

Aalto CHEM Wacom One Guide

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Introduction and background

This is a short guide to help Aalto CHEM teachers with the [Wacom One](#) pen displays. Wacom One could be described as a digital whiteboard, with the added benefit that you can also draw and write on your Powerpoint slides. Students can see the digital markup during a Zoom or Teams session.

After experiences with remote lectures and exercises during Spring 2020, we purchased a Wacom One pen display to see if it could help us to further improve remote lectures and exercises. After positive initial results, we extended the pilot by purchasing fifteen devices for Fall 2020. Currently, we have 36 devices available for teaching at the CHEM school. The exact model of our device is [Wacom One 13.3" Creative Pen Display \(Model DTC133\)](#).

For any questions, please contact antti.karttunen@aalto.fi.

Quick installation guide for Windows 10

Version 2021-01-13

Please complete the sections **A**, **B**, and **C** below.

The installation on **Mac computers** is rather similar, but you can skip part B.

A. Parts required

1. Wacom One display
2. Wacom Pen
3. Wacom X-cable
4. Laptop with HDMI output

B. Administrative rights required

(Skip this step if you are using a Mac computer or your computer is not managed by Aalto IT)

Driver installation (Step 6 below) requires either (1) administrator rights on your laptop or (2) help from Aalto IT.

On Aalto research workstations, administrator rights can be obtained in five minutes by following these instructions (login to aalto.fi required):

(fi): <https://www.aalto.fi/fi/palvelut/yllapito-oikeuden-aktivointi-windows-tyoasemissa>

(en): <https://www.aalto.fi/en/services/activating-administrator-rights-on-windows-workstations>

C. Actions required

1. *(If you are going to use several displays, connect all other displays before connecting and powering on Wacom One.)*
2. Connect X-cable power plug to power socket (*virtajohto seinään*)
3. Connect X-cable USB plug to laptop USB port (USB-A, that is, "classic" USB cable)
4. Connect X-cable HDMI plug to laptop HDMI output
5. Connect the fourth X-cable plug to top left corner of the Wacom One (the cable has 90 degree angle in the end and a flat plug that looks like USB-C)
6. Power on Wacom One from top right corner Windows will detect the device
7. Download and install drivers from <https://www.wacom.com/en-us/support/product-support/drivers> (scroll down to "Just looking for drivers? Here is our latest:" and **Download**)

8. Restart the computer
9. A short Wacom setup tutorial opens when the computer restarts. The pen should now work when you touch Wacom One with it. There is **no need to register** the device.

Quick introduction to Wacom One

Here is a one-minute introduction to the device. For more detailed instructions, please see the **Best practices** section below and the [How to use your Wacom One](#) guide provided by Wacom.

- Wacom One is a secondary display that extends or mirrors your primary display.
- You can use the pen like a mouse: tapping with pen corresponds to left-click and the pen button corresponds to right-click, when the pen is near the display.
- Try for example drawing on Powerpoint slides (start a presentation and just draw on the Wacom One display).
- In a Zoom session, you can share your Powerpoint slides and start drawing on them (see below for more details).
- In a Zoom session, you can share a Zoom whiteboard and draw on it.

Best practices

Using Wacom One in Zoom meetings

Please see a separate page dedicated to [Zoom lectures with Wacom One](#).

Windows Ink Workspace

If you want to test an alternative for the standard Zoom whiteboard, Windows includes Windows Ink Workspace which you can install and use from the bottom right corner:



Compared to the standard Zoom whiteboard, the Windows Ink Workspace allows better management of your whiteboard drawings, if you for example want to save them for later use.

Digital Inking in Office applications

It is possible to draw and write with ink also in other Office applications besides Powerpoint. Please see <https://support.microsoft.com/en-us/office/draw-and-write-with-ink-in-office-6d76c674-7f4b-414d-b67f-b3ffef6ccf53>.

Troubleshooting

Audio issues

Some teachers have reported issues with the audio settings of Zoom sessions when Wacom One is plugged in. Wacom One does not have any speakers or microphones, but Windows may misinterpret it as an audio device because the HDMI connection could in principle carry sound. These are examples of situations that have occurred:

- The teacher cannot hear the students in a Zoom session, even though the students can hear the teacher.
- When recording a Zoom session, the audio from the teacher is not being recorded

Here are two suggestions to fix the audio issues. After fixing the issue, you may still want to test the audio settings with a colleague before entering a live session with the students.

Please contact Antti if these guidelines do not help or if you find a better solution!

Option 1. Disable any audio properties of Wacom One permanently

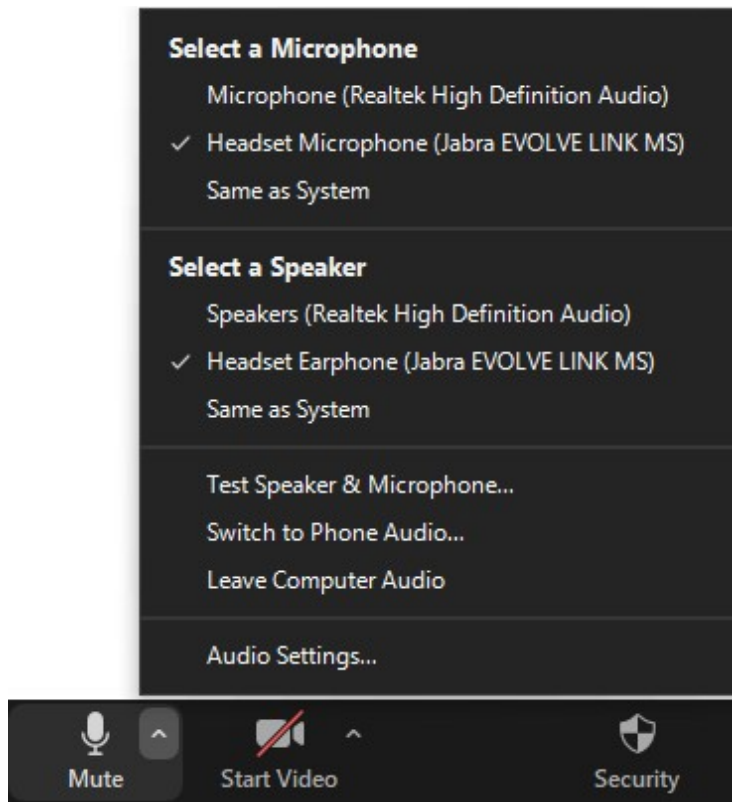
This suggestion has been adapted from [Wacom Customer support database](#).

- Search for "Control Panel" in the Windows Search Box
- Select "Hardware and Sound"
- Select "Manage Audio Devices"
- Right click on Wacom One
- Select "Disable"

- Select "Apply"
- Click "OK"

Option 2. Change the audio settings of the Zoom session

In your Zoom session, open the audio menu from the bottom left corner (microphone icon). Check that a correct device is selected both for Microphone and Speaker. If Wacom One is offered in the menu, you may want to disable it permanently (see Option 1 above).



Tips and tricks

Extra nibs for the Wacom One pen

Every Wacom One includes few extra nibs for the pen. If your pen does not "draw" properly anymore, please try changing the nib. The extra nibs are included under the "leg" of the display.



Calibration of the Wacom One pen

If your pen seems to be bit off while you are writing with it, you can try calibration of your Wacom One.

Calibrate your pen display to align the screen cursor with the position of the pen on the screen. This compensates for viewing angle and adjusts for parallax.

1. Set up your pen display in its working position.
2. Open **Wacom Tablet Properties** (Windows Start menu type Wacom Wacom Tablet Properties should appear).
3. Select a pen from the **Tool** list.
4. Select the **Calibrate** tab.
5. If you are working with multiple monitors, select the monitor corresponding to your pen display from the dropdown menu.
6. Click **Calibrate...** to activate the calibration screen.
7. Holding the pen, sit or stand as you normally would when working with the pen display. Use the pen tip to click on the center of the crosshairs in the upper-left corner.
8. Click on the center of the crosshairs that are displayed in the remaining corners.
9. Test the alignment by positioning the pen at a few different points on the display.
10. Click **OK** to accept the calibration, or **Try Again** to recalibrate.

(Adapted from from <http://101.wacom.com/UserHelp/en/Calibrate.htm>)