# Possible uses of smartboards and hybrid technology in DOR24, 2.102 (as of May 2025)

#### Overview of this document:

- Basics
- Contents of the technology cabinet
- Use of the smartbord with the PC
- Catchbox microphone (for hybrid use)
- Logitech camera setup (for hybrid use)
- Scenario 1: Zoom meeting
- Scenario 2: BBB meeting
- How to export whiteboard drawings on the Smartboard (independent of Zoom or Big Blue Button) (see images):
- General Troubleshooting
- Troubleshooting cables: How should the cables be plugged in so that everything works?
- Contact with problems

#### Basics:

- Key box in the building: compartments 55 or 56.
- There is a technology cabinet with various accessories in the room near the window.
  Only key box 55 also contains the key to the technology cabinet, which is required to use the technology in the room. Lock operation on the technology cabinet, see sign stuck on the cabinet.
- The room has a Smartboard (can be used as a digital whiteboard, projection screen and audio system or conference system for hybrid seminar formats), which can be used via a permanently installed PC in the room (HDMI1) or with a laptop (from the cabinet or one you have brought with you, HDMI port required) (HDMI2)
- PC and smartboard can be used together for hybrid teaching. A swivel camera and a catchbox audio system are permanently installed on the local PC for this purpose (accessories can be found in the technology cabinet, instructions below)
- A laptop with common programs is stored in the technology cabinet, the login data can be found there on a post-it. Please remove all your own files from the laptop after use, as these and browser data etc. are regularly deleted.
- Stable, zoom-capable internet connection via eduroam is available in the laptop and PC or for use on your own laptop.
- A power strip is located at the bottom left between the blackboard and smartboard.

Contents of the technology cabinet (please put back and lock up after use as found or as described here):

- Wireless mouse and keyboard (necessary for using the permanently installed PC, must be switched on using the slider, spare batteries are in the cupboard)
- o Laptop of the ZtG, Account and Password are on the Post-it

- Various small accessories, backup projector with HDMI cable, portable backup boxes, remote control for the swiveling camera permanently installed above the smartboard
- o For use in hybrid seminar formats (slightly lower left, in the black case): CatchboxPlus throw mic for seminar participants and neck mic for the teacher (the receiver is permanently connected to the room PC small box to the right and switched on by default. The clip-on microphone must also be switched on before use (and switched off again afterwards).

#### Use of Smartboard and PC

1. switch on the Smartboard (bottom right)



2. switch on the PC, remove the mouse and keyboard from the technology cabinet and switch on. Switch off again after use!



- 3. Login with at the account **ztg** with the same password that is provided on a post-it attached to the inside door of the cabinet and on the laptop inside the cabinet.
  - 4. press the "Inputs" button on the smartboard



5. select input "HDMI1"



6. the Smartboard now mirrors the screen of the PC



# Catchbox microphone (for hybrid use )

1. remove the catchbox case from the technology cabinet



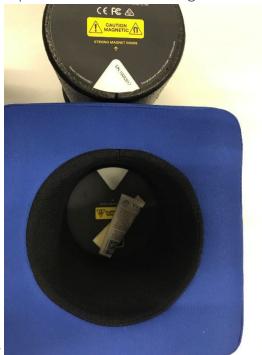
2. Catchbox contents (from left to right)



- a. Catchbox microphone
- b. Charging cable
- c. Speaker microphone
- d. Charging station
- 3. -remove the catchbox microphone from the casing by turning it halfway to the left.
- 4. switch on by pressing and holding the on/off button. Switch off again after use.



5. put the microphone back into the casing so that the white triangles are on top of



each other.

- 6. the speaker-microphone is also switched on by pressing and holding the on/off button and can be worn directly on the body. Switch it off again after use.
- 7. The receiver of the Catchbox is connected to the computer by default.
- 8. make sure that the power switch is on.
- 9. the receiver is supplied with power via the USB cable and the sound is transmitted via the AUX cable (output). Both cables must therefore be connected.

10. if both "MIC STATUS" LEDs on the front panel light up, the connection to the



microphones is active



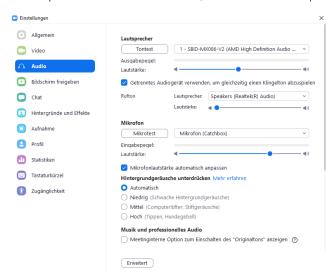
# Logitech-Camera Settings

- 1. The camera is positioned on the Smartboard and does not need to be switched on separately.
- 2. the camera's orientation can be changed using the remote control from the technology cabinet.

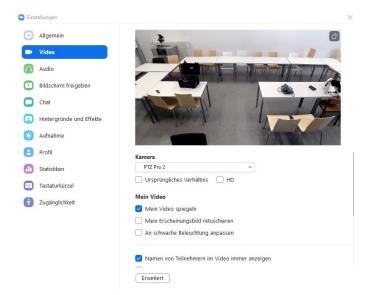


## Scenario 1: Zoom-Meeting

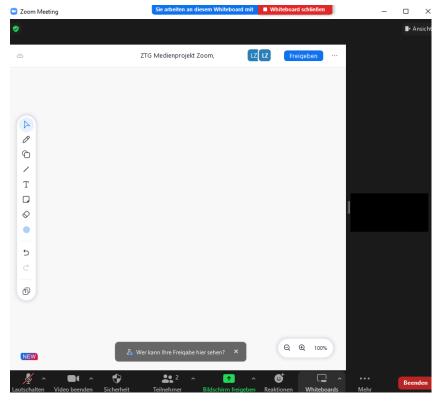
- 1. log in with HU account via <a href="https://hu-berlin.zoom.us/">https://hu-berlin.zoom.us/</a>.
- 2. Open settings.
  - a. Audio-settings:
    - i. Select Input: Microphone (Catchbox) oder Realtek R (Audio)
    - ii. Output: 1-SBID-MX086-V2 (the sound is output via the Smartboard)



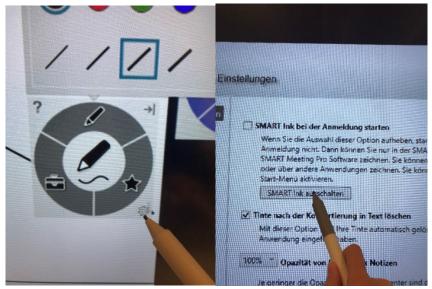
b. Video-settings: PTZ Pro 2



- 3. the sound recorded by the microphones is only heard by the participants in the digital room. Likewise, only the sound of the digital participants and various playback media can be heard via the smartboard.
- 4. use of the whiteboard / writing on the smartboard:
  - a) Click on Whiteboard in the zoom menu bar at the bottom right. This opens an area for notes and whiteboard images that all meeting participants can see and use.



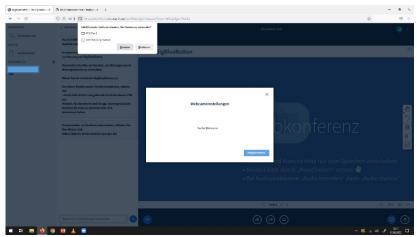
b) To make sure that you are actually writing on the whiteboard and not just on the Smartboard surface, Smart-INK must be turned off.



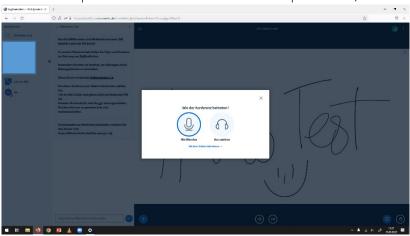
- c) The whiteboard can be used in the seminar room from the PC or Smartboard.
- d) The finished whiteboard images can be saved, shared, exported or deleted.

#### Scenario 2: BigBlueButton-Meeting

- 1. login with the HU account via <a href="https://bbb.hu-berlin.de/b/ldap.signin">https://bbb.hu-berlin.de/b/ldap.signin</a>
- 2. when the BBB room is opened, the audio and video settings are queried.
  - a. Video: Allow PTZ 2 Pro camera access



b. Audio: select mit Mikrophon am Meeting teilnehmen (as long as the catchbox is turned on, the sound should automatically come from it, otherwise please select the input as shown in the zoom example above).



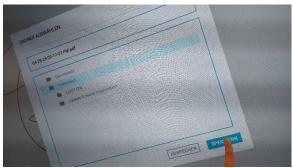
How to export whiteboard drawings on the Smartboard (independent of Zoom or Big Blue Button) (see images):

As the Smartboard itself is not connected to the internet, whiteboard drawings must be exported using a USB stick. There is a socket for this at the bottom left of the Smartboard. Once the whiteboard image has been created, click on the Share icon at the top left and select PDF export. This should be selectable in the next window if a USB stick is connected.

Where are my drawings? In the main menu of the Smartboard, there is a Files button at the bottom center. Here you will find an overview of all Smartboard drawings. After exporting, your own drawing can also be deleted there.







## General Troubleshooting:

- If the HDMI connection does not work, please check the cable and restore the status described below if necessary.
- Ensure that the PC is connected to Eduroam. If there are connection problems, the "Berlin free wifi" network can be used temporarily. The Smartboard alone is online. All Internet connections visible on the Smartboard come from the input devices.
- Attention: apart from the drawing function, the Smartboard accepts touch commands when connected to the permanently installed computer, but not when connected to a laptop via HDMI.
- If the Catchbox is reconnected via USB, in order for it to be recognized, "Microphone" must be selected in the dialog box that then appears (what has been plugged in/what should be optimized for)? "Microphone" must be selected

## Troubleshooting cables: How should the cables be plugged in so that everything works?

We ask all users not to reconnect the cables on the rear smartboard. However, if they appear to be unplugged or no connection can be established between the device in use and the Smartboard, this is the target state that guarantees the functionality of the inputs:

USB connection cable: for the permanently installed camera, extension, runs through the wall cable guide to the fixed computer. The laptop comes with a USB extension cable that can be connected to the upper cable for temporary use of the camera with a laptop. Afterwards, please re-establish the cable connection as shown here.

HDMI1: this cable runs through the cable guide on the wall to the permanently installed computer. The other HDMI end comes from the wall strip at the bottom and should be plugged into the back of the computer.

HDMI2: The connection that can be used for a laptop. Cable should be present, if not, please check in the cabinet or inform us.



USB connection cable: for the permanently installed camera, extension, runs through the wall cable guide to the fixed computer. The laptop comes with a USB extension cable that can be connected to the upper cable for temporary use of the camera with a laptop. Afterwards, please re-establish the cable connection as shown here.

**HDMI1:** this cable runs through the cable guide on the wall to the permanently installed computer. The other HDMI end comes from the wall strip at the bottom and should be plugged into the back of the computer.

**HDMI2:** The connection that can be used for a laptop. Cable should be present, if not, please check in the cabinet e.g. at the replacement projector or inform us.

With all problems that occour please inform us so that we can promptly solve them.

## ztg-pc-pool@gender.hu-berlin.de

As we are not constantly in-house please consider that the problem analysis and solving needs some time. After receiving your notice, we will try to check and solve the problem and as soon as possible, usually within a few days.