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Chapter 1. Introduction

1.1 Overview

The COPYSTAR DVD/CDR controller, is the ideal controller for your CD/DVD Duplicator system. The controller is always upgrading in order to support present and even future CD/DVD drives.

1.2 Features of COPYSTAR DVD/CDR controller

1.DVD/CDR controller supports the newest DVD 8 speed drives and the CD 52X speed drives.

2.You can install up to 7 CD or DVD drives.

3.It can run 7 drives simultaneously. Every drive is independent and will not interface with another drive's writing speed.

4.It has a 32MB Buffer, used to prevent the decrease of the duplication process when the source disc media speed is too slow.

5.Internal HDD can be installed to save images files with the controllers; due to the high reading speed of the HDD, it will stabilize the duplication process and prevent the decrease of the duplication process.

6.It provides the function to Edit multi Audio CD into one CD,either by loading tracks into a HDD or directly disc to disc.

7.You cad adjust the writing speed of the duplication process, according to your quality that you want. You can adjust the writing method to control your quality.

8.Supports and auto-detects most of the CD/DVD format, no need for adjustments.

9.It provides the following functions; Test(simulate the duplication process), Copy, Verify, Load and Erase.

10. Easy and simple to upgrade the firmware of the controller.

Chapter 2. Getting Started

2.1 Before you start

This product is for you to backup and save data.
Please refer to the copyright articles in backup actions.

2.2 Declaration of limited liability

Licensor (An Chen Computer Co., Ltd.) makes no representation and warranty, expressed or implied, statutory or otherwise, including but not limited to any implied warranty of free of defects, merchantability or fitness for a particular purpose and any equivalents under the laws of any jurisdiction that might arise from any activities relating to the Products that Licensor developed. No oral or written information or advice given by Licensor shall in any way increase the scope of this warranty.

2.3 Unpacking the case

Please check the following accessories when you receive COPYSTAR DVD/CDR controller. Refer to the items as below list for a check.

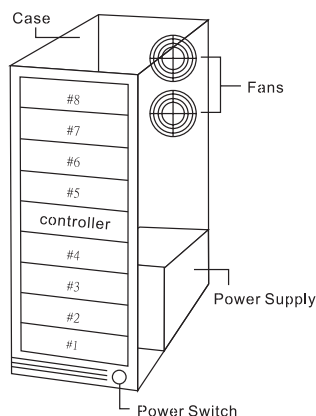
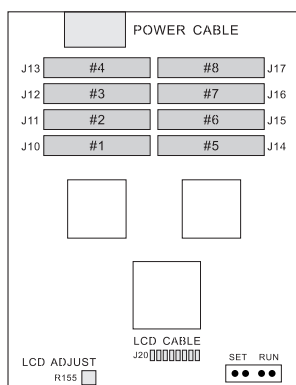
- 1) Standard Accessories : Controller and user's guide
- 2) Optionals : IDE HD, CD-ROM or DVD-ROM Drive, CD/DVD Writers, Casing with Power Supply, and Power Cord.

A point for attention : If what you have purchased including the optionals, please check the model and the numbers carefully. Contact the local dealer if you find any defects or shortage.

2.4 Installation Instructions

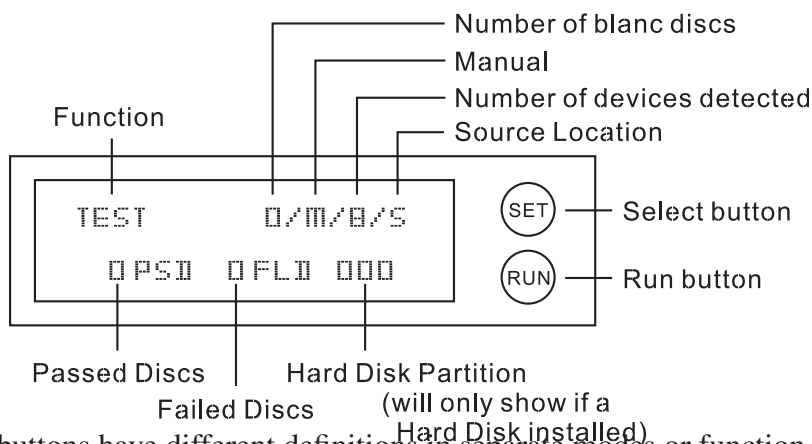
Please check before you plug in the system if the voltage setup fits the local standard. If you have no ideas with this matter, please ask the local dealer. If the purchased product is inclusive of the CD-ROM or DVD-ROM Drive, CD/DVD Writers, or the built-in HD, please refer to their installation illustrations.

*The numbers in the Pictures #1~#8 in the controller are the correspondent position for the Devices.



2.5 About the LCD Panel Display

The diagram for COPYSTAR DVD/CDR controller LCD Panel Display



The buttons have different definitions in separate modes or function menus. Please refer to corresponding chapters and sections.

2.6 Turning on the System

Before you turn on the system, please make sure it's set under below situation.

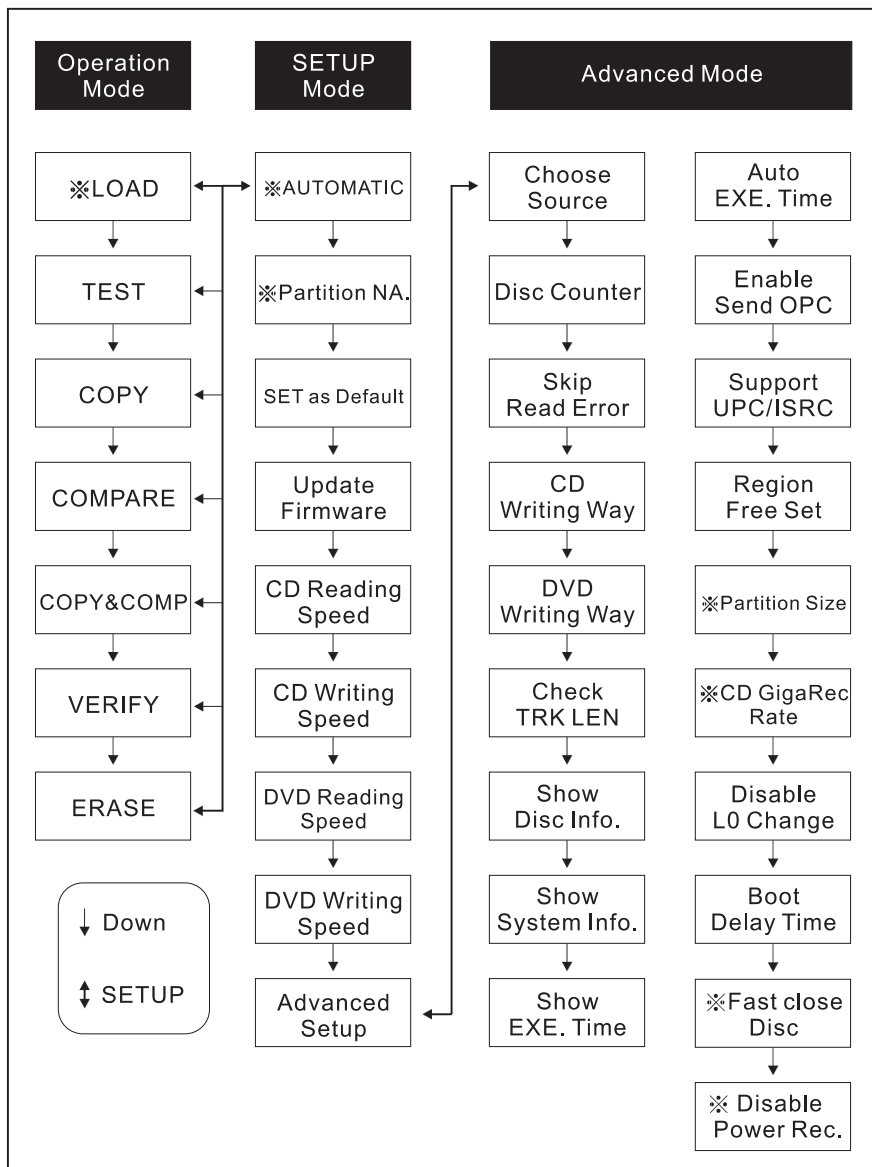
1) COPYSTAR DVD/CDR system is put on a flat and steady place. It results in errors in copy if there is vibration or slope.

2)The voltage setting to the power supply has to fit the local standard. Burnout occurs if it's in wrong voltage setting.

3)The system works at high speed to access data and thus brings excessive heat. Heat sinking therefore becomes a key for better operation. The temperature to the working environment should be kept 25 degree. The system has to be put with good ventilation in order to prevent irregular operation.

Chapter 3. The Basics

3.1 Function Tree



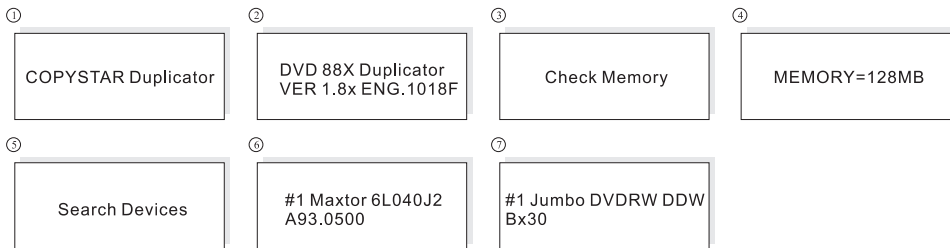
3.2 Start the System

If the COPYSTAR DVD/CDR controller is well installed in the system, you can start the system. In start of the controller, the display shows the program version and then searches linked drive, writers, or HD.

You can see the searching process on the screen. The device searching by COPYSTAR DVD/CDR controller follows in order #1, #2, #3, and so on. If there is any missing device in order, please check if the flat cables and power lines are in consistency, the CD-ROM or DVD-ROM Drive, writers, and the HD are all in good condition. Once you have the problems, please refer to the troubleshooting sections or contact local dealer for services.

The Start Frames

The frame-show varies under different installed models.



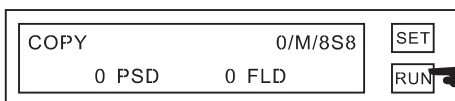
3.3 Disc Duplication

(The following operations are based on controller default settings)

3.3.1 Disc-to-Disc Copy

Insert separately the source disc in drive/writer, and the target(s) media in writers. Wait until all the discs are detected. It shows in the upper right side of the LCD display the status to the source disc and the blank media. Press the SET button to change to COPY function and then press the RUN button to initiate the duplication. The devices automatically eject the discs separately for passed and failed copies.

Push "SET" button and select COPY Function

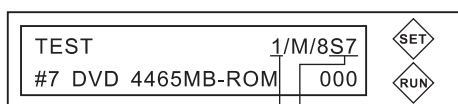


1. Insert the Source Disc and CD-R media into the drives. Once the Duplicator detects all discs, push the "RUN" button to start the duplication.

3.3.2 HD-to-Disc Copy

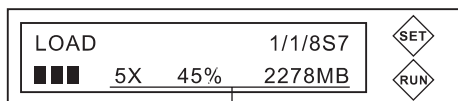
This mode can only be available when the system is including a built-in HD. Firstly, insert the source disc in any of the writers and then wait until the system detects the source. The LCD display then shows in the upper right side the IDE location to the source disc. Press the SET button to change to LOAD and then it starts to download the content of source to HD. Once the system accomplishes the download to the built-in HD, please take out the source disc. Press the SET button to change to COPY and then insert the target blank discs. Press the RUN button to initiate the duplication.

Load to HD for the Copy to burner



Controller detects a HD.
The source disc is now at S7.

1. In operation mode, insert the source and blank discs. Wait until controller detects the position of the source and the amount of the blank ones. (You can refer to "Direct Copy") The partition is at 000.

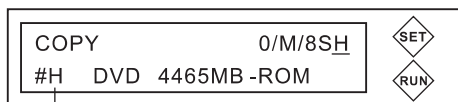


The loading speed, rate of progress, and the amount of the data of source disc.

2. Switch to LOAD thru **[SET]**. Press **[RUN]** to load the data from the source disc. During the loading, the LCD display shows the rate of progress, the speed in loading, and the flashing letters to show the current loaded volume.



3. The loading is finished. Controller rejects the source disc then. If you are continuing the load, please insert another source disc and set the partition number. (You can refer to "Set Partition Name"). Press any key to exit the work mode.



The present source device is at "#H" which means HD.

4. Change to COPY thru **[SET]**. At this time, controller shows the source disc info. In flashing. The present source device is at "#H" Insert the blank discs and press **[RUN]** for copy. The present source device is at "#H" which means HD.

3.3.3 Set (HD) Partitions Name

The setting to each partition in HD is formed by 5 digits. The first 2 digits are for the ID setting to the HD. The rest 3 digits represent the position to HD partition. The capacity of HD determines the amount of partitions. For CDR models, the HD is split into 1GB/per partition while 9GB/per

partition is split up in DVD-series.

e.g. A 80GB HD :

In CDR models, the HDD is split up into 80 partitions and codes
00000-00079

In DVD models, The HDD is split up into 8 partitions and codes
00000-00007

Press and hold the SET button for 3 seconds. Thus the function is changed to the SETUP mode. Press the SET button to change to "PARTITION NAME". The SET button is for the selection to the position of partitions and the RUN button is for the change of partition codes. Once the setting is finished, press and hold the SET button for 3 seconds to complete the setting.

Set Partition Name

TEST	0/M/8S	SET
0PSD 0FLD	000	RUN

1. In operation mode, press **SET** until the beep.
It then enters the setup mode.

SETUP	SET
PARTITION NA. 【00000】	RUN

2. If the controller had installed the Hard Disk,
you will see the function of "Partition NA."
firstly after entered the setup mode.

SETUP	SET
PARTITION NA. 【00000】	RUN

3. You can start the setup of partition when it's in
"Partition NA."
Shift the position of partition thru **SET** .
Change the partition number thru **RUN** .

SETUP	SET
PARTITION NA. 【00001】	RUN

4. When the setup is finished, press **SET** until
the beep. The setup to partition is finished. Press
SET once more to exit the setup mode.

TEST	0/M/8S	SET
0PSD 0FLD	001	RUN

The partition name has been changed to 001.

3.4 Edit and Duplicate Audio CDs

3.4.1 Compilation and duplication thru CD/DVD drives

COPYSTAR DVD/CDR controller enables the compilation of one or more audio disc(s). The maximum capacity to the compilation is 99 minutes or 99 tracks per disc.

Music DJ Music Compilation

TEST	0/M/8S	SET
0PSD 0FLD	000	RUN

1. In operation mode, press **【SET】** to switch to COPY.

COPY	1/M/8S4	SET
#4 01S15T MUSIC		RUN

2. Insert the source and blank discs. Wait until controller detects the device code of the source and the length of the disc. Press **【RUN】** until the beep. You are able to select music tracks from drive now.

COPY	1/M/8S4	SET
#4 CD CAP:0668MB		RUN

COPY TRACKS?	SET
SET → YES , RUN → NO	RUN

3. Press **【SET】** to select music tracks.

SELECT TRACKS	00/79	SET
01 02 03 04 05 06 07		RUN

4. Controller shows all the tunes of the musical record. Press **【SET】** to switch the position of music tracks. Press **【RUN】** To select the music tracks. The selected tracks are marked as ■■. When the selection is finished, press **【SET】** until the beep and then start the copy.

COPY	1/M/8S4	SET
LONG OPC 0X 0% 0M		RUN

5. [LONG OPC]

Controller does OPC, Optical Proximity Correction, on blank discs. In the limited of laser power in the disc, it finds the best laser power value.

COPY	1/M/8S4	SET
LONG WRT 0X 0% 00/69		RUN

6. [LONG WRT]

Controller is writing in the lead-in area of blank disc.

COPY	1/M/8S4	SET
■■ 31X 53% 38/69		RUN

7. Controller is duplicating the discs.

COPY	1/M/8S4	SET
CLSE DISC..		RUN

8. The session of the disc is closed. No more data can be filled in.

REMOVE SOURCE DISC	SET
ANY KEY → EXIT	RUN

9. Once the disc is closed, the drive will reject the source disc. If you are continuing the compilation to another musical record, please insert the source disc and follow the step 2 to step 4.

WAIT SOURCE READY...	SET
RUN → CANCEL	RUN

10. Press **【RUN】** to cancel the compilation and then return to normal operation mode.

3.4.2 Compilation and duplication thru built-in HD

The maximum capacity to the compilation is 99 minutes or 99 tracks per partition.

Loading Audio CD tracks into the Hard Disk:

LOAD	1/M/8S2	SET
#2 01S16T73M MUSIC		RUN

1. Select the Hard Disk partition where you want to Edit the Audio CD tracks.

LOAD	1/M/8S2	SET
#2 01S16T73M MUSIC		RUN

2. Insert the Audio CD (Source disc) in one of the CD writers/burners and wait for the Duplication system to check.

LOAD TRACKS?	SET
SET → YES, RUN → NO	RUN

3. Push the "SET" button.

SELECT TRACKS	00/99	SET
01 02 03 04 05 06 07		RUN

4. Push the "SET" button to move the cursor and push the "RUN" button to select the desired track. Once the First Audio CD tracks are finished selecting, hold the "RUN" button for 3 seconds and then let go. It will start loading selected tracks into the Hard Disk.

REMOVE SOURCE DISC	SET
ANY KEY → EXIT	RUN

5. Remove the Audio CD (Source Disc) and push any key to exit. If you want to add more tracks into the selected Hard Disk partition, then insert another Audio CD (Source Disc 2) and then close the tray and go back to Step3. If you finished loading, push any key to exit.

3.4.3 Delete the Contents in HD Partition

Press the SET button to change to "PARTITION NAME" in SETUP mode. Refer to the foregoing descriptions in [Set Partition Names in HD] section to delete the contents in specific partition. Press and hold the RUN button for 3 seconds and then the screen shows the command if the deletion is decided. If what's in deletion the audio tracks, it comes out the command once the deletion is decided.

Deleting information or Audio tracks from specific Hard Disk Partition:

SETUP	SET
PARTITION NAME (00000)	RUN

1. Hold the "SET" button for 3 seconds and then let go, it will enter to the Setup Mode.

DELETE PARTITION #000?	SET
SET→YES, RUN→NO	RUN

2. Push the "SET" button and select "PARTITION NAME".

DELETE TRACK?	SET
SET→YES, RUN→NO	RUN

3. Select the Hard Disk Partition that you would like to delete (see diagram 5 for reference).

DELETE PARTITION 000	SET
SET→YES, RUN→NO	RUN

4. Hold the "RUN" button for three second and then let go, it will display "DELETE TRACKS?" if you loaded Audio tracks in this partition, or it will display "DELETE PARTITION" if you loaded other CD format.

*If you are deleting tracks, then you will have to delete track by track. e.g. If you loaded 10 tracks then you will have to delete ten times, when you are deleting the last track, the LCD will display "DELETE PARTITION".

3.5 Unable to identify the master CD being with/without RING protection

Press the SET button to change to SKIP READ ERR. in Advanced mode. Setting it [SHORT] in the SKIP READ ERR function. Press the SET button 1 more time to change to CHECK TRK LEN function. Setting it [SHORT] as what shows in below captured screens. Once this setup is complete, it enables copying master CDs what are unable to be identified with or without RING. protection. The setting does not affect normal copies.

Duplication of source disc with bad tracks which can not be judged by the surface

TEST	0/M/8S	SET
0PSD 0FLD	000	RUN

SETUP	SET
ADVANCED SETUP	RUN

ADVANCED SETUP	SET
SKIP READ ERR [SHORT]	RUN

ADVANCED SETUP	SET
CHECK TRK LEN [SHORT]	RUN

1. In operation mode, press **【SET】** until the beep. It then enters the setup mode.

2. Press **【SET】** than switch to Advanced mode, and enter to Advanced mode menus with **【RUN】** under setup mode.

3. In Advanced mode, press **【SET】** and switch to "SKIP READ ERR." then set it to **【SHORT】** thru **【RUN】** .

4. Presses **【SET】** and switch to "Check TRK LEN" then switch the setting to **【SHORT】** thru **【RUN】** .

3.6 RING setup in master CDs.

Press the SET button to change to SKIP READ ERR. in Advanced mode. Setting it [LONG] in the SKIP READ ERR function. Press the SET button 1 more time to change to CHEK TRK LEN function. Setting it [LONG] as what shows in below captured screens. Thru this setup, you can do copy with RING master CDs. This setting does not affect normal copies.

Duplication of source disc with bad tracks



1. In operation mode, press **SET** until the beep. It then enters the setup mode.



2. Press **SET** then switch to Advanced mode, and enter to Advanced mode menus with **RUN** under setup mode.



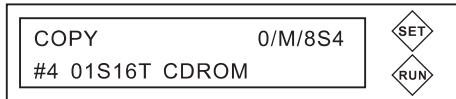
3. In Advanced mode, press **SET** and switch to "SKIP READ ERR." then set it to **LONG** thru **RUN**.



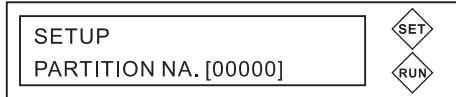
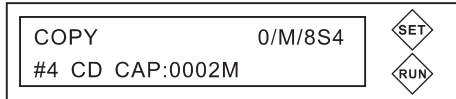
4. Presses **SET** and switch to "Check TRK LEN" then switch the setting to **LONG** thru **RUN**.

3.7 Updating the Controller firmware

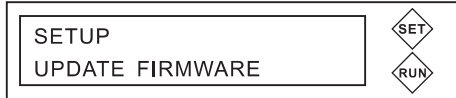
Put the update CD into any of the Drive/Writers. In the operation mode, hold the SET button until beep sound. It's now entering the SETUP mode. Change to the UPDATE FIRMWARE function and press the RUN button to start the firmware update.



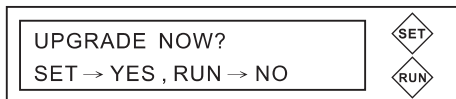
1. Insert the update firmware CD into one of the drives, and wait for the controller to check it.



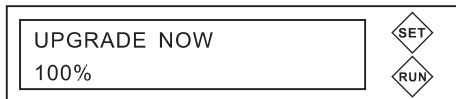
2. Hold the **【SET】** button for 3 seconds and then let go, it will enter the setup mode.



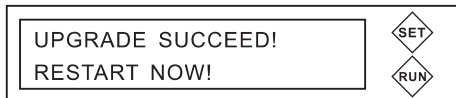
3. Press the **【SET】** button and select the "UPDATE FIRMWARE", and then press the **【RUN】** button to start the firmware upgrade. The LCD screen shows "UPGRADE NOW ?".



4. Push the **【SET】** button to begin.



5. Attention : do not turn off the power or push any keys while upgrading the DVD-88X controller, it will break the controller and the only solution is send back to your local distributor for repair.



6. After finishing the upgrade, reboot the duplication system.

Chapter 4. NOTES

1. Check the voltage setting before you plug in the duplicator to see if it fits the local standard. If the setting is incorrect, it may result in the unstable display and damage to the devices.

2. Please be aware that the power cord connection of controller is contrary to what of the CD/DVD drives.

3. Please note that the controller is mainly for you to backup and keep files. It supports no authentic test. (It's not suitable for the quality restriction to discs.)

4. Please reload the source to HD if the firmware in controller is just updated.

5. It fails to execute "TEST" in use of DVD+R format blank media. If you insist on running the function, the display shows [PLEASE CHANGE TO COPY MODE].

6. If source is DVD, the display shows [PLEASE USE BLANK CD] when you insert blank CD in DVD 16X duplication systems and run "TEST" or "COPY".

7. How controller finds the source??

1) In case there is drive or built-in HD in the system, the controller seeks through the source disc in drives or saved files in HD.

2) If there is none source either in the drive or HD, the controller seeks through the devices in turn. Please watch the right upper side the S(*) sign when there are flashing letters on screen. e.g. "S5" means that the source is in the 5th writer.

3) If the source device is preset in setting of [CHOOSE SOURCE], the controller runs COPY thru the preset source.

8. Please check the position of drive where the source is put before you run each function. The position of the device should be same as what's showing on the display.

9. If both the source and the targets are DVD+RW, please be aware that the position to the source device is correct or not.

10. Points for Attention in copy thru DVD drive-to-drive (direct) copy.

1) Write in DVD by default settings :

- 1.1 We have no guarantee that the quality of read-out reaches the expectation to users in direct copy due to the performance in variety among DVD drives. The DVD controller is under strict proof so that it supports the highest read-out speed in direct copy in below models.
- 1.2 Lite-on JLMS XJ-HD 166S / 167 、 Pioneer DVD121/122 support full speed in **disc-to-disc** copy. However, the prerequisite is that the source disc must be DVD+R or Book Type as DVD-ROM.
- 1.3 Please contact us for the firmware of above-mentioned models.
- 1.4 Reset it only once in firmware update to the controller. It remains the original setting in restart.

2) Manual setting to DVD write-in speed

- 2.1 Press and hold the SET button for 3 seconds and then enters the SETUP mode.
- 2.2 Change to DVD Writing Speed.
- 2.3 Press RUN to change the default setting from MAX to 8X.
- 2.4 Once the setting is changed, and therefore the DVD controller can support the highest read-out speed of installed DVD drives in direct copy. However, it has effect on the quality in direct copy due to the DVD drives can not read out the data in real time.

11. Please check below conditions if the LCD screen shows "Wrong VENDOR" message when you are updating the controller firmware.

1) The language system or the corresponding controller model is different between the existing firmware version and the version in update CD.

For example : Either the controller is in Chinese system but the update CD has firmware in English system, or the controller model starts with CDR but the update CD is for DVD model.

2)Incorrect burning method for the save of downloaded firmware.

For example : You can use BURN IMAGE to burn .iso files but must drag .bin files for burning.

3)The LOGO setting in the existing firmware in controller is not fit to what's in the update CD.

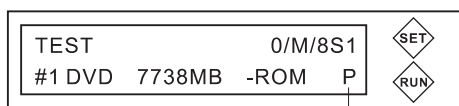
4)Please make sure the file is formed as .bin after being burned onto the update CD.

5)After all above conditions are sure to be correct, please burn the firmware again now.

12.How to duplicate a CD+G source disc ??

In the CD WRITING WAY in Advanced mode, change to RAW thru the RUN button. Whether it's the direct copy thru drives or copy thru a HDD, the installed CD/DVD drives must support the write-in or read-out mode to RAW.

13.How can I identify if the DVD movie has CSS protection ??



Namely, the source media protected by CSS

Chapter 5. Menus in the Operation Mode

1) **TEST**

The simulate duplication executes the duplication either thru disc-to-disc or HD-to-disc. TEST just does the burning test but not really writes the blank disc. The source which is determined by the setting of COPYSTAR DVD/CDR CONTROLLER controller can be from either built-in HD or the drive .

2) **COPY**

COPY does the real copy either thru disc-to-disc or HD-to-disc and is decided by the setting of COPYSTAR DVD/CDR COPY enables the compilation of audio discs directly thru the source discs. Press and hold the RUN button for 3 seconds to execute the function. Please refer to The Basics/Edit and Duplicate Audio CDs/Compilation and duplication thru CD/DVD drives in the foregoing chapter.

3) **COMPARE**

Compare the presaved files either in source drive or in HD to what's in the copied CD.

4) **COPY & COMPARE**

COMPARE follows COPY.

5) **VERIFY**

Verify the copied discs to see if there is any unreadable sector. This function is in use of neither the source drive nor built-in HD.

6) **ERASE**

Erase the data in discs. This mode is available under R/RW writers and R/RW media. This function is in use of neither the source drive nor HD. Default setting is [Quick Erase]. You can press and hold the RUN button for 3 seconds for [Full Copy]. The system displays the same process but the work time becomes longer.

7) LOAD

If the system has a built-in HD, you can execute LOAD. You can load data in the source disc from drive to HD partitions. The original data in the partition are covered repeatedly. Users do not have to reset the partitions if the load is for copy instantly since it just needs a partition for work only. If you are loading various sources to the HD, change to [PARTITION NAME] to set the partition after per load is finished. This avoids covering the original data in the partition.

LOAD enables the audio tracks in the source disc to be added to HD partition. Press and hold the RUN button for 3 seconds to execute this mode. For details, please refer to The Basics /Disc Duplication/HD-to-Disc COPY in the foregoing chapter.

Chapter 6. Menus in the SETUP mode

The menus in the SETUP mode offer the setup to operation modes in the COPYSTAR DVD/CDR controller. You can press the SET button for the changes to different functions and press the RUN button to change the setup. There are parentheses behind most setup options. The content in the parentheses indicates the present setup value. Hold the SET button until beep sound. It then exits the setup mode and returns to the operation mode.

1) AUTOMATIC

The feature will come with A3 or A7(Autoloader) for that the robot is adjusted.

2) PARTITION NAME

Set up the ID and the partition number of HD.

The partition number is formed by 5 digits. The first 2 digits are I.D. of the HD which you can change it for demand. It can be from 00 to 99.

The rest 3 digits represent the position of partition which is determined by

HD capacity.

Default setting is 00000.

Press and hold the RUN button for 3 seconds to delete particular partition. If what's in the partition the audio tracks, it enables the deletion to the last track. COPYSTAR DVD/CDR controller queries if you are really deleting the partition. Press the RUN button to cancel the command or press the SET button to delete the partition.

3) SET AS DEFAULT

COPYSTAR DVD/CDR controller stores the setting of arguments in advanced mode. If you want to save the adjustments as default setting, please use this function.

4) UPDATE FIRMWARE

4.1 Updating the Controller firmware

In the operation mode, hold the SET button until beep sound to change to SETUP mode. Changing the function to UPDATE FIRMWARE. The COPYSTAR DVD/CDR controller starts to detect the devices to find the update CD. If the system finds the correct update CD, it queries if you are doing the update.

To cancel the command, just press the RUN button. Do not turn off the power when the COPYSTAR DVD/CDR system is going updating.

Otherwise, the update will fail and result in shot down and you have no choice but to send it back to the maker for repair now. If the update action is finished, the screen will show a message and all arguments return to the default settings. Please restart the system to accomplish the task.

4.2 Updating Drive/Writers firmware

In the operation mode, hold the SET button until beep sound to enter the SETUP mode. Change the function to UPDATE FIRMWARE. The COPYSTAR DVD/CDR controller searches for the update CD put in the

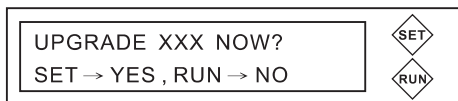
drive/writers. When COPYSTAR DVD/CDR controller detects the correct update CD, it queries if you are really doing the update. To cancel the command, just press the RUN button.



1. In operation mode, insert the update disc to any of the drive/writer. Wait until the DVD-88X controller detects the update disc.

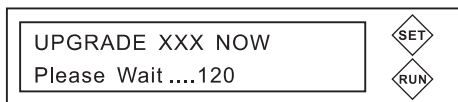


2. In operation mode, press **[SET]** until the beep. Enter the setup mode and select "UPDATE FIRMWARE"



3. DVD-88X controller asks if you are really going to update firmware. Press **[SET]** for yes or **[RUN]** for no.

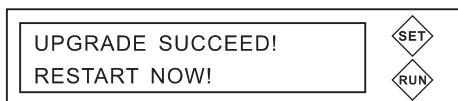
※ XXX represents the brand of the device.



4. Press **[RUN]** to update the firmware of drive or writer.

Note : You have to wait 120 sec. to update the firmware. In update, do not turn off the power or press any button. Otherwise, the firmware update will be failed and results in the crash to controller.

※ XXX represents the brand of the device.



5. The display shows the successful update. Please restart the DVD-88X controller.

Note : Before you restart the controller, please take out the update disc from the drive in advance.

4.3 What you have to know about Firmware Update

- 1) Before doing the update, please ensure the correctness of the firmware version.
- 2) Firmware update is not guaranteed to be successful since there are uncertain factors in the process.
- 3) If the firmware update is failed, please consult with the local agent.

4.4 The firmware support list to CD/DVD drives.

CD/DVD drive or writer	Model Name	Firmware version
LITEON	CD-ROM	
	LTN-529S	7S57
	LTN-529SV	7\$58
	CD-Recorder	
	LTR-52327S	QS0E · QS5A
	LTR-52328S	4S07
	LTR-52329S	2S09
	COMBO CDRW	
	SOHC-5236K	RK07(16xRead)
	DVD-ROM	
	LTD-166S	DS1E(16xRead)
	SOHD-167T	9S1B(16xRead)
	SOHD-16P9S	FS09(16xRead)
	DVD-Recorder	
	SHOW-811S	HS0R(12xRead)
	SOHW-812S	US0S(12xRead)
	SOHW-832S	VS0J(12xRead)
	LDW-851S	GS0P(12xRead)
	SOHW-1213S	TS0D(16xRead)
	SOHW-1613S	AS06(16xRead)
	SOHW-1633S	BS0S(16xRead)
	SHW-1635S	YS0B · YS0G
	SOHW-1653S	CS0P(16xRead)
	SHOW-1673S	JS0C(16xRead) JS0C(Low Speed Support)
	SHOW-1693S	KS0A(16xRead) KS0A(Low Speed Support)
NEC	DVD-Recorder	
	ND-2510	2.F9(Mad Dog OEM) 205C(Dell OEM)
	ND-3500	2.19 · 2.TG
	ND-3520	2.U2 3.06-offica 3.23-IOData
	ND-3540	1.03-Fast 1.24-IOData 1.W6 1.F1(Mad Dog OEM)

CD/DVD drive or writer	Model Name	Firmware version
Pioneer	DVD-ROM	
	DVD-122	1.03
	DVD-Recorder	
	DVR-107D	1.22
	DVR-108D	1.20
	DVR-109D	1.58(For external OEM drive firmware) 8.57
	DVR-110D	1.22
SONY	Combo CDRW	
	CRX320EE	RYK1
	DVD-ROM	
	DDU1612	DYS3(16xRead)
	DDU1613	9YS2(16xRead)
	DDU1615	FYS2(16xRead)
	DVD-Recorder	
	DRU-700A	VY08(12xRead)
	DRU-710A	BYX4
	DRU-720A	JY06(16xRead)
	DRU-800A	KY05(16xRead)
	D22A	BYS3
	D23A	CYS1
	D26A	JYS2
	DW-Q28A	KYS3
	DW-U18A	UYS4
BENQ	DVD-Recorder	
	DW-1620A	B7V9 、 B7W9(16xRead)
	DW-1610A	B8V9 、 G8M9
	DW-1625A	BBIA(16xRead)
	DW-1640A	GSHB 、 BSLB(16xRead)
TDK	DVD-Recorder	
	DVDRW 1612DLB	C7S3(16xRead)
	DVDRW 1280B	T7S4(16xRead)

CD/DVD drive or writer	Model Name	Firmware version
TEAC	DVD-ROM	
	DV-516G	F4S6 F4S6(16xRead)
	DVD-Recorder	
	DV-W516G	B4S6 B4S6-LowSpeedSupport
	DV-W516GB	J4S2
	DV-W58G-A	U4S7
	DV-W58G	H4S4
PLEXTOR	CD-Recorder	
	Premium PX-W5232TA	1.06
	DVD-Recorder	
	PX-708A	1.10 、 1.11
	PX-712A	1.07
	PX-716A	1.08
	PX-740A	1.01
LG	DVD-Recorder	
	GRA-4120B	A116
	GSA-4082B	A208 、 A209
	GSA-4160B	A306
	GSA-4163B	A105 、 AN16(NEC OEM)
ASUS	DVD-ROM	
	DVD-E616P2	1.08
	DVD-E616P3	1.07
	DVD-Recorder	
	DRW-0804P	1.21
	DRW-1604P	1.18
	DRW-1608P	1.57
	DRW-1608P-BULK	1.57
AOpen	DVD-Recorder	
	DUW-1608P	A080
MSI	DVD-Recorder	
	DR16F	2.10
	DR16F2	2.30

CD/DVD drive or writer	Model Name	Firmware version
TOSHIBA	DVD-Recorder	
	SD-R5272	1031
	SD-R5372	TU56
4KUS	CD-ROM	
	CCD-9S52	7SGB
	CD-Recorder	
	CDR-9S52	2SG8
	COMBO CDRW	
	COB-6K5216	RKG5
	DVD-ROM	
	DVD-16X6S	DSG2(16xRead)
	DVD-7T16	9SG6(16xRead)
	DVD-9S16P	FSG2(16xRead)
	DVD-Recorder	
	DRW-1S81	HSG8
	DRW-2S81	USG4
	DRW-2S83	VSG1
	DRW-3S121	TSG2
	DRW-3S163	BSG3
	DRW-3S165	CSG4
	DRW-3S167	JSG7
	DRW-3S169	KSG2
	DRW-5S163	YSZ1、YSZ2
GIGABYTE	DVD-Recorder	
	GO-W1608A	B8S3
	GO-W1616A	J8S2
	GO-W0808A	USY1
BTC	DVD-ROM	
	BDV316G	0019
	DVD-Recorder	
	DRW1004IM	0251
hivision.com	DRW1116IM	A190
	DVD-Recorder	
	DRW3S121	TSW1(16xRead)

CD/DVD drive or writer	Model Name	Firmware version
hp	DVD-Recorder	
	HP530R	VP5G(12xRead)
imation	DVD-Recorder	
	IMWDVRW8I	HSI3
iomega	DVD-Recorder	
	DVDRW12448	TOSB(16xRead)
OPTODISC	DVD-Recorder	
	OptoriteDD0201	2.60
PHILIPS	DVD-Recorder	
	ED16DVDR	B5S6
	ED8DVDRW	V5S3(12xRead)
Memorex	DVD-Recorder	
	DVD+-DLRWL1 F16	BWSE
	DVD+-RW True8XI	UWS4
	DVDUR RW 8412AJ	HWS7
nu	DVD-Recorder	
	DDW163	G7V9

5) CD READING SPEED

The setting to CD drive reading speed. CDR models support :
MX/01/02/04/06/08/10/12/16/20/24/32/40/46/48/52

[MX] : The maximum speed in CD reading. If the setting exceeds the highest CD reading speed of the drive, the drive works at its highest speed.

[MD] : It reads at the highest speed the blank disc supports.

RUN – Modify parameter

SET – Save and Quit

Default setting is [MX].

6) CD WRITING SPEED

The setting to CD writer writing speed. CDR models support :
MX/01/02/04/06/08/10/12/16/20/24/32/40/46/48/52

[MX] : The maximum speed in CD writing. If the setting exceeds the highest CD writing speed of the writer, the writer works at its highest speed.

[MD] : It writes at the highest speed the blank disc supports.

RUN – Modify parameter

SET – Save and Quit

Default setting is [MX].

7) DVD READING SPEED

The setting to DVD drive reading speed. DVD models support :

MX/1/2/2.4/4/6/8/12/16

[MX] : The maximum speed in DVD reading. If the setting exceeds the highest DVD reading speed of the drive, the drive works at its highest speed.

[MD] : It reads at the highest speed the blank disc supports.

RUN – Modify parameter

SET – Save and Quit

Default setting is [MX].

8) DVD WRITING SPEED

The setting to DVD writer writing speed. DVD models support :

MX/MD/1/2/2.4/4/6/8/12/16

[MX] : The maximum speed in DVD writing. If the setting exceeds the highest DVD writing speed of the writer, the writer works at its highest speed.

[MD] : It writes at the highest speed the blank disc supports.

RUN – Modify parameter

SET – Save and Quit

Default setting is [MX].

9) ADVANCED SETUP

Enter COPYSTAR DVD/CDR controller Set-up manual thru RUN button and choice Advance function. There are some features in Advance setting that will be introduced as following; Pressing SET button until sound changed. Go back to last screen. You will go back to Main Screen, if you do continuously two times.

Chapter 7. Menus in the ADVANCED mode

1) CHOOSE SOURCE

Change the device code of the source. Press RUN to change the default setting of source device code. Those digits stand for the device code. [A] means the auto-operation determined by COPYSTAR DVD/CDR controller itself. If COPYSTAR DVD/CDR controller is in mode of auto-operation, it seeks and sorts below source devices.

A.CD-ROM or DVD-ROM drive contains a readable disc.

B.The system is including a built-in HD where there are readable data in the partitions.

C.Recorder/Writer contains a readable disc while the device code is the smallest.

If the setting is in no use of the source device, the COPYSTAR DVD/CDR controller will not refer to the setting in this mode.

RUN – Modify parameter

SET – Save and Quit

Default setting is [A] which means the determination by COPYSTAR DVD/CDR controller itself.

2) DISC COUNTER

The amount of the target discs in auto-operation mode. Those digits stand for the amount of discs.

[M] : Press the RUN button by manual.

[A] : The COPYSTAR DVD/CDR controller in auto-operation determines the amount of target discs for demand. Normally, the amount of target discs is equal to what of writers in a system.

RUN – Modify parameter

SET – Save and Quit

Default setting is [M] which is in manual operation.

3) SKIP READ ERR

COPYSTAR DVD/CDR controller skips the read errors of the source disc

and keeps on reading.

[NO] : The drive instantly rejects the source disc in facing of read errors.

The display shows copy failure.

[SHORT] : The system skips read errors by 2-KB sectors

[MED] : The system skips read error by 100-KB sectors.

[LONG] : The system skips read error by few-MB sectors.

[SKIP] : The system skips the read of the track in facing of the first bad sector.

RUN – Modify parameter

SET – Save and Quit

Default setting is [NO]

4) CD WRITING WAY

COPYSTAR DVD/CDR controller provides 3 modes for CD reading/writing. It follows the default writing setting in controller upon the read of the source by the drive. If you want to change the CD writing mode, just reset appropriate writing mode before loading. If you force the setting, the accuracy to the content in targets is unsure.

[DAO] : Short for Disc at Once which is in most common use.

[TAO] : Short for Track at Once which means track-by-track writing.

This mode is in rare use.

[RAW] : This mode is in rare use. It is only available when installed writer supports RAW writing. If the above-mentioned 2 modes both fail in writing, you can try RAW.

RUN – Modify parameter

SET – Save and Quit

Default setting is [DAO]

4) DVD WRITING WAY

[DAO] : Short for Disc at Once which is in most common use. DAO is fit for not only outdated but up-to-date DVD writers.

[INC] : INC improves the readability in other DVD players. INC suits old writers or writers which support INC writing.

RUN – Modify parameter

SET – Save and Quit

Default setting is [DAO]

6) CHECK TRK LEN

There are various ways for the detection of bad sectors.

[NO] : Read as GAP = 0.

[AUTO] : Read by standard GAP.

[SHORT] : Read by short GAP.

[LONG] : Read by long GAP.

RUN – Modify parameter

SET – Save and Quit

Default setting is 【SHORT】

7) SHOW DISC INFO.

Show the disc info. what is put in the drive/writer.

For CDs : It shows ATAPI CODE

For DVDs : It shows MANUFACTURE CODE

8) SHOW SYSTEM INFO.

Show hardware info. about the controller, drive, writer, and HD.

9) SHOW EXE. TIME

It shows the consuming time when the execution of any functions is finished.

RUN – Enable or Disable

SET – Save and Quit

Default Setting is 【Disable】

10) AUTO EXE. TIME

The drive/writers have to detect the blank discs before the use of this function. Regardless of the amount of the blank discs put in the writers is correct or not, the controller goes executing the functions automatically. This execution is not repeated until the cancellation of this option.

RUN – Modify parameter

SET – Save and Quit

Default Setting is 【60】 sec.

11) ENABLE SEND OPC

Adjustment in the blank discs to get the optimum laser power.

Thru OPC, Optical Proximity Correction, we can find the best laser power range for the discs. It can therefore remain the low read error rate by means of the value when we write data in.

RUN – Enable or Disable

SET – Save and Quit

Default Setting is 【Enable】

12) SUPPORT UPC/ISRC

Copy the UPC code of music CDs and the ISRC code of tracks. The copy of ISRC code includes its full information. It records the country of the manufacture, the owner, the date, the serial number of each track ...etc. The content can be different from track to track.

RUN – Enable or Disable

SET – Save and Quit

Default Setting is 【Disable】

13) REGION FREE SET

Rip the restriction of DVD movie region codings and set the region code free automatically. As such, the duplicated DVD movies have no protection to the region code. Please note that the DVD movies have to be non-CSS firstly.

RUN – Enable or Disable

SET – Save and Quit

Default Setting is 【Disable】

14) PARTITION SIZE

Assign the space of HD partition according to the demand. Therefore, it can increase the utility rate of HD space and makes it flexibly to data storage thru the partition blocks. The system default setting is 9GB.

Once you have changed the size of partition, you have to reload the source. Please also be aware of the size between the source disc and the assigned partition block.

RUN – Modify parameter

SET – Save and Quit

Default Setting is 【9G】

15) CD GIGAREC RATE

Support the GigaRec tech. of Plextor PX-712A and PX-716A writer. This function is not available in the Advanced menu unless there is Plextor PX-712A and PX-716A writer connected with the controller. The GigaRec tech. packs up to 1GB of data on a normal 740MB CD, that is to say, enabling disc capacity overburn on particular CDs. It enables pushing up to 99' 59" of music data or 875MB of normal data. That is because of the higher rank of the tracks and then increase or decrease the record density, the record capacity, over the unit square measure. The most important thing is that the CD must be read on Plextor PX-712A.

RUN – Modify parameter

SET – Save and Quit

Default setting is 【100%】

16) DISABLE L0 CHANGE

The feature is able to change DL writing method; it will be more efficient and quicker to back-up 8.5G DL Disk.

RUN – Enable or Disable

SET – Save and Quit

Default Setting is 【Enable】

17) BOOT DELAY TIME

Some 16X writers are initiated taking more time than normal one that will cause the booting time delay while the machine be turned it on, but some writers will be not same problem. If the writers are able to support quick initiation, the feature will be allowed user to change parameter, so as to shorten the booting time while the machine runs the process of booting. Default Setting will be given enough time to make sure whatever that all writers are able to complete the process of booting.

RUN – Modify parameter

SET – Save and Quit

Default Setting is 【0】

18) FAST CLOSE DISC

This feature does not regard copy disc at all, it is only for DVD+R and the content of disc is less than 1G as well. This feature not for all Writers, unless the writer is support it.

RUN – Modify parameter

SET – Save and Quit

Default Setting is 【Disable】

19) DISABLE POWER REC.

As usual, user is able to decide which speed would like to burn, however, high speed writing will lead to poor writing quality and high failed rate.

In the same time, user have to consider what the quality disc you have.

Enable Power Rec. the duplicator will have ability to recognize the disk what is the best optimal writing speed, however, this feature only support some writers, not for all.

RUN – Modify parameter

SET – Save and Quit

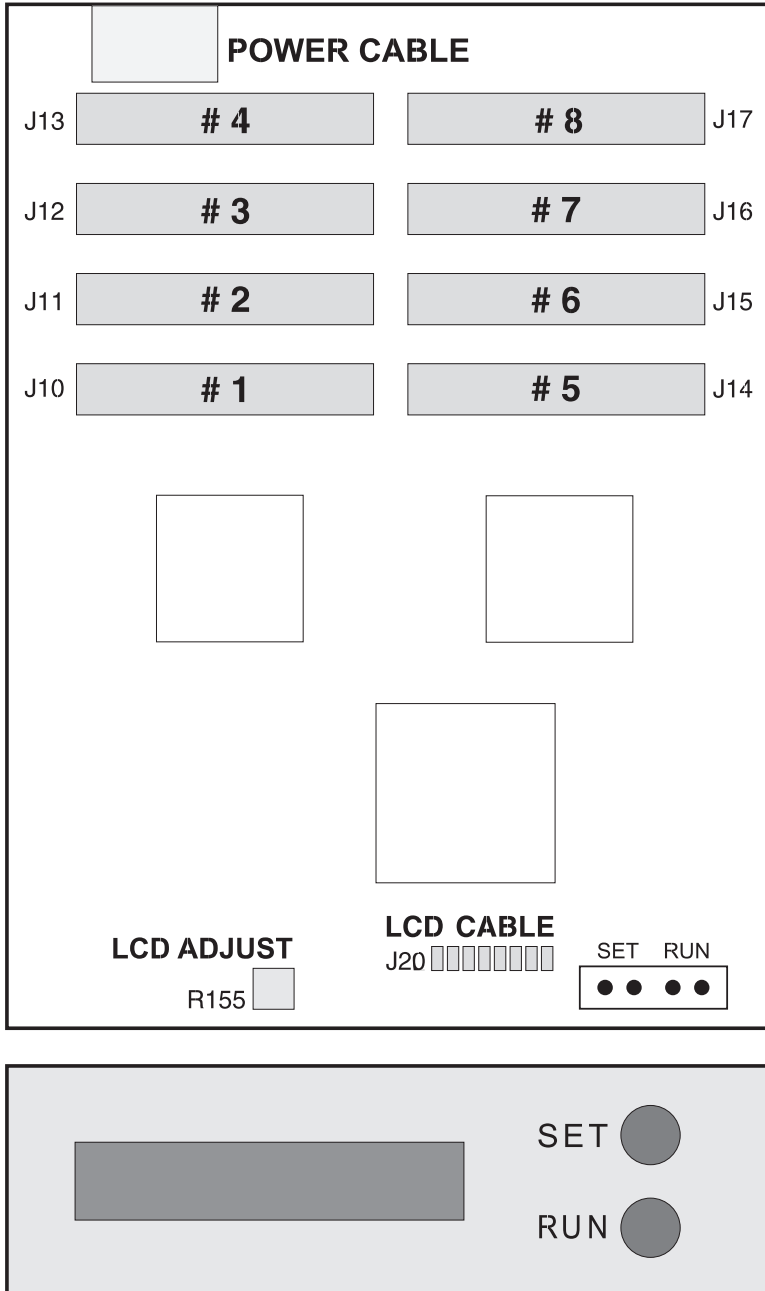
Default Setting is 【Enable】

Chapter 8. Appendix

8.1 Specification

Controller Model	DVD887		DVD883	DVD8812
Display	20*2 Light Background LCD			
Input	2 Push Button			
Memory	32 MB			
Device	7	3	1	
Writing Method	CD	DAO、TAO、RAW		
	DVD	DAO、INC		
Recording Speed	CD	1X-52X		
	DVD	1X-8X		
DVD Format	DVD-ROM、DVD-R、DVD-RW、DVD+R、DVD+RW、DVD-Video、DVD+R DL、DVD-R DL			
CD Format	CD-ROM、CD-ROM XA、CD-Audio、CD Extra、CD Text、CD-IReady、CD-Bridge、Photo-CD、VideoCD、Hybrid CD			
Storage Device	IDE Hard-Disk			
Weight	Net weight :1Kgs	Gross weight : 1.5Kgs		
Dimension (L*W*H) mm	235*155*60 mm			
Voltage	110-220VAC Switch cable			

8.2 Main Board Diagram



8.3 Installation Instruction

Note :

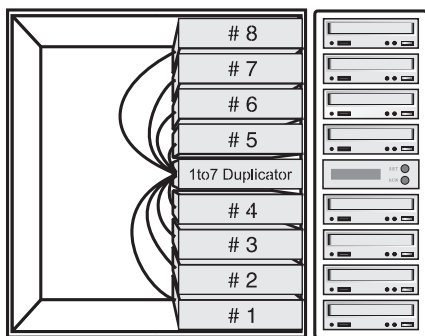
*DVD887/DVD883/DVD8812 Mode, they are all support to install C/DVD-ROM and Hard-disc as a source in the same IDE channel.

In other words, user is allowed to choice either one to be a source. Please follow the instruction to install two devices in the latest IDE channel.

Hard-disk set to Master and C/DVD-ROM to Slave.

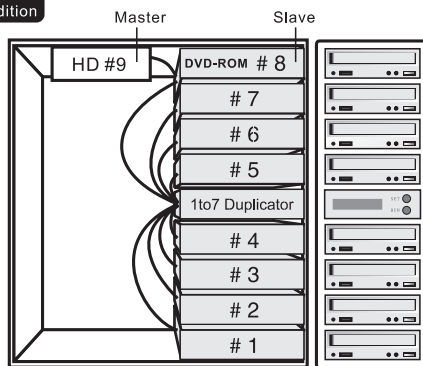
*Loading speed will base on the reader performance, even same source disc; the different C/DVD-ROM will have different reading speed.

Type 1
Original

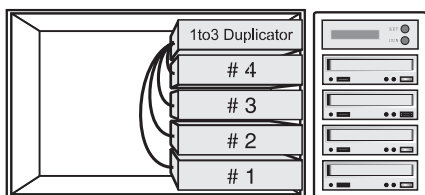


#1 Hard Disk or C/DVD-ROM
1 to 7 Duplication proper installation diagram

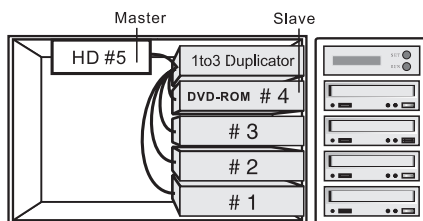
Type 2
Addition



#1 ~#7 DVD-RW
1 to 7 Duplication proper installation diagram



#1 Hard Disk or C/DVD-ROM
1 to 3 Duplication proper installation diagram



#1 ~#3 DVD-RW
1 to 3 Duplication proper installation diagram

8.4 Start/Remove USB Controller

When users choose USB controller, please refer to below for list of accessory.

- USB 2.0 Controller
- USB 2.0 A/B External Cable
- 40PIN IDE Flat Cable
- Switch Cable of Power
- USB Driver (Install USB Driver under Win 98 OS)

Start USB Device

STEP 1 : Turn off the power of CD/DVD Controller and then switch the USB Switch to [USB ON].

STEP 2 : Turn on the power of CD/DVD Controller and wait until PC detects the USB device.(The display shows DETECT NEW DEVICE).
The installed writers now become external writers.

Remove USB Device

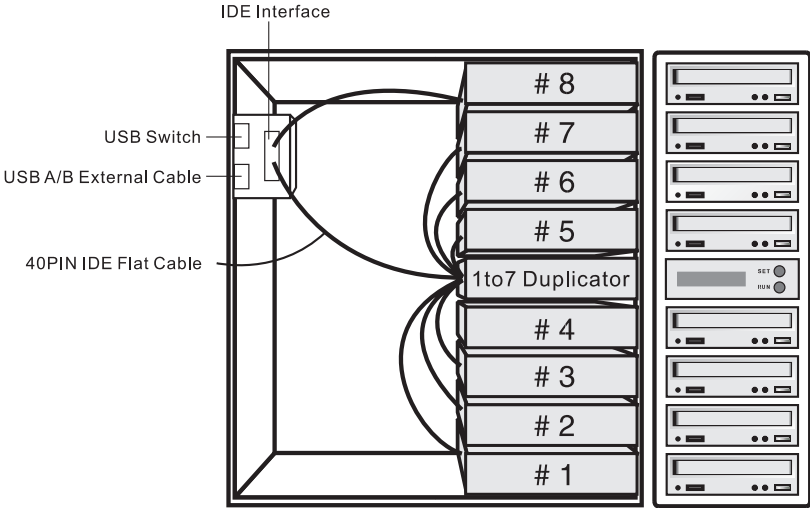
STEP 1 : Remove the USB device of PC firstly.

STEP 2 : When PC shows the remove is done, please turn off the power of CD/DVD controller then. Switch USB Switch to [USB OFF] and then turn on CD/DVD controller.

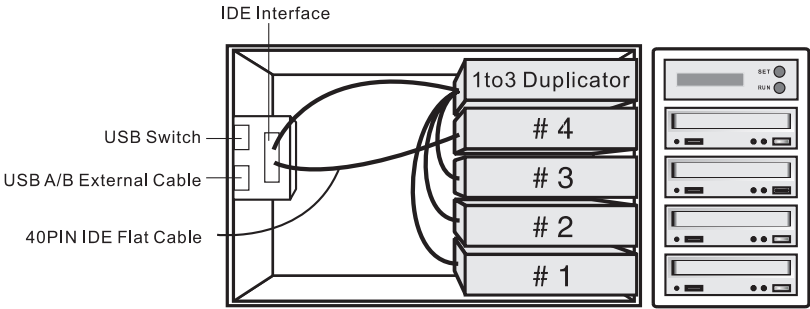
Operating Instructions :

- Win 98 edition must be SE2 and upward
- Install USB Driver under Win 98 OS

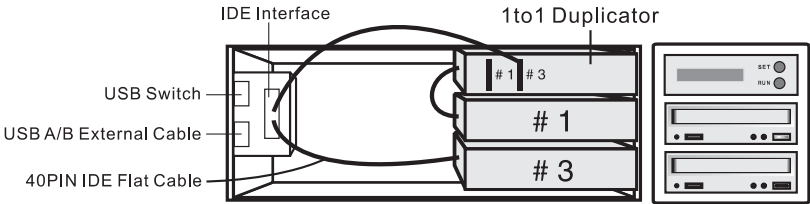
8.5 Diagram of USB 2.0 controller Installation



#1 Hard Disk or CD-Rom
1to7 Duplication proper installation diagram



#1 Hard Disk or CD-Rom
1to3 Duplication proper installation diagram



#1 Hard Disk or CD-Rom
1to1 Duplication proper installation diagram

8.6 Error Code Definitions

SET_SPEED_ERROR	'S'	Wrong speed setting
READ_ERROR	'r'	Reading error
WRITE_ERROR	'w'	Writing error
READ_DMA_ERROR	'R'	DMA reading error
WRITE_DMA_ERROR	'W'	DMA Writing error
CUE_SHEET_ERROR	'U'	Writing wrong CUE-SHEET
ERASE_ERROR	'E'	Erasing Error
FORMAT_ERROR	'F'	Formatting error
COMPARE_ERROR	'C'	Comparing error
SYNCHRONIZE_ERROR	'Z'	Syn. Writing error
CLOSE_ERROR	'O'	Closing disk error
TERMINATE_ERROR	'T'	Data interrupt
BLANKMED_ERROR	'B'	Disk type error between source and target
ATIPCODE_ERROR	'A'	Blank disk can not be recognized
MCODE_ERROR	'M'	Only support Ritek medium
READDISCINF_ERROR	'D'	Closing disk incomplete
TARGNOTEMPTY_ERROR	'N'	Non blank medium
PLUSRTTEST_ERROR	'P'	Doing test function with +R medium
UNKNOWN_ERROR	'K'	Other error
READDISCINF_ERROR	'D'	Medium format error
CDDVDDISC_ERROR	'J'	Medium error
HD_READ_ERROR	'G'	Hard-disk Reading error
HD_WRITE_ERROR	'H'	Hard-disk writing error
REV_TRACK_ERROR	'I'	DVD-R Medium capacity error

8.7 Troubleshooting

COPYSTAR DVD/CDR controller is unable to be started or start but without display ??

- 1.) Check if the power in the rear fits the local voltage setting.
- 2.) Open the casing to see if the power cables disconnected.
- 3.) Open the casing to see if the cable to the LCD Display disconnected.

The System is Unable to Duplicate CDs.

- 1.) Check if the system detects all the devices firstly. If there is any missing device, please open the casing to check if all the flat cables and power cables are well connected. All the devices should be set at MASTER.
- 2.) Check if there is any scrape or damage on the source CD.
- 3.) Try some other blank CD media.
- 4.) Check if the master CD is without any protection and okay for duplication source.
- 5.) Check if the source device is in good condition.

Deceleration or Instable Burning

- 1.) If you install the devices by yourself, please ensure that the installation follows the instruction in user manual.
- 2.) Try to use other blank CD media brands. The quality of CDs is uneven and you might get the poor ones. Moreover, it might happen that the blank CD media you use have not yet been proofread by those writers. We especially recommend that you open the [Disable Send OPC] function in the setup mode.
- 3.) Install a hard disc to be your source; that will increase writing/reading stability. The device can avoid the influence of defect source disc
- 4.) Try to find out the defect device. It happens that one defective device affect the others' writing performance.
- 5.) Try to slow down writing speed. eg. Slow down from 52X to 48X or to 40X. It happens that the blank disks can not support high speed writing or the reading speed in unstable.

Music CDs have interference noise or VCD have blocks

- 1.) Please check the source quality to see if it has had noise or block.
- 2.) Slow down the writing speed. eg. Slow down from 52X to 48X or to 40X.