. The status of the system can be quickly and easily identified by observing the eight multi-colour LED indicators.


System startup

1) Turn the key 






- | | | | |
|---|------------------|---|-----------------|
|  | POWER ON |  | KEY ACTIVATION |
|  | SYSTEM CONDITION |  | GAS SUPPLY |
|  | PERIOD EXTENSION |  | WATER SUPPLY |
|  | FIRE ALARM |  | ELECTRIC SUPPLY |
|  | REMOTE STOP | | |

You now have 1 minute to select which services you require by pressing the appropriate pad. The system will beep, and the KEY ACTIVATION indicator will change colour when the minute is almost up.

 = 30 seconds remaining

 = 10 seconds remaining

PRESS 

- | | | |
|---|------------|--------------------------|
|  | GAS SUPPLY | <i>GAS TEST (OPEN)</i> |
|  | | |
|  | GAS SUPPLY | <i>GAS TEST (CLOSED)</i> |
|  | | |
|  | GAS SUPPLY | <i>GAS ON</i> |

Before the gas valve is opened permanently, a pressure test is carried out on the system. The gas valve is opened for a short time, and then closed for a short time. During this time the pressure is monitored. If the pressure falls while the gas valve is closed, the system will alarm. All gas taps should be checked before attempting to restart. In addition, if the gas pressure ever falls below 12mbar during normal operation, the system will alarm and close the gas valve.

System shutdown

The system can be shut down at any time by using



If all services are off, the system will shut down.

At the end of the pre-defined operation period, the system will automatically shut down. Five minutes before the timer expires, the PERIOD EXTENSION indicator will flash, and the system will beep every 30 seconds. For the last minute of the timer, the system will beep every 5 seconds.



= 5 minutes remaining



= 1 minute remaining

In order to extend the normal operating period by 15 minutes, press



at any time.

Whilst in the extension period, the PERIOD EXTENSION indicator will flash.



= 15 minutes remaining

Restarting

Once stopped, the system cannot be restarted until the key has been switched to the “off” position, and then back to “on”. Whilst in this state, the KEY ACTIVATION indicator is red.

If the system has been stopped by an external source, for example a remote stop button or a fire alarm signal, the system can be reset by pressing







LED Indication

The **LabSense-01** unit has nine status indication LEDs. These change colour to allow instant diagnosis of the system state.







POWER ON:

-  Lights up when power is applied to LabSense.



SYSTEM CONDITION:

-  System condition is normal
-  System is in "setup" mode
-  System fault detected – see other LEDs for further details
-  System is in "gas tightness test" mode







PERIOD EXTENSION:

-  System within normal operating period
-  System stopped
-  5 minutes left of operating period (press  to extend)
-  1 minute left of operating period
-  System within extension operating period

FIRE ALARM / REMOTE STOP:

-  Fire alarm / remote stop in normal position
-  Fire alarm / remote stop in alarm position




KEY ACTIVATION:

-  System within normal operating period, key in "on" position
-  System stopped, key in "off" position
-  System stopped, key in "on" position (must be turned to "off" to reset)
-  30 seconds left of activation period, key in "on" position
-  10 seconds left of activation period, key in "on" position
-  System within activation period, key in "on" position

OR

Key in "off" position and one of the services' touch pads has been pressed (see PERIOD EXTENSION indicator)

GAS SUPPLY:

- Gas supply enabled
- Gas supply not enabled
- Gas pressure fault during initial test on startup
-  Gas pressure less than 12 mbar
-  Gas test - gas valve open
-  Gas test - gas valve closed

OR

Gas valve open for tightness test (see SYSTEM CONDITION indicator)

FOR FURTHER TECHNICAL ASSISTANCE, PLEASE CONTACT US BY

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DO NOT dispose of this product (or batteries if used) as unsorted municipal waste. It should be disposed by a specialised company for recycling.
This product should be returned to your distributor or to a local recycling service.
Respect the local environment rules.

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