Athena

User's Manual
Version 1.0e

1 to 3 targets
1 to 7 targets
1 to 11 targets

CD/DVD Duplicator Controller

CONTENTS

1. INTRODUCTION

The Athena series duplicator functions both as stand-alone CD/DVD Disc Duplicator Controller, and supports up to 11 CD/DVD discs. There is up to 12 IDE ports on the controller each of which is independent from one another. This gives the controller the ability to control several CD/DVD devices at once. There is no need for the drives to be of the same brand and/or speed. The controller can support up to 11 discs duplicating simultaneously at a maximum of 56x CD writing and 16X DVD writing speeds.

This easy-to-use operating control panel consists of an LCD screen and 4 control buttons. All operating information, such as the function list, instructions, operating status, or error message(s), is displayed in real time on the screen.

The built-in Hard Drive allows users to load several CD/DVD Master Source Discs onto the HDD as source disc images. This reduces the risk of damaging the Source Disc that result from heavy duplicating jobs. A forceful HDD management system dynamically assigns HDD partitions to each CD/DVD disc image loaded onto the HDD accordingly. This ideal HDD manager will ensure a flexible and efficient HDD management process.

2. FEATURES

- **1 to 3/ 1 to 7 / 1 to 11 IDE-to-IDE CD\DVD Disc Duplicator Controller**

- Auto-detect IDE devices

- 2x16 LCD display and 4 control buttons

- Supports up to max 56x CD duplication, 16x DVD duplication

- Offers flexibility in setting different duplication speeds depending on Disc writers

- Easy to **select Drive as the Master Reading Source**

- Support for an **IDE Hard Drive Device.** Source CD or DVD disc can be loaded onto the Hard Drive as **disc images**

- Customizable **Hard Drive Partitioning**. Create a Hard Drive partitioning name for easy storage

- Support for **Audio Track editing**. Combine audio tracks into one customized CD

- Special **PreScan** feature evaluates master source disc before copying

- Support **System Startup Password Protection.** Prevent unauthorized use of duplicator systems

• Support **Setup Password Protection** protects custom settings on duplicating systems

• Support for copying simulation prevents failures caused by defective blank discs or damaged source discs

• Support for Verification function ensures copied disc's readability

• Support Counter Function

• Supports all major disc types

• Auto detect source disc

• Can set beep button on or off

• **Firmware is easily upgradeable**. Simply place a CD in any drive and in a matter of seconds the firmware is automatically updated

• **CD/DVD Rewriteable Drive Firmware upgradeable through the controller**

3. SPECIFICATION

Power	Voltage:	5V+-5%
	Current:	0.7A Max
Environment	Working Temperature	0C~75C
	Storage Temperature	-20 C~85 C
Humidity	Working Humidity	20%~80%
	Storage Humidity	5%~95%
Dimension	Length	176 mm
	Height	42 mm
	Width	146 mm

Model	Max Burn CD SPEED	Max Burn DVD SPEED	Buffer Memory Size	Total IDE Port Number
Athena CD3	56X	N/A	32 MB	4
Athena CD7	56X	N/A	32 MB	8
Athena CD11	56X	N/A	64 MB	12
Athena DVD3	56X	16X	32 MB	4
Athena DVD7	56X	16X	64 MB	8
Athena DVD11	56X	16X	128 MB	12

4. HARDWARE INSTALLATION GUIDE

The following are the basic operation guidelines on how to set IDE devices as Optical READER, WRITERS, or Hard Drives. The system auto detects the drives then assigns Drive numbers.

	READER	WRITER	HDD	System Setting Information
1	Installed	Installed	No	When machine is turned on, the system will detect and assign the READER drive as Source Reader. Then it will automatically be set as Drive #1. WRITERS will be set by sequence after the READER drive, starting from Drive #2, Drive #3, etc.
2	No	Installed	No	When machine is turned on, the system will assign the WRITER drive connected to Port #1 of the controller as the Source Reader and set it as Drive #1. The rest of the WRITERS will then be set as Writers and numbered on a sequence beginning from Drive #2 and so on.
3	No	Installed	Installed	When machine is turned on, the system will assign the WRITER drive connected to HDD, the Source Reader function. It will automatically assign Drive #1. Then, the rest of the WRITERS will be set as Writers, and numbered on a sequence beginning from Drive #2, then to Drive #3, etc.
4	Installed	Installed	Installed	When all Drives are installed, assure that the READER drive is connected to the HDD. The READER will be set as the Source Reader and as Drive #1. WRITERS will be set as Writer and numbered in order from Drive #2, Drive #3, etc.

5. LCD FRONT CONTROL PANEL

1. Control Buttons
There are 4 control buttons: $\boxed{\wedge}$, $\boxed{\vee}$, $\boxed{ENT}$ and $\boxed{ESC}$
$\boxed{\wedge}$: **UP; backward; used to navigate backward in the menu**

$\boxed{\vee}$: **Down; forward; used to navigate forward in the menu**

$\boxed{ENT}$: **OK, Enter, Execute the function**

$\boxed{ESC}$: **Escape, Used to go back to previous function**

2. LCD Display
The LCD display is a 2x16 Mono LCD screen. The system displays function information, messages, and instructions on the LCD.
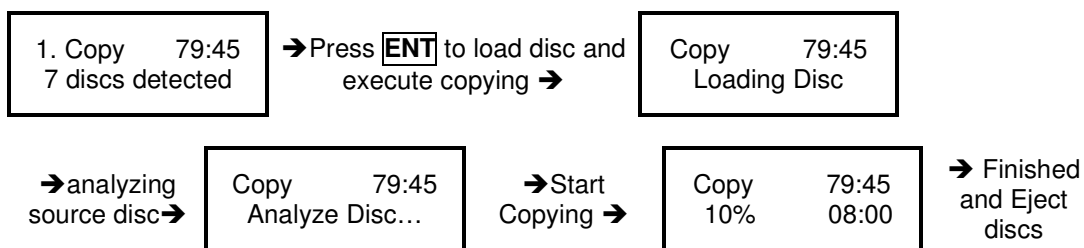
6. MENU OVERVIEW

1	**COPY**	Allows making a CD/DVD copy. Before the use of this function, assure that the correct reading source and blank discs are placed. The system will automatically display how many blank discs are detected. When the system is ready press ENT to execute CD/DVD copies.
2	**TEST**	This functions process is the same as above, except it will not record to the recordable disc. The purpose of this process is to ensure an error-free duplication.
3	**COPY&VERIFY**	Creates copies and is followed by a Verification process to automatically ensure data correctness.
4	**COPY&COMPARE**	Creates copies and is followed by a Comparison process to ensure data correctness.
5	**VERIFY**	Enables the use of Disc Readability Check. This operation will check all master and copied discs' readability to confirm that all the copies are readable.
6	**COMPARE DISK**	Used to make a bit-by-bit Comparison between the Master Reading Source and all the copied discs inside the writer trays. It assures that the copies have the same information as the Master Reading Source.
7	**SET BURN SPEED**	Enables to select Duplication Speed for three different disc types, (CDs, audio CDs, and DVDs).
8	**SELECT SOURCE**	Used to set the Master Reading Source as Optical Drive or Hard Drive Disk.
9	**TRACK EDIT**	Makes Audio Tracking Selection. It combines audio tracks from various CDs into a single customized audio CD.
10	**UTILITY**	
	10.1 Pre-scan	Confirms whether or not the Master Source Disc can be properly duplicated.
	10.2 Quick Erase	Quick erase re-writable discs' data.
	10.3 Full Erase	Full erase re-writable discs' data.
	10.4 Eject All Disc	Ejects all discs in writer tray, including master source disc.
	10.5 Disc Info.	Checks disc's basic information such as disc type, data length, and available space.
	10.6 Drive Info.	Checks the duplicator's major component information, such as the manufacturer, Writer or Reader model numbers and versions.
	10.7 System Info.	Provides the duplicator's information, such as the Controller model number, Buffer memory capacity, and Firmware version.
	10.8 Update BIOS	As manufacturer's certified update CD is inserted, this feature instantly updates duplicator's software.

11	SET UP	
	11.1 Power On Time	After the system power is turned on, the system's warm up time can be set from 5 sec to 255 sec.
	11.2 Auto Start	This feature allows the duplicator to automatically execute copying, once recordable disks are inserted to the master source disc and writer trays. The setting can be turned off or the amount of seconds can be set to (1~99). To execute this function, the operation mode has to be set to COPY, TEST, VERIFY, COPMARE, COPY&VERIFY, COPY&COMPARE.
	11.3 Startup Menu	The function in the menu which will be shown first can be selected when the duplicator is turned on.
	11.4 Write Method	CD duplication mode can be selected among "DAO", "SAO", and "TAO". The default mode is "DAO," which means Disc at Once.
	11.5 Button Beep	Gives the option to hear a beep as you press a button.
	11.6 SkipReadError	Gives the option to stop duplication process when an error has occurred or simply continue the process.
	11.7 Eject on Start	Allows choosing whether the duplicator system will eject the disc on startup.
	11.8 Boot Password	Allows setting or changing the password at start up.
	11.9 Setup Password	Allows setting or changing the password for Setup.
	11.10 Clear Setup	Resets all of the operations back to manufacturer's default.
12	IMAGE MANAGER	Demonstrates how to perform various Hard Drive related operations. If duplicator does not have HDD installed, the system menu will not show this function.
	12.1 Select Image	Used to select an Image file as a Source to be copied to the discs.
	12.2 Disc -> Image	Used to copy a Source Disc to HDD to save as an Image file.
	12.3 Reader Speed	The following function (12.2 Disc -> Image function), will allow you to set the Reading Speed of the master source disc.
	12.4 Image Info.	Checks the image file information and file size.
	12.5 Rename Image	This function renames the HDD image partition's name.
	12.6 Delete Image	Deletes an image file in HDD. If the file is selected as the source file, you will not be able to delete it unless you go back to 12.1 to re-select the image.
	12.7 HDD Info.	Checks the information in HDD, such as the number of discs stored on the HDD and the amount of space left in the HDD.
	12.8 Format HDD	This feature will allow you to format the HDD. However, if HDD image was selected as the source you will not be able to format it.

1. **COPY**

The following operation shows how to copy a Master Reading Source to a blank CD/DVD disc. If you would like to make Disc-to-Disc copies, make sure the Master Reading Source is set as the READER.
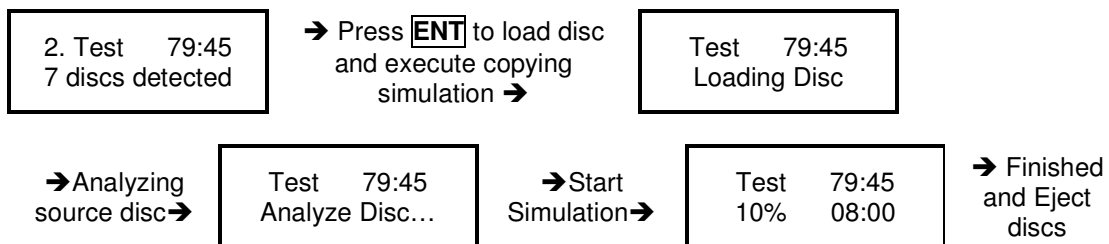
a. Turn on the duplicator before you start copying and make sure the correct reading source and blank disks have been set.
b. The system will automatically display how many blank discs were detected.
c. When the system is ready to copy, press **ENT** to execute CD/DVD copies.
d. When the system starts the copying process, it will start loading the disc. It will then analyze the discs, and then start copying. During the copying process, the LCD screen will display the Master Source Disc's data size and copying progress.
e. When the copying is finished, the Writer Trays will automatically eject.

| 1. Copy 79:45
7 discs detected | ➔ Press **ENT** to load disc and
execute copying ➔ | Copy 79:45
Loading Disc |

| ➔analyzing
source disc➔ | Copy 79:45
Analyze Disc… | ➔Start
Copying ➔ | Copy 79:45
10% 08:00 | ➔ Finished
and Eject
discs |

- *Note 2: If your duplicator has a HDD installed and you would like to make Hard Drive-to-Disc copies, refer to 12.1.1 HDD Image Manger for more information*
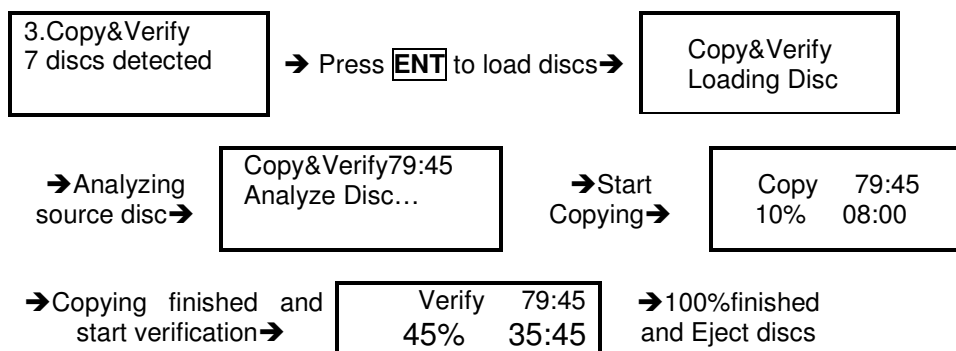
2. **TEST**

a. This function is similar to the COPY process with the exception of the writing on the recordable disks.
b. Press ▲ or ▼ to navigate the function menu to 2. Test and press ENT
c. The system will auto detect the numbers of blank disc and start to simulate the COPY process. However, there is no data that will be written onto the blank disc.
d. The purpose of this process is to ensure an error free duplication.

| 2. Test 79:45
7 discs detected | ➔ Press **ENT** to load disc
and execute copying
simulation ➔ | Test 79:45
Loading Disc |

| ➔Analyzing
source disc➔ | Test 79:45
Analyze Disc… | ➔Start
Simulation➔ | Test 79:45
10% 08:00 | ➔ Finished
and Eject
discs |

3. <u>COPY&VERIFY</u>

This operation will start the copying process and will be followed by a Verification process to ensure data's correctness. Therefore, the duplicator will not eject discs until verification is complete.

a. This operation will copy the Master Source onto Blank CD/DVD discs. Before the use this function, assure that the correct reading source and blank disks have been set.
b. The system will automatically display how many blank discs were detected.
c. When the system is ready to copy, press ENT to execute CD/DVD copying.
d. When the system starts the copying process it will start loading the disk. It will then analyze the disks, then start copying. During the copying process, the LCD screen will display the Master Source Disc's data size and copying progress.
e. When finished, the system will continue a verification to make a disc Readability check.
f. When the verification is complete, the Writer Trays will automatically eject the completed discs.

| 3.Copy&Verify
7 discs detected | ➔ Press ENT to load discs➔ | Copy&Verify
Loading Disc |

| ➔Analyzing
source disc➔ | Copy&Verify79:45
Analyze Disc… | ➔Start
Copying➔ | Copy   79:45
10%   08:00 |

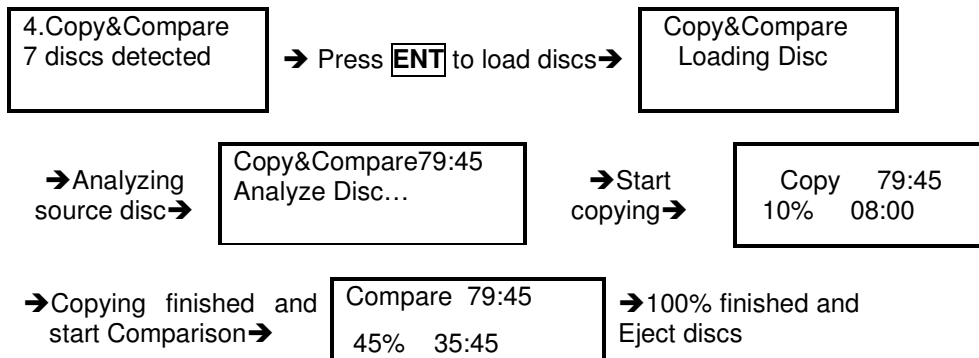| ➔Copying finished and
start verification➔ | Verify   79:45
45%   35:45 | ➔100%finished
and Eject discs |

- *The verification process makes a **Disc Readability Check**. This operation will check the master disc and the copied discs' readability to make sure all of the copies are readable.*

4. <u>COPY&COMPARE</u>

This operation will start the copying process and will continue with a Comparison process to ensure data correctness. Therefore, the duplicator will not eject discs until a disc Comparison is complete.

a. This operation will directly copy the Master Source onto a blank CD/DVD disc. Before the use of this menu, make sure you have put the correct reading source and blank discs.
b. The system will automatically display how many blank discs are detected.
c. When the system is ready to copy, just place ENT to execute CD/DVD copies.
d. When the system starts the copying process, it will start loading the disk. It will then analyze the disks, and then start copying. During the copying process the LCD screen will display the Master Source Disc's data size and copying progress.
e. When finished, the system will continue with the Comparison process to ensure the discs have the same information as the master source.
f. When the Comparison is complete, the Writer Trays will eject the discs.

```
┌──────────────────────┐                              ┌──────────────────────┐
│ 4.Copy&Compare       │                              │    Copy&Compare      │
│ 7 discs detected     │ ➔ Press ENT to load discs➔   │    Loading Disc      │
└──────────────────────┘                              └──────────────────────┘
```

```
                   ┌──────────────────────┐                  ┌──────────────────────┐
 ➔Analyzing        │ Copy&Compare79:45    │  ➔Start          │   Copy     79:45     │
 source disc➔      │ Analyze Disc…        │  copying➔        │ 10%     08:00        │
                   └──────────────────────┘                  └──────────────────────┘
```

```
                        ┌──────────────────────┐
 ➔Copying  finished and │ Compare   79:45      │ ➔100% finished and
 start Comparison➔      │ 45%     35:45        │ Eject discs
                        └──────────────────────┘
```
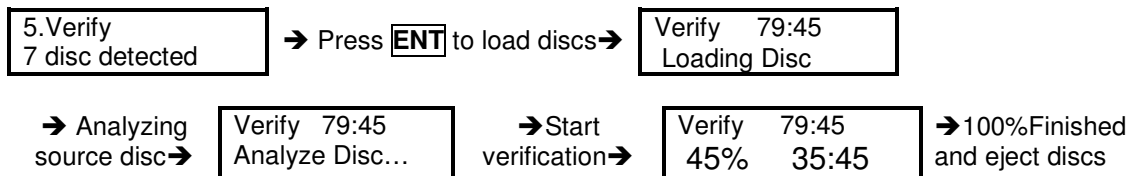
- The Compare Disc function serves as a bit-by-bit Comparison between Master Reading Source and the copied discs inside the writer trays. This operation ensures that all of the copies are completely identical to the Master Reading Source.

5. <u>VERIFY</u>

This function will check the master disc and the copied discs' readability to ensure that all of the copies are readable.
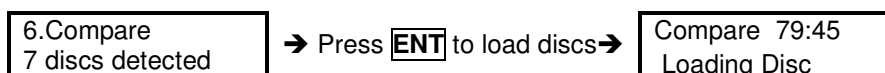
a. Place master source disc and all copied discs into the duplicator.
b. Press ENT. The duplicator will automatically start loading the disc, analyze the source disc and begin verification.
c. When verification is complete, the duplicator writer trays will automatically eject.

```
┌──────────────────────┐                              ┌──────────────────────┐
│ 5.Verify             │                              │ Verify     79:45     │
│ 7 disc detected      │ ➔ Press ENT to load discs➔   │ Loading Disc         │
└──────────────────────┘                              └──────────────────────┘
```

```
                   ┌──────────────────────┐                  ┌──────────────────────┐
 ➔ Analyzing       │ Verify   79:45       │  ➔Start          │ Verify     79:45     │ ➔100%Finished
 source disc➔      │ Analyze Disc…        │  verification➔   │ 45%       35:45      │ and eject discs
                   └──────────────────────┘                  └──────────────────────┘
```
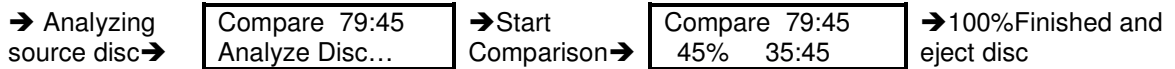
6. <u>COMPARE DISC</u>

Use this function to make a **bit-by-bit Comparison** between Master Reading Source and the copied discs inside the writer tray. This operation is used to ensure all of the copies have the same information as the Master Reading Source.

a. Put master source disc and all copied discs into the duplicator.
b. Press ENT. The duplicator will automatically start loading the disc, analyzing the source disc and start the Comparison function.
c. When the Comparison process is complete, the duplicator writer trays will automatically eject.
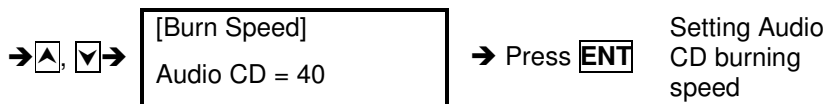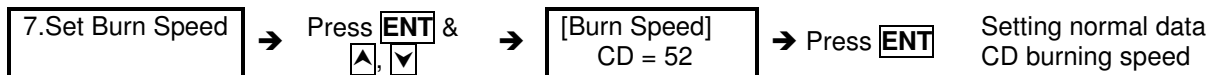
```
┌──────────────────────┐                              ┌──────────────────────┐
│ 6.Compare            │                              │ Compare   79:45      │
│ 7 discs detected     │ ➔ Press ENT to load discs➔   │ Loading Disc         │
└──────────────────────┘                              └──────────────────────┘
```

→ Analyzing source disc→	Compare 79:45 Analyze Disc…	→Start Comparison→	Compare 79:45 45% 35:45	→100%Finished and eject disc

- *Note : You can ONLY use the compare function when duplicating DATA discs*

7. <u>SELECT SPEED</u>

This operation allows you to adjust and **select the Duplication Speed** for the three different disc types: CD, Audio CD, and DVD.
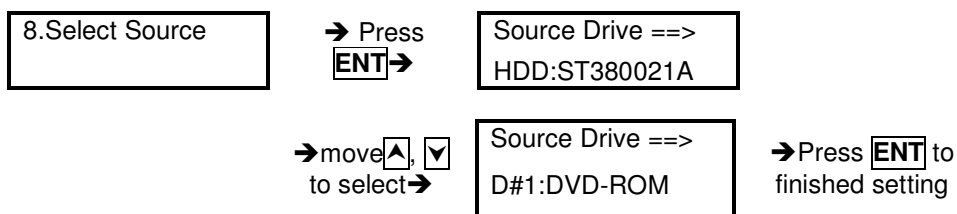
a. Press ▲ , ▼ to navigate the menu. <u>7. SELECT SPEED</u>, and press **ENT**
b. You will see three disc types: CD, Audio CD, and DVD. Press ▲ , ▼ to select a disc type and press **ENT** to confirm your selection.
c. Press ▲ , ▼ to select the burning speed.

7.Set Burn Speed	→	Press **ENT** & ▲, ▼	→	[Burn Speed] CD = 52	→ Press **ENT**	Setting normal data CD burning speed

→▲, ▼→	[Burn Speed] Audio CD = 40	→ Press **ENT**	Setting Audio CD burning speed

→▲, ▼→	[Burn Speed] DVD = 8	→ Press **ENT**	Setting DVD burning speed	★*Note: This is only available on DVD duplicators*★

8. <u>SELECT SOURCE</u>

Use this function to set an **Optical Drive or Hard Drive Disk** as the Master Reading Source**.**

a. Move to <u>8. Select Source</u> and press **ENT**.
b. Press ▲, ▼ to select either HDD or an Optical Drive with assigned number as the reading source.

8.Select Source	→ Press **ENT**→	Source Drive ==> HDD:ST380021A

→move▲, ▼ to select→	Source Drive ==> D#1:DVD-ROM	→Press **ENT** to finished setting

- *Note: If HDD was selected as Source, then follow 12.1 <u>Select Image</u> 's instructions to be familiar with how to select image files as your reading source.*
- *Note: Each Optical Drive will be assigned a Drive # according to their installation sequence. If there isn't, then Drive #1 is automatically set as the Reading Source.*
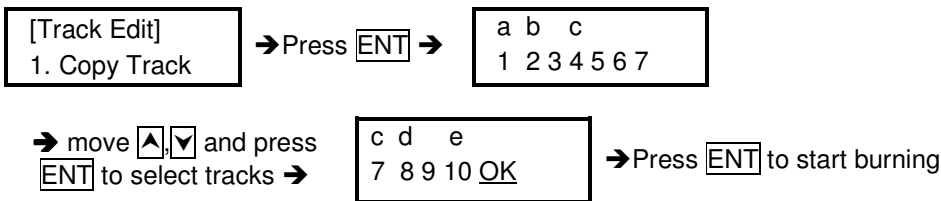
9. <u>AUDIO TRACK EDIT</u>

This process will guide you on how to select audio tracks from various audio CDs and combine them into one customized Audio CD.

9.1 Select and Copy Track:

a.   Move⊼, ⊻ to <u>9.Audio Track Edit</u> menu.

```
9.Track Edit
```

b.   Insert an Audio CD with music tracks in the Reading drive and Insert ONLY ONE Blank CD-R disc into one of the writers.
c.   As soon as both audio CD and blank CD-R are recognized, the following message will appear "ready to press ENT" on duplicator LCD screen.
d.   Navigate the menu by pressing ⊼, ⊻ to find the desired track number and then press **ENT** to confirm the selection. Repeat the process to choose the tracks that will be copied to the disk. The letter "a, b, c, d…" will appear on top of each selected track.

```
[Track Edit]
1. Copy Track
```
➔Press ENT ➔
```
a  b   c
1  2 3 4 5 6 7
```

➔ move ⊼,⊻ and press ENT to select tracks ➔
```
c d   e
7  8 9 10 OK
```
➔Press ENT to start burning

e.   Once the tracks have been selected, press⊻ to move cursor to the end of the "OK" display. And press **ENT** to confirm and submit your selection.

f.   Once you submit selection, *"Copying Audio Tracks…"* will appear *o*n your LCD screen. It will display the track number, total number of the current tracks and the position that is copying.

```
Track 02        06:14
Copy……        03:14
```

g.   Once the Copying Audio Tracks process is complete, copied CD will be displayed. It reveals the total tracks on the CD, total time used and total time remaining.

```
Track  Used  20:53
04       Free  59:25
```

h. You will need to finalize, as indicated on 9.2 before playing back. If you choose NOT to finalize, you can go back to the first step to continue the process. If you choose to finalize, use "9.2 Close Disc".

- *Note: Once you finished copy Audio Track, you will NEED to perform "9.2 Close Disc" function for your audio CD. If you do not, your audio CD will NOT play.*

9.2 Close Disc

Use this process to make a CD-R/CD-RW disc become a playable Audio CD.

a. Select 9. Track Edit and press ENT

```
9.Track Edit
```

b. Move to select 2. Close Disc and press ENT to start close disc process.
c. When Close Disc is processing, you will see "o", "O" blinking on the screen.
d. When the process is done, writer will automatically eject the disc, and you will see "_" on the screen.

```
[Track Edit]
2.Close Disc
```
→Press ENT→
```
Finalizing Disc…
```
→Close finished and eject disc

9.3 Disc Info.

This feature allows you to check your disc status, such as available capacity.

a. Move to 9. Track Edit, and press ENT
b. Select 3. Disc Info, and press ENT

```
[Track Edit]
3. Disc Info.
```
→Press ENT→
```
[ 1 ]        79:59
CD-R  Use 27:53
```

10. <u>UTILITY</u>

This function group includes several Disc related functions. You can press ENT and press the up or down button to select the desired function.

10.1 Prescan

This feature will check whether or not the Master Source Disc can be duplicated.

a. Select Utility and press ENT

```
10. Utility
```

b. Select 1. Pre-scan and press ENT

```
[Utility]
1.Prescan
```
→Press ENT →
```
Prescan   76:24
20%         15:30
```
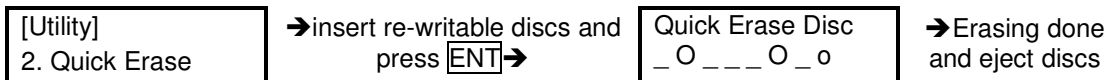→100%→
```
Prescan   76:24
Finished!
```

10.2 Quick Erase

This operation erases re-writable discs in the Writer Tray. When it has finished erasing, the tray will automatically eject.
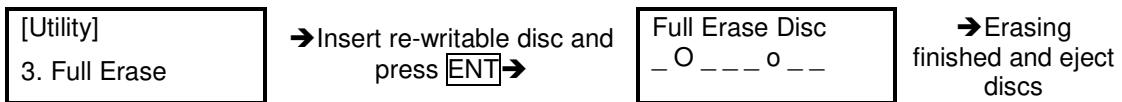The duplicator can erase different types of re-writable discs simultaneously. You can place the re-writable disc you wish to erase in any tray.

[Utility] 2. Quick Erase	➔insert re-writable discs and press ENT➔	Quick Erase Disc _ O _ _ _ O _ o	➔Erasing done and eject discs

- Note: If you see "O" "o" blinking, Erasing is in process. If you see "F" "f" blinking, DVD+RW Disc Formatting is in process.

10.3 Full Erase

This operation will erase re-writable discs in the Writer Tray. It is timelier than Quick Erase function. When finished, the writer will automatically eject the trays.

[Utility] 3. Full Erase	➔Insert re-writable disc and press ENT➔	Full Erase Disc _ O _ _ _ o _ _	➔Erasing finished and eject discs

10.4 Eject All Discs

Ejects disks, including master source disc and discs in writer trays.

[Utility] 4. Eject All Disc	➔Press ENT➔Eject all discs
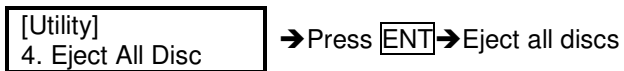
10.5 Disc Info

This feature checks disc's basic information, such as the disc type, data length, and available capacity.

| [Utility] 5. Disc Info.	➔press ENT➔	[1] 79:59 CD-R Use 27:53
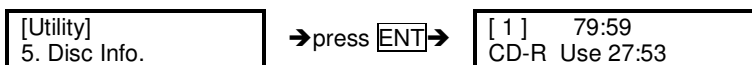
10.6 Drive Info

This feature checks the duplicator's major component information, such as its manufacturer, Writer or Reader model number and version.

a. Press ENT and then press up or down to check each Drive's model number and information.
b. The duplicator will assign each drive a number from 1 to 8. #1 is the Reader, #2~#8 are writers.

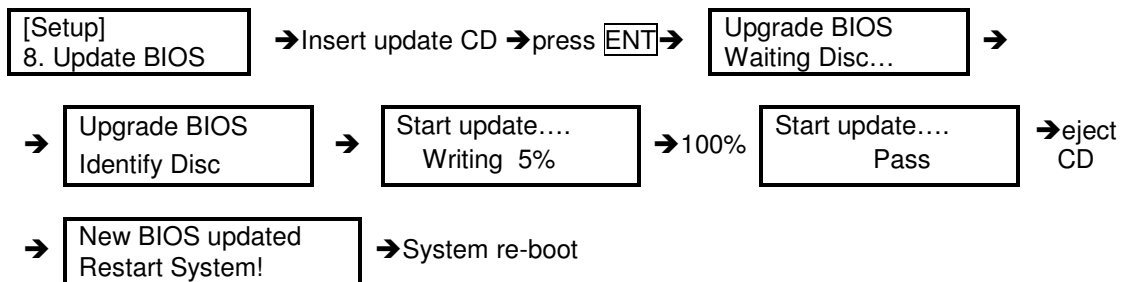| [Utility] 6. Drive Info.	➔Press ENT➔	[#1]Port8.0 3.38 CD-ROM Max 52X	➔press ▲,▼to select different Drives
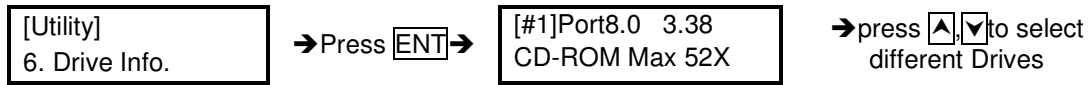
10.7 System Info

This feature provides information about the duplicator, such as the controller model number, RAM capacity, and Firmware version.

[Setup] 7. System Info.	➔press ENT➔	P727DVD 64MB Ver:1.00
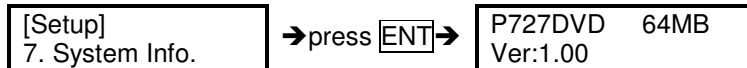
10.8 Update BIOS

When manufacturer's certified update CD is inserted, this operation will automatically update your duplicator's software.

a. Turn on the duplicator select 10. Utility, and press ENT
b. Insert an updated CD to any Drive.
c. Select 8. Update BIOS and press ENT
d. The system will then start executing the firmware update. When finished, the updated CD will automatically eject.
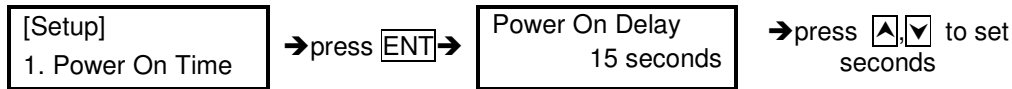e. In 2 sec, the system will re-boot. The new firmware update is complete.

[Setup] 8. Update BIOS	➔Insert update CD ➔press ENT➔	Upgrade BIOS Waiting Disc…	➔

➔	Upgrade BIOS Identify Disc	➔	Start update…. Writing 5%	➔100%	Start update…. Pass	➔eject CD

➔	New BIOS updated Restart System!	➔System re-boot

11. SETUP

Use this function group to change the manufacturer's default setting.

11.1 Power On Time

You can set the system warm up time from 5 sec to 255 sec after system power on.

a. Select 11. Set Up and press ENT
b. Select 1. Power On Time and press ENT
c. Press ▲,▼ to increase or decrease the seconds.

| [Setup]		Power On Delay		
1. Power On Time	➔press ENT➔	15 seconds	➔press ⏶,⏷ to set seconds	

11.2 Auto Start

This operation allows the duplicator to **automatically execute copying once source disc is placed in the master source drive and recordable discs in any of the writer trays**. You can disable or turn on the auto start function with the time (1-99 seconds) it would take to activate this feature. To execute this function, you must set the operation mode from COPY, TEST, VERIFY, COMPARE, COPY & VERIFY, COPY&COMPARE to auto start copying.

[Setup]		Auto Start		
2. Auto Start	➔press ENT➔	3 seconds	➔ press ⏶,⏷ to set seconds	
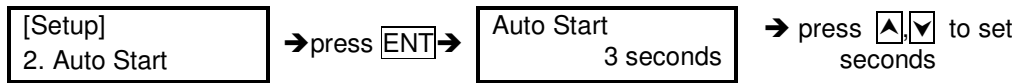
- Note: If you set the function off, the LCD screen will not show how many blank discs are detected in writer trays.

## 11.3 Startup Menu

3.1.1   You can select which function in the menu to see first when the duplicator is turned on.

[Setup]		[Startup Menu]		
3. Startup Menu	➔press ENT➔	1. Copy Disc	➔ move ⏶,⏷ to select function	
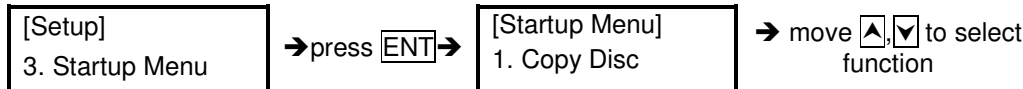
11.4 Write Method

You can select which mode to duplicate **CD** from "DAO", "SAO", and "TAO". The default mode is "DAO" (Disc at Once). Unless it is clearly understood what such terms represent, we strongly recommend users to set it as "Disc at Once".=]]]]]]]]]]]]]]]]]]]]]]]]]]]]]]

[Setup]		Write Method		
4. Write Method	➔ press ENT➔	DAO	➔ move ⏶,⏷ to select	
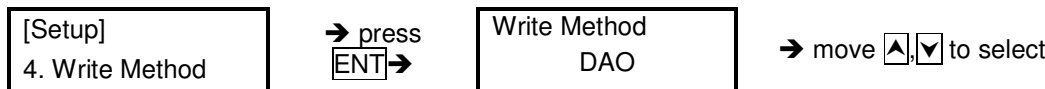
11.5 Button Beep

Choose whether or not to hear a beep when you press a button.

[Setup]		Button Beep		
5. Button Beep	➔ press ENT➔	ON	➔ move ⏶,⏷ to select ON/OFF	

11.6 Read Error Skip

Choose to stop the duplicating process when error has occurred.

```
┌─────────────────┐              ┌─────────────────┐
│ [Setup]         │  → press     │ Skip Read Error │  → move ▲,▼ to select
│ 6. ReadErrorSkip│    ENT→      │      ON         │    ON/OFF
└─────────────────┘              └─────────────────┘
```

11.7 Eject on Start

You can choose whether or not to eject the disc when powering up the system.

```
┌─────────────────┐              ┌─────────────────┐
│ [Setup]         │  → press     │ 7.Eject On Start│  → move ▲,▼ to select
│ 7. Eject On Start│   ENT→      │    Eject All    │    Eject All/No Eject/
└─────────────────┘              └─────────────────┘    Eject Target/Eject Source
```

11.8 Boot Password

You can setup the boot password to prevent anyone from using duplicating system.

```
┌─────────────────┐              ┌─────────────────┐
│ [Setup]         │  → press     │ Boot Password   │  → move ▲,▼ to select
│ 8. Boot Password│    ENT→      │    Disable      │    Disable/Enable
└─────────────────┘              └─────────────────┘
```

If you select Disable, you will go back to:

```
┌─────────────────┐
│ [Setup]         │
│ 5. Boot Password│
└─────────────────┘
```

If you select Enable, you will need to choose a password:

```
┌─────────────────┐
│ Boot Password   │
│ ==> _           │
└─────────────────┘
```

Use ▲,▼ to select the character you want.

Press ENT to go to the next position.

There are a total of 6 positions for the password. To enable the password, set all 6 positions. An empty space is acceptable.

Press ESC to cancel the process. The duplicating system will then ask for password when the unit is restarted.

11.9 Setup Password

You can enable the setup password to prevent anyone from changing the setting of the duplicating system.

```
┌─────────────────┐              ┌─────────────────┐
│ [Setup]         │  → press     │ Setup Password  │  → move ▲,▼ to select
│ 8. Setup Password│   ENT→      │    Disable      │    Disable/Enable
└─────────────────┘              └─────────────────┘
```

If you select Disable, you will go back to:

```
[Setup]
5. Boot Password
```

If you select Enable, you will need to choose a password:

```
Boot Password
==> _
```

Use ⒜,⒱ to select the character you want.

Press ENT will go to the next position.

There are total of 6 positions for the password. To enable the password set all 6 positions.
An empty space is ENT.

Press ESC to cancel the process.

The duplicating system will ask for password when 11 Setup is entered.

11.10 Clear All

Reset the operations back to manufacturer's default settings.

```
[Setup]
10. Clear Setup
```
➔ press ENT , clear all settings made and return back to
             manufacturer's default setting

12. IMAGE MANAGER (For Duplicator with HDD Installed)

This function shows how to perform various Hard Drive related operations. The system menu
will not show this function if your duplicator does not have an HDD installed. *Please refer to
12.8 ABOUT HDD MANAGER for more information about the special function and
advantages about this feature.*

12.1 Select Image

This function shows how to select an Image file as a Source that can be copied to discs. This
function is required when a copy is made from your HDD to blank discs. Please refer to 12.1.1
for instructions on how to make Hard Drive-to-Disc Copies.

```
[Image Manager]
1.Select Image
```
➔ press
ENT➔
```
[Select Image]
A001 DVD 4469M
```
➔
move ⒜,⒱ to
select and press
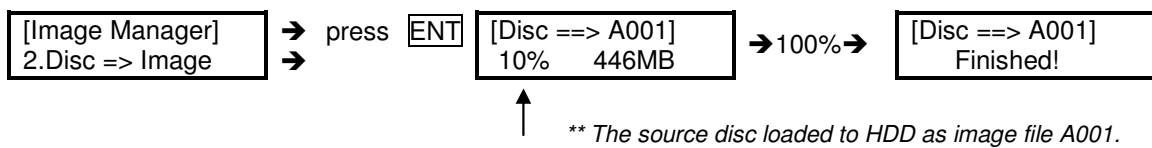ENT to confirm

Make Hard Drive-to-Disc Copies

    a. Make sure Hard Drive is set to Master Reading Source. When it is finished select the image then HDD will automatically be set as the Reading Source.
    b. Return to the main menu and press the up or down buttons to select 1. Copy function.
    c. Insert blank discs into writer trays. (If there is a disc in the Reader tray, it will not be read).
    d. Press ENT to start copying. If 11.2 Auto Start, is selected when a blank disc is placed in any of the writer trays, the duplicator will automatically begin the copying process.
    e. When completed trays will eject.

> • *Note: Once an HDD Image is selected, the HDD will automatically be set as the Reading Source. If you wish to make Disc –to- Disc Copies, you must go back to 8. Select Source to select the CD/DVD-ROM as the Reading Source.*

12.2 Disc => Image

This function shows you how to load the master source disc onto the Hard Drive and save it as an image file.

a. Place Master Source Disc into **any Drive.**
b. Select 12.2 Disc -> Image and press ENT

```
[Image Manager]        ➔   press   ENT   [Disc ==> A001]        ➔100%➔   [Disc ==> A001]
2.Disc => Image        ➔                 10%      446MB                          Finished!
```

                    ⬆
                  ** The source disc loaded to HDD as image file A001.

> • *Note: The source disc can be placed in any Reader or any Writer Drive.*

12.3 Reader Speed

When you wish to perform this function, 12.2 Disc -> Image, set the Reading Speed from the reading master source disc.

```
[Image Manager]
3.Reader Speed
```
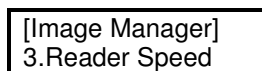
> • *Note: this function is ONLY available when loading the Source Disc to an HDD*

12.4 Image Info

This function checks all image file information such as the Image file number, Disc type, and its file size.

```
[Image Manager]      ➔     press   [Image Info.]
4. Image Info.       ENT➔           A001 DVD 4469MB
```

```
[Image Info]
A001 DVD     3875MB
```
············▶ 3.875GB DVD disc image
file A001

```
[image info]
A003 CD          65:28
```
············▶ CD disc image with 65 min
28 sec, file name A003

12.5 Rename Image

This function allows you to rename an image file in HDD. This will help organize the image.

```
[Image Manager]
6.Delete Image
```
➔ press ENT➔
```
001 [A001      ]
DVD          4469M
```
➔Select the image file you
would like to rename➔

➔ press ENT➔
```
[Edit Image Name]
[A001      ]
```

Use ⏶,⏷ to select the character you want.

Press ENT to go to the next position.

There are total of 8 characters for the image name.

Empty Space will confirm the name change.

```
[Edit Name Change]
[NewName ]  OK  ?
```
➔ press ENT➔
```
[A001      ]
=>[NewName ]
```

Press ESC to cancel the whole process.

12.6 Delete Image

This function allows you to delete an image file in HDD. If the file is selected as source file you will not be able to delete it unless you go back to 12.1 to re-select another image as source.

```
[Image Manager]
5.Delete Image
```
➔ press ENT➔
```
[DELETE Image]
A001 DVD 4469M
```
➔Select the image file you
would like to delete➔

➔ press ENT to confirm ➔
```
[DELETE Image]
A003 DVD 4372M
```
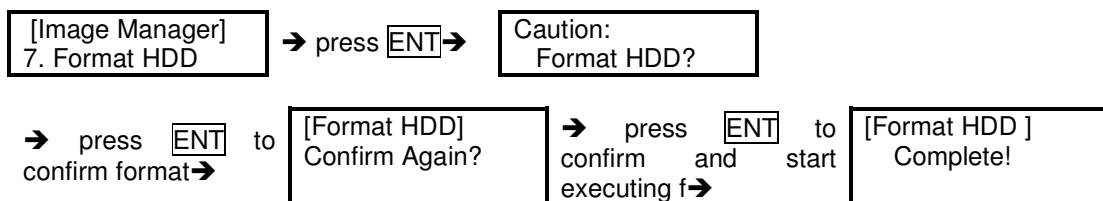➔ press ENT and execute delete➔
```
A003 DVD  4372M
DELETE Complete!
```

12.7 HDD Info.

This function checks all information of HDD, such as how many discs are stored and the HDD's available space.

[Image Manager] 6. HDD Info.	→ press ENT→	Used: 0CD 7DVD Free: 41CD 8DVD

12.8 Format HDD

This feature formats the HDD. However, you will be unable to format the HDD if the HDD image was selected as Reading Source. You must go to 8. Select Source to select the Optical Drive as Reading Source.

[Image Manager] 7. Format HDD	→ press ENT→	Caution: Format HDD?

| → press ENT to confirm format→	[Format HDD] Confirm Again?	→ press ENT to confirm and start executing f→	[Format HDD] Complete!

7. ABOUT HDD MANAGER

Our duplicator uses rational and dynamic HDD management technology. The traditional method of formatting an HDD requires you to choose the number of partitions designated for DVDs and CDs before formatting your hard drive.   The problem is that you might not be able to predict how many DVDs or CDs you will load onto your hard drive. Many incomplete partitions can be created, mainly with new DVD disks constantly coming out, such as the double- layer DVD. **You need an intelligent and more dynamic way to manage your HDD and our HDD manager can do that for you**!

Our Dynamic HDD Manager consists of the following special features:
I. Auto Detect Disc Capacity and Dynamically Assign Partitions

1. When you first format the built-in HDD, our duplicator will **automatically divide the HDD into 1GB partitions.** A DVD or CD partition does not have to be selected in the beginning.

2. You can check HDD information in function 12.6 HDD Info. The Hard Drive's **capacity is presented in terms of how many DVD or CD discs** you can load. For example, if your built-in HDD is 40GB, then the system will show the HDD available capacity:

or

8 DVD	----▶ 5GB = 8

40 CD	----▶ 40GB / 1 GB = 40
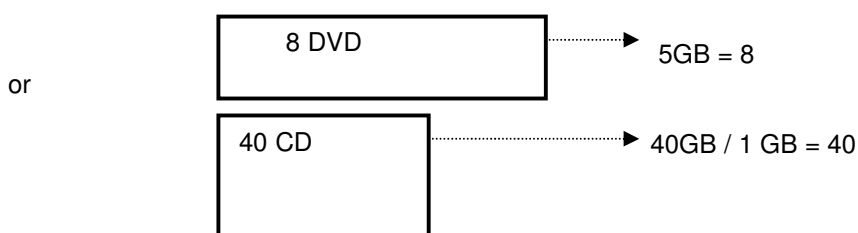
- *Note: DVD is calculated by 5GB, and CD is calculated by 1GB*

3. Every time a source disc is loaded, **the duplicator will auto detect the disc capacity and assign correct partitions for it.** For example, if you load a 4GB double-layer DVD disc into HDD as a disc image, the system will automatically detect and assign 4 partitions for it.

4. **Dynamic calculated and display HDD capacity**. The duplicator will present built-in HDD capacity information dynamically depending on your loaded source disc's capacity. For instance, before loading a 4GB DVD disc as source disc image, the HDD information shows the HDD capacity that is available for loading 5 DVD's or 26 CD's. However, after loading a 4GB DVD, the system will **re-calculate** the total available partitions and display how many DVD or CD discs you can load as disc image the next time.
Before load 4GB DVD HDD info:

```
Used:  2 DVD    3CD
Free:  5 DVD   26 CD
```
············► *Note: DVD indicates 5GB partition and CD indicate 1GB partition*

After load 4GB DVD HDD info:

```
Used:  3 DVD    3CD
Free:  4 DVD  22 CD
```

II. <u>Smart Image File Management:</u>

1. When Discs are loaded into HDD as stored disc images, the system will assign a file name to the image file, beginning from A001~.

   • *Note: Each time a new disc image is loaded, **the system will automatically search and assign the lowest number as the file name.** For example, if there are no deleted files, the file name will be assigned in sequence beginning from A001. However, if there is a deleted file, such as A003, then the file name will be held. The next time there is a new disc image stored, the lowest number of A003 will be assigned as this new disc image's file name.*

2. You are allowed to delete an image file by executing <u>12.5 delete image</u>. Once an image file is deleted, the name of the file will be left empty and held for a future loaded image file. The existing file name will not be changed or moved ahead due to the deletion.
3. Use 12. 4 Image Info function to check image file information. The image information will display the image file name, Disc type and file size.

```
[image info]
A001 DVD       3875MB
```
··········► 3.875GB DVD disc image file A001

Or

```
[image info]
A003 CD          65:28
```
··········► CD disc image with 65 min 28 sec, file A003