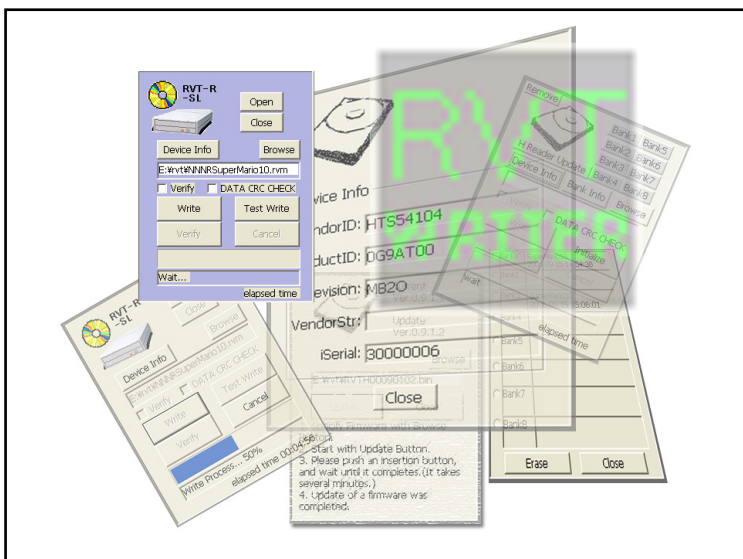


# RVT-R WRITER/RVT-H READER

## Writing Software

## User's Guide



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# Preface

This User's Guide describes how to use the writing software for FVT-R Writer/RVT-H READER. Carefully read this User's Guide to handle the software correctly.

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# Notes on Use

Observe the following precautions when using this software.

## Operating Environment

The software can operate in an environment as shown below.

- **Hardware** <sup>\*1</sup>

PC having a connector compliant to USB 2.0 interface.

- **Software** <sup>\*2</sup>

Microsoft Windows XP Home Edition operating system (Service Pack 2 or later)

Microsoft Windows XP Professional operating system (Service Pack 2 or later)

Microsoft Windows 2000 Professional operating system (Service Pack 4 or later)

Microsoft Windows 2000 Server operating system (Service Pack 4 or later)

- **Number of hardware that can be connected** <sup>\*3</sup>

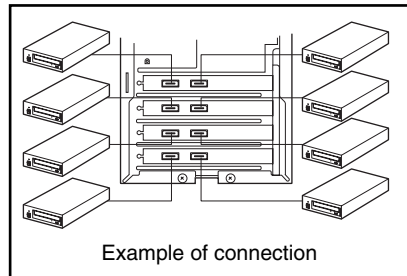
Up to 8 drives in gang writing mode

The software can run while both the RVT-R WRITER and the RVT-H READER are connected concurrently.

- **Available media**

- NR DISC, RVT-R-SL, or RVT-R-DL  
Operation on any other device than described above is not guaranteed.

- RVT-H READER: Coexistence of banks of 4.7GB and 8.5GB is supported.



\*1 Includes a computer containing PCI to USB CARD. For the recommended PCI to USB cards, refer to the following URL or consult your service representative.

<https://www.warioworld.com>

\*2 Either Japanese or English edition.

\*3 The recommended number of devices that can be connected when the computer contains PCI to USB CARD: 2 devices per a card, eight devices per a computer (The software can run when USB hub is used or three or more devices per a card are connected.)

## Restrictions and Precautions

- Common

- To run this software, logon the system using the administrator account or other account which is a member of the Administrators group. Exit all the applications before running this software.
- RVT-R WRITER and RVT-H READER cannot be specified at the same time in gang writing.
- If you exit from the software while writing is in progress, the RVT-R media becomes no longer available. For RVT-H READER, it is assumed as a write error, and the software used for writing cannot be started.
- Exit the software before executing [Remove Device] on task tray.
- Do not run the software of GUI edition and CUI edition at the same time.
- Do not run the software of the GUI edition and the CUI edition simultaneously.

The GUI edition attempts to occupy all drives. Therefore, you cannot select the RVT-R WRITER or RVT-H READER that is accessible from the CUI edition. (Devices available for CUI edition can be known using **rvtwt --list --media=rvtr** or **rvtwt --list --media=rvth** (see page 20).)

- The Elapsed Time box shows the accumulated time from starting of data file check to completion of writing. The time includes the time required for start and end processing of the device.
- Do not move, delete, or overwrite the master data file during the write/verify operation.
- During mastering, a temporary file is created in the same folder of the specified mastering file. Care must be taken for the free space of the hard disk drive. The temporary file will be deleted when mastering process completes.
- The mastering file can be specified for only one device at a time. If you want to specify the same mastering file for any other RVT-H READER, make sure that "Mastering... XX%" is not displayed.
- If you specified the Remove command (by pressing the [Remove] button on H reader screen in GUI edition, or specifying the **--remove** command or **-r** option in CUI edition), you must actually remove the RVT-H READER.

- GUI edition only

- If you have selected a file to write and then add a device for gang processing, the file is not written onto the added device. Be sure to select the device first.
- The [Verify] button is enabled when [Test Write] process completes. However, if you click the [Verify] button, an error will occur.
- To write onto a media again after the [Test Write] process completes, open the tray once, then close it before starting. The [Write] and [Test Write] buttons are enabled again.

- CUI edition
  - Gang processing is performed to all the devices. (Specify "0" for serial number.)
  - You cannot select several devices by specifying several serial numbers.
  - To write onto a media again after the [Test Write] process completes, open the tray once, then close it before starting.  
The [Write] and [Test Write] buttons are enabled again.

# Obtaining, Installing, and Uninstalling Software

There are two types of software; GUI (Graphical User Interface) edition and CUI (Character User Interface) edition. You can download them from the following URL:

**<https://www.warioworld.com>**

- Execution file
  - GUI edition: rvtwriter.exe
  - CUI edition: rvtwt.exe
- DLL file (common to GUI and CUI editions)
  - deffile.dll
  - makervm.dll

Copy the downloaded execution file onto the desired folder.

To delete the software (uninstall), delete the execution file or move it to Recycle Bin.

---

## – ✓CHECK

- If a file named "readme" or the like is contained in the downloaded file, read it before running the execution file.
  - When you running CUI edition on command prompt screen, you may be prompted to specify the command search path for copy destination. Confirm the path for copy destination.
- 

Using the GUI edition (page 8) and CUI edition (page 20) are described in the subsequent sections individually.

# GUI Edition

This section describes how to use the software of GUI (Graphical User Interface) edition.

## Starting and Exiting Software

To start, run "rvtwriter.exe" or double-click it.

To exit, click the [Close (  )] button, or select [Exit] from the toolbar.

### — ✓CHECK—

- To run this software, logon the system using the administrator account or other account which is a member of the Administrators group.
- The software exits even while writing or verify process is in progress. Note that the RVT-R media being used becomes no longer available, if the software exits while in writing. For RVT-H reader, it is assumed as a write error, and the software used for writing cannot be started.

## Menus

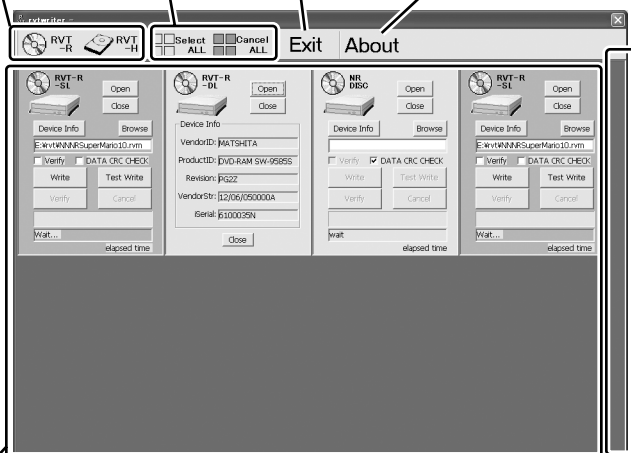
### Main Window

Select indication for RVT-R or RVT-H being connected.

Select or deselect all the devices.

Exits the software.

Displays the software version.

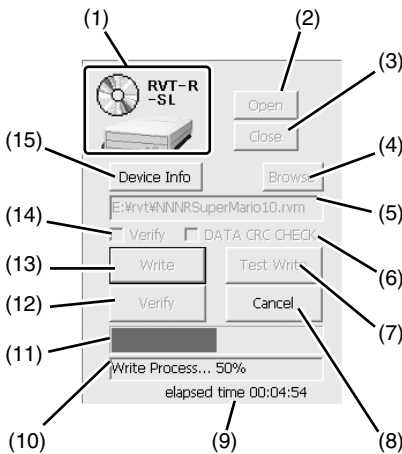


Subwindows indicating each device. (Details are described later.) The devices are arranged in the ascending order of their serial number, from left to right, top to bottom of the screen.

The scroll bar appears here when eight or more devices are connected.

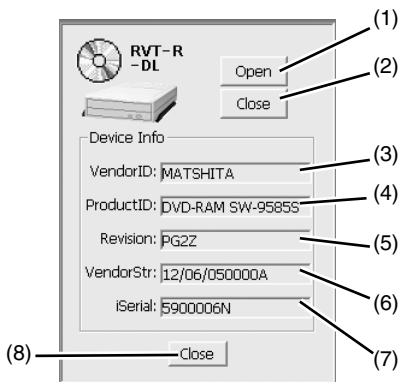


## Device Subwindow (RVT-R WRITER)



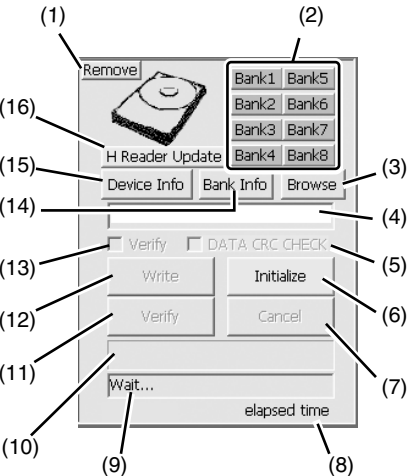
- (1) Indicates a media type being inserted into the drive.  
Blank is displayed when no media is inserted into the drive or other media type than NR DISC, RVT-R-SL, or RVT-R-DL is inserted in the drive. No operation is acceptable.
- (2) Open the tray of RVT-R WRITER.
- (3) Close the tray of RVT-R WRITER.
- (4) Open dialog box to select a file (master data file) for writing.
- (5) Display the file name (master data file) to be written onto media.
- (6) Checkbox to specify whether to execute the CRC check to the disk data section or not. If an error occurs during the CRC check, "Data File Error\*1" will appear on item (10).
- (7) Execute test writing.
- (8) Cancel the process being executed.
- (9) Display the elapsed time.
- (10) Display progress percentage. If an error occurs while processing tasks, the error message\*1 will appear on item (10).
- (11) Display the process being executed.
- (12) Execute verify processing.
- (13) Execute writing.
- (14) Checkbox to specify whether to verify or not.
- (15) Display detailed information of the device (described later).

## Detailed Device Information (RVT-R WRITER)



- (1) Open the tray.
- (2) Close the tray.
- (3) Indicates vendor ID.
- (4) Indicates product ID.
- (5) Indicates revision.
- (6) Indicates vendor unique string.
- (7) Indicates iSerial (eight digits).
- (8) Close the device Info window.

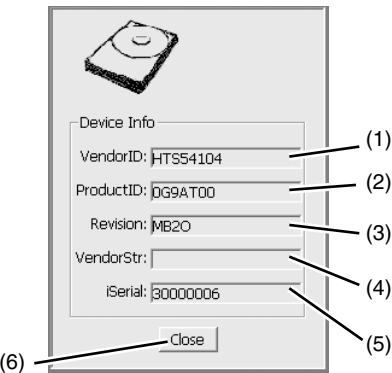
Device Subwindow (RVT-H READER)



- (1) Remove the RVT-H READER.
- (2) Indicates used or selected status of each bank.  
Empty bank: Light gray  
NR already written: Light turquoise  
RVT-R-SL already written: Light blue  
RVT-R-DL already written: Light blue  
Writing being selected: Light red  
Verify being selected: Light yellow
- (3) Opens a dialog box to select a file to be written (master data file).
- (4) Displays the file to be written (master data file).
- (5) Specify whether to execute CRC check for disk data. If an error occurs while checking, an error message "Data File Error" is displayed in the field (9).
- (6) Initializes the all banks in the RVT-H READER.
- (7) Aborts a process being executed.
- (8) Displays the elapsed time.
- (9) Displays the progress. See "Status Indication Message" on page 12.
- (10)Displays the percentage of completion.
- (11)Executes verify process.
- (12)Starts write process.
- (13)Specify whether to include verify process in write process.

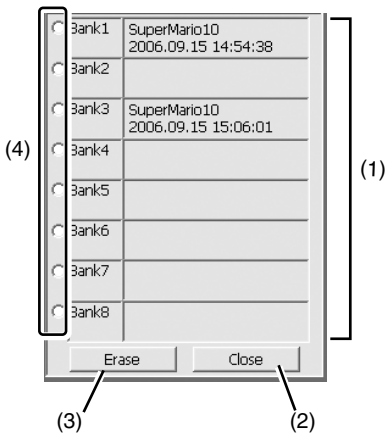
- (14)Indicates the detailed bank information. (See "Detailed Bank Information (for RVT-H READER)" on page 11.
- (15)Indicates the detailed device information. (See "Detailed Device Information (for RVT-H READER)" on page 10.
- (16)Opens the RVT-H READER Firmware Update window. (See "Update RVT-H READER Firmware (for RVT-H READER)" on page 11.)

Detailed Device Information (RVT-H READER)



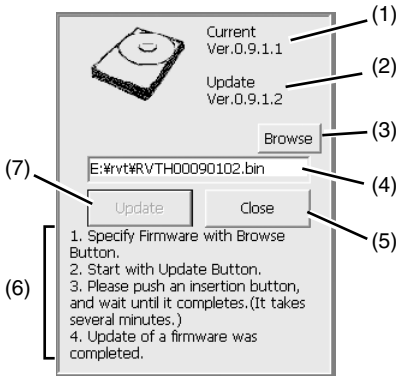
- (1) Indicates the manufacturer.
- (2) Indicates the product name.
- (3) Indicates the product version number.
- (4) Indicates the character string defined by the manufacturer.
- (5) Indicates the product serial number (eight digits).
- (6) Closes the Detailed Device Information window.

## Detailed Bank Information (RVTH READER Only)



- (1) Indicates information on each bank.
- (2) Closes the window.
- (3) Erases the information on the bank being selected with radio button.
- (4) Select a bank you want to erase its information.  
Clicking the [Erase] button erases the information.

## Update RVTH READER Firmware (RVTH READER Only)

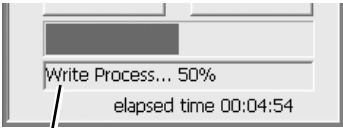


- (1) Indicates the version of the firmware in the RVTH READER that has been written.
- (2) Indicates the version of the RVTH READER firmware file to be written.
- (3) Specifies the RVTH READER firmware to be written.
- (4) Indicates the file name.
- (5) Closes the window.
- (6) Indicates procedures for updating.  
Messages 1 to 4 appears according to the progress status (see page 19 for detail).
- (7) Starts updating.

Status Indication Message

The Device subwindow on the main win-  
dow shows the status of the device being  
connected.

The following table lists messages and their  
meanings.



Status indication

Message	Meaning	Remarks
Wait...	Shows waiting status.	
DataFile Check... XX%	Indicates percentage of completion of CRC check process	
Write Process... XX%	Indicates percentage of completion of write process.	
Verify Process... XX%	Indicates percentage of completion of verify process.	
TestWrite Process... XX%	Indicates percentage of completion of test write process.	RVT-R WRITER only
Cancel	Indicates that the process was aborted.	
Complete Process...	Indicates that the final process is in progress.	
Complete	Indicates that the process completed successfully.	
Write Error (Error code*1)	An error occurred during writing.	
Verify Error (Error code*1)	An error occurred during verifying.	
TestWrite Error (Error code*1)	An error occurred during test writing.	RVT-R WRITER only
DataFile Error ( ) *2	One of the following three errors occurred. 1. CRC error in master data file 2. Decoding error (Password error) 3. Inconsistency between the media and the master data file	

\*1 Error format:

Write Error (X<sup>1</sup> X<sup>2</sup> Y<sup>1</sup> Y<sup>2</sup> Y<sup>3</sup> Y<sup>4</sup> Y<sup>5</sup> Y<sup>6</sup> Y<sup>7</sup> Y<sup>8</sup>)

When error classification is drive:  
Y<sup>1</sup> Y<sup>2</sup>: Byte 0 of STATUS offset  
Y<sup>3</sup> Y<sup>4</sup>: Byte 2 of STATUS offset SenseKey (Upper four bits are unmasked.)  
Y<sup>5</sup> Y<sup>6</sup>: Byte 12 of STATUS offset ASC  
Y<sup>7</sup> Y<sup>8</sup>: Byte 13 of STATUS offset ASCQ  
When error classification is Device I/O error:  
Error code acquired by GetLastError ()  
Classification:b7 0: Device error  
b7 1: Device I/O error  
b6-b4: Type 0: Media sense error 1: Write error 2: Verify error  
b3-b0: Error location

\*2 Abnormal end of mastering

- 11XX: Failed to open the temporary file.
- 12AA: Failed to obtain a handle for mastering.
- 13AA: Failed to obtain the block count for mastering.
- 14XX: Mastering file size exceeded the limit.
- 15XX: Failed to write into a temporary file.
- XX: Undefined error
  - AA: 00 = No mastering error was found.
  - 01 = The disk layout definition file is illegal.
  - 02 = Failed to open file.
  - 03 = Failed to read file.
  - 04 = The system file format is illegal.
  - 05 = Abort is specified by callback function.

If you cannot continue processing because the mastering file is being used by other device, a message "Mastering..Error (use by others?)" is displayed.

## Write/Test Write

Take the following steps to write onto media.

### — ✓CHECK—

RVT-R WRITER and RVT-H READER cannot be specified at the same time in gang writing.

## RVT-R WRITER

### 1. Power on the RVT-R WRITER, and insert a blank media (NR DISC, RVT-R-SL, or RVT-RDL).

Use the Open/Close button on the front panel of the RVT-R WRITER to open and close the tray.  
For gang writing, all drives must be filled with media.

### 2. Power on the computer, and connect the RVT-R WRITER with the computer through the USB cable.

### 3. Run the software.

### 4. Click a device field for the target device for writing.

The selected device field is displayed in light blue. Clicking again cancels selection. For gang writing, click the target device field or click [Select ALL].

### 5. Click the [Browse] button to select the master data file.

The selected file name is displayed in every target subwindow when the gang writing is specified.  
After selecting the master data file, the [Write] and [Test Write] buttons are enabled.

### 6. If you want to verify the written data, put a checkmark in [Verify] checkbox.

[Verify] is not applied to [Test Write].

### 7. Click the [Write] or the [Test Write] button to start writing.

When gang writing is specified, pressing the button on either device subwindow starts writing onto other devices.

When the CRC check is enabled, checking of data file starts first (When gang writing is specified, the progress of data file check is indicated on the subwindow of the device having the youngest serial number).

If the master data file is encrypted, you will be prompted to enter the password.

When a mismatch between the media type and master data file, "Data File Error" occurs.



### — ✓CHECK—

Click the [Cancel] button to abort the process. Note that the media to which the writing process has been started with the [Write] button becomes no longer available.

## RVTH READER

### — ✓CHECK—

Test writing to the RVT-H READER is unavailable.

### 1. Power on the computer and the RVT-H READER, and then connect the RVT-H READER with the computer through the USB cable.

For gang writing, all the target drives must be connected.

### 2. Run the software.

### 3. Select a bank for writing by clicking it on the device field.

The selected bank is displayed in light red. To cancel selection, click the bank several times until it is displayed in light gray.

For gang writing, click the target bank, or click [Select ALL].

### — ✓CHECK—

To write a data file of double-layer size, the two consecutive banks are required. Accordingly, bank 8 cannot be specified.

### 4. Click the [Browse] button to select the master data file.

The selected file name is displayed in every target subwindow when the gang writing is specified. Specifying the master data file enables the [Write] button.

### 5. If you want to verify the written data, put a checkmark in [Verify] checkbox.

### 6. Click the [Write] button to start writing.

When gang writing is specified, pressing the button on either device subwindow starts writing onto other devices.

When the CRC check is enabled, checking of data file starts first (When gang writing is specified, the progress of data file check is indicated on the subwindow of the device having the youngest serial number).

If the master data file is encrypted, you will be prompted to enter the password.

When a mismatch between the media type and master data file, "Data File Error" occurs.



### — ✓CHECK—

Click the [Cancel] button to abort the process. The [Cancel] button is unavailable for an incompletely written data.

## Verify

Take the following steps to perform verify process only.

### RVT-R WRITER

1. **Power on the RVT-R WRITER, and insert a media (NR DISC, RVT-R-SL, or RVT-R-DL) that contains data into the RVT-R WRITER.**

Use the Open/Close button on the front panel of the RVT-R WRITER to open and close the tray.

For gang processing, all drives must be filled with media.

2. **Power on the computer, and connect the RVT-R WRITER with the computer through the USB cable.**
3. **Run the software.**
4. **Click a device field for the target drive for verify.**

The selected device field is displayed in light blue. Clicking again cancels selection. For gang processing, click the target device field or click [Select ALL].

5. **Click the [Browse] button to select the master data file.**

The selected file name is displayed in every target subwindow when the gang processing is specified.

After selecting the master data file, the [Verify] button is enabled.

6. **Click the [Verify] button to start.**

When gang processing is specified, pressing the button on either device subwindow starts verifying on other devices.

When the CRC check is enabled, checking of data file starts first (When gang processing is specified, the progress of data file check is indicated on the subwindow of the drive having the youngest serial number).

If the master data file is encrypted, you will be prompted to enter the password.

When a mismatch between the media type and master data file, "Data File Error" occurs.



### — ✓ CHECK —

Click the [Cancel] button to abort the process.



## RVTH READER

1. **Power on the computer and the RVT-H READER, and then connect the RVT-H READER with the computer through the USB cable.**

For gang processing, all the target devices must be connected.

2. **Run the software.**

3. **Select a bank to be verified among the banks that contain data (displayed in light turquoise, blue, or green).**

The selected bank is displayed in light yellow.

For gang processing, click the target bank, or click [Select ALL].

---

### — ✓CHECK—

---

To verify a data file of double-layer size, specify the two consecutive banks. See Detailed Bank Information (RVT-H READER Only)" on page 11 for details.

---

4. **Click the [Browse] button to select the master data file.**

The selected file name is displayed in every target subwindow when the gang processing is specified.

After selecting the master data file, the [Verify] button is enabled.

5. **Click the [Verify] button to start.**

When gang processing is specified, pressing the button on either device subwindow starts verifying on other devices.

When the CRC check is enabled, checking of data file starts first (When gang processing is specified, the progress of data file check is indicated on the subwindow of the drive having the youngest serial number).

If the master data file is encrypted, you will be prompted to enter the password.

When a mismatch between the media type and master data file, "Data File Error" occurs.




---

### — ✓CHECK—

---

Click the [Cancel] button to abort the process.

---

## Initialize/Erase Bank (RVT-H READER Only)

Initialization of RVT-H READER and clearing of banks are available on RVT-H READER only.

### — ✓CHECK—

Performing procedures described below erases the data file in the RVT-H READER (or in the specified bank). Make sure that the RVT-H READER (or the specified bank) does not contain any important data file before starting procedure.

### Initializing RVT-H READER

1. **Power on the computer and the RVT-H READER, and then connect the RVT-H READER with the computer through the USB cable.**
2. **Run the software.**
3. **Click the [Initialize] button.**

### — ✓CHECK—

You can initialize another device while executing this initialization process.

### Erasing Bank

1. **Power on the computer and the RVT-H READER, and then connect the RVT-H READER with the computer through the USB cable.**
2. **Run the software.**
3. **Click the [Bank Info] button on the device to be initialized.**

The detailed information on the bank is displayed. See "Detailed Bank Information (RVT-H READER Only)" on page 11.

4. **Click the radio button at the left of the bank number you are going to erase.**
5. **Click the [Erase] button.**

### — ✓CHECK—

You can erase another bank while executing the initialization process.

## Updating RVT-H READER Firmware (RVT-H READER Only)

Updating RVT-H READER firmware is available only on RVT-H READER.

---

### — ✓CHECK—

---

Do not perform any of the following. Doing so may cause failure of the RVT-H READER.

- Power off the computer.
  - Disconnect the USB cable.
  - Quit the writing software.
- 

### 1. Obtain a firmware.

You can download the firmware file from the following URL:

<https://www.warioworld.com>

### 2. Power on the computer and the RVT-H READER, and then connect the RVT-H READER with the computer through the USB cable.

### 3. Run the software.

### 4. Click the [H Reader Update] button on the device to be updated.

A screen to update the firmware in the RVT-H READER appears. (See "Update RVT-H READER Firmware (RVT-H READER Only)" on page 11.)

### 5. Click the [Browse] button to specify the firmware file.

### 6. Click the [Update] button.

### 7. Depress the [Insertion] button on the RVT-H READER for about two seconds.

After a while, update of firmware completes and the all LEDs on the front panel of the RVT-H READER are turned off.

### 8. Turn off and on the RVT-H READER.

# CUI Edition

This section describes how to use the software of CUI (Character User Interface) edition.

## Starting and Exiting Software

On the command prompt screen, enter **rvtwt** to execute. If required, specify the command search path for the execution file you have copied in the directory of the computer. To quit the software, wait for completion of command execution, or press the Esc key.

### — ✓CHECK—

- To run this software, logon the system using the administrator account or other account which is a member of the Administrators group.
- Do not forcibly quit the software with CTRL+C.
- To remove the device while the software of CUI edition is running, use a relevant command only. Do not remove the device forcibly by using any other procedure.

If you execute **rvtwt** with no argument specified, the list of arguments (command, media, and parameter) available for this software is displayed. The argument must be case sensitive. Specify the argument exactly as in the next section, "Format and Commands".

## Format and Commands

**rvtwt COMMAND MEDIA PARAMETER ...**

The Usage is displayed if **rvtwt** is executed without parameter or with illegal parameter specified.

### — ✓CHECK—

COMMAND, MEDIA, and PARAMETER are case sensitive.

To abort (cancel) command execution, press the Esc key.

**Command**

Specify one of the following.

Command	Description	Remarks
--write	Write data.	
--vwrite	Write data and then verify the written data.	
--test	Perform test writing.	RVT-R WRITER only
--open	Open the tray.	RVT-R WRITER only
--close	Close the tray.	RVT-R WRITER only
--verify	Verify the written data.	
--info	Displays the information on the specified bank in the specified RVT-H READER.	RVT-H READER only
--erase	Clears the specified bank of the specified RVT-H READER.	RVT-H READER only
--init	Initializes the index area of the specified RVT-H READER.	RVT-H READER only
--list	Display the list of available devices.	
--remove	Removes the specified RVT-H READER.	RVT-H READER only
--fupdate	Updates firmware of RVT-H READER. "0" (zero) cannot be used for the serial to be specified by -d option because no gang processing is performed.	RVT-H READER only
--fver	Displays the current version of firmware stored in RVT-H READER.	RVT-H READER only

**Media**

Specify as shown below. (Do not enter a space character before and after the equal sign (=).)

Media	Description
--media=rvt r	For RVT-R WRITER
--media=rvt h	For RVT-H READER

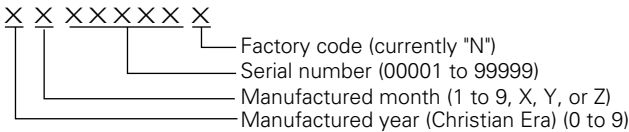
Parameter

Specify one of the following. (Delimit parameters with a space character.)

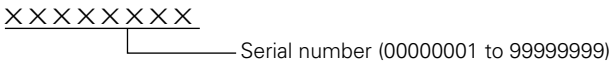
Parameter	Description	Remarks
-b <code>bnkNo</code>	Specify a bank number. Available value <code>bnkNo</code> : 1 to 8	RVT-H READER only
-f <code>filename</code>	Specification of file name Specify the file name you want to write or verify in <code>filename</code> .	
-p <code>password</code>	Specification of password Specify a password to decrypt the file. If this parameter is not specified for the encrypted file, a message to prompt password entry is displayed. If the file is not encrypted, this parameter is ignored.	
-d <code>serial</code>	Specification of device Specify the target device. Enter the serial number *1 (1 - 99999) stored in iSerial of the device. To specify all the devices, enter zero (0).	
-s	Specification of data CRC Use this parameter to ignore the data CRC check before proceeding the write/verify operation.	
-r	Remove the target RVT-H READER after command completes regardless of completion status (normal or abnormal).	RVT-H READER only

\*1 The product serial number consists of 8-digit character string. Its format is as shown below.  
You can also obtain the serial product number by using `--list` (iSerial value).

<RVT-R WRITER>



<RVT-H READER>



The table below shows options that can be specified for the command. (O: Can be specified, X: Cannot be specified, -: Ignored)  
Specifying an option indicated as "X" causes an error to occur.

**RVT-R WRITER**

Command	Option				
	--media	-f	-p <sup>*1</sup>	-d <sup>*2</sup>	-s
--write	--media=rvtr	○	○	○	○
--vwrite	--media=rvtr	○	○	○	○
--test	--media=rvtr	○	○	○	○
--verify	--media=rvtr	○	○	○	○
--list	--media=rvtr	×	×	×	×
--open	--media=rvtr	×	×	○	×
--close	--media=rvtr	×	×	○	×

\*1 Ignored when the file is not encrypted.

\*2 0: ALL, 1-99999: Only one device

**RVT-H READER**

Command	Option						
	--media	-b <sup>*1</sup>	-f	-p <sup>*2</sup>	-d <sup>*3</sup>	-s	-r
--write	--media=rvth	○	○	○	○	○	○
--vwrite	--media=rvth	○	○	○	○	○	○
--info	--media=rvth	○	×	×	○	×	○
--verify	--media=rvth	○	○	○	○	○	○
--erase	--media=rvth	○	×	×	○	×	○
--list	--media=rvth	×	×	×	×	×	×
--init	--media=rvth	×	×	×	○	×	○
--remove	--media=rvth	×	×	×	○	×	—
--fupdate	--media=rvth	×	○	×	○	×	○
--fver	--media=rvth	×	×	×	○	×	○

\*1 Specify a bank among 1 to 8.

\*2 Ignored when the file is not encrypted.

\*3 0: ALL, 1-99999999: Only one device.

Return Value

Value	Description
0	Normal end
1	Command/parameter error (With no argument specified, normal end "0".)
2	Terminated by Cancel command
3	Target device not found (unconnected or being used by other processing)
4	Master data file error
5	Abnormal end (When all devices are specified, one of them terminated abnormally.)
6	Abnormal end of mastering*1
10	System error (Failed to reserve the system resource, and other failure)

\*1 Abnormal end of mastering

11XX: Failed to open the temporary file.  
12AA: Failed to obtain a handle for mastering.  
13AA: Failed to obtain the block count for mastering.  
14XX: Mastering file size exceeded the limit.  
15XX: Failed to write into a temporary file.

XX: Undefined error  
AA: 00 = No mastering error was found.  
01 = The disk layout definition file is illegal.  
02 = Failed to open file.  
03 = Failed to read file.  
04 = The system file format is illegal.  
05 = Abort is specified by callback function.

If you cannot continue processing because the mastering file is being used by other device, a message "Mastering..Error (use by others?)" is displayed.



## Explanation of Screen

Shown below are images when each command is executed.

### List display (RVT-R WRITER)

```
D:\>rvtwt.exe --list --media=rvtr

iSerial  VendorID  ProductID  Rev.  VendorStr
5900001N MATSHITA  DVD-RAM SW-9585S  P62Z  12/06/050000A
5900002N MATSHITA  DVD-RAM SW-9585S  P62Z  12/06/050000A
5900005N MATSHITA  DVD-RAM SW-9585S  P62Z  12/06/050000A

Normal End(0).
```

### List display (RVT-H READER)

```
D:\>rvtwt.exe --list --media=rvth

iSerial  VendorID  ProductID  Rev.  VendorStr
00000001 HTS54104  0G9AT00    MB20
30000005 HTS54104  0G9AT00    MB20
30000006 HTS54104  0G9AT00    MB20

Normal End(0).
```

### Bank information (RVT-H READER only)

```
D:\>rvtwt.exe --list --media=rvth

iSerial  VendorID  ProductID  Rev.  VendorStr
00000001 HTS54104  0G9AT00    MB20
30000005 HTS54104  0G9AT00    MB20
30000006 HTS54104  0G9AT00    MB20

Normal End(0).
```

### Open (RVT-R WRITER only. Example when all devices are specified with "0".)

```
D:\>rvtwt.exe --open --media=rvtr -d 0

Normal End(0).
```

### Close (RVT-R WRITER only. Example when the device having a serial number "1" is specified.)

```
D:\>rvtwt.exe --close --media=rvtr -d 1

Normal End(0).
```

Write \*1 (RVT-R WRITER)

```
D:\>rvttwt.exe --write --media=rvtr -d 0 -f SuperMario10.rvm
PRESS ESC KEY TO ABORT.
password:***
WRITE:
iSerial : Status
5900001N : Ready
5900002N : Ready
5900005N : Ready

Data File check(01:57) : 100% OK
iSerial % P elapsed progress
5900001N (100) (W) 00:30:37 | #####...:Done
5900002N (100) (W) 00:30:49 | #####...:Done
5900005N (100) (W) 00:31:23 | #####...:Done

Normal End(0).
```

Cancel is available even while entering password.

Will not proceed to the next step until all devices become ready.

NO DISC: No disk is inserted.

No Blank Medium: For Write or Test Write, blank media must be used.

Blank medium: For Verify, the media must not be blank.

Medium Mismatch: The media disagrees the master file data.

Verify (RVT-R WRITER)

```
D:\>rvttwt.exe --verify --media=rvtr -d 0 -f SuperMario10.rvm
PRESS ESC KEY TO ABORT.
password:***
VERIFY:
iSerial : Status
5900001N : Ready
5900002N : Ready
5900005N : Ready
Data File check(01:58) : 100% OK
iSerial % P elapsed progress
5900001N (100) (V) 00:23:01 | #####...:Done
5900002N (100) (V) 00:23:01 | #####...:Done
5900005N ( 74) (V) 00:17:39 | #####...:Error(23F0031000)

Abnormal Error(5).
```

Cancel is available even while entering password.

\*2 An error occurred on any device.

\*1 The progress percentage is updated every 1% along with the elapse of time.  
A symbol "#" indicates the progress of 5%.  
"P" denotes the following:  
W: Write V: Verify T: Test

\* 2 Error format

Error (X<sup>1</sup> X<sup>2</sup> Y<sup>1</sup> Y<sup>2</sup> Y<sup>3</sup> Y<sup>4</sup> Y<sup>5</sup> Y<sup>6</sup> Y<sup>7</sup> Y<sup>8</sup>)

When error classification is drive:  
Y<sup>1</sup> Y<sup>2</sup>: Byte 0 of STATUS offset  
Y<sup>3</sup> Y<sup>4</sup>: Byte 2 of STATUS offset SenseKey (Upper four bits are unmasked.)  
Y<sup>5</sup> Y<sup>6</sup>: Byte 12 of STATUS offset ASC  
Y<sup>7</sup> Y<sup>8</sup>: Byte 13 of STATUS offset ASCQ

When error classification is Device I/O error:  
Error code acquired by GetLastError ()

Classification:b7 0: Device error  
b7 1: Device I/O error  
b6-b4: Type 0: Media sense error 1: Write error 2: Verify error  
b3-b0: Error location

**Verify after writing \*1 (RVT-R WRITER)**

```

D:\>rvtt.exe --vwrite --media=rvtr -d 0 -f SuperMario10.rvm
PRESS ESC KEY TO ABORT.
password:***
WRITE-VERIFY:
iSerial : Status
5900001N : Ready
5900002N : Ready
5900005N : Ready
Data File check(01:57) : 100% OK
iSerial % P elapsed progress
5900001N ( 21) (W) 00:07:52 | ##### ...:Error(18F1040302)
5900002N (100) (V) 01:06:06 | #####...:Done
5900005N (100) (V) 01:08:36 | #####...:Done

Abnormal Error(5).

```

Cancel is available even while entering password.

An error occurred on any device.

**Test Write (RVT-R WRITER only)**

```

D:\>rvtt.exe --test --media=rvtr -d 0 -f SuperMario10.rvm
PRESS ESC KEY TO ABORT.
password:***
TESTING-WRITE:
iSerial : Status
5900001N : Ready
5900002N : Ready
5900005N : Ready
Data File check(01:59) : 100% OK
iSerial % P elapsed progress
5900001N (100) (T) 00:29:23 | #####...:Done
5900002N (100) (T) 00:29:29 | #####...:Done
5900005N (100) (T) 00:29:23 | #####...:Done

Normal End(0).

```

Cancel is available even while entering password.

**Disconnect (RVT-H READER only)**

```

D:\>rvtt.exe --remove --media=rvth -d 30000006

iSerial
30000006 : Removed

Normal End(0).

```

**Erase bank (RVT-H READER only)**

```

D:\>rvtt.exe --erase --media=rvth -d 30000006 -b 1

Normal End(0).

```

\*1 The indication of "P" changes from "W" to "V".

**Display RVT-H READER firmware version (RVT-H READER only)**

```
D:\>rvtt.exe --fver --media=rvth -d 10000639
```

```
iSerial    Current  
10000639  Ver.0.9.2.2
```

```
Normal End(0).
```

**Update RVT-H READER firmware (succeeded) (RVT-H READER only)**

```
D:\>rvtt.exe --fupdate --media=rvth -d 30000006 -f E:\rvt\RVTH00090102.bin
```

```
Firmware update:
```

```
Serial:30000006
```

```
Current Ver.0.9.1.1
```

```
Update  Ver.0.9.1.2
```

```
Please push an insertion button, and wait until it completes.
```

```
(It takes several minutes.)
```

```
Update of a firmware was completed.
```

```
Normal End(0).
```

**Update RVT-H READER firmware (failed) (RVT-H READER only)**

```
D:\>rvtt.exe --fupdate --media=rvth -d 30000006 -f E:\rvt\RVTH00090101.bin
```

```
Firmware update:
```

```
Serial:30000006
```

```
Current Ver.0.9.0.0
```

```
Update  Ver.0.9.1.1
```

```
Please check Clear of HDD, or a file! Or a device has not been stopped!
```

```
Abnormal Error(5).
```

# Troubleshooting

This section describes solutions to problems you may encounter while using this software.

Symptom	Recommended action
Fail to start software	<ul style="list-style-type: none"> <li>● Login the computer with the user belonging to Administrator group.</li> <li>● Starting GUI and CUI editions simultaneously on the same computer causes a malfunction to occur.</li> </ul>
Fail to write data. Both the [Write] and the [Test Write] buttons are disabled.	<ul style="list-style-type: none"> <li>● Use a media applicable to the device. (See page 4.)</li> <li>● After the [Test Write] process completes, open the tray once, and then close it. This enables the [Write] and [Test Write] button.</li> <li>● Use the dedicated writing software. (See page 4.)</li> </ul>
Write error occurs.	<ul style="list-style-type: none"> <li>● Make sure that the installation place is appropriate to the device. (Refer to the User's Guide of the device.)</li> <li>● Make sure that the cables are connected firmly.</li> </ul>
Fail to gang writing	<ul style="list-style-type: none"> <li>● Recommended number of devices for successful gang writing is up to eight.</li> <li>● Make sure the connection between the device and computer, and other connection configuration. (See page 4.)</li> </ul>
Fail to accept the command (CUI edition)	<ul style="list-style-type: none"> <li>● Commands and parameters must be case sensitive. Check CapsLock status, and enter them correctly.</li> <li>● Check whether a space character is required between commands or parameters or not. Enter them correctly. (See page 20.)</li> <li>● If an error occurred, an error code is shown in return value. See page 24 for details of return values. At normal end, the return value shows zero (0).</li> </ul>
Fail to open the tray	<ul style="list-style-type: none"> <li>● When the software command failed to open the tray, use Open/Close button on the front of the device. (Refer to the User's Guide of the device.)</li> <li>● Power off the device, unplug the power cord, then press the emergency eject hole to open the tray. (Refer to the User's Guide of the device.)</li> </ul>
Fail to write a data file of double-layer size	<ul style="list-style-type: none"> <li>● When writing onto the RVT-H READER, specify the two consecutive banks.</li> <li>● The bank 8 cannot be specified when writing onto the RVT-H READER.</li> </ul>
Error message is displayed on the screen	See page 12 for GUI Edition and page 26 for CUI edition.
Mastering error has been occurred	See page 12 or page 24 for detail.