User Manual

For Econ A Series Duplicator

V 1.2A

WARNING!

THIS CD/DVD/BLU-RAY/LIGHTSCRIBE DUPLICATOR IS MEANT FOR BACK UP AND DISTRIBUTION OF ORIGINAL DATA AUTHORED OR OWNED BY THE USER. ANY DUPLICATED DISCS MADE FROM A THIS CD/DVD/BLU-RAY/LIGHTSCRIBE DUPLICATOR IS THE COPYRIGHT OWNERSHIP OF THE AUTHOR OR COMPANY WHICH OWNS THE SOURCE DISC. ANY UNAUTHORIZED COPYING, EDITING, OR ANY PART THEREOF OF A COPYRIGHT DISC IS STRICTLY PROHIBITED. WE DISCOURAGE THE USE OF ANY SUCH ACTION THAT GIVES RISE TO CRIMINAL INTENT AND PROSECUTION.

THE SELLER OF THIS PRODUCT IS NOT RESPONSIBLE FOR ANY POTENTIAL ILLEGAL ACTIONS OF THE USER DUE TO ACTIVITIES BEYOND THE SCOPE OF THE PRODUCTS INTENDED USE.

Copyrights and Trademarks

Table of Contents

Chapter 1: Introduction & Manual Overview

This system is a reliable, high performance, high speed, standalone manual tower system. With its professional industrial design and simple beginner user interface, it will make your duplicating experience easier than ever.

Before you start:

Before you start using this system, please read the following to ensure proper operation:

1. **Important Notice:**

   The type of system you purchase will determine the type of discs you are able to copy. For example, if you purchased a CD only system, then you will only be able to copy onto recordable CD formats. If you purchased a DVD system, then you can copy on to recordable DVD and CD formats. If you purchased a Blu-ray system, then you can copy onto recordable Blu-ray, DVD, and CD formats.

   If you have a Blu-ray capable system, the terms CD or DVD can be substituted for Blu-ray within the text of this user manual.

2. **System Limitations:**

   The system will not copy any CD, DVD, or Blu-ray discs that have Copy Protection encoded inside. Typically, the movies you purchase or rent from the store will contain copy protection.

   In addition to the copy protection limitation, the system cannot copy across formats. This means that you cannot copy a DVD master onto a recordable CD or vice versa. In addition, you cannot copy the same formats if the discs have different maximum capacity limitations. This means that you cannot copy a single layer DVD or Blu-ray Disc onto a double/dual layer DVD or Blu-ray Disc or vice versa.   The recordable blanks must be the same format and maximum capacity as the master disc you intend to duplicate.

3. **Temperature Warning:**

   If the system was stored in a location where the temperature dropped below 32ºF (0ºC) within the past 24 hours, please leave the system in a warm room with temperatures at least 65ºF (19ºC) for 4 hours prior to powering it on for the first time. Failure to do so may cause irreparable harm and prevent the system from functioning.

4. **Maintenance:**

   It is very important to operate and keep the system in a dust free, clean environment since dust is the number 1 killer for optical recording devices. Failure to do so may severely damage your system. We strongly suggest you place an Air Cleaner next to the system and constantly use the Air Duster (Can Air) to clear off any dust on the surface of the system.

    Do not try to use the Air Duster to clean the system while the reader/writer trays are open. In doing so, you may inadvertently blow dust into the recording device and damage the recording device.

5. **Proper Shutdown:**

   To avoid possible system failures, you need to shutdown the system properly. To shutdown the system, you need to press the Up or Down Arrow button to "15. Shutdown", then press "ENT"/Enter and follow instructions on the screen to shutdown the system properly. Turning

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

Package Contents:

Quick Start Guide

OR

Standard Operation User Manual Booklet or CD

User Manual

Power Cord Cable
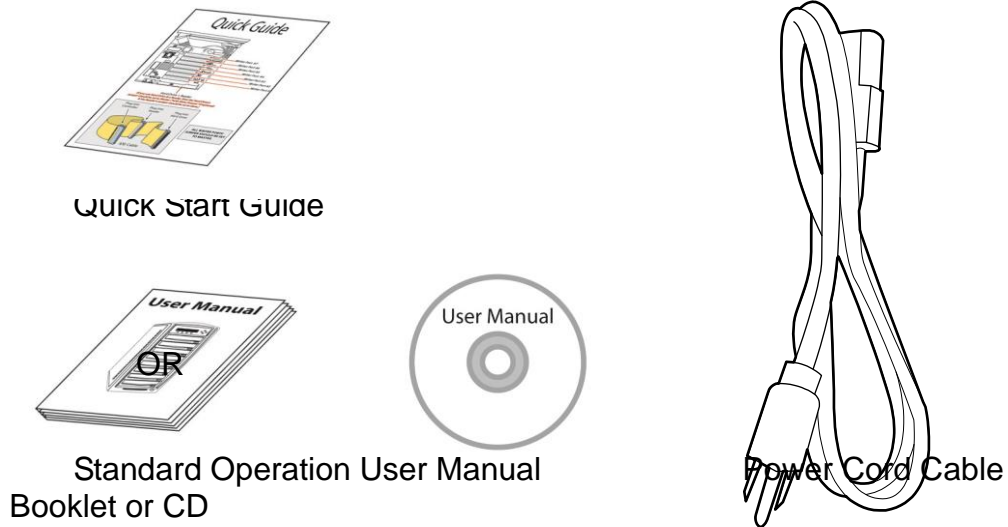
Chapter Overview:

Chapter 2: Getting to know your system

This chapter describes the physical features and instructions on how to operate your system

Chapter 3: Basic Operations Guide

This chapter describes how to perform basic operations like Making Copies, Changing Speed, etc.

Chapter 4: Menu Overview

This chapter describes what every function/setting does.

Appendix A: Troubleshooting

This section provides many solutions on frequently asked questions and provides insights on system error codes.

Chapter 2: Getting to know your system

System Overview

The below image is one representation of the duplicator casing. Your case's outlook may vary but will have similar principles.
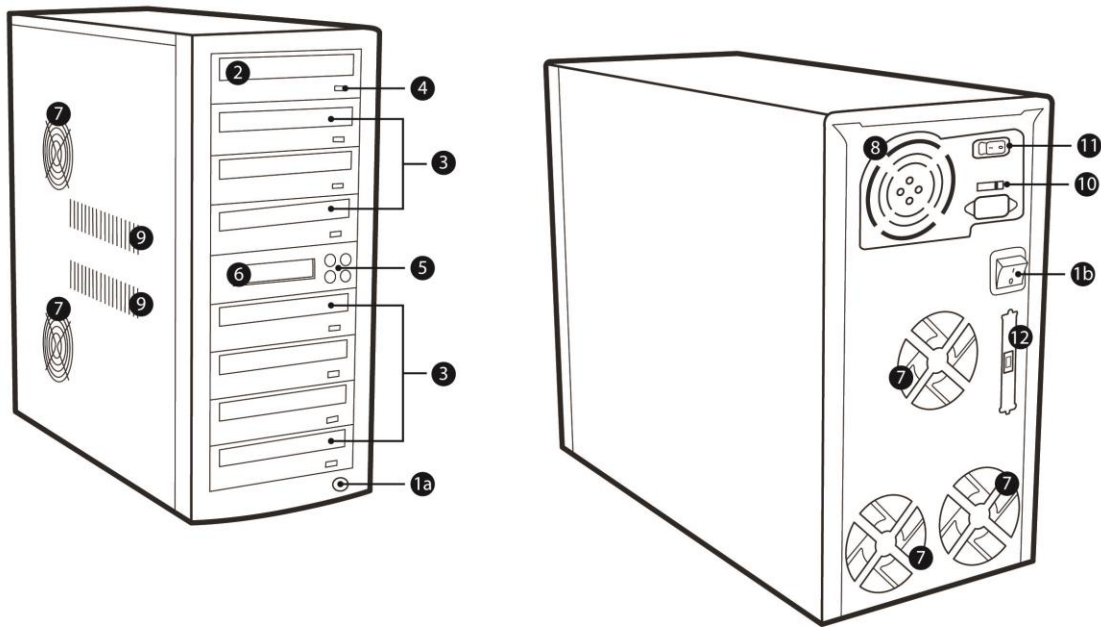
Figure 1-1 System Controls and Display

The components shown in Figure 1-1 are:

1. System Power On/Off Button (either 1a or 1b, locations vary by model)
2. Optical Disc Reader
   (Referred to as "Reader" throughout this manual)
3. Optical Disc Writers
   (Referred to as "Writer" throughout this manual)
4. Eject Button
5. Keypad
6. LCD Screen
7. Ventilation Fans
8. Power Supply Fan
9. System Ventilation Vents
10. Power Voltage Switch (110v/220v) (not available on all models)
11. Power Supply On/Off Switch (not available on all models)
12. External USB Connection (not available on all models)

LCD Front Panel

*The below images are for reference only. Your key assignment and appearance may differ.

6 Button Version

4 Button Version

▲	: Up (Menu/Option Scroll Up)
▼	: Down (Menu/Option Scroll Down)
ENT	: Forward; Enter; OK; Execute the function
ESC	: Backward; Escape; go back to the previous function
Speed/F1	: Shortcut to Speed Menu, or customized F1 menu.
Speed/F2	: Shortcut to Speed Menu, or customized F2 menu.

▲	: Up (Menu/Option Scroll Up)
▼	: Down (Menu/Option Scroll Down)
ENT	: Forward; Enter; OK; Execute the function
ESC	: Backward; Escape; go back to the previous function

Chapter 3: Basic Operations

Make Copies from a Master Disc

This process will copy your master disc onto one or multiple blank discs simultaneously. However, due to its simultaneous nature, a good conditioned master disc and a lower recording speed is recommended for higher success rates and better-quality duplications.

For a disc-to-disc copy, the copy source can be either of these devices:

➢ **The reader:** The reader normally is the 1st drive from the top of the system and is most often the source typically used when making disc-to-disc copies.

➢ **Any of the writers:** One of the writers can also be used as the copy source when making disc-to-disc copies. This option is typically only used when the reader is either bad or unable to read the master disc.

Section 1: Selecting the Copy Source.

Ignore this section and proceed to Section 2 if your system does NOT have a Hard Drive installed.

When you turn on your system, after it has booted up, all trays will be ejected and you should see the following signifying your system is ready.

```
1.Copy      1.07
HDD:  1 ODD:  8
```

Use the up or down arrow button to navigate to the Select Source menu.

```
8.Select Source
```

Press "ENT"/Enter button to enter the Image menu.

```
Src: DVD-DUAL
01 CH01
```

If you plan to use the Reader/Top Drive as the source, use the up or down button to locate the first non-HDD drive and press "ENT"/Enter button to select it.

```
DVDDUAL selected
```

Press "ENT"/Enter button once again to go back to the main menu.

```
8.Select Source
```

Section 2: Making Copies from the Reader/Top Drive.

Use the up or down arrow button to navigate to the Copy menu

```
1.Copy
```

Insert the Master Disc into the Reader/Top Drive.

```
1.Copy
          4357MB
```

Insert the Blank Disc into the Writer(s)/Bottom Drive(s). The system will automatically detect and automatically duplicate them.

```
Copying- 8x 30%
1307.1MB  03:30
```

- 8x indicates the duplication speed.
- 30% indicates the current percentage of the duplication progress.
- 1307.1MB indicates the current amount of data that has been duplicated from the master disc.
- 03:30 indicates current elapsed time.

It is normal to see the progress indicator stay at 0-10% and 100% for approximately 30 seconds for CD duplication and up to 1 minute for DVD duplication. That is caused by the initializing and finalizing stages.

Once the duplication job is completed, the successful copies will be ejected and you shall see the following screen.

```
OK:07
Time: 00:07:48
```

- "OK:07" indicates that you've just made 7 successful copies.
- "00:07:48" indicates the total duplication time.

Remove the successful copies and refill the trays with additional blank media to continue making more copies. You can also press the "ESC"/Escape button to terminate your project and go back to the main menu.

```
1.Copy
```

If you happen to have any failed discs (bad copy), the failed disc(s) will not be ejected automatically. You need to manually eject them and throw them away if they are write once recordable disc(s).

Making Copies from Hard Drive

(This function is not available if the duplicator does not have a hard drive installed.)

Copying from the hard drive is the best way to make copies. Overall, there are four benefits of copying from the hard drive.

➢ **Performance**. Copying from the hard drive will enable the writer dives to boost the copying performance to its limit.

➢ **Stability**. Copying from hard drive will stabilize the duplication process compared to disc-to-disc duplication.

➢ **Durability.** The hard drive is a more durable storage device than recordable discs. The recording surface of a recordable disc is exposed and can easily be scratched on its surface, while hard drives are covered with metal and mounted inside the system protecting it from incidental damage.

➢ **Convenience.** With your master disc(s) stored inside the hard drive, you can have access to each one easily. There is no need to carry your master discs every time you want to make a copy; they are all stored inside the system.

 Throughout this manual, the term partition(s) is also used to refer to image files in the hard drive.

If your system has a Hard Drive installed, a partition/image will be created whenever you begin to load master disc content into the hard drive. The number of images the hard drive can hold is determined by the capacity of your hard drive and the size of every master disc image you transferred into the hard drive.

 Hard Drive Manufactures use conversion rate of 1GB = 1 Billion Bytes or 1000^3 Bytes. However, most Operating Systems, including our Duplication System use standard conversion rate of 1GB = 1.074 Billion Bytes or 1024^3 Bytes. Therefore, for an advertised 160GB Hard Drive (160 Billion Bytes), the true capacity base on our system's standard is actually 149GB.

The following steps will show you how to load your master disc into the installed hard drive as an image and copy the stored image onto blank discs.

7

Section 1: Loading Master Disc content into the Hard Drive as an image.

When you turn on your system, after it has booted up, you should see the following signifying your system is ready.

```
1.Copy      1.07
HDD:  1 ODD:  8
```

Use the up or down arrow button to navigate to the Hard Drive Setup menu.

```
9.Image
```

Press "ENT"/Enter button to enter the Image menu.

```
9-01.Image    0001
Load
```

- "P: A" indicates current selected image name

Please place your master disc into the Reader/Top Drive and the loading progress screen will be displayed, as show below:

```
Load0001    8x 2%
 126.8MB    00:18
```

- "0001" indicates the assigned image name.
- 8x indicates the reading speed.
- 2% indicates the current loading progress.
- 126.8MB indicates the current amount data has been loaded.
- 00:18 indicates the current elapsed time.

Once the loading process is completed, you should see the following screen:

```
Image Load OK
```

Press ESC button twice to go back to the main menu:

```
9-01.Image      0001
Load
```

Section 2: Selecting the Copy Source to the Hard Drive.

Press "Source" button to enter the Select Source menu and you shall see a screen similar to below:

```
Src: DVD-DUAL
01 CH01
```

Use the up or down button to locate the HDD and press "ENT"/Enter button to select it.

```
HDD is selected!
```

Press "ENT"/Enter button once again to go back to the main menu.

```
8.Select Source
```

Section 3: Making Copies from an existing partition/image of the Hard Drive.

Use the up or down arrow button to navigate to the Copy menu

```
1.Copy       0001
          4357MB
```

- 0001 indicates the current selected Image name
- 4357MB indicates the master disc size for this image.

Confirm the Image name on the screen and Insert the Blank Disc into the Writer(s)/Bottom Drive(s). The system will automatically detect and automatically duplicate them.

```
Copy0001 8x 30%
1307.1MB   03:30
```

- 0001 indicates the name of the source image name.
- 8x indicates the duplication speed.
- 30% indicates the current percentage of the duplication progress.
- 1307.1MB indicates the current amount of data that has been duplicated from the master disc.
- 03:30 indicates current elapsed time.

It is normal to see the progress indicator stay at 0-10% and 100% for approximately 30 seconds for CD duplication and up to 1 minute for DVD duplication. That is caused by the initializing and finalizing stages.

Once the duplication job is completed, the successful copies will be ejected and you shall see the following screen.

```
OK:07        0001
Time: 00:07:48
```

- A indicates the name of the source image name.
- "OK:07" indicates that you've just made 7 successful copies.
- "00:07:48" indicates the total duplication time.

Remove the successful copies and refill the trays with additional blank media to continue making more copies. You can also press the "ESC"/Escape button to terminate your project and go back to the main menu.

```
1.Copy
```

If you happen to have any failed discs (bad copy), the failed disc(s) will not be ejected automatically. You need to manually eject them and throw them away if they are write once recordable disc(s).

Chapter 4: Menu Overview

1. COPY

This menu will guide you to make CD/DVD/BD copies.

2. TEST

This menu will guide you to make a simulation of the copying process. During this simulation process, all write once recordable discs such as (DVD-R, CD-R) will be reusable. The purpose of performing such simulation is to ensure error free duplication.

Due to the physical limitation of DVD+R/RW & BD-R/RE recordable format, you can not perform this procedure on these formats. If you do so, you will encounter a failure message.

If you are using CD-RW/DVD-RW discs as your blank media during the simulation, any content that may have been recorded inside those discs will be permanently ereased.

3. TEST&COPY

This menu will guide you to perform the simulation of copying process and if everything passes during the simulation, the real copying process will be performed. If there's an error encountered during the simulation, an error message will be displayed and the copying process will not be initiated.

4. VERIFY

This menu will guide you to perform a verification on the copied discs to ensure it is fully readable.

5. COMPARE

This menu will guide you to perform a bit-by-bit comparison between your master disc (or master disc image on the hard drive) and all the copied discs. The reason to perform this compare operation is to ensure all of your copies identically compare to the master disc.

6. PRESCAN

This menu will guide you to make copies, after which, it will perform an additional comparison process automatically to ensure data correctness.

7. DISC INFO

This menu will identify your blank recordable media's format, capacity, manufacture ID as well as the media's certified writing speed. Please note that limited information will be displayed for media in the Reader drive.

8. SELECT SOURCE

This menu will guide you to select a Reader/Writer drive, or a Hard Drive, as the source

drive (where your master disc will be placed into) for Copy related operations.

9. IMAGE

9.1 Load

This function will guide you to load your master disc content into the hard drive as a partition/image.

9.2 Delete Image

This function will guide you to delete or remove the pre-selected partition/image in the hard drive.

9.3 Image Info

This function will display additional information of the pre-selected partitions/images in the hard drive. Such information includes partition/image disc type, capacity, etc.

9.4 Compare Image

This function will verify the pre-selected partition/image in the hard drive with the master disc at the source drive.

9.5 Select Image

This function will guide you to choose/select a partition/image for all Hard Drive related operations, including Copy.

9.6 Image Scr Drive

This function will guide you to select a drive as the source drive (where your master disc will be placed into) for partition/image loading/creating related operations.

9.7 Image Format Info

This function will show how the Hard Drive (image) is formatted.

9.8 Edit

This function is to edit selected image's title, sub1 title and sub2 title.

9.9 Format HDD

This function will guide you to re-format the entire hard drive of the system. During the formatting process, all of your hard drive contents will be permanently lost. Please use this function with caution.

9.10 LoadImage Method

This function is to change the way to save Image. There are 2 formats for choice: Auto and Manual. Auto means system auto assign partition for loaded image. Manual let you to choose which partition to load image to.

10. EDIT TRACK

This menu is exclusively designed for editing a collection of favorite songs from CDs. In other words, you can collect songs on a number of CDs and merge them into a single CD.

10.1 CD to CD Edit

This function will guide you to select songs from source CD, and then burn into a blank CD-R/RWs.

10.2 CD to HDD Edit

This function will guide you to select tracks from single or multi-audio CD and create image to specific partition of HDD.

10.3 Close Session

This function will guide you to close the session of edited disc for best playback compatibility.

11. CPI Copy

This menu will guide you to make CopyLock protected DVD Video copies from a CopyLock Copy Protected Image (CPI) Master disc. For more information, please refer to CopyLock Quick Guide for CopyLock Supported Duplicators.

12. SETUP

12.1 Language

This setting will allow you to choose which language you prefer be used to navigate the controller function of this system.

12.2 Burn Speed

This setting will allow you to choose the burning speed of various formats.

12.3 Read Speed

This setting will allow you to choose the reading speed of various formats.

12.4 Auto Start Drive

This setting allows you to choose when the system will automatically start the job.

12.5 Startup Menu

This setting will allow you to choose which menu should be seen first upon system is boot up.

12.6 Auto Verify

This setting will allow you to perform Verify function after Copy function is completed.

12.7 Auto Compare

This setting will allow you to perform Compare function after Copy function is completed.

12.8 Auto Prescan

This setting will allow you to perform Prescan function before Copy function is completed.

12.9 Eject Discs

This setting will allow you to choose the tray ejection behavior after the copy process.

12.10 Burn On the Fly

This setting will allow you to enable/disable the On the Fly burning mode.

12.11 Burn Mode

This setting will allow you to choose DAO or TAO burning mode.

12.12 Display Time

This setting will allow you to display timer during the copy process.

12.13 Button Sound

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.

12.14 Device Info

This setting will display information on all devices detected by the system.

12.15 System Info

This setting will display information about the system.

12.16 Quick Erase

This setting will quickly erase the data on the rewritable disc.

12.17 Full Erase

This setting will completely erase the data on the rewritable disc.

12.18 Auto Close Tray

This setting will allow system to automatically close the tray after an idle period.

12.19 Quick Compare

This setting will allow system to stop the compare process once the selected bytes of error are reached.

12.20 Tray-In/Out

This setting will allow system to close the tray in separate phases, instead of all in/out at same time.

12.21 BootTime Delay

This setting will allow system to delay the device scanning stage during boot up process.

12.22 Start Tray Eject

This setting will allow system to eject all trays upon system boot up.

12.23 Disc Redetect

This setting will allow system to detect the media once again if any detection error occurred.

12.24 Show Burn Speed

This setting will allow system to display the copying speed in real time during the copy process.

12.25 Audio Compare

This setting will allow system to activate "Audio CD Compare". System will prompt "Audio CD Compare Activated" for 1 second prior the duplication is started.

Requirements:
- "Audio CD Compare" supported duplicator model.
- "Audio CD Compare" Certified ODD drive(s).
- Pure Audio CD (Single Session, Multi-tracks).

Appendix A: Troubleshooting

Frequently Asked Questions

1. **No display on the LCD or the unit does not operate when the power is on.**
   - ✓ Check the power cable connection and that the environment for the power outlet is normal.
   - ✓ Make sure the power voltage on the duplicator matches the voltage of your power outlet.
   - ✓ If the system was stored in a location where the temperature dropped below 32ºF (0ºC) within the past 24 hours, leave the system in a warm room with temperatures at least 65ºF (19ºC) for 4 hours prior to powering it on.

2. **The system can not recognize the master disc.**
   - ✓ Check the format of the master disc or the master itself for damage.
   - ✓ Your master disc may be copy protected. Normally, most of the DVD/Blu-ray Disc and some of the CD you have purchase from stores have copy protected encoded in them.
   - ✓ Use one of the Writers to read your master disc by selecting one of writers as the Copy source. If it works, make a copy of your master disc and treat the copy as the new master. Then set the Copy source back to the Reader and try again.

3. **Buttons do not function.**
   - ✓ Maybe it is still busy on a task. Give it sometime and press it again. If it still doesn't work, turn off the machine, and then restart the machine after a minute.

4. **Copy completed but the copies are not readable / executable?**
   - ✓ Use "compare" feature to check the copied disc.
   - ✓ 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.
   - ✓ Please use another BD/DVD/CD player/ROM to test the copied media. Sometimes, your BD/DVD/CD Player/ROM may not be compatible with recordable BD/DVD/CD disc.

5. **The failure rate is high.**
   - ✓ Lower the "Burn Speed" and try again.
   - ✓ Quality of blank disc may be poor.
   - ✓ Quality of your master disc may be poor.

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

7. Cannot boot-up or fails to upgrade firmware.

✓   Contact our Tech Support.

8. Can I load data directly from my computer to my system's Hard Drive?

✓   No, your system'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.

9. Why some writers won't copy?

✓   Reset back to default. (Troubleshoot #10)

✓   Contact our tech support.

10. How do I reset my system back to default?

a)   Press & Hold "ESC" button for 3 seconds. You shall see menu 12 Adv Setup.

```
13-01.Adv Setup
UnderRun Protect
```

b)   Press down button until you see "Load Default" (12-10) on the 2nd line

```
13-10.Adv Setup
Load Default
```

c)   Press "ENT"/Enter button.

```
Load Default
Config? Yes
```

d)   Press "ENT"/Enter button again.

```
Load Default
OK!
```

e)   Press "ESC"/Escape button.

```
13-10.Adv Setup
Load Default
```

f)   Power off the system and power it back on. All settings should be restored back to default.