

Be sure, be safe.

**COSMOS**

Multi-point LPG Alarm System

# NV-520

**Simpler and Easier to Use  
for Greater Peace of Mind**



Image of 8-point model

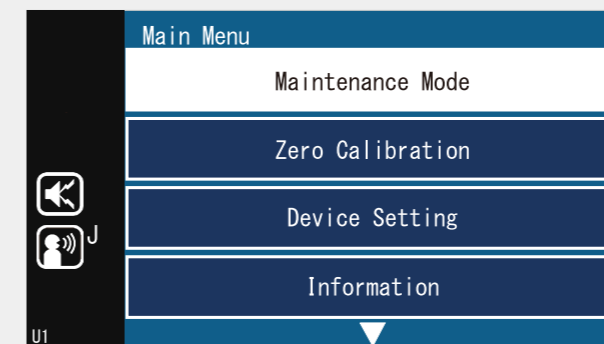
# Enhanced operability and simplicity for greater peace of mind

## POINT 1 Operability

**Main unit**

- Rotary Knob**  
Select items or change values
- [ZERO] Switch**  
Change to one-touch zero adjustment mode
- [SPAN] Switch**  
Change to one-touch span adjustment mode
- [MENU/CANCEL] Switch**  
Change to menu mode, cancel operation
- [BZ STOP/RESET] Switch**  
Stops alarm and cancels alarm state
- [ENTER] Switch**  
Selects or confirms an item
- LCD**

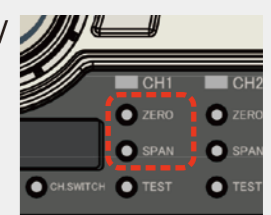
Easy to see and understand menu screen



Rotary knob makes menu selections and numerical changes easy



One touch zero adjustment/span adjustment



Manual ZERO adjustment and Manual SPAN adjustment are easy using just the main unit



No tools or testers required

## POINT 2 Peace of mind

**Check!**

Newly equipped with alarm failure history display

Date (mm/dd/yyyy)	Event	Channel
6/7/2023 15:40	AL2	CH.1
6/7/2023 15:40	AL1	CH.1
6/7/2023 11:10	AL2	CH.1
6/7/2023 11:10	AL1	CH.1
4/13/2023 10:35	E-13	CH.1
4/13/2023 10:05	E-13	CH.1
2/21/2023 19:55	AL1	CH.1

Prevents malfunctions caused by incorrect insertion when replacing batteries

**NV-500**  
Connect 4 terminals with red and blue cords

**NEW NV-520**  
Just plug in two connectors. It does not matter which way you insert them.

Passed magnitude 7 earthquake resistance test

No issues with output or display during test; no damage, loose screws, issue with normal operation, issues with alarm operation, or output contact issues after test.

Can monitor for up to 2 days\* during a power outage

Short intermittent operation cycle of 15 minutes for increased safety

\*Varies depending on type of connected detector head, connection status, and number of connected detector heads

**Power on:** Normal detection (Continuous monitoring with backup power supply 120 minutes)

**Power off:** Intermittent monitoring with backup power supply (10 seconds of monitoring, 15 minute cycle)

**Stop:** Up to 2 days

Increased by 90 minutes! (compared to conventional products)

## POINT 3 Simplicity

Easy to understand gas concentration bar graph

**Gas concentration bar graph**

Normal | 1st stage alarm | 2nd stage alarm | Malfunction alarm

1st stage alarm line | 2nd stage alarm line

Easily visible even from a distance with color coded display

Makes identifying alarm and fault status easy

Device status displayed with icons

- Key Lock
- Initial delay
- Maintenance mode
- Buzzer ON
- Voice Message ON

Easy to understand voiced alarms available in 4 languages (select 2)

When selecting 2 languages, voice alerts will be played in the order the languages are selected

Equipment Status	Japanese	English	Chinese	Korean
Alarm	ガス漏れです	Danger! Gas Alarm	气体泄漏警报	가스 경보입니다
Main Unit Failure	本体が故障です	Main Unit Failure	主机故障	본체가 고장입니다
Maintenance	点検中です	Test in Progress	维护中	점검 중입니다

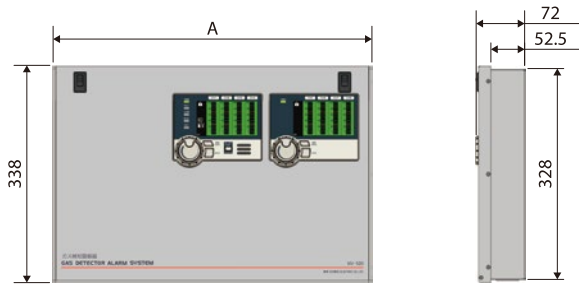
Beep..Beep..Beep!  
Danger!  
Gas Alarm

## Specifications

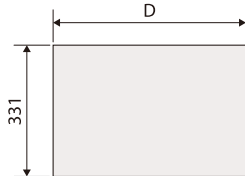
Connected Detector Head *1	Detection principle : Catalytic combustion type, Target Gas : LPG
Power Supply Voltage *2	AC specifications: AC 100V~240V ±10%, 50/60Hz DC specifications: DC 24V ±10 %
Power Consumption *3 *4	AC specifications: 2-point type -12~15.6VA, 4-point type 22.4~29.2VA, 8- point type 44.8~58.3VA, 12-point type 67.3~87.5VA (+4.0~6.0VA with backup power supply) DC specifications: 2-point type : 9.6~12.5W, 4-point type 17.9~23.3W, 8-point type 35.8~46.6W, 12-point type 53.8~70.1W
External Outputs	Bundled • Signal output: voltage output DC0-6-12V • 1st stage alarm contact output: 1a no-voltage AC250V 2A , DC30V 2A (resistive load) • 2nd stage alarm contact output: 1a no-voltage AC250V 2A , DC30V 2A (resistive load) • Buzzer contact: 1a non-voltage AC250V 2A , DC30V 2A (resistive load) Individual • Signal output: voltage output DC0-6-12V • 1st stage alarm contact output: 1a no-voltage AC250V 2A , DC30V 2A (resistive load) • 2nd stage alarm contact output: 1a no-voltage AC250V 2A , DC30V 2A (resistive load) • Power source output for pump: DC24V max. 0.3A *5
Alarm Display and Sound	1st alarm: [ALARM] LED flashes red + LCD display (orange) + buzzer sound (slow intermittent sound) + voiced warning "gas leak" 2nd alarm: [ALARM] LED flashes red quickly + LCD display (red) + buzzer sound (fast intermittent sound) + voiced warning "gas leak"
Fault Indication Display and Sound	[FAULT] Yellow LED flashes + error message display + buzzer sound (fast intermittent sound) + voiced warning *6
Alarm Set Value *2	AL1: 25%F.S. AL2 : 50%F.S. or AL1, AL2 : 25%F.S.
Alarm Delay	Dependent on connected detector head specifications
External Dimensions (excluding protrusions)	2-point type with backup power supply: W221mm X D71.5mm X H338mm 2-point type with backup power supply : W299mm X D71.5mm X H338mm 4-point type: W299mm X D71.5mm X H338mm 6-point type, 8-point type : W496mm X D71.5mm X H338mm 10-point type, 12-point type: W644mm X D71.5mm X H338mm
Optional Backup Power Supply	Continuous operation for approx. 120 min. after power outage, followed by intermittent monitoring (approx. 70 seconds of monitoring every 15 minutes). Intermittent monitoring period: upto 2 days.

\*1. Only compatible with New Cosmos detector heads. \*2. Please specify when ordering. \*3. Power consumption when the maximum number of detector heads are connected. Varies depending on the detector head specifications and device status (normal, alarm). \*4. Only AC specifications are available with backup power supply. \*5. Do not use for purposes other than those specified. Output voltage varies depending on specifications and operating conditions. (DC specification: Depends on power voltage, AC specification backup operation: Depends on battery voltage) \*6. The content of the audio will vary depending on the malfunction. \*7. Alarm accuracy is not guaranteed during intermittent monitoring. Therefore, alarms may occur at different gas concentrations compared to continuous monitoring. \*8. Continuous monitoring time may be shortened depending on the connected detector head, connection status, and number of connections. In these cases, intermittent backup operation may not function.

## External Dimensions (mm)



### Recessed panel dimensions



### Dimensions Table

Number of Detection	A	D
2 point without backup power supply	221	215±1
2 points with backup power supply /4 points	299	293±1
6 points/8 points	496	490±1
10 points/12 points	644	638±1

\*4points, \*6/8points, \*10/12 points the size does not change with or without backup power supply

## Detector Head

Previous model (NV-500) users can continue using their existing detector heads

### Diffusion Type



KD-5B

Other compatible units: KD-2A, KD-3A, KD-5

### Suction Type



PD-14

Other compatible units: PE-2DC

### Options



KW-22  
Rain Cap



KW-15  
Rain Cover

## Instruction Manual



### ◀ For operation

For more details, please refer to this link.



### ◀ For installation

For more details, please refer to this link.



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## SAFETY WARNING

Carefully read the instruction manual prior to use.

Select and use the device designed to detect the required type of gas. Use of a wrong sensor type may cause an accident.