mPower Electronics
Making Powerful Senses

UNI 321

Quick Start Guide

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PN: M001-4030-000 v1.31

Warning

- Never operate the monitor when the cover is removed.
- Remove the monitor cover and battery only in area known as non-hazardous.
- Use only mPower's lithium battery part number M500-0001-000 [1.17.02.0002] (3.6 V, 2700 mAh, AA size).
- This instrument has not been tested in an explosive gas/air atmosphere having oxygen concentration greater than 21%.
- Substitution of components will impair suitability for intrinsic safety and void warranty.
- It is recommended to bump test with a known concentration gas to confirm the instrument is functioning properly before use.
- Before use, ensure that the colorless ESD layer on the display is not damaged or peeling. (The blue protective film may be removed.)

Avertissement

- N'utilisez jamais le moniteur lorsque le couvercle est enlevé.
- Retirer le couvercle du moniteur et la batterie uniquement dans une zone connue comme non dangereuse.
- Utilisez uniquement le numéro de pièce de la batterie au lithium mPower M500-0001-000 [1.17.02.0002].
- Cet instrument n'a pas été testé dans une atmosphère explosive gaz / air ayant une concentration en oxygène supérieure à 21%.
- La substitution de composants compromettra l'aptitude à la sécurité intrinsèque et annulera la garantie.
- Il est recommandé de tester avec un gaz de concentration c onnu pour confirmer que l'instrument fonctionne correctem ent avant de l'utiliser.
- Avant l'utilisation, assurez-vous que la couche ESD incolore de l'écran n'est pas endommagée ou épluchée. (Le film protecteur bleu peut être enlevé.)

Read Before Operating

The User's Guide must be carefully read by all individuals who have or will have the responsibility of using, maintaining, or servicing this product.

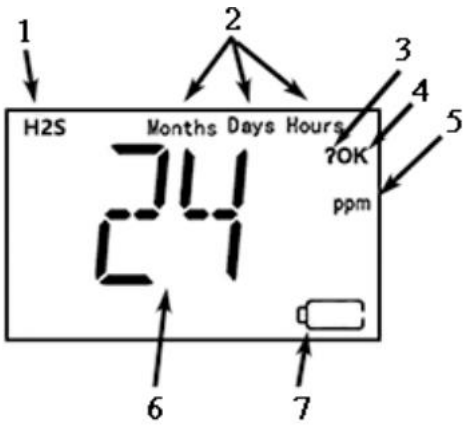
The product will perform as designed only if it is used, maintained, and serviced in accordance with the manufacturer's instructions.

User Interface

The UNI 321's user interface consists of the LCD display, LEDs, an alarm buzzer, two keys: Left Key [Confirm/Number increasing] and Right Key [Power/Cursor moving], an alligator clip, and a sensor.

Display

1. Gas name, includes: CO, H_2S, O_2
2. Remaining time unit: Months, Days or Hours
3. Question mark
4. Unit status indicator "OK"
5. Gas concentration unit, for alarm setting display
6. Remaining operation time
7. Low Battery



Turning the Unit On

Press and hold the Right Key for 3 seconds, until unit LCD displays "on", the buzzer beeps, and the green LED is on. After power on, the unit enters a warm up and self-test sequence, and then enters normal mode. Once the unit is turned on, it runs continuously until the remaining life time ends, and cannot be turned off.

Normal Mode

In normal mode, the unit starts monitoring gas concentration. The LCD displays the remaining life time when there's no gas alarm. In case of a gas alarm, the alarm type is displayed: Low or High alarm.

Enter Config Mode

Press and hold the Left Key and the Right Key together for 3 seconds, the unit enters config mode. The LCD displays "PWD" to prompt password entry. To input a password, use the Left Key to increase the number, and the Right Key to move the cursor. After all four digits are entered, the cursor will move to "OK". Use the Left Key to exit password input and enter Config Mode.

Exit Config Mode

When the LCD displays "Exit?", press Left to exit from Config Mode back to normal mode.

Zero (Fresh Air) Calibration

Zero calibration sets the base line for the sensor and is done in fresh air or other clean air source. When the LCD displays "AiR", press the Left Key to start zero calibration. When the 15-second count-down is finished, the zero calibration result "pass" or "fail" will be displayed.

To abort zero calibration during the 15-second count-down, press the Right Key and the display acknowledges with "AbRt".

Bump Test

A recorded Bump Test can only be done using an MP300 CaliCase with mPower Suite software. Please refer to the software user guide. A manual bump check can be performed by applying test gas and verifying that the alarms are triggered.

Daily Self-Test

1. Press the Left Key
2. Confrm that the following tests are performed:
   a) LED flashes, Buzzer beeps, Vibrator is on
   b) All LCD segments are shown
   c) High and Low alarm settings are shown
   d) Peak reading is shown if it occurred during the last 24 hours
   f) Minimum Oxygen reading is shown if it occurred during the last 24 hours
   g) Display returns to normal mode

Maintenance and Service

The UNI 321 is maintenance-free.

Year of Manufacture

The year of manufacture can be identified by the fifth and sixth digits of the instrument serial number. For example, 16 indicates that the unit was made in 2016.

Safety Certifications

UL/cUL:
Class I, Group A,B,C,D
Class II, Group E,F,G
Class III; T4, -20°C ≤ T_{amb} ≤ 50°C

IECEx: Ex ia IIC T4

ATEX: II 1G Ex ia IIC T4

UNI 321 Factory Calibration Certificate

The instrument was factory inspected, tested and calibrated in accordance with the conditions and requirements of our registered Quality System, Operating Standards and Sales Agreements.

Proper Product Disposal at The End Of Life

The Waste Electrical and Electronic Equipment (WEEE) directive (2002/96/EC) is intended to promote recycling of electrical and electronic equipment and their components at the end of life. This symbol (crossed-out wheeled bin) indicates separate collection of waste electrical and electronic equipment in the EU countries. This product may contain one or more nickel-metal hydride (NiMH), lithium-ion, or alkaline batteries. Specific battery information is given in this user guide. Batteries must be recycled or disposed of properly. At the end of its life, this product must undergo separate collection and recycling from general or household waste. Please use the return and collection system available in your country for the disposal of this product.