

QUICK START GUIDE

SST4 Pump

QSG-SST4 Pump-Rev 1.2

19.06.2024

EN

WARNINGS

- Ensure the monitor is switched on and the sensor and audible port are unobstructed prior to use.
- This detector is a personal safety device. It is your responsibility to respond properly to any alarm conditions.
- Do not use the device if it appears to be damaged. Always inspect it before use and look for blocked filters and physical damage.
- Periodically test the response of the sensors by exposing the detector to a target gas concentration that exceeds the alarm set point. Manually verify that the audible, vibration, and visual alarms are activated.
- For safety reasons, this equipment must be operated and serviced by qualified personnel only.
- Do not attempt to replace the internal components. This will void the intrinsic safety rating and will void the warranty of the product. (Unless replaced by a WatchGas-approved service technician using original WatchGas parts.)
- Deactivating the detector by removing the battery pack may cause improper operation and harm to the detector.
- The Li-ion battery in this product presents a risk of fire, explosion, and chemical burn if misused. Do not disassemble, incinerate, or heat above 212°F (100°C).

Batteries exposed to heat at 266°F (130°C) for 10 minutes can cause fire and explosion.

- Batteries must only be charged in a safe area free of hazardous gas.
- Only use WatchGas chargers. Using other Non-Approved chargers can lead to fire and/or explosion. (The Wireless charger used in conjunction with the equipment must be a suitably approved SELV / PELV supply with a maximum voltage not exceeding 5 V.)
- This instrument contains a lithium polymer battery. Do not disassemble and do not dispose of in fire. Do not mix with the solid waste stream.
- Used batteries must be disposed of by a qualified recycler or hazardous materials handler.

CAUTIONS/SPECIAL CONDITIONS

- All inspections should be performed in a clean and hazardous-free environment.
- The detector should be cleaned with a soft damp cloth using a neutral cleaner (i.e. ACL Staticide). **NOTE:** Do not use solvents, soaps, or polishes.
- This product is a gas detector, not a measuring device.
 - For optimal performance, periodically zero the sensor in a normal atmosphere (20.9% v/v O₂) that is free of hazardous gas.
- This equipment is intended for use in hazardous

atmosphere in air with normal oxygen content not exceeding 21.0 % v/v.

- Before using the detector, refer to Sensor Poisons and Contaminants (see SAFETY INFORMATION - READ BEFORE USE chapter).

AVERTISSEMENTS

- Assurez-vous que le moniteur est allumé et que le capteur et le port sonore ne sont pas obstrués avant utilisation.

- Ce détecteur est un dispositif de sécurité personnelle. Il est de votre responsabilité de réagir correctement à toute condition d'alarme.

- N'utilisez pas l'appareil s'il semble endommagé. Inspectez-le toujours avant utilisation et recherchez les filtres obstrués et les dommages physiques.

- Testez périodiquement la réponse des capteurs en exposant le détecteur à une concentration de gaz cible qui dépasse le point de réglage de l'alarme. Vérifiez manuellement que les alarmes sonores, vibrantes et visuelles sont activées.

- Pour des raisons de sécurité, cet équipement doit être utilisé et entretenu uniquement par du personnel qualifié.

- N'essayez pas de remplacer les composants internes. Cela annulera la cote de sécurité intrinsèque et annulera la garantie du produit. (Sauf remplacement par un technicien de service agréé WatchGas utilisant des pièces WatchGas d'origine.)

- La désactivation du détecteur en retirant la batterie peut entraîner un mauvais fonctionnement et endommager le détecteur.

- La batterie Li-ion de ce produit présente un risque d'incendie, d'explosion et de brûlure chimique en cas de mauvaise utilisation. Ne pas démonter, incinérer ou chauffer à plus de 212°F (100°C). Les batteries exposées à une chaleur de 266°F (130°C) pendant 10 minutes peuvent provoquer un incendie et une explosion.

- Les batteries ne doivent être chargées que dans une zone sûre, exempte de gaz dangereux.

Utilisez uniquement des chargeurs WatchGas. L'utilisation d'autres chargeurs non approuvés peut provoquer un incendie et/ou une explosion. (Le chargeur sans fil utilisé avec l'équipement doit être une alimentation SELV/PELV dûment approuvée avec une tension maximale ne dépassant pas 5 V.)

- Cet instrument contient une batterie au lithium polymère. Ne pas démonter et ne pas jeter au feu. Ne pas mélanger avec le flux de déchets solides.

- Les batteries usagées doivent être éliminées par un recycleur qualifié ou un manutentionnaire de matières dangereuses.



PRÉCAUTIONS / CONDITIONS PARTICULIÈRES

- Toutes les inspections doivent être effectuées dans un environnement propre et sans danger.
- Le détecteur doit être nettoyé avec un chiffon doux et humide en utilisant un nettoyant neutre (c'est-à-dire ACL Staticide). REMARQUE : N'utilisez pas de solvants, de savons ou de produits à polir. Ce produit est un détecteur de gaz et non un appareil de mesure.
- Pour des performances optimales, mettez périodiquement le capteur à zéro dans une atmosphère normale (20,9 % v/v O₂) exempte de gaz dangereux.
- Cet équipement est destiné à être utilisé dans une atmosphère dangereuse dans un air dont la teneur normale en oxygène ne dépasse pas 21,0 % v/v.
- Si le film antistatique de l'écran LCD est endommagé, ne l'utilisez pas et contactez votre distributeur WatchGas agréé.
- Avant d'utiliser le détecteur, reportez-vous à la section Poisons et contaminants du capteur (voir le

chapitre INFORMATIONS DE SÉCURITÉ - À LIRE AVANT UTILISATION)



AVISOS

- Certifique-se de que o monitor esteja ligado e que o sensor e a porta sonora estejam desobstruídos antes do uso. Este detector é um dispositivo de segurança pessoal. É sua responsabilidade responder adequadamente a quaisquer condições de alarme.
- Não use o dispositivo se ele parecer danificado. Sempre inspecione-o antes de usar e procure por filtros bloqueados e danos físicos.
- Teste periodicamente a resposta dos sensores expondo o detector a uma concentração de gás alvo que exceda o ponto de ajuste do alarme. Verifique manualmente se os alarmes sonoros, vibratórios e visuais estão ativados.
- Por razões de segurança, este equipamento deve ser operado e reparado apenas por pessoal qualificado.
- Não tente substituir os componentes internos. Isso anulará a classificação de segurança intrínseca e anulará a garantia do produto. (A menos que seja substituído por um técnico de serviço aprovado pela WatchGas usando peças originais da WatchGas.)
- Desativar o detector removendo a bateria pode

causar operação inadequada e danos ao detector.

- A bateria de íons de lítio deste produto apresenta risco de incêndio, explosão e queimadura química se usada incorretamente. Não desmonte, incinere ou aqueça acima de 100°C (212°F). Baterias expostas ao calor a 130°C (266°F) por 10 minutos podem causar incêndio e explosão.

- As baterias só devem ser carregadas em uma área segura e livre de gases perigosos.

Use apenas carregadores WatchGas. O uso de outros carregadores não aprovados pode causar incêndio e/ou explosão. (O carregador sem fio usado em conjunto com o equipamento deve ser uma fonte SELV / PELV devidamente aprovada com uma tensão máxima não superior a 5V.)

- Este instrumento contém uma bateria de polímero de lítio. Não desmonte e não descarte no fogo. Não misture com o fluxo de resíduos sólidos.

- As baterias usadas devem ser descartadas por um reciclador qualificado ou por um manipulador de materiais perigosos.



! CUIDADOS/CONDIÇÕES ESPECIAIS

- Todas as inspeções devem ser realizadas em um ambiente limpo e livre de perigos.

O detector deve ser limpo com um pano macio úmido e um limpador neutro (ou seja, ACL Staticide).

NOTA: Não use solventes, sabões ou polidores.

- Este produto é um detector de gás, não um dispositivo de medição.

- Para um desempenho ideal, zere periodicamente o sensor em uma atmosfera normal (20,9% v/v O₂) livre de gases perigosos.

- Este equipamento destina-se ao uso em atmosferas perigosas em ar com teor normal de oxigênio não superior a 21,0% v/v.

Se o filme antiestático do display LCD estiver danificado, não use e entre em contato com seu distribuidor autorizado WatchGas.

- Antes de usar o detector, consulte Venenos e contaminantes do sensor (consulte o capítulo INFORMAÇÕES DE SEGURANÇA - LEIA ANTES DE USAR)

 **SAFETY INFORMATION - READ BEFORE USE**

Sensor contaminate

WatchGas recommends the catalytic combustible sensor be checked with a known concentration of calibration gas after any known exposure to catalyst contaminants/poisons (sulfur compounds, silicon vapors, halogenated compounds, etc).

The catalytic combustible sensor is factory calibrated to 50% LEL methane. If monitoring a different combustible gas in the % LEL range, calibrate the sensor using the appropriate gas.

Do not test the combustible sensor's response with a butane cigarette lighter; doing so will damage the catalytic LEL sensor.

WARNING: Over limit readings may indicate an explosive concentration.

Any rapid up-scaling reading followed by a declining or erratic reading may indicate a gas concentration beyond upper scale limit, which may be hazardous.

Extended exposure of the detector to certain concentrations of combustible gases and air may

stress sensing element that can seriously affect its performance. If an alarm occurs due to high concentration of combustible gases, calibrate the detector. If necessary, replace the sensor. Do not expose the detector to electrical shock and/or severe continuous mechanical shock. Ensure proper pump function prior to use.

PRODUCT IDENTIFICATION

Serial number 10 digit:

digit 1-2: product code

digit 3: model

digit 4: Hardware revision

digit 5: year of manufacturing

digit 6: month of manufacturing

digit 7-10: running serial number

E.g.: XXXX3CXXXX = 2023/Dec.

INTRINSIC SAFETY:**With CAT LEL.****II 1G Ex ia IIC T4 Ga****IM1 Ex ia I Ma****With IR sensor installed:****II 1G Ex ia op is IIC T4 Ga****IM1 Ex ia op is I Ma,**

IECEX EXV 23.0045X

ExVeritas 23ATEX1686X

ExVeritas 23UKEX1687X

Int.Safe: CII Dv1, Gr A,B,C,D T4

SST4 pump

 $-20^{\circ}\text{C} \leq \text{Tamb} \leq +60^{\circ}\text{C}$ EU conformity www.watchgas.com

RoHS compliant

Standard

EN IEC 60079-0:2018

EN 60079-11:2012

EN 60079-28:2015

IEC 60079-0:2017

IEC 60079-11:2011

IEC 60079-28:2015

Inmetro:

ABNT NBR IEC 60079-11:2011

ABNT NBR IEC 60079-0:2017

ABNT NBR IEC 60079-28:2015

North America:

UL 60079-0 7th Edition

UL 60079-11 6th

UL 60079-28:2015

UL 60079-29 6th

CSA C22.2 NO. 60079-0:19

CAN/CSA C22.2 NO. 60079-11:14

UL 61010-1 Safety Requirements

CAN/CSA-C22.2 NO. 61010-1-12/A1:18

APPROVED BATTERY

Approved batteries for SST4 Pump

BATTERY CHARGER:

Induction charger for SST Range: SST-IND-S

Induction Disk Charger for SST Range (comes with unit

as standard): SST-DISK-CHR

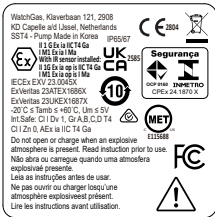
**WARNING**

Charge only in a safe area that is free of hazardous gas

and within temperatures of 32°F to 113°F (0°C to 45°C)

First-time charge: 3 hours.

Normal charge: SST4 Pump: 4-6 hours.**Indication Error LEL: ± 5% FS**



SST4 Pump label

PREPARE FOR USE

The list below provides the standard items included with the detector. If the detector is damaged or parts are missing, contact the place of purchase immediately.

- Sensors: H2S, SO2, CO, O2, and combustible (LEL) (LPC, CAT or IR) as ordered
- Male Luer
- Calibration Hose 30cm/1ft
- Printed Quick Start Guide
- Calibration/QC Card
- External 25 mm filter
- Disk induction charger with USB

All units come with a disk induction charger model number SST-DISK-CHR as standard. Also available is the SST Cradle Charger for all the SST4 gas devices part number SST-IND-S speak to your local partner for more information.

Configuration Application: The detector is configured WatchGas SST Application it can be downloaded from Google play or IOS store alternatively from www.watchgas.com

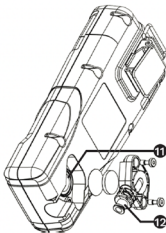
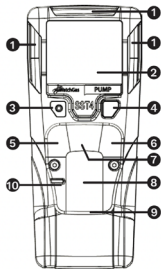
ALARM SET POINTS

Default factory alarm set points

Gas	Low	High	STEL	TWA
LEL	10 %LEL	20 %LEL	N/A	N/A
H2S	10 ppm	15 ppm	15 ppm	10 ppm
CO	35 ppm	200 ppm	100 ppm	20 ppm
SO2	5 ppm	10 ppm	5 ppm	2 ppm
O2	19.5% Vol	23.5% Vol	N/A	N/A

These set points can be changed using the WatchGas SST Application.

GETTING STARTED



- 1. Visual Alarm
- 2. Display
- 3. Audio Alarm
- 4. Button

- Under Cover:
- 5. Oxygen sensor
- 6. Toxic sensor
- 7. Toxic Sensor

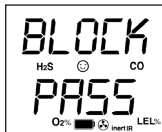
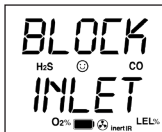
- 8. LEL sensor
- 9. Pump Cover
- 10. Gas outlet
- 11. Filter
- 12. Gas inlet

To activate the detector, press and hold the button until the 3 second countdown is complete.

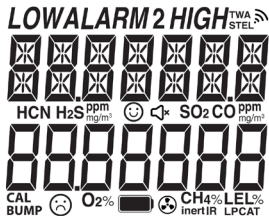
WARNING: If the Pump Cover is **NOT** installed, the unit cannot be calibrated in order to ensure a full verification of the device.

If the pump cover is mounted upon start up, the pump will automatically start when the detector is turned on. After the sensor warm up, the device will require the user to "BLOCK INLET" to the pump, in order to complete the Block Inlet test.

If BLOCK INLET test passed successfully, the unit will start normal operation. If the user fails to complete the first Block Inlet test, they will then have 3 more tries to block the Block Inlet and complete this test before the unit switches off. To deactivate the detector, press and hold the button until the OFF countdown is complete and the LCD deactivates. To view the TWA, STEL, and peak (maximum) readings, press the button twice. To clear the peak readings, press the button when the LCD displays CLR. To activate NFC, press the button for 1.5 second until you hear a single beep and the NFC Icon is active. To activate the backlight in normal operation, press the button. To acknowledge latched alarms, press the button.

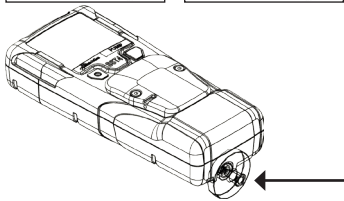


DISPLAY



When the device is powered on or off the full display will light up as above showing all segments allowing the user to fully verify the correct function.

A self-test can be performed by holding the button for 3 seconds, after the detector will alarm and light up the display.









External filter
PN: SST-WTF-001

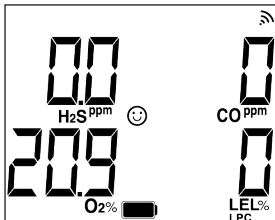
When using the Pump Function on the SST4 Pump Detector, always use the external filter SST-WTF-001. Periodically inspect the external filter for contamination and replace as needed. Use of sampling tubes increases response time.

NOTE: The device should not be operated without an external filter.

ALARM	
ALARM	Alarm Notification
LOW	Low Alarm
HIGH	High Alarm
STEL	Short Term Exposure Alarm
TWA	Time Weighted Average Alarm
2	Indicate LOW LOW or HIGH HIGH alarm. 3rd alarm level
SENSORS	
H₂S	Hydrogen sulfide sensor
SO₂	Sulfur dioxide sensor
CO	Carbon monoxide sensor
O₂	Oxygen sensor
IR	NDIR LEL
LPC	Low Power Catalytic
CAT	Catalytic bead LEL sensor

INFORMATION	
	Product Compliant
	Product Non-Compliant
CAL	Calibration Required
BUMP	Bump Required
	NFC in Communication
	Battery level
	Mute
	Pump ON
inert	Inert
UNIT OF MEASURE	
ppm	Parts Per Million
mg/m ³	Milligrams per Cubic Meter
LEL%	Percentage LEL
O₂%	Percent VOL

NORMAL OPERATION



In normal operation the installed sensors are displayed and a Smiley Face indicates no attention is needed. Press the button for 1,5 sec until you hear a beep and the NFC Icon flashes.

Use the WatchGas SST Application or a SST Dock to configure the unit. Details are in the manual.

The SST Range products are shipped with following features **deactivated**:

Latched Alarm, Heart beat, Silent Mode, Alarm mute, Low Alarm Acknowledgement, Scan Protect, Compliance Interval, Enable Expiry, Zero Cal, Safe Mode, High High and Low Low alarms.

MENU

Press the button twice and the settings of the unit will be displayed.

Short button press to move to next screen

1. STEL Press and hold button to reset
2. TWA Press and hold button to reset
3. PEAK Press and hold button to reset
4. Days to Calibrate (only if configured)
5. Days to Bump (only if configured)
6. LEL correction factor
7. Language
8. Date
9. Time
10. User ID
11. Site ID
12. VAC
13. Inert On (only if configured)

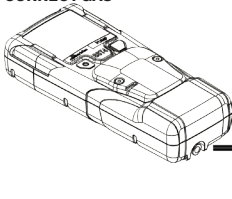
Screen shots are available in the full manual.

CALIBRATION



The SST Range products can only be calibrated with the WatchGas SST Application or an SST Dock.

CONNECT GAS



Last-O-More
Sampling Hose
PN: 411-0018-038

SPECIFICATION

Measurements: 15.0 x 6.22 x 3.65 cm (5.9 x 2.4 x 1.4 in.)

Weight: 275 g (6.3 oz.)

Storage temperature: -20°C to +50°C (-4°F to +122°F)

Operating temperature: -20°C to +60°C (-4°F to +140°F)

Operating humidity: 0% to 95% relative humidity (non-condensing)

Alarm setpoints: May vary by region and are user defined. All setpoints automatically display during the startup self-test

Detection range:

H₂S: 0 – 500 ppm (1 / 0.1 ppm increments)

CO: 0 – 2000 ppm (1 ppm increments)

O₂: 0 – 25.0% vol. (0.1% vol. increments)

SO₂: 0 – 100 ppm (1 / 0.1 ppm increments)

Combustible (LEL): 0% to 100% LEL (1% LEL increments)

Alarm conditions: TWA alarm, STEL alarm, low alarm, high alarm, over limit (OL) alarm, low battery alarm, Low Low and High High alarm.

Audible alarm: 95 dB at 30 cm (1 ft.) (100 dB typical) multi tone

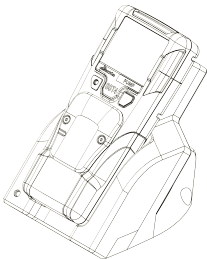
Vibration alarm: 0.8 G

Display: Alphanumeric liquid crystal display (LCD)

Datalogging: Yes

Backlight: Activates when the pushbutton is pressed and deactivates after 5 seconds; also activates during an alarm condition

CHARGING THE SST RANGE



The SST Range products can be charged in the WatchGas SST Charger. Connect the power adapter to the USB-C port. Connect the adapter to main power. The charger will now blink red-green-red to indicate correct function. While charging the LED will be red. When fully charged the LED will change to green.

LIMITED WARRANTY

Where a product within the warranty period has a defect or a quality issue, WatchGas provides the buyer with a repair or a replacement for free of charge direct from WatchGas or through an authorized Partner / Service Center. This warranty is only applicable to the original purchaser of the product. Also, this warranty is valid only if the detector is activated by the date on the package.

This warranty does not include:

1. fuses, disposable batteries, or routine replacement of parts due to the normal wear and tear of the product arising from use.
2. any product which, in WatchGas's opinion, has been misused, altered, neglected or damaged by accident or abnormal conditions of operation, handling, or use.
3. any damage or defects attributable to repair of the product by any person other than an authorized dealer, or the installation of unapproved parts on the product.

The obligations specified this warranty are conditional on:

1. proper storage, installation, calibration, use, maintenance and compliance with the product manual instructions and any other applicable

- recommendations of WatchGas;
2. the purchaser promptly notifying WatchGas of any defect. No products shall be returned to WatchGas until receipt by the purchaser of shipping instructions from WatchGas;
 3. the right of WatchGas to require that the purchaser provide proof of purchase such as the original invoice, bill of sale or packing slip to establish that the product is within the warranty period.

In no event shall WatchGas liability hereunder exceed the purchase price actually paid by the buyer for the product.

The buyer agrees that this warranty is the buyer's sole and exclusive remedy and is in lieu of all other warranties, expressed or implied, including but not limited to any implied warranty or merchantability or fitness for a particular purpose. WatchGas shall not be liable for any special, indirect, incidental, or consequential damages or losses, including loss of data, whether arising from breach of warranty or based on contract, tort, or reliance on any other theory. Some countries or states do not allow limitation of the term of an applied warranty, or exclusion or limitation of incidental or consequential damages, the limitations and exclusions of this warranty may not apply to every buyer. If any provision of this warranty is held invalid or

unenforceable by a court of competent jurisdiction, such holding will not affect the validity or enforceability of any other provision.

FOR MORE INFORMATION

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