

## Preparation for start-up

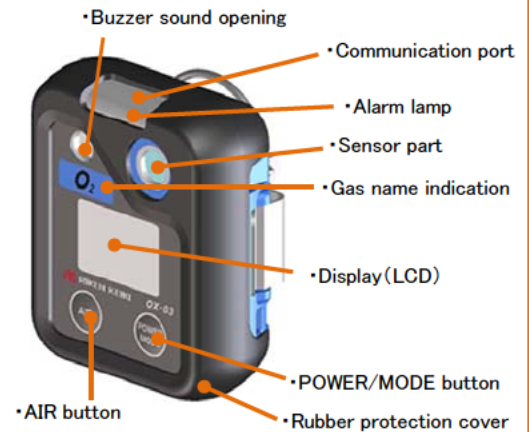
1. Check that the batteries are installed.
2. Check that the dust filter is free of dust.
3. Check that the gas monitor is not damaged.

## How to use

### 1. How to start the gas monitor

Press the POWER/MODE button until the buzzer blips.  
About 15 seconds after Power on,  
short sound will be made twice.  
Then this gas monitor enters detection mode.

#### 【Names for each part】



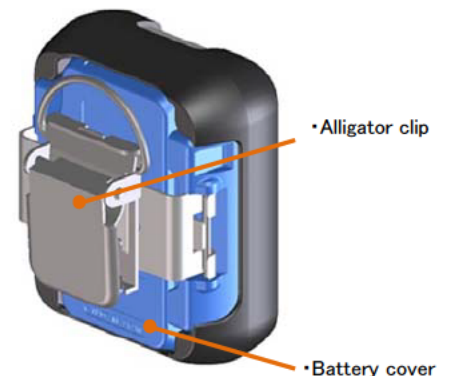
### 2. Air calibration

Keep the AIR button pressed until "Adj" on the LCD.  
Readings is shown as 0 (Zero). If it is OX-03, 20.9vol% is shown.

**CAUTION: Perform it in fresh air.**

### 3. How to detect

Please confirm this unit is in detection mode, then please equip this unit so as not to hide the sensor part.  
It detect target gas in the atmosphere.



### 4. Alarm action/How to turn off the alarm

[Alarm action]

Buzzer makes sounds, readings and lamp blink.

[How to turn off the alarm]

How to turn off the alarm is different for each type.

- In case of CO-03

When the gas concentration is lower than the first alarm set point, a gas alarm will be reset automatically.

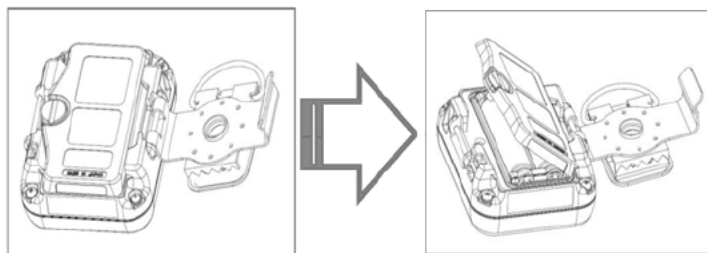
- In case of GP-03/OX-03/HS-03

When the gas concentration is lower than the first alarm set point (for oxygen, higher than the first alarm set point), a gas alarm can be reset by pressing the POWER/ MODE or AIR button

### 5. How to exit

Press and hold POWER button until the LCD does not show anything.

## Replace the batteries



Dry battery type: Alkaline dry battery  
 Rechargeable battery type: Nickel metal hydride battery

<Replace the batteries>: Remove belt clip and open battery cover, then replace the 2 dry battery. If it is rechargeable type, charge batteries with designated charger.

<CAUTION>: Turn off the power of the gas monitor before replacing the batteries.

Replace both of the two batteries with new ones at one time.

Pay attention to the polarities of the batteries when replacing them.

Use only the batteries specified by RIKEN KEIKI on this gas monitor.

Replace the batteries in a non-hazardous area.

## Troubleshooting

Symptoms	Causes	Actions
System abnormalities 『SYSTEM FAIL』	A circuit abnormality occurred.	Request RIKEN KEIKI for repair.
Sensor abnormalities 『SENSOR FAIL』	A sensor has failed.	Request RIKEN KEIKI for repair.
A low battery voltage alarm is displayed. 『BATTERY FAIL』	The battery level is low.	Turn off the power and replace the dry batteries with new ones in a non-hazardous area.
Fresh air adjustment cannot be performed. 『AIR FAIL』 (GP-03/OX-03/HS-03)	Fresh air is not supplied around the gas monitor.	Supply fresh air.
Span adjustment cannot be performed. 『CO FAIL』(CO-03)	Span calibration gas with appropriate concentration is not supplied.	Supply span calibration gas with appropriate concentration.
Clock abnormalities 『CLOCK FAIL』	Abnormalities of the internal clock The gas monitor is left for a long time with the batteries removed (or with dead batteries).	Make a setting of Date/Time. If such a symptom is observed repeatedly, the built-in clock is seemingly malfunctioning.

This simply helps to find the causes of malfunctions which frequently occur. If the gas monitor shows a failure which is not explained in this manual, or still has malfunctions even though troubleshooting are taken, please contact RIKEN KEIKI.

Since this is a safety unit,

**Perform a maintenance once or more for every six months to maintain the performance as a safety unit.**

Note : Regarding detail, refer to instruction manual.