

Manual – Setting Up for Hybrid Events at the GCSC

o. General Notes

Most of the equipment listed below can be found in room 207, either in the two yellow boxes or in/on the shelves. You need to carry the two boxes, three microphone tripods and one general-purpose tripod downstairs. Be aware that there is some redundant equipment in the yellow boxes.

You will find the designated Laptop incl. a power cable and HDMI cables in Ann's office.

You will find extension cords in one of the HIWI-offices (016?) When in doubt, ask Ann.

1. Audio

1.1 Microphones

We can use up to four microphones at once to transmit audio from the participants in the room to external participants. In general, the closer the microphones are to the speakers, the better. One microphone can pick up a maximum of three people reasonably (for this the input dials on the interface need to be at 10 and the people need to be speaking loudly).

First, set up the tripods in the room where you think you need them. Extend them by turning the thicker plastic part of the tripods and pulling out the upper tube. You can also change the elevation and length of the crane part by turning the silver turn-screw.

Snap the thinner end of the microphones you find in the small black bags into the plastic mic holders that are already on the tripods. They give a little resistance but are relatively flexible so use some force. Make sure the sliding lever is positioned so you can read 'on'.

Finally, use the XLR cables to connect the Microphones to the audio interface. Follow the instructions in section 1.3. to 'activate' the mics.



1.2 Wireless Microphone

The wireless microphone is useful in situations in which not all potential speakers can have an individual microphone, such as in lecture settings or larger seminars. First, position the receiver on the same table to the left of the lectern and plug in the small power brick. Turn on the receiver by pressing the button on the left of the device. Next, connect one of the 4 XLR cables to the back of the receiver and the interface (see below).

Finally, turn on the wireless microphone by pushing the small sliding-button on the mic up; a small green light should turn on. It takes a couple of seconds for the mic to connect to the receiver. Check if the mic is sending signals by tapping the front and monitoring the display on the interface after having turned on the corresponding number on it.



Note that only 3 wired microphones can be used when the wireless microphone should be active.

1.3 Interface

The interface is needed to connect multiple microphones to the computer. Place the interface on the table next to the lectern and connect the mini-USB to USB-A cable from the plastic bag to the USB input of the computer. Turn the interface on by pushing the lever on the left of the device towards the side facing you.

The device's display should turn on and ask you what you want it to do. Choose the interface option and then choose 'PC/Mac' and 'Stereo Mix.' Make sure to check the inputs and outputs on the laptop. Input should be *Mikrofon(H6)* and output should be one of the options in section 1.3. The device is then ready to operate. You do not need to press record.



Plug in as many microphones as you need into the interface via the numbered XLR inputs. To operate the interface you need to check three things.

- 1) Make sure to 'arm' the channels by pressing the numbers on the device that correspond to the microphone inputs. The respective LED should light up red.
- 2) Turn up the dials to an appropriate level depending on the distance of the speaker to the mic. You can check whether the levels are okay on the small display. If the bars max out between -12 and -6dB, you are perfect. If the levels are 'clipping', i.e. the LEDs are blinking red then you can back off the turn dials one or two notches.
- 3) Monitor who is speaking. If someone external is coming out of the speakers, make sure that the mics are turned off by pressing on the numbered buttons on the interface.

1.4 Loudspeaker

To hear (1) audio from the external participants and (2) sound from presentation materials (video on slides, e.g.) we need to connect appropriate loudspeakers to the laptop. The two options are either:

- a): The loudspeakers built into the projector on the ceiling. For this simply connect the projector via one HDMI cable and make sure that the laptop and the video conferencing software use "Extron HDMI..." as sound output.
- b): Connect the loudspeakers in the yellow box via the 3.5mm audio jack into the headphone input of the laptop. Plug in the power cable of the speakers and turn them on with the turn dial on one of the two speakers. Once connected and turned on, the computer will likely ask you what you have plugged in; choose *Lautsprecher* or similar.



2. Video

The goal for video here is for participants in the room to see the slides of the presenter and external participants. We are using a projector connected to a laptop to achieve both of this. Conversely, we also want external participants to see the presenter, their slides, as well as the audience in the room. For this we need a projector to show the slides and the external

participants. We need webcam to show what is going on within the room, while the slides will be discussed in section 3.3.

2.1 Projector

Connect your laptop to the HDMI input underneath the lid on the lectern using a HDMI cable. Turn on the projector by pressing the blue on-button on the white remote control of the projector. The projector should automatically display your desktop after a couple of seconds.



2.2 Webcam

First, set up the tripod and extend it to about eye level by loosening the wing-screws. Then, screw on the Webcam on the top of the tripod. Next, connect the webcam to the laptop via the similarly grey colored USB cable (one end is USB-A and the other USB-C). The computer should automatically recognize the webcam as Logitech Brio. Make sure that the webcam is also selected within the video conferencing software.



The length of the cable limits where you can put the webcam – Setting it up in front of the seems to be a good option. Unfortunately, the webcam can not show the entire room at once. It makes sense to point it at whoever is speaking, of course. This is most easily done by loosening the top wing-screw, turning the top segment of the tripod and tightening the screw again.

3. Computer & Video Conferencing Settings

3.1 Computer Placement & Inputs

Place the laptop on the lectern so the speaker can monitor their slides on the screen. It is easiest to let them use the GCSC laptop and import their slides using a USB drive.

There should be three or four inputs going into the computer:

1. The power cable from the laptop bag
2. The USB cable connecting the Webcam
3. The USB cable connecting the Audio Interface
4. Optional: The 3.5mm cable going into the headphone input.

3.2 Video Conference Software & Screensharing

Start the video conferencing software and power point or similar. Make sure that all the correct audio and video settings are chosen as described above for the computer itself and the conference software.

Start the presentation and share the (secondary=projector) screen in the software. Arrange the participant window and the slides as needed on the projected screen.