# DVA Fidelity Analyzer

Peter Bubestinger-Steindl

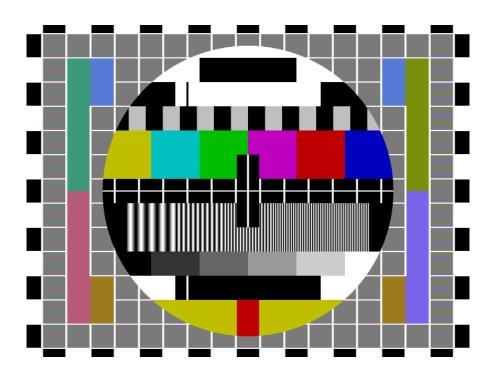
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#### Speaker notes

### Introduction

How do you test your video signal chain for field/timing fidelity?



### Speaker notes

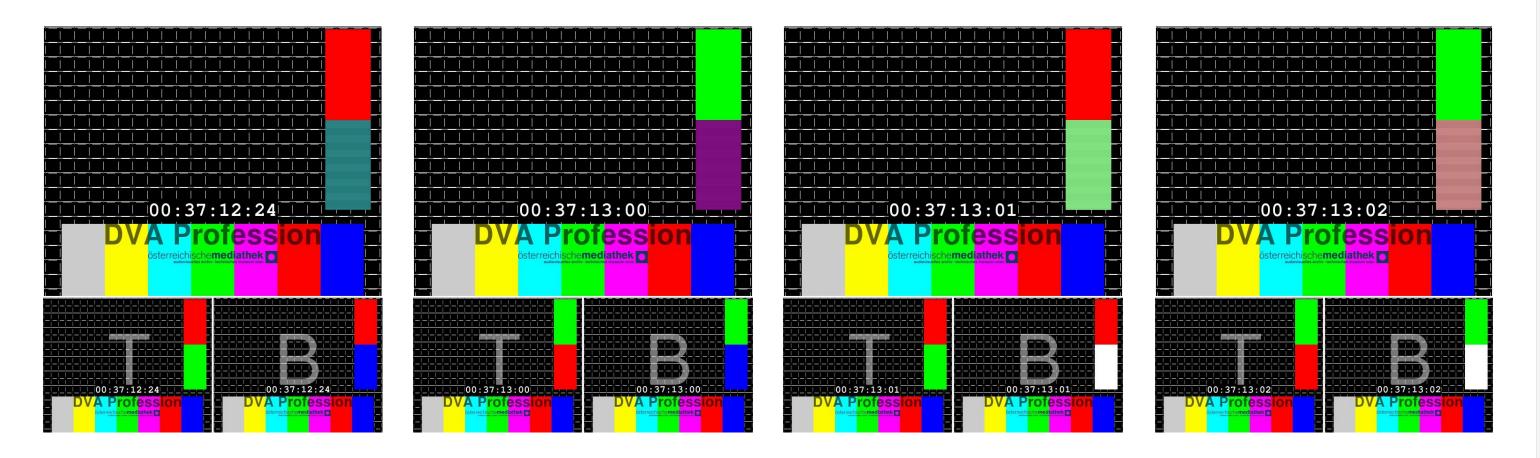
## DVA-Fidelity (Born March 2011)

Website: http://www.av-rd.com/products/dva-fidelity/



### Speaker notes

## DVA-Fidelity: The 4 Base Images



(4 frames = 8 fields)

See "Introduction: How does it work"

### Detectable Issues

Details, see: "Detectable Issues"

- Change in duration.
   (field inserted/dropped)
- Field swap/replace.
- Y/C split.
  (Timing difference between luminance and chrominance)
- Y/C interpolation.
- Genlock verification.

#### Speaker notes

## **Automated Analysis**

- Recorded video is compared to expected color patterns.
- Textfile report generated. (Contains list of "noticable" frames/fields)
- Original Prototype: ImageMagick, FFmpeg and BASH.
- Later (2013):
   Patch for new FFmpeg muxer (by Georg Lippitsch)

Speaker notes

Patch still exists (and works), but was not proposed unstream

## A/D Converters tested

• Leitch: DPS 575

• Focus Enhancements: MC-HD1 Studio

Focus Enhancements: MC-2E

• Harris: X50

Snell & Wilcox: Kudos Plus HD CVR800

#### Speaker notes

### Video Sources used

- Digital master (PC)
- VHS
- DigiBeta
- DV

### Speaker notes

## Video Signals used

- CVBS (Composite)
- Y/C (S-Video)
- SDI
- RGB (Component)
- YUV (Component)

ca. 137 hours of captured DVA-Fidelity test-video

#### Speaker notes

### - Konec -

Otázky? Komentáře?

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### Speaker notes