



# BROADCAST YOURSELF

Thorsten Butz

## BROADCAST YOURSELF by Thorsten Butz

This session was recorded on 17<sup>th</sup> of January in 2024 in Rijswik/Netherlands.

<https://www.mctsummit.nl/sessions?sessionId=530187>

### Abstract

It's never been more important to be visible on social media and on the notable platforms, and it's rarely been so hard to keep up with ever-increasing quality standards and expectations. Then you've given a great talk at an important conference and, of all things, your recording has failed yet again. I started recording my own talks years ago, started my own podcast and I am taking care of the AV related matters of the PSConfEU today.

In this session, I will show how you can record your own presentations, lectures and related topics with very simple means, edit them automatically and put them online with transcriptions and translations. Affordable and feasible for everyone. And of course with lots of demo material. It's time to broadcast yourself!

### Recording

<https://vimeo.com/thorstenbutz/byyourself>

### Notes and links

<http://www.thorsten-butz.de/mctsummit2024>

<https://github.com/thorstenbutz/conferences/tree/master/2024.MCTSummitNL>

<https://thorsten-butz.de/public/byyourself/>

### Chapters

00:00:00 Prologue

00:00:00 Welcome!

00:00:00 General advice

00:06:13 Motivation

00:15:45 All good things

00:19:29 Audio interfaces

00:22:10 TR(R)S

00:26:52 Auphonic

00:28:48 Buyer's guide

00:34:01 The demo files

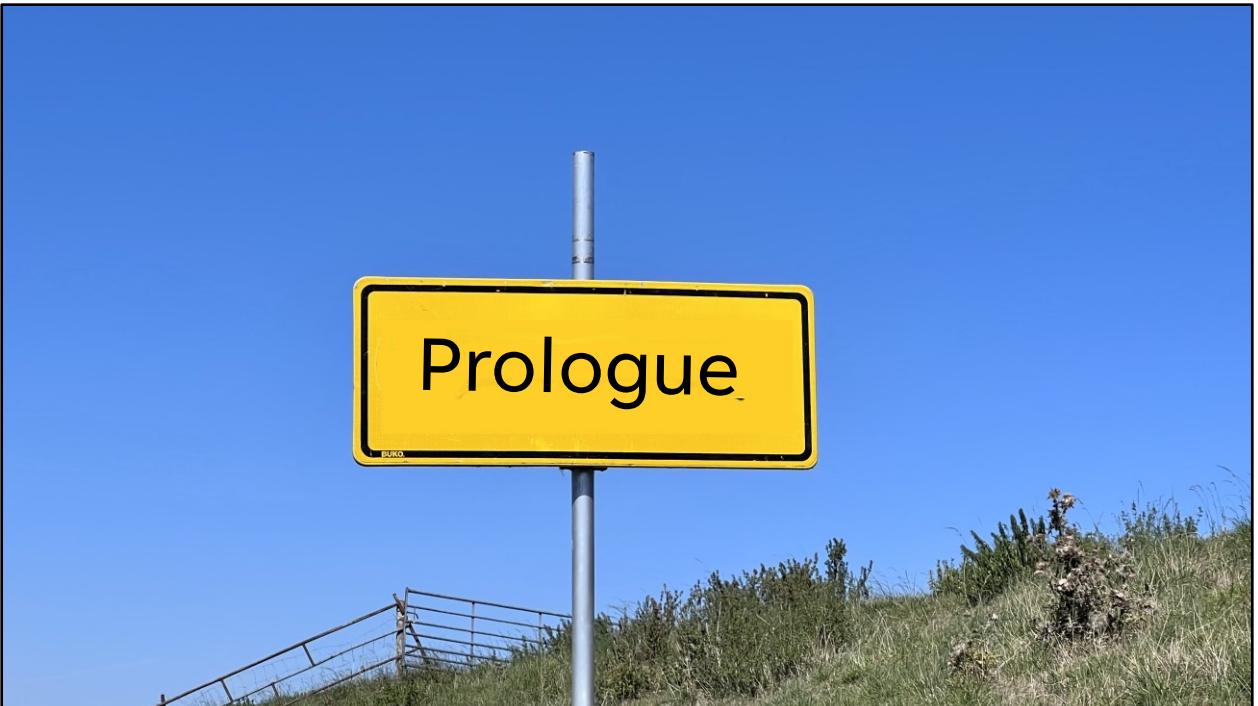
00:47:24 Thank you / Q&A

### Title picture

Doris Mooltsje (Oudega, Fryslân)

Photographed by Thorsten Butz

[https://en.wikipedia.org/wiki/Doris\\_Mooltje,\\_Oudega](https://en.wikipedia.org/wiki/Doris_Mooltje,_Oudega)



## **Prologue**

"a part that comes at the beginning of a play, story, or long poem, often giving information about events that happened before the time when the play, story, or poem begins"

<https://dictionary.cambridge.org/de/worterbuch/englisch/prologue>

## 2019: From Cologne to Vilnius with [Denise McLaughlin](#)

**Denise McLaughlin:**

<http://www.bytesizetraining.co.uk/>  
<https://www.linkedin.com/in/denisemcl/>

Denise and I delivered a co-hosted session in 2017 in Thessaloniki:

“Oh, I am alien. Avoiding the hidden traps of training delivery in foreign languages.”  
<https://www.youtube.com/watch?v=KtnBKVfrE9w>

3 things you should know about Cologne:

- a) [https://en.wikipedia.org/wiki/Cologne\\_Cathedral](https://en.wikipedia.org/wiki/Cologne_Cathedral)
- b) [https://en.wikipedia.org/wiki/Kölsch\\_\(beer\)](https://en.wikipedia.org/wiki/Kölsch_(beer))
- c) <https://www.stadt-koeln.de/artikel/08218/index.html>

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# about\_Me



## 11 steden tocht

<https://www.fietselfstedentocht.nl/en>

"For more than 100 years, around 15,000 participants have been cycling the Eleven Cities Bicycle Tour every Whit Monday. The start and finish of this 235-kilometre-long tour is in Bolsward. In the morning between 05.00 and 08.00, participants start in 23 different groups, in the centre of Bolsward. A group of around 650 participants starts every 8 minutes. The different groups are composed according to a lottery system. To complete the tour, the participants need to have collected all stamps from the different checkpoints and have passed the finish check in Bolsward by midnight..."

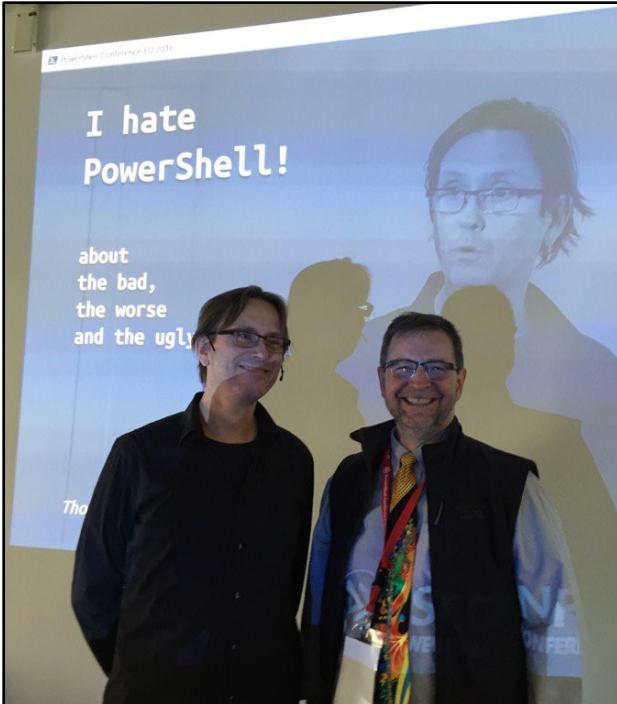


## Motivation

There are many reasons, why (conference) recordings can fail or lead to undesired results.

From HDCP to cable breakage and human error. This motivated me years ago, to create my own (backup) recordings while talking at conferences.

The nice "Bandsalat" (tape salad) picture was generated with the help of ChatGPT4.



"In the future,  
everyone will be  
world-famous  
for 15 minutes"

Andy Warhol

The picture was shot during PSConfEU 2016:

**"I hate PowerShell" - Top 10 Annoyances (Thorsten Butz)**

[https://youtu.be/FryjGPJ\\_aFY](https://youtu.be/FryjGPJ_aFY)

I also recorded an interview with the "father of the PowerShell":

SLW10: Automation with Jeffrey Snover

<https://www.slidingwindows.de/slw10/>

There is also a video recording from this episode, "Behind the mic":

<https://vimeo.com/thorstenbutz/slw10>



[https://en.wikipedia.org/wiki/High-bandwidth\\_Digital\\_Content\\_Protection](https://en.wikipedia.org/wiki/High-bandwidth_Digital_Content_Protection)

## General advice

"High-bandwidth Digital Content Protection (HDCP) is a form of digital copy protection developed by Intel Corporation to prevent copying of digital audio and video content as it travels across connections. Types of connections include DisplayPort (DP), Digital Visual Interface (DVI), and High-Definition Multimedia Interface (HDMI), as well as less popular or now deprecated protocols like Gigabit Video Interface (GVIF) and Unified Display Interface (UDI)."

[https://en.wikipedia.org/wiki/High-bandwidth\\_Digital\\_Content\\_Protection](https://en.wikipedia.org/wiki/High-bandwidth_Digital_Content_Protection)



This is an example splitter for ≈ 16 Euros available in Germany:

[https://www.amazon.de/gp/product/B09F2N17H5/ref=ppx\\_yo\\_dt\\_b\\_asin\\_title\\_o09\\_s00](https://www.amazon.de/gp/product/B09F2N17H5/ref=ppx_yo_dt_b_asin_title_o09_s00)

# best practices

- RTFM: HDCP (and buy a splitter!)
- Always use 1920x1080 (FullHD), mirror your screen
- Enable presentation settings (Windows)
- Hide the clock in the traybar
- Do NOT use presenter mode (PowerPoint)
- Put your private checklist on slide 0
- Start with a countdown or jingle

## Hide the clock:

```
[HKEY_CURRENT_USER\Software\Microsoft\Windows\CurrentVersion\Explorer\Advanced]  
"ShowSystrayDateTimeValueName"=dword:00000000
```

## Show the clock:

```
[HKEY_CURRENT_USER\Software\Microsoft\Windows\CurrentVersion\Explorer\Advanced]  
"ShowSystrayDateTimeValueName"=dword:00000001
```

## Enable presentation settings (on any type of computer)

You can also enable "presentationsettings.exe" on a Desktop computer.

You need to skip the battery check in this case.

```
[HKEY_CURRENT_USER\SOFTWARE\Microsoft\MobilePC\AdaptableSettings]  
"SkipBatteryCheck"=dword:00000001
```

## Powerpoint countdown

You find the demo countdown in the example PPTX file in this repository:  
"CountdownTimerExample.pptx"

## Turn off presenter view in PowerPoint:



- screen recording
- audio: your voice
- video: your face

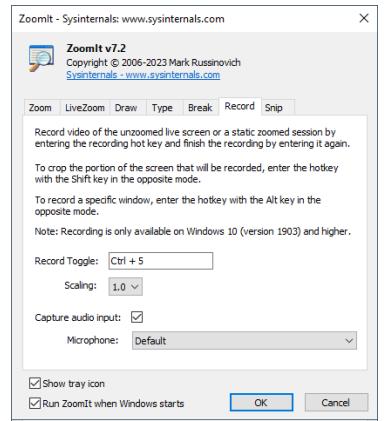
### All good things come in 3

Screen recording (as a backup) should be mandatory for you.

Audio recording is desirable.

Additional camera for the presenter's "headshot" is optional.

1. Camtasia
2. ZoomIt
3. Open Broadcaster Software (OBS)



### a) Camtasia (by Techsmith)

<https://www.techsmith.com/camtasia.html>

Perpetual License ≈ 300 Euro

### b) ZoomIT (Sysinternals)

<https://learn.microsoft.com/de-de/sysinternals/downloads/zoomit>

Free!

You can map it (on windows clients)

```
net use s: 'https://live.sysinternals.com/tools' /persistent:Yes
```

### b) Open Broadcaster Software (OBS)

<https://obsproject.com/download>

Free!

# 3 audio interfaces



## a) The big one

Audient iD4 MKII

[https://thmn.to/thoprod/510532?partner\\_id=36378](https://thmn.to/thoprod/510532?partner_id=36378)

## b) Medium size (my recommendation)

Rode AI-Micro

[https://thmn.to/thoprod/530607?partner\\_id=36378](https://thmn.to/thoprod/530607?partner_id=36378)

## c) The small adpater

Apple Lightning to 3,5 mm Adapter

[https://thmn.to/thoprod/466501?partner\\_id=36378](https://thmn.to/thoprod/466501?partner_id=36378)

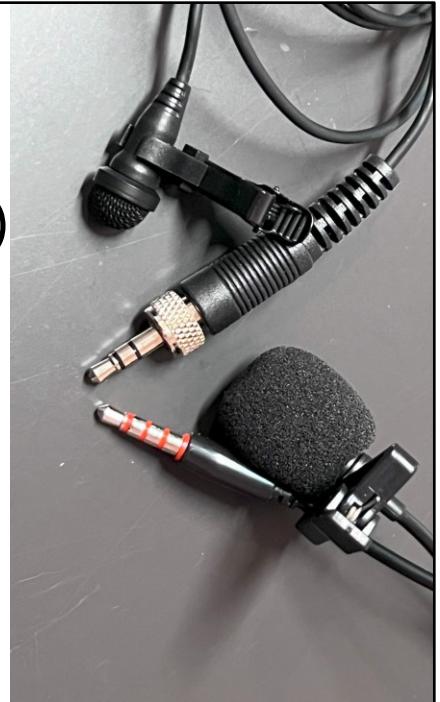
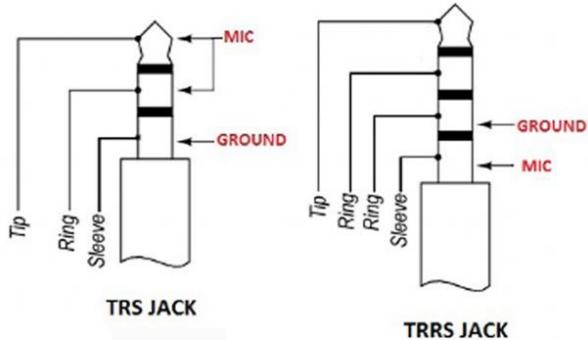
Apple USB-C to 3,5mm Adapter

[https://thmn.to/thoprod/516828?partner\\_id=36378](https://thmn.to/thoprod/516828?partner_id=36378)

# TRS (Tip/Ring/Sleeve)

VS

# TRRS (Tip/Ring/Ring/Sleeve)



## Articles worth reading

a) "TS/TRS/TRRS/TRRRS: Combating the misconnection epidemic" by Allan Tépper

<https://www.provideocoalition.com/ts-trs-trrs-trrrs-combating-the-misconnection-epidemic/>

b) "Inside Apple's New Audio Adapter" by Jeff Suovanen

<https://www.ifixit.com/News/8448/apple-audio-adapter-teardown>

c) Wikipedia: Phone connector (audio)

[https://en.wikipedia.org/wiki/Phone\\_connector\\_\(audio\)](https://en.wikipedia.org/wiki/Phone_connector_(audio))

Mind the difference between **OMTP vs CTIA** within the TRRS connectors!

TRS  
to  
TRRS

TRRS  
to  
TRS



#### Simple adapters: TRS ⇔ TRRS

"TRS to TRRS" (and vice versa) are pretty simple adapters. The nice thing about the RØDE gear is, that they always use **gray for TRRS** and **black for TRS**. You can also buy any other (maybe cheaper) adapter, that you can find. Amazon offers e.g. favourable triple packs from other manufacturers.

##### a) RØDE SC3 ≈ 11 Euro

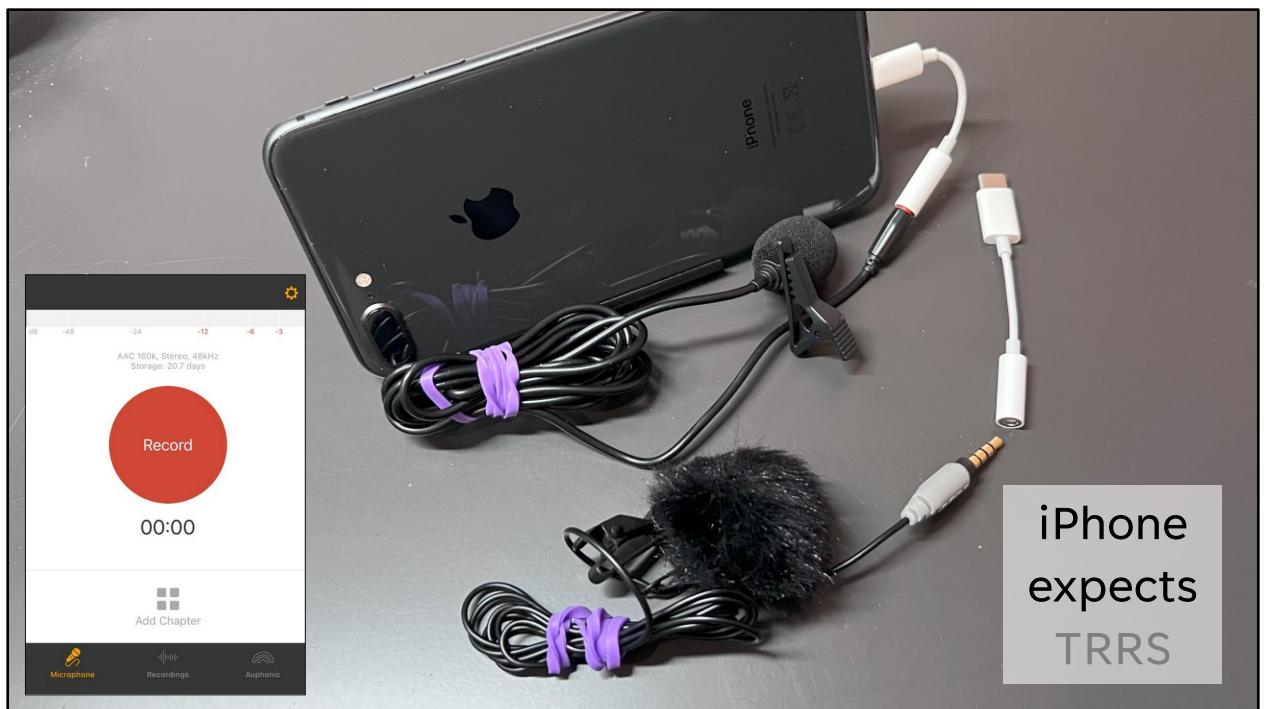
<https://rode.com/accessories/adaptors-cables/sc3>

[https://thmn.to/thoprod/346182?partner\\_id=36378](https://thmn.to/thoprod/346182?partner_id=36378)

##### b) RØDE SC4 ≈ 11 Euro

<https://rode.com/accessories/adaptors-cables/sc4>

[https://thmn.to/thoprod/389792?partner\\_id=36378](https://thmn.to/thoprod/389792?partner_id=36378)



a) iOS: "**Auphonic Recorder**" (Georg Holzmann, screenshot above)

<https://apps.apple.com/de/app/auphonic-recorder/id1081792712>

b) iOS + Android: "**RØDE Central Mobile**" and "**RØDE Reporter**"

<https://play.google.com/store/apps/details?id=com.rode.rodecentralmobile>

<https://play.google.com/store/apps/details?id=com.rode.rodereporter>

"RØDE Central Mobile" requires RØDE hardware.

c) Android: **Voice recorder apps** (examples)

<https://play.google.com/store/apps/details?id=com.google.android.apps.recorder>

<https://play.google.com/store/apps/details?id=com.sec.android.app.voicenote>

The screenshot shows the Auphonic Presets page. At the top, there's a navigation bar with links for 'productions', 'presets' (which is the active tab), 'services', 'account', and 'pricing'. On the right, there are 'help' and 'logout' links. The main title 'Auphonic Presets' is centered above a red button labeled 'New Preset'. Below this, a text box says 'Create a new preset [?]:'. A note explains that presets store common metadata and options for a group of recordings (e.g., a podcast series). It also states that you enter output files, cover image, file transfers, etc. only once and select the preset during a new file upload. On the left, there are buttons to 'Create a multitrack preset' and 'New Multitrack Preset'. On the right, there are two preset cards: 'PSConfEU 2022' (2022-06-21, UUID: hJN6T5iDq4MfnvLokmUKa) and 'PSConfEU 2019'. Each card has an 'edit' and 'duplicate' link.

## auphonic.com

Auphonic is free to use for a maximum of 2h per month – without any restrictions.

I used the settings below to optimize the demo files from Ralphs session.

The Whisper system by OpenAI is integrated in Auphonic – just enable it.

You can **download the demo files** (pristine/untouched and also the optimized files) to try this on your own: <https://thorsten-butze.de/public/byyourself/>

This screenshot shows the 'Speech Recognition and Automatic Shownotes' section. It includes fields for 'Service' (set to 'Auphonic Whisper ASR'), 'Language\*' (set to 'Automatic Language Detection'), and 'Keywords (comma separated)' (empty). There's a checked checkbox for 'Automatic Shownotes and Chapters'. A note at the bottom states: 'By clicking 'Start Production' you accept that your data will be sent to OpenAI, furthermore you agree with OpenAI's [Privacy Policy](#) and [Terms of use](#)'.

This screenshot shows the 'Audio Algorithms' section. It features several checkboxes for audio processing: 'Adaptive Leveler' (checked), 'Filtering' (checked), 'Loudness Normalization' (checked), 'Noise Reduction' (unchecked), and 'Automatic Cutting' (unchecked). A note on the right says 'Click ☰ to toggle more settings'. A 'Filtering Method' dropdown is set to 'Voice AutoEQ'.

**-not**



### **-not (the buyer's guide)**

Be careful, do not buy simple adapters (screenshot above), since these are (almost always) made to support headphones only, e.g.:

<https://www.aliexpress.com/item/1005006171008048.html>

Also be careful with bluetooth microphones, since bluetooth does not support high quality, low-latency microphones at all, e.g:

<https://www.aliexpress.com/item/1005005958244941.html>

must have  
≈ 10 €

USB-C/Lightning to 3.5 mm  
Headphone Jack Adapter



#### **Apple Lightning to 3,5 mm Adapter**

[https://thmn.to/thoprod/466501?partner\\_id=36378](https://thmn.to/thoprod/466501?partner_id=36378)

#### **Apple USB-C to 3,5mm Adapter**

[https://thmn.to/thoprod/516828?partner\\_id=36378](https://thmn.to/thoprod/516828?partner_id=36378)

Reminder (see also page "TRS vs TRRS"):

"Inside Apple's New Audio Adapter" by Jeff Suovanen

<https://www.ifixit.com/News/8448/apple-audio-adapter-teardown>

nice to have  
≈ 80 €

RØDE AI-Micro



### RØDE AI-Micro

[https://thmn.to/thoprod/530607?partner\\_id=36378](https://thmn.to/thoprod/530607?partner_id=36378)

<https://rode.com/interfaces-and-mixers/ai-series/ai-micro>

Main features:

- TRS/TRRS switchable
- Headphone output
- 2 separate channels
- Packaging includes
  - USB-A cable
  - USB-C cable
  - Lightning cable

nice to have  
≈ 60 €

RØDE smartLav+



#### **RØDE SmartLav+**

.. support TRRS connections.

[https://thmn.to/thoprod/345457?partner\\_id=36378](https://thmn.to/thoprod/345457?partner_id=36378)

<https://rode.com/microphones/mobile/smartlav-plus>



### Gear used during this session recording

- Smallrig 10 magic arm, Smallrig super clamp large  
<https://www.amazon.de/gp/product/B08B63WXWN>

- Smallrig Universal Mobile Phone Cage  
<https://www.amazon.de/gp/product/B08GCCV625>

- RØDE filmmaker kit

#### - Microphone 1 (≈ 90 Euro)

RØDE Lavalier II  
[https://thmn.to/thoprod/534868?partner\\_id=36378](https://thmn.to/thoprod/534868?partner_id=36378)  
<https://rode.com/de/microphones/lavalier-wearable/lavalier-ii>

#### - Microphone 2 (≈ 1-2 Euro)

No-name Aliexpress Mini Lavalier Microphone Metal (microphone 2)  
<https://www.aliexpress.com/item/1005003676763510.html>

- Ralph's pen tablet recommendation  
Wacom One  
<https://www.wacom.com/en-gb/products/wacom-one>

The demo session by Ralph:

Ralph Eckhard: "Calling all admins: Teams Telephony Deep-Dive"  
<https://www.mctsummit.nl/sessions?sessionId=520090>

i am rich  
≈ 100 €  
(used)

RØDELink Filmmaker Kit  
(+ Tripod)



### RØDE Filmmaker Kit

<https://rode.com/microphones/wireless/rodelink-filmmaker-kit>

.. the kit might be hard to find in retail shops, since there are numerous successors:

<https://rode.com/de/microphones/wireless>

I prefer the older kit, since it offers better battery life and supports longer distances. You can get the kit on the used market, where they are typically traded for less than 100 Euro. The kit includes a pretty good lapel mic with TRS jack.

You can get a lot of comparable receivers/transmitters (check YouTube for comparisons),

e.g.:

XVive U5 Wireless Audio System + Lav (also available as bundle)

[https://thmn.to/thoprod/517640?partner\\_id=36378](https://thmn.to/thoprod/517640?partner_id=36378)

[https://thmn.to/thoprod/517642?partner\\_id=36378](https://thmn.to/thoprod/517642?partner_id=36378)



### **Tramrestaurant**

The picture shows the Trammehuys moving tram restaurant in Voorburg (near The Hague).

<https://www.hoftrammm.nl/en>

Photographed by Thorsten Butz



# the poll result

Have you ever given a presentation at a conference,  
to a user group or something similar?  
What was your experience? (Choose all that apply!)

Yes, I gave a talk in public.	93%
In my experience, everything worked well.	43%
There were (occasional) sound problems.	43%
There were (occasional) screen recording problems.	29%
There were (occasional) video problems.	43%
I was annoyed that the recording didn't work	29%
No, I have never given a talk like this.	7%

14 total

# my setup

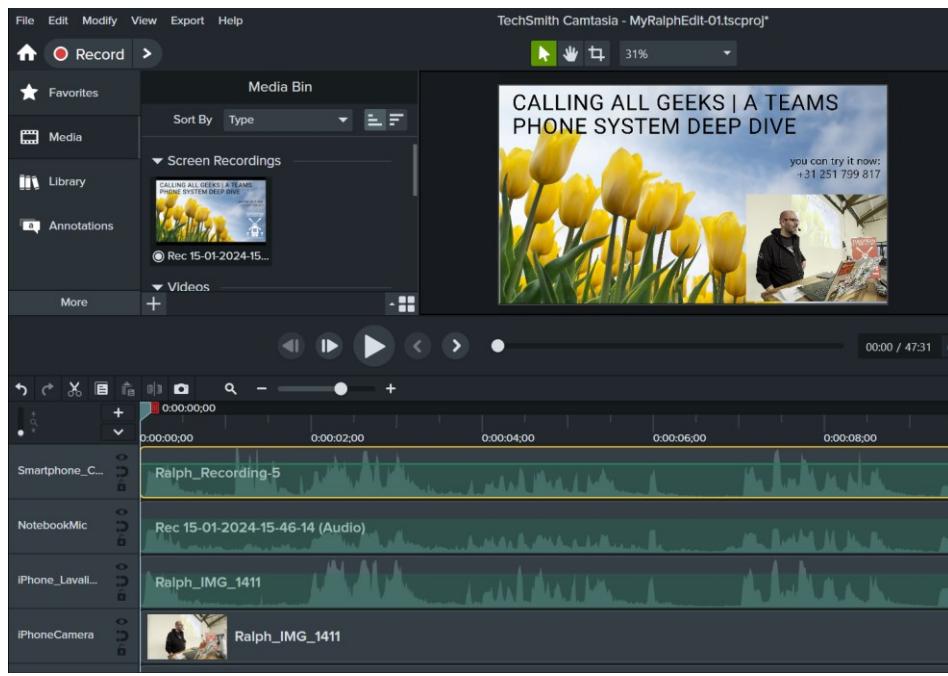


## My setup during this talk

- Tripod (3 Legged Thing)
- RØDE Filmmaker Kit
- RØDE Lavalier II
- RØDE AI-Micro
- iPhone 13 Pro (recorded with the built-in camera app)
- OBS

Edited and cut with Camtasia and processed by Auphonic.

# editing



## Aligning audio tracks

If you record tracks independently, you will have to find the proper alignment. Sadly, Camtasia does not support to sync tracks by timestamps.

Professional video gear supports "timestamps" to automatically sync multiple tracks. If you do this manually, you should have a look at the waveforms. You can ease your life, by clapping into your hands somewhere at the beginning of your recording. Such a noise will clearly be visible in the waveforms.

# gear



## Connecting a TRS mics to a smartphone

More expansive microphones provide TRS connectivity (in many cases). You need a "TRS to TRRS" adapter (just like the **RØDE SC4**). The picture above shows this use case.

# gear



## Connecting a TRS mics to a smartphone

The filmmaker kit also uses TRS connectivity, again you need a "TRS to TRRS" adapter (just like the **RØDE SC4**).

The picture above shows this use case.

If you would like to attach a cheap TRRS microphone to the filmmaker kit (not the case on the picture), you have to use a "TRRS to TRS" adapter – just the other way round. Such an adapter is the **RØDE SC3**.

# gear



## Inexpensive lapel mics from AliExpress

### a) My gift to you (left)

No-name Aliexpress Mini Lavalier Microphone Metal ( $\approx$  1-2 Euro)  
<https://www.aliexpress.com/item/1005003676763510.html>

### b) Another inexpensive lapel mic (right)

I do like this cheap (also  $\approx$  1-2 Euro) lapel mic from AliExpress, since it comes in a useful plastic box and is at least as good as the the microphone a).  
<https://www.aliexpress.com/item/1005004774726550.html>

# gear



## A bag of mic

Some inexpensive microphones are delivered with adapters and a bag, just like the example AGPTEK. You can buy this one via Amazon for ≈ 10 Euro, it includes a "TRS to TRRS" adapter.

[https://www.amazon.de/Transformation-abnehmbaren-Smartphone-Stimmeverstärker-Z02/dp/B01G16LSVQ/ref=sr\\_1\\_2](https://www.amazon.de/Transformation-abnehmbaren-Smartphone-Stimmeverstärker-Z02/dp/B01G16LSVQ/ref=sr_1_2)

# gear



## RØDE Lavalier II ( $\approx$ 90 Euro)

[https://thmn.to/thoprod/534868?partner\\_id=36378](https://thmn.to/thoprod/534868?partner_id=36378)

<https://rode.com/de/microphones/lavalier-wearable/lavalier-ii>

This microphone comes in a nice box and provides a Kevlar-reinforced shielded cable, which makes it that makes it insensitive to touch.

its up to you!



Now it's up to you:  
**Broadcast yourself!**  
Good luck!

# recommended videos

## **Career Tips from Sami Laiho (MCT Summit 2016)**

<https://slideslive.com/38897951>

Very useful insights from Sami (in 2016!)

## **Eine Paketverwaltung für Windows (Eine Geschichte voller Missverständnisse)**

<https://vimeo.com/thorstenbutz/pssat2023>

This video was completely independently recorded with an iPhone, Camtasia screen recording and 2 filmmaker kits (2 speakers)

## **Keynote: Microsoft schafft sich ab**

<https://vimeo.com/thorstenbutz/geekmania2018keynote>

An older recording (from 2018), not yet so sophisticated in technical terms, but very telling.

## **PS Enigma - Thorsten Butz - PSConfEU 2023**

<https://youtu.be/NZfmyKq-v6w>

Example transcript and curated subtitles based on Auphonic/Whisper.

Curated = I corrected the subtitles and also added translation (via deepl.com)

## **WinGet and Chocolatey: A Real-World Look at Package Manag. Tools - Paul Broadwith - PSConfEU 2023**

<https://youtu.be/9qYqO9lkkpo>

Automated transcript and subtitles based on Auphonic/Whisper - not curated!

Since Paul has a notable Scottish accent, the quality of the transcript is very meaningful.

## **about\_VideoProcessing - Thorsten Butz - PSConfEU 2022**

<https://youtu.be/i4watr8txOM>

I explain in great detail, how automated video processing with Auphonic (and other tools) work.

If you want to know more about Auphonic and how I use it – this is the talk you should watch!



Title : Broadcast Yourself  
Speaker : Thorsten Butz  
Co-Pilot : Denise McLaughlin  
Uri : thorsten-butz.de  
Twitter : @thorstenbutz  
Podcast : slidingwindows.de  
Cast : Ralph Eckhard,  
Somesh Pathak



You will usually find me on \$socialmedia by @thorstenbutz.

**All about this talk:**

<https://www.thorsten-butz.de/mctsummit2024>

**Direct link to the video recording:**

<https://vimeo.com/thorstenbutz/byyourself>

**Small files:**

<https://github.com/thorstenbutz/conferences/tree/master/2024.MCTSummitNL>

**Demo recordings from Ralph:**

<https://thorsten-butz.de/public/byyourself/>

This picture shows the Grachtengordel in Amsterdam.

<https://en.wikipedia.org/wiki/Grachtengordel>

Photographed by Thorsten Butz