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# Hi-Fi Products Service Bulletin

CSA-13

Sony Service Company - Technical Services  
A Division of Sony Electronics Inc.  
Sony Drive, Park Ridge, New Jersey 07656

Model: GEN-CD

No. 374

Subject: Identifying Defective Discs

Date: February 28, 1994

**Symptom:**  
(57)

Some discs may not comply with industry manufacturing standards (CD "Red Book"), which results in unplayability, distortion, or skipping. The discs may play well on some CD players, but not on others; however, a disc's ability to play on one player does not necessarily mean it complies with industry standards.

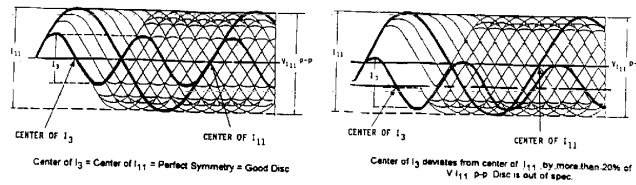
Compliance with the industry standard, as it applies to the pressing of the data on the disc surface (pit shape and depth), can be confirmed by viewing the RF eye pattern on an oscilloscope.

**Solution:**

In order for a disc to be judged in compliance with the industry standard (for pit shape and depth) the center of the I3 frequencies must not be shifted from the center of the I11 frequencies by more than 20% of the p-p voltage of the I11 frequencies. I3 frequencies are the highest frequencies recorded on the disc (i.e. data, not audio frequencies), while I11 frequencies are the lowest frequencies recorded on the disc.

As an example, if the p-p voltage of the I11 frequencies is 1.2V, the center of the I3 frequencies must not be more than 240 mV (1.2 x .2) higher or lower than the center of the I11 frequencies. If a disc does not meet this criteria, it may be considered out of specification.

Refer to the illustrations for clarity.



Reference:  
Autoflagged - NO



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