# JTQ-BF-06TLLoRa Combustible Gas Detector

# (Sensitivity: 0~100%LEL) User's Manual

Please read the User's Manual carefully in order to proper installation!

## I. Description

JTQ-BF-06TL LoRa combustible gas detector (Sensitivity:0~100%LEL, hereinafter referred to as the "Detector") design incorporates ahigh-quality screen printing metal-oxide semiconductor sensor (longevity, keep stabilization in high concentration combustible gas). It can be widely used in apartments, houses, factories, inns, etc.

## II. Product features

The detector design incorporates a metal-oxide semiconductor sensor and excellent MCU. It has advantages of long service life, stable operating, easy installation. Alarm and audio prompts is also equipped, and the prompts will change in different combustible gas concentration which means it solves problems safely, quickly and efficiently.

The detector sends signals to "SANJIANG Cloud" which based on LoRaWAN protocol. If you want know more details about "SANJIANG Cloud", please read "SANJIANG Cloud" instruction.

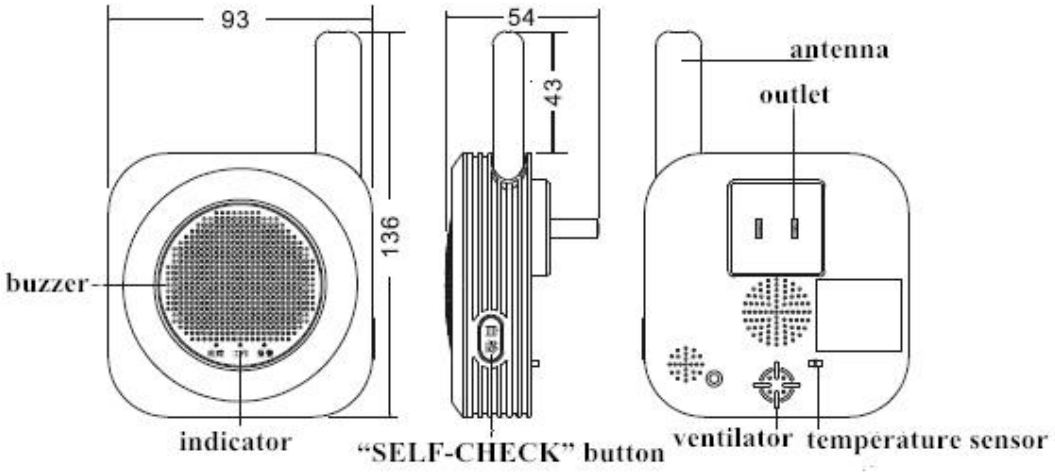
## III. Technical parameters

1. Operating power: AC 220V
2. Operating consumption: operating≤5W; Alarm≤5W
3. Operating Temperature: 0℃~55℃
4. Application: methane
5. Alarming: 5%LEL

6. Alarm volume: 70dB~115dB
7. Response time: ≤30s, reset automatically
8. Lifespan: ≥5 years (uncontaminated air condition)
9. Weight: approximately 120g
10. Dimensions: 136mm×93mm×54mm
11. Housing material: ABS
12. Installation: wall mount

## IV. Structural features

1. Dimensions(mm)




2. Installation
   Power the detector with AC220V, and it start operating.

## V. Instruction for use and installation

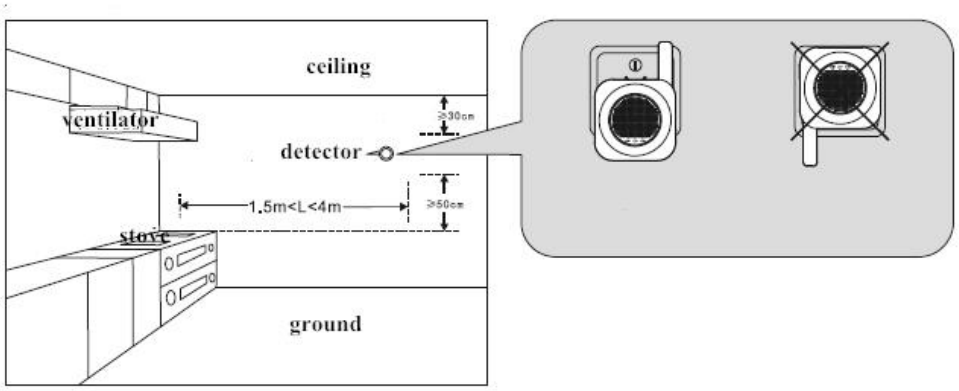
1. Instruction for use
   - Power-on: before power the detector, please make sure decoration is totally completed (Note: Don't expose the detector in decoration. Otherwise it might damage the detector's sensor). After the decoration is finished, power the detector and you will notice "Welcome to SANJIANG's product" audio prompt.
   - Prepare for operation: after connected to power, the detector needs about 20 minutes to prepare for operation. During this time, "RUN" indicator will flash in sequence.

- Operation: after preparing for operation, the detector starts operating, and the “RUN” indicator remains on steadily.
- Error: if the detector’s sensor malfunction (ex. the sensor in shortcut or open-circuit condition, etc.), “ERROR” indicator remains on steadily, and starts beeping in sequence every 5 seconds.
- Alarm: If smoke concentration around the detector has reached setting concentration for alarming, the detector will make sounds and “ALARM” indicator remains on steadily. Due to different kinds of combustible gas concentration, the detector makes three kinds of sounds:
    1) Attention! Combustible gas leak, please check circumstance!
    2) Warning! Combustible gas leak, please air the room by opening doors and windows. We suggest leave the room as soon as possible, and contact professional staffs to check circumstance!
    3) Danger! Combustible gas leak is serious, please don’t fire or turn on the light. We suggest leave the room as soon as possible, and call the police!
- Restore: If smoke concentration around the detector lower than setting concentration for alarming, the detector will stop alarming and restore to normal.
- Self-check: press “SELF-CHECK” button and the detector will start self-check status: the detector will check visual and audio component, and then return to normal operation.

2. Instruction for installation position:

The detector’s installation position depends on facts, and follows below rules:

1) The detector should be equipped in the same room with stoves.
2) Horizontal distance between the detector and stoves or gas should be 1.5m~4m.
3) The detector should be equipped above stoves and vertical distance between them should be more than 0.5m. Otherwise, distance between the detector and ceiling should be less than 0.3m.
4) Installation diagram:




5) In order to avoid unnecessary malfunction, please don't equip the detect in following places:

   a) Influence by stove vent directly

   b) Places where air velocity is fast

   c) Places where have too much steam or sometimes blackout

   d) Places where need explosion-proof

   e) Outdoor and temperature is lower than 0℃ or higher than 55℃

## VI. Troubleshooting

| No. | Problem | Cause | Solution | Remark |
|---|---|---|---|---|
| 1 | Keep silence during commissioning | Buzzer or internal circuit malfunction | Send the detector back to manufacturer and repair | |
| 2 | Indicator doesn't light up during commissioning | Indictor or internal circuit malfunction | Send the detector back to manufacturer and repair | |
| 3 | Alarm or error during prepare time for operation | Sensor is unstable, and need more time to prepare for operation | Check if it still alarm or error after prepare for operation | If the detector doesn't operation well, send it back to manufacturer and repair |

## VII. Maintenance

If the detector malfunction or has any other problems, please don't repair it by yourselves. Contact us, and we will solve the problem as soon as possible.

## VIII. Attention

1. Don't install or preserve the detector in corrosive circumstance.
2. Before install the detector, please make sure decoration is totally completed (Note: Don't expose the detector in decoration. Otherwise it might damage the detector's sensor).
3. Please don't test the detector with unknown concentration gas. Extreme concentration gas is harmful for the detector and health.
4. Please contact distributor/manufacturer to check the detector once a year in order to make sure it operates well.
5. Please don't test the detector with high air pressure instrument, because high pressure might damage the detector's sensor.

## IX. Warning

1. Please change the detector which has been used more than 5 years.
2. The detector won't be guaranteed if in following situations:
    1) Causing damage of the detector, because installation does not follow the instrument.
    2) Causing damage of the detector, because use beyond power voltage or disassemble it.
    3) Causing damage of the detector, because install it in unsuitable circumstance.
    4) The detector has been inappropriately used.