

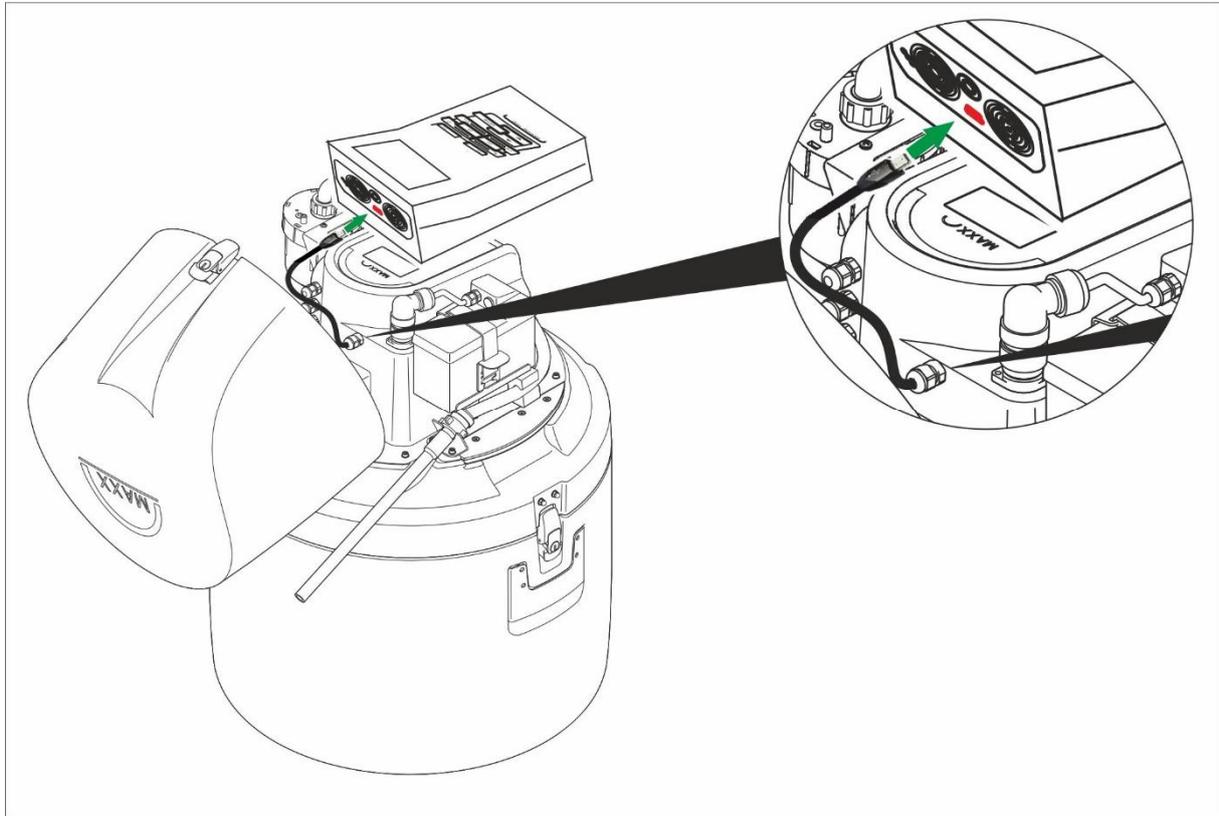
SUPPLEMENT

– sampler with WTW Handheld via USB Interface –

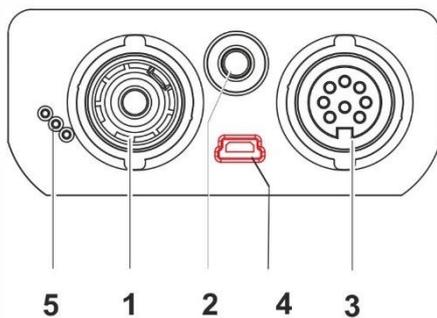


Connection of the WTW Handheld via USB

At the backside of the housing is the cable with a mini-USB plug for connection with the handheld. The USB socket of the handheld (4) is between the connections for the sensors (see graphic “Jack field/connections” below)



Jack field /connections



1	pH electrode
2	Temperature sensor
3	Conductivity measuring cell, D.O. sensor
4	USB B interface (device)
5	Service interface

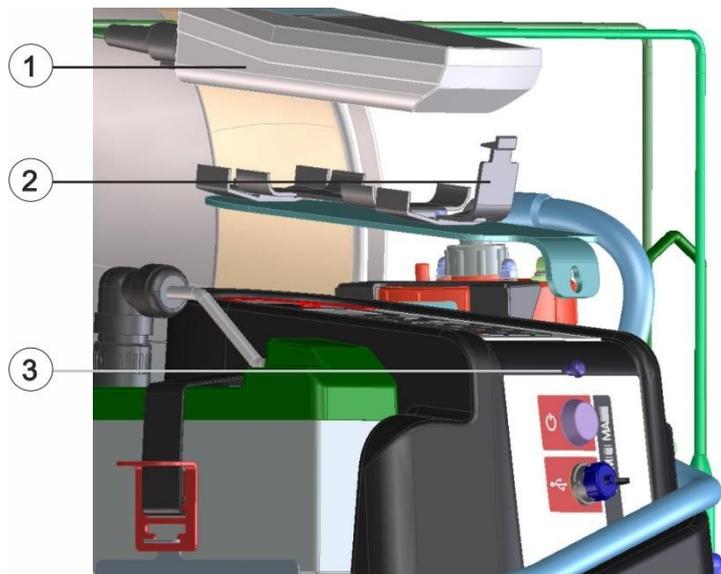
MOUNTING THE HANDHELD

The (1) handheld is simply clicked into the (2) holder, which is mounted on a fixing plate. The entire unit is then placed on the keyboard / display unit of the sampler and fixed with a (3) locating pin at the front. To program the sampler, the holder with the handheld can be easily removed.

1. Handheld-device

2. click-holder on fixing plate

3. locating pin



1. Handheld-device

2. click-holder on fixing plate

3. locating pin

4. optional: sensor holder
(0093768 for WTW or 0093986 for Hamilton Sensors)



GENERAL INFORMATION

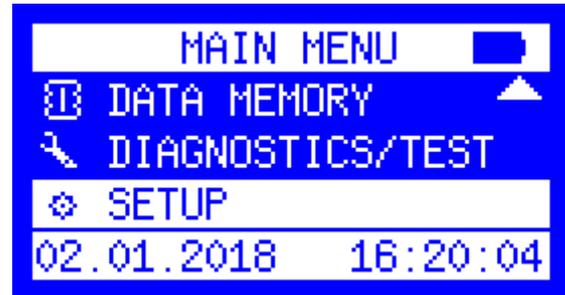
In combination with the Handheld it is possible to trigger the sampler. You either can use pH or the Conductivity as setpoint sampling triggers.

Note: After you connected the sampler with the handheld via USB cable, it can take a while (up to 2 minutes) until the Handheld is linked to the sampler.

The Trigger channels can be configured in

SETUP ► SYSTEM SETTINGS ►

MEASUREMENT INPUT



There are **2 Trigger channels**, that can be configured.

The menu shows TRIGGER (CH) 1 which is still not configured. Just press the ENT-key to configure.

Note: to change the channel (1-2), press arrow-key right or left



Next step is, to select one of the parameters pH or Conductivity for configuring.
(e.g.here pH)



After you choose the parameter for channel 1 you have to set "HIGH SETPOINT" or "LOW SETPOINT" or you can choose "NO DETECTION" to deactivate monitoring of channel 1.



SETPOINT HIGH or LOW

Each measurement trigger can be defined as a high or low setpoint.

Additionally, an optional deadband value can be set (HYSTERESIS).

The purpose of a deadband is to keep the trigger from rapidly fluctuating between active and inactive states when the trigger measurement value hovers near the defined setpoint.

In a **HIGH SETPOINT** condition, the trigger becomes active when e.g. the rising pH value reaches the setpoint value of **7.0**. The trigger condition does not clear until the pH measurement value falls below **6.5** (the setpoint **minus** the deadband value). (here **0.5**)

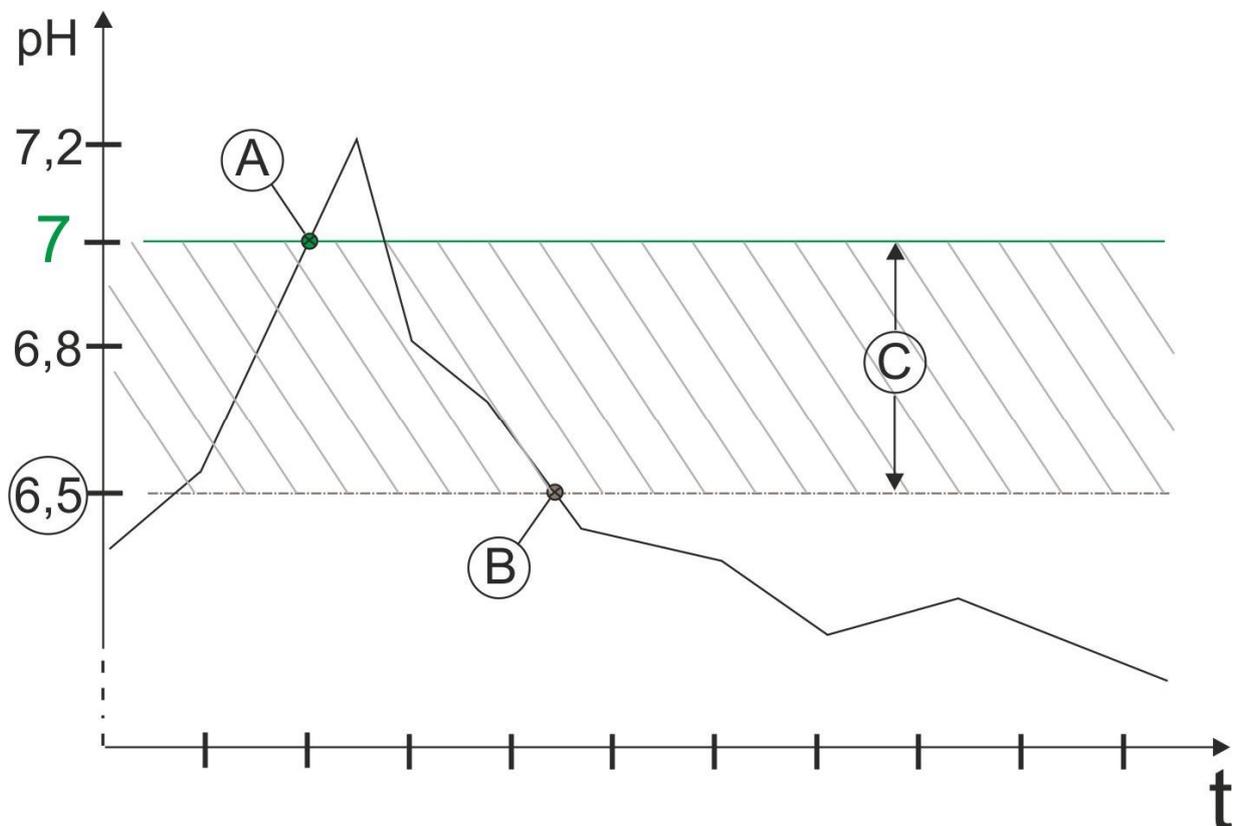


Figure 1 High Setpoint

A: Setpoint switches **ON**, pH = 7

B: Setpoint switches **OFF**, pH = 6.5

C: deadband value (Hysteresis) = 0.5

In a **LOW SETPOINT** condition, the trigger becomes active when the decreasing pH measurement value reaches **7.0**. The trigger condition does not clear until the pH measurement value rises to **7.4** (the setpoint **plus** the deadband value). (here **0.4**)

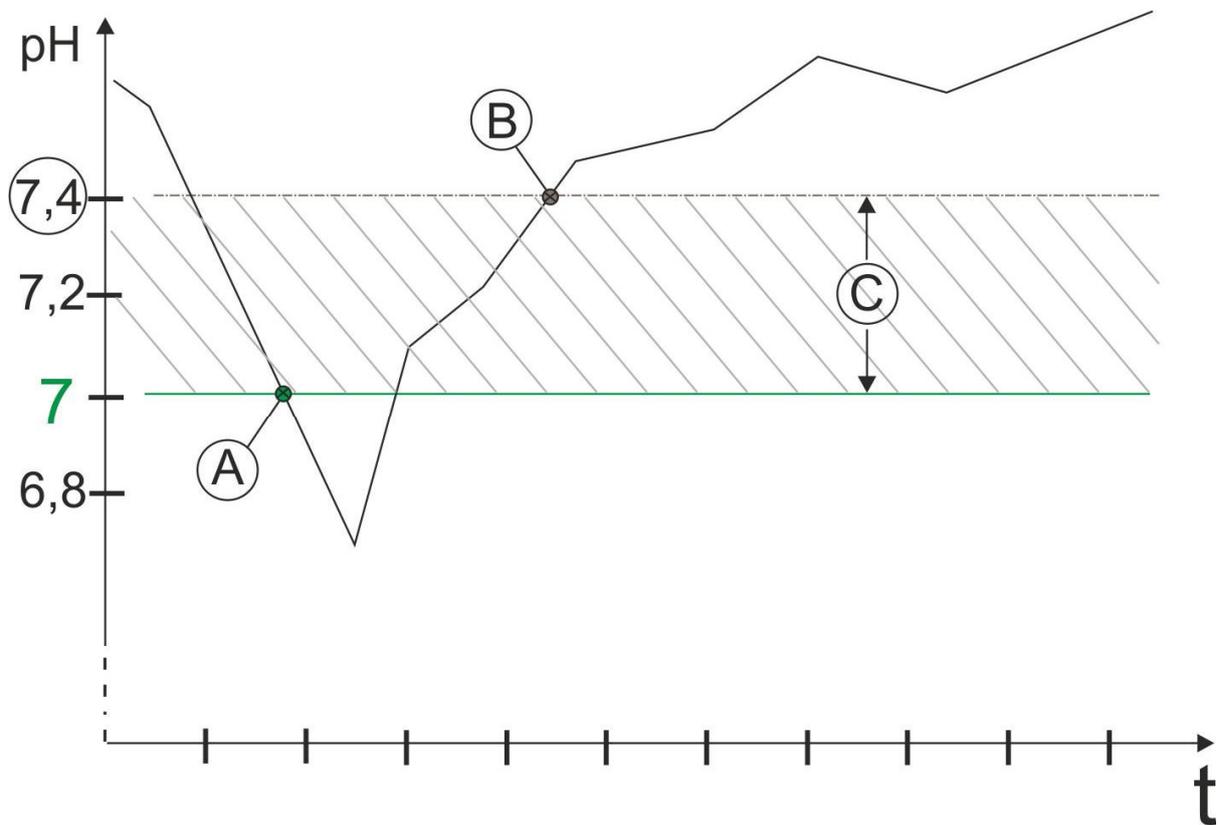


Figure 2 Low Setpoint

- A:** Setpoint switches **ON**, pH = 7
- B:** Setpoint switches **OFF**, pH = 7.4
- C:** deadband value (Hysteresis) = **0.4**

Here "HIGH SETPOINT" is selected for CHANNEL 1 (C°).



The setting for "HIGH SETPOINT CH.1" is here pH = 7.0

The "DEADBAND CH.1" is selected with 0,5.



As last step, you have to select how to trigger the sampler.

EVENT: starts a sample program when the signal is received and stops the program when the signal is no longer received.

START PRG. 1: starts a sample program when the signal is received, and continues until the program is completed.

You can select 1 of the 12 preprogrammed programs.



After you have configured **TRIGGER(CH) 1**, it appears the menu already with the real measured value from your sensor. (if it appears "LIMIT VALUE ", it means an exceeded setpoint).



TRIGGER CHANNEL 2

The menu shows the **TRIGGER(CH) 2**, which can be configured.

Press ENT to configure



Now you have to select INPUT CHANNEL 2 to configure TRIGGER(CH) 2. Here it's Conductivity as setpoint selected.



Setting of LIMIT CHANNEL 2 with LOW SETPOINT condition



The condition for "LOW SETPOINT CH.2" is here 0,8000 mS/cm (Conductivity).



The DEADBAND CH.2 value is 0.01 mS/cm (Conductivity).



For CHANNEL 2 you can select again how to trigger the sampler. EVENT or START PROG. X (1-12).

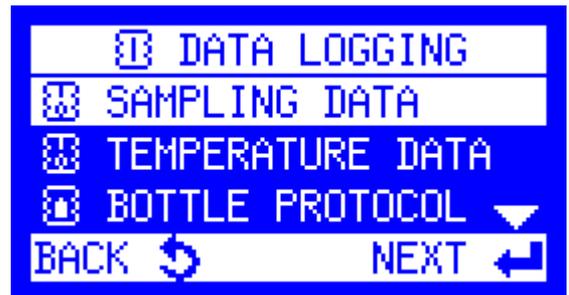
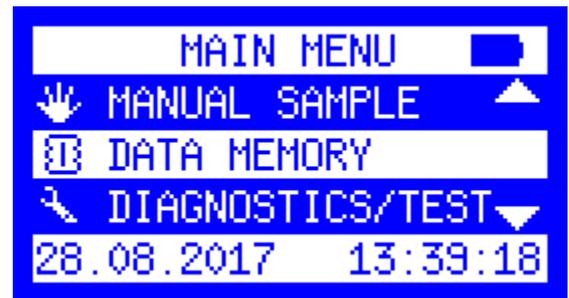


After you have finished to configure CH2, it appears the value for **mS/cm** from the connected sonde.



DATA LOGGING

The data logger of the sampler stores the following information of handheld -triggered sampling (additionally to the basically stored data):



- The values of an exceeded **HIGH** Setpoint with date/time (see figure 1, Values A and B)
- The values of an exceeded **LOW** Setpoint with date/time (see figure 2, Values A and B)

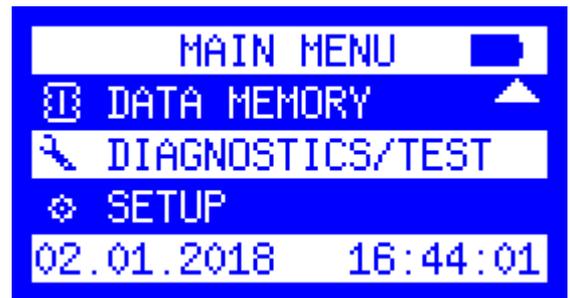


READ OUT OF DATA via maxxwareConnect®

If you connect your sampler via USB cable, you can read out the data via maxxwareConnect software for further use (e.g. Excel)

DIAGNOSTICS

In DIAGNOSTICS/TEST you can check whether your Sonde is connected correctly or not.



Select "SONDE" in the menu and confirm with the ENT-key.



If there is no Sonde connected (or detected) it appears the blank menu, just with a "-".

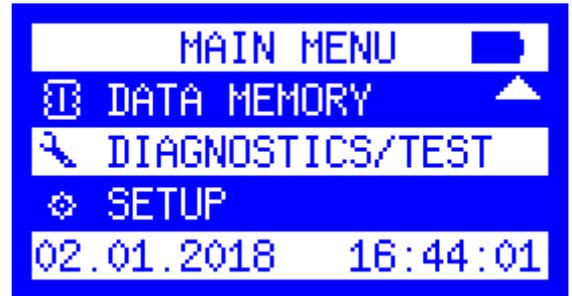


If a Sonde(Handheld) is connected and detected, it appears the vendors name and device model name WTW Ph/Cond 3320 (this depends to the handheld model).

(If you disconnect the handheld, this information will be further shown until a restart or reboot)



In DIAGNOSTICS/TEST you are also able to check, which channels are already configured.



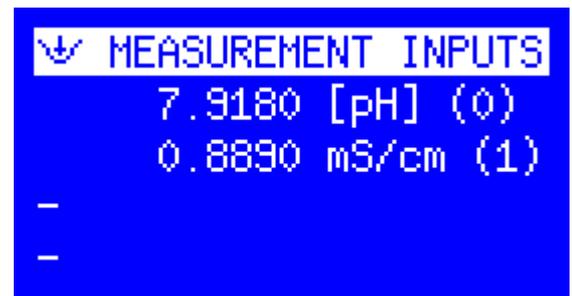
Select MEASUREMENT INPUT.



If nothing is configured it appears the blank menu (just with "-")



This menu shows the two configured channels (pH and conductivity) with actual values of the connected sonde. They can be used to trigger the sampler as described before.



Note:

- **(0)** behind the value means, that there is actually **no setpoint** exceeded.
- **(1)** behind the value means, that at this moment is an **exceed of setpoint**.

(If you disconnect the sonde/handheld, this information will be further shown until a restart or reboot)