**Application Note** 

# TESTING OF IMAGE DISTURBANCE ON TV WITH R&S®ADVISE

#### **Products:**

- ▶ R&S®AdVISE
- ► R&S®EMC32
- ► R&S®ELEKTRA

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http://www.rohde-schwarz.com/appnote/1S007



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### 1 Overview

This application note shows how to configure the R&S®AdVISE visual inspection software to automate the immunity testing in line with EN 55020 and CISPR 35 on TV sets and monitors.

Basis for the test is the test signal Moving Color Bar. This test signal is available for all R&S Broadcast test signal transmitter.

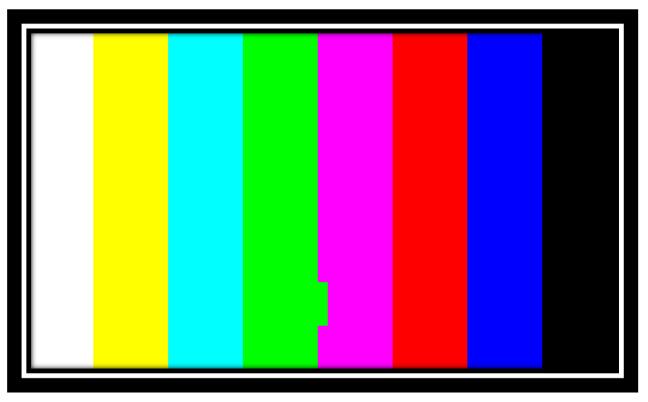


Figure 1-1: Test signal "Moving Color Bar"

## 2 Configuration

Place six "Object In" ROIs on the color bars and one ROI "Motion Freeze" as shown in Figure 2-1.

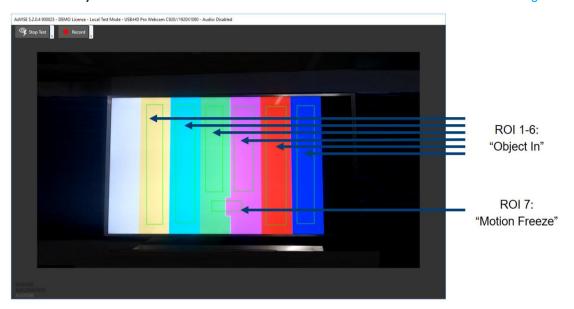


Figure 2-1: Overview over the used ROIs

The "Object In" ROIs should be configured like in Figure 2-2.

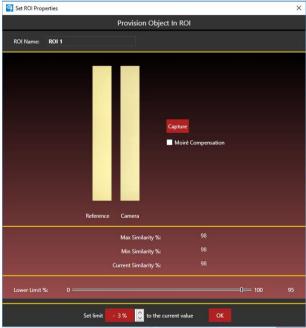


Figure 2-2: Configuration of "Object In" ROI

Depending on your camera and your EUT, the best value for lower limit in your test set-up may differ. It should be set as close as possible to the "Min Similarity" value, however, still so far away that an undisturbed signal will not trigger an alarm.

As a starting point, you can use the button for set limit with a value from -5% to -3 %.

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The "Motion Freeze" ROI is supposed to be configured like in Figure 2-3:



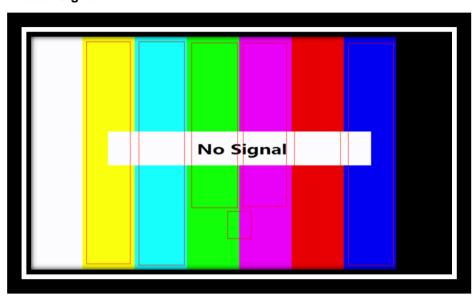
Figure 2-3: Configuration of "Motion Freeze" ROI

Once this is done, you can start the test.

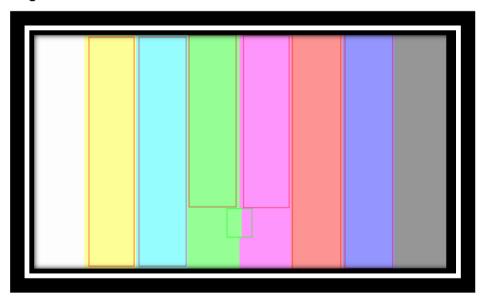
# **3 Examples of Detected Distortions**

The following images show a few examples of typical distortions that can be detected with the configuration shown above.

#### **Loss of Signal**

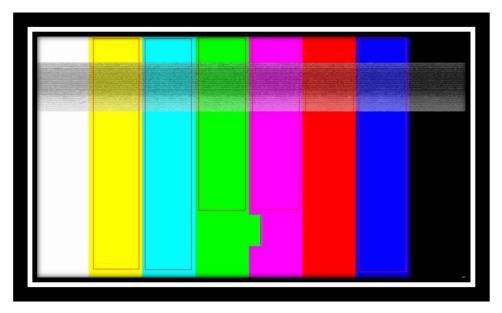


#### **Brightness Problem**

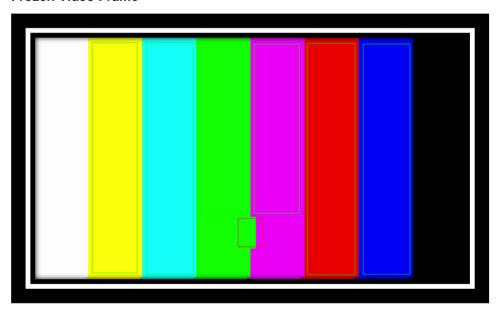


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#### Noise in Parts of the Picture



#### **Frozen Video Frame**



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