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JJF

NATIONAL METROLOGY TECHNICAL SPECIFICATION OF THE PEOPLE'S REPUBLIC OF CHINA

JJF 1387-2013

Calibration Specification for Vectorscopes

矢量示波器校准规范

(English Translation)

Issued on: January 6, 2013 **Implemented on: April 6, 2013**

Issued by: General Administration of Quality Supervision, Inspection and Quarantine

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Introduction

This specification based JJF 1071-2010 "National Calibration Specifications writing rules" and JJF 1059-1999 "measure Evaluation and Expression of Uncertainty "Writing. Specification uses the GB 3174-1995 "PAL-D television broadcasting system specification" Related definition color bar signal and the representation and GB/T 7400-2011 "Broadcasting term" in the derivative gain and the definition of differential phase. Measuring the PAL television signal vector oscilloscope calibration method are described.

This specification is the first release.

Vectorscope calibration specifications

1 Scope

This standard applies to the PAL vectorscope calibration, the calibration of the NTSC vectorscope can refer carried out.

2. References

GB 3174-1995 PAL-D television broadcasting system specifications GB/T 7400-2011 term Broadcasting for dated references, only the dated edition applies to this specification; undated references, the latest version (including any amendments) applies to this specification.

3 terminology and units of measurement

3.1 SCH phase subcarriertohorizontalphase TV video signal horizontal sync leading edge 50% level and a reference subcarrier over the timing relationship between the zero. The error in subcarrier phase in degrees.

3.2 channel crosstalk between crosstalkbetweenchannels A trace of the voltage signal generated at the output corresponding with the UAA A track signal corresponding to the output of the B track produced UAB than the input voltage of the string, expressed in decibels.

4 Overview

Vectorscope mainly used to measure and display analog TV video signal chrominance component vector of phase and amplitude, there these vectorscope also has differential gain, differential phase, SCH phase measurements and other functions. Vectorscope is analog video Frequency measuring instrument used and displayed. It mainly consists of the video amplifier, subcarrier generator, demodulators, phase shifters, sweep Description generator, output amplifier, a calibration signal generator, the election row controller, a

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display portion and other units.

5 Metrological characteristics

5.1 Chroma Bandwidth

5.1.1 Measuring range. 1MHz ~ 2MHz.

5.1.2 The maximum permissible error. ± 200kHz.

5.2 vector phase

5.2.1 Measuring range. 0 ° ~ 360 °.

5.2.2 The maximum permissible error. ± 1 °.

5.3 vector phase increment

5.3.1 Measuring range. ± 10 ° or ± 3 °.

5.3.2 The maximum permissible error. ± 0.5 °.

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