

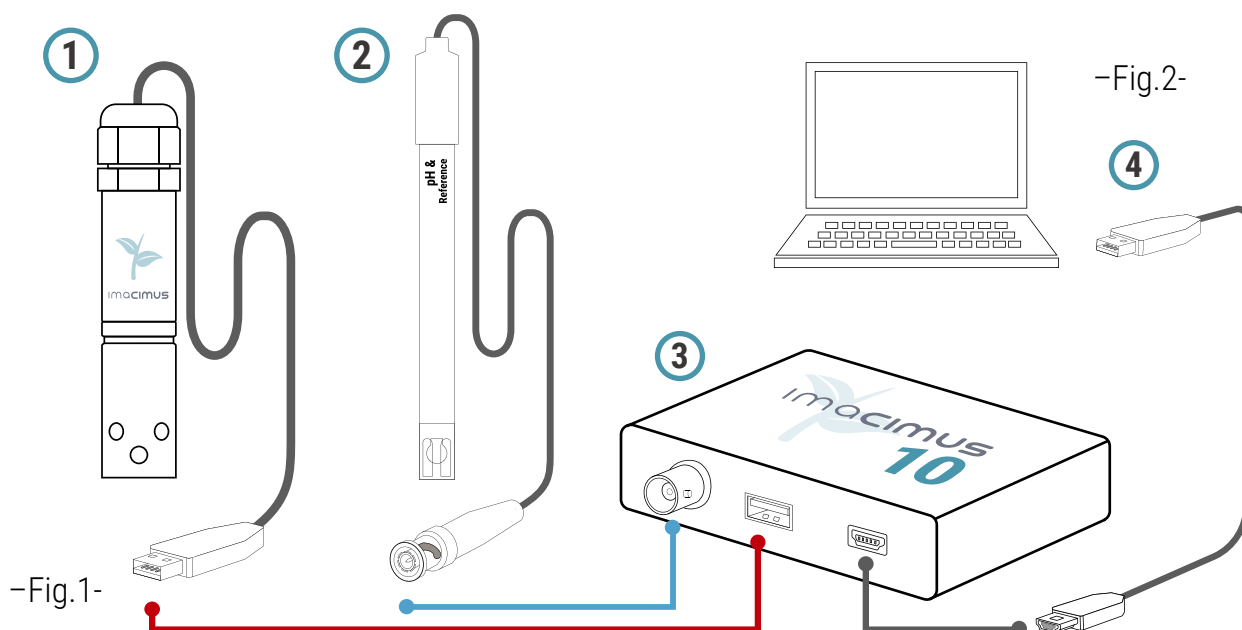


## Content

1. Multi ION Probe  
+ individual electrodes
2. pH Probe
3. Multichannel meter

4. USB connector
5. Stand case/holder
6. Conditioning solution
7. Standard pH 4

8. Standard pH 7
9. Standard n°1, ref.HP08
10. Standard n°2, ref.HP08
11. Standard n°3, ref.HP08



## Software download for Windows

- A.** Software is available at <http://software.imacimus.com>
- B.** Download the file to your Windows laptop, computer or tablet and proceed with the installation.
- C.** Check information and/or video tutorials on our site. Full detailed pdf guide also available on site for download. <http://software.imacimus.com>

## Equipment installation

- 1.** Connect Multi Ion and pH probe to the multichannel meter. –Fig.1-
- 2.** Plug the meter to your Windows computer or tablet using the USB cable. –Fig.2-
- 3.** Run the software. Meter is automatically detected as the software is started for the first time.  
*To restart automatic detection configuration → reset.*
- 4.** Probe configuration. If you have acquired all the parameters (7 ions) the probe is preconfigured. Otherwise, you must configure/add a new probe. - See user manual -

## White/Transparent case preparation

- 1.** Shake vigorously the standard solutions before using them.
- 2.** Fill 3/4 of each container with proper solution.

*During calibration and measurement process, containers should not be removed from case. The case is used as support for the probes during the process.*

 **Renew/ refresh solutions after 3 calibrations**

## Multi Ion probe conditioning

*For conditioning, it is not necessary to connect probe to meter nor meter to computer.*

- 1.** Take off the rubber cap from the probe twisting it clockwise. - Image 1 -
- 2.** Place the probe in the conditioning solution provided. - Image 2 -

### CONDITIONING TIMES

1st use or sporadic **1h - 4h**  
Frequent use **30 min - 1h**

 **It is very important to respect the conditioning time**

- 3.** Once the time has passed, **rinse the Multi Ion probe with deionized water** (not included) and dry externally with absorbent paper.

 **Electrodes tips are extremely sensitive. Take special care when drying with the tissue paper the probe**



- Image 1-



- Image 2-

# Calibration


## 1. pH electrode calibration

 Don't move the probes during the calibration process.


### 1. Preparation

Run the software. Go to "Calibration" menu.  
Select pH solution on the left panel section.  
Unscrew pH bottle and remove from pH probe. - Image 3 -  
*Rinse with plenty of deionized water and dry externally.*

### 2. pH4 calibration

Introduce pH probe in pH4 Standard (red) and press   
Remove the probe when indicated.  
*Rinse with plenty of deionized water and dry externally.*

### 3. pH7 calibration


Introduce pH probe in pH7 Standard (green) and press   
Remove the probe when indicated.  
*Rinse with plenty of deionized water and dry externally.*




- Image 3-

## 2. Calibration of Multi Ion + pH


### 1. Standard 1 calibration

Place Multi Ion and pH probes in container of Standard Solution 1.  
Select your calibration solution (reference in the supplied bottle) and press   
When indicated, remove the probes and dry externally with absorbent paper. DO NOT RINSE.

### 2. Standard 2 calibration

Place Multi Ion and pH probes in container of Standard Solution 2.  
Select your calibration solution (reference in the supplied bottle) and press   
When indicated, remove the probes and dry externally with absorbent paper. DO NOT RINSE.

### 3. Standard 3 calibration

Place Multi Ion and pH probes in container of Standard Solution 3.  
Select your calibration solution (reference in the supplied bottle) and press   
When calibration end indicated, remove the probes, RINSE with deionized water and dry probes externally with absorbent paper.

*The results of the calibration will appear in a pop-up window:*



Correct calibration



Renew Standards or  
replace the electrode

*In case of incorrect calibration you can continue with the analysis of the remaining parameters.*



## Calibration check

1. To check sensitivity and proper standard calibration, take a measurement of standard solution n°2 after calibration.
2. The standard solution n°2 measurement results should not have more than a 10% - 20% margin error, depending on the parameter.

## Measurement

1. Fill the flask with the sample.
2. Pulse "Measurement" 
3. Place the probes (pH and Multi Ion) in the sample and press 

Once the analysis process is finished, the results appear on the screen.

4. Clean the probes with deionized water and dry externally.

» Edit and customize the description name of the sample

» Export data to excel or copy to the clipboard



## Maintenance and storage

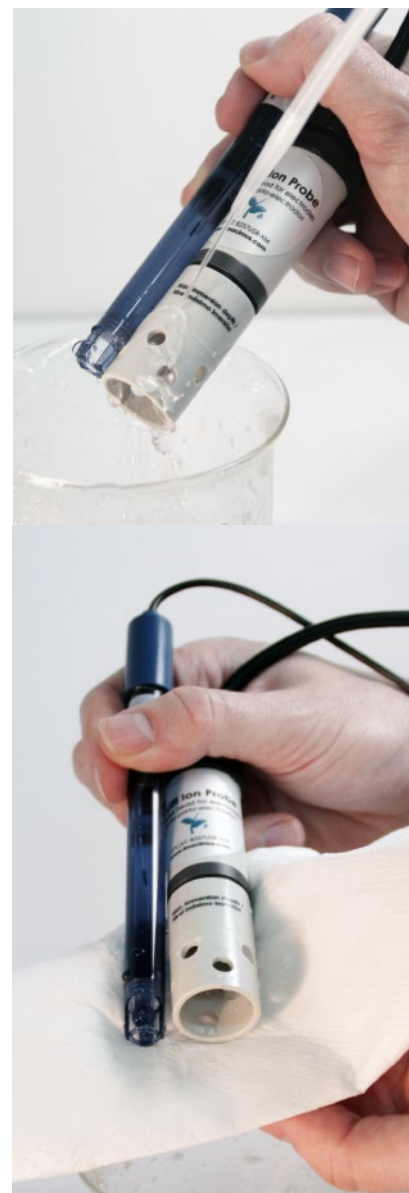
1. Close the application and disconnect USB cable from the computer.
2. Clean the probes with deionized water and dry externally.
3. Storage

**pH probe:** Place the pH probe in its bottle and screw.

**Multi Ion probe:** Put on the black cap.

*If the Multi Ion probe will not be used the next day, it is important to dry it internally. Unscrew the protection and dry the sensors with absorbent paper (DO NOT rub on sensors, tactfully touch with absorbent paper).*

**Support case:** Clean the bottles periodically.



## Electrodes maintenance

Avoid contact of the electrodes with strong acids or highly alkaline solutions, detergents, surfactants and / or PVC solvents.

Avoid exposure in solutions that contain high contents of interfering ions that can poison the membrane.

Rinse with deionized water after each sample.

Do not leave the electrodes in deionized water.

Do not touch, grate or hit the tip of the electrode.

Do not store at temperatures above 25°C.