

	Product Name: VOXiLink	Last Modify Date: 2024/12/24
	Document Name: MP87X Controlled Part of Manual	Originator: JunJie Lu
Doc No.: CER90312	Rev. No.: 1	Page 1 of 9

Read Before Operating

This manual must be carefully read by all individuals who have or will have the responsibility of using, maintaining, or servicing this product. The product will perform as designed only if it is used, maintained, and serviced in accordance with the manufacturer's instructions. The user should understand how to set the correct parameters and interpret the obtained results.



- Never operate the monitor when the cover is removed.
- Use only mPower replaceable battery pack P/N:025-3003-X00
- This instrument has not been tested in an explosive gas/air atmosphere having an oxygen concentration greater than 21%.
- Substitution of components may impair suitability for intrinsic safety.
- Substitution of components may void warranty.
- This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.
- CAUTION: Changes or modifications to this unit not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.
- NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:
 - Reorient or relocate the receiving antenna.
 - Increase the separation between the equipment and receiver.
 - Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
 - Consult the dealer or an experienced radio/TV technician for help.
- This device complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with a minimum distance of 20 cm between the radiator and your body. This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

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WARNINGS:

**CAUTION: UNDERSTAND MANUAL FIRST BEFORE
OPERATING!**

**ATTENTION: COMPRENDRE LE MANUEL AVANT D'UTILISER
CE PRODUIT!**

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**CAUTION: SUBSTITUTION OF COMPONENTS MAY IMPAIR
INTRINSIC SAFETY.**

**ATTENTION: LA SUBSTITUTION DE COMPOSANTS PEUT
ENDOMMAGER LA SÉCURITÉ INTRINSEQUE.**

MP87X Multi Gas Detector Marking

MP87X Multi Gas Detector is certified by IECEx.

The MP87X Multi Gas Detector contains the following marking:

- Ex Mark
- Ex ib II C T4 Gb /Ex ib ia op is II C T4 Gb
- Multi Gas Detector
- MP87X
- VOXILink
- Battery: 3.6V
- Warnings:
Use only mPower replaceable battery pack
P/N:025-3003-X00

UNDERSTAND MANUAL FIRST BEFORE OPERATING.

- Serial No
- $-40^{\circ}\text{C} \leq T_{\text{amb}} \leq 60^{\circ}\text{C}$
- Manufacture name and logo

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Caution

- Battery replacement can only be done by mPower Electronics or authorized service department, to avoid any damage to PCB.
- Use only mPower replaceable battery pack P/N:M025-3003-X00.

CAUTION:

**FOR SAFETY REASONS THIS EQUIPMENT MUST BE
OPERATED AND SERVICED BY QUALIFIED PERSONNEL ONLY.
READ AND UNDERSTAND INSTRUCTION MANUAL
COMPLETELY BEFORE OPERATING OR SERVICING.**

ATTENTION:

POUR DES RAISONS DE SÉCURITÉ, CET ÉQUIPEMENT DOIT

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**ÊTRE UTILISÉ ET ENTRETÉ PAR DU PERSONNEL QUALIFIÉ
UNIQUEMENT. LIRE ET COMPRENDRE LE MANUEL
D'INSTRUCTIONS COMPLÈTEMENT AVANT D'UTILISER OU
D'ENTRETIEN.**

Year of manufacturing

To identify the year of manufacturing, please refer to the serial number of the instrument.

The fifth to sixth digit in the serial number indicates the year of manufacturing. 00~99 indicates the manufacturing year of 2000~2099.

*The following operation instruction may changes according to firmware development.

1. Setup:

a) Connection:

- Connect **red** (V+) & black (GND) wire to an DC supply for testing purpose. Set DC supply to 3.6V. For actual operation, a primary battery pack will be placed inside the enclosure and connected to the two power supply wires.

b) Power consumption:

- LCD ON: 15 mA – jump to 21 mA briefly once a second LCD OFF: 0 mA – jump to 12 mA briefly once a second

2. Operation:

a) Turn On Power:

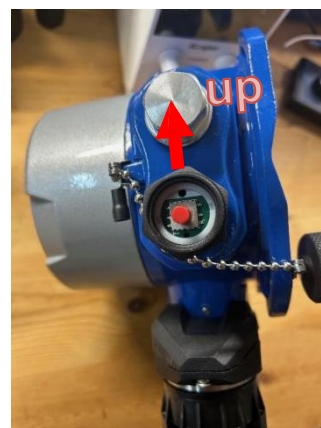
- Open the programming port, press the **red** button for 3 seconds. The LCD display and LED should turn on

b) LCD display:

- The LCD display shows the sensor name (H2S, LEL, etc.), measurement unit
- (ppm, %LEL, etc.) and sensor readings. After 3 minutes, the LCD display will turn off. The LED remains on. Press **once red** button, the LCD display will turn on again.

c) Normal mode:

- Press **[↓]** key, the Site ID will be displayed. After 2 seconds, it returns to



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normal display automatically.

d) Basic Menu mode:

- i. Long press 3 sec [↑] key to enter the Basic menu mode.
 1. Password screen (*Default basic menu mode password is 0000*)
- ii. Press [↑] or [↓] key to adjust digit, Press [←] or [→] key to move cursor, press **once red** button to confirm basic password
- iii. Press [←] or [→] key to select [calibration], [measurement] or [alarm setting] function, press **once red** button to confirm and enter the function menu
- iv. Press **twice red** button to return to previous menu
- v. Refer to MP87x Firmware QSG for the detailed basic menu mode operation

e) Advanced Menu mode:

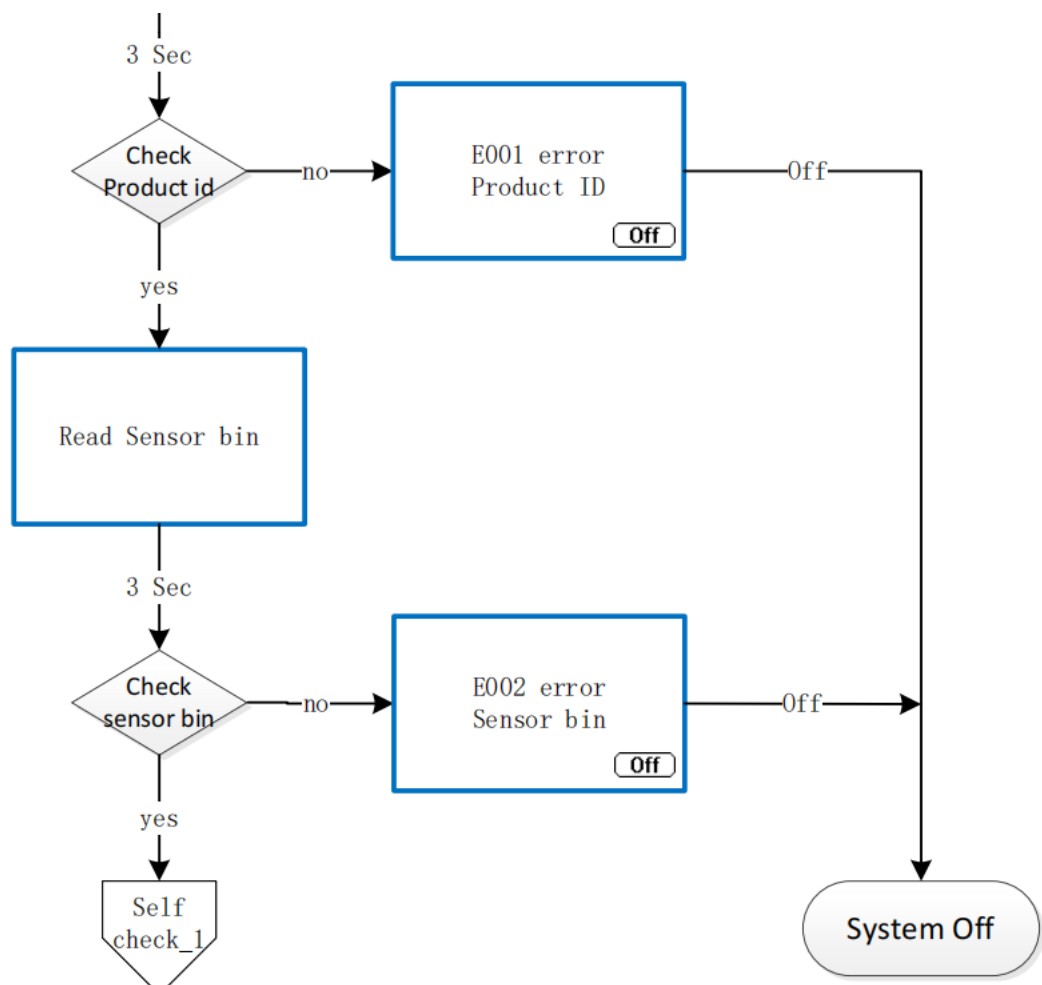
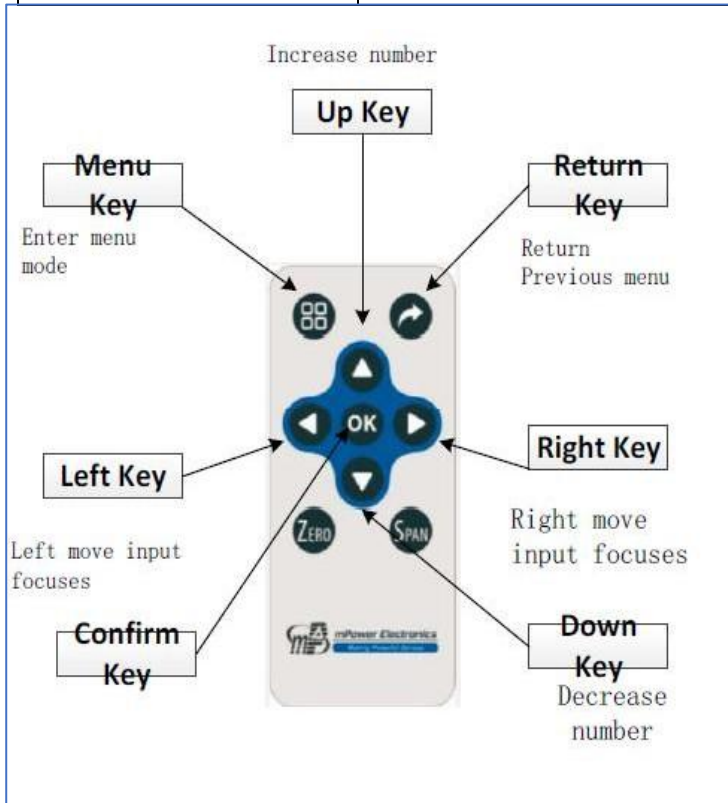
- i. Long press 3 sec [↑] key to enter the Advanced menu mode.
 1. Password screen (*Default advanced menu password is 8888*)
- ii. Refer to the MP87x Firmware QSG for the rest of the advanced menu mode operation

f) IR Remote Controller Operation:

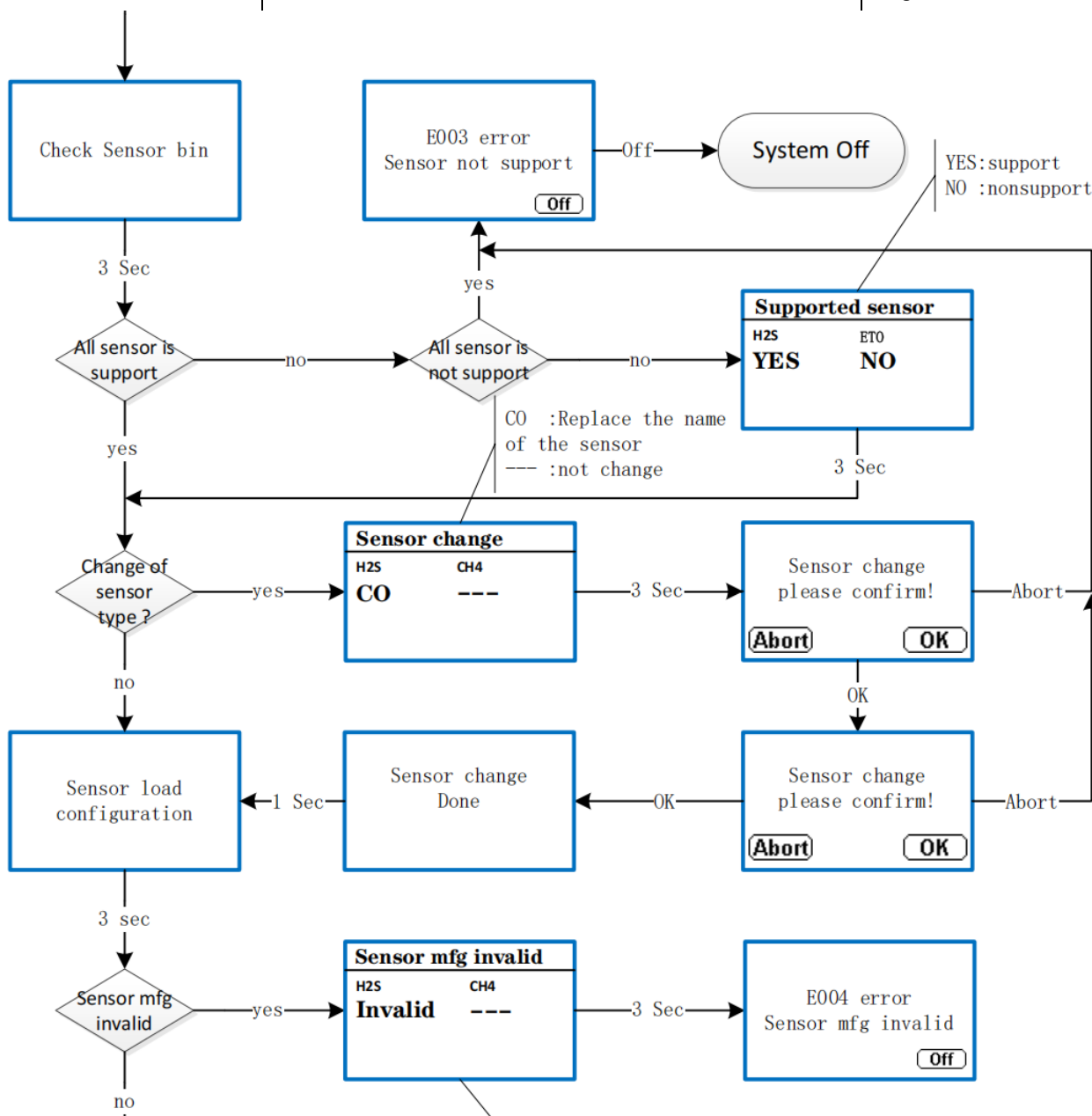
- i. The IR remote controller MP220 can be used to control the display and operation of MP87X transmitter.
- ii. First, turn on MP87x unit following step 2a).
- iii. If the LCD display is turned off, press [OK] button on the remote controller to turn on the LCD display
- iv. Operate the display using the buttons on the remote controller. The operation is very similar to that of the programming switch.

IR Device	JS 5208 key
Menu key	Long up (3 sec)
Up key	up
Return key	Double push
Right key	right
Down key	down
Confirm key	push
Left key	left

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3 Maintenance and repair

Please maintain the instrument regularly and check the working condition of the instrument; Check the air inlet of the sensor to ensure that it is not stained or blocked by impurities; Calibrate the instrument according to relevant laws and regulations. If need to replace the instrument sensor, please contact the service agency for repair.

4 Troubleshooting

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Note: Before searching the instrument problem, please make zero and span gas calibration on the instrument.

LCD fault message	Reason and solutions
E001 error Product ID	Reason: product id error Solution: Check the product or set the id again
E002 error Sensor bin	Reason: sensor id error Solution: Check the sensor or replace the sensor
E003 error Sensor not support	Reason: Unsupported sensor Solution: Check the sensor or replace the correct sensor
E004 error Sensor mfg invalid	Reason: sensor mfg invalid Solution: Make zero and span gas calibration on the instrument