

Angel Introduction: Camera and Video Mixer

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C3VOC@EH20

ToC

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General Info

General Info I

- All talks get recorded and archived forever
- We aim for consistent quality, but we'll make mistakes
- Don't blame yourself for mistakes, because we don't blame ourselves either - even if all experts of the internet will complain and think they know how to do it better.
We did not see those experts on-site - did you?
- Livestream content is the same as the one recorded and published

General Info II

- Introduction Meeting here
- Complete overview for all new angels
- Short diff for experienced ones
- Slides available online: <https://github.com/voc/engelschulung>



Angeltypes

Angeltypes

- A/V Angels with two different roles
- C3VOC Crew
- Kampnagel Crew

A/V Angel: Role Campera

- Operate the fixed cameras in the lecture halls.
- Two camera angels per lecture hall
- Camera angels will communicate with the Video-Mixer-Angel via intercom,
- Get instructions to shoot in certain ways.
- Maintain good camera settings.

A/V Angel: Role Video Mixer

- Switch the video feed between different sources.
- Mixed video feed is used for both the live-stream and the recordings
- You decide which picture, respectively source, is most interesting/important at each moment.
- Work proactively with camera angels through the intercom

C3VOC Crew

- 2nd to n-th level support in the lecture halls.
- Responsible that stuff works.
- Familiar with the equipment that is used.
- Able to fix (nearly) all the issues.
- Reachable via radio

Kampnagel Crew

- Does Audio Mixing and controls the lighting fixtures.
- Ensure that the stage and their equipment works
- If there is anything, just talk to them
- They are nice.

Communication Tools

Radio

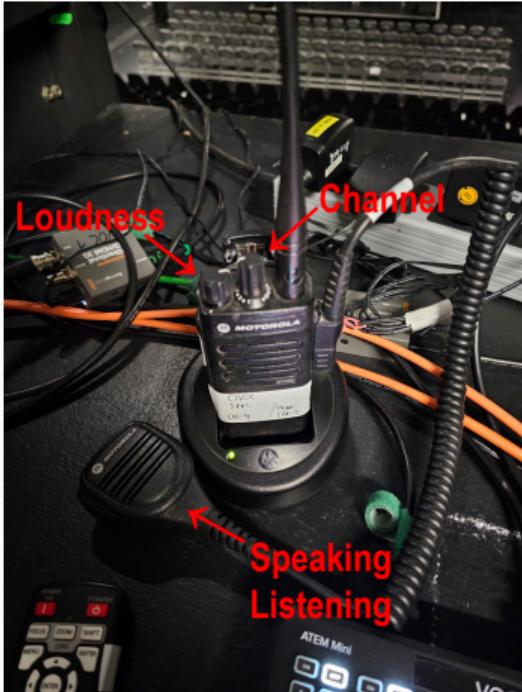


Figure 1: C3ROC Radio Device

Radios are used for communicating and fixing issues. You can clip the device on, but please put it back in the charger after your shift.

Channel Ensure that the device is set on **channel 4**

Volume Check loudspeaker volume by switching to a different channel and back. Should be loud enough to hear, but not too loud to annoy the audience.

Radio Discipline



Figure 2: PTT

One way communication only, either speak or listen. The device takes some time to connect.

Think Prior pressing the button, think about what you want to say.

Press Press the button, but don't start speaking immediately.

Wait Ready state signalled by a short beep.

Hail Start with C3VOC followed by your name

Speak Tell us about your issue and release the button.

Listen Listen to any answers.

Intercom: Mixer



Figure 3: Intercom Device: Main Station

We use an Party-Line intercom for communication between mixer and camera

Headset VOL Adjust the loudness of your headset

PPT PPT Should switched to "off", so you can always speak to the camera angel

Intercom: Camera



VOL Adjust volume prior talk.

PTT Ensure that PTT is set to "off", to prevent noise from the stage on the party line.

Yellow Button Press the yellow button to speak.

Figure 4: Intercom Device: Camera Station

Camera Hardware

Hardware Camera Controls Panasonic



Figure 5: 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 6: Panasonic Cam

Display Indicators Panasonic

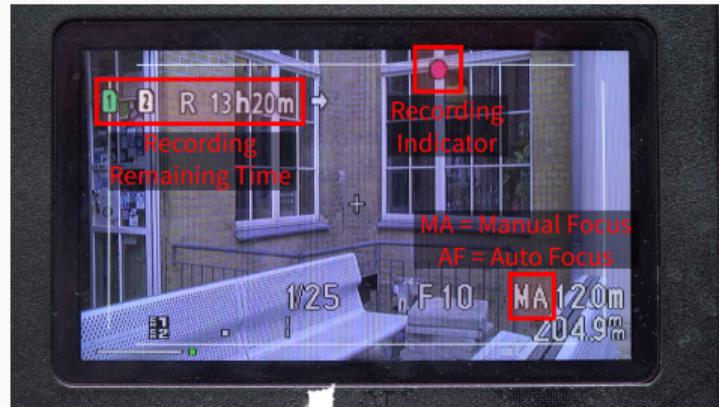


Figure 7: Panasonic Display Indicators

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.

Tripod



Figure 8: 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.

Camera Positions and Angles

Camera 1 - Closeup Camera

Content

- The Speaker is your best friend
- Keep them always in frame
- Default for all composition modes

Framing

- The upper part of their body + head + a bit of headroom.
- Stay close to his/her eyeline on the upper third line.

Alerts

- Anticipate movement, stay alert
- Leave some room where they want to move next.

Camera 1 - Closeup Camera

Example Shots I



Figure 9: Good Closeup Shot

Camera 1 - Closeup Camera

Example Shots II

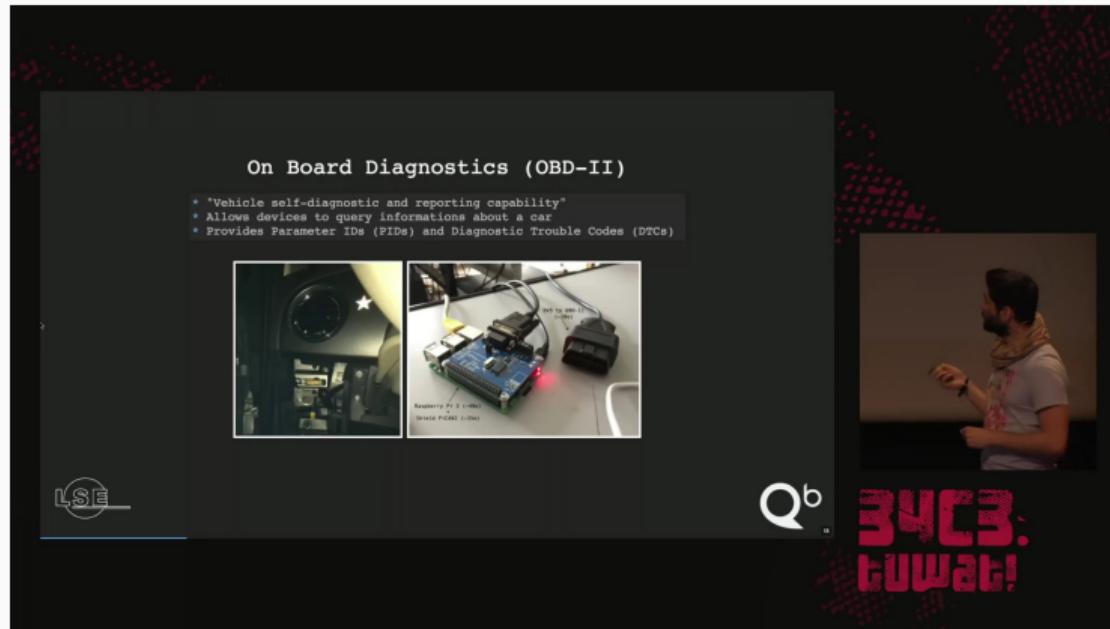


Figure 10: Good Closeup in Supersource

Camera 1 - Closeup Camera

Bad Shots I



Figure 11: Half a head - not good.

Camera 1 - Closeup Camera

Bad Shots II

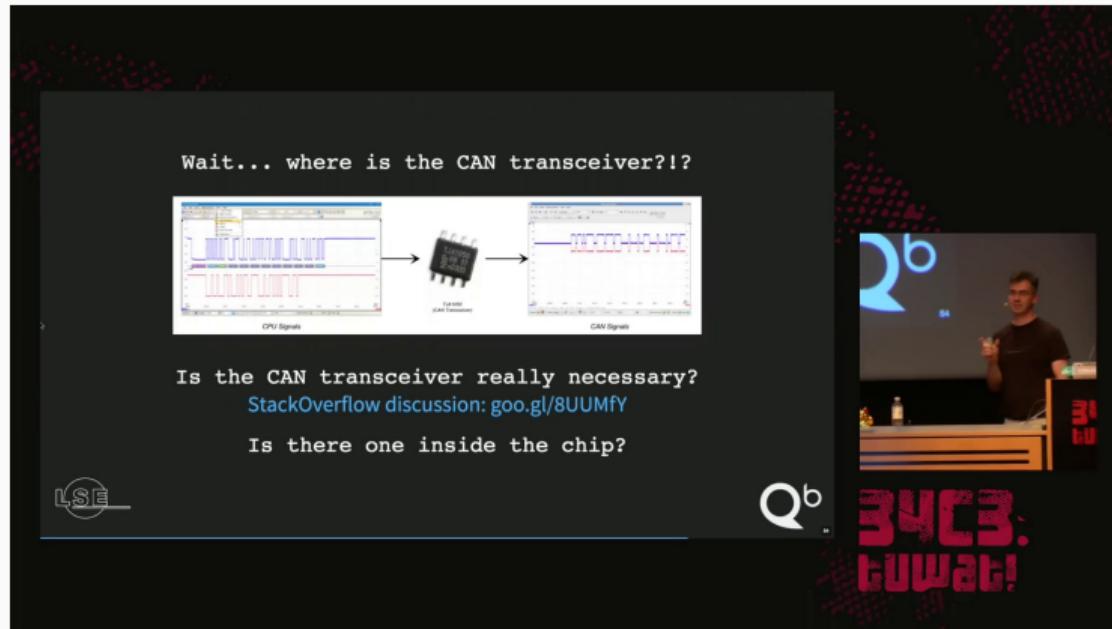


Figure 12: Too Far out for a good supersource image.

Camera 2 - Medium Camera

Content

- Context around the speaker
- If there are two or more speakers choose the other one

Framing

- Speaker from Head to Toes
- Stay close to his/her eyeline on the upper third line.

Alerts

- Anticipate movement.
- Leave some room where they want to move next.
- Fallback Camera if the Closeup Camera can't keep up.

Camera 2 - Medium Camera

Good Shots I



Figure 13: Good Context image.

Camera 2 - Medium Camera

Good Shots II



Figure 14: Two Speakers.

Camera 3 - Wide Shot

Framing

- Covers the whole stage.
- A bit of small audience for context.
- Statically set.

Alerts

- Needs no attention.
- Fallback Camera if all else fails
- Beautifully captures standing ovations

Camera 3 - Wide Shot



Video Mixer Tools

Software Video Mixer - Vocomix2

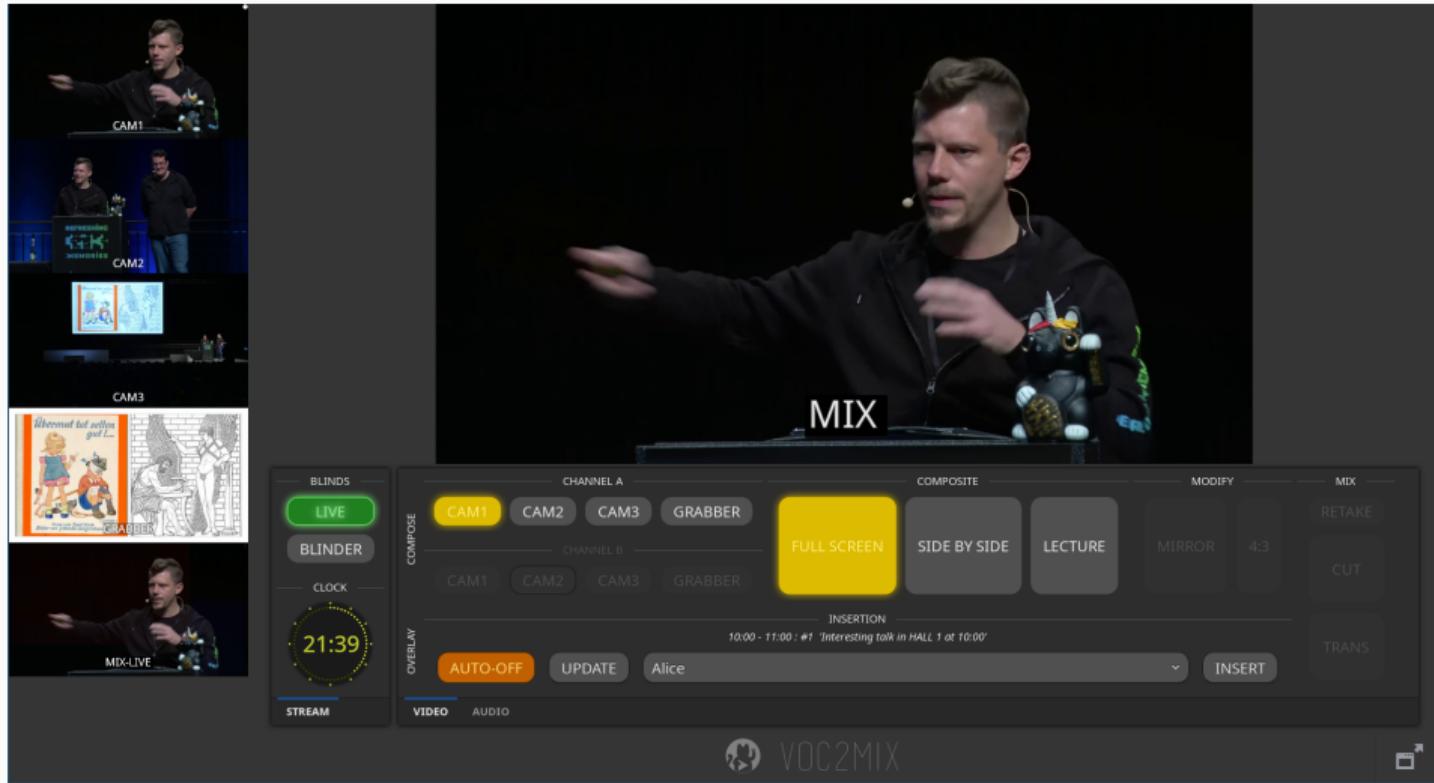


Figure 15: Vocomix2

Software Video Mixer - Vocomix2

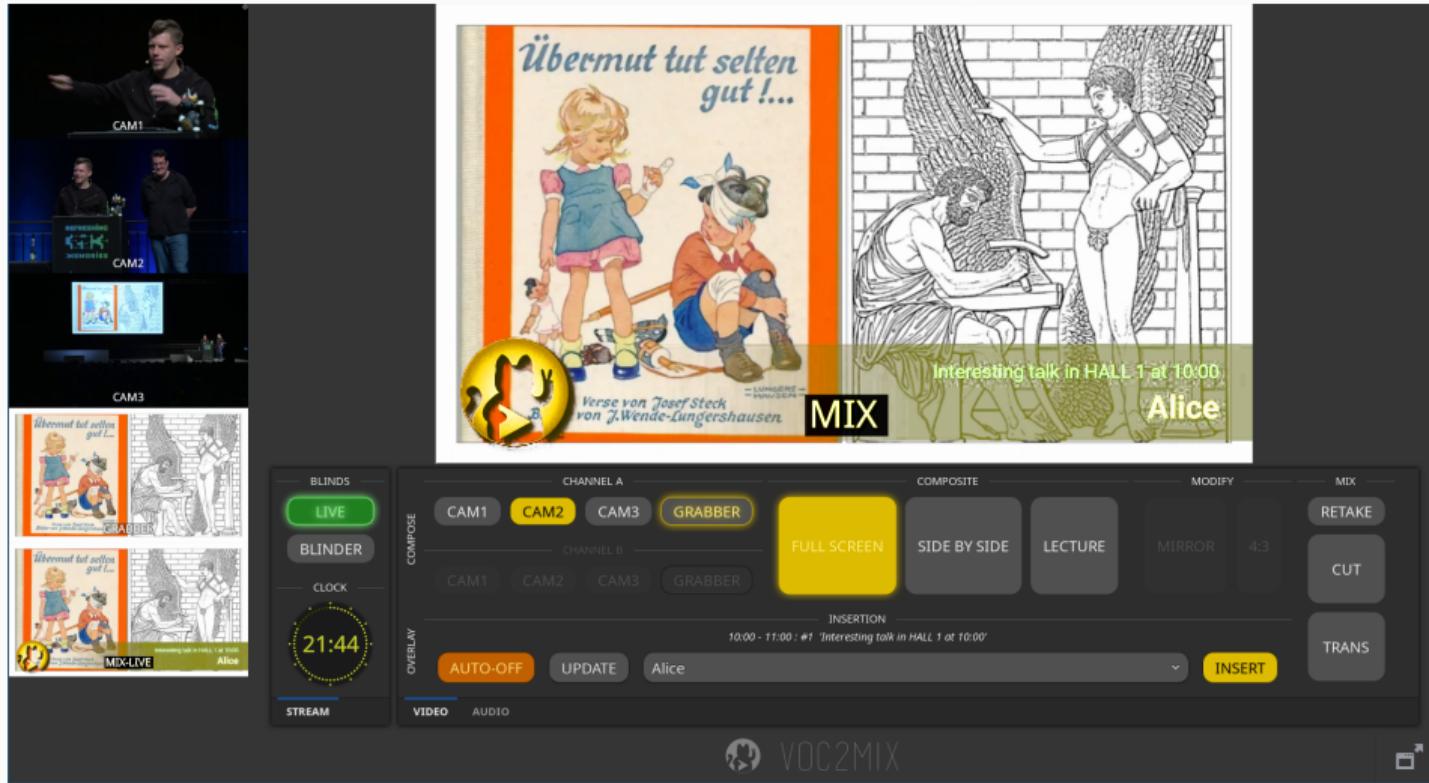


Figure 16: Vocomix2

Software Video Mixer - Voctomix2

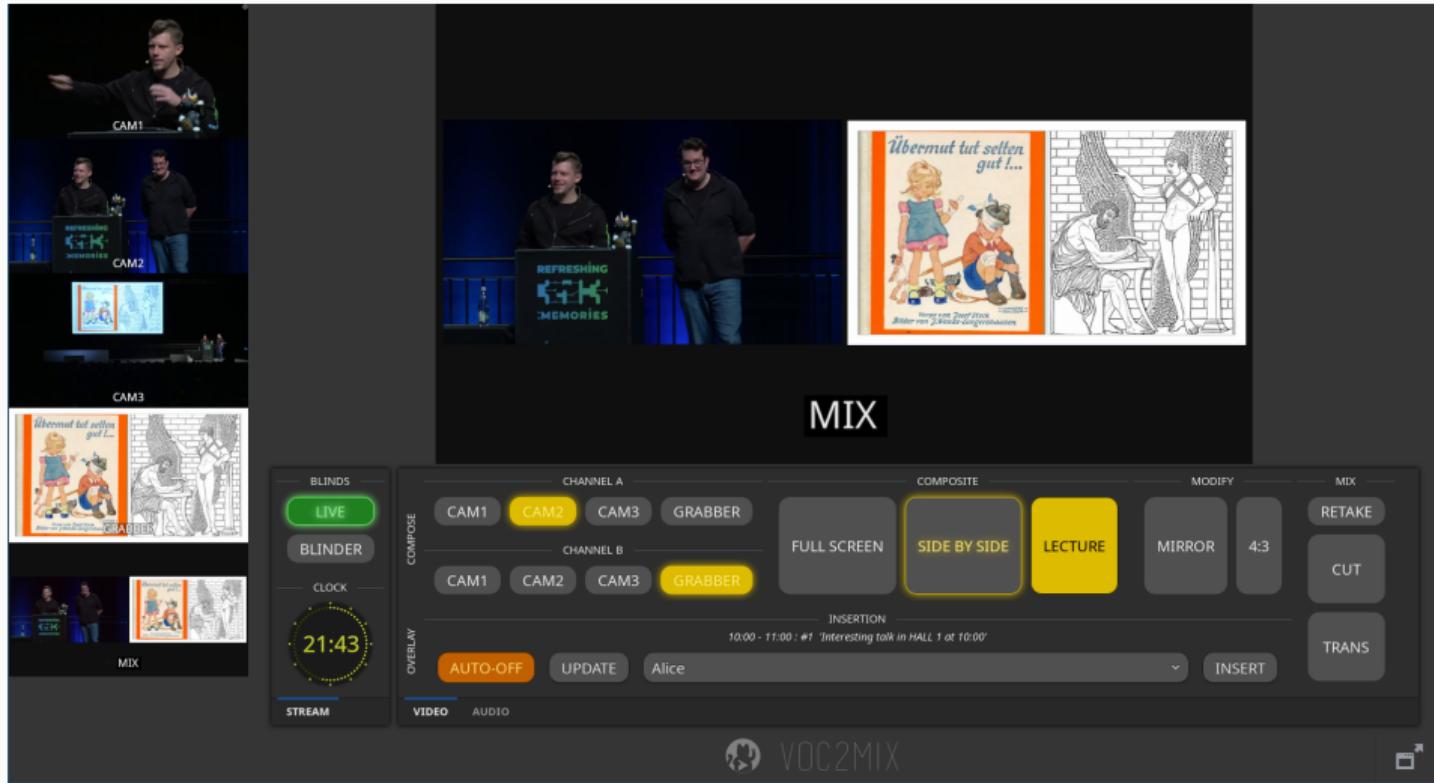


Figure 17: Voctomix2

Video Mixing Guidelines

Mixing Guidelines - Hard Rules

- All you are doing is **recorded** and will be published. **Don't make mistakes.**
- 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**.

Hint

Fast-paced presentations with lots of slides are easier to handle with the supersource.

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.

Audio Mixing

Audio Mixing - Basics

- Mute / Unmute the correct Mics at the right time
- Adjust Mic levels to a comfortable listening level
- Eliminate feedback
- Adjust Dynamics / EQ if necessary
- Stream Mix is Post Fader of the Main Mix - what you're mixing for the Hall is what will be heard on Stream.

Audio Mixing - Advanced

- Intercom is patched into the Mixer, and by Default only the Intercom is on your Headphones. To Listen to Channels or Mixes, use the "Solo" Buttons.
- To Talk to Intercom use "Talk B"
- To Talk to Stage via Monitor, use "Talk A"
- To adjust Stream levels, select Stream Bus and press "Fader Flip" - please return these to 0 if you changed anything here. We might adjust these remotely if necessary
- To access the Main PA EQ, select the LR Bus and hit "Effects"
- To adjust Dynamics or EQ, select a channel and use the controls on top or the LCD

Timeline - Preparations beforehand

Cameras

- Get to know your fellow angels.
- Test your camera and settings.
- Look on Stage who will be herald or speaker.
- Camera 1: Get a closeup of the speaker.
- Camera 2: Get a head to toes shot of the herald.
- Both cameras start tracking their persons.

Mixer

- Check Slides and adjust supersource to 16:9 or 4:3.
- Have Camera 2 on Preview.
- Talk to your cameras via the intercom.

Timeline - Announcements and Introduction

Cameras

- Camera 1: Get a closeup of the speaker.
- Camera 2: Get a head to toes shot of the herald.
- Both cameras track their persons.

Mixer

1. Go live with Camera 2 as soon as the Herald starts.
2. Title slide can be shown during the introduction
3. Put Camera 1 on Preview.
4. Camera 1 live as soon as the Speaker starts talking

Timeline - Content

Cameras

- Follow commands from the Mixer
- Ask for time off if you have to readjust zoom, focus or anything else that should not be in the recording.

Mixer

- Show new slides as soon as they are keyed by the Speaker
- Show Camera 2 when the Speaker starts walking and gesturing
- Call out your actions and intentions via intercom
- Plan ahead. Which picture should be shown in 30 seconds?
- Keep your available pictures diverse. Both cameras on medium closeup don't make sense.

Timeline - Questions and Answers

Cameras

- Camera 1: Track the Speaker
- Camera 2: Track the Herald or both if they are close
- 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.

Contacts

Who to Contact?

- Generic Questions? C3VOC Helpdesk **DECT 1600**
- Something is wrong in lecture hall? **Radio Channel 4**
- Do you want to talk to us? Come to the C3VOC Office in K4
Follow the CERT-Entrance Sign and turn left instead of right.
- If you want to hang out and socialize:
We have some small VOC Assembly in K4 (near CERT-Entrance), because our office is really small and unsuitable for hanging around :(