

Exhibit A

COMPLIANCE RULES FOR DVD+RW/+R RECORDERS

1. Requirements for DVD+RW/+R Recorders

1.1 No playback of CSS encrypted content from a DVD+RW/+R Disc

If a DVD+RW/+R Recorder has the functionality of playing back CSS encrypted content, such DVD+RW/+R Recorder shall refuse to de-scramble CSS encrypted content contained on a DVD+RW/+R Disc and shall refuse to play back CSS encrypted content from a DVD+RW/+R Disc.

Note: Other requirements as specified in the license for CSS decryption technology remain fully applicable when a DVD+RW/+R Recorder has the functionality of playing back CSS encrypted content.

1.2 Record Control Rules

1.2.1 Prevent writing CSS keys and content protection information under user control in sector headers

DVD+RW/+R Recorders shall be incapable of writing CSS key blocks or user defined data into the content provider information section of the control data, i.e. sectors number 2 through 15 of every ECC block of the 192 ECC blocks in the control data zone. The first sector in an ECC block shall be labeled 0, whereas, the last sector shall be labeled 15. Further, DVD+RW/+R Recorders shall be incapable of writing user defined data into the RSV field of all sector-headers in the Lead-in, the Lead-out and Data Zone.

1.2.1.1 In DVD+RW/+R Recorders manufactured and shipped after December 31, 2004, a Hardware implementation (as defined in Exhibit B: Robustness Rules) shall ensure that only (00) can be written in the last 5 bytes of the RSV fields in the Data Zone.

1.2.1.2 In DVD+RW/+R Recorders manufactured and shipped after December 31, 2004, a Hardware implementation (as defined in Exhibit B: Robustness Rules) shall ensure that the first byte of the RSV fields (the Copy Protection System Type) in the Lead-in cannot be set to 0x01 (which indicates CSS-encryption).

1.2.2 Special Applications

All DVD+RW/+R Recorders shall recognize the special application settings on a DVD+RW/+R Special Purpose Disc, indicated in byte 17 of the ADIP information, and act according to the rules indicated by that byte. When a DVD+RW/+R Recorder cannot recognize or obey the rules indicated by that byte, the recorder is not allowed to record on that DVD+RW/+R Special Purpose Disc.

1.2.3 Watermark detection for record control

Subject to the provisions of Article 2.03 of the DVD+RW Recorder Content Protection Agreement, and after the grace period as provided therein, DVD+RW/+R Recorders shall scan for the watermark specified in accordance with Article 2.03 of the DVD+RW Recorder Content Protection Agreement, in analogue input signals and in unencrypted DVD MPEG input streams and react in accordance with the copy control information encoded in the watermark, as specified in the watermark system compliance rules.

Attached to this document are some of most relevant requirements specified in the current version of the watermark system compliance rules.

2. Additional requirements for DVD+RW/+R Video Recorders

2.1 Signals from Analogue Inputs

DVD+RW/+R Video Recorders shall only make recordings using the following approved analogue video signal inputs (whether from an internal or external source) in which labeling technologies as defined in Section 3 exist:

- A. NTSC, PAL, or SECAM analogue composite video signals including S-video in Y/C format, including the RF signal.
- B. YUV interlace analogue component video signals.
(Note: "YUV" as used herein means a component video signal comprised of a luminance signal (Y) and two colour difference signals (U and V) and specifically includes the following component video signals (Y, Pb, Pr), (Y, Cb, Cr), (Y, Db, Dr) and (Y, B-Y, R-Y)).
- C. RGB signal from SCART connector that is carrying a PAL, SECAM or NTSC composite video signal, provided that the composite video signal is used for synchronization reference for that RGB signal. (Note that RGB analogue video signals carried over any connector other than a SCART connector, are not approved for use as an analogue video signal input for DVD+RW/+R Video Recorders.)

Except as listed above, no other analogue video inputs are approved for use on DVD+RW/+R Video Recorders until and unless specifically permitted by an amendment to these Compliance Rules.

DVD+RW/+R Video Recorders shall scan on any analogue video signal entering the DVD+RW/+R Video Recorder in a composite signal format (including the S-Video format) or component signal format, including transmissions from any internal or external source to detect the copy control information. If the content is labeled as “Copy Never” or as “Copy No More” by any such copy control signal, such content shall not be recorded. If the content is labeled as “Copy One Generation”, the content may be recorded and shall be labeled as “Copy No More” in accordance with Section 3.2. If the content contains an AGC signal as specified in Section 3.1, such content shall be considered labeled as “Copy Never” and such content shall not be recorded.

2.2 **Digital signals inputs in non-encrypted MPEG Transport Stream format or the DV format**

DVD+RW/+R Video Recorders shall scan for the CGMS-D copy control labeling technology as specified in Section 3.3 to detect copy control information on digital video signals entering the DVD+RW/+R Video Recorder in the MPEG Transport Stream format or the DV format. If the content is labeled as “Copy Never” or as “Copy No More” by any such copy control signal as specified in Section 3.3, such content shall not be recorded. If the content is labeled as “Copy One Generation” as specified in Section 3.3, the content may be recorded and shall be labeled as “Copy No More” in accordance with the technologies specified in Section 3.3.

2.3 **Other inputs and signal formats not listed under 2.1 and 2.2**

Other signal formats supplied to DVD+RW/+R Video Recorders than those referred to in Sections 2.1 and 2.2 may be recorded only when a copy protection technology approved by Philips is available, as specified in Section 3.

Note: All compliance and robustness requirements as specified by the protection technologies listed under Section 3 remain fully applicable.

2.4 **Hierarchy**

In the event that more than one copy control labeling technology is applied, and a conflict exists in the interpretation of these copy control labeling technologies, Macrovision Anti-taping shall overrule CGMS bit settings. In the event that Macrovision Anti-taping and/or CGMS copy control labeling information is in conflict with the requirements of the watermark system, the watermark compliance rules shall prevail.

3. Specified copy control labeling technologies

- 3.1 Automatic Gain Control (AGC) and colour-stripe as documented in the document: "Definition of the Default Settings of the Macrovision Anti-taping process for DVD Products, Revision 1.0, July 5, 1997".
- 3.2 CGMS-A, as documented in:
- * For NTSC signals:
 - IEC 61880
 - EIA 608b
 - EIA 805
 - * For PAL and SECAM signals:
 - ETS 300294
- 3.3 CGMS-D as documented in:
- * IEC13818-1 ("MPEG-2 Transport Streams and Program Streams")
 - * Blue Book: Specifications of Consumer Use Digital VCRs (DV).
- 3.4 DTCP as specified in the Digital Transmission Protection Agreement, issued by the DTLA.
- 3.5 Video Watermark Compliance Rules

Note: Adopter is hereby informed that Philips intends to enter into an agreement with the 4C Entity concerning the implementation of CPRM encryption technology for the DVD+RW/+R System.

By means of reference, the following are some of the most relevant requirements referred to in Section 1.2.3.

Note: This information is provided as reference only, and Philips expressly disclaims any responsibility or liability in connection with reliance upon this information.

DVD-Video Recorders

A content stream that is to be recorded in digital format by a Stand-Alone DVD-Video Recording Device shall be checked to determine whether either unencrypted baseband video content or content in DVD-Video MPEG2 Format can be found in any part of the stream within the Device (including without limitation at the input or at any other location).

If the content stream contains either unencrypted baseband video content or content in DVD-Video MPEG2 Format, the content stream must be evaluated by that Recording Device prior to or at the time the Device makes a digital recording of such content, in order to determine whether the content includes a VWM Primary or Secondary Watermark and, if so, the state of such Watermarks. The detection function must be applied continuously to the content stream while it contains unencrypted baseband video or DVD-Video MPEG2 Format content.

DVD-Video PC Recording Drive

A content stream that is to be recorded in by a DVD-Video PC Recording Drive shall be checked to determine whether unencrypted content in DVD-Video MPEG2 Format can be found in any part of the stream within the Drive.

If the content stream contains unencrypted content in DVD-Video MPEG2 Format, the content stream must be evaluated by that Drive prior to or at the time the Drive makes a recording of such content, in order to determine whether the content includes a VWM Primary or Secondary Watermark and, if so, the state of such Watermarks. The detection function must be applied continuously to the content stream while it contains unencrypted DVD-Video MPEG2 Format content.

Detection of “Copy Never” or “Copy No More” Content

When the WM Detection Module detects one or more of a Primary Watermark indicating a state of “Copy-Never,” or a Secondary Watermark indicating a state “Copy-No-More,” the Recording Device shall (i) stop recording for at least the duration of 1 Watermark Detection Cycle, if the Device was in record mode, or, alternatively, (ii) not start recording for a duration of at least 1 Watermark Detection Cycle, if the Recording Device was not in record mode.

Detection of “Copy One Generation-Encrypt” content

When the WM Detection Module detects a Primary Watermark indicating a state of “Copy-One Generation-Encrypt” and does not detect a Secondary Watermark indicating a state of “Copy-No-More,” the Recording Device may continue or start recording a copy of the Content (as the case may be), and, if it does so, shall (i) cause the Remark Module in the Recording Device to insert the Secondary Watermark indicating a state of “Copy-No-More” into such copy, and (ii) encrypt such copy using an Authorized Encryption Technology. In case of a DVD-Video PC Recording Drive, encryption must be accomplished in a robust way either within the Drive or within the secure PC-system or by means of an external encryption program which communicates with the Drive over a protected connection with the Drive.

Reference Copy

Filename: ExhibitA-DVD+RWComplianceRules-12-2002
Directory: L:\licensing\IP&S WEBSITE LICENSE
DOCUMENTS\DVD+RW+R recorder (joint)\Current Versions
Template: C:\Documents and Settings\nlv10480\Application
Data\Microsoft\Templates\normal.dot
Title: Exhibit A
Subject:
Author: Elles de Wit
Keywords:
Comments:
Creation Date: 05-12-2002 11:49:00
Change Number: 5
Last Saved On: 09-12-2002 11:01:00
Last Saved By: Philips Intellectual Property & Standards
Total Editing Time: 5 Minutes
Last Printed On: 17-11-2006 12:26:00
As of Last Complete Printing
Number of Pages: 6
Number of Words: 1,602 (approx.)
Number of Characters: 9,133 (approx.)

Reference copy