



**Instructions for the use of the mini-cases for the hybrid lessons in fall semester 20/21**



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## 1 Introduction

The hybrid scenario assumes that one part of the students attends within the classroom while the other part attend online at the same time.

Within the framework of the project "*Beschaffung Ausrüstung für die Lehre und Weiterbildung hinsichtlich Start Herbstsemester 2020*", the evaluation of suitable technical equipment (camera, microphones, etc.) for the implementation of the hybrid scenario at the School of Engineering (SoE) was carried out.

This manual explains step by step how to use the mini-cases for the laboratories and also for the MSE. **Please allow about 10 minutes for the first test run.**

## 2 Requirements

The infrastructure of the mini-case can be used with both Windows and macOS-based hardware (laptop). As a macOS user, please make sure that the correct drivers for the camera are installed.

Via any videoconferencing application such as MS Teams or Zoom, the participating students can be connected. This manual describes the use of MS Teams.

## 3 Existing components

The following components are available in the laboratories and the MSE with the mini-case (cf. Figure 1):

- 1 Mini WebCam
- 1 Mini-tripod
- 1 wireless lecturer microphone (Transmitter & Receiver)
- 1 USB-Charger
- 1 Presenter
- 1 external soundadapter
- 2x USB-C cable



Figure 1: Components of the mini-case

Bring your own...: Laptop plus optional additional personal peripherals such as a mouse etc.

## 4 Commissioning of the components

The following chapter describes the commissioning of the components for teaching in the laboratories and the MSE.

### 4.1 Using the camera

In the mini cases there are two different WebCams. A Logitech C920 (cf. Figure 2) or a Logitech Brio 4k (cf. Figure 3).



Figure 2: Logitech C920



Figure 3: Logitech Brio 4k

The Mini WebCam can be used in two ways. Either as a desktop WebCam or as a WebCam on a mini-tripod. If you decide to use the WebCam in combination with the mini-tripod, you can screw the Logitech C920 onto the already available thread. With the Logitech Brio 4k you will need to remove the webcam's mounting bracket, which may require some force. Unscrew the holder sideways. Afterwards you can screw the WebCam on the thread as well.

## 4.2 Using the lecturing microphone

In the mini-case there is 1 lecturer's microphone, consisting of a transmitter and a receiver. Now it is important that you connect the microphone correctly. Proceed as follows:

1. Connect the external USB sound adapter to a USB port on your notebook
2. The transmitter of the lecturer microphone usually already has a cradle. If not, you can recognize the transmitter by the "microphone symbol" on the back of the microphone. Attach the cradle if you have not already done so.
3. Now connect the lavalier microphone to the transmitter microphone. Plug it in and screw it on so that it is tight.
4. Screw the audio connection cable to the receiver microphone. The side with the twist lock should be on the end of the receiver microphone
5. Now plug the other end of the audio connection cable into the microphone input of the USB sound adapter.
6. Start both microphones by pressing their power buttons for 2 seconds. Both lights must be steady green

**Important:** When not in use, always connect the microphones to the USB charger so that there is enough battery for the next use!

## 4.3 Using the presenter

If you want to use the provided presenter, you only need to plug in the USB dongle at the end of the presenter into the laptop. After a short period of time, the presenter is available. You can charge the presenter at any time using the provided USB charging cable on the USB charger.

## 4.4 Using the videoconference application (MS Teams)

Now the videoconferencing application can be started to transmit the on-site lessons to the online students. In this manual we assume the use of MS Teams.

1. Start the MS-Teams-instance of the teaching module and click on "Meeting".

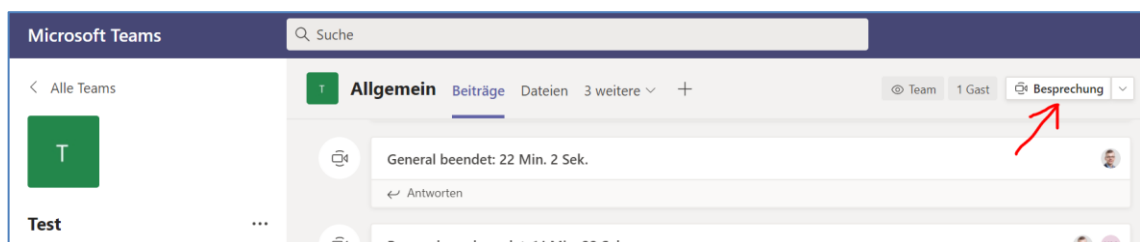
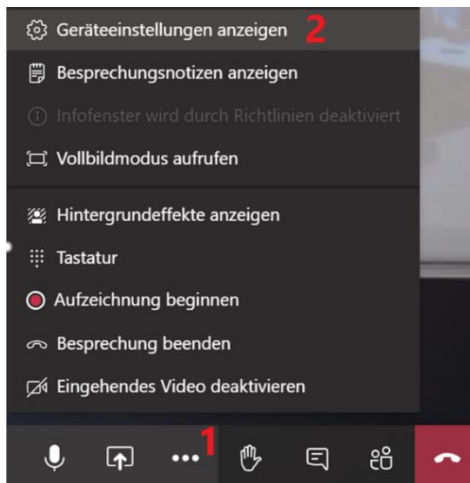


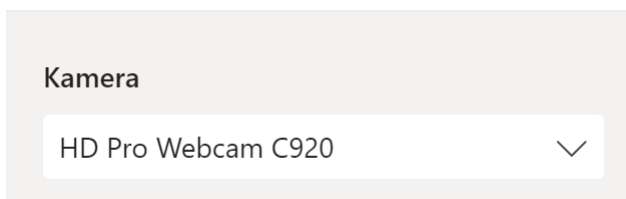
Figure 4: Start Meeting in MS Teams

2. Now click on the three points «...» (1) and then on «Display device settings» (2)



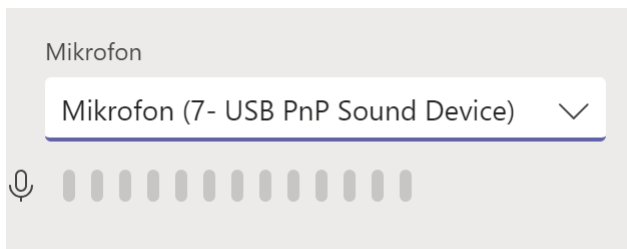
**Figure 5:** Opening the device settings in MS Teams

3. Make sure that the following device settings for the camera (below for Logitech C920)



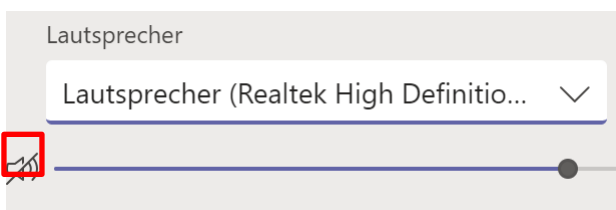
**Figure 6:** Camera settings in MS Teams

and the following device settings are set for the microphone.



**Figure 7:** test

Please also note that the audio settings in the MS Team are made as follows and are not set to mute (cf. Figure 8).



**Figure 8:** Audio settings in MS Teams