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WRITE-ONCE CD-R System User's Manual

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WRITE-ONCE CD-R System

User's Manual

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Introduction

Segacdw is a program that records a CD image file created on a virtual CD system (command VCDBUILD) on a CD-R disc using a CD-R recording unit. This command is invoked from the system command prompt.

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Installation

Hardware Installation

Connect the YAMAHA CDE/CDR100 CD-R recording unit (CDE100 is the model name for CDR100 with the system case) to the host machine using the SCSI interface. See the CDR100 manual for details and how to connect the recording unit.

Setting CDR100 SCSI ID to 5, eliminates the necessity of setting the SCSI ID to the command `segacdwr` argument each time.

Software Installation

Copy the `segacdwr` execution file from the floppy disk distribution medium to the hard disk of your host machine. Set the PATH if necessary.

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Command Reference

The CD Writter Command

Command name:
segacdw

Syntax:
segacdw [-i #] [-s #] [-t] image_prefix

Description:
This command writes to a CD image file a CD-R using YAMAHA's CDR100 CD-R recording unit. The command is invoked from the system command prompt.

Arguments:
The name of the CD image file is specified to the image_prefix image_prefix. The name of CD image file is the prefix of files which have the .dsk, the .emu and the .toc file name extensions. These files must all be in the same directory. The CD image files created with the Virtual CD System should have the file name extension .dsk. Use the file name extension .emu for the CD image files created with the C-Trac Builder.

Options:

- i Specifies the destination to be transmitted the CD image files by the SCSI ID 0 to 7. In other word, specify SCSI ID of CDR 100. The default is 5.
- s Specifies the writing speed. Specify any one out of the values 1 (normal speed), 2 (double speed) and 4 (quadruple speed). The default is 4, which writes at quadruple speed.
- t Write with CDR100 test mode. The actual CD-R is not written on it.

Examples:
To record a CD image file consisting of test.dsk and test.toc onto a CD-R, specify as follows.

```
C> segacdw test
```

The following is the test to record at double speed on a recording unit with a SCSI ID of 6.

```
C> segacdw -i 6 -s 2 -t test
```

The TOC File Generator Command

Command name:

gentoc

Syntax:

gentoc [-v] image_prefix

Description:

This command generates a TOC file from a CD image file created using C-Trac Builder for MEGA-CD/SEGA-CD. The command is invoked from the system prompt.

Arguments:

The name of the CD image file is specified at an image_prefix image_prefix. The CD image file name is the prefix of a file which has the an .emu file name extension.

Options:

-v Displays such information as the contents of the Cue sheet.

Example:

To generate TOC file test.toc from test.emu, specify as follows.

C> gentoc test



Troubleshooting

The following sections describe the measures against the error message display.

Image File Errors

The error messages described in this section will be displayed when there are problems with the CD image. Make sure the .dsk file or the .emu file is in the same directory as the .toc file. Make sure the files are created correctly using the Virtual CD System. If the error still remains, you will have to create the CD image again.

Image File Format Errors

The following error message displays indicate that the format of the CD image to be recorded is incorrect.

- Bad data form
- unknown data form in line
- Error Data Length

The following error message display indicates either the mode of the CD-ROM to be created is incorrect or a CD image format is not supported by segacdwr.

- Unknown data mode

ISRC Length Errors

The following error message display indicates that there is a problem with the length of the ISRC stored in the CD image. Check the original data and regenerate the CD image.

- ISRC length error in line.

Cue Sheet Errors

The following error message display indicates that there are problems with the Cue sheet. Recreate the .dsk file and .toc file using the Virtual CD System.

- Cue Sheet intermediate conversion failed
- Cue Sheet parsing failed
- Cue Sheet conversion failed
- Cue sheet size error
- Cue sheet too large
- Empty cue sheet
- No track definitions in cue sheet
- Can't find lead-out in cue sheet
- Nocore for cue sheet

The following error message indicates that there is not a Cue Sheet generated or there is not a file that contains the Cue Sheet not in the same directory as the image file.

- No cue sheet

Errors Generated by the Relationship Between the Host Machine and CD-R Recording Unit

CD Image Transmission Error

The following error message indicates that the I/O speed of the host hard disk cannot keep the same the writing speed as of its CD-R writing unit. Specify the correct speed using option-s.

- Buffer Under Run

CD-R Recording Unit Setting Errors

The following error message is displayed when an incorrect writing speed was specified. Specify the correct writing speed using the option-s.

- Error:Bad speed value

The following error message is displayed when the CDR100 firmware version of the is old and cannot create CD discs for SEGA Saturn. Change to the correct version of the CDR100 firmware.

- Firmware upgrade of CD recorder is needed to use this software.

Errors Returned by CD-R Recording Unit

The following error messages are returned by the CD-R recording unit.

- Unknown sense key
- Unknown additional sense code
- Field Replaceable Unit failed
- Number of Errors
- Error Number [%d] at Logical Block Address
- No Additional Sense
- Caddy out
- Drive Not Ready
- Communication Failure
- Track Following Error
- Unrecoverd Read Error
- Positioning Error
- Recovered Read Data With Retries
- Recovered Read With ECC Correction
- Parameter List Length Error
- Invalid Command
- Invalid Block Address
- Illegal Field in Command Descriptor
- Invalid LUN
- Invalid Field Parameter List
- Medium Changed
- Power-on Reset or Bus Reset Occurred



- Command Sequence Error
- Medium Format Corrupted
- Write Data Error with CU
- Monitor Atip Error
- Invalid Bits in Identify Message
- Diagnostic Failure
- Power-On or Self Test Failure
- Internal Controller Error
- SCSI Parity Error
- Write Operation in Progress
- Medium(Caddy) Load or Eject Failed
- Unable to Read TOC, PMA or Subcode
- Operator Medium Removal Request
- End Of User Area encountered on this Track
- Illegal Mode for this Track
- Illegal Track
- Command Currently Not Valid
- Medium Removal Is Prevented
- Stopped on Non-data block
- Invalid Start Address
- Attempt to cross track-boundary
- Illegal Medium
- Application Code Conflict
- Illegal block-size for command
- Block-size Conflict
- Request for Fixation Failed
- End Of Medium Reached
- Illegal Track Number
- Data Track Length Error
- Buffer Under Run
- Illegal Track Mode
- Optimum Power Calibration Error
- Calibration Area Almost Full
- Current Program Area Empty
- No EFM at search address
- Link Area Encountered
- Calibration Area Full
- Dummy blocks added
- Block size format conflict
- Current Command Aborted
- BARCODE READING ERROR
- Recovery Needed
- Can't Recover from track
- Can't Recover from Program Memory Area
- Can't Recover from Lead-in Area
- Can't Recover from Lead-out Area
- Laser Current Over