

Sensiblue 315

MANUAL

Rev. C – 27-06-2017

Installation, use and servicing



FOR POTABLE WATER ONLY

©2013 SENSIBLUE

No part of this publication may be reproduced, transmitted, transcribed, stored in any retrieval system or translated into any human or computer language by any means or in any form, without the prior written permission of SENSIBLUE. Contravention of the owner's copyright may also reduce the ability of SENSIBLUE to provide effective support for its equipment.

All the technical information, data and instructions contained in these operating instructions for operations that can and are to be performed, are up to date at the time of editing. They contain our current knowledge and experience to the best of our understanding.

We reserve the right to make technical modifications arising from the further development of the SENSIBLUE product presented in these operating instructions. For this reason, no claims may be derived from technical data, descriptions and illustrations.

SENSIBLUE reserves the right to make changes without notice to both this manual and to its products described within this manual. Nothing in this manual represents any contractual or other commitment on the part of SENSIBLUE and should not be taken as such. All possible care has been taken in the preparation of this publication. Contact SENSIBLUE for suggestions for improvement. This manual is originally written in English. A copy is available on request.

SAFE INSTALLATION, USE AND SERVICE

Your safety and the safety of others is extremely important in the installation, use and servicing of this water disinfectant.

Read and follow all safety messages and instructions throughout this manual. It is very important that the meaning of each safety message is understood by you and others who install, use or service this water disinfectant.

GENERAL SAFETY

WARNING:

Read and understand instruction manual and safety messages before installing, operating or servicing the Sensiblue disinfectant.

Failure to follow instructions and safety messages could result in death or serious injury.

This instruction manual must remain with the Sensiblue.

Don't fill the salt container with chemicals other than consumable salt!

Don't open the cover of the Sensiblue.

CAUTION:

Improper installation and use may result in property damage!

Do not operate Sensiblue if flood damaged.

Check Sensiblue on leakage after installation.

Do not install the Sensiblue when water pressure can exceed 8 bar.

Do not use the Sensiblue for disinfecting non potable water.

CUSTOMER INFORMATION

Thank you for purchasing the Sensiblue potable water disinfectant. Properly installed and maintained, it should give you years of trouble free disinfection.

Sensiblue is designed to disinfect potable water and control legionella in your shower water as well as for safe water storage. Typical situations are drinking water installations with 'dead water' e.g. in holiday houses where the water circuit is not used continuously.

Sensiblue uses the salt electrolysis process to disinfect drinking water. After disinfection the water will contain a low concentration of active chlorine (< 0,4 mg/l) and salt, NaCl (< 20 mg/l), these low concentrations do not change the taste of the water.

Sensiblue doesn't need any connection to the power supply nor batteries.

The Sensiblue can be installed in both a point-of-entry and a point-of-use situation. As long as the capacity of the Sensiblue is taken into account, the disinfection will be effective.

The operating life of the Sensiblue depends upon the water quality, water pressure and water flow.

It is strongly suggested that the Sensiblue is professionally installed. Contact your reseller for recommended installers.

Read the 'General Safety' section of this manual first and then the entire manual carefully. If you don't follow the safety rules, the water disinfectant may not operate properly. It could cause sickness and or property damage.

READ THIS ENTIRE MANUAL BEFORE ATTEMPTING TO INSTALL OR OPERATE THE SENSIBLUE!

If after reading this manual you have any questions or do not understand any portion of the instructions please contact your reseller.

Sensiblue is protected by patents in countries all over the world. If patents are violated the Dutch law will be applicable.

TOOLS NEEDED

Material not included

- 2 Connecting tubing with 3/4" inner thread fitting.
- 2 Crosshead screws, Ø6mm and 2 plugs
- Teflon tape (used on water connections)

Tools

- Crosshead screwdriver
- Drill + bore
- Bahco or fork wrench (s=30mm)
- Tubing cutter or hacksaw

INSTALLATION INSTRUCTIONS

You should carefully choose a dry and frost-free location for the Sensiblué disinfectant, because the placement is an important consideration for the optimal performance and operating life.

The Sensiblué must be mounted to a stable vertical surface (brick wall/hardboard wall).

CAUTION

The Sensiblué should be installed dry and frost-free!

Do not install Sensiblué close to electrical devices. Be aware of small leakage of the salt container especially when filling it with salt. So avoid electrical devices in the area under the salt container.

CAUTION

Sensiblué produces active chlorine and salt. If you would serialize 2 or more Sensiblué disinfectants or install it in a recirculation installation the active chlorine or salt % could reach undesired high values.

CAUTION

When the feed water is already chlorinated do not install the Sensiblué, the overall concentration of active chlorine could exceed safe values.

If some residual chlorine is yet present in the feed the use of an active carbon filter before the Sensiblué can be considered.

Depending on the water quality, the total distance from Sensiblué to tap and residence time, the amount of can be negligibly resulting in a decreased performance.

If you have any doubt about the amount of active chlorine in the tap water, you should perform an active chlorine test e.g. with active chlorine indicator sticks or other measuring equipment.

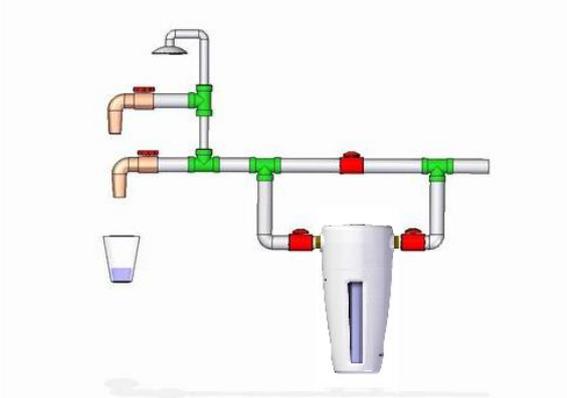
The maximum water temperature; 40°C/ 104° Fahrenheit for optimal operation

CAUTION

In case a Sensiblué equipped water circuit is not used for several weeks, we strongly advise to first 'clean' the circuit by opening all taps/faucets before using the water.

Typical Installation

A. In Line by-pass



We strongly advise to install the Sensiblue in a dry, clean, aerated and frost free environment.

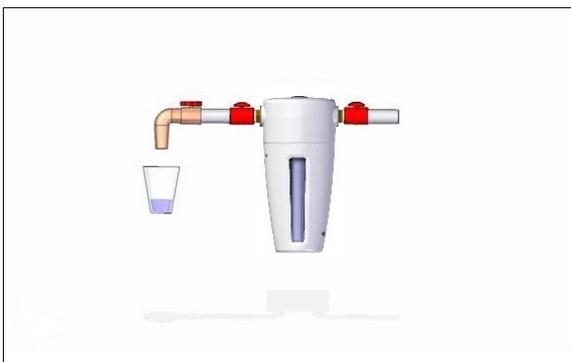
We advise you to install Sensiblue between two valves; upstream and downstream for easy refill the salt container and to have back up water supply if the Sensiblue would be out of order.

Sensiblue must be installed before a drain point or faucet. An 'open end' configuration can result in an unsafe performance.

The water temperature may not exceed 40°C for good operation.

B. In Line

This type of installation has no back up line if the Sensiblue would be out of order.

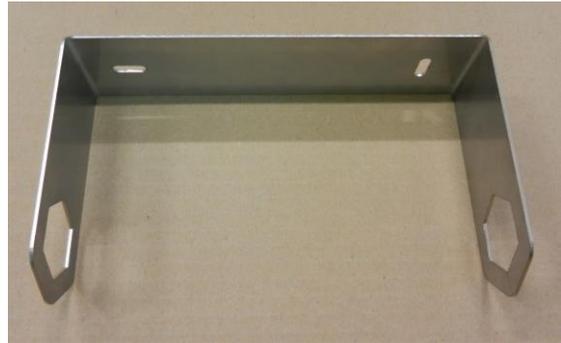


Mounting the Sensiblue

install Sensiblue in horizontal position (both in front and side-view)

Handle the Sensiblue with care; damages can lead to leakage.

Define the exact place for the Sensiblue to hang. keep bottom at least 10cm from the floor. Please take bend radii of the tubing into account.



Install the mounting bracket. Drill two holes corresponding to the plug or screw, horizontal.



Sensiblue can be turned around 180 degree so that the water inlet and water outlet side can be positioned to what is the most easy for your installation.



Connecting to the water circuit

In case of a new made water circuit, first clean the water works by tapping water for a about 1 minute.

We advice (flexible) tubing with internal diameter of at least Ø15mm; smaller tubing will decrease the performance of Sensiblu.

Avoid mechanical stress on the Sensiblu as result of the connection to the water circuit.

Sensiblu is equipped with 3/4" pipe thread.

Install the Sensiblu according to one of the installation schemes.

CAUTION

Sensiblu can only be connected to the water system in one way. Note IN and OUT. Flow in opposite direction can demolish the system!

Operation

If the Sensiblu salt container is not already filled with salt go to 'Service and Maintenance' and follow the fill procedure.

- After installation: open the downstream valve.
- Gently open the upstream (main) valve and watch the container being filled with water.
- When water reaches top of container; close upstream valve.
- Open the upstream (main) valve again.
- Check the system on any leakage.
- Sensiblu is now ready for use.
- For optimal performance i.e. chlorine production sufficient salt must be dissolved. Depending on water temperature this will take 10-30 minutes

CAUTION

Inclusion of air in the water can have major influence on the performance of Sensiblu

LED indicator

Sensiblu is equipped with a multicolour-LED that provides information about the Sensiblu status.

The LED only works in case of flow (> ca. 3/ min or 180l/h).



If the LED indicates green, Sensiblu is disinfecting water.

If the LED indicates red, the salt container needs to be refilled (see 'Service and Maintenance').

CAUTION

After start the first 100 ml water will contain a slightly higher salt concentration which may change the taste

SERVICE AND MAINTENANCE

The Sensiblu® disinfection process not only uses water for its energy supply, it also uses a very small amount of salt. The salt consumption of Sensiblu® depends mainly on the amount of water used.

When the LED-indicator gives a red sign refill the container with new salt. Use only consumable salt

CAUTION

Use only consumable salt pearls, preferable the Salt refill units available at your reseller. These pearls match the requirement 5-15mm EN973 Type A and/or DIN19604 Type 2.

Refilling container with salt

- Close all valves and taps in the water circuit.
- Open the down-stream tap to release water pressure.



- Open the Sensiblu housing by turning the housing following the indicated direction



- Unscrew the salt container anti-clockwise
- Pour out 2/3 of the water. After refilling it will take 10-30 minutes before a sufficient amount of salt has been dissolved for optimal performance of chlorine production. Leaving part of the salty water will accelerate startup .
- Clean the container and O-ring with warm water.
- Check the position of the salt distribution unit in the container and the position of the O-ring
- Pour the salt in the container (consumable salt pearls, dimensions 5-15mm, according EN973 Type A and/ or DIN19604 Type 2).
- Mount the salt container back to the Sensiblu and close it hand tight
- Slowly open the upstream valve, the container will be de-aerated if you open the downstream valve and close and open the upstream valve 2 or 3 times.
- Note: After refilling the container it takes some time for the Sensiblu to start up the disinfection process. The LED indicator will soon after refilling turn green again.

TROUBLESHOOTING

LED does not indicate green nor red	Water pressure/ flow is not sufficient, increase water flow
LED indicates red	<p>Check if there are still salt pearls in the salt container.</p> <p>A. If there are no salt pearls in the salt container it needs to be refilled (see 'Service and Maintenance')</p> <p>B. If there are salt pearls in the salt container check if the distribution unit is not blocked by holding the top end in water and blowing air through the other side. The end in the water should show air bubbles. If not replace the distribution block.</p>
Leakage of the Sensiblue	<p>A. Check if the Salt container is mounted properly, open and close it again</p> <p>B. Water pressure is too high, lower to max 8 bar</p>
Active chlorine test indicates production is below 0,2 mg / l	<p>A. Check if there are salt pearls in the Salt container, if not refill the salt container</p> <p>B. Flow is too low, increase flow > 3 l / min</p> <p>C. Flow is too high, lower the flow up to 15 l / min</p> <p>D. After first time installation or salt refill not enough salt has been dissolved yet. Wait 10-30 minutes.</p> <p>E. The flow in the salt distribution unit might be blocked, replace the salt distribution unit (see spare part list)</p>

MAINTENANCE and SPARE PARTS LIST

Description	Article number	
Salt Refill unit 850 gram		
Salt distribution unit		
Salt cartridge		
Spanner		

PRODUCT SPECIFICATIONS

Sensiblu type Type 315	
Max. capacity	approx. 15 L / min
Max. water pressure	8 bar
Min. flow for disinfection	Approx. 3 L/min
Min. water pressure for disinfection	0,2 Bar
Life span (expected)	1800 m ³ (water quality according to Dutch standards).
Process	Salt electrolysis and production of active chlorine
Application	Disinfection of drinking – and shower water
Requirements feed water – pH	7 – 8
Requirements feed water – filtered up to	100 micron
Active chlorine production	0,2 – 0,4 mg/ l
Salt consumption	approximately: 20-30 gr/m ³
Refill Salt	quality pearls 5-15mm approved for drinking water, meeting standards EN973 TypA and/ or DIN19604 Typ2
Mass of salt in container:	approx. 0,85 kg
Sensiblu meets WHO requirements for drinking water	
Sensiblu complies with CE-rules.	
All materials meet with NSF regulations.	
All electronic components are RoHS compliant.	
Electronics meet protection classification IP65	
Weight	3 kg including salt and packaging
Measurements packaging box	400 x 233 x 206 mm (LxWxH)
Measurements Sensiblu	175 x 160 x 370 mm (LxWxH)

WARRANTY

Guarantee period for the Sensiblue disinfectant is one year.

The guarantee proper function of the Sensiblue if instructions in this manual has been followed properly

If you have any trouble to start up the Sensiblue please check the installation and operation instructions first.

If your Sensiblue have been working properly and have an operational problem please check the Trouble shooting section first.

If you are not able to solve your problem contact your reseller and report your problem as well as your Sensiblue serial number.