

# Angel Introduction: Camera and Video Mixer

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sophie (she/her), jtbx (he/him), jwacalex (it/its)

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C3VOC @ 37c3



<https://github.com/voc/engelschulung>

## General

- We will stream, record and publish all talks with your help
- You can operate the cameras and video mixer
- We (people from c3voc) will be there to help
- The live stream video signal will also be the final recording
- We aim for consistent quality, but everybody make mistakes – don't blame yourself!

# Angeltypes

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# Angeltypes

- A/V Angels:
  - Camera Angels
  - Video Mixer Angels
- A/V Technician
- C3VOC Crew
- External Crew
- Stage Manager

## A/V Angel: Role Camera

- One camera angel per camera in each lecture hall
- Operates the cameras in the lecture halls
- Maintains good camera settings

## A/V Angel: Role Video Mixer

- One person per lecture hall
- Operates the video mixer to produce an interesting video
  - Switches between cameras and slides
  - Composes pictures with multiple sources
  - You decide, which sources to show
- Mixed video feed is used for both, live-stream and the recordings
- You might get assistance by a director on challenging talks

## C3VOC Crew

- 2nd to n-th level support in the lecture halls.
- Responsible for keeping stuff working
- Familiar with all equipment in use
- Able to fix (nearly) all the issues
- Reachable via phone/ DECT

## External Crew

- Does audio mixing and controls the lighting fixtures.
- Ensures that the stage and their equipment works
- Please refrain from bothering them all the time
- Ask A/V Tech first
- They are still nice people

## A/V Technician

- Shift slots usually between big breaks
- Direct support for you in the lecture hall
- Makes sure, that speaker laptop is connected
- Should help with the speaker's headset microphone
- Communication gateway to the Stage Managers and external crew
- Your **first contact for any technical issues** in the lecture hall

## Stage Manager

- Shifts together with A/V-Technicians
- Is responsible for the lecture hall operations:
  - Coordination with all teams (VOC, Heralds, Translation, etc.)
  - Crowd control
  - Time keeping
  - Last minute issues
- Carries the radio for emergency communication

## Basics

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## Closeup Shot

- Show the head and upper part of the body
- Leave the width of one hand above the head
- Eyes should be close to the upper third line

## Closeup Shot: Good Example



**Figure 1:** Good closeup shot

# Closeup Shot: Good Example



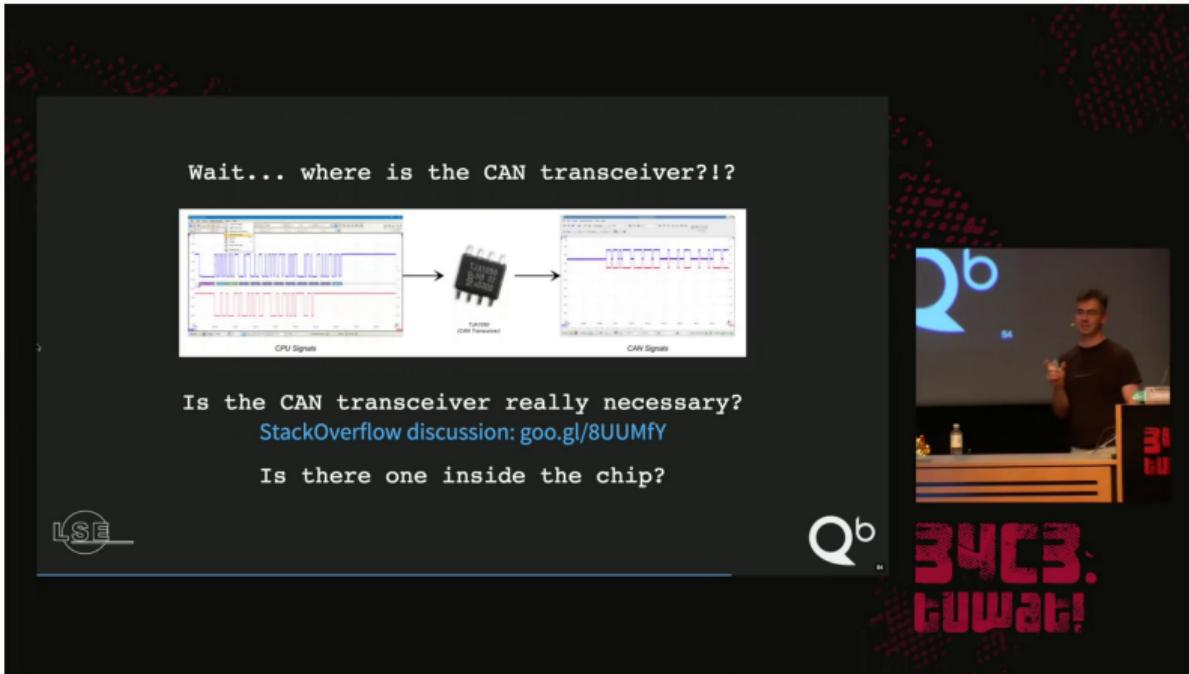
**Figure 2:** Good closeup in Lecture Mode

## Closeup Shot: Bad Example



**Figure 3:** Half a head - not good

# Closeup Shot: Bad Example



**Figure 4:** Too far out for a good Lecture Mode image

## Medium Shot: Good 1



**Figure 5:** One person, the lectern and some context

## Medium Shot: Good 2



**Figure 6:** Two persons on stage

## Overview

- Shows the complete stage and the people on it
- Heads of the crowd are OK, if it's dark enough
- Don't use this camera to show the slides - use lecture mode instead
- Locked off, do not move.

## Wide Shot: Good Example



## Usual Talk Timeline

- Please be on time when your shift starts
- Get to know your fellow angels, check the camera and mixer
- Talk starts with an introduction by the herald
- Speaker starts talk
- Q&A session
- Talk ends with "thank you" and applause
- Hand over to the next angels

## Timeline - Preparations

### Camera

- Test your camera and tripod
- Check who is herald and speaker
- Show the stage, ideally with herald and speaker

### Mixer

- Be prepared to go live
- Signal that you're ready when the talk should start

## Timeline - Introduction

### Camera

- Follow the herald, if necessary

### Mixer

- Show the herald (and speaker)
- Put fullscreen slides on preview
- Switch to slides when announcement is finished

## Timeline - Content

### Camera

- Show closeup of the speaker
- Follow the speaker, if necessary

### Mixer

- Show new slides as soon as they are keyed by the Speaker
- Show slides long enough (read slide 2 times)
- Use lecture mode, if possible
- Use the camera in fullscreen, if there's action on the stage
- Try to plan ahead and anticipate the next actions by the speaker

## Timeline - Questions and Answers

### Cameras

- Camera: Track the Speaker
- Keep tracking, don't give up even if your shift ends soon

### Mixer

- Show whoever is talking on stage to the stream
- The "Thanks"-Slide can be shown from time to time
- Don't end too early

## Timeline - Preparations

### Cameras

- Test your camera and tripod
- Check who is herald and speaker
- Camera 1: Get a closeup of the speaker
- Camera 2: Show the stage, ideally with herald and speaker

### Mixer

- Have camera 2 on program and be prepared to go live
- Signal that you're ready when the talk should start

## Timeline - Introduction

### Cameras

- Cam 1: Follow the speaker, if necessary
- Cam 2: Keep the herald in frame

### Mixer

- Go live with Camera 2 as soon as the Herald starts
- Title slide can be shown during the introduction
- Be prepared to switch to Lecture Mode or Camera 1 as soon as the speaker starts talking

## Timeline - Content

### Cameras

- With intercom: Follow commands from your mixer and ask for time off, if you need to re-adjust something
- Cam 1: Follow the speaker with a closeup shot
- Cam 2: Get a medium shot of the speaker (for gestures and walking around)

### Mixer

- Show new slides as soon as they are keyed by the Speaker
- Show slides long enough (read slide 2 times)
- Use lecture mode, if possible
- Use the camera in fullscreen, if there's action on the stage
- Try to plan ahead and anticipate the next actions by the speaker

## Timeline - Questions and Answers

### Cameras

- Cam 1: Track the Speaker
- Cam 2: Show the herald as well
- Keep tracking, don't give up even if your shift ends soon

### Mixer

- Show whoever is talking on stage to the stream
- The "Thanks"-Slide can be shown from time to time
- Don't end too early

## Camera Hardware

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# Hardware Camera Controls Panasonic



**Figure 7:** Panasonic Cam

Cameras are in manual mode because of difficult lighting situation.

**Left Ring/red** Focus - control sharpness of the image.

**Middle Ring/green** Zoom - vary the focal length.

**Right Ring/blue** Iris - will have to be adjusted throughout the day. If there is anything wrong, contact C3VOC helpdesk.

## Zoom Control Panasonic



- For smooth zoom use the zoom buttons.
- Gentle touch ⇒ slow zoom
- Top Buttons fixed speed

**Figure 8:** Panasonic Cam

# Display Indicators Panasonic



Figure 9: Panasonic Display Indicators

**Rec Indicator** The recording must always run, even during the break.

**Focal Indicator** Use only manual focus!

**Remaining Time** It must have enough remaining time before talk.

## Alert

Alert the A/V-Technician if something's wrong.

# Hardware Camera Controls JVC



**Figure 10:** JVC Cam

Cameras are in manual mode because of difficult lighting situation.

**Left Ring/red** Focus - control sharpness of the image.

**Middle Ring/green** Zoom - vary the focal length.

**Right Ring/blue** Iris - will have to be adjusted throughout the day. For lighting issues talk to the A/V tech via intercom.

## Zoom Control JVC



- For smooth zoom use the zoom buttons.
- Gentle touch ⇒ slow zoom
- Top Buttons fixed speed

**Figure 11:** JVC Cam

# Display Indicators JVC



**Figure 12:** Panasonic Display Indicators

**Rec Indicator** The recording must always run, even during the break.

**Focal Indicator** Use only manual focus!

## Alert

Alert the A/V-Technician if something's wrong.

# Tripod



**Figure 13:** Tripod

- Should be level - check the water bubble.
- Variable brakes - can be adjusted to your needs.
- Tilt axis should be balanced, so that the camera doesn't tilt up or down on its own.
- Pan axis is needed all of the time. Set it so you can do smooth pans all over the stage.

## Alert

Alert the A/V-Technician if something's wrong or misplaced.

## SD-Card Recording

- Two SD-Cards in every Camera
- Backup Recording
- Turn on Recording before first shift in the morning -> Red Dot somewhere in the Display.
- Control Recording Time remaining.

### Alert

Alert the A/V-Technician if something's wrong or not running.

## Video Mixer Tools

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# Voctomix2 - Overview

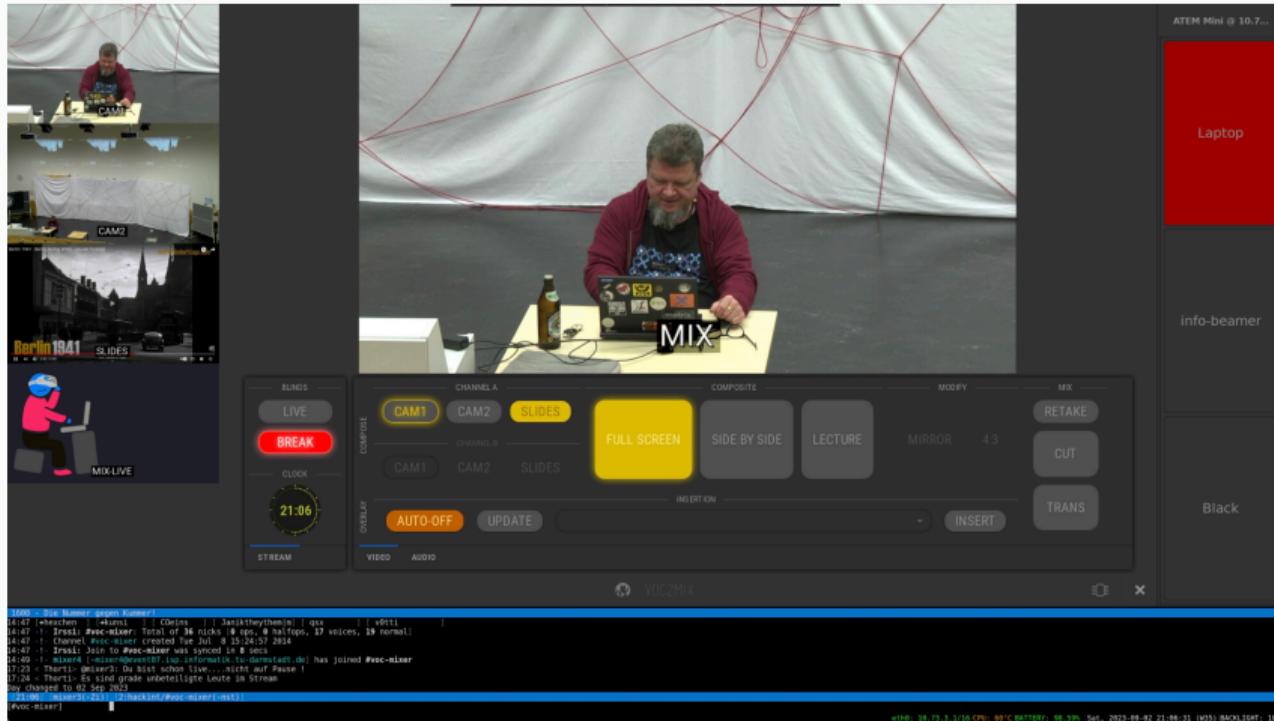
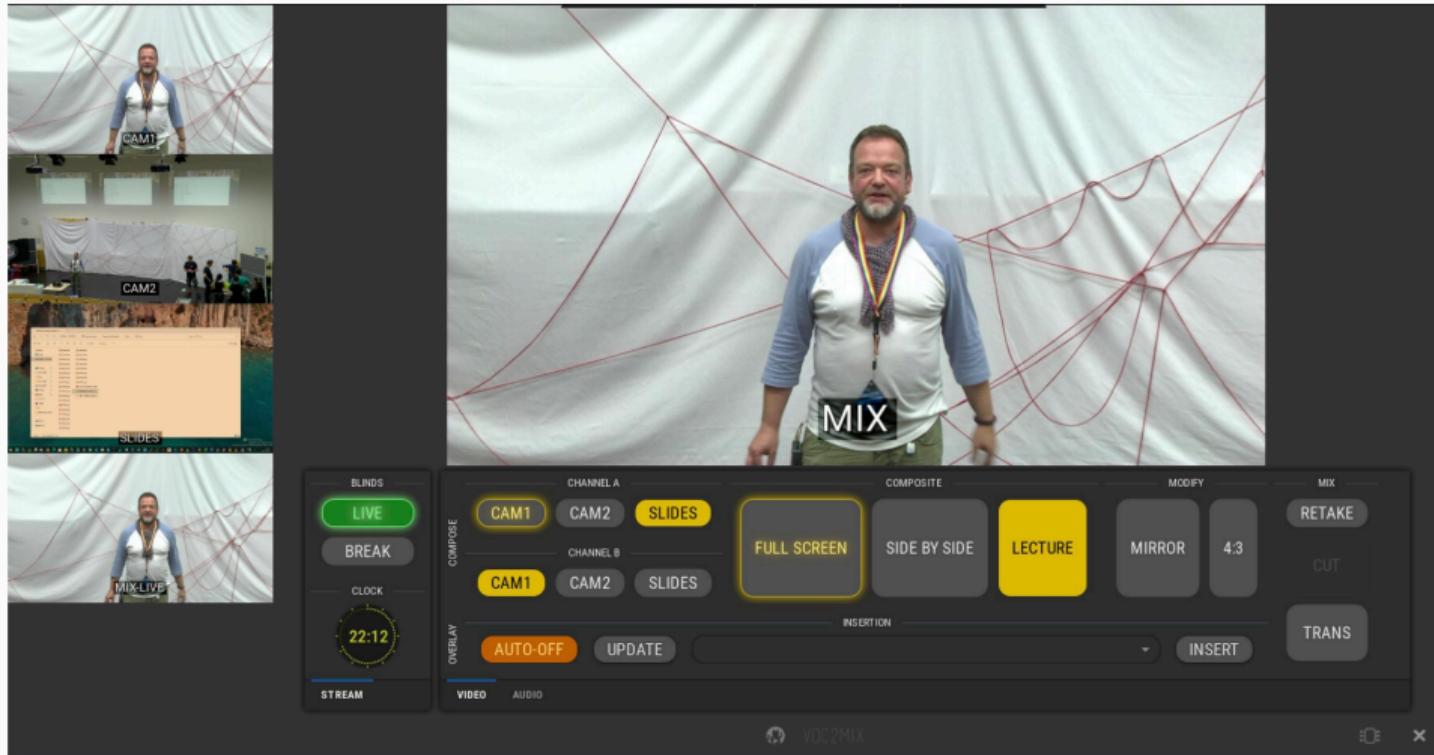


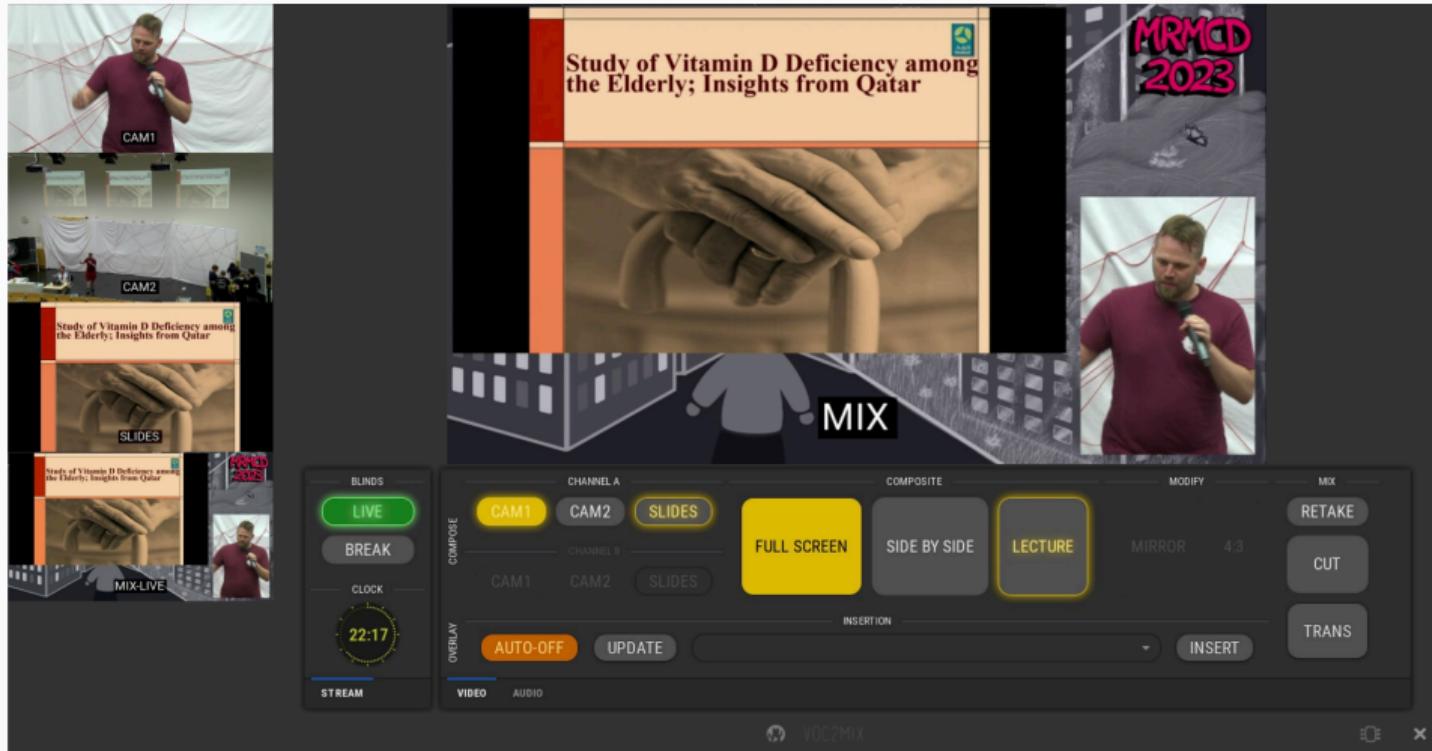
Figure 14: Voctomix2 - Overview

## Voctomix2 - Pre-Select



**Figure 15:** Voctomix2 - Select (Lecture Mode)

# Voctomix2 - Lecture Mode



**Figure 16:** Voctomix2 - Lecture Mode

## Voctomix2 - Lecture Mode 4:3

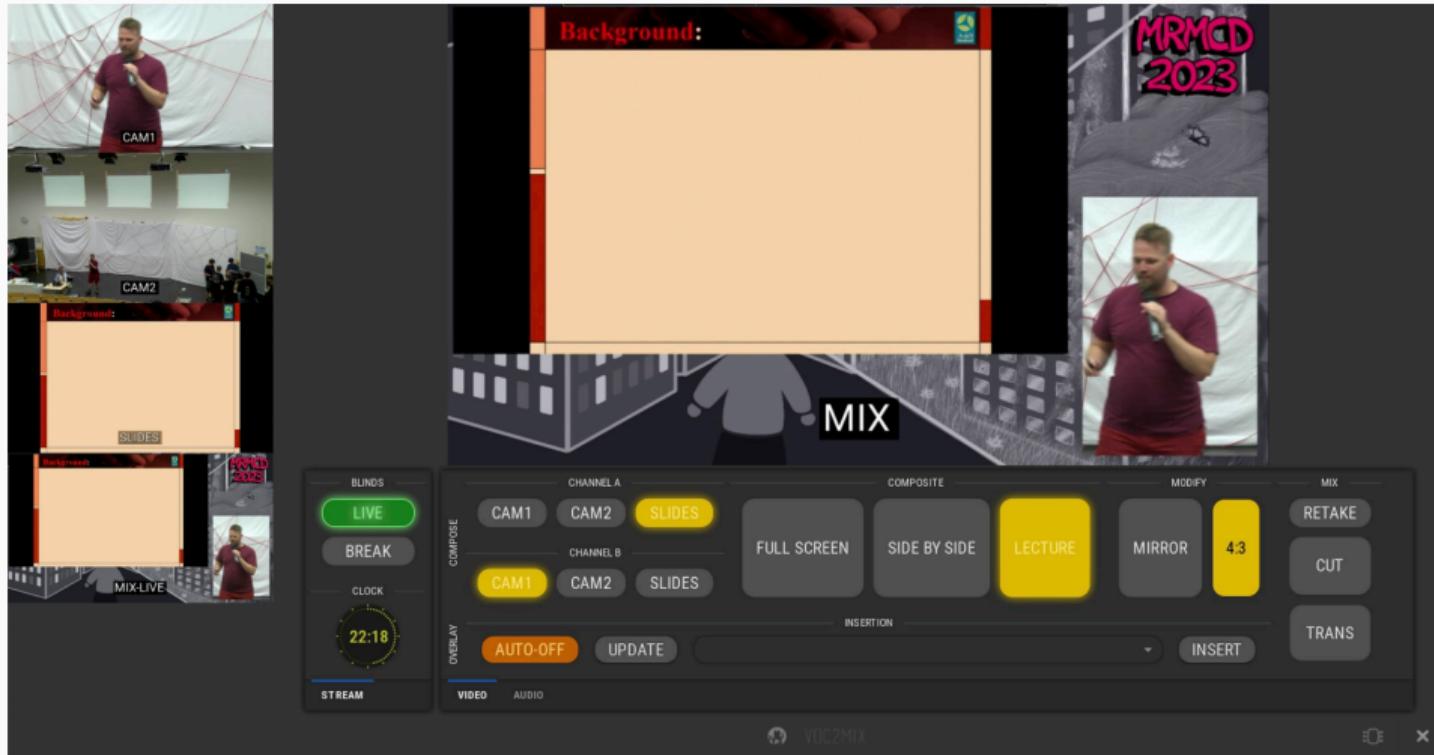
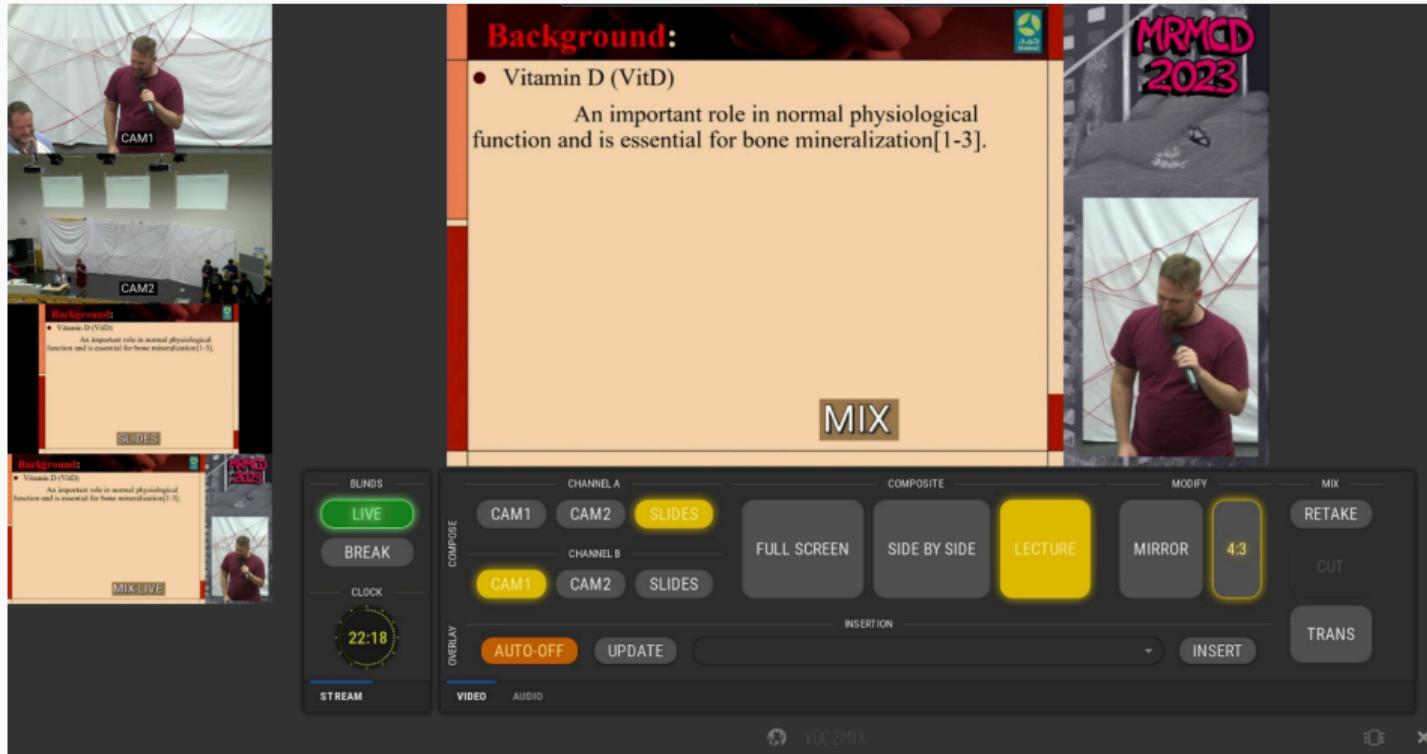


Figure 17: Voctomix2 - Select Lecture Mode 4:3

# Voctomix2 - Lecture Mode 4:3



**Figure 18:** Voctomix2 - Lecture Mode 4:3

## Video Mixing Guidelines

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## Mixing Guidelines - Hard Rules

- **All** you are doing is **recorded** and will be published.
- The Audience is **not to be filmed**. Cut away if faces of people not on the stage appear.
- **Slides are important**
- Slides stay on till the text has been read **twice**.
- Show new slides **immediately**.

## Mixing Guidelines - Softer Hints

- Start early opening announcements of the Herald are a good start. Their introduction has to be in the recording and on stream.
- Open wide Structure the beginning of a talk with shots that set the stage
- The slides in fullscreen you're dealing with a very small screen. Text has to be readable
- Show gestures medium-close-up that follows the speakers eye-line
- Don't be too cutty Pace your videos temperately. Do not cut too often.
- Don't end too early All questions and answers have to be recorded. The herald ends the talk, not the mixer angel.

### Hints

Leave lots of room at the start and end of a talk. Cut away from the infobeamer before the Herald starts with announcements. Cut to the infobeamer only after the last applause has finished.

## **Contacts and Action Items**

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## Who to Contact?

- Generic Questions? Something is wrong in lecture hall?
  - Reach A/V Technician on duty
  - Call the C3VOC Helpdesk **DECT 1601**
- Orga-Issues? Troubleshooting? Issues with shifts?
  - Call Saal Coordination **DECT 1500**
  - non urgent issues via e-mail: [saal-coordination@cccv.de](mailto:saal-coordination@cccv.de)
- General Angel Topics - Heaven - **DECT 1023**
- We might need to call you. Please have your DECT number in the Engelsystem!

## Daily Meeting

- We meet **every day at 22:00 in Hall 8**
- If you can, you should attend to this meeting.
- We'll distribute information and news there, e.g. if there are any special talks with additional requirements.
- Also this meeting should give you the chance of giving each other feedback, ask questions or rise issues.

## Final Notes

- Click "join" on the angel types you want to have
- Queue up to get approved
- Select shifts:
  - Fill talks with no angels first
  - Take breaks