

ACP-DVD

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Video Copy Protection FAQ

A) GENERAL / LEGAL

A1. Why can't I make backup copies of the VCR movies or DVD titles I purchase?

It is the owner of the copyrighted material who makes the decision concerning whether or not such content should be protected from unauthorized copying. If the copyright owner chooses to have material copy protected, there are laws and regulations that apply. The laws and regulations regarding the copying of copyrighted content are written by governmental entities, not by Macrovision. For example, in the United States the Digital Millennium Copyright Act (DMCA) prohibits the circumvention of technological measures taken to prevent unauthorized copying. Other laws, regulations and directives also apply in the U.S. and elsewhere. Macrovision is only involved in providing technologies to the content owners to protect against unauthorized copies.

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A2. My listing of an auction item was removed at the request of Macrovision. Why was my item removed?

Macrovision requests that ads be removed which infringe upon or facilitate the infringement of Macrovision's intellectual property. Macrovision does not license the removal of its technology, and any ad that offers or provides for such removal (or offers products with the technology removed) may be at issue. Improper circumvention of copy protection measures violates the Digital Millennium Copyright Act.

In simpler language, if you offer a DVD player with Macrovision disabled, a device to remove Macrovision, or some similar bypass, hack, removal, or circumvention of Macrovision's digital rights management and/or copy protection technology, it may be delisted.

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B) PRODUCT / TECHNICAL

B1. What forms of video copy protection does Macrovision provide?

Macrovision currently provides three video copy protection technologies. Each of these has a separate purpose. These technologies may be applied independently or, in some cases, jointly. They are briefly described as follows:

1. ACP (Analog Copy Protection) – ACP is intended to prevent unauthorized copying of protected copyright content via an analog input (CVBS, Y/C, Component) to a recording device such as a VCR, DVD Recorder, or Hard Drive recorder.
2. RipGuard DVD™ – This is a digital anti-ripping encryption that protects against software designed to decrypt and copy DVD's on computers.
3. Hawkeye™ Peer-to-Peer Anti-Piracy Service – Hawkeye inhibits file sharing of copy protected content over certain computer networks.

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B2. How can I use my DVD authoring software to set copy protection?

We do not have detailed experience with the software packages used for authoring DVDs. I believe that this question could be better answered by the software vendor.

However, there is some information of a more general nature that we can provide that might be of use to you.

1. Employment of Macrovision ACP protection requires the proper setting of CGMS and APS flags on the authoring software.
2. There is no way to reliably set the CGMS flags on a common recordable disc (such as a DVD-R/RW or DVD+R/RW). Thus, only replicated discs can properly implement Macrovision protection. This is due to the difference in sector lengths between a replicated disc and a recordable disc. In practice, this means that if you are performing your own authoring, you will need to author to a DLT.
3. As a self-author, you will be required to enter into a Rights Holder Agreement with Macrovision.
4. The Replicator will need to be Macrovision certified.

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Video Copy Protection FAQ

B3. Can I apply ACP technology to the DVDs that I produce on recordable media such as DVD-R, DVD-RW, DVD+R, DVD+RW or DVD-RAM?

Unfortunately, there is no reliable method of applying Macrovision ACP technology to recordable DVD media. The effectiveness of this technology relies upon the Copy Generation Management System (CGMS) which can only be applied to replicated, original DVD disc media which have an extended sector length.

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B4. Can ACP technology be applied to replicated discs with or without CSS encryption?

Yes, ACP technology can be applied independently of the Content Scramble System (CSS). However, its effectiveness depends on the CGMS state being set to Copy Never.

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B5. Is there any relationship between the Macrovision video copy protection technologies and either CSS or CPRM encryption?

There is no direct connection between any of the Macrovision video copy protection technologies and CSS or CPRM encryption.

CSS (Content Scramble System) is controlled by the DVD Copy Control Association (www.dvdcca.org). CPRM (Copy Protection for Recordable Media) encryption is controlled by the 4C Entity, LLC (<http://www.4centity.com>).

Both may be licensed through LMICP (www.lmicp.com) in Morgan Hill, California, USA.

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B6. Does Macrovision have any video copy protection technology for High Definition analog signals?

There is no Macrovision analog copy protection defined for High Definition such as 720p or 1080i. Further, the DVD-CCA prohibits playback of HD formats of either CSS and/or copy protected DVD content except over digital interfaces such as HDMI or DVI. There is further information about this at www.dvdcca.org in the Procedural Specifications.

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B7. How can I get a copy of a Macrovision copy protection specification?

Macrovision specifications are confidential documents that are only provided to entities which have entered into a licensing or similar agreements with Macrovision. If you are an employee of such an entity, you should check with your legal department first since some companies require that such documents are distributed only from their own contracts/legal department. Where your company has a proper agreement in place with Macrovision, we will be happy to provide you with a copy if you have determined that delivery from us is in accordance with the policy of your company. In that case, please provide us with your full name and mailing address for a Federal Express shipment of the specification as Macrovision does not distribute these documents electronically.

Note that the specification which Macrovision may provide is dependent upon the type of agreement involved. Since several companies have more than one agreement, be sure to specify which specification is needed.

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B8. Does Macrovision have a DVD test disc? What are the uses of the Macrovision DVD test disc?

Macrovision does have available a DVD test disc. It is available to the public and can be ordered from the following Internet website URL: <https://shop.mediuscorp.com/macrov/>

The DVD is double sided. Side 1 is 525/60 (NTSC) and side 2 is 625/50 (PAL). Each side has twelve chapters with various moving pictures and test patterns. Each chapter contains four identical tracks with copy protection set to Off, Type 1, Type 2 and Type 3.

Uses of the Macrovision DVD test disc:

Among other uses, the test disc can be used by television display manufacturers to show a lack of visible distortion in the displayed picture of copy protected content. It can also be used by PC manufacturers to show a lack of software conflicts preventing proper display of copy protected content on the computer screen.

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C) PLAYABILITY / DVD DEVICE HOOK UP

C1. Why am I unable to view a copy protected DVD title on my recently upgraded computer?

Please be aware that Macrovision does not manufacture any PC hardware products or any of the application software or drivers that are used on PC products. It is possible that the manner in which the copy protection process has been implemented by the manufacturer is causing the difficulty.

Based on past experience, these types of playability problems are almost always resolved by downloading the latest drivers or software for the equipment and operating system involved. We suggest exploring the website of the graphics card manufacturer for a more recent driver.

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C2. Why is there a horizontal bar across my display when I try to play a copy protected DVD title?

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C3. I have a TV connected to the video output of my computer and I have activated that output from my control panel. Why is there no picture displayed on my TV when I play copy protected titles in my computer's DVD player?

If the video encoder IC (integrated circuit) in the computer is Macrovision certified and all the software drivers are implemented correctly, the video should be displayed properly on the TV.

We suggest you contact the manufacturer of the graphics device used on your computer to determine if the video encoder is Macrovision certified and/or to determine if the driver for your operating system requires updating.

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C4. I have a VCR connected between my DVD Player and my TV. Why does the picture grow very dim when I play a copy protected DVD title?

The relevant copy protection process was designed to upset certain recording circuitry used by VCRs. Thus, if the VCR is placed into a "Record" mode, the video output will be similarly affected.

If the VCR is not recording, the video signal should pass through from input to output without any degrading effect on the video. Unfortunately, some VCR products are designed in such a way that components of the recording circuitry are still active and cause this effect on the output video.

For that reason, whenever possible, we suggest that establishing a direct connection between the DVD player (or cable box) to your television, bypassing the VCR. This also has the added beneficial effect of facilitating the highest quality reproduction of the video content.

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C5. I have a DVD player connected to the input of my TV/VCR combination product. Why does the picture grow very dim when I play a copy protected DVD title?

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