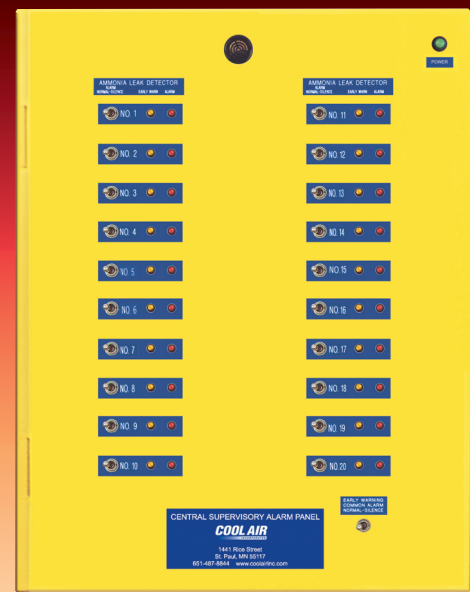


# Central Supervisory Alarm Panel

**COOL AIR**  
INCORPORATED



20-detector unit

**A dependable, time-saving system for single-location monitoring of remote ammonia leak detectors**

**Designed for use in main equipment or control rooms of ammonia refrigeration plants.**

**Fast and accurate detection of ammonia leak sources for maximum protection of employees and product.**

**Can monitor an unlimited number of ammonia leak detectors. Specify required number of field sensors when ordering.**



## Additional features:

- Affordable
- High quality, UL listed components
- One year warranty
- Virtually maintenance free
- Can be tied into existing building security alarm system
- Can provide power supply for the model LBW-50 and LBW-50 RLV Ammonia Leak Detectors

# Ammonia Leak Detector Central Supervisory Alarm Panel

## Sequence of operation

The Central Supervisory Alarm Panel is designed to monitor the required number of field sensors from remote ammonia leak detectors. If a remote detector detects a concentration of ammonia exceeding the pre-set level (adjustable from 25 ppm to 800 ppm concentration of NH<sub>3</sub>), it will close a dry contact which sends an alarm signal to the Central Supervisory Alarm Panel. The remote units can be wired to send an audible alarm signal to the Central Panel at both the “early warning” and “emergency alarm” stages of ammonia concentration.

**Figure A** depicts the Central Panel under normal conditions. All silence/normal switches are in the “normal” position, all LED indicators are off, and the audible alarm is silent.

### Wiring Option for Audible Alarm at Early Warning Stage:

**Figure B:** In this example, user has exercised option of wiring sensor number 2 to activate audible alarm at the “early warning” stage (25 ppm concentration of NH<sub>3</sub>). Illustration shows number 2 early warning LED indicator illuminated and the audible alarm sounding.

**Figure C:** The operator at the Central Panel can silence the early warning audible alarm by moving the early warning common alarm switch to the “silence” position. Number 2 early warning LED will remain illuminated until the early warning alarm condition clears.

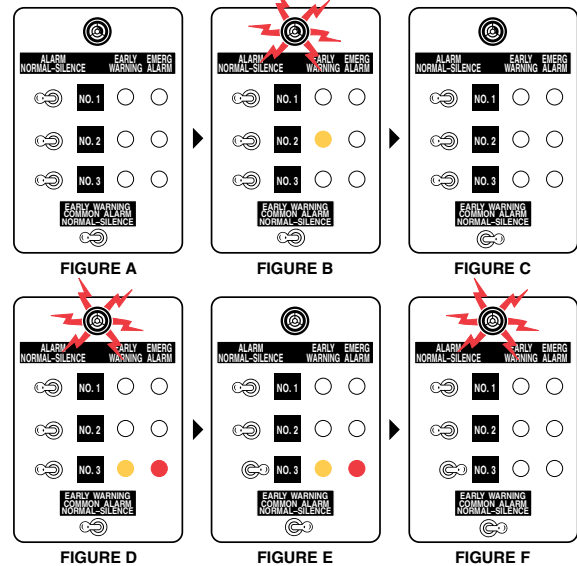
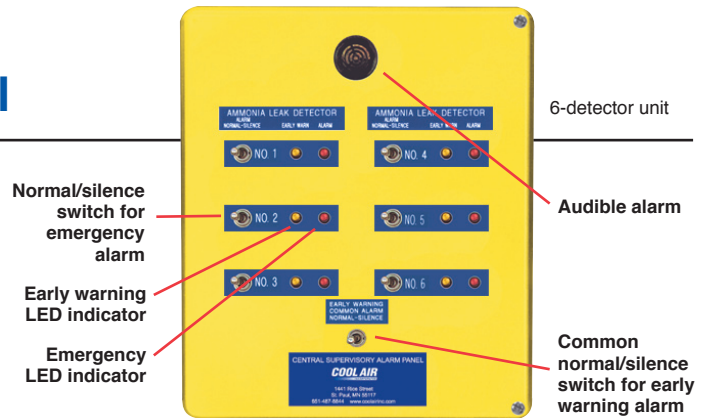
### Wiring Option for Audible Alarm at Emergency Stage:

**Figure D:** In this example, user has exercised option of wiring remote detector number 3 to activate audible alarm at the “emergency” stage. Early warning LED indicator will be illuminated at 25ppm concentration of NH<sub>3</sub>. When concentration reaches emergency trip point (adjustable from 30 ppm to 800 ppm), emergency LED will be illuminated and audible alarm will be activated—as shown in illustration.

**Figure E:** As the ammonia leak emergency is being corrected at remote detector number 3, the operator at the Central Panel can silence the audible alarm by placing switch number 3 in the “silence” position. The LED indicators will remain illuminated until the alarm condition clears.

**Figure F:** When the alarm condition clears at remote detector number 3, the LED indicators will turn off. The audible alarm will be activated and will stay on until the number 3 silence/normal switch is returned to the “normal” position.

**NOTE:** If the alarm condition at number 3 remote detector has not cleared and its silence/normal switch is in the “silence” position, this will not affect the detection and signaling of emergency alarm conditions that may occur at other remote units.



## Specifications

**10-detector panel:**

**Size:** 14"H x 12"W x 6"D.

**Weight:** Approx. 12 lbs.

**Power input:** 115 VAC, 60 Hz, low voltage wiring 16 VAC between detectors and control panel. Other power supply options available.

**Sensitivity:** as determined by trip point settings at remote detectors, adjustable from 25 ppm to 800 ppm concentration of NH<sub>3</sub>. Early warning alarm trip point at remote detectors is set at 25 ppm (not adjustable).

## Warranty

12 months warranty on workmanship from point of sale.

Cool Air reserves the right to make changes in the design of this unit without notification.

Dimensions given here are approximate and should not be used for construction planning.

**COOL AIR**  
INCORPORATED

1441 Rice Street • St. Paul, Minnesota 55117-3899  
Office: 651/487-8844 • Fax: 651/487-8857  
E-Mail: info@coolairinc.com  
Web Site: www.coolairinc.com