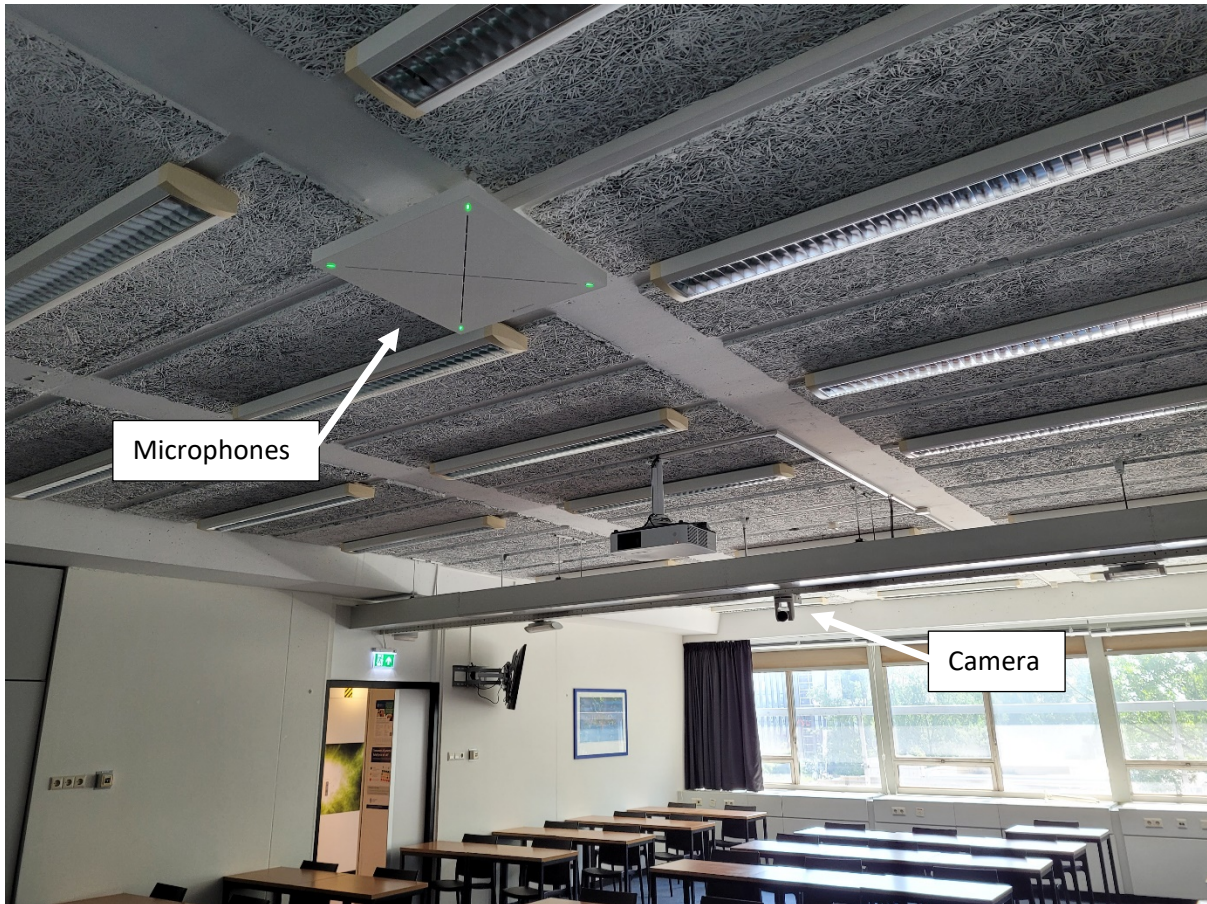# Hybrid Teaching in HL414

The lecture room in Huygens Lab 414 has been equipped with a ceiling surround microphone and a pivot camera to allow remote students to follow a hybrid lecture as if they were in the class room.



Now on the Audio Visual Console you will see two USB cables, one from the Microphones and on from the Camera. In fact, for your convenience, we have bundled the two with a USB hub.



You can use the cable from the USB hub as a single USB input to your personal laptop.

Either put it in your laptop directly if you have an old style USB connector, or through a conversion hub as is often used in modern laptops with only (one) USB-C socket.

# Using the remote microphones and camera

Before you start your lecture you can hook up your laptop in the usual way, connecting it to the Audio Visual system through either an HDMI, USB-C or VGA/audio jack connector for displaying your presentation on the beamer.

However, you should make sure you have on USB socket still free to hook up to the remote microphones and camera. Plug in this USB hub and your laptop should respond by enabling the devices for the new hardware it sees. Our experience is that this is done fully automatic for Windows 10 and MacOS High Sierra and more recent OSes (see the appendix for detailed info on getting info about the devices in your OS).

Now you most probably will enable hybrid teaching by using Zoom to reach your remote students. We have tested the proper functioning of the microphones and camera for Zoom. See below what you have to do to enable these devices in Zoom, for each OS.

## Zooming from Windows

Start up your zoom session and configure it to use the new devices. First click the little carrot sign next to the microphone symbol.
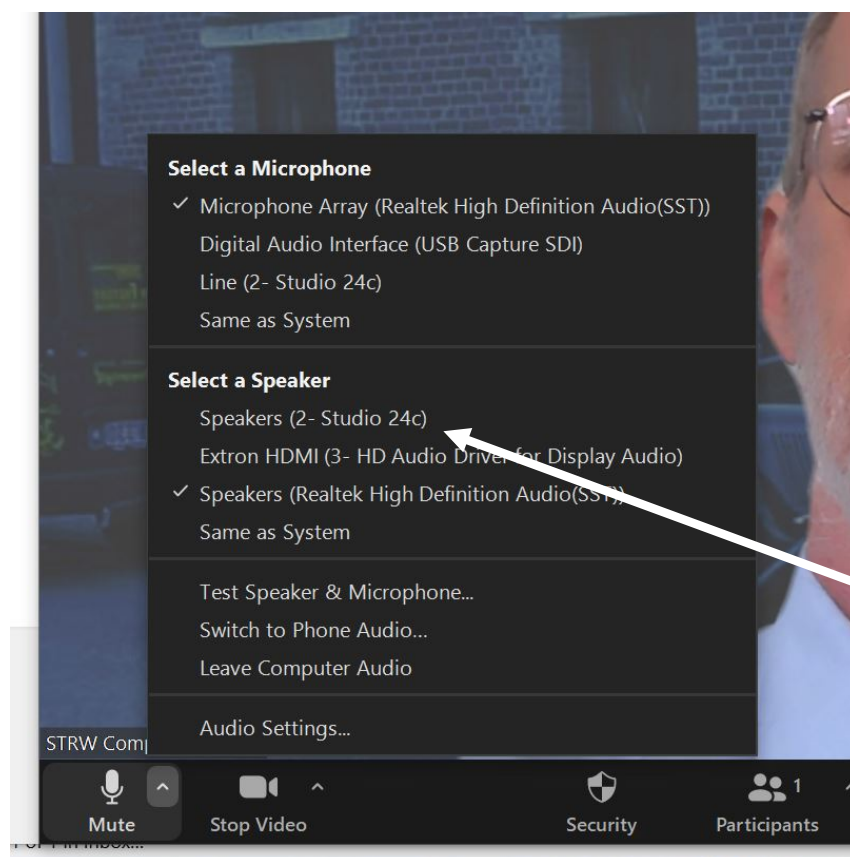


Default your Zoom application uses the standard microphone on your system. That might either be the named device, or the one that you have set system wide, through the 'Same as System' setting.

You need to change this and select the ceiling microphones. Their name is **'Studio 24c'**. It might be the case that this name is part of a longer string.

After selecting the input device for sound, you now have to set the input device for images. Click the little carrot sign next to the video recorder symbol:
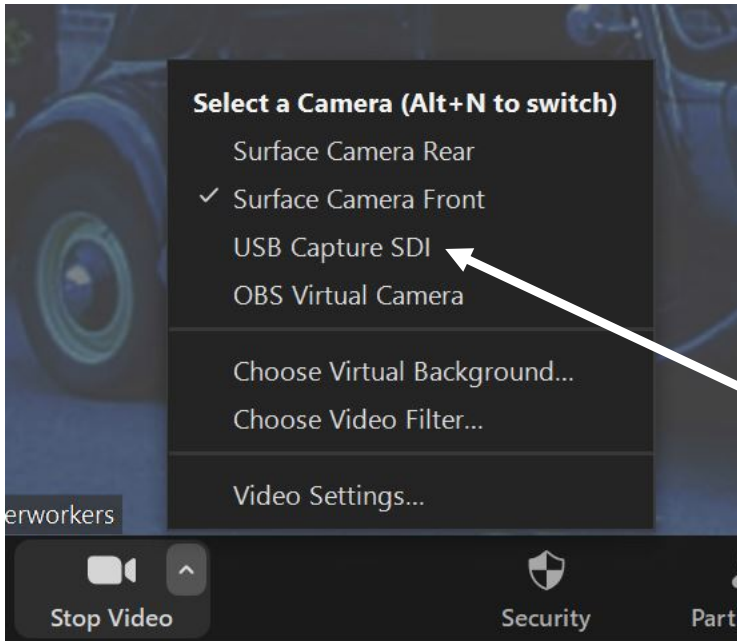
This opens the device selection for your camera. Again it is most probably set on your default system camera.
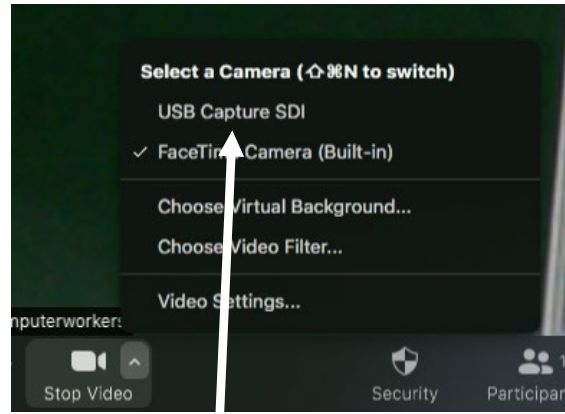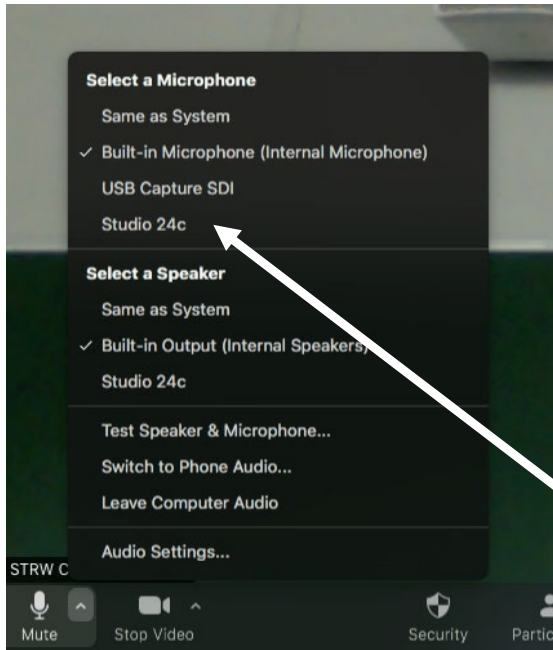
You need to change this to the newly install remote camera device name **'USB Capture SDI'** or a name containing that string.

Once done you are all set to start your hybrid course.
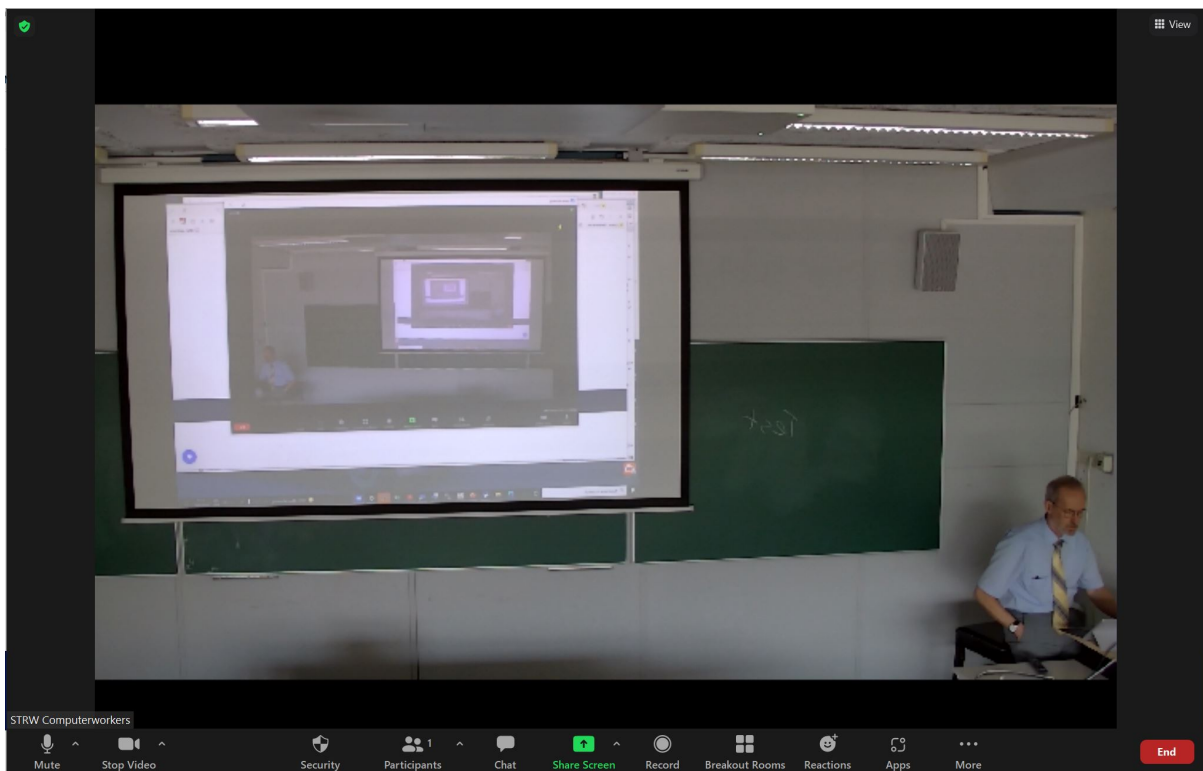


## Zooming from Mac

The images above are for a Windows 10 based Zoom session. Below you see similar screen captures for a MacOS based zoom session.

Select the same device names for MacOS as one would do in case of a Windows 10 based Zoom session.

# Appendix

You can find that your laptop has recognized the remote devices by inspecting the system information about these new devices for:

## Windows 10

You can find the microphones device by opening the Windows Start -> Settings option and selecting 'System' and then the 'Sound' menu item from the then appearing window.
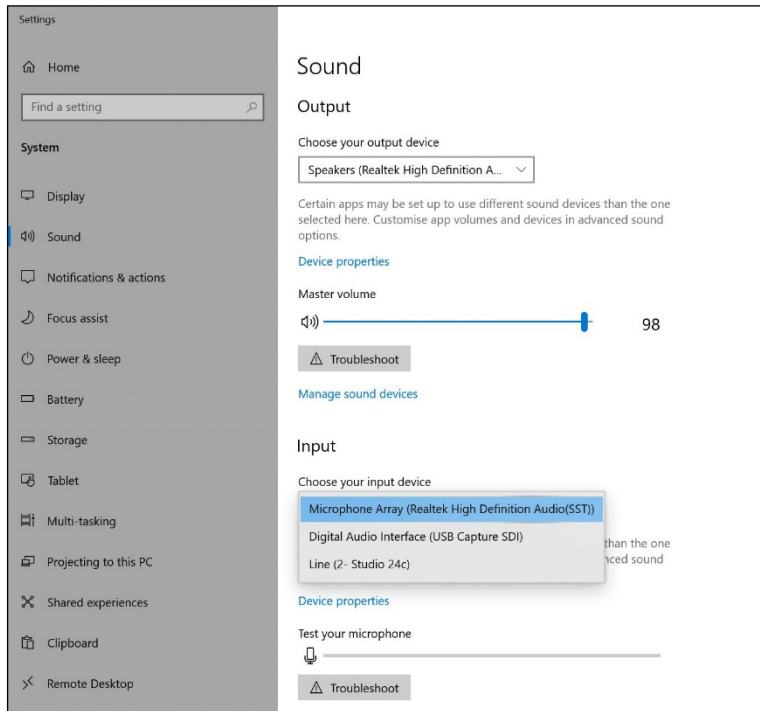


If you scroll down the page to Input, you can see the presence of a new device named: **'Studio 24c'** or a name containing that string.

\Similarly you can see if your OS has picked up the Camera. In this case Windows Start -> Settings option and selecting 'Devices'.
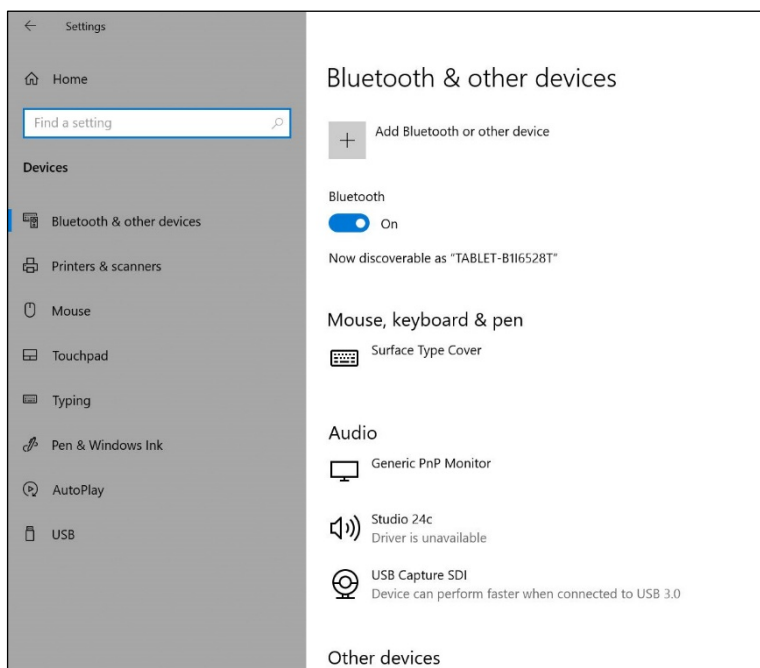


Here you will find the camera unde the Audio heading. The camera has a name containng the string: **'USB Capture SDI'**

## MacOS

To make sure your Mac has recognized the microphones and remote camera, choose Apple Menu  > System Preferences. Then click 'Sound'. This will open the Sound related window. Click 'Input' to see if your Mac identifies the Microphones: 'Studio 24c' and the camera: 'USB Capture SDI'
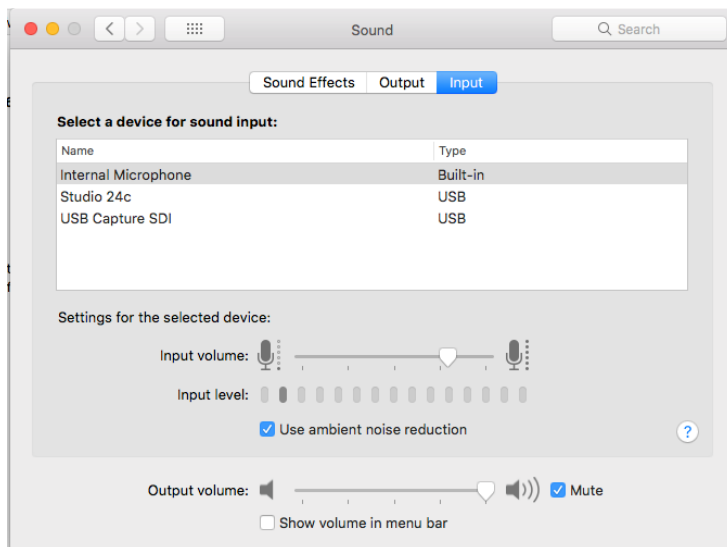


You can get more information about the camera by choosing Apple Menu  > About this Mac. This will show you all know hardware for your Mac. Choose Hardware > Camera and you should see below detailed info.