Standalone, fully automated CD/DVD/BD Duplication System with LightScribe printing capabilities
User Manual

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All Pro Solutions shall not be liable for direct, indirect, special, incidental or consequential damages arising from the use or inability to use this product or documentation. In particular, All Pro Solutions shall not have liability for any hardware used with this product, including the costs of repairing, replacing or recovering such hardware.

DAMAGE_____

This shipment was packaged and delivered to the carrier with the utmost care to ensure safe delivery of goods. If your HERA system is damaged during shipment, please contact the freight carrier first, then contact your distributor or All Pro Solutions

INCOMPLETE ORDERS_____

Check the shipment against the shipping papers thoroughly and immediately to ensure receivership of a full shipment. Do not discard packing materials or cases. Check out all possibilities before reporting a shortage or incomplete order.

SAVE PACKAGING_____

You have to save your packaging materials so that if the need arises you can return your system for service. Sending a system to All Pro Solutions without the original packaging will void the warranty. This packaging was designed specifically for shipping your system. Other packaging may not be as suitable.

IF YOUR SYSTEM REQUIRES SUPPORT_____

If your system requires servicing, you should first contact the place of purchase and request support or contact All Pro Solutions as follows:
    Phone: (803) 980-4141
    Email: techsupport@all-pro-sol.com
Before shipping any item to All Pro Solutions, first obtain a RMA (Return Material Authorization) Number from All Pro Solutions support. This number must be placed on the outside of the product packaging where it can be easily found; otherwise the item will be refused and returned at the sender's expense.

Table Of Contents

Introduction

Thank you for choosing the HERA Series duplication systems. Hopefully this equipment will bring you satisfaction and great pleasure in CD/DVD duplication.

<u>Features:</u>

- Stand-alone design, no PC nor software required.
- Easy operation, no training required.
- Support various CD and DVD formats
- Load, Copy, Compare, Verify, Emulate, Editing, etc.
- Track selection available for copying music tracks
- On-the-fly direct copy or through hard drive loading
- User friendly LCD display

Important Note:

- Make sure voltage setting (AC115/230V) is correct.
- Stable input of power required for normal operation.
- Duplicator should be placed on a flat and stable surface inside clean & cool working area.
- Check, clean the master and CD/DVD discs before duplication starts.
- Do not touch recording surface of the discs.
- Do not move the duplicator during operation.

Quick Start

Getting started

The removal of this product should be undertaken by at least 2 people because of its size and weight. Please ensure safe manual handling procedures are followed

Carefully remove your system from it's shipping box and verify that all parts are present. If there are missing or damaged parts contact *All Pro Solutions (APS)* or an authorized distributor immediately to correct any miss-packed or missing parts.

You should find the following packaged with your system:
➢ Autoloader AU4 (330 disc capacity), AU7 (630 disc capacity) or AU9 (900 disc capacity), depends on your model configuration
➢ Tower populated with drives
➢ Two Power cords (1 for autoloader and 1 for tower)
➢ Serial Cable
➢ User Manual
➢ 5/64 hex head key (Allen wrench) and a bottle with oil to maintain shafts functionality
➢ Warranty card

NOTE:
If your system is damaged during shipment, please contact the freight carrier first, and then contact your distributor or All Pro Solutions.
You have to save your shipping materials so that if the need arises you can return your system for service. Sending a system to All Pro Solutions without the original packaging will void the warranty. This packaging was designed specifically for shipping your system. Other packaging may not be as suitable. If you have already disposed of your packaging materials, you can receive a new set from All Pro Solutions for a fee.

Manufacturer Recommendations

☞ Before starting to operate your system, please read the User's Manual **entirely!**

☞ Place your system on a flat, steady surface in a climate controlled environment with regular office light (no bright light to reflect into the system's sensor), free of dirt, dust, excess humidity, excessive heat or electro-magnetic interference.

☞ Please fan the media before placing it into the Input Hopper and align it. Media has to slide easy on top of each other

☞ Do not use un-expensive media because it can generate problems: media sticks together and 2 or more discs can be loaded even if the picker it's designed to grab just one.

☞ For audio duplication, please use good quality media and max 16x speed on CD

☞ Because your system is equipped with up 22x DVD drives, use only 52x certified CD and 22x certified DVD media.

☞ From time to time, the drives have to be cleaned using a CD Lens cleaning Kit or blowing air using a compressed gas duster.

☞ The 2 shafts used by the Picker to travel up and down should be oiled from time to time; use the multipurpose oil provided

Mounting the tower

For all systems, the tower is provided with a tower plate mounted on the bottom. This plate will help in stabilizing the tower on the adapter (see Fig. 1 page 4)
Make sure all thumbscrews are loose, place the tower on top of the adapter matching the colored marks (see Fig.2). Tight gently thumbscrews # 1 on both sides until they touch the adapter and then tight thumbscrews # 2 (they consolidate the tower on the adapter) as shown in Fig. 3.

After the tower has been mounted successfully, proceed with "Connecting Power" (page 5) and "Drive Alignment" (page 41)

In case you don't have good alignment, loose all thumbscrews, adjust the tower (left and right, back and forth) and tight back the thumbscrews as described above. Repeat the steps above until you obtain the right alignment.

Fig. 1
System unassembled

Tower with Drives

Autoloader

Input Bins

Thumbscrews # 2

Adapter

Tower
Plate

Thumbscrews # 1

ALL PRO SOLUTIONS
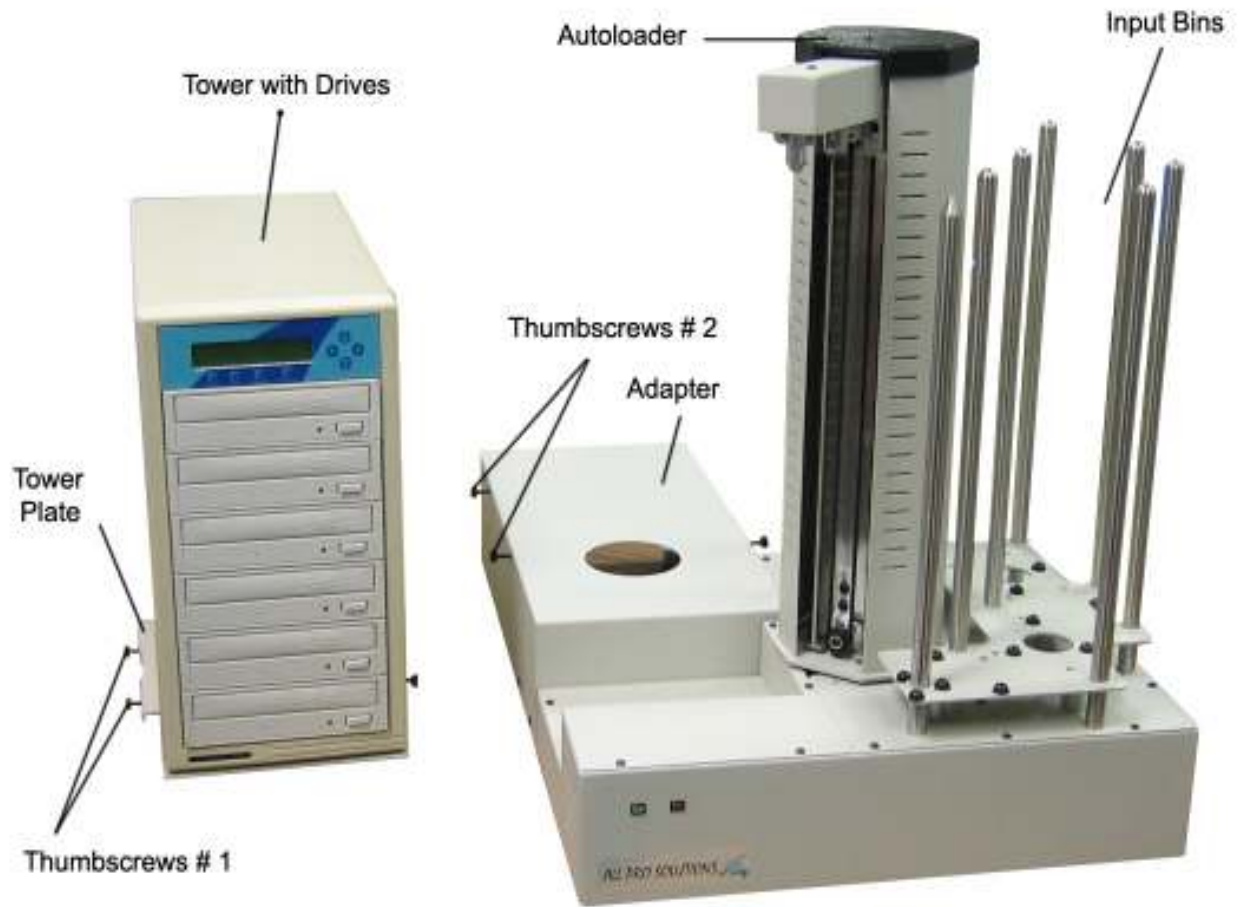
Fig.2
Tower alignment

Fig. 3
Side view

Blue marks

Thumbscrews # 1

Thumbscrews # 2
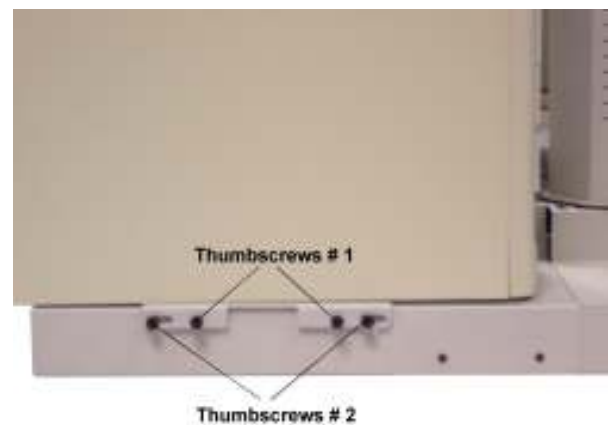
Operating Environment

Your APS System should be used in a climate-controlled environment free of dirt, dust, excess humidity, excessive heat or electro-magnetic interference. Your APS System should be placed on a sturdy level surface – away from sources of vibration and excessive lighting.

Allow at least four (4) inches of clearance around the sides and back of the system for ventilation.

Connecting power

Plug one power cable into the tower system, and the other one into the autoloader. Plug each power cable into the proper power source and connect Serial Cable as shown in:
The power On/Off switch for the tower is located in the front and the one for the autoloader is located in the back. Power the tower on first, then turn on the autoloader

Fig. 4a
System assembled

HERA-3: 330 disc capacity   **HERA-6: 630 disc capacity**   **HERA-9: 900 disc capacity**
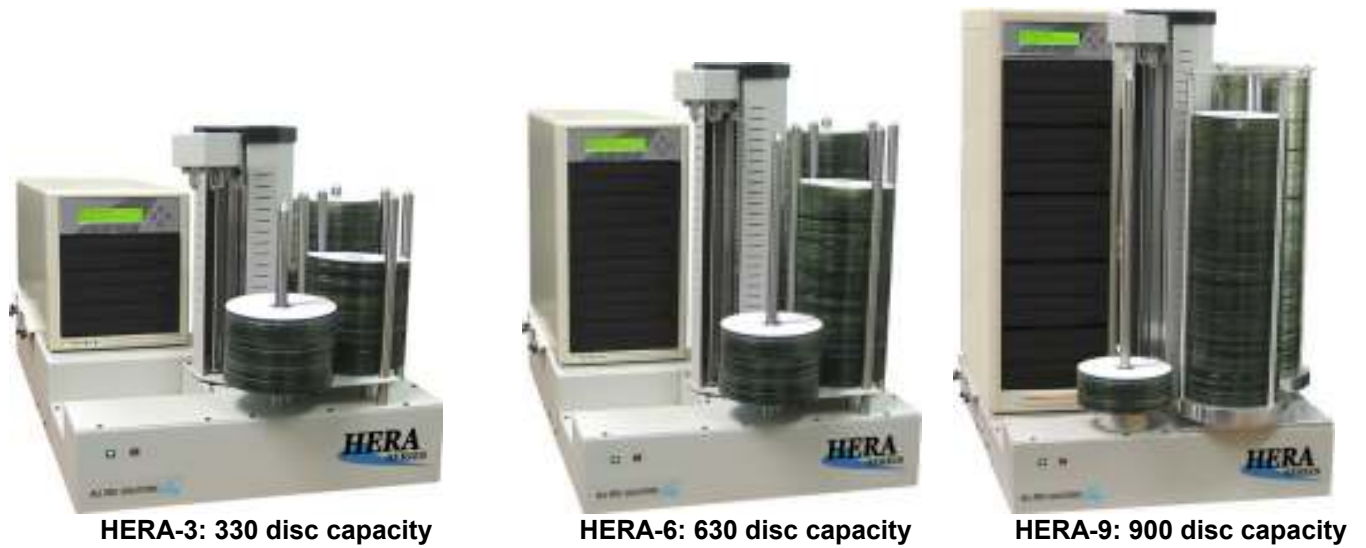
Fig. 4b
Back View – Cables configuration
(same on all models)

Autoloader
Power Cable

Serial
Cable

Tower
Power Cable

OVERVIEW

1. Welcome

The Autoloader is a reliable, high performance, high speed, standalone, robotic DVD, CD and/or BD (optional) autoloader with LightScribe printing capabilities. With its professional industrial design and simple user interface, it makes your duplicating experience easier than ever.

With the Autoloader, you can have a capacity up to 900 discs, duplicate continuously for 24 hours (even with multiple masters), and get the highest quality duplication, all at an extremely affordable price. The Autoloader is the most reliable and affordable autoloader on the market, even compared to units with half the drives and capacity.

* The multiple-master feature applies to Duplication ONLY. LightScribe Printing ONLY supports the single master function.

Before you start using this autoloader, please read the following to ensure proper operation:
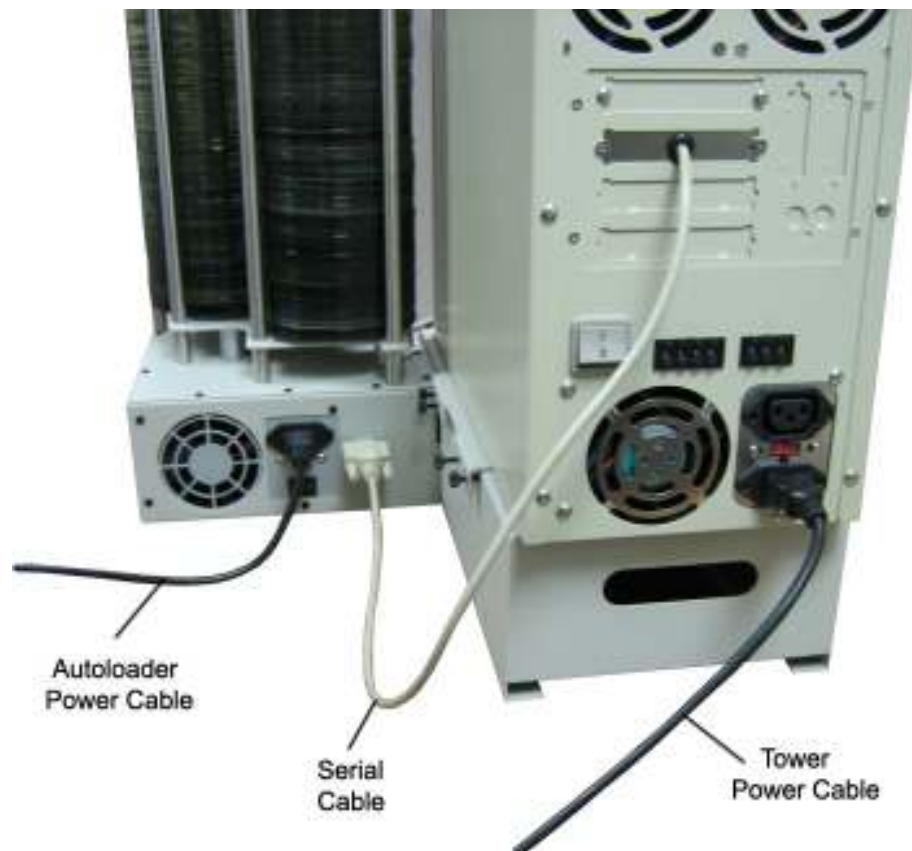
DVD/BD Duplication Limitations

The autoloader will not copy any BD/DVDs that have Copy Protection encoded in the content. Typically, most Blu-Ray (BD) or DVD movies you purchase or rent from a store contain Copy Protection.
In addition to the copy protection limitation, the autoloader will only copy a single layer (4.7 GB) disc to another single layer recordable media. If your autoloader has double layer/dual layer capability, you can copy a double layer (8.5 GB) disc to another double layer recordable media, but you cannot duplicate a single layer disc on to a double layer recordable media or vice versa.

Temperature Warning

If the Autoloader was stored in a location where the temperature dropped below 32° F (0° C) within the past 24 hours, leave the autoloader in a warm room with temperatures at least 65° F (19° C) for four hours prior to powering it on for the first time. Failure to do so may cause irreparable harm and prevent the autoloader from functioning.

Maintenance

It is very important to operate and keep the autoloader in a dust free, clean environment since dust is the number one killer of CD/DVD/BD recording devices. Failure to do so can severely damage your autoloader. We strongly suggest that you constantly use an Air Duster (Canned Air) to clear off any dust on the surface of the autoloader.

Note: Do not try to use an Air Duster to clean the autoloader while the writer trays are open. In doing so, you may inadvertently blow dust into the recording device and damage it.

Proper Shutdown

To avoid possible system failures, you need to shut down the autoloader properly. To shut down the autoloader, scroll to menu 15. Shutdown and follow the instructions on the screen. Not performing this function increases the risk of damaging the autoloader.

Double Layer/Dual Layer Partition Issue

If you have a 16x speed or higher autoloader with double layer/dual layer DVD9 capability, the hard drive partitions are set to a default size of 9 GB each to accommodate for the expanded size of the DVD9 format. If you require more partitions and do not plan on using double layer/dual layer DVD9 media, you can reduce the size of the partitions using the instructions given in "Partition Size" on page 33. Keep in mind that if you alter the partition size, all previous data/video stored on the hard drive will be lost and you will only be able to load media with less than 5 GB capacity such as DVD5 (4.7 GB), CD (700 MB), etc.

Disc Static and Sticky Media Issues

The most common problems when using an autoloader are the disc static and sticky media issues. These static charge problems cause multiple discs to stick together, resulting in improper operation and more severely, can shock the robotic arm while loading a disc that causes the system freeze. Even though the autoloader has a sticky media separator function to prevent the sticky media, but you should still follow these steps to prevent sticky media from disrupting your operation and protect your system from disc static charge.

This issue is most commonly seen when you buy a 100 pack of blank discs and insert them into the autoloader without any treatment. If you have experienced this kind of problem, please do the following to remove the adhesive static between the discs:

Separate the blank discs before you place them into the autoloader's bins and align them using. Separating them will greatly reduce the static between discs. See pictures below:

If this doesn't achieve the desired outcome, use an air duster (canned air) to blow air around the circular edge of the blank discs. This process reduces the static between the discs up to 90%. The amount of air to use depends on factors specific to your environment.

Disc Placement Issue

Another common problem when using an autoloader is the placement of media into the bins. Placing the media into the bins properly can avoid possible picking errors when operating the autoloader. Even though the autoloader is designed with certain tolerance adjustments to prevent mishandling by the picking arm, failures may still arise if the bins are not loaded correctly. All media loaded into the bins should be flat and not slanted at an angle to ensure the picking arm can securely grab the disc. Be sure not to load too many discs into the bins as well as this may cause errors in placement and loading. The figure below shows the proper and incorrect disc placements when loading media into the bins
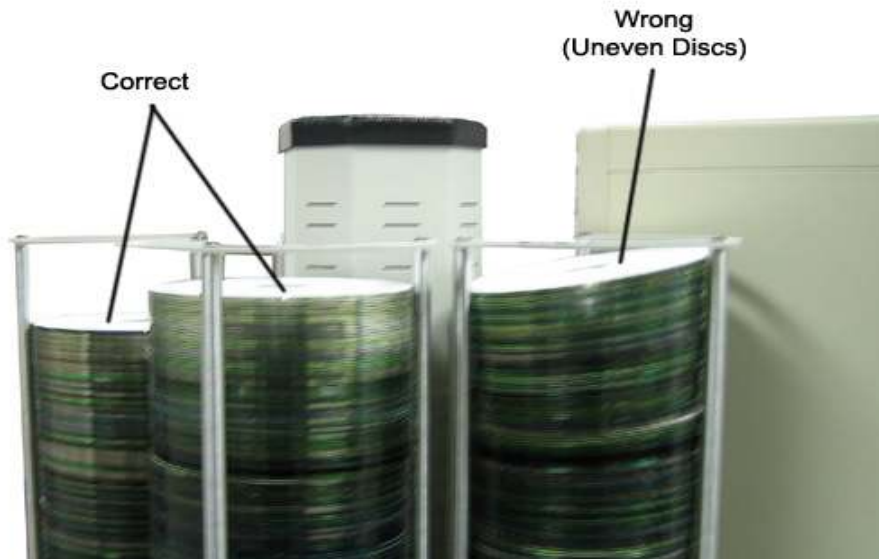
2. The Robotic Platform

The autoloader (with up to 900 Disc Capacity) has 3 input bins that hold:
-   110 discs each for HERA-3
-   210 discs each for HERA-6
-   300 discs each for HERA-9

The robotic arm picks blank discs from Input Bin # 1 first, and places the successful copies into the Output Bin. Once Input Bin # 1 is empty, it picks blank discs from Input Bin # 2, and places the successful copies into Input Bin # 1 which becomes Output Bin # 2. It then picks from Input Bin # 3 and places into Input Bin # 2 which becomes Output Bin # 3 and so on. Reject discs are placed on to the deck below the drive trays. (Throughout this manual, this area is also referred as "Reject Area").

3. The LCD Control Panel

Figure 4 below shows the LCD Control Panel. This panel has a two-line 20 character LCD display to provide user feedback and eight push buttons to control the operation of the Autoloader. The functions for these buttons are shown in Table 1.

Fig. 4
LCD Control Panel Layout
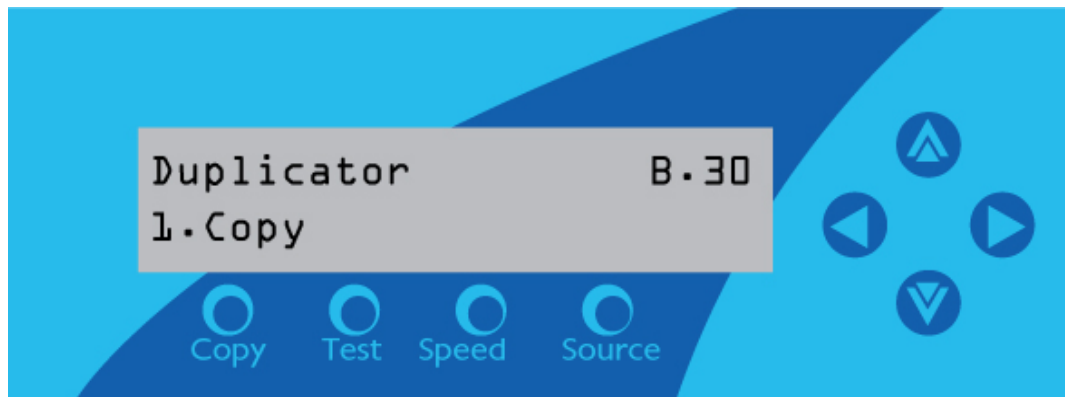
Table 1: Front Panel Controls

Control	Name	Function
△	Up	Scroll up through the menu or list.
▽	Down	Scroll down through the menu or list.
▷	Enter	Execute the function. Also called OK in the Menus.
◁	ESC	Go back to the previous function.
Copy	Copy	Quick key to make a copy. Pressing this key takes you directly to the *Copy* menu.
Test	Test	Quick key to make a simulation of the copy process. Pressing this key takes you directly to the *Test* menu.
Speed	Speed	Quick key to change the duplication speed. Pressing this key takes you directly to the *Select Burn Speed* menu.
Source	Source	Quick key to change the master reading source. Pressing this key takes you directly to the *Select Source* menu.

4. Menu Overview

This section provides an overview of the menu options. These menu options are explained in detail on the referenced pages.

1. Copy (page 20)

Use the *Copy* menu or *Copy* quick key to make CD/DVD or BD (optional) copies. Before you start a copy, make sure you have selected the correct Master Mode.

If you plan to use Single Master Mode, please make sure you have successfully loaded your master disc to a partition on the Hard Drive.

If you plan to use Multi Master Mode, please make sure you have placed every master disc on top of the corresponding number of blank discs.

For additional information, see "Making Copies in Single Master Mode" on page 19 or "Making Copies in Multi Master Mode" on page 21.

2. Print (page 24)

Use the *Print* menu to print label(s) directly onto the label side of your LightScribe printable media. Before you start a printing process, please make sure you have successfully loaded your LightScirbe label file(s) into the Hard Drive via the "Load Label" function under "Print Setup". See page 35 for details.

For additional information on creating/designing your labels, please refer to "Design and Create a Label File" on page 54.

3. Test (page 26)

Use the *Test* menu or *Test* quick key to simulate the copy process. With simulation, write once recordable discs such as DVD-R, or CDR will be reusable. The purpose of simulation is to ensure error free duplication.

Note: *Due to physical limitations of the BD/DVD+R recordable format, if you try to simulate BD/DVD+R copying, you will encounter failure messages.*

Warning*: If you are using CD/DVD/BD Rewritable discs as your blank media during the simulation, the content on those discs will be permanently erased.*

4. Compare (page 27)

Use the Compare function to perform a bit-by-bit comparison between the content of your master disc(s) in the Hard Drive and the contents of all discs it copied. This ensures that all of your copies are identical to original master disc(s).

> **Note:** The bit-by-bit comparison will only apply on all BDs, DVDs and Data CDs. The readability check will be applied for other formats like Audio CDs, CD+G, and Video CDs discs due to their lack of error correction mechanisms.

5. Test + Copy (page 28)

Use the *Test + Copy* menu option to simulate the copying process initially. Then, the autoloader performs the actual copy process on the blank disc(s) that passed the simulation. For the blank disc(s) that didn't pass the simulation, the autoloader will place it/them to the Reject Area.

6. Copy + Compare (page 28)

Use the *Copy + Compare* menu option to make 100% reliable copies. After the copy process is done, the autoloader automatically compares the copies from the content of your original master disc.

7. Select Burn Speed (page 28)

Use the *Select Burn Speed* menu option or the *Speed* quick key to adjust the duplication speed for the various blank disc formats. For additional information, see "Select Burn Speed" on page 28.

8. Select Source (page 29)

Use the *Select Source* menu or the *Source* quick key to tell the system where the content of the master disc resides during duplication. At this point, Hard Drive is the only place where the content of the master disc resides during duplication. For additional information, see "Select Source" on page 29.

9. Master Mode (page 30)

Use the Master Mode menu to select either Single Master Mode(SM) or Multi Master Mode (MM). For more information on those modes, see "Single Master and Multi Master Modes" on page 17. For more information on using the Master Mode menu, see "Master Mode" on page 30

10. Erase RW (page 30)

Use the Erase RW menu to erase your Rewritable discs. There are two options:

- ➢ **Full Erase:** This option erases the entire disc, destroying all previously written data in the process.
- ➢ **Quick Erase:** This option erases the index (TOC) of the Rewritable disc, not the data section. It is much faster than Full Erase. However, the data section is still recoverable. If you prefer the old content not to be recovered for security purpose, please perform Full Erase.

11. Hard Drive Setup (page 31)

Use the Hard Drive Setup menu to perform various hard drive-related operations. These options include loading, renaming, or deleting your images. For additional information, see "Hard Drive Setup" on page 28.

12. Print Setup (page 35)

Use the Print Setup menu to perform various printing-related operations. These operations include loading, renaming, or deleting your print labels.

13. Setup (page 37)

Use the Setup menu options to control how the autoloader operates. You can scroll between the various options using the △**Up or** ▽ **Down** button.

1. **Language**
    Use this setting to choose the language used to navigate the autoloader. The autoloader supports English and Spanish menus.

2. **Read Error Skip**
    Normally, when the autoloader encounters a read error while reading the master disc, all the duplication will be aborted and all the recordable media in the writers will be ruined. However, if you believe that your master disc has a small, insignificant error due to physical damage, you can enable this setting to allow the autoloader to skip any read errors that it encounters. It is ON by default.

    Important: This function does not fix the error; it only skips it to continue copying the rest of the readable data. This function is recommended for Video and Audio duplication purpose.

3. **CD Writing Mode**
    Use this setting to select the mode you would like use to duplicate a CD. There are two different modes: "Disc at Once" and "Track at Once." Unless you understand completely what they mean, we strongly suggest you to set it as "Disc at Once".

4. **Max Audio, VCD & CDG Speed**
    Due to the lack of error checking mechanism for Audio CD, Video CD and CD+G format, duplicating them at too high a speed can cause frequent errors like glitches and skips. Use this setting to adjust the maximum duplication speed for Audio, Video CD and CD+G format to ensure the reliable duplication for such formats.

5. **Buzzer**
    Use this setting to choose whether you want to hear a beep when you press a button and when a task has been completed.

6. **Startup Menu**
    Use this setting to choose which menu you would like to see first when you turn on the autoloader.

7. **Screen Saver**
    Use this setting to enable or disable the *Screen Saver* feature. When this is enabled, a screen saver is displayed whenever your autoloader has been idle for a long period of time.

8. **Counter**

    Use the Counter menu to enable or disable the *Counter* feature. The counter tells you how many discs have been copied and how many discs are left to go during the progress and it will stop the job once the desired number of copies has been made.

9. **AUTOCOPY Enabled**

    This menu option turns on the hidden *AUTOCOPY* main menu option. The *AUTOCOPY* function simplifies the copy process by allowing you to stack blank media on a spindle(s), place the master on top of the stack on the first spindle, and press the ▶ **Enter** button on *AUTOCOPY* key in the main menu. It will load the content of the top disc of the 1st input spindle (master disc) into the Reserved Partition of the Hard Drive and copy it to blank disc(s) below it and other input spindle(s) if exists.

10. **DVD+R Compatibility Mode**

    This feature allows you to turn the *DVD+R High Compatibility Mode* feature ON or OFF. The purpose of this feature is to increase the compatibility of DVD+R media with a broader range of DVD Video players.

11. **ISRC**

    This option will allow you to enable/disable copying the ISRC code of an Audio CD. ISRC is the serial number of the audio track that uniquely identifies the song in that audio track. This ISRC code is commonly found in commercial Audio CDs and rarely seen on home made Audio CDs. By enabling this feature, the duplication performance will be lowered.

12. **Disable Drives**

    Use this utility to allow the system to disable certain drives/trays when certain drives/trays are producing high failure rates. See "Disable Drives" on page 42.

13. **CD Overburn**

    Most CD-R media is either 650MB or 700MB. The burning starts from the center of the CD and works its way out but stops before the physical edge of the CD. Overburning is a burning method to bypass the limitations of burning further out onto the edge of the CD. This can result in slightly higher storage capacity, however, it has also been known to have compatibility playback issues. Please use it with caution.

14. **Max Failure per Job**

    Use this setting to set the maximum number of failures the autoloader is allowed per job. Once the maximum is reached, the job will be stopped.

15. **Max Failure per Drive**

    Use this setting to set the maximum number of failures each drive is allowed during the job. Once the maximum is reached for any particular drive, said drive will be disabled for the remainder of the job. The autoloader will continue to function using the remaining drives.

14. *System Utilities (page 44)*

1. **Disc Info**

    Use the Disc Info utility to identify the type of blank recordable media. This utility identifies your blank recordable Media's format, capacity, manufacture ID, and the Media's certified writing speed.

2. **System Info**

Use this menu option to see data about the autoloader and its resources (firmware version, RAM and CPU).

3. Device Info

Use this menu option to see data about the drives that are installed in the autoloader.

4. Load Default

Use this menu option to reset all of the options back to the manufacturer's default values. You can use this function if your autoloader is acting abnormally.

5. Update Firmware

Use this utility to update the software in your autoloader. To update, insert the manufacturer's Certified Update CD into the 1st tray and make sure no other discs are in rest of the trays. Then you can press the ▶ **Enter** button to update.

Important: You should not upgrade your autoloader's firmware unless your system is becoming unstable or you are advised to do so by Tech Support.

15. Loader Utilities (page 46)

Use the Loader Utilities menu options to access the various utilities built into the autoloader. You can scroll between the various options using the ▲**Up or** ▼ **Down** button.

1.   Drive Alignment

The Drive Alignment menu is used to check the mechanical alignment between the drives and the robotic arm. See "Drive Alignment" on page 46 for more information.

2. Alignment Protection

Enabling Alignment Protection makes each drive tray quickly slide in and out after a disc has been loaded into it. This ensures that the disc sits properly in the disc indentation of the tray by "shaking" the disc into place. See "Alignment Protection" on page 47.

16. Manage Accounts (page 47)

Use this menu option to:
➢   Create user accounts and passwords to prevent unauthorized use of the autoloader.
➢   Edit existing user account information, including name and password.
➢   Delete existing user account(s).
➢   Enable/Disable this feature.

For additional information, refer to "Introduction to Manage Accounts" on page 16.

17. AUTOCOPY (Hidden – page 40 and 50)

The AUTOCOPY function simplifies the copy process by allowing you to stack blank media on a spindle(s), place the master on top of the stack on the first spindle, and press the ▶ **Enter** button on *AUTOCOPY* key in the main menu. It will load the content of the top disc of the 1st input spindle (master disc) into the Reserved Partition of the Hard Drive and copy it to blank disc(s) below it and other input spindle(s) if exists.

To activate this function, you need to activate it by going to "13. Setup" -> "9.AUTOCOPY" and turn it on.

18. Shutdown (page 50)

Use this menu option to turn off your system. Once you see the "Ready to Power Off" message, you can safely turn off the machine using the power switch. Turning off your autoloader without performing this function increases the risk of damaging it.

5. Introduction to Manage Accounts

This feature allows the administrator to:

> ➢ Create user accounts and passwords to prevent unauthorized use of the autoloader.
> ➢ Edit existing user account information, including name and password.
> ➢ Delete existing user account(s).
> ➢ Enable or disable "Manage Accounts".

Manage Accounts is disabled by default. Prior to activating the "Manage Accounts" feature, the autoloader recognizes all users as the Administrator.

The pre-defined password for this function is "0000."

By adding additional users, each individual user has his/her own settings and only has access to the hard drive partitions that the individual user loaded to the hard drive. No one else can access their hard drive partitions other than the Administrator.

For example, if USER 1 logs-in and loads a master disc to hard drive Partition A, when USER 2 logs-in, USER 2 will not have access to any partitions loaded by USER 1; which includes partition A.

To take advantage of this feature, follow these instructions:

> ➢ Change the Administrator password. Refer to "Edit User Info" on page 49 for additional information.
> ➢ Create a User Name and Password for each authorized person on this autoloader. Refer to "Create User" on page 48 for additional information.
> ➢ Enable the "Manage Accounts" feature by turning on the "Password on Bootup" setting. Refer to "Password on Bootup" on page 50 for additional information.

Note: This autoloader comes with a standard license that allows you to create up to 32 users. However, if you desire to create more than 32 users, please contact Tech Support Service regarding our special 64 user license pack.

For instructions on how to use "Manage accounts", see "Manage Accounts" on page 47.

6. Single Master and Multi Master Mode

There are two ways to make copies using the autoloader:

Single Master Mode:

This mode requires that a single master disc is loaded onto the hard drive prior to initiating the duplication process. This mode is ideal if your job involves one or very few master disc(s).

Multi Master Mode (Batch Mode):

This mode does not require you to manually load your master. Simply place the master disc(s) on top of the stack of blank discs needed for that particular job of the master disc. This mode is ideal if you have numerous master discs and fewer copies for each master disc.

The Multi Master mode uses the Reserve partition to temporarily store the content of the current master disc. Once the task is complete and a new master disc has been detected, the reserve partition's content (of previous master disc) will be replaced with the content of the new master disc.

You can tell immediately which mode you are in by looking at any of the Copy or Test menus:

```
Duplicator      B.30          Duplicator      B.30
1. Copy        (SM)           1. Copy        (MM)
```

The (SM) indicates Single Master Mode, and the (MM) indicates Multi Master Mode.

For example, if you need to make:

 ➢ 20 copies of job A
 ➢ 40 copies of job B
 ➢ 30 copies of job C

Under Multi Master Mode, you would need to follow the steps below:
1. Make sure all of the spindles are empty.
2. Place 30 blank discs for job C on to the first input spindle.
3. Place the master disc for job C on top of those blank discs for job C.
4. Place 40 blank discs for job B on top of the master disc for job C.
5. Place the master disc for job B on top of those blank discs for job B.
6. Place 20 blank discs for job A on top of the master disc for job B.

Place the master disc for job A on top of those blank discs for Job A.

After you have completed these steps, the Input Bin should be loaded in the order shown in Fig. 5:

Master A
20 Blank Job for Master A
Master B
40 Blank Job for Master B
Master C
30 Blank Job for Master C

Fig. 5
The Order of the Discs

When you start the copy operation, the robotic arm will pick up discs from the Input Bin and place them into the drives. If any of the discs in the drives contains data, (in this case, that would be the first disc, the Master Disc for job A) the autoloader will load entire content of this disc (Master A) into the reserve partition on the Hard Drive. The subsequent discs from the input bin will be loaded in the empty drives.

Once the loading process is completed, the autoloader will start the duplication process for the blank media in the remaining drives. Master disc A will be picked up from the appropriate drive and dropped on to the Output Bin and the empty drive where the master disc was removed will be loaded with the next disc from the Input Bin.

If a new master is detected before the previous job is finished, the autoloader will complete the first job, unload the completed job, and fill the drive trays with blank discs for the next job.

The robotic arm will continue to load media into the drives as the duplicated discs are placed in the Output Bin. Once a writer drive (any drive) detects another Master disc, the same process is repeated for the new Master disc.

7. Setting Counters and Assigning Names

Two frequently used tasks are setting counters and assigning names to partitions. Directions for these tasks are given here.

7.1 Setting Counters

The autoloader frequently gives you the option to set a counter so that the machine can keep track of the number of copies made. Follow these steps when you see a Counter Selection Menu:

```
Counter:
No Counter
```

The Counter Selection Menu lets you set how many copies you want to make for your project. The Counter Selection feature tells the autoloader to count the number of successful copies you have made and stop the job when the desired number of copies has been reached.

You can select "No Counter" if you prefer to copy continuously with no interruption. (It will still count the number of copies, but it will not notify you when to stop.) To select the "No Counter", simply press the ▶ **Enter** button when you see the screen above.

Or, you can select "Specify Counter" between 1 to 9999 by pressing the ▲**Up or** ▽ **Down button** to go to the Specify Counter menu:

```
Counter:
Specify Counter
```

Press the ▶ **Enter** button to select this option. You will see the next *Specify Counter* menu.

```
Specify Counter:
[0    ] OK?
```

To specify the number of copies for your project, you need to enter/input a four-digit number.

If you need to specify a number that is less than four digits, fill the leading spaces with zeros (any leading zeros will be skipped). Examples of four-digit numbers are "0234" (two hundred and thirty four), or "0010" (ten).

To enter the number, you need to use the ▲**Up or** ▽ **Down button** to select the number for each digit and use the ▶ **Enter** button or the ◀ **ESC** button to move the cursor position right or left. Once you've finished, move the cursor to "OK" and press the ▶ **Enter** button. For example, if you want to specify a counter value of 21 (twenty one). The 4-digit value would be "0021." To input the desired quantity, do the following:

Make sure the cursor is located at the first position (First blinking position):

```
Specify Counter:
[0    ] OK?
```

➢ Press the ▽ **Down** button repeatedly until "0" is displayed.
➢ Press ▶ **Enter** button once to move the cursor to the next position.
➢ Press the ▽ **Down** button repeatedly until "2" is displayed.
➢ Press ▶ **Enter** button once to move the cursor to the next position.
➢ Press the ▽ **Down** button repeatedly until "1" is displayed.
➢ Now, "0021" is displayed, press ▶ **Enter** button once and the cursor moves to "OK".

Then, press the ▶ **Enter** button once to submit your counter value. The loader will now start loading disc from the input spindles and place them into all drive trays.

7.2 Editing Names

When you create either a new user or a partition, you need to assign a name to it. The example shown here shows how to name or rename a partition, but the process for naming or renaming the user name is identical.

During the process of creating a new partition, you will see the Edit Partition Name menu:

```
Edit Partition Name
[          ] OK?
```

To enter the name, use the ▲ **Up** or ▼ **Down button** to select the character and use the ▶ **Enter** or ◀ **ESC** button to move the cursor position. Once you've finished, move the cursor to "OK" and press the ▶ **Enter** button.

The name for a partition can be up to eight characters long, and the characters can be any alpha (A...Z) or numeric (0...9) value. For example, if you want to name the partition for your master disc as "FUN". Then follow this example:

- ➢ Press the ▼ **Down** button repeatedly until "F" is displayed. (You can also hold the ▼ **Down** button down, and the autoloader will scroll through the alphabet.)
- ➢ Press the ▶ **Enter** button once to move the cursor to the next position.
- ➢ Press the ▼ **Down** button repeatedly until "U" is displayed.
- ➢ Press the ▶ **Enter** button once to move the cursor to the next position.
- ➢ Press the ▼ **Down** button repeatedly until "N" is displayed.
- ➢ Press the ▶ **Enter** button once to move the cursor to the next position.
- ➢ Once you have the name "FUN" displayed and then, press the ▶ **Enter** button repeatedly until the cursor is moved to "OK".
- ➢ Then press the ▶ Enter button once to submit your name selection.

You will now see the following confirmation screen:

```
Loading Partition?
[FUN     ], OK?
```

Press the ▶ Enter button to confirm.

OPERATION

This chapter shows each of the menu options and how they are used.

1. Copy

The Copy menu option or the front panel Copy quick key have two different modes of operation:

Copy

> ➤ Single Master Mode: This mode requires that a single master disc is loaded onto the hard drive prior to initiating the duplication process. This mode is ideal if your job involves one or very few master disc(s).

> ➤ Multi Master Mode (Batch Mode): This mode does not require you to manually load your master. Simply place the master disc(s) on top of the stack of blank discs needed for that particular job of the master disc. This mode is ideal if you have numerous master discs and fewer copies for each master disc.

These modes are described in detail in "Single Master and Multi Master Modes" on page 17. If you are making copies in Single Master Mode, continue on to the next section. If you are making copies in Multi Master Mode, jump ahead to "Making Copies in Multi Master Mode" on page 22.

1.1 Making Copies in Single Master Mode

This process will copy your master disc on to several blank discs simultaneously. This mode requires that your master disc is loaded into a partition on the Hard Drive. See "Load Partition" on page 32 for instructions on how to do this.

Turn on your autoloader and wait until it has booted up. It should take several minutes for the autoloader to go through its self adaptive test and auto-calibration procedures. You should see the following signifying your autoloader is ready:

```
Duplicator      B.30
1. Copy         (SM)
```

Make sure the Master Mode is set to Single Master mode (SM). If it is not, use the △ **Up** or ▽ **Down** button to navigate to the *Master Mode* screen. If it is already in Single Master mode (SM), please skip to the step that starts the copy process.

```
 Duplicator      B.30
 8. Master Mode  (MM)
```

Press the ▶ **Enter** button to enter the *Master Mode* Menu and you will see a screen similar to one of the following:

```
 Master Mode:
 Multi Master
```

```
 Master Mode:
 Single Master
```

Use the △ **Up** or ▽ **Down** button to select Single Master Mode. Press the ▶ Enter button to submit your selection.
Go back to the *Copy* Menu. Use the △ **Up** or ▽ **Down** button to navigate to the following screen:

Start the Copy Input Spindle(s) and menu. You will see the

```
 Duplicator      B.30
 1. Copy         (SM)
```

Process. Insert your blank discs on to the press the ▶ **Enter** button to enter the *Copy Choose Partition* menu:

```
 Choose Partition
  3->[FUN    ]CD
```

Use the △ **Up** or ▽ **Down** button to find the partition where your master disc is stored. Press the ▶ **Enter** button to select that Partition. Next, you will see the *Counter Selection* menu:

```
 Counter:
 No Counter
```

Follow the instructions shown in "Setting Counters" on page 19 to continue. Once the counters have been set, press the ▶ **Enter** button to confirm. You will see the *Processing* screen:

```
 Preparing...
 Please Wait
```

After a short interval, the robotic loader will pick the top disc from the input spindle and place it into one of the drives. As this is happening, you will see a screen similar to below:

```
Loader Processing
Drive 1 <- Input Bin
```

This information screen shows what is happening. In this case, the loader has taken a disc from the input spindle and is placing it into Drive 1.

The loader will continue to remove discs from the input spindle and place those into drives until either all of the drives are full, or the count that you loaded into the counter is reached.

```
Processing...
Please Wait
```

It takes a few seconds for the autoloader to recognize all the discs.

After two or three seconds of processing time, one of the following *Copy Progress* screens will appear.

```
Copying...   H4012MB
   0/21        12%
```

➢   "H" indicates the source of the job resides in the Hard Drive.
➢   "4012MB" indicates the capacity of the master disc.
➢   "12%" indicates the current progress of the duplication.
➢   "0/21" indicates you have a project size of 21 copies and you have made 0 copies so far.

```
Copying...   H4012MB
   0         12%
```

➢   "H" indicates the source of the job resides in the Hard Drive.
➢   "4012MB" indicates the capacity of the master disc.
➢   "12%" indicates the current progress of the duplication.
➢   "0" indicates you have made 0 copies so far.

Note: It is normal to see the progress indicator stay at 0%-10% and 100% for approximately 30 seconds for CD duplication and up to one minute for DVD duplication. That is caused by the initializing and finalizing stages.

```
Loader Processing
Drive 1 -> Output Bin
```

Once the duplication run is completed, the loader will remove the finished disc from the drive and place the successful copy on the Output Spindle and if there are any bad/NG copy to the reject area.

The loader will then pick up another blank disc and load it into the drive. This is then repeated for each disc.

```
Loader Processing
Drive 2 <- Input Bin
```

The copying process will continue until you either run out of blank discs or until the count that you loaded into the counter is reached.

If you run out of blank discs and the job is not complete, the autoloader will give you an opportunity to fill the spindle:

Important: When you add discs to the input spindle, be sure to remove your finished discs from the Output Spindle.

```
Input Bin Empty(20)
Continue?
```

At this point you can either put more discs on to the input spindle and press the ▶ **Enter** button to continue, or press the ◀ **ESC** button to terminate your project.

Once the autoloader is through, you will see the following screen:

```
PASS 100 FAIL 0
Job Completed! Press OK to Finish
```

➢ "PASS 100" indicates that you made 100 successful copies.

> ➢ "FAIL 0" indicates that you have no failures for this job.

At the bottom of the screen, you will see the scrolling message: "Job Complete! Press OK to Finish"

Press the ▶ **Enter** button once again and you shall see the "Access Log" menu. You can press the ▶ **Enter** button one more time to see the log that indicates the number of passes and fails for every drive/tray, or simply press the ◀ **ESC** button to go back to the main menu. It is highly recommended to check the log when your job has an abnormal amount of failures.

1.2. Making Copies in Multi Master Mode

This mode does not require you to manually load your master. Simply place the master disc(s) on top of the stack of blank discs needed for that particular job of the master disc. This mode is ideal if you have numerous master discs and fewer copies for each master disc.

The Multi Master mode uses the Reserve partition to temporarily store the content of the current master disc. Once the task is complete and a new master disc has been detected, the reserve partition's content (of the previous master disc) will be replaced with the content of the new master disc.

For more information on Multi Master Mode, see "Single Master and Multi Master Modes" on page 16.

Turn on your autoloader and wait until it has booted up. It should take several minutes for the autoloader to go through its self adaptive test and auto-calibration procedures. You should see the following signifying your autoloader is ready:

```
Duplicator      B.30
1. Copy         (MM)
```

Make sure the Master Mode is set to Multi Master mode (MM). If it is not, use the ▲ **Up or** ▼ **Down** button to navigate to the *8. Master Mode* screen. If it is already in Multi Master mode (MM), please skip to the step that starts the copy process.

```
Duplicator      B.30
8. Master Mode  (SM)
```

Press the ▶ **Enter** button to enter the *Master Mode* Menu and you will see a screen similar to one of the following:

```
Master Mode:
Single Master
```
```
Master Mode:
Multi Master
```

Use the ▲ **Up or** ▼ **Down** button to select Multi Master Mode. Press the ▶ **Enter** button to submit your selection.

```
Duplicator      B.30
1. Copy         (MM)
```

Use the ▲ **Up or** ▼ **Down** button to navigate back to the *1. Copy* Menu.

Place your master discs and blank discs onto the Input Spindle as described in "Single Master and Multi Master Modes" on page 18. In general, the order of the discs on the spindle will be, **from top to bottom**:

> ➢ The master disc for the first job
> ➢ The blank discs for the first job
> ➢ The master disc for the second job
> ➢ The blank discs for the second job
> ➢ The master disc for the third job

> ➢ The blank discs for the third job
> ➢ etc.

If your autoloader has more than one Input Spindle, then the job sequence can be spread across the spindles, in sequence. CD duplication jobs and DVD duplication jobs can be intermixed. The autoloader will automatically detect a job's master and blank disc format and copy them when they match.

You should still be at the *1. Copy* Menu:

```
Duplicator        B.30
1. Copy          (MM)
```

Press the ▶ **Enter** button to start the duplication job.

```
Preparing...
Please Wait
```

After a short interval, the robotic loader will pick the top disc (master disc) from the Input Spindle and place it into one of the drives. As this is happening, you will see a screen similar to below:

```
Loader Processing
Drive 1 <- Input Bin
```

This information screen shows what is happening. In this case, the loader has taken a disc from the Input Spindle and is placing it into Drive 1.

The loader will continue to remove discs from the Input Spindle and place those into drives until either all of the drives are full or all Input Spindles are empty.

```
Processing...
Please Wait
```

It takes a few seconds for the autoloader to recognize all of the discs in the trays.

```
Loading...   RESERVED
36%     121MB Loaded
```

Once all of the discs are detected, the autoloader will detect the master disc and read the contents of the master disc into the reserve partition.

Once the master disc has

```
Loader Processing
Drive 1 -> Output Bin
```

been loaded, the autoloader will remove the master disc from the drive and place it onto the Output Spindle.

```
Loader Processing
Drive 1 <- Input Bin
```

The loader will then pick up another blank disc and load it into the drive where the last master disc was placed.

Once the loading process is completed, the duplication process will start. When the duplication process is through, the loader will remove the discs from the drives and place successful copies onto the Output Spindles and place failed copies onto Rejected Area.

In Multi Master Mode, the robotic arm continues to load more media into the drives from Input Spindles while the duplicated discs are placed in the Output Spindle. Once a new Master disc are been detected by any of the drives, this process will repeat for the new Master disc.

When all of the jobs are complete, and the autoloader detects all Input Spindles are empty, it presents you with the Input Bin Empty message:

```
Input Bin Empty (20)
Press OK to Continue
```

Press the ▶ **Enter** button to continue and you will see the *Access Log File* screen:

```
   Access Log File
   OK?
```

Press the ▶ **Enter** button to view the log file or press the ◀ **ESC** button to return to the *1.Copy* menu. If you choose to see the log file, you will see a screen similar to below:

```
   Master #1,  Total 20
   Pass 20, Fail 0

   Master #2,  Total 40
   Pass 40, Fail 0

   Master #3,  Total 30
   Pass 30, Fail 0
```

Use the ▲ **Up or** ▼ **Down** buttons to look at the log file for the various jobs. Press the ◀ **ESC** button to return to the *1.Copy* menu

2. Print

Use the *Print* menu to print label(s) directly onto the label side of your LightScribe printable

Print

media. Before you start a printing process, please make sure you have successfully loaded your LightScirbe label file(s) into the Hard Drive via the "Load Label" function located under "Print Setup". See page 35 for details. For additional information on creating/designing your labels, please refer to "Design and Create a Label File" on page 54.

To begin the printing process, perform the following:

Turn on your autoloader and wait until it has booted up. You should see the following signifying your autoloader is ready:

```
   Duplicator   2.20
   1. Copy      (SM)
```

To start the printing process, place your LightScribe printable discs in to the Input Spindle, with the label side facing down toward the bottom of the bin.

Use the **Up or Down** button to navigate to 2.Print and press the **ENT/Enter** button. You will see the *Please Select Label screen:*

```
Please Select Label
  [FUN.lsi] 25MB
```

Use the **Up or Down** button to find the desired LightScribe label file on the hard drive. Press the **ENT/Enter** button to select that LightScribe label file. Next, you will see the *Counter Selection* menu:

```
Counter:
No Counter
```

Follow the instructions shown in "Setting Counters" on page 18 to continue. Once the counters have been set, press the **ENT/Enter** button to confirm.

```
OK: 0 NG: 0 NB:  0
Input Bin > Drive01
```

After a short interval, the robotic loader will pick the top disc from the input spindle and place it into one of the drives. This information screen shows what is happening. In this case, the loader has taken a disc from the input spindle and is placing it into Drive 1.

The loader will continue to pick discs from the input spindle and place them into drives until either all of the drives are full, or the count that you loaded into the counter is reached.

```
Processing...
Please Wait
```

It takes a few seconds for the autoloader to recognize the disc(s).

After two or three seconds of processing time, one of the following *Copy Progress* screens will appear.

Counter Specified

```
Printing...        H
[FUN.lsi]   0/21 12%
```

or:

No Counter Specified

```
Printing...        H
[FUN.lsi]   0    12%
```

- ➢ "H" indicates the source of the job resides in the Hard Drive.
- ➢ "FUN.lsi" indicates name of the label file you are printing.
- ➢ "12%" indicates the current progress of the printing.
- ➢ "0/21" indicates you have a project size of 21 prints and you have made printed 0 discs so far.

- ➢ "H" indicates the source of the job resides in the Hard Drive.
- ➢ "FUN.lsi" indicates name of the label file you are printing.
- ➢ "12%" indicates the current progress of the printing.
- ➢ "0" indicates you have printed 0 discs so far.

Note: It is normal to see the progress indicator stay at 0% and 100% for several minutes due to the initializing and finalizing process.

```
OK: 3 NG:  0 NB:  0
Drive01 > Output Bin
```

Once the printing run is completed, the loader will remove the printed disc(s) from the drive and place the successfully printed disc(s) onto the Output Spindle. If the printing process failed, the loader will place the failed disc onto the Reject Area.

After the loader has placed the printed disc into the Output Spindle, the loader will then pick up another LightScribe printable disc and load it into the drive. This is then repeated for each drive.

```
OK: 3 NG:  0 NB:  0
Input Bin > Drive01
```

The printing process will continue until you either run out of LightScribe printable discs or until the count that you loaded into the counter is reached.

If you run out of LightScribe printable discs and the job is not complete, the autoloader will give you an opportunity to re-fill the spindle:

Important: When you add discs to the input spindle, be sure to remove your finished discs from the Output Spindle.

```
 Input Bin Empty
 Reset Hopper?
```

At this point you can either put more LightScribe printable discs into the input spindle(s) or press the **ENT/Enter** button to continue, or press the **ESC/Escape** button to terminate your project.

```
 Access Drive Log?
```

Upon project termination, you shall see the *Access Drive Log* menu. You can press the **ENT/Enter** button one time to see the drive log that indicates the number of passes and fails for every drive/tray, or simply press the **ESC/Escape** button to go back to the main menu.

If you choose to see the drive log file, you will see a screen similar to below:

```
Drive 1
OK: 1 NG:  0 NB:  0
```

- ➢ "Drive 1" indicates the below results are for the 1st drive.
- ➢ "OK: 1" indicates there was "1" successful print made by this drive.
- ➢ "NG: 0" indicates there were "0" bad prints created by this drive.

> ➢ "NB: 0" indicates there were "0" discs in this drive that were not printable due to a non-printing error such as invalid media type, etc.

If your unit has more than one drive, use the **Up or Down** buttons to look at the drive log file for the additional drive(s). Press the **ESC/Escape** button to return to the *1.Copy* menu

3. Test

Use the *Test* menu or *Test* quick key to simulate the copy process. With simulation, write once recordable discs such as DVD-R, or CDR will be reusable. The purpose of simulation is to ensure error free duplication.

Test

> *Note:*   *Due to physical limitations of the DVD+R recordable format, if you try to simulate DVD+R copying, you will encounter failure messages.*

> *Warning: If you are using CD/DVD Rewritable discs as your media during the simulation, the content on those discs will be permanently erased.*

Operation in Test mode is identical to operation in Copy mode. See "Copy" on page 20 for instructions.

4. Compare

Use the Compare function to perform a bit-by-bit comparison between the content of your master disc(s) in the Hard Drive and the contents of all discs it copied. This ensures that all of your copies are identical to original master disc(s).

Note: *The bit-by-bit comparison will only apply on all DVDs and Data CDs. The readability check will be applied for other formats like Audio CDs, CD+G, and Video CD discs due to their lack of error correction mechanisms.*

If you are at the *1. Copy* Menu, do the following:

```
Duplicator      B.30
1. Copy         (MM)
```
Use the ▲ **Up or** ▼ **Down** button to find the *4. Compare* menu.

```
Duplicator      B.30
4. Compare
```
Press the ▶ **Enter** button on *4. Compare* menu to enter the *Choose Partition* Menu and you will see a screen similar to the following:

```
Choose Partition
 3-> [FUN     ]CD
```
Use the ▲ **Up or** ▼ **Down** button to find the partition where your master disc is stored. Press the ▶ **Enter** button to select that Partition. Next, you will see the *Counter Selection* menu:

```
   Counter:
   No Counter
```

Follow the instructions shown in "Setting Counters" on page 18 to continue. Once the counters have been set, press the ▶ **Enter** button to confirm. You will see the *Preparing* screen.

```
   Preparing...
   Please Wait
```

After a short interval, the robotic loader will pick the top disc from the input spindle and place it into one of the drives. As this is happening, you will see a screen similar to below:

```
   Loader Processing
   Drive 1 <- Input Bin
```

This information screen shows what is happening. In this case, the loader has taken a disc from the input spindle and is placing it into Drive 1.
The loader will continue to remove discs from the input spindle and place those into drives until either all of the drives are full, or the count that you loaded into the counter is reached.

```
   Processing...
   Please Wait
```

It takes a few seconds for the autoloader to recognize all the discs.

The system will then compare the discs in the trays to the content of the master disc residing in the Hard Drive partition you specified. When the comparison job is complete, the autoloader will place the good discs and failed discs into corresponding areas and you will see a PASS/FAIL result screen similar to this:

Counter Specified		**No Counter Specified**

```
   PASS 16 FAIL 0
   Job Completed! Press OK to
   Finish
```
or:
```
   Input Bin Empty (20)
   Reset Hoppers?
```

➢ "PASS 16" indicates 16 discs have been compared successfully.

➢ "FAIL 0" indicates none of the discs have failed.

Press the ▶ **Enter** button to finish

➢ "Input Bin Empty (20)" indicates that the system has run out of discs to compare.

If you have more discs to compare, you can empty the Output Spindle; place the discs to be compared in the Input Spindle and Press the ▶ **Enter** button to continue.

If you have no more discs to compare, press the ◀ **ESC** button to terminate the operation.

5. Test + Copy

With the Test + Copy menu option, the autoloader simulates the copying process, and then makes copies if everything works correctly. If a failure is encountered on a disc during the simulation, it will not be copied during the copying process while the discs that passed the simulation will move on to the copying process. After the

copying process, the autoloader will place the failure discs into the rejected area while the successfully copied discs will be placed into the corresponding Output Spindle.

Operation in *Test + Copy* menu is identical to operation in *Copy* menu. See "Copy" on page 20 for instructions.

6. Copy + Compare

The *Copy + Compare* menu option is used to make verified copies. After the copy process is done, the autoloader automatically compares the copies to the master content residing in the hard drive to ensure that they are identical. When the operation is complete, the autoloader automatically places good discs on to the Output Spindle and bad discs in the Reject Area.

Operation in *Copy+Compare* menu is identical to operation in *Copy* menu. See "Copy" on page 20 for instructions.

7. Select Burn Speed

The *Select Burn Speed* menu option or the *Speed* quick key is used to adjust the duplication speed for the various duplication modes. By default, the duplication speed will be set to the optimal speed. However, under some circumstances you might want to lower down the duplication speed. Those circumstances are:

Speed

➢ Poor Blank Media Quality - When your media quality is sub-par, lowering the duplication speed is necessary to make good copies.
➢ Duplication Quality - Overall, the lower the speed, the higher the quality of your duplicates. If you have time, it is a good choice to lower the speed to produce the best quality duplicates.

If you are at the *1. Copy* Menu, do the following:

```
Duplicator      B.30
1. Copy         (MM)
```
Use the ▲ **Up or** ▼ **Down** button to find the *7. Select Burn Speed* menu.

```
Duplicator      B.30
7. Select Burn Speed
```
Press the ▶ Enter button on *7. Select Burn Speed* menu to set the duplication burn speed and you will see the *Select Burn Speed* type menu similar to below:

```
Select Burn Speed
HDD to CD Speed
```
There are two recording speed types that can be set:
➢ HDD to CD: Copy Hard Drive CD Content to CD-R/RW Discs speed.
➢ HDD to DVD: Copy Hard Drive DVD Content to DVD±R/RW Discs.

Depending upon the type of duplication and your autoloader restrictions, you need to select the correct format in order to take effect. To select the recording speed options, use the ▲ **Up or** ▼ **Down** buttons to find the desired speed for the appropriate format and press the ▶ **Enter** button to enter the menu. You will see a menu similar to this:

```
HDD to CD Speed
32x
```
Use the ▲ **Up or** ▼ **Down** button to find the desired speed. Press the ▶ **Enter** button to set the desired recording speed.

The options that are available are shown in Table 2.

Duplication Type	Speeds Available
HDD to CD Speed	1x, 2x, 4x, 8x, 12x, 16x, 24x, 32x, 40x, 48x, 52x
HDD to DVD Speed	1x, 2x, 2.4x, 4x, 6x, 8x, 12x, 16x

Table 2 Duplication Speeds

These options might change depending on the CD or DVD writers pre-installed in your system.

Note: The speed you choose may be adjusted by the drives and/or the media for optimized duplication.

Once your selection has been changed successfully, you will see the following screen for 2 seconds:

```
HDD to CD Speed
Adjusted to: 8x
```

You will automatically be returned to the Main Menu

8. Select Source

The *Select Source* menu or the *Source* quick key is used to set the Master Reading Source. In the autoloader, the Master Reading Source is always the Hard Drive.

Source

9. Master Mode

The *Master Mode* menu is used to select between Single Master mode or Multi Master mode. For more information on the modes, see "Single Master and Multi Master Modes" on page 16.

If you are at the *1. Copy* Menu, do the following:

```
Duplicator      B.30
1. Copy         (SM)
```

Use the ▲ **Up or** ▼ **Down** button to find the *8. Master Mode* menu.

```
Duplicator      B.30
9. Master Mode
```

Press the ▶ Enter button on *8. Master Mode* to enter the menu and you will see one of the following screens:

```
Master Mode:
Single Master
```
```
Master Mode:
Multi Master
```

Use the ▲ **Up or** ▼ **Down** button to choose between Multi Master mode and Single Master mode. Press the ▶ Enter button to enter your selection. The system will return you back to the main menu.

10. Erase RW

Use the *Erase RW* menu to erase your Rewritable discs.

```
Duplicator        B.30
1. Copy           (SM)
```

Use the ▲ **Up or** ▼ **Down** button to find the *10. Erase RW* menu.

```
Duplicator        B.30
10. Erase RW
```

Press the ▶ Enter button on *10. Erase RW* to enter the menu and you will see the following screens:

```
Erase RW
Quick Erase
```

There are two options:
  ➢ **Full Erase:** This option erases the entire disc, destroying all previously written data in the process.
  ➢ **Quick Erase:** This option erases the index (TOC) of the Rewritable disc. not the data section. It is much faster than Full

Use the ▲ Up or ▼ Down buttons to select between the two options and press the ▶ Enter button to continue.

```
Counter:
No Counter
```

Follow the instructions shown in "Setting Counters" on page 18 to continue. Once the counters have been set, press the ▶ Enter button to confirm.

```
Loader Processing
Drive 1 <- Input Bin 1
```

The Robotic Arm will go out and pick the discs to be erased from the Input Spindles and place them into the drives. As soon as the drives are all full, or the number programmed into the counter is reached, you will see the following:

```
Processing ...
Please Wait
```

The system will check all discs in the drive and prepare them to be erased. As soon as the checking process completes, the Erase RW process starts.

```
Quick Erasing...
0/25
```

The "0" indicates that zero discs have been erased so far. The "25" indicates the number programmed into the counter. Once all the discs have been erased, you will see one of these PASS/FAIL screens:

Counter Specified

```
PASS 25 FAIL 0
Job Completed! Press OK to Finish
```

or:

No Counter Specified

```
Input Bin Empty (20)
Reset Hoppers?
```

> ➤ "PASS 25" indicates 25 discs have been erased successfully.
>
> ➤ "FAIL 0" indicates none of the discs have failed erase.
>
> Press the ▶ **Enter** button to finish

> ➤ "Input Bin Empty (20)" indicates that the system has run out of discs to erase.
>
> If you have more discs to erase, you can empty the Output Spindle; place the discs to be erased in the Input Spindle and Press the ▶ **Enter** button to continue.
>
> If you have no more discs to erase, press the ◀ **ESC** button to terminate the operation.

11. Hard Drive Setup

The Hard Drive Setup menu consists of following sub-menus:

    1   Select Partition

    2   Load Partition

    3   Rename Partition

    4   Delete Partition

    5   Partition Info

    6   Partition Size

    7   Format Hard Drive

Each of these menus is discussed in it's own subsection.

If you are at the *1. Copy* Menu, do the following:

```
Duplicator      B.30
1. Copy         (SM)
```

Use the ▲ **Up or** ▼ **Down** button to find the *11. Hard Drive Setup*.

```
Duplicator      B.30
11. Hard Drive Setup
```

Press the ▶ **Enter** button on *11. Hard Drive Setup* to enter the menu. Use the ▲ **Up or** ▼ **Down** button to select between those options.

10.1 Select Partition

The *Select Partition* submenu is used to select the partition on the Hard Drive that will be used as the default partition choice for various Hard Drive related tasks.

```
Hard Drive Setup
1. Select Partition
```

Press the ▶ **Enter** button to enter the *Select Partition* menu.

```
Choose Partition
1->[RESERVED] CD
```

Use the ▲ **Up or** ▼ **Down** button to select the desired partition. The RE-SERVED partition is reserved for use by the System under Multi-Master mode.

```
Choose Partition
  2->[FUN     ] CD
```

Press the ▶ **Enter** button to select the desired partition (named FUN in this example).

10.2 Load Partition

The Load Partition menu is used to load a master disc's content into the desired partition on the Hard Drive.

```
Hard Drive Setup
2. Load Partition
```

Press the ▶ **Enter** button to enter the *Load Partition* menu.

```
Load Partition[2/16]
Load -> New Partition
```

If you would like to load the master disc into a new partition, press the ▶ **Enter** button when the *New Partition* option is shown. Or, you can use the ▲ **Up** or ▽ **Down** button to select one of the existing partitions to be overwritten & press the ▶ **Enter** button to select it.

Depending on whether you are loading the master into a new partition, or into an existing partition, you will see one of these two screens:

New Partition

```
Edit Partition Name
[         ] OK?
```

Enter a new partition name as described in "Editing Names" on page 20. For this example, we will name it "Happy".

or:

Existing Partition

```
This will Overwrite
[FUN     ],OK?
```

Press the ▶ **Enter** button to overwrite the partition named "FUN". Before continuing, the autoloader will ask you again to confirm it.

```
Edit Partition Name
[FUN     ] OK?
```

Enter a new partition name as described in "Editing Names" on page 19. For this example, we will name it "HAPPY".

```
Load Partition
[HAPPY   ], OK?
```

The system will display a verification message before continuing. Pres the ▶ **Enter** button to start loading the partition named "HAPPY".

The master should be placed on the first input spindle. The robotic arm will pick it up and place it into one of the drives, and the contents of the master disc will be loaded into the desired partition.

```
Load Partition OK!
Press OK to Finish
```

Pres the ▶ **Enter** button to finish.

10.3 Rename Partition

When you load your master disc onto a hard drive partition, you are asked to give it a name. However, you can rename it at anytime afterwards. Instructions for this are shown in "Editing Names" on page 19.

10.4 Delete Partition

The *Delete Partition* option deletes an existing partition. Use the ▲ **Up or** ▼ **Down** button to navigate to the *4.Delete Partition* menu.

```
   Hard Drive Setup
   4. Delete Partition
```

Press the ▶ **Enter** button to enter the *Delete Partition* menu. The autoloader will first ask you to choose the partition to be deleted:

```
   Choose Partition
    2->[FUN     ] CD
```

Use the ▲ **Up or** ▼ **Down** button to find the partition that you want to delete. Press the ▶ **Enter** button to select the partition.

```
Delete Partition
[FUN     ] CD, OK?
```

The autoloader displays the *Delete Partition* confirmation message. Press the ▶ **Enter** button to continue.

```
   Partition FUN
   Deleted
```

The autoloader displays the *Deleted* message for two seconds and then returns you to the *Delete Partition* menu.

10.5 Partition Info

The *Partition Info* option provides information about an existing partition. Use the ▲ **Up or** ▼ **Down** button to navigate to the *5. Partition Info* menu.

```
   Hard Drive Setup
   5. Partition Info
```

Press the ▶ **Enter** button to enter the *Partition Info* menu, and use the ▲ **Up or** ▼ **Down** button to find the partition that you want information about.

```
   ( 2)    From: ADMIN
   [FUN     ] CD 21MB
```

➢   The "(2)" field indicates that it is the second partition on the drive.
➢   The "From:" field indicates the user that created the partition (See "Introduction to Manage Accounts" on page 15.)
➢   The "[FUN]" field shows the name of the partition.
➢   The "CD" field indicates that the master stored in this partition is

10.6 Partition Size

The Partition Size option allows you to change the size of the Hard Drive partitions.

Warning: When you alter the partition size, all previous data or video stored on the hard drive will be lost, and you will only be able to load media with less than the specified partition size capacity.

To change the hard drive partition size, use the ▲ **Up or** ▼ **Down** button to navigate to the *6. Partition Size* menu:

```
Hard Drive Setup
 6. Partition Size
```

Press the ▶ **Enter** button to enter the *Partition Size* menu.

```
 Partition Size
 AUTO
```

Press the ▲ **Up or** ▼ **Down** button to select the desired partition size. Press the ▶ **Enter** button to select the Partition Size.

The Hard Drive is divided into a number of equal-sized partitions. Each partition holds ONE and ONLY ONE master disc content regardless of the size of your master disc.

The options for partition size are:
  ➢ Auto
  ➢ CD: 1 GB
  ➢ DVD Single Layer: 5 GB
  ➢ DVD Dual/Double Layer: 9 GB

The number of partitions is determined by dividing your Hard Drive's total capacity by the selected media size: 1 GB for CD format, 5 GB for DVD5 format, or 9 GB for DVD9 format (double layer/dual layer), and then subtracting one partition for system use. For example, if you have a 160 GB Hard Drive, you can calculate the number of DVD5 format partitions by: 160 / 5 = 32. Since one partition is reserved for system use, you will have 31 partitions available for use.
Or you can calculate the number of DVD9 format partitions using the formula: 160 / 9 = 17.77. Since you cannot use an incomplete partition, there will be a total of 17 partitions available for a 160 GB Hard Drive. Since one partition is reserved for system use; there will be 16 partitions available for use.

The *Auto* option sets the partition to the largest size that the installed CD/ DVD writers can accommodate.

If you have a 16x speed or higher autoloader with double layer/dual layer DVD9 capabilities, the hard drive partitions are set at a size of 9 GB each under *Auto* option to accommodate the expanded size of the DVD9 format. If you require more partitions and do not plan on copying double layer/dual layer DVD9 media, you can change the hard drive partition size to CD (1 GB) or DVD (5 GB).

10.7 Format Hard Drive

This function formats the Hard Drive. It deletes all disc images and re-initiates the Hard Drive. To format the Hard Drive, use the ▲ **Up or** ▼ **Down** button to navigate to the *7. Format Hard Drive* menu:

```
Hard Drive Setup
 7. Format Hard Drive
```

Press the ▶ **Enter** button to enter the *Format Hard Drive* menu.

```
 Format Hard Drive
 Press OK to Continue
```

Press the ▶ **Enter** button to format the Hard Drive. After the Hard Drive has been formatted, the system will return you to the *Format Hard Drive* menu.

12. Print Setup

The Print Setup menu consists of the following sub-menus:

  1   Load Label
  2   Rename Label

3   Delete Label
4   Print Surface Info
5   Label Info

Each of these menus is discussed in its own subsection.

If you are starting from the *1. Copy* Menu, do the following:

```
Duplicator      2.20
1. Copy        (SM)
```

Use the **Up or Down** button to find *Print Setup*.

```
Duplicator      2.20
12. Print Setup
```

Press the **ENT/Enter** button at *Print Setup* to enter the menu. Use the **Up or Down** button to select between the following options.

12.1 Load Label

This function allows you to load your LightScribe Label file (.lsi file) from the Label Disc onto the system's internal hard drive.

For instructions on how to generate the LightScribe Label, please refer to "Design and Create a Label File" on page 54.

```
 Print Setup
 1. Load Label
```

Press the **ENT/Enter** button to enter the *Load Label* menu.

```
  Loading Master
```

The autoloader will pick up a disc that contains your LightScribe label file and place it into a drive for analyzing.

```
Please Select Label
1.[Load All Labels]
```

Upon successfully analyzing your label disc, you have the following options:

➢ Load all labels found in the disc – The system can load all LightScribe Label file(s) (.lsi file) detected in the disc into the hard drive. If you choose to do so, please use the **Up or Down** button to select [Load All Labels] and press the **ENT/Enter** button to continue.

➢ Select any single label –The system can also load any single LightScribe Label file (.lsi file) detected in the disc into the hard drive. If you choose to do so, please use the **Up or Down** button to select the LightScribe label file you wish to load and press the **ENT/Enter** button to continue

```
Loading...     25MB
FUN.lsi    12%   3MB
```

During the loading process, you shall see the screen on the left.

➢   "FUN.lsi" indicates name of the label file you are loading.
➢   "12%"/"3MB" indicates the current progress of loading.
➢   "25MB" indicates the size of the label file you are loading.

```
  Unloading Master
```

Upon completion of the loading process, the autoloader will pick up the label disc and place it into the output spindle.

```
Load Label Success!
Press OK to Continue
```

The system will then show a result screen, at which point you can press the **ENT/Enter** button to return to the "Print Setup" menu.

12.2 Rename Label

When you load your LightScribe Label file into the hard drive, the filename of the label file is used as a reference. However, you can also rename it at anytime afterwards. Instructions on how to perform this operation is very similar to the partition name change example, which is shown in "Editing Names" on page 19.

12.3 Delete Label

The *Delete Label* function deletes an existing LightScribe Label file in the hard drive. Use the **Up or Down** button to navigate to the *3.Delete Partition* menu.

```
 Print Setup
 3. Delete Label
```

Press the **ENT/Enter** button to enter the *Delete Label* menu. The autoloader will first ask you to choose the label to be deleted:

```
Please Select Label
  [FUN.lsi]25M
```

Use the **Up or Down** button to find the label that you want to delete. Press the **ENT/Enter** button to select the label.

```
 Delete Label
 [FUN.lsi], OK?
```

At the autoloader *Delete Label* confirmation message display, press the **ENT/Enter** button to continue.

```
 [FUN.lsi]
 Deleted!
```

The autoloader displays the *Deleted* message for two seconds and then returns you to the *Delete Label* menu.

12.4 Print Surface Info

The *Print Surface Info* function provides information about the LightScribe printing device and the LightScribe printable media used in this LightScribe printing device for troubleshooting purposes. Use the **Up or Down** button to navigate to the *Print Surface Info* menu.

In order to display this information, a LightScribe printable disc (printing side face down) must be manually placed into the LightScribe printing device before performing this function.

12.5 Label Info

The *Label Info* function provides in-depth information as to what type of LightScribe media is supported by this label file. This function is only needed for troubleshooting purposes.

13. Setup

The Setup menu options are used to configure various options on the autoloader. The Setup menu consists of the following sub-menus:

- ➢ Language
- ➢ Read Error Skip
- ➢ CD Writing Mode
- ➢ Max Audio, VCD & CDG Speed
- ➢ Buzzer
- ➢ Startup Menu
- ➢ Screen Saver

- ➢ Counter
- ➢ AUTOCOPY Enabled
- ➢ ISRC
- ➢ DVD+R Compatibility Mode
- ➢ Disable Drives
- ➢ CD Overburn
- ➢ Max Failure per Job
- ➢ Max Failure per Drive

Each of these options is discussed in its own subsection.

13.1 Language

This setting allows you to choose the language that you prefer to use when navigating the autoloader. The autoloader supports multiple languages.

```
Setup
1. Language
```

Use the ▲ **Up or** ▼ **Down** button to select the Language menu and press the ▶ **Enter** button to enter that menu.

```
Language:
English
```
```
Language:
Espanol
```

Use the ▲ **Up or** ▼ **Down** button to select between the languages and press the ▶ **Enter** button to select that option.

13.2 Read Error Skip

Normally, when the autoloader encounters a read error while reading your master disc, the duplication is aborted and all the recordable media in the writers are ruined. However, if you believe that your master disc has a small, insignificant error due to physical damage, you can enable this setting to allow the autoloader to skip any read errors it encounters.

Note: This function does not fix the error; it only skips it to make the rest of the data readable.

```
Setup
2. Read Error Skip
```

Use the ▲ **Up or** ▼ **Down** button to select the *Read Error Skip* menu and press the ▶ **Enter** button to enter that menu.

```
Read Error Skip
On
```
```
Read Error Skip
Off
```

Use the ▲ **Up or** ▼ **Down** button to select whether *Read Error Skip* is on or off, and press the ▶ **Enter** button to select that option.

13.3 CD Writing Mode

This setting allows you to select which mode to use to duplicate a CD; "Disc at Once" or "Track at Once." Unless you understand completely what these modes are, we strongly suggest you to set it to "Disc at Once."

```
Setup
3. CD Writing Mode
```

Use the ▲ **Up or** ▼ **Down** button to select the *CD Writing Mode* menu and press the ▶ **Enter** button to enter that menu.

```
CD Writing Mode
Disc at Once
```
```
CD Writing Mode
Track at Once
```

Use the ▲ **Up or** ▼ **Down** button to select either *Disc at Once* or *Track at Once*, and press the ▶ Enter button to select that option.

13.4 Max Audio, VCD & CDG Speed

Due to the lack of error checking mechanism for Audio CD, Video CD and CD+G format, duplicating them at too high a speed can cause frequent errors like glitches and skips. Use this setting to adjust the maximum duplication speed for Audio, Video CD and CD+G format to ensure reliable duplication for such formats.
The options are: 1x, 2x, 4x, 8x, 12x, 16x, 24x, 32x, 40x, 48x, and 52x.

```
Setup
4. Max Audio, VCD & CDG Speed
```

Use the ▲ **Up or** ▼ **Down** button to select the *Max Audio, VCD & CDG Speed* menu and press the ▶ **Enter** button to enter that menu.

```
Max Audio, VCD & CDG Speed
16x
```

Use the ▲ **Up or** ▼ **Down** button to select the desired maximum writing speed for Audio, VCD and CDG, and press the ▶ Enter button to select that option.

Note: The actual speed that is selected may be determined by the drives or by the blank media.

13.5 Buzzer

This setting will allow you to choose whether you want to hear a beep when you press a button or when a task has been completed.

```
Setup
5. Buzzer
```

Use the ▲ **Up or** ▼ **Down** button to select the *Buzzer* menu and press the ▶ **Enter** button to enter that menu.

```
Buzzer:
On

Buzzer:
Off
```

Use the ▲ **Up or** ▼ **Down** button to select whether *Buzzer* is on or off, and press the ▶ **Enter** button to select that option.

13.6 Startup Menu

This setting will allow you to choose the menu option that you will see first when you turn on the autoloader. The options are:
➢ Copy
➢ Print
➢ Test
➢ Compare
➢ Test + Copy
➢ Copy + Compare
➢ Select Burn Speed
➢ Select Source
➢ Master Mode

➢ Erase RW
➢ Hard Drive Setup
➢ Print Setup
➢ Setup
➢ System Utilities
➢ Loader Utilities
➢ Manage Accounts
➢ Autocopy
➢ Shutdown

```
Setup
6. Startup Menu
```
Use the ▲ **Up or** ▼ **Down** button to select the *Startup Menu* option and press the ▶ **Enter** button to enter that menu.

```
Startup Menu
Copy
```
Use the ▲ **Up or** ▼ **Down** button to select the desired startup menu, and press the ▶ **Enter** button to select that option.

13.7 Screen Saver

This menu allows you to choose whether you want to enable the Screen Saver feature. By enabling this feature, a screen saver will be displayed when your autoloader has been idle for a long period of time.

```
Setup
7. Screen Saver
```
Use the ▲ **Up or** ▼ **Down** buttons to select the *Screen Saver* menu and press the ▶ **Enter** button to enter that menu.

```
Screen Saver:
On

Screen Saver:
Off
```
Use the ▲ **Up or** ▼ **Down** button to select whether the *Screen Saver* is on or off, and press the ▶ **Enter** button to select that option.

13.8. Counter

This menu allows you to choose whether you want to enable the *Counter* feature. By enabling this feature, the autoloader will prompt you to enter a counter amount and continuously burn discs until it reaches the value set into the counter.

```
Setup
8. Counter
```
Use the ▲ **Up or** ▼ **Down** button to select the *Counter* menu and press the ▶ **Enter** button to enter that menu.

```
Counter:
On

Counter:
Off
```
Use the ▲ **Up or** ▼ **Down** button to select whether the *Counter* is on or off, and press the ▶ **Enter** button to select that option.

For information on entering the counters, see "Setting Counters and Assigning Names" on page 19.

13.9 AUTOCOPY Enabled

This option turns on the hidden Autocopy menu. The Autocopy function is the simplest way to make CD/DVD copies. It simplifies the copy process by automatically copying from the Master Disc, which should be placed on top of the first Input Spindle, to all of the blank discs which follow it. To make copies in Autocopy mode, you simply:

➢ Fill the input spindle(s) with the required number of blank discs
➢ Place the Master disc on top of the stack in the first input spindle
➢ Press the *17. AUTOCOPY* button

```
Setup
9. AUTOCOPY Enabled
```

Use the ▲ **Up or** ▼ **Down** button to select the *AUTOCOPY Enabled* menu and press the ▶ **Enter** button to enter that menu.

```
AUTOCOPY Enabled:
On

AUTOCOPY Enabled:
Off
```

Use the ▲ **Up or** ▼ **Down** button to select whether the *AUTOCOPY Enabled* function is on or off, and press the
▶   **Enter** button to select that option.
▶

Once you get back to the main menu, use the ▲ **Up or** ▼ **Down** button to navigate to the following screen:

```
Duplicator      B.30
17. AUTOCOPY
```

Fill the input spindle(s) with the required number of blank discs. Place the Master disc on top of the stack in the first input spindle, and press the ▶ **Enter** button to start the AUTOCOPY process.

```
Loader Processing...
Please Wait
```

The loader will then start the Autocopy process.

```
Loader Processing
Drive 1<-Input Bin
```

The loader will load the Master into the next available drive.

```
Loading...    RESERVED
60%           4012MB
```

The loader will load the contents of the master disc into the RESERVED partition.

Once the content of the master disc has been loaded, the autoloader removes it from the drive, places it on the output spindle, and starts placing blank discs into the writer drives.

```
Loader Processing
Drive 2<-Input Bin
```

This information screen shows what is happening. In this case, the loader has taken a disc from the input spindle and is placing it into Drive 2.

The loader will continue to remove discs from the input spindle and place them into drives until either all of the drives are full, or until it runs out of blank discs.

```
Processing...
Please Wait
```

It takes a few seconds for the autoloader to recognize all the discs.

After two or three seconds of processing time, the following *Copy Progress* screen will appear.

```
Copying...   H4012MB
     0          12%
```

> ➢ "H" indicates the source of the job resides in the Hard Drive.
> ➢ "4012MB" indicates the capacity of the master disc.
> ➢ "12%" indicates the current progress of the duplication.
> ➢ "0" indicates you have made 0 copies so far.

> *Note: It is normal to see the progress indicator stay at 0% - 10% and 100% for approximately 30 seconds for CD duplication and up to one minute for DVD duplication. That is caused by the initializing and finalizing stages.*

Once the duplication run is completed, the loader will remove the disc from the drive and will place either the successful copy on the output spindle or the bad copy in the reject area.

The loader will then pick up another blank disc and load it into the drive. This is then repeated for each drive.

```
Loader Processing...
Drive 2<-Input Bin
```

The copying process will continue until you run out of blank discs.

```
Input Bin Empty(20)
Reset Hoppers?
```

At this point you can either load more discs on to the input spindle(s) and press the ▶ **Enter** button to continue, or press the ◀ **ESC** button to terminate your project.

13.10 ISRC

This option will allow you to enable/disable copying ISRC code of the Audio CD. ISRC is the serial number of the audio tracks that uniquely identifies the song in that audio track. This ISRC code is commonly found in commercial Audio CDs and rarely seen on the home made Audio CDs. By enabling this feature, the duplication performance will be lowered.

```
Setup
10.ISRC
```

Use the **Up or Down** button to select the *ISRC* menu and press the **ENT/Enter** button to enter that menu.

```
ISRC
On
```
```
ISRC
Off
```

Use the **Up or Down** button to select whether the *ISRC* is ON or OFF, and press the **ENT/Enter** button to select that option

13.11 DVD+R High Compatibility Mode

This feature allows you to turn the DVD+R High Compatibility Mode feature ON or OFF. The purpose of this feature is to increase the compatibility of DVD+R media with a broader range of DVD Video players. This process will increase the amount of time required to duplicate your disc(s).

```
Setup
11.DVD+R High Compatibility Mode
```

Use the △ **Up or** ▽ **Down** button to select the *DVD+R High Compatibility Mode* menu and press the ▶ **Enter** button to enter that menu.

```
DVD+R High Compatibility Mode:
On
```
```
DVD+R High Compatibility Mode:
Off
```

Use the ▲ **Up or** ▼ **Down** button to select whether the *DVD+R High Compatibility Mode* is on or off, and press the ▶ **Enter** button to select that option.

13.12 Disable Drives

This feature allows you to disable certain drives/trays when those drives/trays are producing high failure rates or not functioning properly.

```
Setup
12. Disable Drives
```

Use the ▲ **Up or** ▼ **Down** button to select the *Disable Drives* menu and press the ▶ **Enter** button to enter that menu.

```
Drive 1  Port 1
[*]Enable [ ]Disable
```
```
Drive 1  Port 1
[ ]Enable [*]Disable
```

Use the ▲ **Up or** ▼ **Down** button to select the desired drive/trays you would like to enable/disable. Then press ◀ or ▶ button to move the asterisk in front of "Enable" or "Disable"

```
Save Changes?
```

Use the ▲ **Up or** ▼ **Down** button until you see the "Save Changes" screen and press the ▶ **Enter** button to save the changes you made.

```
Setting Saved!
Please Restart
```

Once the changes are saved, you shall see the "Please Restart" screen and restart the system to have the new setting take effect.

13.13 CD Overburn

Most CD-R media has a capacity of 650MB or 700MB. The burning starts from the center of the CD and works its way out but stops before the physical edge of the CD. Overburning is a burning method to bypass the disc limitations for the edge of the CD. This can provide slightly higher capacity storage, however, it has also been known to create compatibility issues. Please use it with caution.

```
Setup
13. CD Overburn
```

Use the **Up or Down** button to select the *CD Overburn* menu and press the **ENT/Enter** button to enter that menu.

```
CD Overburn
ON
```
```
CD Overburn
OFF
```

Use the Up or Down button to select whether the CD Overburn feature is ON or OFF, and press the ENT/Enter button to select that option.

13.14 Max Failure per Job

Use this setting to set the maximum failures the autoloader is allowed per job. Once the maximum is reached, the job will be stopped. The default value for this setting is 30.

```
Setup
14. Max Failure per Job
```

Use the **Up or Down** button to select the *Max Failure per Job* menu and press the **ENT/Enter** button to enter that menu.

You can select numbers between 1 to 999 by pressing the **Up or Down** button:

```
 Max Failure per Job
 [030] OK?
```

To specify the number of maximum failures per job, you need to enter/input a three-digit number.

If you need to specify a number that is less than three digits, fill the leading spaces with zeros (any leading zeros will be skipped). Examples of three-digit numbers are "034" (thirty four), or "010" (ten).

To enter the number, you need to use the **Up or Down button** to select the number for each digit and use the **ENT/Enter** button or the **ESC/Escape** button to move the cursor position right or left. Once you've finished, move the cursor to "OK" and press the **ENT/Enter** button. For example, if you want to specify a counter value of 21 (twenty one). The three-digit value would be "021." To input the desired quantity, do the following:
Make sure the cursor is located at the first position (First blinking position):

➢ Press the **Down** button repeatedly until "0" is displayed.
➢ Press **ENT/Enter** button once to move the cursor to the next position.
➢ Press the **Down** button repeatedly until "2" is displayed.
➢ Press **ENT/Enter** button once to move the cursor to the next position.
➢ Press the **Down** button repeatedly until "1" is displayed.
➢ Now, "021" is displayed, press **ENT/Enter** button once and the cursor moves to "OK".

Then, press the **ENT/Enter** button once to submit your maximum failures per job.

13.15 Max Failure per Drive

Use this setting to set the maximum failures each drive is allowed per job. Once the maximum is reached for any particular drive, that drive will be disabled for the remainder of the job. The default value for this setting is 5.

```
Setup
15.Max Failure per Drive
```

Use the **Up or Down** button to select the 14. *Max Failure per Drive* menu and press the **ENT/Enter** button to enter that menu.

You can select numbers between 1 to 999 by pressing the **Up or Down** button:

```
Max Failure per Drive
[030] OK?
```

To specify the number of maximum failures per drive, you need to enter/input a three-digit number.

If you need to specify a number that is less than three digits, fill the leading spaces with zeros (any leading zeros will be skipped). Examples of three-digit numbers are "034" (thirty four), or "010" (ten).

To enter the number, you need to use the **Up or Down button** to select the number for each digit and use the **ENT/Enter** button or the **ESC/Escape** button to move the cursor position right or left. Once you've finished, move the cursor to "OK" and press the **ENT/Enter** button. For example, if you want to specify a counter value of 21 (twenty one). The three-digit value would be "021." To input the desired quantity, do the following:

Make sure the cursor is located at the first position (First blinking position):

➢ Press the **Down** button repeatedly until "0" is displayed.

- ➢ Press **ENT/Enter** button once to move the cursor to the next position.
- ➢ Press the **Down** button repeatedly until "2" is displayed.
- ➢ Press **ENT/Enter** button once to move the cursor to the next position.
- ➢ Press the **Down** button repeatedly until "1" is displayed.
- ➢ Now, "021" is displayed, press **ENT/Enter** button once and the cursor moves to "OK".

Then, press the **ENT/Enter** button once to submit your maximum failures per drive.

14. System Utilities

System Utilities is used to provide information pertaining to the autoloader as well as modification to maintain proper functioning. The System Utilities are:

- ➢ Disc Info
- ➢ System Info
- ➢ Device Info
- ➢ Load Default
- ➢ Update Firmware

14.1 Disc Info

If you are uncertain about the type of blank recordable media you are using, the Disc Info function can help you identify the type of disc and provide information about the data encoded on the disc. For blank recordable discs, it will tell you the media's format, capacity, manufacture ID, and the Media's certified writing speed.

Note: The Disc Info function does not use the robotic capabilities of the system. You must manually insert the discs into the drives.

```
System Utilities
1. Disc Info
```

Use the △ **Up or** ▽ **Down** button to select the *Disc Info* menu and press the ▶ **Enter** button to enter that menu. The system will proceed to the *Please Insert Disc* menu.

```
Disc Info
Please Insert Disc
```

Place your disc(s) into the drives.

```
Disc Info
3 Disc Detected, GO?
```

After a few seconds, the system will detect the discs and ask you if you want to proceed. Wait until all of your discs have been detected and press the ▶ **Enter** button to continue.

14.2 System Info

The System Info menu provides information about your autoloader including the firmware version, CPU type, and RAM capacity. You can scroll through the various specifications by pressing the △ **Up** or ▽ **Down** button.

```
System Utilities
2. System Info
```

Use the △ **Up or** ▽ **Down** button to select the System Info menu and press the ▶ **Enter** button to enter that menu.

14.3 Device Info

This menu allows you to see information about the devices built inside your autoloader. This information includes, but is not limited to, manufacturer, model number, etc.

```
System Utilities
3. Device Info
```

Use the △ **Up or** ▽ **Down** button to select the *Device Info* menu and press the ▶ **Enter** button to enter that menu.

14.4 Load Default

This function will reset all of the options back to the manufacturer's default settings. You should only perform this function if your autoloader is acting abnormally.

```
System Utilities
4. Load Default
```

Use the △ **Up or** ▽ **Down** button to select the *Load Default* menu and press the ▶ **Enter** button to enter that menu.

```
Load Default
Press OK to Continue
```

Press the ▶ **Enter** button to load the default parameters or the ◀ **ESC** button to return to the *System Utilities* menu.

14.5 Update Firmware

This function will update the software of your autoloader. To update, you need to insert the manufacturer's Certified Update CD into the 1st tray and select this function by pressing the ▶ Enter button. We strongly suggest that you not upgrade your autoloader's firmware unless your autoloader has become unstable or you are instructed to do so by Tech Support.

Warning: When you update the firmware on your system, there may be a chance that you will lose all of the data (contents of master discs) stored in the user HDD partitions. Make sure that you have all of your data on the HDD backed up before attempting this procedure.

15. Loader Utilities

The Loader Utilities menu consists of these submenus:

➢ Drive Alignment

➢ Alignment Protection

Each submenu has a section that describes it.

15.1 Drive Alignment

The Drive Alignment menu option is used to check the alignment of the drive trays to the robotic arm. When the Drive Alignment function is selected, the system picks a disc from the first input spindle and moves it to just (1/4 inch) above the drive tray and holds it there.

To start the alignment, place a disc on to the first input spindle.

```
Loader Utilities
1. Drive Alignment
```

Use the ▲ **Up or** ▼ **Down** button to select the *Drive Alignment* menu and press the ▶ **Enter** button to enter that menu. The system will proceed to the *Please Select Drive* menu.

```
Please Select Drive
Drive 1        Go?
```

Use the ▲ **Up or** ▼ **Down** button to select drive # 1 and press the ▶ **Enter** button to select it.

The autoloader will pick a disc from the first input spindle, move it to ¼ inch above the drive tray, and hold it there. You will see the Drive Alignment screen:

```
Drive Alignment
Alignment Finished?
```

Check the alignment of the drive trays and press the ▶ **Enter** button when you are finished.

> *Note: If the drive trays are not properly aligned and there is a need to re-align them, please contact Tech Support Service for information regarding setting alignments.*

> *Warning: This function is ONLY for checking the alignment, NOT for setting the alignment. Please do not move the robotic arm with your hands during this process.*

When you have finished checking the alignment of the drive(s), the robotic arm will move the disc to the arms top position and hold it there. You will see the *Alignment Next* menu.

```
Drive Alignment
Alignment Next?
```

Press the ▶ **Enter** button to return back to the *Please Select Drive* menu. This allows you to complete the alignment checking procedure for each of the installed drives.
If you are through checking the alignment of drives, press the ◀ **ESC** button to go back to the *Loader Utility* Menu.

When the drive alignment checking process is complete, the robotic arm will drop the disc in the Reject Area.

15.2 Alignment Protection

Enabling Alignment Protection causes each drive tray to quickly slide in and out after a disc has been loaded into it. This ensures that the disc is set properly in the disc indentation in the tray by "shaking" the disc into place.

For example, if the disc is not placed squarely in the center as it should be, but rather slightly off the lip, the "shake" will cause the disc to slide into position in the center of the tray.

To enable the Alignment Protection function:

```
Loader Utilities
5.Alignment Protection
```

Use the ▲ **Up or** ▼ **Down** button to select the *Alignment Protection* menu and press the ▶ **Enter** button to enter that menu.

```
Alignment Protection
On

Alignment Protection
Off
```

Use the ▲ **Up or** ▼ **Down** button to select whether *Alignment Protection* is on or off, and press the ▶ **Enter** button to select that option.

16. Manage Accounts

This feature allows the administrator to:
- ➢ Create user accounts and passwords to prevent unauthorized use of this autoloader.
- ➢ Edit existing user account information, including name and password.
- ➢ Delete existing user account(s).

For complete information on Manage Accounts, see "Introduction to Manage Accounts" on page 16.

To access the Manage Accounts feature, you need to perform the following tasks:

```
Duplicator       B.30
16.Manage Accounts
```

Use the ▲ **Up or** ▼ **Down** button to select the *Manage Accounts* menu and press the ▶ **Enter** button to enter that menu. You will be shown the *Enter Password* menu.

```
Enter PWD
[    ]  OK?
```

The system will ask you for the Administrator's Password.

The default Administrator's Password is "0000." To enter, press the ▲ **Up or** ▼ **Down** button to select the first digit of your password and press the ▶ **Enter** button to submit the current digit. You will automatically move to the next digit. Repeat these steps until you've selected all four digits for your password. After you have entered the password, press the ▶ **Enter** button to "OK" the submission of your password.

Once your password is validated, you will be guided to the main Manage Accounts screen:

```
Manage Accounts
1. View User
```

The submenus of Manage Accounts are discussed in the sections that follow.

16.1 View User

This menu allows you to view current existing user accounts.

> **Note:** *User "Admin" is the administrative account. It will always be there.*

```
Manage Accounts
1. View User
```

Press the ▶ **Enter** button to enter this menu

```
View User
1. [ADMIN   ]
```

Use the ▲ **Up or** ▼ **Down** button to scroll through the list of users. Press the ◀ **ESC** button to go back to the *Manage Accounts* menu.

16.2 Create User

This menu allows you to create additional user accounts. Each user has their own settings and hard drive partitions. During this process, you will be prompted to enter a new username and user password for a new account.

> **Note:** *The User name consists of a maximum of eight alphanumeric letters or numbers.*
> **Note:** *The User password consists of four numbers.*

```
Manage Accounts
2. Create User
```

Press the ▶ **Enter** button to enter this menu.

```
Edit User's Name
[RALPH   ] OK?
```

Enter the user's name using the instructions shown in "Setting Counters and Assigning Names" on page 17. Press the ▶ **Enter** button to move on to the Enter Password stage.

```
Enter PWD
[0    ] OK?
```

Enter the user's password using the instructions shown in "Setting Counters and Assigning Names" on page 18.
Press the ▶ **Enter** to complete.

```
User Ralph
Added!
```

The autoloader will display a confirmation message and automatically return you to the Manage Accounts menu.

16.3 Edit User Info

The Edit User Info menu allows you to change the existing user's account name and password. During this process, you will be asked to select the existing account and then you will be prompted to enter the new user name and new user password for this account.

> *Note: User "Admin" is the administrative account, you cannot change the user name for this account, but can change the password for this account.*
> *Note: The User name consists of a maximum of eight alphanumeric letters or numbers.*
> *Note: The User password consists of four numbers.*

```
Manage Accounts
3. Edit User Info
```

Press the ▶ **Enter** button to enter this menu.

```
Edit User Info
1. [ADMIN   ]
```

Use the ▲ **Up or** ▼ **Down** button to scroll through the list of users. Press the ▶ **Enter** button to select user.

```
Edit User's Name
[RALPH   ] OK?
```

Edit the user's name using the instructions shown in "Setting Counters and Assigning Names" on page 18. Press the
▶ **Enter** button to move on to the *Enter Password* stage.

```
Enter PWD
[0    ] OK?
```

Enter the new password for this user via the instructions shown in "Setting Counters and Assigning Names" on page 18. Press the ▶ **Enter** button to complete.

```
User Ralph
Changed!
```

The autoloader will display a confirmation message, and automatically return you to the Manage Accounts menu.

16.4 Delete User

This menu allows you to delete the existing user account. During this process, you will be asked to select the existing account to be removed.

Note: The user "Admin" is the administrative account; you can't delete this account.

```
Manage Accounts
4. Delete User
```
Press the ▶ **Enter** button to enter into this menu.

```
Delete User
3. [RALPH   ]
```
Use the ▲ **Up or** ▼ **Down** button to scroll through the list of users. Press the ▶ **Enter** button to select the user to delete.

```
Delete User
[RALPH   ] OK?
```
The autoloader will ask you to confirm the deletion. Press the ▶ **Enter** button to delete the user.

```
User Ralph
Deleted!
```
The autoloader will display a confirmation message, and automatically return you to the Manage Accounts menu.

16.5 Password on Bootup

This menu allows you to enable or disable the Password on Bootup feature. During this process, you will be asked to select "Yes" or "No" (enable or disable).

```
Manage Accounts
5. Password on Bootup
```
Press the ▶ **Enter** button to enter into this menu.

```
Password on Bootup:
Yes
```
Use the ▲ **Up or** ▼ **Down** button to select either Yes or No. Press the ▶ **Enter** button to enter the selection.

17. AUTOCOPY

The Autocopy function is the simplest way to make CD/DVD copies. It simplifies the copy process by automatically copying from the Master Disc, which should be placed on top of the first Input Spindle, to all of the blank discs which follow it (see "Autocopy Enabled " on page 40). To make copies in Autocopy mode, you simply:

➢   Fill the input spindle(s) with the required number of blank discs
➢   Place the Master disc on top of the stack in the first input spindle
➢   Press the *17. AUTOCOPY* button

18. Shutdown

This function will make sure it is safe to turn off your autoloader. Once you see "Ready to Power Off" message, then you can safely turn off the machine using the power switch.

Turning off your autoloader without performing this function will increase the risk of damaging your autoloader.

```
Duplicator        B.30
18.Shutdown
```

Press the ▶ **Enter** button to enter into this menu.

```
Shutdown
Press OK to Shutdown
```

Press the ▶ **Enter** button to shut down the autoloader. The autoloader will do all of its internal housekeeping and then display a confirmation message:

```
Shutdown
Ready to Power Off
```

Press the power button to power off the system.

LightScribe Software Setup Instruction

❖ **Minimum Hardware Requirements**

1. Pentium 3 Class microprocessor or better

2. CD/RW Recorder

3. 32Mbytes of RAM

4. 10Mbytes of free disc space on your hard drive

❖ **Minimum Software Requirements**

1. Windows 2000, XP, 2003 or Vista

Software Installation

1. Insert the LightScribe Installation Disc into the CD drive of your computer.
2. Using the "My Computer" icon or Windows Explorer, click on the CD drive
3. From the CD Drive, double-click the setup.exe to run the setup program.
4. Follow the Installation Wizard to start the installation process, see screen below:

Where is the icon for this statement?

5. During the installation process, you will be prompted for a Product Key. The product key can be found on the Installation Disc.


6. You will then be asked to choose the LightScribe writer model that was installed in your duplication system. The default writer that comes with your system should be pre-selected. You can then click Install to continue the installation process.
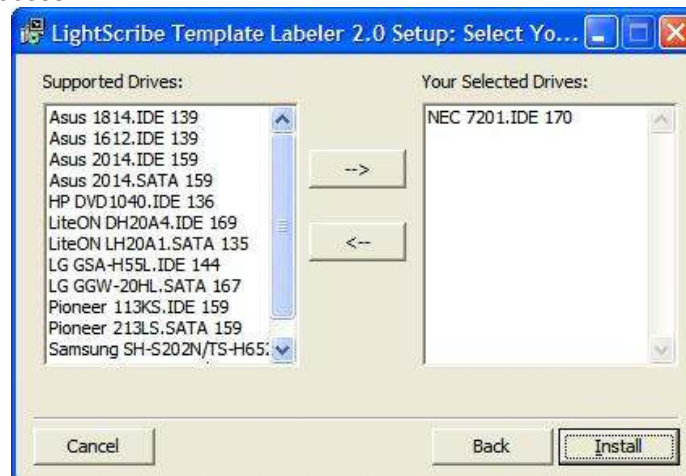
7. During the installation process, the following applications will be installed:

LightScribe System Software   **Template Labeler**

8.   Upon successful installation of the above software, click the Finish button to complete the installation.
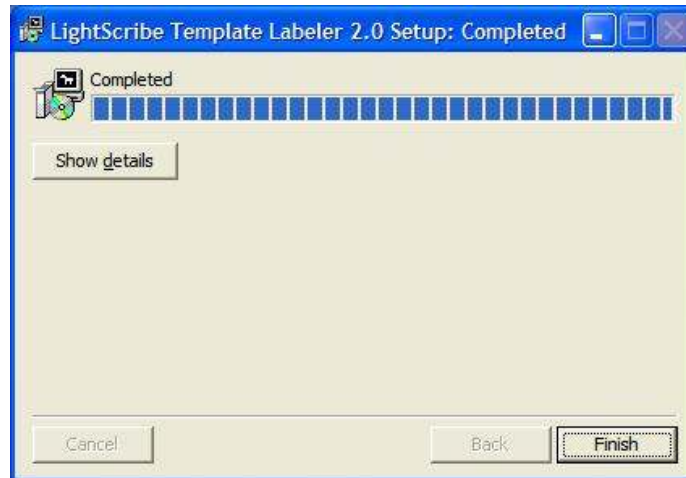
Design and Create a Label File

The instructions covered in this section will help you design and create a label for your LightScribe autoloader.

Please note that you must install the supplied LightScribe software in order to proceed with the instructions below. If you have any difficulties installing the software, please contact Tech Support for assistance.

Section 1: Design your labels with LightScribe Template Labeler and create a LightScribe Label CD

Step 1: Launch the *LightScribe Template Labeler*

➢ By clicking the shortcut icon on your desktop.
➢ Or you can find the program launch shortcut in *Start > All Programs > LightScribe Direct Disc Labeling > LightScribe Template Labeler*.

Since we use this software for design and layout purposes only, please ignore the "LightScribe Disc Insertion" prompt below by pressing the OK button.
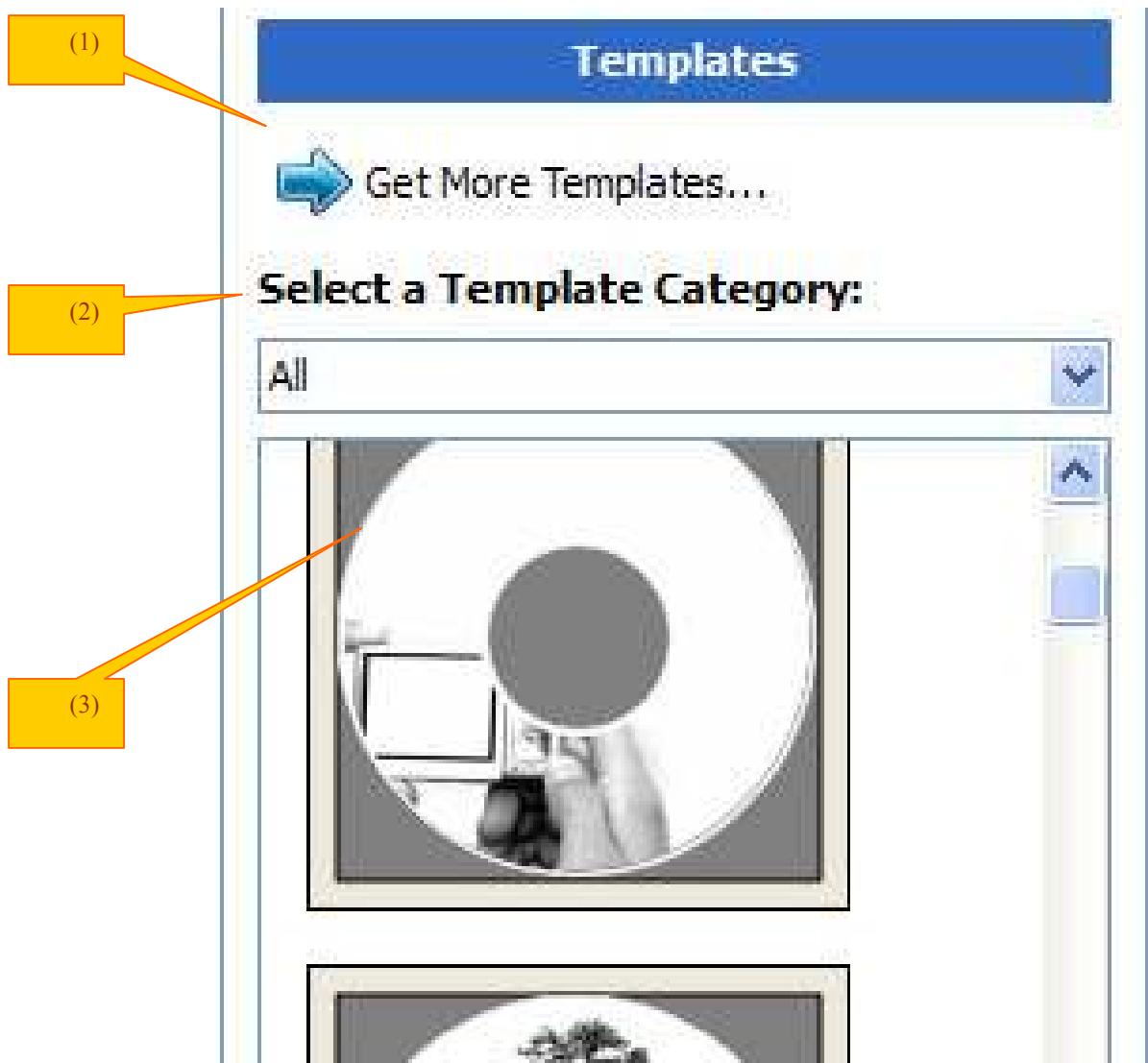
Step 2: Select Template

➢ Choose one of the preinstalled templates, or click on "Get More Templates" to download additional templates. (1)

➢ Select the Category filter function to better view and choose a template. Note that each template may appear in multiple categories. (2)

➢ Click on your Template choice to activate. (3)

i **Note**

*If you prefer more advanced design capabilities instead of the pre-designed templates, you can do following::*

> *a. Design your own CD label artwork using a more advance design software like Adobe PhotoShop*
b. *Export your completed CD artwork as a picture format like bmp, jpeg, png, etc.*
c. *Choose an empty template from the Template Labeler and add the exported CD artwork pictures into the empty template.*

(1)

(2)

(3)

Step 3: Insert Text and/or Pictures

➢ Depending on the template chosen, you may have the option to modify the text box(s) or picture(s).

➢ For inserting pictures, just click on the dedicated area to select the picture you'd like to use. (4)

➢ Use the Zoom button or the scroll wheel of your mouse to size the picture, and then drag it to position where you want it within the selection window. (5)

➢ For text, just click on the text field, and then type the text you'd like to appear within the text field. Note you can enter multiple lines of text depending on the template chosen. (6)
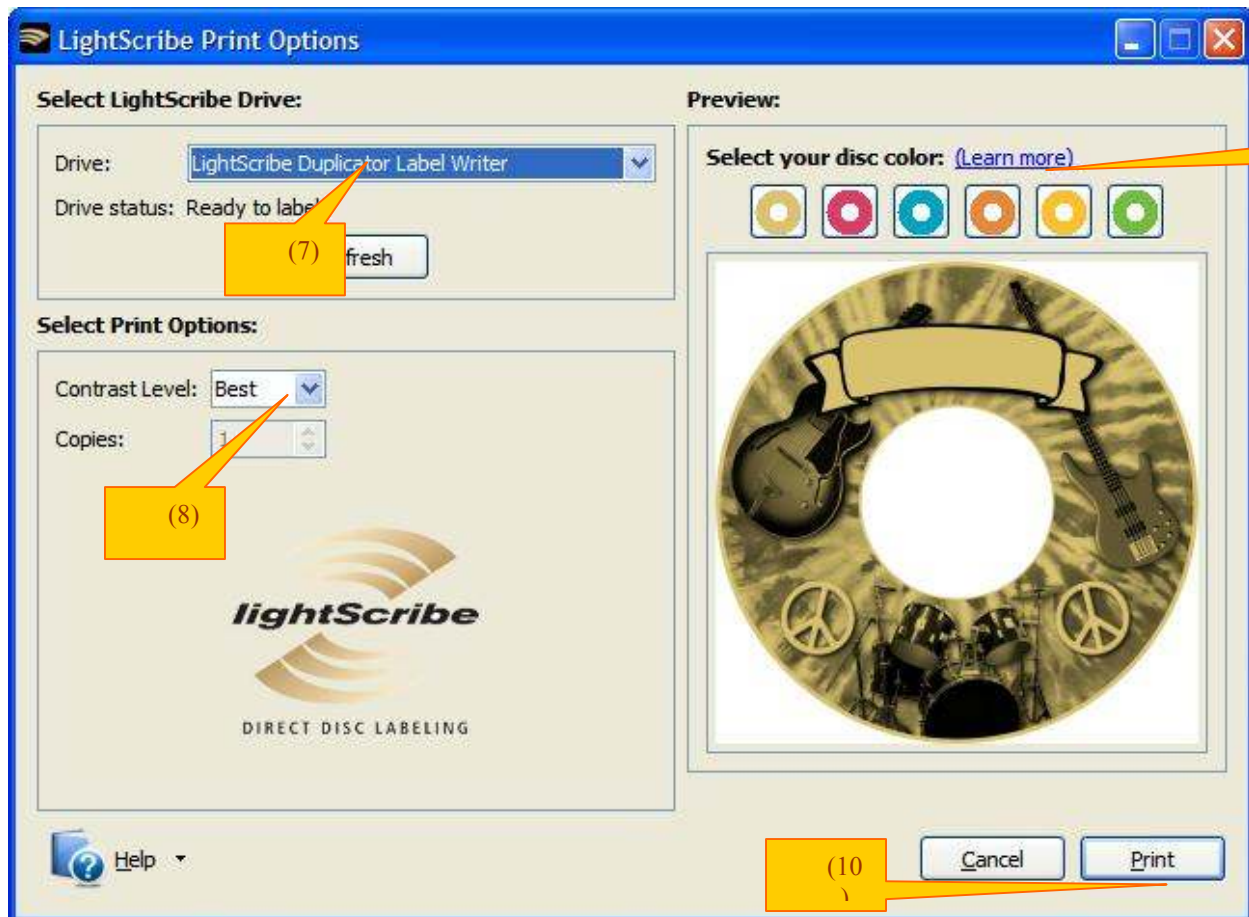
Step 4: Preview and Print Label
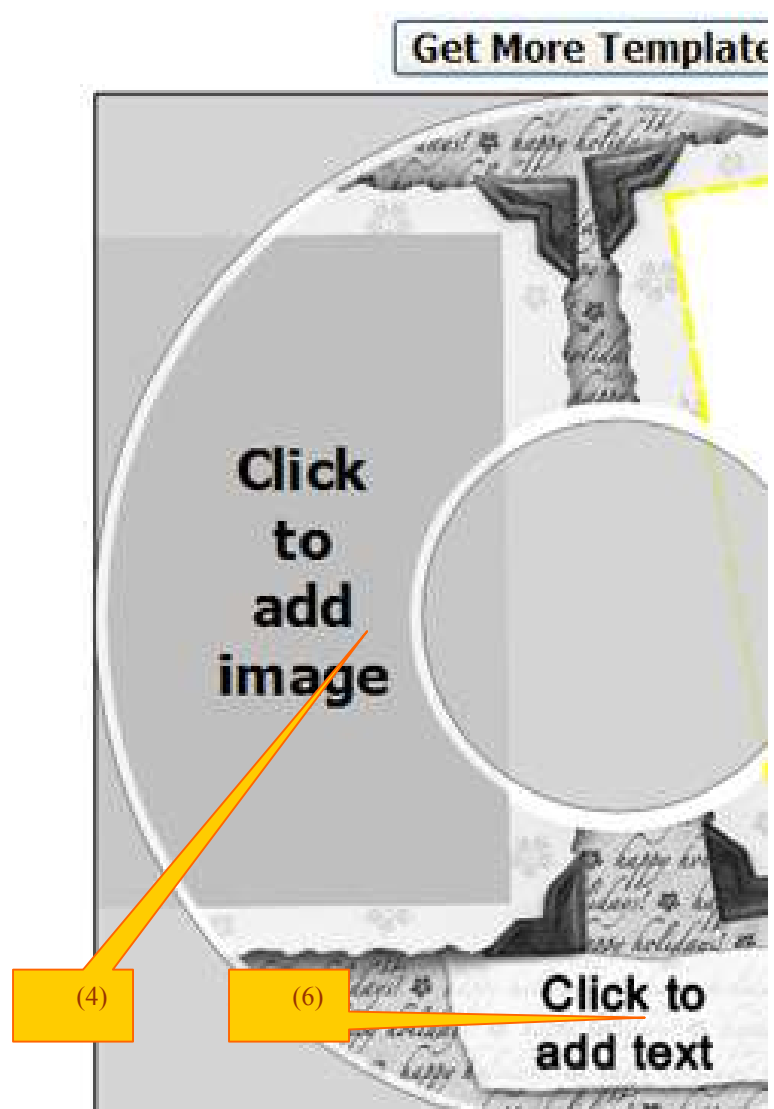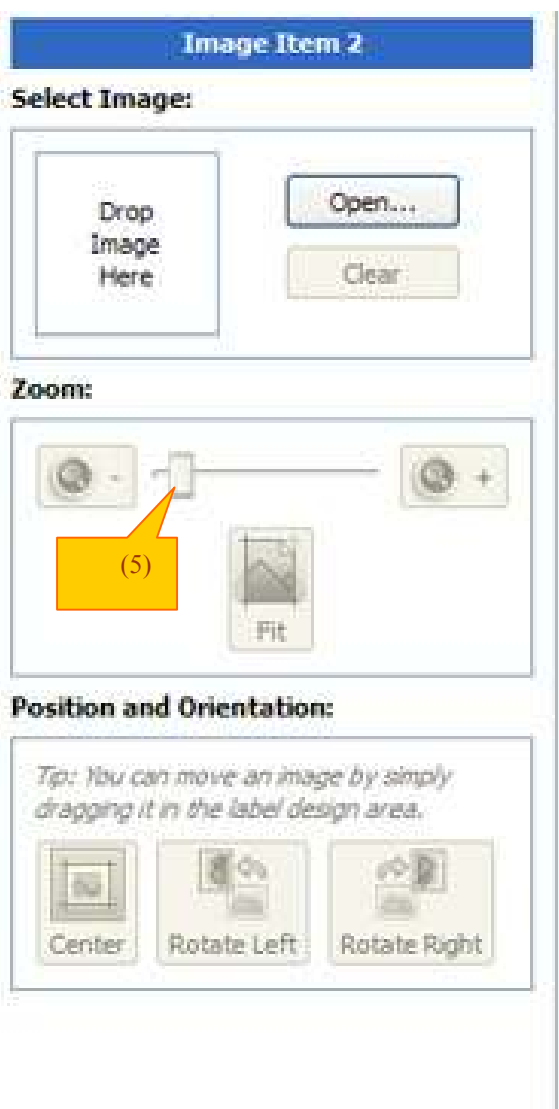
Step 5: Click on "Preview and Print" to bring up the print window.

➢ Select the "LightScribe Duplicator Label Writer" as the LightScribe Drive. (7)

➢ Select the "Best" contrast mode for the darkest print. (8)

➢ Select the label surface color of the disc you wish to label onto. (9)

➢ If you are satisfied with the preview, click "Print" to begin generating the Duplicator Label file (.lsi files). (10).

You will be asked for the location & the name of the label file(s) you wish to generate. In addition, due to the system display limitation, make sure the file name does not contain any foreign characters other than those in the 26 Greek alphabets, numerical digits, and/or some basic symbols like "-", etc.

Note

LightScribe Print Options

Select LightScribe Drive:

Drive: LightScribe Duplicator Label Writer
Drive status: Ready to label

(7)

fresh

Select Print Options:

Contrast Level: Best
Copies: 1

(8)

lightScribe

DIRECT DISC LABELING

Preview:

Select your disc color: (Learn more)

(9)

(10) Cancel Print

Help ▾

Step 6: Create a Label CD

➢ Locate the label file(s) (.lsi files) on your PC.
➢ Create a Data CD with the label file(s) via a CD/DVD Creating Software; like Nero Burning-ROM or Roxio Classic CD Creator

Note

Do NOT place the label file(s) under any directory/folder of the Label CD. Failure to do so will result in the label file(s) not being recognized by your system.

Trouble Shooting

Why do I get "Label Not Found" error message?
➢ Please verify that the label file does not contain any symbols or foreign characters.
➢ Please verify that the label file has a "lsi" extension, like "abc.lsi"
➢ Please verify that the label file is located under the root of your data CD.
➢ Please verify that the Label CD wasn't created under Roxio's Drag to Disc, Nero's InCD or Windows XP or Vista's built-in burning software.
Please verify that the correct writer was selected during the software installation.

No display on LCD or the unit does not operate when the power is on.
➢ Check the connections for the power cable and ensure that the power outlet is working correctly.
➢ Make sure that the rear-panel power voltage setting matches the voltage of your power outlet.
➢ If the autoloader was stored in a location where the temperature dropped below 32°F (0°C) within the past 24 hours, leave the autoloader in a warm room with a temperature of at least 65°F (19°C) for four hours prior to powering the autoloader on.

Drives cannot read disc and shows error message.
➢ Check the format of the master CD/DVD
➢ Check the master CD/DVD itself for damage.
➢ Your master disc may be copy protected. Normally, most of the DVDs and some of the CDs you purchase from stores have been copy protected.

Buttons do not function.
➢ The autoloader may still be busy performing a task. Give it some time and press the button again. To interrupt the currently running process, press the ◀ **ESC** button and hold it for several seconds. If it still doesn't work, turn the machine off, and then restart the machine after a minute.

Copy completed, but the copies are not readable / executable.
➢ Use the "compare" feature to check the copied disc (data discs only).
➢ Based on our experience, the quality of your media plays a big role on this part. Try to use high quality media to prevent such problems.
➢ Use another DVD/CD player/ROM to test the copied media. Sometimes, your DVD/CD Player/ROM may not be compatible with recordable DVD/CD disc.

The failure rate is high.
➢ Lower the "write speed" and try again. See "Select Burn Speed" on page 28.
➢ The quality of your blank discs may be poor.
➢ The quality of your master disc may be poor.

Do I need to upgrade my autoloader's firmware?
➢ Unless your system is getting unstable, we strongly suggest not upgrading your autoloader's firmware. Please contact our Tech Support if your system is getting unstable.

Cannot boot-up or fails to upgrade firmware.
➢ Contact our Tech Support.

Can I load data directly from my computer to my autoloader's Hard Drive?
➢ No, your autoloader's Hard Drive has a unique file system that computers will not recognize. Thus, you can't perform any read/write operations to the Hard Drive from your computer.

Why won't some drives copy?
➢ Reset the system settings back to default. (See "Load Default" on page 45)
➢ Drives are consumable parts and every drive comes with a lifespan. After a period of time, they do tend to wear out. Please contact Tech Support Service for assistance.
F.Y.I - Replacing any component of the autoloader without Tech Support Service's consent will void the autoloader's warranty instantly.
➢ Contact our Tech Support.

Why does my autoloader stay at "System Bootup"?
➢ The reason the autoloader stays at system bootup forever is caused by improper shut down. To solve the problem, contact our Tech Support department. Even though this problem can be solved, all the hard drive information will be lost due to this failure.

How do I reset my autoloader back to default?
➢ See "Load Default" on page 45.