

# **Angel Introduction: Camera and Video Mixer**

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C3VOC

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## **General Info**

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## General Info I

- All talks get recorded and archived forever
- Consistent quality
- No postproduction of individual signals.
- Livestream content is the same as the one recorded and published
- Less mistakes ⇒ better recordings.
- Stream observer shifts
- Difficult talks together with additional video director

## General Info II

- Introduction Meeting here
- Complete overview for all new angels
- Short diff for experienced ones
- Shift distribution every day 17:00 in CCL 11.
- Feedback loop and review at those meetings
- Slides available online:

<https://streaming.selfnet.de/engelschulung.pdf>



# Angeltypes

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# Angeltypes

- Camera Angels
- Video Mixer Angels
- Stream Observing Angels
- A/V Technician
- Stage Manager

## Camera Angels

- Operate the fixed cameras in the lecture halls.
- Usually, two video 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

## Video Mixer Angels

- 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,
- Challenging talks, with assistance from an external "image composition director" joining the intercom channel.

## Stream Observing Angels

- Open for all camera and mixing angels
- Reflecting the work of colleagues from an audience perspective.
- Examine streams for issues
- Keep track of sequences appearing hard to consume or violating our rule set.
- Positive and negative remarks
- Constructive feedback
- Instantly report severe issues like "there is no signal" to the VOC Helpdesk.
- Self evaluation and not meant as external monitoring.

## A/V Technician

- 2nd level support in the lecture rooms.
- is responsible for A/V Angels
- Familiar with the equipment that is used
- Able to fix (nearly) all the issues.
- is on intercom

## Stage Manager

- is responsible for the lecture hall, especially
  - crowd control
  - time keeping
  - last minute issues
- carries the radio for emergency communication

## A/V Technician & Stage Manager

- have the same shift slots (4h) together
- Stage Manager is communication gateway to heralds

## Camera Hardware

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# Hardware Camera Controls Panasonic



**Figure 1:** 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 - don't touch.

# Hardware Camera Controls JVC



**Figure 2:** 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 - don't touch.

# Zoom Control Panasonic



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

**Figure 3:** Panasonic Cam

## Zoom Control JVC



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**Figure 4:** JVC Cam

# Display Indicators Panasonic



Figure 5: 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.

# Display Indicators JVC



**Figure 6:** 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 Handle Controls



**Figure 7:** Tripod Handle

Beware: various models in use.

**Zoom Control** lever above red ring

**Red Button** Start/stop recording, don't touch

**Other Buttons** markings on the handle

# 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 one camera each room
- Backup Recording
- Turn on Recording before first shift in the morning -> Red Dot somewhere in the Display.
- Control Recording Time remaining.

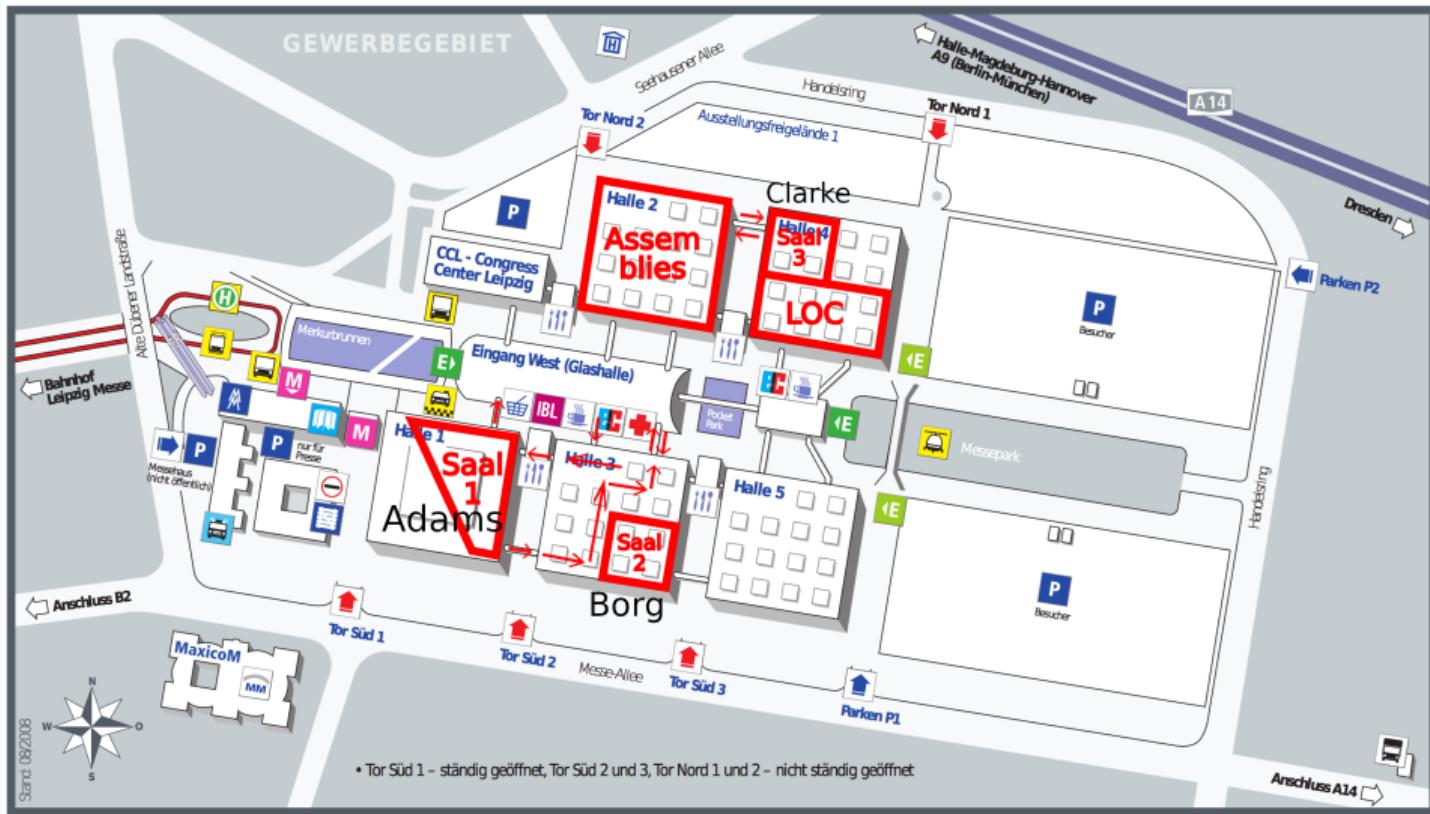
### Alert

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

## **Camera Positions and Angles**

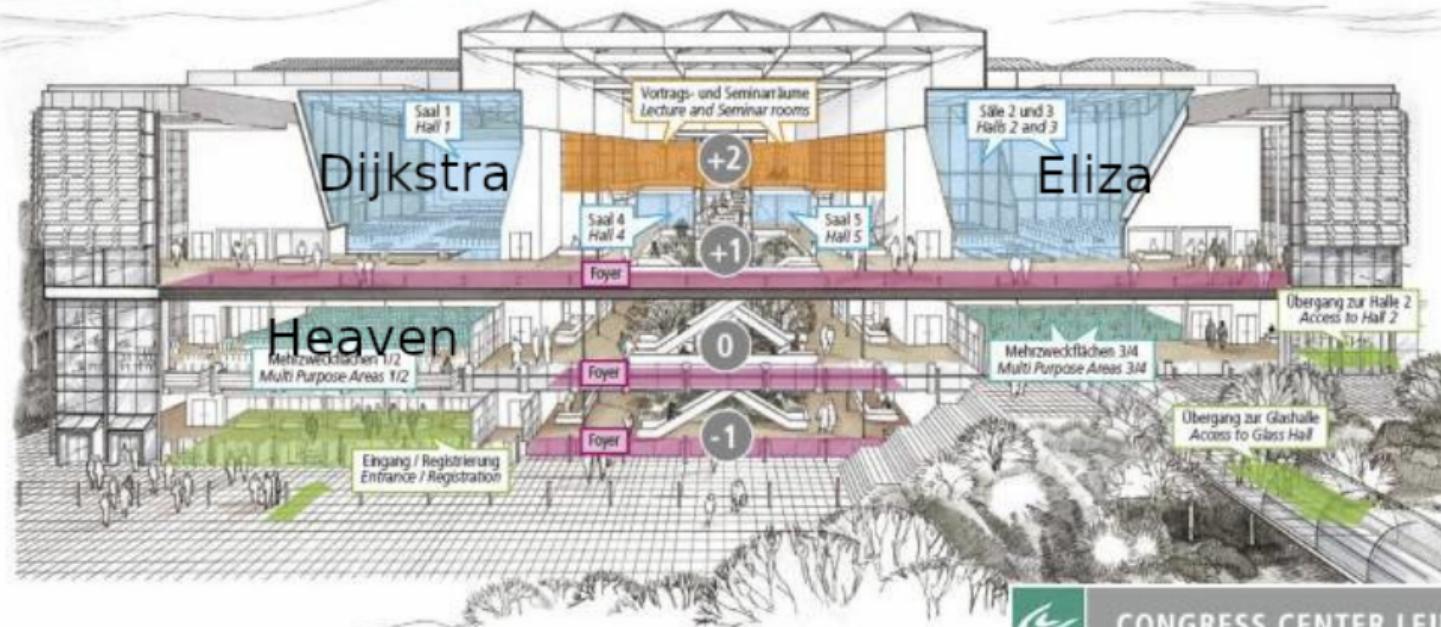
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# Map of the fair grounds



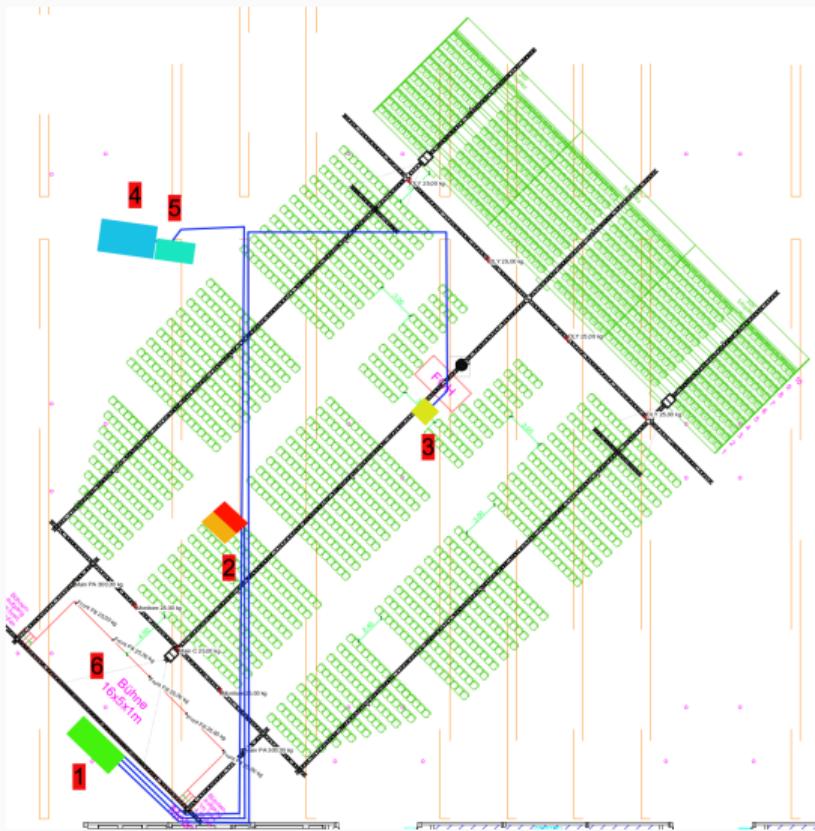
# Rooms in CCL

## Congress Center Leipzig – Ebenenplan Congress Center Leipzig – floorplan



CONGRESS CENTER LEIPZIG

# Saal Borg



# 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

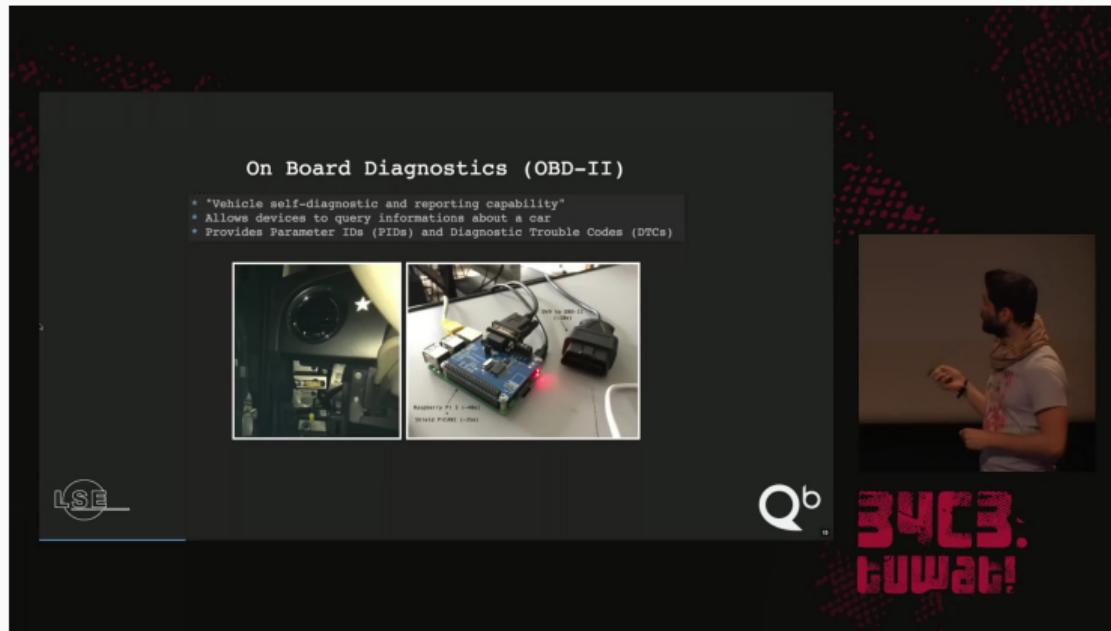
### Example Shots I



**Figure 9:** Good Closeup Shot

# Camera 1 - Closeup Camera

## Example Shots II



**Figure 10:** Good Closeup in Supersource

## Camera 1 - Closeup Camera

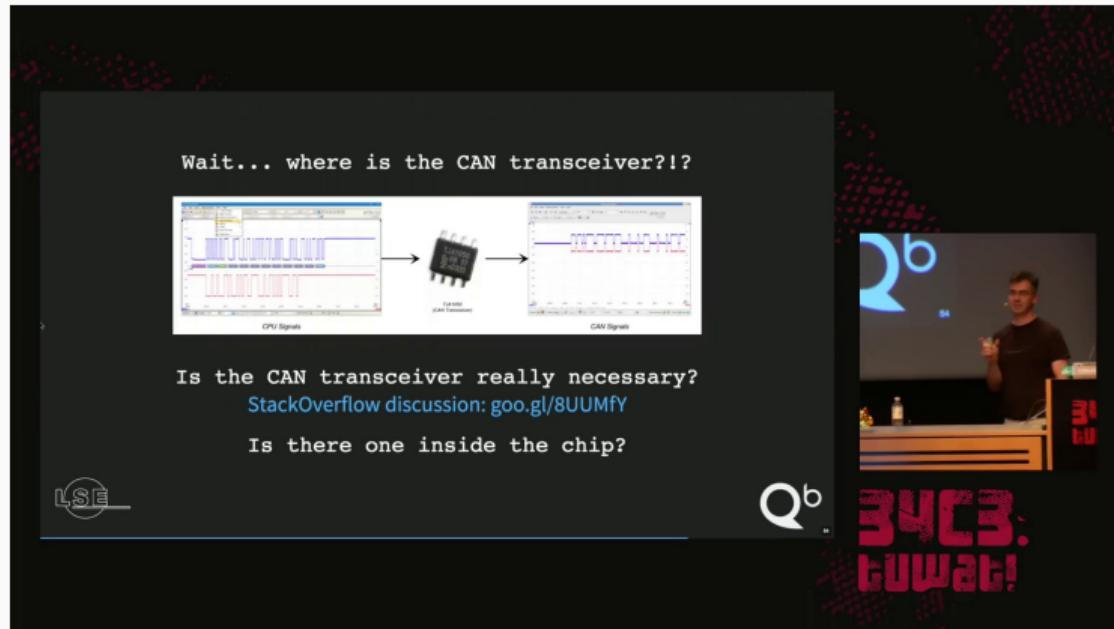
### Bad Shots I



**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

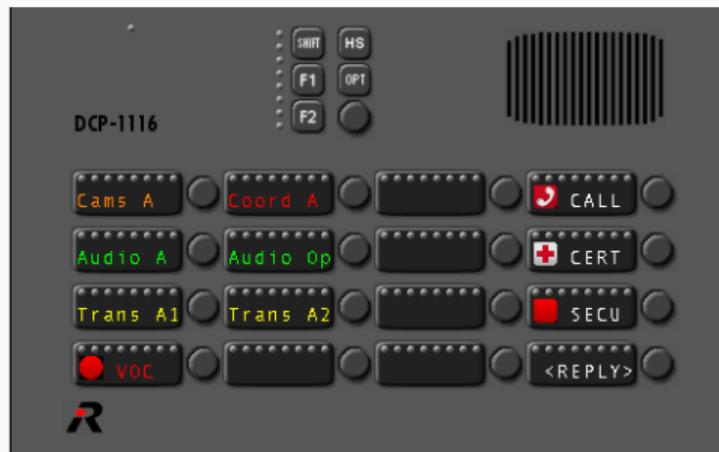
## Camera 3 - Wide Shot



# Intercom

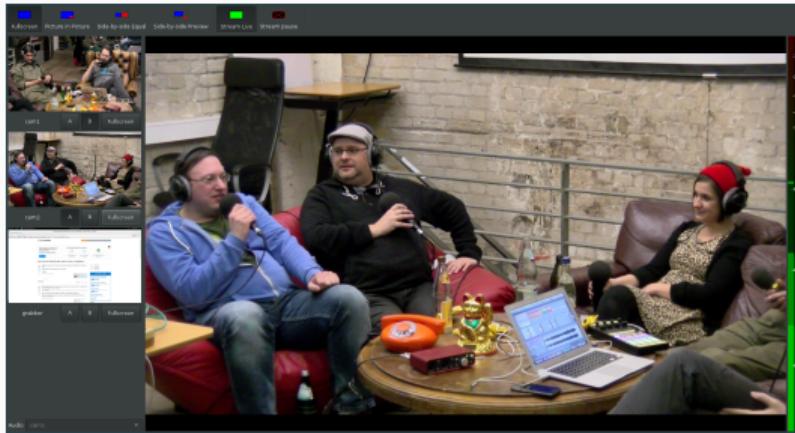
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# Intercom



## Video Mixer Tools

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**Figure 15:** Voctogui

**Previews** Small images on the left

**Program** Large, middle, what everyone  
on the internet sees.

**Composition** Top row.

**Blue** Select A

**Red** Select B

**Stream Blank** For breaks when nothing  
should be streamed.

# Software Video Mixer - Voctogui

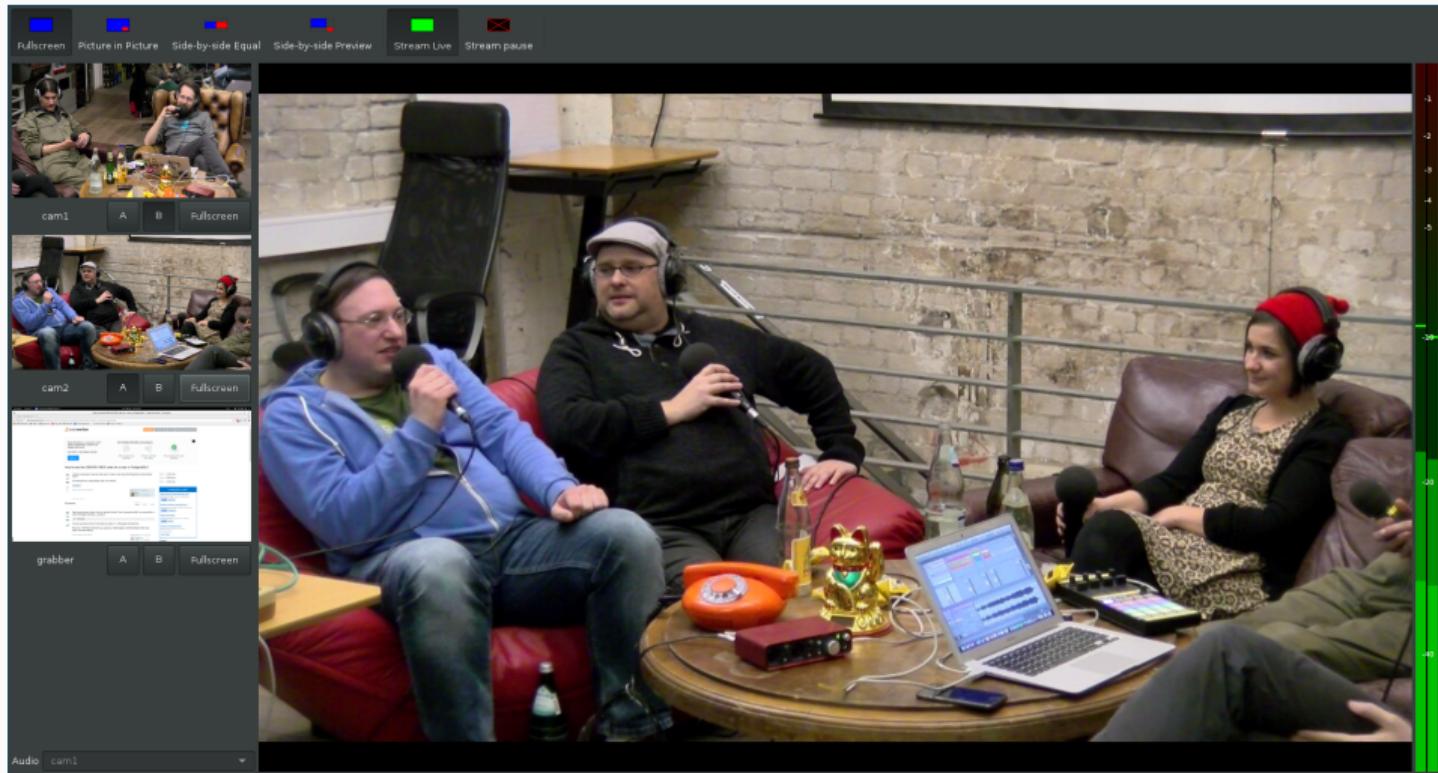


Figure 16: Voctogui

## Video Mixing Guidelines

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## 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.

## Mixing Guidelines - Communication

- Communication is key
- Partyline intercom in every room
- Mixer Angel requests pictures from Camera Angels and announces their next steps
- Camera angels offer good pictures
- Work together, say what you want to do and what doesn't work.

# Quality

- hands-on training with Frederik and Allan

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## Quality

- hands-on training with Frederik and Allan
- do stream-observer shifts
- get feedback from peers
- get feedback from Capo
- watch your own edits (post event)
- do it more than once a year, check [c3voc.de/wiki](http://c3voc.de/wiki)
- have a habit of continuous improvement

## Hands On Training

- Problem: Experience in handling mixer and cameras was gained by doing angel shifts
  - ⇒ You train in a productive system
- Solution: Hands-On-Training during the whole congress
- Possibility to train in a non-productive setting
- Stream a mock-up talk, gain experience, get feedback
- Get coached in
  - image composition
  - camera handling
  - "logical mixing"
  - communication between mixer and camera angel
- Starting tomorrow: 11AM - 2PM at the VOC Assembly

Orga

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## Daily Meeting

- We meet in Lecture Room 11 on day 1, 2 and 3 at 5 pm  
[https://events.ccc.de/congress/2018/wiki/index.php/Session:  
A/V\\_Angel\\_Meeting](https://events.ccc.de/congress/2018/wiki/index.php/Session:A/V_Angel_Meeting)
- **Mandatory** for **Video Mixing Angels**
- **Optional** for **other A/V Angels**
- Feedback and Shift Distribution

# Agenda

- Announcements (5 mins)
- Remarkable Examples (15 mins)
- Short Feedback Round (10 mins)
- Shift Distribution (30 - 40 mins)
- Keep in mind that we will moderate the session to fit into those timeboxes

## Shift Distribution

- Video Mixer shifts will be distributed in this meeting
- Select about three talks you want do have and be excellent to your fellow angels
- Talks with special requirements might be handled by VOC

## **Contacts**

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## Who to Contact?

- Technical problem **in the hall** - A/V Technician on duty
- General Questions regarding VOC - VOC Helpdesk **1600**
- Organizational or social problems / Angels - jwacalex - DECT **5542**
- Further training / Angels - Frederik DECT **1609**
- General Angel Topics - Heaven - DECT **1023**
- Unable to find right person for issue - VOC Helpdesk **1600**
- We might need to call you. Please have your DECT (or UMTS) number in the Engelsystem! If you don't have a number yet, go to [eventphone.de](http://eventphone.de) and get one.

## Questions?

Contact us on congress via irc, voc-lounge on hackint.