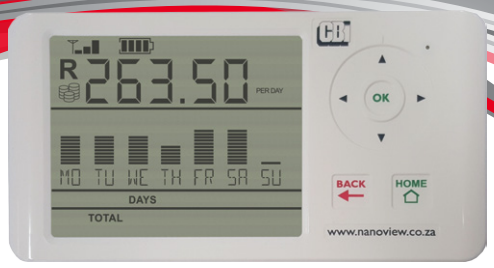


For use in conjunction with the CBI NanoView (NVFP001) *

** Sold separately*

Realtime and accumulated consumption of wireless water meter, (can be expanded to maximum of 4 NanoWater meters) displayed in either Litres (ℓ), Kilolitres (kℓ), Rands and Cents (R / c)

Consumption graphs for each NanoWater meter in (ℓ / kℓ / R / c) every: hour for the last 24 hours, day for the past 2 weeks, week for the past 7 weeks, month for the past 12 months, calendar year for up to 5 years

- Connects wirelessly to the NanoView Controller
- 100 m range
- 3 year battery life (displayed on NanoView Controller)
- Compatible with popular water meter brands: Elster Kent V110, Precision Meters ASM and most reed switch capable brass and plastic water meters
- SANS 60950
- ICASA type approved

ICASA TA-2016/1783 APPROVED

CONTENTS

- 1 x NanoWater Transmitter
- 2 x AA Batteries
- 1 x Reed Switch Cable
- 1 x Reed Switch Mounting Screw
- 1 x Installation Guide / Programming Instruction

REQUIRED INSTALLATION EQUIPMENT (not supplied)

- 2 x Cable Ties (min. 250 mm in length)
- 1 x Phillips Screwdriver (Pozi 1#)
- 1 x Phillips Screwdriver (Pozi 2#)

CAUTION

Batteries may explode or leak if recharged, inserted improperly or mixed with different types. Never dispose of batteries in fire because they could explode. Dispose of used batteries promptly, in accordance with local requirements.

Please recycle

Silico

Customer Service:
0860 BREAKR

Tel: +27 (0)11 928 2000
cbi@cbi-electric.com
www.cbi-lowvoltage.com

MANUFACTURED IN SOUTH AFRICA,
DESIGNED BY CIRCUIT BREAKER INDUSTRIES (PTY) LTD &
SILICO (PTY) LTD.

6 009522 959401
WMBP001

Step 2:

Remove the rubber seal to expose the Reed switch access point.

Step 3:

Insert the Reed switch into the Reed switch access point on the water meter as shown in figure 2.

Step 4:

Tighten the Reed switch into position with the supplied screw.

Step 5:

To complete the installation, fit the NanoWater Transmitter unit to the existing water meter using cable ties (not supplied). Ensure that the fitment is as high as possible, as to prevent possible exposure to ground water, and close the water meter unit.

On the controller, check that the unit is receiving a good signal strength – test the unit's operation by selecting the water channel and opening a tap – you should see the controller incrementing in either R / c or kℓ / ℓ dependent on the selected unit of measure.

Warranty

All products sold are subject to the CBI (Pty) Ltd General Terms and Conditions of sale. CBI (Pty) Ltd warrants that the product will be free from defects in materials and workmanship for a period of 12 months from the production date. If the product proves defective during this warranty period, CBI (Pty) Ltd, at its option, will either repair the defective product, or will provide a replacement in exchange for the defective product. Batteries are excluded from this warranty. The Customer must notify CBI (Pty) Ltd of the defect before the expiration of the warranty period to obtain service under this warranty.

Standard electronic products warranty: 12 months

Please review the CBI General Terms and Conditions of sale on www.cbi-lowvoltage.com.

Thank you for your purchase!

INSTALLATION INSTRUCTION 1

Figure 1 below shows the NanoWater Transmitter and Reed switch which needs to be installed at the external water meter:

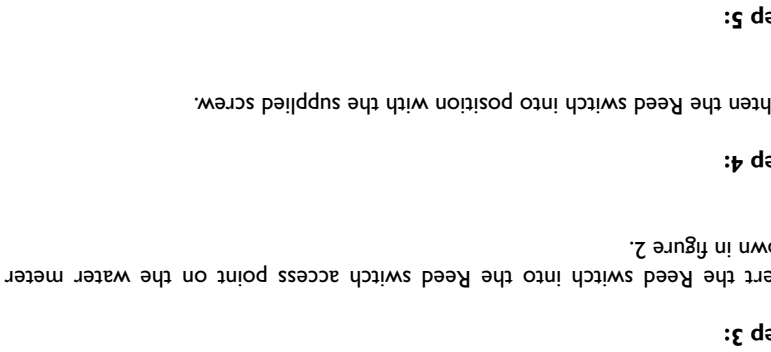


Figure 1: NanoWater

Step 1:

Remove external water meter cover to access the water meter.

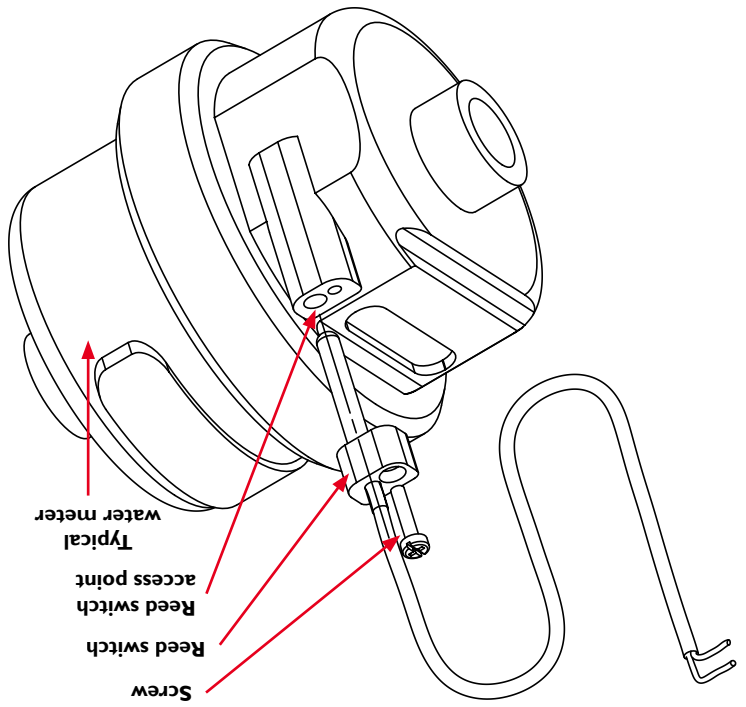


Figure 2: A typical water meter indicating the Reed switch access point and fitment

hi electric
low voltage

NANOWATER
WMBP001

www.nanoview.co.za

Equipment Required for Installation (Not Supplied)

Equipment Required	NanoWater (Base/Cover)	NanoWater (Reed Switch)
Philips Screwdriver	Yes – Pozi # 2	Yes – Pozi # 1
Cable Tie (250 mm)	Yes - 2	No

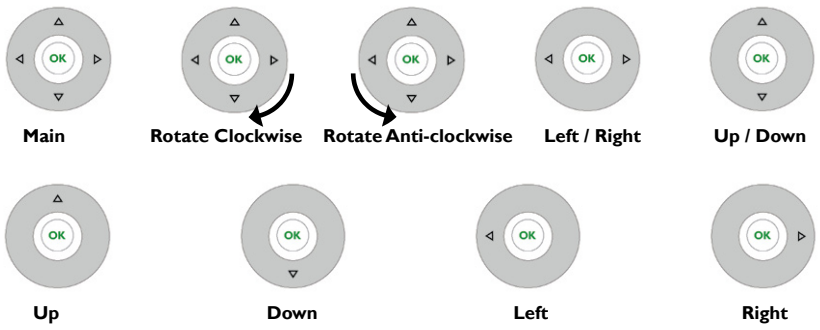
NOTE: If you have procured the NanoWater Transmitter unit, please **do not** insert the 2 x AA batteries until requested to do so in the setup. **Do not** install the NanoWater at your water meter until setup is complete as detailed below.

NanoWater Compatibility

It is extremely important to note that the NanoWater requires an compatible external fitted water meter. NanoWater compatibility has been verified with the following water meters:

- Sensus 220 C
- Elster Kent V110
- Precision Meters ASM
- Most reed switch compatible brass and plastic meters

Understanding the scroll function



The scroll pad can be used either by scrolling (rotating) your index finger **clockwise / anti-clockwise** on the GREY demarked touch pad area or by simply pressing your index finger on either of the four sectors i.e.: **Left, Right, Up and Down**. For the purpose of this programming instruction, the press **Left, Right, Up** and **Down** function is used, but the scroll function may also be used to achieve the same result.

The programming of the NanoWater is only required if **not** originally procured with the NanoView. If it was originally procured with the NanoView, the programming setup would have been done during the NanoView setup – no further action required.

If the NanoWater was not originally procured with the NanoView, but as an additional add-on, then the following instructions need to be followed to set up your new unit:

Settings Menu

Step 1:

To enter the programme settings menu, press BACK and HOME together for 1 second and release. The controller should now indicate the setup icon and ***"Scroll to Settings"***. If this does not appear, repeat this step.

Step 2:

Press **Right** ▷ until the following message appears on the controller ***"Water Limit Warning"***.

Press OK and the message changes to ***"Set Warning Limit"*** and the cursor will flash in the top right hand corner of the controller.

The desired total monthly consumption limit can be set by rotating your index finger **clockwise / anti-clockwise** on the GREY demarked touch pad area or by simply pressing repeatedly your finger on the **Up / Down** △ / ▽ .

The limit can also be set to OFF by repeatedly selecting **Down** ▽ .

After the desired limit has been set or deactivated, press OK and the controller will read ***"kL Limit Updated"***. This step is to be repeated if multiple NanoWater Transmitters are connected.

Note: When in daily operation, you may observe the following LED warnings with respective on screen messages pertaining to the set limit:

- Red LED flashing with message ***"Near Water Use Limit"*** and respective consumption displayed at the top of the controller = you have reached 90% of the set monthly water usage value in kℓ's.
- Red LED permanently on with message ***"Water Limit Exceeded"*** and respective consumption displayed at the top of the controller = you have reached 100% of the set monthly water usage value in kℓ's.
- Press OK to clear the message

Step 3:

Select next setup menu by pressing BACK and then **Right** ▷ , until the controller reads ***"Water Leak Warning"***.

Press OK and the message changes to ***"Set Sensitivity - Norm"***. The ***"Norm"*** will flash, by pressing the **Left / Right** ◁ / ▷ you can select either ***"Norm"***, ***"Low"*** or ***"Off"***.

Once the desired selection is made, press OK and the controller will read ***"Sensitivity Changed"***.

Note: When in daily operation and a NanoWater is installed, you may observe the following LED warnings and error messages pertaining to the set limits:

- Set sensitivity = Norm, water leak detection is active with limits set to monitor 1 ℓ of water used every 60 minutes consecutively between 22h00 and 05h00 the next day.
- Set sensitivity = Low, water leak detection is active with limits set to monitor 1 ℓ of water used every 30 minutes for 12 hours consecutively
- Set sensitivity = OFF, water leak detection is disabled.

NanoWater setup settings are now complete, to exit the settings menu press HOME.

Configuration Menu

Step 1:

To enter the configuration menu, press BACK and HOME together and hold, then press OK simultaneously for 1 second and release. The controller should now indicate the setup icon and ***"Config Menu Selected"***. If this does not appear, repeat this step.

Step 2:

Press **Right** ▷ until the following message is displayed on the controller, ***"Water kL Tariff"***. Press OK and the message changes to ***"Tariff Rand / Other per kL"*** and the cursor flashes in the top right hand corner.

The tariff can be changed by rotating your index finger **clockwise / anti-clockwise** on the GREY demarked touch pad area.

Once the desired tariff is set, press OK and the controller will read ***"Water Tariff Updated"***.

Note: A geographic water rate tariff table will be available on the CBI-electric: low voltage website (**http://cbi-lowvoltage.co.za/sa)** or by scanning the QR code on the NanoHub.

Step 3:

Select next setup menu by pressing BACK and then **Right** ▷ , until the controller reads ***"Pair a Water Meter".***

Press OK and the message changes to ***"Select a Water Channel"*** with water and channel number flashing.

Select the desired channel (1 to 4) by using **Left / Right** ◁ / ▷ , after selection press OK. The controller must now read the flashing message ***"Insert WM Battery Now".***

At this stage, open the NanoWater (separate the base and cover) and insert the 2 x AA batteries as indicated. Observe a Green LED flashing for a short time on the NanoWater meter board.

Press OK on the controller and observe message ***"Scanning Signal"***, this may take a few seconds.

If pairing was successful, the controller will read ***"Paired"*** with a unit serial number, additionally the controller will also now display a signal strength and battery life in the left hand top corner.

NanoWater configuration settings are now complete, to exit the Settings menu press HOME.

Your unit is now ready for use, but still needs to be installed at your water meter.

For installation instructions, see NanoWater Installation Instruction.

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