MacTheRipper



A How-To Guide

Official Website:

http://www.ripdifferent.com/mtr/

Official Support Forum:

http://www.ripdifferent.com/phpbb2/viewforum.php?f=26

Support Email Contact:

mtr@ripdifferent.com

About MacTheRipper:

MacTheRipper is a DVD ripper (extractor) for Mac OS X. It uses the open-sourced GPL libdvdread and libdvdcss libraries. We also use the 'tocgen' program in certain modes, which is a part of the 'dvdauthor' project. It is not necessary to install these libraries and executables separately to use MTR. This product is made to backup DVDs you have legally purchased for personal use onto your hard drive. Any copyright infringing activity you choose to perpetrate using this application is illegal, wrong, and beyond our control.

That being said, MacTheRipper (MTR) removes CSS encryption, Macrovision protection, and sets the disc's region code to '0' for region-free by default, and is capable of removing RCE region protection as well, making an unrestricted copy of any DVD movie you own. It doesn't rely on the DVD drive to get the CSS decryption keys, so that means that you do not need to play the DVD with DVD Player in order to rip it to your

hard drive unprotected. MTR is also capable of removing UOPs, or User Operation Prohibitions, which are the settings that prevent you from skipping or fast-forwarding certain parts of DVDs, such as FBI warnings, previews, logos, intros, etc. WARNING: Disabling UOPs can break the navigation on certain DVDs. If you disable UOPs, be sure to verify the DVD with DVD Player before you burn it to DVD±R disc. MacTheRipper is also able to extract discs with the new ARccOS protection, as well as DVDs that have been damaged or improperly mastered.

Installing MacTheRipper:

To install MacTheRipper, simply mount the .dmg archive by double-clicking it, and copy the MacTheRipper application from it to your Applications folder (or wherever you want it), along with this MacTheRipper Manual if you need it.

Using MacTheRipper:

To use MacTheRipper, you insert your DVD movie into your DVD drive and launch the MacTheRipper application.

Then, you should set the RCE options if applicable. If MacTheRipper displays 'DISC RCE: -CLEAR-' after scanning the DVD in the drive, you can leave the 'RCE Region' popup menu on 'OFF', as it is by default. Only (and always) set the 'RCE Region' to "OFF" when it says that RCE is '-CLEAR-'.



If MacTheRipper displays 'DISC RCE: -DETECTED-', you must set the 'RCE Region' popup menu option to the region in which the DVD was purchased. For example, if you have a DVD that was purchased in N. America (Region 1), and MacTheRipper says that RCE is detected, you must set the 'RCE Region' popup menu to 'RCE 1'. So, if RCE is

'-DETECTED-', always set the 'RCE Region' to the region the DVD comes from, regardless of the numbers that show up in the 'Region' field.



Disc RPC displays which regions the DVD is set to work in.



'New Region' should usually be left on its default of all regions selected (region 0), unless you wish to restrict the playback of the DVD to certain regions. This is the setting for the disc region(s) you wish to have your backed up DVD able to play in.



If you wish to select certain regions to limit the output DVD to (some DVD players don't like region 0 discs, so you might limit them for compatibility), click on the 'New Region' button, and select the regions you want the output to work with, and hit 'Close'.



In the above example, the DVD would play in regions 1-6, but not in 7 or 8.

De-Macrovision should usually be enabled, to allow you to record your DVDs straight to VCR, or connect the DVD player through a VCR without getting a bunch of wavy lines. This is enabled by default.



If you wish to disable UOPs to allow you to skip or fast-forward through most DVD content, such as warning screens, previews, and such, you can click the 'UOPs' button:



This will open a sheet where you can choose to 'Disable DVD UOPs', by checking this box:



If you do this, be sure to verify the output of MTR with DVD Player before you burn to DVD±R, as it can break the menu system on certain DVDs.

If you want to access the advanced UOPs options, you can check the 'Enable Advanced Features' box:



This will allow you to select the UOPs you wish to enable in the DVD. This option should only be used by advanced users, and has the potential to break DVD playback if you don't know what you're doing. If you don't understand the options in the advanced features, leave 'Enable Advanced Features' unchecked.

Actions To Be Disabled On DVD	
Time Play or Search PTT Play or Search Title Play Stop Go Up Time or PTT Search TopPG or PrevPG Search NextPG Search Foward Scan Backward Scan	MenuCall Title MenuCall Root MenuCall Subpicture MenuCall Audio MenuCall Angle MenuCall PTT Resume Button Selector Activate Still On Pause On
Audio Stream Change Angle Change Video Presentation Mode Ch	Subpicture Stream Change Karaoke Audio Mix Change

WARNING: The options you check here will be DISABLED during the DVD playback. For example, if you check the 'Stop' box here, you will no longer be able to use the 'Stop' button on this DVD during playback. All actions left unchecked will be enabled in this mode (or rather their UOPs will be disabled).

Once you're done selecting the UOPs options, you can click the 'Close' button, and go back to the main window.

Now it's time to choose the type of extraction you want in the 'Mode' tab.



Usually, you would want to extract the whole DVD for either burning back to DVD-R or processing with other tools to shrink it down to size first (such as DVD2OneX or DVDRemaster). For this, you will choose the 'Full Disc Extraction' option.



If the main feature is under 4.37 GB (or you don't want to waste time extracting parts of the DVD you don't want), and you don't care for the extra content on the DVD

or the menus, you can choose the 'Main Feature Extraction' option to only get the main feature title set by itself.

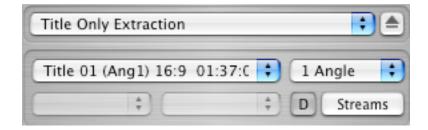


If you only want to extract a certain title set (video track) from the DVD besides the main title set, you can choose the 'Title Set Extraction' option, and setting the title set number you want to extract. This might involve a little trial and error to get the desired one if you don't want the Main Feature title set.

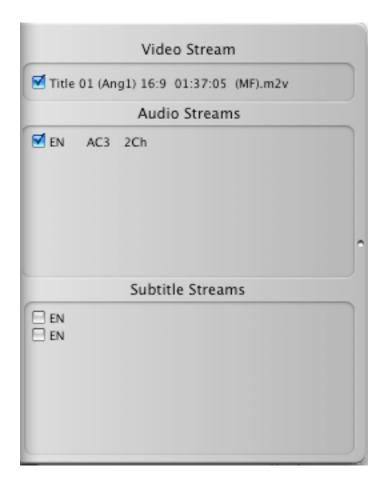


If you want to extract only a particular title, you can choose the 'Title Only Extraction' option, and set the title you wish to extract. The main feature title is

indicated with the letters '(MF)'. You can also set the desired angle if there are several.

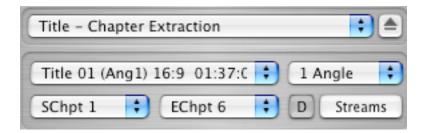


You can also choose to demux the individual streams (.m2v, .ac3, .dts, .pcm, .spc) from the VOB, and select only the ones you want. To do this, click the "D" button (for demux), and then the "Streams" button to open the stream selection drawer:



Here, you can choose exactly which streams you want extracted.

If you want to extract only a certain set of chapters of a particular title, then you can choose the 'Title – Chapter Extraction' option, and set the title number and chapter range you wish to extract by choosing the start chapter 'SChpt' and end chapter 'EChpt'.



In the above example, you would be extracting chapters one through six of angle one of the main feature. Again, if you want to extract the elementary streams (.m2v, .ac3, .dts, .pcm, .spc), follow the demuxing instructions above for Title Only mode.

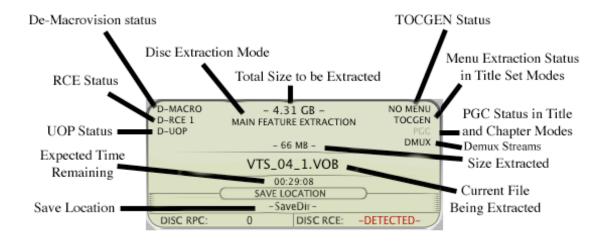
Once you've selected the type of extraction and options you want, you can go back to the 'Disc' tab and click the 'GO!' button (or hit the 'Enter' or 'Return' key) to start the extraction.



This will prompt you to choose a Save Location in a new window (only the first time you run a new version of MacTheRipper – after that, you must choose "Save To…" in the "File" menu to change Save locations). Navigate to where you want to save the DVD folder, and click the 'Open' button to make your selection. Once the process starts, the upper progress bar will indicate the progress on the current file displayed in the main window area, and the lower one will indicate how far along the extraction process it is for the entire disc. There will be a sound when the process is finished, along with a dialog showing Bomberman™ and the time elapsed for extraction. If at any time during the processing you wish to cancel, you can click the 'Cancel' button (where the 'GO!' button was before processing began), and it will stop processing immediately, leaving your partially extracted DVD where you saved to. You should probably throw this away, if you didn't get the parts you wanted.



Here's a brief overview of the main interface during extraction:



Here's a brief overview of the options in the preferences (Command-,):

▼ Enable PGC Mode In Title / Chapter Mode

This option enables PGC mode for title and chapter extractions. This is the preferred method of title and chapter extraction, and is much more accurate than the legacy method. If you encounter strange problems during title or chapter extraction with PGC mode active, you might uncheck this option and try again. Otherwise, it should probably remain checked, as it is by default.



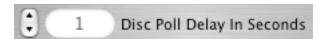
This is the method by which the file size of the various title sets, titles and chapters are calculated. It's left on Pre Scan by default, where it will calculate those sizes when you insert the DVD or launch MTR with a DVD inserted. This stalls the application while it scans the sizes. The time it takes varies from drive to drive. If you don't care to see the sizes in Main Feature, Title Set, Title Only and Title - Chapter modes and don't want to wait for the disc to be scanned, you can set this option to 'Disabled'.

Disable File Overwrite Warning

This option disables the warning you get when you try to overwrite a folder on your hard drive. Only check this if you know what you're doing, and don't wish to be bothered with the warning screen that displays when you're about to overwrite a DVD folder on your hard drive. Otherwise, it should be left on its default of unchecked.

Don't Remember Save Location

This option will make MTR prompt you for a save location each time you run it. If unchecked, MTR will remember the last place you saved to, and extract the next DVD in the same place automatically.



The Disc Poll Delay is the delay from the point the DVD is first inserted until MTR will attempt to scan it. This is to prevent conflicts as both MTR and the Mac OS attempt to access the disc at the same time. If you find that MTR crashes when you insert a DVD while MTR is already running, you should increase this delay time. If you don't want to wait that extra second, you can set this to '0', but set it back if you start getting any crashing problems upon DVD insertion.

Disable Menus In MainFeat / T-Set Extraction

This option will make MTR only copy the bare movie in Main Feature and Title Set modes. If unchecked (as it is by default), you will sometimes get menus and some extra features in those modes.

Extract DVD-ROM Content (FULL DISK ONLY)

This option will make MTR copy all the extra folders and files (AUDIO_TS, JACKET_P, DVD-ROM stuff, etc.) from the DVD after it's done ripping the VIDEO_TS folder. Those extra files and folders aren't necessary to make a working DVD video, but it doesn't hurt. You can uncheck this option if you only want the VIDEO_TS folder, or wish to copy the rest manually.

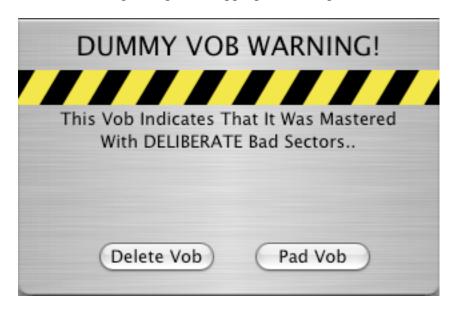
Disable UOPs Warning

This option will stop the warning screens you get when you extract a DVD with the 'Disable DVD UOPs' option checked. We put the warning in to make sure people realize that disabling UOPs can break DVDs, and that you should verify the DVD after extraction if you use that option. Once you realize that, you can go ahead and disable this warning.

Additional Notes, Tutorials and Help:

ARccOS: Note that ARccOS copy-protected DVDs are automatically detected, and MTR will switch to an equivalent ARccOS mode when such a DVD is detected. It is normal to see "Bad Sector" warnings in ARccOS modes, as that is part of the ARccOS

protection. Those warnings should be gone in version 2.7 to avoid confusion. Popcorn's Movie Only mode might have some issues with ARccOS DVDs (like long pauses before the movie starts), so it's recommended to use Disc Copy mode or DVD2OneX instead. Title Only and Title - Chapter modes are not affected by ARccOS protection. You may see the following dialog when ripping ARccOS-protected DVDs:



Choose 'Delete' if you are doing a Movie Only compression afterwards using DVD2OneX or Popcorn, and choose 'Pad' if you are doing a Full Disc.

Additional tutorials for shrinking and burning DVDs onto DVD±R media can be found here:

• http://www.videohelp.com/forum/viewforum.php?f=9

This is a message board forum with lots of information on all aspects of Mac video tools. There's a sticky thread at the top called "How to properly burn DVD2One DVDs using Toast 6.0" with detailed instructions of the process. You can also do a forum search if you have any specific issues you need information on, or post a new topic asking for help if you can't find the info you need.

• http://www.dvd2one.com/osxtoast.php

This is an illustrated guide to using MTR, DVD2OneX and Roxio Toast to backup DVDs onto DVD±R media.

• http://www.dvd2one.com/osxutil.php

This is an illustrated guide for using MTR, DVD2OneX and Disk Utility to backup DVDs onto DVD±R media.

For any other questions or problems, please visit our forums at the following address:

http://www.ripdifferent.com/phpbb2/viewforum.php?f=26

If the answer you are looking for can't be found there, feel free to register with the forums and create a new topic, and we will answer it promptly. Otherwise, you can email us at mtr@ripdifferent.com and we will try to get it resolved.

Acknowledgements:

MacTheRipper is made possible thanks to much hard work by Geezerbuttz, who coded the application. Also, thanks to the creators of libdvdcss and libdvdread, which are essential to MTR, as well as the tocgen utility we use in some modes. Here are some relevant links:

- http://www.dtek.chalmers.se/groups/dvd/downloads.shtml (libdvdread project page)
- http://developers.videolan.org/libdvdcss/ (libdvdcss project page)
- http://dvdauthor.sourceforge.net/ (dvdauthor project, creators of tocgen)

Version History:

2.6.6

- Improves prescanning to fix crashing problems on certain DVDs
- Faster prescanning by consolidating code into fewer passes to reduce seeking

2.6.5

• Improves prescanning code to fix crashing problems on certain DVDs

2.6.4

• Improves IFO scanning code to fix some crashing problems on certain DVDs

2.6.3

- This time it really fixes the bug in the new UOPs disabling code
- Fixes an obscure bug where a file called Glass.snd in the home/Library/Sounds folder on some users' systems could cause MTR to crash

2.6.2

• Fixes a big bug in the new UOPs disabling code

2.6.1

- Greatly improved UOPs disabling code, now much less of a chance of making an unplayable DVD, and more effective
- Improved prescanning code for speed and compatibility, should now work with more titles

2.6

- Added the ability to extract DVDs with ARccOS copy protection, along with new Full Disc and Main Feature modes for those discs
- Added the ability to handle VOBs with bad sectors, which get padded with dummy data, and notify the user at the end of extraction that read errors were encountered
- Added bad cell detection in Title Only and Title Chapter modes, so they automatically get skipped; useful for ARccOS DVDs
- Added the ability to demux elementary streams in Title Only and Title Chapter modes, along with the ability to choose which streams will get extracted.
- Removed deprecated preferences
- Fixed large crashing bug that occurs if the user chooses Title Only extraction, and then immediately chooses another mode
- Fixed a bug in Non-PGC Title Only and Title Chapter modes where the output would be incorrect
- Fixed a crashing bug on certain DVDs with particular IFO issues
- Reduced the amount of UI updates during extraction to hopefully reduce the amount of crashes on certain computers, namely dual-processor Macs
- Improved progress bar accuracy
- Removed 'Real Time' prescan option in the preferences, as Pre Scan is required for certain functions to work properly now, including ARccOS detection and chapter extraction

2.0.2

- Fixed a bug where MTR would become unstable if chapters were selected in reverse order
- Other miscellaneous bugfixes

2.0.1

- Minor bugfixes
- Compiled with Xcode 1.5 for improved performance and stability
- Changed the progress bar code to decrease tax on CPU when MTR is in focus

2.0

- Completely rewritten in Objective-C Cocoa to behave more like a Mac application
- New PGC mode for improved title and chapter extractions
- UOP disabling
- ForceRead mode for extracting damaged discs
- File size calculation in the various extraction modes
- DVD-ROM content extraction
- Compiled with GCC 3.3 for improved performance
- Countless bugfixes and performance enhancements
- Improved compatibility with a wider range of DVDs
- New and improved interface with innumerable enhancements

1.5.6

- Added Macrovision removal
- Added CSS key recovery method selection
- Added an 'Eject' button
- Updated interface

1.5.5a

• Improved RCE removal code

1.5.5

- Allows you to select exactly which regions you want to enable, allowing for any combination of regions
- No longer remembers the last RCE region you set, so that it will always go back to the default of 'OFF', to avoid corrupting DVDs by having RCE removal enabled when it shouldn't be
- Minor interface enhancements

1.5.4

- Fixes a bug with DVDs that have certain characters (namely the apostrophe) in their title
- Fixes a bug with the disc size calculation code
- Minor interface enhancements

1.5.3

- Fixes a bug where MTR would forget the last save location if you open the 'Save To' panel and hit 'Cancel'
- Redesigned interface in standard Aqua widgets to improve compatibility and functionality

1.5.2

- New application preferences remember the last options you set last time you used MTR, including save location, extraction type, disc region and RCE options
- 'GO!' is now the default option, so if you have a save location set, you can just hit 'Enter' and start the extraction, as long as there is no RCE option to set
- Minor interface enhancements

1.5.1

- Fixes a bug where mounted volumes other than the DVD were being scanned for region and RCE
- Fixes a bug if you insert a second DVD while the first one is ripping
- Added a refresh button for the list of DVDs, in case it doesn't get automatically updated (disabled during extraction)
- Remembers window placement
- Minor interface enhancements

1.5

- RCE and disc region detection and removal
- New interface with progress bar
- Now makes playable output in 'Main Feature' and 'Title Set' modes, thanks to the addition of tocgen
- Consolidated different releases to have a single version for Mac OS 10.2.x, 10.3.x and for G5s
- Additional minor bugfixes

1.0

- New interface
- Many bugfixes, resolved crashing issues

<u>0.5</u>

• Fixes bug for DVDs with spaces and punctuation marks in their title

0.4

• Several bugfixes, including some of the quit-on-launch problems

0.3

- Minor bugfixes
- Separate version for G5s

0.2

- Several bugfixes
- Separate version for Mac OS 10.2.x and 10.3.x

0.1

• Initial public beta