# SD Card Formatter 5.0.2
# User's Manual

## Version 1.10

## April 12, 2023

# SD Card Association

## Revision History

| Date | Version | Changes compared to previous issue |
|---|---|---|
| Jun. 30, 2017 | 1.00 | First release |
| Jan. 15, 2018 | 1.01 | Updated operating system supported versions |
| May 30, 2018 | 1.02 | Updated operating system supported versions<br>Added information related to new Format Size Adjustment feature |
| Jun. 13, 2018 | 1.03 | Updated SD Card Formatter version |
| Sep. 4, 2018 | 1.04 | Added note concerning overwrite format |
| Nov. 1, 2019 | 1.05 | Updated operating systems supported versions |
| Jan. 23, 2020 | 1.06 | Updated operating system supported version |
| Aug. 26, 2020 | 1.07 | Updated operating system supported version |
| Jul. 15, 2021 | 1.08 | Updated operating system supported version |
| Feb. 28, 2022 | 1.09 | Updated SD Card Formatter for Windows Overwrite Format |
| Apr. 12, 2023 | 1.10 | Updated Windows and macOS supported versions |

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SD Card Association
5000 Executive Parkway, Suite 302
San Ramon, CA 94583 USA
Telephone: +1 (925) 275-6615,
Fax: +1 (925) 886-4870
E-mail: help@sdcard.org

## Disclaimers

Downloading or using the SD Card Formatter is required to agree on the "End User License Agreement" shown in the SDA website when downloading the SD Card Formatter as well as when installing the application.

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Tuxera Inc. owns copyright of the SD Card Formatter 5.XX programs for both the source code and object code.

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# Table of Contents

# Table of Figures

# 1. Introduction

The SD Card Formatter formats SD Memory Card, SDHC Memory Card and SDXC Memory Card (respectively SD/SDHC/SDXC Cards) complying with the SD File System Specification created by the SD Card Association (SDA).

It is strongly recommended to use the SD Card Formatter to format SD/SDHC/SDXC Cards rather than using formatting tools provided with individual operating systems. In general, formatting tools provided with operating systems can format various storage media including SD/SDHC/SDXC Cards, but it may not be optimized for SD/SDHC/SDXC Cards and it may result in lower performance.

# 2. System Requirements

## 2.1 Operating Systems

Please refer to the following SDA website for evaluated Windows and Mac OS X/macOS.
Execution of SD Card Formatter requires Administrator Rights for both Windows and Mac OS X/macOS.

### 2.1.1 Windows

https://www.sdcard.org/downloads/formatter/

### 2.1.2 Mac OS X/macOS

https://www.sdcard.org/downloads/formatter/

## 2.2 SD Cards Capacity Types

The SD Card Formatter formats the following SD Card capacity types.
- SD up to 2GB
- SDHC more than 2GB up to 32GB
- SDXC more than 32GB up to 2TB

## 2.3 SD Card Interface Devices

The following SD interface devices are available to access SD/SDHC/SDXC Card:
- SD Card slot on PC
- USB2.0, USB3.0, USB3.1, USB-C SD Card reader

Please check that your SD Card interface device is compatible with your SD, SDHC or SDXC Card before using the SD Card Formatter.

# 3.  SD Card Formatter Installation

(1) Close all application programs on your PC
(2) Execute the SD Card Formatter installation program which you downloaded from SDA website
(3) Follow the instructions from the SD Card Formatter installation program, accepting the End User License Agreement (EULA) and complete the installation

**Note:** If you have installed an older version of the SD Card Formatter (Version 4.0 or earlier), you must uninstall the SD Card Formatter as described below, then install the latest SD Card Formatter.

If "User Account Control" window is displayed on the screen during the installation, please click [Yes].

# 4.  SD Card Formatter Uninstallation

## 4.1 Windows 8, Windows 8.1, Windows 10, Windows 11

(1)  Right-click [SD Card Formatter] icon in Start
(2)  Click [Uninstall]
(3)  Click [SD Card Formatter]
(4)  Click [Uninstall]
(5)  If confirmation window is displayed on the screen, click [Yes]
(6)  If "User Account Control" window is displayed on the screen, please click [Yes]

## 4.2 Windows 7

(1) Click [Start] then click [Control Panel]
(2) Click [Uninstall program]
   If View is "Big Icon" or "Small Icon", click [Program and function]
(3) Double click [SD Card Formatter]
(4) If confirmation window is displayed on the screen, click [YES]
(5) If "User Account Control" window is displayed on the screen, click [Continue]
(6) Follow the instructions during the uninstallation of the SD Card Formatter

### 4.3 Mac OS X and macOS

(1) Open the [Applications] directory
(2) Right-click [SD Card Formatter]
(3) Click [Move to Trash]
(4) Enter your password and click [OK]

# 5. Operation Guide

## 5.1 SD Card Formatter User Interface

When the SD Card Formatter is starting up, the following main window is shown on the screen.
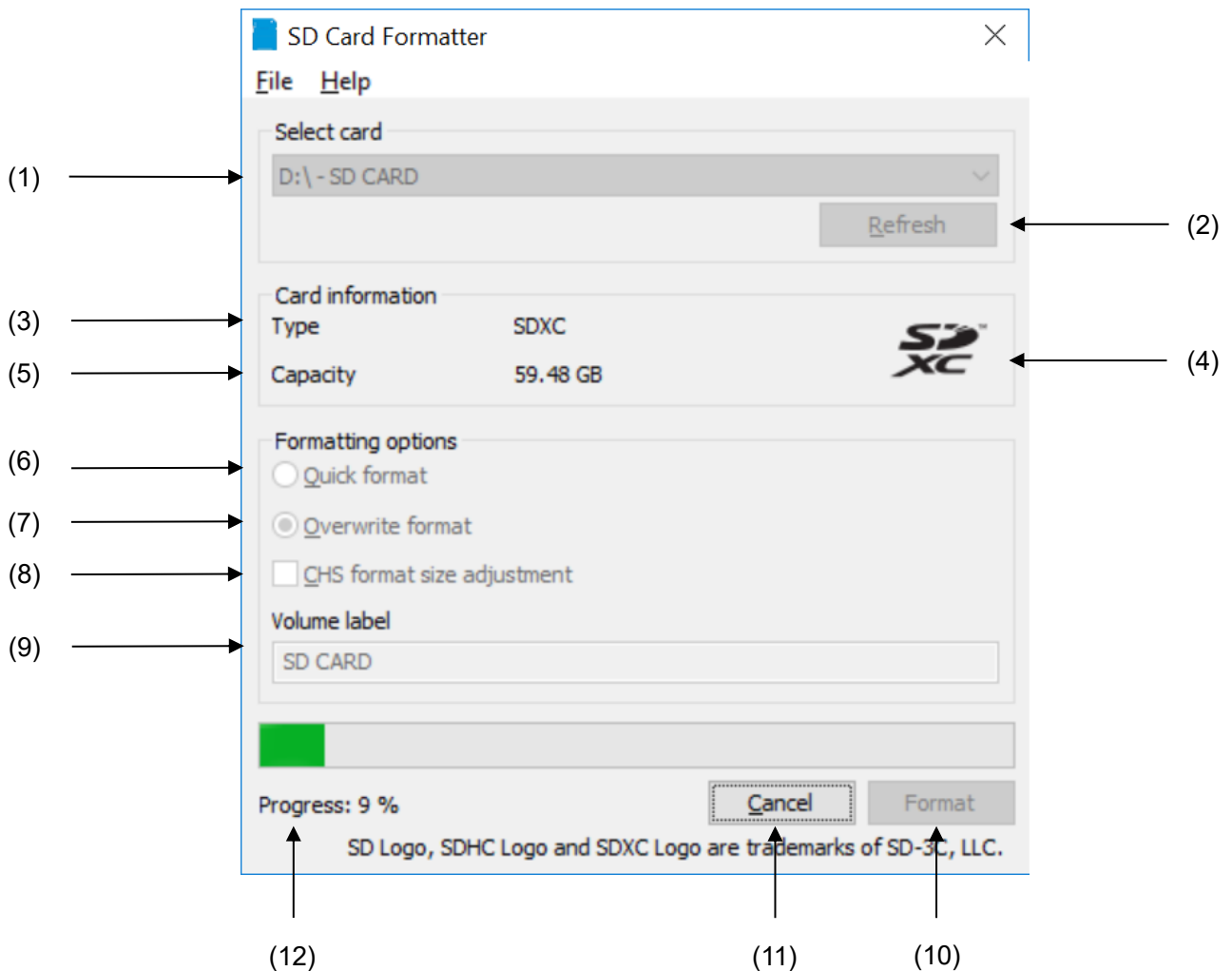


**Figure 1: SD Card Formatter Main Window**

(1)     Drive List
        This list indicates SD/SDHC/SDXC Cards recognized by the SD Card Formatter.
        You can select the card to be formatted within this list.

(2)     Refresh Button
        This button is used to update the list of cards detected. Click this button when new SD/SDHC/SDXC Card is inserted to an SD Card interface device.

(3)     Card Type
        This field indicates the card type, either SD, SDHC, or SDXC which was selected.

(4)     SD Card Logo
        This field indicates the SD Card Logo, either SD, SDHC, or SDXC Logo of the card selected.

(5)     Size
        This field indicates the card capacity.
        On Windows, the capacity is calculated with base 1024 (i.e. 1kB = 1024 Bytes), while on Mac OS X/macOS, the capacity is calculated with base 1000 (i.e. 1kB = 1000 Bytes).

(6)     Formatting Option, Quick format
        This option performs a quick formatting. It deletes all the file/directory entries by initializing file system parameters of the card but does not initialize the data written in files. If you need to initialize the data in the files, use the [Overwrite format] option.

(7)     Formatting Option, Overwrite format
        This option deletes file/directory entries by initializing file system parameters of the card and erase all data by overwriting the user data area completely. This formatting option takes much longer time than Quick format depending on the card capacity. Please make sure that your computer is connected to a power supply and that sleep mode is disabled.

(8)     CHS Format Size Adjustment (only available on Windows version)
        This option adjusts the formatted capacity calculated by number of Cylinders, Heads and Sectors (CHS). This option is available for both Quick format and Overwrite format.
        **Note:** this option is enabled only when the user capacity of the card is less than or equal to 8032.5MB (8,422,686,720 Bytes).

(9)     Volume Label
        This field shows the volume label of the card, and you can enter a new volume label to be written into the card during formatting. You can enter up to 11 characters in the [Volume label] field.
        **Note:** if the volume label has been written in other than English characters, the information in this field may not be shown correctly. In this case, you should enter a new volume label using English characters.

(10)    Format Button
        This button starts the format operation. After clicking this button, a confirmation window will be shown on the screen. You can [Continue] or [Cancel] the formatting.

(11)    Cancel Button
        This button cancels the ongoing format operation.
        If you cancel the format operation during [Overwrite format], the user data area will not be overwritten (or erased), however the file system parameters of the card will be initialized and the volume label you entered will be written into the card.

(12)    Progress Information
        This message indicates the current progress of the formatting.

## 5.2 SD Card Formatter Version Information

On Windows operating system, click the [Help] menu and then click [About] to display the application version information.
On Mac OS X/macOS operating systems, click the [SD Card Formatter] menu and then click [About SD Card Formatter].



**Figure 2: Version information**

## 5.3 SD Card Formatter Update Function

Every time the application starts, it checks whether a new version of the SD Card Formatter is available. If a new version is available, the following window is shown:
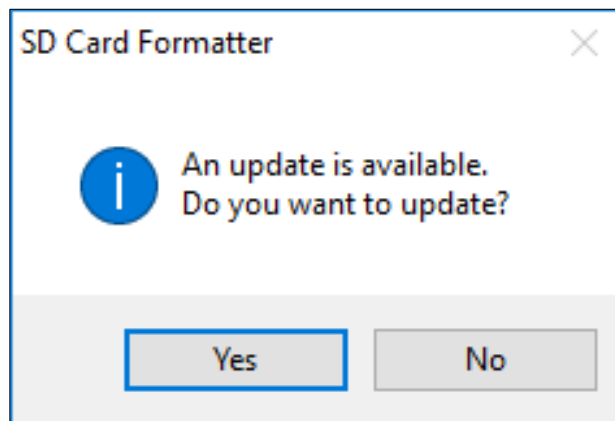


**Figure 3: Available software update**

After clicking [Yes], a browser window opens with the SDA SD Card Formatter download page. Proceed to download the most recent version from this page.

**Note:** it is possible to manually check for updates by clicking on the [Help] menu and then on [Check for updates] on Windows; and by clicking on the [SD Card Formatter] menu and then on [Check for updates…] on Mac OS X/macOS.

## 5.4 SD Card Formatter Help Function

The help function provides an easy access to the SD Card Formatter User's Manual (this manual) through SDA website.
For Windows operating system, click the [Help] menu and then click [Help]; and for Mac OS X/macOS operating systems, click the [Help] menu and then click [SD Card Formatter Help].

# 6. Important Notice

(1)     Do not format recordable media other than SD/SDHC/SDXC Cards using the SD Card Formatter. If you accidentally formatted a recordable media other than SD/SDHC/SDXC Cards, reformat the media using the appropriate formatting software which came with the media.

(2)     Do not remove an SD/SDHC/SDXC Card or an SD Card interface device like USB SD Card reader while formatting. Please use EJECT function on Windows and Mac for safe removal of the card.

(3)     Once formatting has started, all recorded information will no longer be available.

(4)     Check the position of the write protect switch on your card before formatting. The position shall be on the NOT PROTECTED position (i.e. upward).

(5)     If the SD Card Formatter does not recognize the SD/SDHC/SDXC Card, re-insert the card and click the [Refresh] button.

(6)     The SD Card Formatter does not format the Protected Area in the card. The Protected Area is used by CPRM (Content Protection for Recordable Media). The Protected Area shall be formatted by appropriate PC applications or SD host devices that provide CPRM function.

(7)     If the SD/SDHC/SDXC Card cannot be recognized by the SD Card Formatter after the card is inserted into an SD interface device (SD Card slot on PC, USB SD Card reader), check that the SD interface device is compatible with SD/SDHC/SDXC Cards. Some SD interface devices are interoperable only with SD and SDHC Cards. Also, some PCs need to install drivers and file systems to work with SD/SDHC/SDXC Cards.
If your system is compatible with SD/SDHC/SDXC Cards but the card is not recognized, try to restart your PC and execute the SD Card Formatter again.

(8)     If you choose the [Quick format] option, all files in the card are deleted. However, data in the files still remains in the card and it may be retrieved by using data recovery tool. Please use the [Overwrite format] option if you want to erase all data in the files completely.

(9)     SD Card Formatter does not format SD/SDHC/SDXC Card encrypted by the "BitLocker To Go" provided with Windows. Please unlock the SD/SDHC/SDXC Card specified by Windows before formatting the card.

(10)    Execution of the SD Card Formatter requires Administrator Rights for Windows and Mac OS X/macOS.

(11)    Overwrite format can be long depending on the size and speed of the card. Make sure that your computer is connected to a power supply and that sleep mode is disabled.