



for Authoring

DVD-R Disc (4.7 Gbytes) for Authoring

TEST SPECIFICATION

Version 2.01
June 2005

Amendment for DVD-R Disc (4.7 Gbytes) for Authoring TS Version 2.0₁ (June 2005)

The following pages were amended without changing the version number of the TS.

- **Minor amendment (July 2, 2009)**

| Page | Location | Amendment |
|--------|----------------|--|
| Page 7 | Annex A | <ul style="list-style-type: none">• Class-A Lab information of "Industrial Technology Research Institute" and "PIONEER CORPORATION" was updated. |

- **Minor amendment (January 2010)**

| Page | Location | Amendment |
|--------|----------------|---|
| Page 7 | Annex A | <ul style="list-style-type: none">• Class-A Lab information of "PIONEER CORPORATION" was updated. |

- **Amendment 1 (June 2012)**

| Page | Location | Amendment |
|--------|----------------|---|
| Page 7 | Annex A | <ul style="list-style-type: none">• "Industrial Technology Research Institute" was deleted from the Class-A Lab list. |

Conditions for Publication

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- May 2000
DVD-R Disc for Authoring Test Specification version 2.0 (Draft) was approved by Verification Task Force members.
- June 2000
DVD-R Disc for Authoring Test Specification version 2.0 was authorized by Steering Committee members.
- June 2005
Version 2.01 was edited as electronic files.

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Forms for DVD Format verification

Form 1Q

Preliminary Information for DVD Format Verification F1

Form 2Q

Test Information of DVD Format Verification F2

Form 3Q

Test results of the Unrecorded disc (1) F3

Form 4Q

Test results of the Unrecorded disc (2) F4

Form 5Q

Test results of the Unrecorded disc (3) F5

Form 6Q

Test results of the Unrecorded disc (4) F6

Form 7Q

Test results of the Recorded disc (1) F8

Form 8Q

Test results of the Recorded disc (2) F9

Form 9Q

Test results of the contents of the pre-pit data block configuration F11

Form 10Q

List of the Test results F12

Form 11Q

Confirmation of DVD Format Verification F13

1. General

1.1 Scope

The scope of this Test Specification is for the purpose of testing DVD-R Discs for compliance with DVD Specifications for Recordable Disc for Authoring Part 1: Version 2.0 and Part 2: Version 2.0. The test procedure described herein could be used by Class-A Verification Labs, Class-B Verification Labs and Quality Assurance Departments of DVD-R Disc Licensees.

The scope of this Test Specification is limited to product's compliance to DVD Specifications and not to evaluate performance of products.

1.2 Normative References

DVD Specifications for Recordable Disc for Authoring
Part 1: Physical Specifications Version 2.0
Part 2: File System Specifications Version 2.0

1.3 Scope of Products Covered

DVD-R Disc (4.7 Gbytes) for Authoring

2. DVD Logo

DVD Format/Logo Licensing Corporation owns the rights to license the DVD Logo. To be able to use the DVD Logo, DVD manufacturer must have:

- a. License to use the Logo and
- b. DVD Specification compliance of the product for logo consideration must be validated by the test specifications as defined in this document.

Licensing terms for the DVD Logo are available from the DVD Format/Logo Licensing Corporation.

This chapter describes the mechanism to be used for product compliance testing.

2.1 Definition of Terms Used

First Production Model - The **First Production Model** must be tested and approved by any of the appropriate Class-A Verification Labs (see definition of Class-A Labs below) for compliance with DVD Specifications. Class-A Labs will use the test specifications described in this document for compliance verification.

The following parameters must be used to determine a **First Production Model**:

- DVD Specifications Version n.x changing to n+1.x
- Initial or the latest production model at the start of Logo Program for each licensee

Next Production Model - A **Next Production Model** does not require compliance verification from a Class-A Verification Lab but must be tested by licensee in its QA department for compliance with DVD Specifications. Licensee's QA department must have the test tools required to perform the tests specified in this document and must, at minimum, use the test procedure referred to in this document (licensee is free to have its own QA procedure, equipment and tools as long as it is a superset of the specification described in this document). A Licensee without own QA department can get the product tested by a certified Third Party Class-B Verification Lab (see definition of Class-B Labs below).

The following parameters must be used to determine a **Next Production Model**:

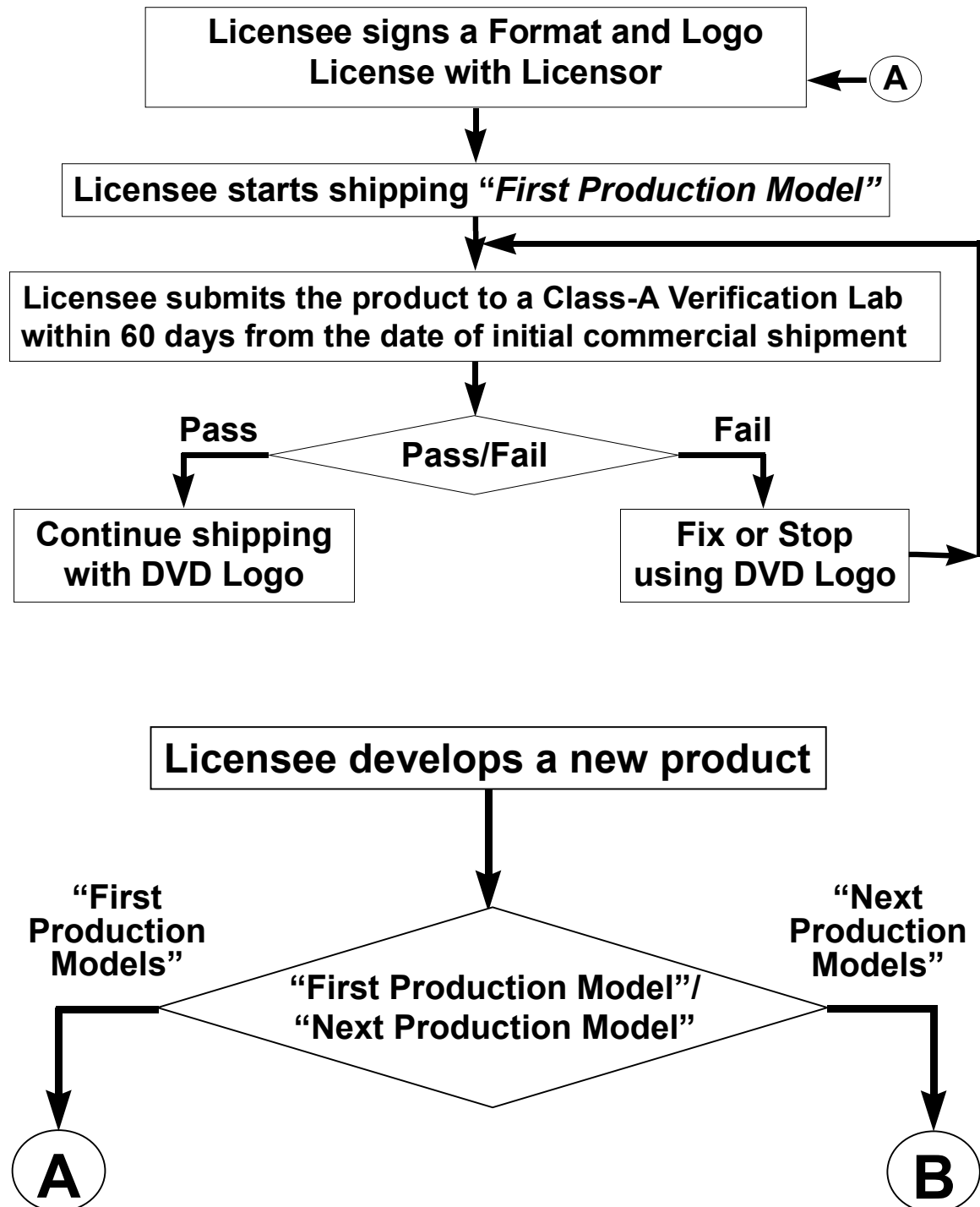
- DVD Specifications Version n.x changing to n.x+1
- Significant changes to the Material and/or Manufacturing process related to DVD format

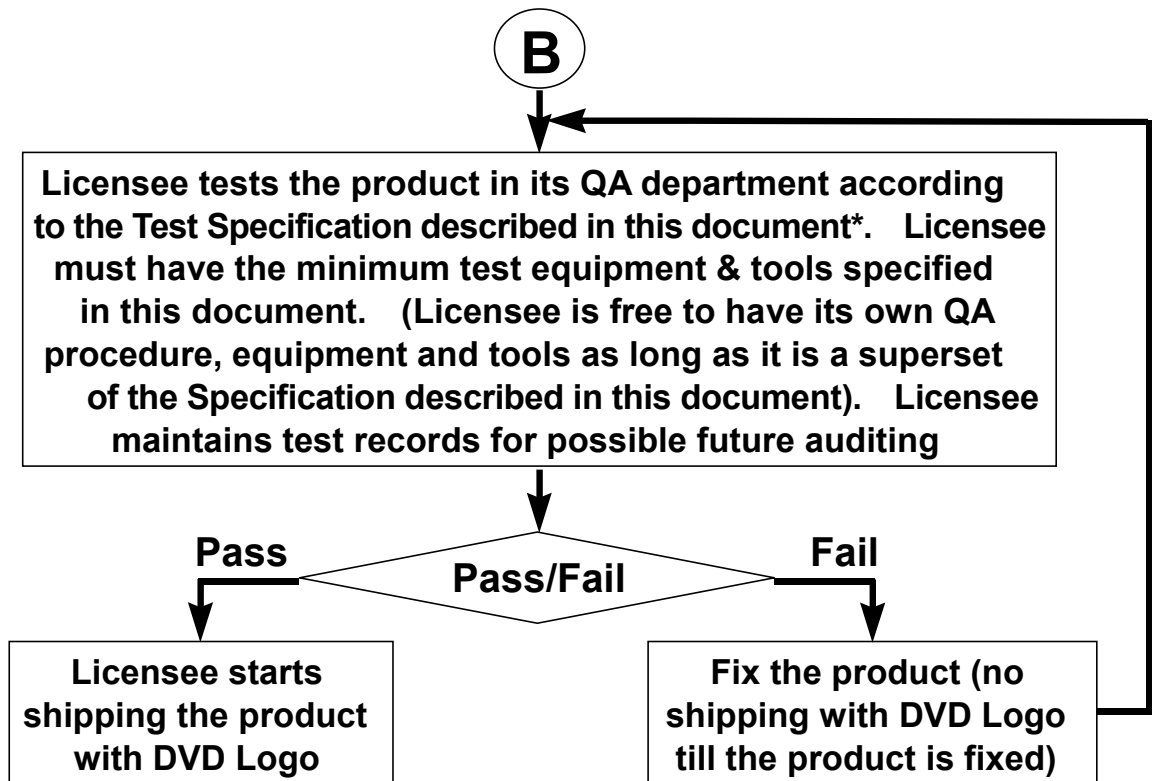
Class-A Verification Labs - Class-A Verification Labs are experts in DVD technology and provide independent expert assessment of Licensee's product compliance with respect to DVD Specifications. Class-A Labs also provide additional services such as interpretation of DVD Specifications, Test Tool development, Class-B Labs and Licensees auditing, etc.

Class-B Verification Labs - DVD-R Disc for Authoring Class-B Verification Labs provide DVD-R Disc testing strictly according to the **DVD-R Disc for Authoring Test Specification** (They can not interpret specifications).

2.2 DVD Logo Mechanism

The DVD Logo mechanism is described in the following flow chart:





*: Licensee without own QA department can get the product tested by a **DVD-R Disc for Authoring Class-B Verification Lab**.

3. Test Tools and Test Specifications

This chapter covers the test specifications and tool requirements for the physical and logical compliance testing.

3.1 Test Tools

The following tools are required to perform the test specified and shall be available before executing the test procedures.

DVD-R Disc evaluation system is consisted of mainly 4 parts: Mechanical test tools, Optical test tools, DVD-R measuring system (Recording) and DVD-R measuring system (Playback).

These test tools are to be equipped by each Lab and applicant individually for executing the tests specified in this document.

3.1.1 DVD-R measuring system (Recording)

The discs tested shall be recorded by DVD-R measuring system (Recording). Its recording beam condition is defined in the DVD Specifications for Recordable Disc for Authoring Part 1: Ver. 2.0.

3.1.2 DVD-R measuring system (Playback)

The discs tested shall be played back by DVD-R measuring system (Playback). Its reading beam condition is defined in the DVD Specifications for Recordable Disc for Authoring Part 1: Ver. 2.0.

3.2 Test Specifications

The following sections describe the requirements and test specifications for DVD-R Disc products for Authoring. The DVD-R disc for Authoring has to be in compliance with the physical DVD requirements as indicated in DVD Specifications for Recordable Disc for Authoring Part 1: Ver. 2.0. This shall be confirmed by parameters as mentioned from **Form 3Q to 10Q**.

A Licensee is requested to submit the test samples with the test results which may be obtained by the self-verification or verification conducted by a Class-B Lab.

3.2.1 Unrecorded disc specifications

Items described in **Form 3Q to 6Q** shall be measured by DVD-R measuring system (Recording). Finally judge the result with **Form 10Q**.

3.2.2 Recorded disc specifications

Random signals or equivalent shall be written in the user area of the disc.

The recommended value of Ttop and Tmp in the description of Basic Write Strategy (refer to 2.2.3.8 of DVD Specifications for Recordable Disc for Authoring Part 1: Ver. 2.0) shall be used for the disc verification. The writing zones shall be at least 2 mm band in radius including measuring points R = 25 mm, 40 mm and 55 mm. The measurement shall be performed around the center of the band.

Items described in **Form 7Q to 8Q** shall be measured by DVD-R measuring system (Playback). Finally judge the result with **Form 10Q**.

3.2.3 Contents of the pre-pit data block configuration

It shall be confirmed whether the Sector structure of Unrecorded physical format (refer to 4.2 of DVD Specifications for Recordable Disc for Authoring Part 1: Ver. 2.0) is written properly. These items described in **Form 9Q** shall be measured using DVD-R measuring system (Playback). Finally judge the result with **Form 10Q**.

Annex A

List of Class-A Verification Labs

This List is correct at the time of publication. However, when the Class-A Lab information contained here differs from such information cited in our website www.dvdfllc.co.jp, the List with more current date prevails. Also, please refer to the website for the latest Verification Service of each Class-A Lab.

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Annex B

Glossary of Terms used

(May be defined)

Annex C

Procedure for Class-A Verification Lab Product Submission

The procedure for submitting a product to a Class-A Verification Lab is as follows:

Preliminary Application

Applicant must complete **Form 1Q** to provide preliminary information.

Self Test

Applicant must test the product in accordance with this Test Specification prior to submitting it to a Class-A Verification Lab. Applicant must complete **Form 2Q to 10Q** to provide test results.

Mutual Non-Disclosure Agreement (NDA)

Applicant, in order to maintain the confidentiality of the applicant's product and Verification Lab's information, must sign a Mutual Non-Disclosure Agreement.

Application

Applicant must submit 10 product samples along with **Form 2Q to 10Q** and the NDA.

Test Results

Upon completion of testing, Verification Lab will complete **Form 11Q** to inform the applicant and DVD Format/Logo Licensing Corporation of the test results.

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