

CD/DVD Disc Duplicator

Model: Hard Drive Version

Operation Guide

Table of Contents

1. Quick Start Guide

1.1 Copying from Internal Hard Drive to Disc

1.2 Copying from Disc to Disc

1.3 Switching Duplication Modes

2. Changing the Hard Drive Partition

3. Making a Composite CD with Hard Drive

4. Making a Composite CD without Hard Drive

5. USB/1394 Option

6. Menu Items

6.1 Main Menu

6.2 Sub Menu

6.3 Setup Options

7. Troubleshooting

1. Quick Start Guide

1.1 Copying from Internal Hard Drive to Disc

1. Power on the system by pressing the round button at the bottom right of the front of the unit. This unit will run through a self-test, displayed on the LCD screen.

Power On ..15

2. Once the self-test procedure is completed, the COPY Mode will display on the LCD screen. Ensure that the duplicator is in the Hard Drive mode. Consult the manual for further detail on how to change to HDD to Disc Mode.

Copy
<mode

3. To load a CD/DVD into a Hard Drive Partition, press the MODE button a few times until the LCD screen reads Load.

Load
<mode

4. Insert the source disc into the top drive. The duplicator will scan the disc and begin to load it onto the hard drive partition for duplication later. The LCD screen will display numbers counting up as it loads.

Current HDD Partition Disc size in Megabyte and Duration

Load	AA691M78:41
L0620+00	0X32 0: 16

Loading Progress Load Speed Elapsed Time

5. Once the load is completed, the LCD will flash between Load and Pass. It will also eject the master CD/DVD. Remove the CD/DVD disc from the drive.

Pass AA691M78:41
L0691+00 0X44 2: 33

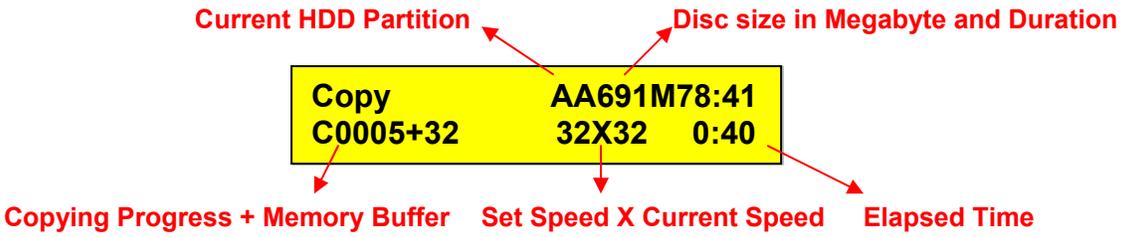
6. To begin the duplication process, press the MODE button a few times until you get back to the Copy Mode. The HDD partition AA is now ready to be copied.

Copy AA691M78:41
<mode

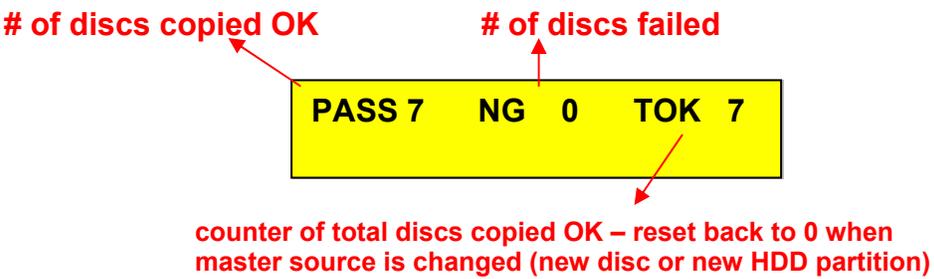
7. Open the drive trays and load a blank CD/DVD in each drive. Close each drive after you load the disc. The LCD will now count up from 1start, 2start and up to the full capacity of the system. The unit will start copying automatically if all drives have been loaded. If you wish to copy fewer than the full capacity, press GO button to start copying.

Copy AA691M78:41
<mode 7start >

8. The duplication process will start and the LCD will display the copying progress and speed.



9. Once the duplication process is completed, the system will eject the discs that have been copied correctly. The LCD will display the number of copies that have PASSED and FAILED. Remove the discs and discard the failed discs.



10. For more copies of the same CD/DVD, repeat steps 7 through 9. For new CD/DVD, repeat steps 3 through 9.

1.2 Copying from Disc to Disc

1. Power on the system by pressing the round button at the bottom right of the front of the unit. This unit will run through a self-test, displayed on the LCD screen.

Power On ..15

2. Once the self-test procedure is completed, the COPY Mode will display on the LCD screen. Ensure that the duplicator is in the Disc to Disc mode. Consult the manual for further detail on how to change to Disc to Disc Mode

Copy
<mode

3. Insert the master disc into the top drive. The duplicator will scan and begin to analyze the disc. The LCD screen will display the information about the disc.

Copy 691M78:41
<mode

4. Open the remaining drive trays and load a blank CD/DVD in each drive. Close each drive after you load the disc. The LCD will now count up from 1start, 2start and up to the full capacity of the system. The unit will start copying automatically if all drives have been loaded. If you wish to copy fewer than the full capacity, press GO button to start copying.

Copy 691M78:41
<mode 7start >

5. The duplication process will start and the LCD will display the copying progress and speed.

Copy 691M78:41
C0005+32 32X32 0:40

Disc size in Megabyte and Duration

Copying Progress+Memory Buffer Set Speed X Current Speed Elapsed Time

6. Once the duplication process is completed, the system will eject the discs that have been copied correctly. The LCD will display the number of copies that have PASSED and FAILED. Remove the discs and discard the failed discs.

of discs copied OK

of discs failed

PASS 7 NG 0 TOK 7

counter of total discs copied OK – reset back to 0 when master source is changed (new disc or new HDD partition)

7. For more copies of the same CD/DVD, repeat steps 4 through 6. For new CD/DVD, repeat steps 3 through 6.

1.3 Switching Duplication Modes

1. To switch the system between Disc-to-Disc and HDD-to-Disc modes, press and hold the MODE button for 5 seconds. A chirping sound will be heard. Release the MODE button and the display will change to indicate that it is in the Setup Mode.

Setup
<mode Go>

2. Press the GO button and the LCD will display CD to CD. Press MODE button to toggle between Yes and No. Yes: Disc to Disc Mode No: HDD to Disc Mode

CD to CD
[*] No [Q]

3. Press GO button and the system will take you back to the Copy Mode again. If no changes has been made, you will enter the next Setup options. Press GO button several times to get back to Setup Mode again. Then press and hold MODE button to exit the Setup Mode. For more details on how to browse around the menu items, consult the Menu Items section in the menu.

Edit
<mode

9. Place the master CD that contains the first track(s) you wish to copy to the hard drive in the first CD drawer. Close the CD drawer. Note that the system automatically starts analyzing the contents of the master CD and displays the prompt, **begin track**:

Begin Track
[+] 0 [Q]

10. Press the **Mode** button until the number of the first track you wish to load appears. For example, if you want to load track number 9 as the first track in your compilation of tracks, press the **Mode** button nine times to display the number 9. For example:

Begin Track
[+] 9 [Q]

11. Press the **Go** button to indicate that you want the copy process to start at the beginning of track number 9.
12. When **end track** is displayed in the LCD panel, press the **Go** button again to indicate that you want to copy just the one track:

End Track
[+] 9 [Q]

In this example, we have just identified track 9 as the first track to be copied to the selected partition of the hard disk. The LCD will redisplay track 0, and it will indicate the number of minutes that the first track occupies in the partition. The identified track (track 9) occupies four minutes, thirteen seconds of the partition on the hard drive:

Begin Track 04:13
[+] 0 [Q]

13. To copy the identified track from the first master CD to the partition on the hard drive, press the **Go** button again. The system will copy the track and the display panel will indicate the number of minutes loaded into the partition, as shown in the example below:

Edit L0038	AA 38M04:13
---------------	-------------

When the system has finished loading the selected track you will hear a three-tone beep, the master CD will be ejected automatically, and the LCD panel will display “pass.”

14. Place another master CD into the first CD drive. Wait until the system analyzes it and displays the first of the edit prompts:

Begin Track	04:13
[+]	0 [Q]

Note that the number of minutes that have been loaded into partition AA of the hard drive is displayed in the top right corner of the LCD display. This number of minutes will help you decide how many tracks you can load. The maximum is 80 minutes.

15. At the **begin track 0** prompt, press the **MODE** button to display the number of the track you wish to copy.
16. Press the Go button at the prompt, **begin track**.
17. Press the Go button again at the prompt, **end track**.
18. At **begin track 0**, make your next selection using the **MODE** button to select the track.
19. Press the Go button at **begin track**.
20. Press the Go button again at **end track**.
21. Press the Go button again to load the selected track(s).
- When the tracks have successfully loaded, the master CD is automatically ejected, and “pass” is displayed.

To add consecutive tracks, such as tracks 1, 2, 3, and 4, do the following:

22. At the **begin track 0** prompt, press the Mode button to display the number of the first track you wish to copy.
23. Press the Go button at the prompt, **begin track**.
24. At **end track**, press the Mode button to select the last track in the series.
25. Press the Go button again at the prompt, **end track**.
26. Press the Go button again to load the selected tracks.

When the tracks have successfully loaded, the master CD is automatically ejected, and “pass” is displayed.

27. Press the Go button again to load the selected track(s).

When the tracks have successfully loaded, the master CD is automatically ejected, and **pass** is displayed.

You can delete the last track from the partition in the hard drive. Here’s how: Press and hold the **Mode** button until you view the **setup** option. Then press the Mode button until you display the **delete** function. Press the Go button to delete the last track that was loaded to the hard drive.

28. Press and hold the **Mode** button to display the **copy** mode.

29. Place a blank CD in the first CD drawer. Close the drawer.

30. At the system prompt, **1start>**, press the Go button to copy the tracks from the hard drive to the CD.

You have already set the system up to copy from the hard drive to CD, using all of the available drawers. You can make multiple copies of your track compilation by placing blank CDs in one or all of the remaining drawers. The system will automatically detect the number of blank CDs in the CD drawers. When you are copying fewer than maximum CDs, you must press the Go button to begin the duplication process. (It starts automatically when you put in all of the blank CDs.)

4. Making a Composite CD without Hard Drive

This procedure explains how to:

- identify and copy selected tracks from multiple CDs directly into blank CDs.

Before you begin, make sure you are in the Disc-to-Disc mode.

1. Turn on the system. Note the mode of operation in the LCD display area (**copy**, **load**, **emulate**, etc.). Your LCD display should look something like this:



Copy
<mode

2. Press and hold the Mode button until you hear the system “chirp.” Then release the Mode button. You should see **setup** displayed in the LCD panel:



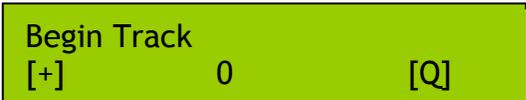
Setup
<mode Go>

3. Press the Mode button once to enter the Edit mode.



Edit
<mode

4. Place the master CD that contains the first track(s) you wish to copy to the hard drive in the first CD drawer. Close the CD drawer. Load the blank CD into the remaining drawers and press GO. The system automatically starts analyzing the contents of the master CD and displays the prompt, **begin track**:



Begin Track
[+] 0 [Q]

5. Press the **Mode** button until the number of the first track you wish to copy

appears. For example, if you want to load track number 9 as the first track in your compilation of tracks, press the **Mode** button nine times to display the number 9. For example:



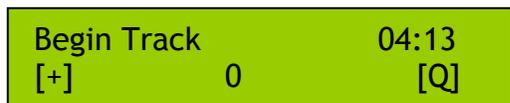
6. Press the Go button to indicate that you want the copy process to start at the beginning of track number 9.
7. When **end track** is displayed in the LCD panel, press the **Go** button again to indicate that you want to copy just the one track:



8. The system will ask you if want to finalize the CD. If you have more tracks from another CD to be copied, select **No** and press Go button. The system will begin to copy the selected track to the blank CD.



9. When the tracks have successfully copied, the master CD is automatically ejected, and "pass" is displayed.
10. Place another master CD into the first CD drive. Wait until the system analyzes it and displays the first of the edit prompts:



Note that the number of minutes that have been copied to the new disc is displayed in the top right corner of the LCD display. This number of minutes will help you decide how many tracks you can still copy. The maximum is 80 minutes.

11. Repeat the same procedures to copy more tracks to the CD.
12. If you have no more tracks to be copied, remember to select **Yes** to Finalize the disc. This will close the current Disc and no more track can be added. The copied CD cannot be used if not finalized.

13. Press the Go button again to copy the selected tracks.

When the tracks have successfully copied, the master CD is automatically ejected, and “pass” is displayed.

5. USB/1394 Connection (Optional)

On the back of the duplicator there is a USB or USB/1394 Connector. This slot lets you connect the bottom drive to your PC.

Using the USB/1394 Connection:

Have your PC on and booted up ready to go. Have the CD/DVD Duplicator plugged into the wall, and the USB/1394 switch on the back of the machine switched to “ON”.

Turn on the CD/DVD Duplicator. On your computer you should soon see a pop-up message saying New Device Detected. If you open up “My Computer” on your PC you should now see a new DVD drive there.

You can now use this drive to create your master CD/DVD. When You are done using this drive and ready to duplicate. Turn the USB switch back to “Off”, and restart the duplicator.

6. Menu Items

Overview of Menu Items:

<u>Main Menu</u>	<u>Sub-Menu</u>	<u>Set up Options</u>
(MODE: next, GO: enter) (Press and hold MODE for 5 seconds to enter Sub-Menu)	(MODE: next, GO: enter) (Press and hold MODE for 5 seconds to go back to Main Menu)	(GO:next, MODE: change setting)
A. Copy	1. Setup →	1.1 CD to CD
B. Copy+Comp	2. Edit	1.2 HDD Partition Size
C. Emulate	3. Delete	1.3 HDD Partition Group
D. Emu+Copy	4. Clear	1.4 HDD Partition of
E. Load	5. Disc Info	1.5 Start Writers
F. Compare	6. Show Drive	1.6 Write Method
G. Quick Erase	7. Burn in	1.7 CD Write Speed
H. Verity	8. Update	1.8 HD to CD Write Speed
I. External		1.9 DVD Write Speed
		1.10 HDD to DVD Write Speed
		1.11 CDROM Drive
		1.12 Autoloader
		1.13 Load Nonblank Disc
		1.14 CDDA Load Speed
		1.15 Grip Before Accept
		1.16 Eject Disc
		1.17 Buzzer
		1.18 CD+G
		1.19 CopyComp Eject
		1.20 Read CDDA Index0
		1.21 Skip Read Error
		1.22 Mode 2 Compare
		1.23 Power On Wait
		1.24 GO load trays
		1.25 Transfer Mode
		1.26 Turbo copycomp
		1.27 Language
		1.28 Model Number and Version
		1.29 Change Password
		1.30 Startup Command
		← Back to Setup

6.1 Main Menu:

A. Copy: This is the primary function of the duplicator. When set to Copy, the duplicator will transfer the contents of a master disc or the current hard drive partition to any blank discs in the tower input bins.

B. Copy+Comp: Like the “Copy” function, but followed by the Compare function (see “Compare”).

C. Emulate: Like the “Copy” function, but nothing is actually written to the blank discs. It is used for testing Master disc readability and hardware. Emulate function does not work with DVD+R disc.

D. Emu+Copy: After emulation is completed and successful, the duplicator will begin writing the actual data to the discs.

E. Load: This function is used to load a Master disc onto its current partition. A Master must first be loaded to the hard drive before the Copy function can be used.

F. Compare: This function will compare bit-for-bit the source disc and destination discs and will report an error if the two sets of discs do not match. This function does not work with Audio or Video CDs (VCD). Audio or Video CDs will instead be verified (see “Verify”).

G. Quick Erase: Allows data on CD-RW/DVD-RW to be erased.

H. Verify: Verification compares the structure of the discs in any drive against the industry standard. This function is good for verifying that your source disc is a suitable Master and can be read in most standard devices.

I. External: The External function is not used.

6.2 Sub-Menu:

Holding down the MODE button for 5 seconds while in the Primary Menu will bring up the Sub Menu. Press the MODE button to cycle through the options and press GO button to select.

1. Setup: Different settings to control the duplicator’s operation. See Setup Options for details.

-
- 2. Edit:** see Making a Composite CD section for details.
 - 3. Delete:** Selecting "Delete" and pressing the GO button will delete the last track of a multi-track disc stored in the current partition of the hard drive.
 - 4. Clear:** Pressing GO will delete the contents of the currently selected partition.
 - 5. Disc Info:** Displays information from the media discs that are loaded to the writers, such as max. write speed, capacity, etc.
 - 6. Show Drives:** The LCD will display all devices connected with the duplicator, i.e. CD-ROM / DVD-ROM, CD-writer / DVD-writer, and hard drive. Press the MODE button to scroll through the devices. Press GO to exit.
 - 7. Burn In:** This function allows you to test if the duplicator is working properly. Please make sure a master disc is placed into the CD-ROM / DVD-ROM first. DVD+R disc is not available under this function.
 - 8. Update:** Under no circumstances should you attempt to update the firmware without express permission from the manufacturer or with firmware that is not specific firmware provided by the manufacturer.

Load the disc containing the latest firmware data into a CD-ROM/DVD-ROM drive and the duplicator should find the data and update its firmware automatically. During updating, don't turn off the power of machine until the update is complete. Turning off the machine during an update may cause severe damage!

6.3 Setup Options:

Holding down the MODE button for about 5 seconds then releasing, will bring up the Sub Menu. Press the GO button once to activate the Setup Options. We suggest you use the default settings during the whole process and not to make any changes unless you are familiar with these functions.

* To reset factory defaults on your unit simply power the unit down. Press and hold the "Mode" button for 15 seconds while the unit is powering up. You will see the display go through a series of tests and boot the "Copy" mode screen.

1.1 CD to CD *See Changing Duplication Mode for more detail.*

Set "Yes" to copy directly from CD-RW / DVD-RW to other burner(s) or set "No" to copy from selected partition of hard drive via the autoloader. Press the MODE button to change the setting. Press GO to confirm.

Default: No

1.2 HDD Partition Size See *Changing HDD Partition for more detail.*

Press MODE button to change.

Auto: controller will select partition size based on drives installed.

DVD Dual Layer Drive: 9.6G

DVD Single Layer Drive: 4.8G

CD: 850M

Default: Auto

1.3 HDD Partition Group See *Changing HDD Partition for more detail.*

Partition groups differ on the capacity of the hard drive installed in your unit.

Press the MODE button to change the Partition Group. Press GO to confirm.

Default: A

1.4 HDD Partition See *Changing HDD Partition for more detail*

Select partition to be loaded to or copied from. Press the MODE button to change the Partition Group. Press GO to confirm.

Default: A

1.5 Start Writers

This controls the number of writers that will be copying. This should normally equal the number of writers installed. However, if you wish to only use 2 out of 4 writers for example, then you can select 2 here the remaining 2 will be ignored during duplication. Press the MODE button to change the setting. Press GO to confirm.

Default: Number of CD/DVD writers installed in the unit.

1.6 Write Method

Choose Disc-At-Once or Track-At-Once. Track-At-Once is normally used only when mixing multiple tracks via the controller. We recommend leaving this at Disc-At-Once. Press the MODE button to change the setting. Press GO to confirm.

Default: Disc at Once

1.7 CD Write Speed

This setting controls the disc to disc writing speed for CD. Lowering the speed will ease duplication of troublesome masters. You may also lower the speed to allow use of older or slower-rated recordable media. Press the MODE button to change the setting. Press GO to confirm.

Default: 32X

1.8 HD to CD Write Speed

This setting controls the HDD to disc writing speed for CD. Lowering the speed will ease duplication of troublesome masters. You may also lower the speed to allow use of older or slower-rated recordable media. Press the MODE button to change the setting. Press GO to confirm.

Default: Max

1.9 DVD Write Speed

This setting controls the disc to disc writing speed for DVD. Lowering the speed will ease duplication of troublesome masters. You may also lower the speed to allow use of older or slower-rated recordable media. Press the MODE button to change the setting. Press GO to confirm.

Default: 4X

1.10 HD to DVD Write Speed

This setting controls the HDD to disc writing speed for DVD. Lowering the speed will ease duplication of troublesome masters. You may also lower the speed to allow use of older or slower-rated recordable media. Press the MODE button to change the setting. Press GO to confirm.

Default: Max

1.11 CD-ROM Drive

Allows the selection of the reader drive for disc to disc copy. Press the MODE button to change the setting. Press GO to confirm.

Default: Auto (top drive)

1.12 Autoloader

For unit with Autoloader installed. This should remain set to "NO" at all times. Press the MODE button to change the setting. Press GO to confirm.

Default: No

1.13 Load Nonblank Disc

For unit with Autoloader installed. This should remain set to "NO" at all times. Press the MODE button to change the setting. Press GO to confirm.

Default: No

1.14 CD-DA Load Speed

When duplicating an Audio CD, the duplicator will automatically lower the read-speed to preserve quality. Setting this to an option other than "Auto" may increase read-in time, but may also introduce errors. It is recommended that this setting remain at "Auto". Press the MODE button to change the setting. Press GO to confirm.

Default: Auto

1.15 Grip Before Accept

For unit with Autoloader installed. This should remain set to "NO" at all times. Press the MODE button to change the setting. Press GO to confirm

Default: No

1.16 Eject Disc

This setting controls the ejection of discs by writer. Three options are available: "Always" means the writers will always eject the discs no matter whether the operation is successful or failed. "No" means all discs will remain in writers when copying is done and you will have to eject discs from the writers manually. "Pass" setting will only eject the passed discs automatically and leave the failed ones in the writers. Press MODE to change the setting and GO to confirm.

Default: Pass

1.17 Buzzer

This turns on or off the buzzer tone in the duplicator. Press the MODE button to change the setting. Press GO to confirm.

Default: On

1.18 CD+G

Changing this setting to "Yes" will allow the duplicator to duplicate CD+Graphic (or "Karaoke") discs if the installed writers support it. Press the MODE button to change the setting. Press GO to confirm.

Default: No

1.19 Copy Comp Eject

This setting controls the ejection of writer's tray under the "Copy + Compare" function. This should remain set to "Auto" for the Copy + Compare feature to function correctly. Press the MODE button to change the setting. Press GO to confirm.

Default: Auto

1.20 Read CD-DA Index 0

The setting controls the copying of data in Index 0 of Audio discs. Set to "Yes", the duplicator will copy the data, set to "No" will leave it empty. On Audio discs, Index 0 is sometimes used for album and artist info and track names. Press the MODE button to change the setting. Press GO to confirm.

Default: No

1.21 Skip Read Error

This setting controls error skipping when reading in a master disc. If the setting is "No", when an error is detected during loading, the duplicator will stop loading

and display a read-error message. If the setting is "Yes", there will be no message shown even there is an error in reading. You can use this function to copy discs with errors or non-standard track configuration. Press the MODE button to change the setting. Press GO to confirm.

Default: No

1.22 Mode 2 Compare

This setting allows the unit to more properly compare Mode-2 formatted discs. Press the MODE button to change the setting. Press GO to confirm.

Default: Yes

1.23 Power on Wait

The setting controls the detecting time (in second) for devices that connected to the duplicating controller card.

Default: 15 sec

1.24 Go load trays

This function will allow the opened trays to be closed automatically by pressing the "GO" button. Press the MODE button to change the setting. Press GO to confirm.

Default: No

1.25 Transfer Mode

This option will increase performance and stability of copying function. Do not use this function unless all drives, including reader and HDD, support UDMA66 transfer mode. The system needs to reboot after any changes. Press the MODE button to change the setting. Press GO to confirm.

Default: UDMA33

1.26 Turbo copycomp

For achieving maximum burning speed allowed by writers. Press the MODE button to change the setting. Press GO to confirm.

Default: No

1.27 Language

For choosing language on menu function from English, Spanish or Portuguese. Press the MODE button to change the setting. Press GO to confirm.

Default: English

1.28 Model Number and Version

Displays model number and firmware version.

1.29 Change Password

This function is to set up password protection. Once set, a 4-digit password will be required after powering up. Press MODE button to Yes to activate and set up password.

Default: No password

1.30 Startup Command

This setting allows the user to pick which command will appear after booting up. Press the MODE button to change the setting. Press GO to confirm.

Default: Copy

7. Troubleshooting

There are no end-user serviceable components that can be replaced in the CD/DVD Duplicator. Please contact your dealer for warranty repairs and service.

No LCD display.

- Please check if the power cord is connected properly and the utility power is supplied. Please check if the fan of power supply is rotating. If not, it might be broken.

Error message shown on LCD.

- Reboot the duplicator.
- Change master disc and try again.

CD Drive doesn't read disc and shows error message.

- Check the format of master disc.
- Use other Master disc or other duplicator to test master.

Switches do not function.

- Task busy. Please wait.
- Restart unit.
- Faulty controller board. Call for Technical support

Copy completed but disc is not readable / executable.

- Use "*Compare*" to check.
- Test with another CD-ROM/DVD-ROM.

Failure rate is high.

- Lower writing speed and try again.
- Quality of blank disc is poor.
- Quality of master disc is poor.
- Rated speed of discs does not match writers. Ensure discs meet writers rated speed.
- Update the latest BIOS version. See manufacturer for latest firmware updates.

Can't boot up or upgrade BIOS.

- Contact your dealer.

-
- Check if the BIOS program is correct.

Some functions are missing.

- Please reboot the unit and press Mode for 3 seconds at the same time.
-