

DVD & CD Duplication systems

DVD Duplication Controllers

USER MANUAL

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1. Introduction

Thank you for choosing this CD/DVD duplication controller/duplicator. This duplicator system will surely help you achieve your duplication needs!

Features:

1. Stand-alone design, no PC or software required.
2. Easy to operate. No training required.
3. Copy, Compare, Verify, Emulate, Editing, etc.
Functions
4. Compatible formats:
 MODE 1: CD-ROM/XA
 MODE 2: Photo-CD, CD-I, VCD
 CD-DA, Multi-session, CD-Plus
5. On-the-fly direct copy from CD-ROM to CD or DVD-ROM to DVD disc.
6. Track selection is available for copying music tracks.
7. Compatible with many brands of CD or DVD writers, such as Plextor, Sony, Sanyo, Yamaha, TDK, Nichimen, Teac, Lite-On, Ricoh, Panasonic, OptoRite, etc.
8. USB 2.0 interface offers you the flexibility of connecting to a PC (built-in with the default case)

IMPORTANT NOTE:

1. Make sure the outside input voltage is either at **AC110V or 220V**.
2. Stable input power is required for normal operation.
3. Duplicator should be placed in a safe area within a clean and cool working environment.
4. Check and clean the master/target discs before starting the duplication.
5. Do not touch recording surfaces of the target discs.
6. Do not move the duplicator during operation.

2. Installation Procedure

You may receive the **CD/DVD** duplicator in three configurations:

A. Controller card only

1. You will need the following equipment:
 - a. CD-ROM/DVD-ROM drives.
 - b. CD or DVD writer.
 - c. Suitable case.
 - d. Power supply.
2. Assemble all required devices mentioned above and make sure to set devices to master mode. The connector with power inlet on the controller card is for CD-ROM/DVD-ROM/Hard drive **(if the ROM reader and hard drive are both connected, please set hard drive to the master mode and ROM in slave mode)** and the other is for CD/DVD writer.

3. The BIOS is fixed and welded on the controller board and cannot be replaced directly. The upgrade of BIOS program can be completed in two ways. One method is to run the upgrade function from the machine and the other is to use the upgrade kit to upgrade the BIOS chipset directly through JP2 (BIOS-UP) port built-in on controller board.
4. The USB 2.0 interface is not bundled with the controller card. It will not be available if you have only purchased the controller card.

B. Whole duplicator without ROM and writer installed:

1. Unpack the package of duplicator.
 - b. Prepare the CD/DVD writer according to the device recommendations in this manual and refer to the Part A above for installation. Please contact duplicator vendor for unlisted CD / DVD writer, if needed.
1. Check the entire unit. Return it to your supplier if the unit is damaged in any way.
2. Assemble the duplicator according to your need.
3. Make sure the input voltage is either AC 110V or 220V.

C. Completed duplication system

1. Unpack the duplicator package.

2. Check the entire unit. Return it to your supplier if there are any problems.
3. Make sure the input voltage is either AC 110V or 220V.
4. If your system did not come with a hard drive, you can still install one if you wish.

3. Operation

1. Turn the system on by pressing the power button and you will see the self-testing procedure running. The following display will appear:

DVDxxxx V3.00 2003

Power On ... X

Copy
<mode

- * There will not be a message on top-right corner if there is no hard drive installed.

2. Different devices installed in the duplicator will require different operation procedures including two main categories:

AA. With hard drive installed

- a. The duplicator will automatically detect the hard drive and create partitions for it. Each partition will have 900MB for CD duplicator and 5GB for DVD duplicator in capacity.
- b. You can select in the set up menu which partition will be the current partition to store the data in the “HDD partition.”
- c. If there is no data stored in present/selected partition of the hard drive, press the MODE switch to select “Load” function and place the master disc into the ROM drive. The duplicator will automatically detect the master drive, analyze and load the data into the present/ selected partition. The master disc will be ejected when loading is completed. In the case of an error, the LCD will show the “error” message and the master disc will be ejected automatically. You would then have to use another master disc to load the information onto the hard drive. Master data can be stored in different partitions. Please refer to HDD partition section for loading the master source.
- d. You can switch to copy function by pressing the MODE switch. When you place blank discs into the writers, the duplicator will automatically copy information onto the blank discs.
- e. When a copy is completed, the target disc will be ejected automatically (default setting: Passed discs will be ejected. This means that completed discs that

are correctly copied will automatically eject themselves. This setting can be changed according to your need). For continuous duplication, place additional blank disc(s) into the writer and repeat the above procedures.

- f. Failed discs will remain in writer. Press the eject button on the writer to eject the disc manually.
- g. The duplicator will prompt you with an error message when you try to copy a partition that contains no data. In this case, switch to the "Load" function to load data first.
- h. Do not press any switches on the duplicator during operation. This will cause an interruption. Any interruption / termination of an operation will cause an error and might lead the duplicator to malfunction (depending on writers installed). The target disc will be ruined and cannot be used again.

BB. Without hard drive

- a. Switch to Copy by pressing the MODE switch. Place the blank target disc into the writer. Duplicator will start copying when writer detects the target disc.
- b. When Copy is completed, the correctly copied CD/DVD discs will be ejected automatically (Default setting: Passed, or correctly copied discs, will be ejected. This can be changed according to your need). For continuous duplication, place additional blank target discs into the writer and repeat the above procedures.

- c. Failed discs will remain in the writer (Default setting: Failed disc NOT ejected. This can be changed according to your need). Press the eject button on the writer to eject discs manually.

4. Function

The function explained below is based on the factory's default setting. Different settings will cause duplicator to react differently. Please press and hold down the MODE switch while turning on the power; the duplicator will return to the factory's default setting.

1.1.Copy

Make sure the present partition in hard drive is correct and it contains data (with hard drive installed) or the master CD/DVD is inserted in the ROM drive (without hard drive installed) before copying. Place blank target disc into the writer. When writer detects the target disc, the duplicator will start copying automatically.

When a copy is finished, correctly copied discs will be ejected automatically and failed ones will not be ejected. You can remove failed discs by pressing the eject button on the writer manually. Put a new target disc in the writer for additional copying. Rewriteable discs containing data can also be copied by the duplicator if writers installed are capable of rewriteable

disc writing. Data stored in the rewriteable disc will be erased automatically before copying new data. No special setting or procedure is required to erase the old data.

1.2.Copy + Compare

This function will copy and compare the correctly copied disc with the master source. With this function, the accurate discs will be ejected and reinserted again into the machine automatically to be compared with the source disc. The correctly copied discs will be ejected automatically after comparison. The failed CD disc will remain in the writer. Press the eject button on the writer to eject the failed discs.

Only data CDs will be compared with the master. VCD or music CDs will be verified (self-reading) instead of being compared with the master, even if the “Compare” function is selected.

1.3.Emulate

This function performs a function similar to the Copy function except that data is not written onto the target disc. The target disc will remain blank when emulation is completed. For rewriteable disc that contains data, the emulate function will quickly erase all old data before emulation. You should NEVER emulate on a target disc that contains important data. Please note that **the machine does not support the emulation on**

DVD+R discs temporarily. If the emulate function is selected on DVD+R disc, the disc will instead perform the copy function on the CD.

Termination during the Emulation process will not affect the target disc. They will remain blank. Note that the data on rewriteable discs containing data may be destroyed and cannot be retrieved again.

Some writers may not support sudden termination during operation. The duplicator may malfunction and you can only reset the machine by re-starting the power. Note that the emulation function is useful when you want to test whether master disc can be copied onto target discs.

1.4.Emu + Copy

This function combines the emulation and copy function within one selection. First, the machine will do the emulation and then continually copy the disc if no errors occur during the emulation process. The correctly copied discs will be ejected and failed discs will remain in the writer. Failed discs must be removed manually.

1.5.Compare

This function performs a data comparison between the master disc and target discs. Only data discs will be compared fully. VCDs, music CDs or DVD movies will

perform the verification function instead.

1.6.Verify

This function does verifications of target discs. A different disc in the writer and ROM drive can be verified together simultaneously.

1.7.Load

This function can only be used when a hard drive is installed in the duplicator. Use the “Load” function to load the master data into the hard drive before performing another function.

Place the master disc into the ROM, the duplicator will automatically detect and analyze the master disc and load its data into the current partition of the hard drive, only if a hard drive is installed.

The hard drive installed on the duplicator will be automatically partitioned by 900MB sections for CDs and 5GB sections for DVD partitions. The number of partitions available depends on the hard drive’s capacity. No pre-formatting or software setup is required to install the hard drive. Each partition in the hard drive will be labeled in alphabetical order starting from AA, AB, AC...etc. The current partition number can be selected under “HDD partition” in the Setup menu.

The duplicator will show an error message when you try to copy it from a partition that contains no data. Switch to the proper partition or use “Load” function to load the master data onto the current partition.

1.8.External

External functions are reserved for releasing the control of devices installed on duplicator.

The external function will be activated when switching to this function for five seconds. To return to other functions of the duplicator after the External function is activated, you have to re-start the duplicator.

1.9.Quick erase

This function only works with rewriteable discs. The data on rewriteable discs will be erased after executing this function.

1.10.Sub-function

In the main menu, press and hold down the MODE switch for five seconds and the menu will be switched to sub-function menu and vice versa.

1.10.1. Setup

Since there are many different settings for this duplication system, we suggest that you use the original default settings for optimal performance. Changes should be made only when you are familiar with the functions. Also, please note that the function settings listed below are summaries that cover all kinds of duplication controllers or duplication systems that we build and might not apply to the system you purchased.

1.10.1.1. Show drive

This setting shows the devices that are connected on the duplicator, such as the CD/DVD-ROM, writers and hard drive, etc. It also displays the version of drives currently installed on the duplicator.

1.10.1.2. HDD partition group

This setting assigns the current working partition group onto hard drive if installed. Press the MODE switch to change the setting and press GO to exit. After selecting the partition group, pressing the exit button will bring you to the next sub function titled, "HDD partition of A" for more selections for the partition number in that group. After choosing the partition number, press the exit button to bring you back to Copy function to the main menu.

Modern hard drives normally have large capacities. In

order to organize and utilize the capacity well, the controller will manage the capacity using two-level management: partition group and partition number. The partition group serves as a folder and the partition number serves as an object in the folder. By using this idea, the controller can have up to 26 folders; each folder has up to 26 partition numbers, a total of 676 (26x26) partition numbers. For the CD controller, each partition normally holds 900MB. For DVD, it holds 5GB. Using this system, no space on the hard drive will be wasted.

Once you start copying discs onto the HDD, each partition will be represented by two letters, such as AC, BD, etc. AC means A group C partition and BD means B group D partition. If you get a 40GB hard drive installed with the CD controller, you might have 42 partitions, beginning from AA to AZ and ending with BA to BP. There will be two groups in your hard drive: A group contains 26 partitions and B group contains 16. All the configurations will be completed automatically so you don't have to run special software utility to create the partitions. Note that this setting is not available if there is no hard drive installed.

1.10.1.3. CD to CD

This setting controls the source location of master data. Select "Yes" to bypass the existing hard drive and you can copy directly from ROM to writer or select "No" to copy target disc from data stored in current

partition of the hard drive. This setting will not be saved during rebooting of the duplicator. You will have to reset it after rebooting if you wish to use CD to CD while there is a hard drive installed.

This setting is not available if there is no hard drive installed. In this case, the only option is to copy from ROM to writer directly.

Press the MODE switch to change setting and GO to bring you to next setting.

1.10.1.4. Start writers

This setting controls the behavior of the writer. It will determine whether or not it runs automatically when the master disc and target discs are both placed in the drives of the duplicator. If the option is set to 0, it means the start of duplication must run manually. You will have to press the GO button each time to activate the duplication. If option set to 1, as soon as the master and target disc are ready in both drives on the duplicator, duplication will start automatically. For duplicating the same master disc, it is suggested to set this option to 1 and this will enable you to start the duplication immediately when you re-insert blank target discs into writers.

Pressing the MODE switch will change the option and press GO to bring you to next setting.

1.10.1.5. Write method

This setting controls the writing methods of CD discs, such as “Disc at once” or “Track at once”. “Disc at once” will be the default setting. Some CD writers may support different writing methods. If the method selected is not supported, the duplicator will automatically switch to the other one. This function is only available for CD disc writing but not for DVD writing.

Pressing the MODE switch will change the setting and the GO switch will bring you to next setting.

1.10.1.6. CD Write Speed

This setting controls the CD writing speed. Default setting is “MAX,” which uses the highest writing speed of the writer. Sometimes maximum writing speed will cause high failure rate that may be due to poor disc quality or unstable disc writing. Under this circumstance, lowering the writing speed in this setting will help you get a higher success rate in disc writing. However, if you lower the writing speed, the duplicator will take more time to copy CDs/DVDs.

Press MODE to change the setting and GO to exit.

1.10.1.7. DVD Write Speed

This option is for DVD duplicating controller card only and is not available with the CD controller card. This setting controls the DVD writing speed of the writer. The default setting for the controller is “MAX,” which would use the highest writing speed of the writer. Sometimes using the maximum writing speed will cause a high failure rate that may be due to poor disc quality or unstable disc writing. Under this circumstance, lower the writing speed in this setting to get a higher success rate in disc writing. Some DVD writer brands will restrict the writing speed on certain DVD discs due to an unauthorized patent. This is due to the writer itself.

Press MODE to change the setting and GO to exit.

1.10.1.8. CD-ROM drive

The ROM drive can be selected manually. Default setting is “AUTO” and the duplicator will select the ROM drive automatically. If the drives are installed correctly, the setting option will be in series like ATA1.0 and the writer will be like ATA2.0. The 0 in ATA1.0 and ATA2.0 means the drives are in master mode and 1 and 2 means the channel number. The digit after the dot represents the master (0) and slave (1) mode. The digit before dot represents the channel number. E.g., ATA2.1 means the channel 2 in slave mode.

Press MODE to change the setting and GO to exit.

1.10.1.9. Autoloader

This duplicating controller card can be used as an independent controller card for external autoloading. If the autoloader is installed, this setting must be set to an appropriate setting, such as “CDF-4800,” “classic,” or “extended”. The default setting is “No”.

Press MODE to change the setting and GO to exit.

1.10.1.10. Load nonblank disc

This setting is mainly for the autoloader and controls the loading of a non-blank disc in any writer. If the setting is “Yes”, whenever there is a non-blank disc detected by the writer, the duplicating controller card will automatically go to the “Load” function and start loading the data from that non-blank disc into current partition of hard drive. Through this function, you can control the autoloader to copy multiple master discs automatically.

Press MODE to change the setting and GO to exit.

1.10.1.11. CD-DA load speed

Normally, when reading music tracks, the ROM drive will automatically lower the reading speed significantly. An unstable reading situation may occur if we use the maximum default speed of ROM drive to read music track. This will affect the quality of music CD duplicated. This setting selects the speed of music

track loading to enhance stability of music track reading. Default setting is “AUTO”.

Press MODE to change the setting and GO to exit.

1.10.1.12. Eject disc

This setting controls the ejection of discs by the writer. Three options are available: “Always” means the writer will always eject the target disc no matter whether the operation is successful or failed. “No” means disc will remain in the writer when job is completed. You will have to eject the disc from the writer manually. The “Pass” setting will eject the correctly copied discs automatically and leave failed ones in the writer.

Press MODE to change the setting and GO to exit.

1.10.1.13. Buzzer

This setting controls the ON and OFF of the buzzer. Default setting is “On”. Press MODE switch to change and GO to exit.

1.10.1.14. CD+G

This setting activates the copy capability of the CD+G format. It cannot be copied if the writer doesn't support this format. Default setting is “No”.

Press MODE switch to change and GO to exit.

1.10.1.15. Copycomp eject

This setting controls the ejection of writer's tray under the "copy + compare" function. If the setting is "Yes", the tray will eject the passed disc after copying. It will also re-insert the disc again for subsequent comparison between the target disc and the source disc. If the setting is "No", the tray will not be ejected between copy and compare. The default setting is "Auto," which means the ejection of the tray will depend on the writer. If it supports auto-ejection, the tray will be ejected after copying. If not, the tray will not be ejected even when setting is "Yes".

Press MODE switch to change and GO to exit.

1.10.1.16. Skip read error

This setting controls error skipping during the master disc reading. The default setting is "No". When an error is detected during loading, the duplicator will stop to load and display an error message. If the setting is "Yes", there will be no message shown even if there is an error during reading. You can use this function to copy master discs that have errors.

Press MODE switch to change and GO to exit.

1.10.1.17. MODE 2 compare

This setting can be activated to compare some data format stored in “MODE 2” disc. Default setting is “Yes”.

Press MODE switch to change and GO to exit.

1.10.1.18. Startup command

This setting specifies the first function to appear when the duplicator is turned on to avoid repeated selection.

Press MODE switch to change and GO to exit.

1.10.1.19. LED offset

This setting controls the offset position for the LED display on different kinds of cases.

Press MODE switch to change and GO to exit.

1.10.1.20. LCD mile 2 digits

This setting controls the display mode for processing meter during operations on the LCD display, e.g. L12 C12 C12 C12. The “L” represents the “Load” and C represents the “Copy” before the 2-digit number. If you set this option to “Yes”, the L and C for the example above will disappear. Setting “No” will keep the display as above.

Press MODE switch to change and GO to exit.

1.10.1.21. Read cdda index 0

The setting controls the copying of data existing in index0. Setting “Yes” will copy the data and setting “No” will make it empty.

Press MODE switch to change and GO to exit.

1.10.2. Edit

The edit function, located in the sub-function menu, is a track-selecting function that can combine tracks on different CD discs onto one single CD disc. For example, you can make a collection of favorite songs from different music CDs and store them into one CD disc.

Switch to the “Clear” function to delete the data, if any, in the hard drive’s partition intended to store the music tracks. Switch to EDIT by pressing the MODE switch in sub-function. Load your master CD into the CD drive (if there is no hard drive installed, the blank CD-R or CD-RW discs must be inserted to the CD writers for “track at once” copy). Duplicator will analyze the master CD and show total xx tracks on the LCD display and finally stop at:



Begin track

[+] 0 [Quit]

Press the MODE switch to change the number of tracks (song) that you wish to start with and then press the GO switch to quit. After quitting, the LCD display will stop at:

End track

[+] 0 [Quit]
--

The number selected must be same or larger than that selected in “Begin track”. The same number means you want to select a single track and larger number means you want to select a sequence of tracks in that particular CD. After selecting the “End track,” the duplicator will bring you back to the “Begin track” selection. Repeat the same procedure to collect other tracks in a different sequence that you want to copy. If no other tracks are selected, press the GO switch directly at “Begin track” and press GO at “End track” to exit. Duplicator will start loading those music tracks selected into the current partition of the hard drive. After you finish loading, the master CD will be ejected automatically and the LCD will display Pass. You may change the master CD and run the Edit function again to gather more music tracks from different master CDs. When finishing the collection, switch the function to Copy and place blank CD discs or CD-RW discs into CD writers for copying.

If there is no hard drive installed and selection of music

tracks from the master CD in CD-ROM drive is completed, the duplicator will prompt you the message:

Finalize	
[+] No	[Quit]

If there are still other tracks that need to be collected, the setting of Finalize must be “No”. Press the GO switch to quit. The duplicator will start to copy the selected tracks onto the blank CD disc. After finishing the copy, the master CD will be ejected automatically and prompt you to “Pass” in the LCD display. You will note that the CD discs in the target CD writers will not be ejected at this moment. Duplicator will analyze the master data and bring you to the “Begin track” message on the LCD. You can repeat the procedures described above to collect more tracks. If the master CD is the last one that you collect, change the setting Finalize to “Yes” and press the GO switch. Duplicator will start to copy and close the CD discs in the CD writers. If all of the CD discs are correctly copied, they will be ejected from the CD writers automatically.

Please study the following examples carefully and follow the instructions step by step. You will find it is easier to collect tracks through the duplicator.

Example 1:

To make a new collection of two CDs listed below with hard drive installed:

No.1 CD: 2, 4, 6-8 songs.

No.2 CD: 3-6, 9, 13-16 songs.

- a. Switch to the Clear Master function and press the GO switch to clear data in the existing partition of hard drive.
- b. Switch to the Edit function.
- c. Place No.1 CD disc into CD drive under the EDIT function and wait for duplicator to analyze it.
- d. Press the MODE switch to number 2 at “Begin track” and Press GO switch to quit.
- e. When “End track” screen is shown on the LCD, press the GO switch to quit directly since the first song number is 2.
- f. Press the MODE switch to number 4 at “Begin track” and Quit. Press the GO switch again to quit.
- g. Press the MODE function at number 6 at “Begin track” and Quit.
- h. Press MODE to number 8 at “End track” and Quit.
- i. Press the GO switch to finish the selection for the 1st CD.
- j. The duplicator will start to collect the tracks that you selected just now into the current partition of the hard drive.
- k. After successfully loading, the duplicator will eject your master CD and show “Pass” on the LCD.
- l. Place No.2 CD into the CD drive and continue the selection for the second CD disc.
- m. Repeat procedures (d) to (k) above.
- n. Once the accumulated length of tracks selected reach the maximum 80 min capacity, the

- duplicator will stop accepting additional tracks.
- o. Switch to the “Delete” function to delete the last track stored in the current partition in the hard drive if necessary.
 - p. Switch to the Copy function to start copying your own collection of music CD.

Example 2:

No.1 CD: All tracks

No.2 CD: 4-6 tracks

- a. Load the No.1 CD disc normally by using LOAD function. Data, if any, in the current partition will be erased and replaced automatically tracks of this CD.
- b. Load No.2 CD disc by using EDIT function but keep the data stored in hard drive. There is no need to do Clear Master as described in Example 1 or you will lose the data of No.1 CD disc.
- c. Repeat the other procedures described in Example 1.

1.10.3. Delete

If the last music track stored in hard drive is not the one you wish to keep, switch to the “delete” function and press the GO switch to delete it. You may always use this function to delete the last track stored in the current partition of the hard drive.

1.10.4. Clear

This function clears the master data stored in the current partition of the hard drive. When you want to EDIT a new collection of songs, you must run this function first to clear the current partition of the hard drive. Perform this function by pressing the GO switch and the LCD will show “Master cleared.”

1.10.5. Copy x1

Under some conditions, you will need to reduce the writing speed of the writer to a single speed. Switch to “Copy x 1.” All operations will be the same as the COPY except that the writing speed will be on a lower speed. Writing on the target disc using a lower speed will offer you better quality than using maximum speed. You can use the disc copied under lower speed as a master for repeated duplication or use.

1.10.6. Emulate x1

Under some conditions, you will have to reduce the emulating speed of writer to single speed. Switch to “Emulate x 1,” all operation will be the same as the “Emulate write” except that the emulating speed will be single-time only.

1.10.7. Copy x2

Occasionally you will have to reduce the writing speed of the writer to double the speed. Switch to “Copy x 2.” All operations are the same as COPY except that the writing speed will be x2.

1.10.8. Emulate x2

Under some conditions, you will have to reduce the emulating speed of writer to double the speed. Switch to “Emulate x2.” All operations will be the same as the “Emulate write” function except that the emulating speed will be twice as fast.

1.10.9. Copy x4

Occasionally you will have to reduce the writing speed to 4x. Switch to “Copy x 4.” All operations will be the same as the COPY except that the writing speed will be at 4x.

1.10.10. Emulate x4

Under some conditions, you will have to reduce the emulating speed of the writer to 4x instead of the normally faster speeds. Switch to “Emulate x4.” All operations will be same as the “Emulate write” except that the speed will be at 4x.

1.10.11. Copy x8

Occasionally you will have to reduce the writing speed of the writer to 8x. Switch to the “Copy x 8” function. All operations are the same as COPY except that writing speed will be 8X.

1.10.12. Emulate x8

Under some conditions, you will have to reduce the emulating speed of writer to 8x. Switch to “Emulate x8.” All operations will be same as the “Emulate write” except that the emulating speed will be at the 8x speed.

1.10.13. Burn in

This function is a burn-in test function. It will run the emulate write function continuously. Between each cycle of the emulation, the disc in the writer will be ejected automatically and re-inserted again for continuous testing. There is no real writing on the blank write-once disc. The disc will be remain blank throughout the process. Re-writeable discs that have data will be erased during the burn-in. Please do not use re-writeable discs with important data under burn-in function.

1.10.14. Update

Functions of the duplicator will be improved for better performance or for other reasons when you update the BIOS. This function will update your firmware to either later or previous versions for specific reasons. Load the CD disc containing the desired firmware data (BIOS CD disc) into ROM drive and the duplicator will find the data and update its firmware automatically. During updating, don't turn the machine off because the update will not be finished until machine resets itself. (Note: Turning off the machine during updating might cause severe problems such as a failure to boot.)

Procedures to complete the upgrade:

1. Get the BIOS firmware from your Vendor.
2. Unzip the BIOS firmware you have gotten and write the file "**cdxxx.bin**" into the root directory of a blank CD-R or CD-RW disc. The CD session has to be closed. If the same CD disc still has capacity to add more data, it can be used to store the newer version of BIOS. When updating the BIOS program from the CD, only the one in the last session will be used. Other versions in previous sessions will be ignored.

1.10.15. Reset

The reset procedure is required for several reasons, such as: The assembling of the duplicator, replacing a new brand of writers in an old duplicator, or resetting the machine to factory default settings according to

different usages. Our design provides an easy way for customers to reset their controller boards as noted below:

1. Turn off the duplicator and wait for about 10 seconds. If the duplicator is not in use at the moment, ignore this step and go directly to procedure 2.
2. Press and hold down the MODE switch and turn on the power of duplicator at the same time. Release the button until the “clear setup” message is shown on the LCD display.
3. If the “clear setup” message is not shown, repeat the whole procedure above.
4. All settings on the duplicator will be restored to its factory default settings after a correct reset procedure.

2. Standard equipment

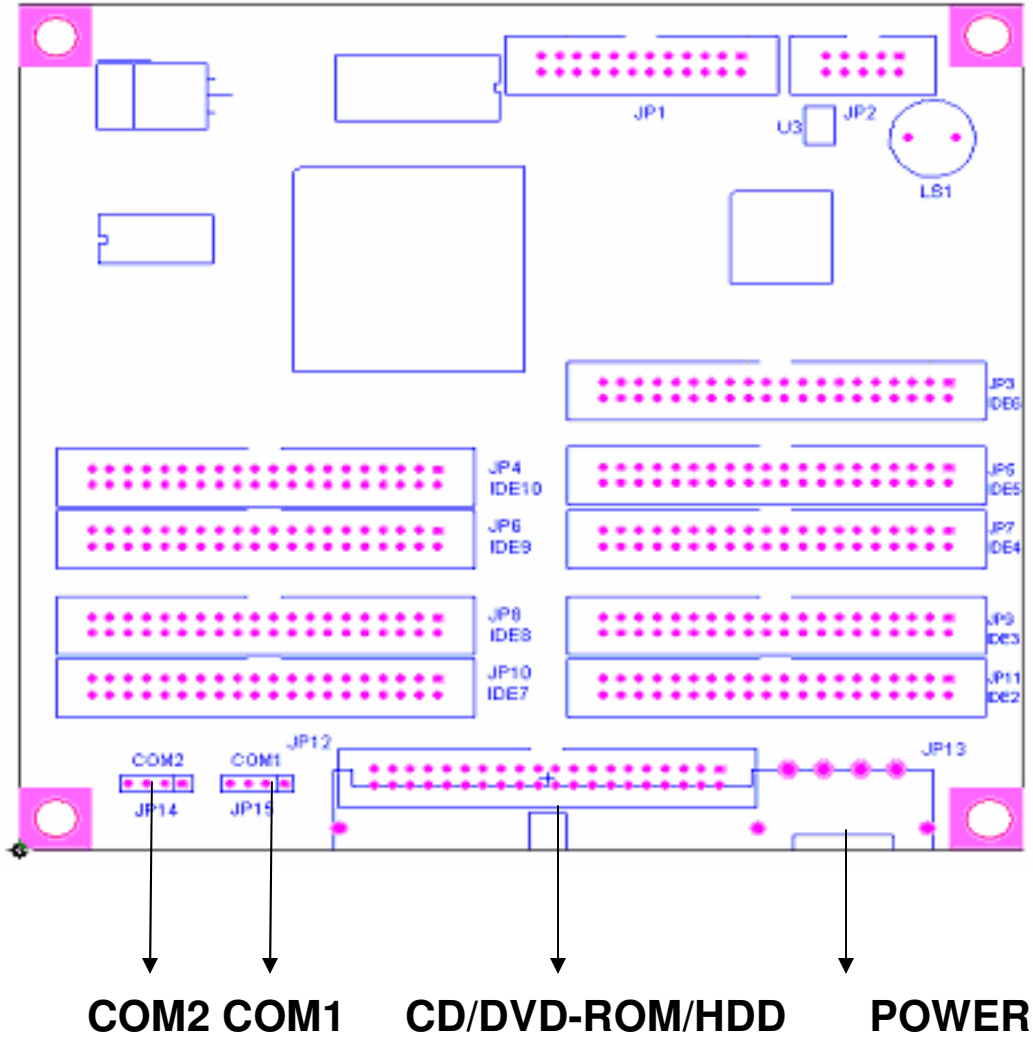
Controller only:

1. Controller fixed on a 5.25”-bay.
2. 20 x 2 LCD display on 5.25”-bay.
3. Operation manual.
4. ATA-66 IDE cables eight pieces.
5. Other equipment according to agent’s assembly.

5. Circuit drawing

LCD
↑

BIOS-UP
↑



CD-398 & DVD-3000 Controller card

6. Trouble Shooting

- A: Check whether the connection of the power cable and the power outlet's environment is normal.
- B: Check the power supply fan. It should rotate if the power is on. If not, the power supply might have a

problem.

C: Turn off the power of the machine. Open the duplicator case to check whether the power cable is fixed.

2Q: There's an error message shown on the LCD:

A: During the use of functions such as Copy, Emulate Write, compare and verify, you may press the MODE switch to abort the operation. An Error message will be shown on the LCD. Aborting, when using certain writers, might cause the duplicator to lock up. If this occurs, you must re-start the power to return the duplicator back to normal.

B: A failed reading may cause the error message shown on the LCD display. Change the master disc to try again.

C: During operation, if you read a message indicating: buffer under run or writing error occurs, the LCD will show an error message like: Pass xx, failed xx.

D: If there is no device connected and detected by the duplicator during power-on, the duplicator will show an error message on the LCD before entering the main menu.

3Q: The ROM doesn't read disc and shows an error message.

A: Check the format of the master disc or the master disc itself for damage.

B: Use any of the writers to read the master. If it works, the ROM drive may be defective or incompatible with the disc.

4Q: Switches do not function.

A : May still be busy on the task.

B : Button malfunction.

C : Faulty board.

5Q: COPY is completed but the target disc is not readable / executable.

A: Use the compare function to check.

B: Change to another ROM drive to test.

6Q: The failure rate is high.

A: Lower the speed of writers and try again.

B: Quality of blank disc is poor.

C: Check for latest BIOS version.

7Q: You can't boot-up or it fails to upgrade BIOS.

A: Contact your dealer to solve the problem. Note you may be charged for this consultation.

B: Check the BIOS program to determine whether it is correct. Customers tend to download the wrong program or simply write the zipped file to CD, which should be unzipped before writing.

C: A failed upgrade might cause a failed boot-up. This can only be solved by returning the control board to the agent or the factory directly. It is not necessary to return the entire system under a failed upgrade.

7. Device support

For IDE CD-ROM:

1. Any CD-ROM drive that is compatible with all kinds of CD formats will be compatible if a hard drive is installed.
2. To install the 40X or above writer, the accessing speed of CD-ROM will definitely not be enough to support the high speed 40X, 48X or 52X writing for direct copy from CD-ROM to CD-R. The only way to improve the speed is to add a hard drive for the buffer. Load first from the CD-ROM to the hard drive and then copy from the HDD to a CD-R.
3. If a direct copy from the CD-ROM to CD-R is preferred, please lower the writing speed to less than 12X. It will work with nearly all kinds of CD-ROM readers in the market.
4. The 52 max. reading speed listed on the front panel of CD-ROM is not a reference that you may count on to run at speeds such as 40X, 48X or even 52X on-the-fly writing from CD-ROM to CD-R. 52X max. It only means that it can reach a maximum speed of 52X during a certain stage and is not “always” at this speed. A qualified reader must always sustain the

reading speed above the writing speed, if you need to do on-the-fly copy from CD-ROMs to CD-Rs.

For IDE DVD-ROM:

1. Teac DV-516D
2. EPO DVD-8216

Note: To link with the maximum target numbers of the DVD writer, some brands of DVD-ROM will be a little bit slow in data transfer bandwidth and such DVD+/-RW writers are not suggested for use with the controller board since it might reduce the target numbers. If a hard drive is added, this consideration can be omitted.

For IDE CD-R/RW writer

- 1 Plextor: W4824TA/W5232TA
- 2 Lite-On: LTR-48245/52327
- 3 Teac: W552G
- 4 Sony: 230E

For IDE DVD writer

1. Pioneer: 106/A06, 107/A107
2. Teac: W58D
3. Plextor: 708A
4. NEC: 2500A

The brands/models of the DVD/CD writers listed above are supported by our duplication controller cards or

duplication systems. Most other drives that are not listed above will work as well.

8. Appendix

CONTACT THE DISTRIBUTOR IF TROUBLE OR PROBLEMS ARISE. FOR PROMPT FEEDBACK & IMMEDIATE SERVICE, PLEASE MAKE NOTE OF FULL DETAILS FOR DIAGNOSIS.