



**MICROBOARDS<sup>®</sup>**  
*Technology*



# LightScribe DVD Premium Pro NET Series

## User's Manual



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Any unauthorized modification to this equipment may result in the revocation by the FCC of the user's authority to operate this equipment.

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna
- Increase the separation between the equipment and antenna
- Connect the equipment into an outlet on a circuit different than that to which the receiver is connected
- Consult the dealer or an experienced radio/TV technician for help



This product is in conformity with the EMC Directive (89/336/EEC) through compliance with the following European standards: EN 55022, EN 55024. The CE mark has been affixed in accordance with the CE Marking **Directive 93/68/EEC**.

#### **Canadian Department of Communications (DOC) Statement**

This Class B digital apparatus complies with the Canadian ICES-003 Issue 4:2004. Cet appareil numérique de la classe B est conforme à la norme NMB-003 du Canada.

## Introduction

The LightScribe DVD Premium Pro NET Series is built on a foundation of duplicators having 1 reader, 10 recorders, and an integrated Hard Drive in each duplicator. Each is a high speed CD and DVD Recordable duplication system from Microboards Technology, LLC, that can be connected in a modular fashion to other LightScribe DVD Premium Pro NET duplicators to function as a single duplicator, all controlled from a single keypad and all duplicating from a single hard drive or reader drive.

Regardless of the number of duplicators you are connecting together, the LightScribe DVD Premium Pro NET is perfect for any user requiring easy copying of large numbers of audio, video, or Data DVD/CDs. The 2-line 20 character LCD panel provides the user with status of the duplication process, information on the process being run, master size, and other information.

The LightScribe feature allows you to burn print images created in the LightScribe Image Designer to LightScribe media.

## Unpacking your system

When unpacking your duplicator, confirm the following items are included:

- LightScribe DVD Premium Pro NET duplicator
- Power cable
- Manual
- NET Connection Cabling

If any of these items are missing, please contact Microboards Technology Technical Support.

**IMPORTANT:** Please keep all the packing for your LightScribe DVD Premium Pro NET duplicators. If your unit ever needs to be sent in for service, it must be returned in the original packing or the warranty will be voided.

## Installation

- Connect the supplied power cable to the LightScribe DVD Premium Pro NET duplicators and plug in to a protected power outlet strip or UPS power supply.

**Note for Installation:**

- 1) Please verify that the voltage switch above the power connection is set correctly for your local power specifications.
  - 2) The socket outlet should be installed near the equipment and be easily accessible.
  - 3) Do not block cooling fans.
- Connect the Duplicators using the NET cabling provided (see page 14 for more configuration options).
    - 1) The cabling and NET ports on the back of the Duplicators are color-coded; the **Blue** end of the cable should always be plugged into the **Blue** port, and the **Black** end of the cable should always be plugged into the **Black** port.
    - 2) The first tower should have the **Blue** end of the NET cable plugged into the **Blue** port (labeled **OUT**), and the last should have the **Black** end of the cable plugged into the **Black** port (labeled **IN**).
    - 3) If more than 2 towers are being connected, connect the **Blue** port in the second tower to the **Black** port of the next. In any chain of towers, the Master will have only the **Blue** port used, while the final tower will have only the **Black** port used.
  - Turn on power to the duplicators.
  - The systems will go through initialization. When the duplicators are ready, the LCD on the Master tower will display *1. Copy*.
  - The system is now ready to use.

## Basic Instructions

### Buttons and LCD

There are four buttons and an LCD on the front panel of the LightScribe DVD Premium Pro NET duplicator.



The LCD display shows the menu items and any status messages that may come up during operation.

Control	Name	Function
▲	Up	Scroll up through the menu or list.
▼	Down	Scroll down through the menu or list.
ENT	OK	Execute the function. Also called OK in the Menus.
ESC	ESC	Go back to the previous function.

### Hardware Description

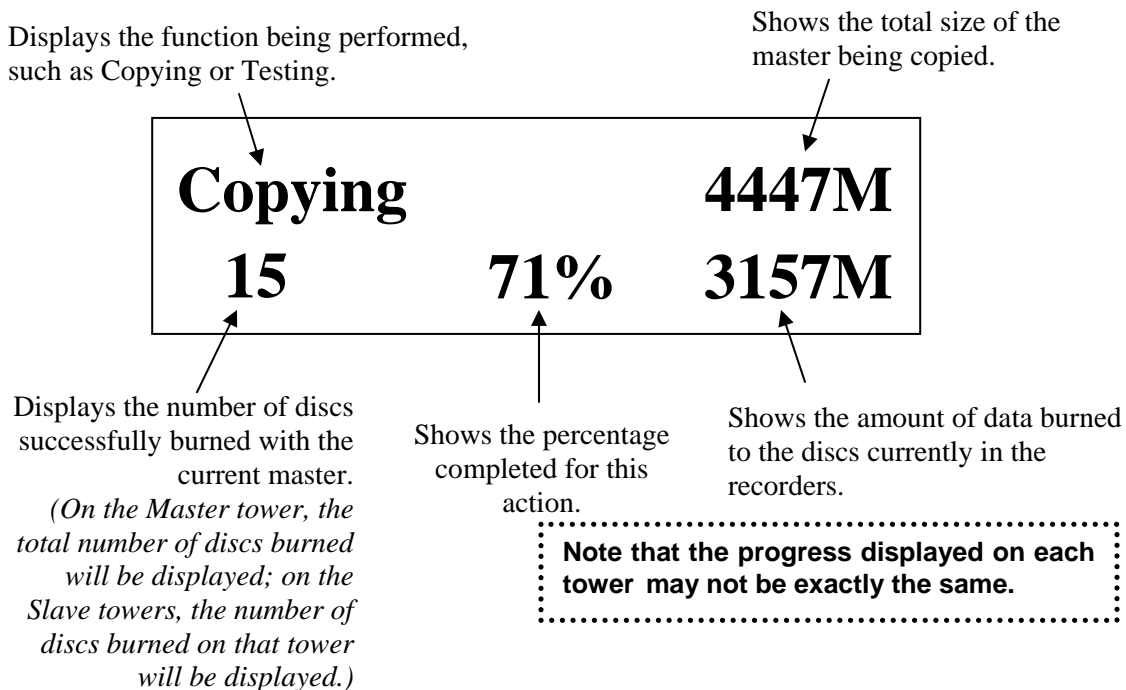
The LightScribe DVD Premium Pro NET system consists of a DVD reader, 10 DVD Recorders, integrated Hard Drive, and Controller module in each tower. Each Premium Pro NET duplicator can be connected to other Premium Pro NET duplicators to act as a single unit.

The master discs always go into the DVD reader drive of the Master tower.

The blank media will always go into the DVD Recorder drives.

The power switch and power LED are also located on the front of the LightScribe DVD Premium Pro NET duplicator.

The LCD display on the Master tower will show the different menu selections. During duplication, each display shows information pertaining to the recording process details on that specific tower. Here is a typical example of what is displayed during the COPY process:



## Main Menu

This section provides an overview of the menu options. These menu options are explained in detail in *the Using the LightScribe DVD Premium Pro NET Series Duplicator* section starting on page 9.

- Copy** Use the *Copy* menu to make CD and DVD copies. Before you start a copy, make sure you have selected the correct Master Source.
- Print** Use the *Print* menu to burn your LightScribe Print Image file to the discs. Before you start a print, make sure you have selected the correct Label file.  
**For all LightScribe printing, you must use .lsi files created using the LightScribe Template Labeler provided with your Premium Pro LightScribe Duplicator. For more information on creating your .lsi files, please see page 20.**
- Test** Use the *Test* menu to simulate the copy process. With simulation, write once recordable discs such as DVD-R, or CDR will be reusable.  
**Note:** *DVD+R recordable media is not compatible with simulation mode. If you try to simulate DVD+R copying, you will encounter failure messages. If you are using Rewritable discs as your blank media during the simulation, the content on those discs will be permanently erased.*
- Compare** Use the *Compare* function to perform a bit-by-bit comparison between the content of your master disc and the contents of all discs it copied. This ensures that all of your copies are identical to original master disc.  
**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 and Video CDs discs due to their lack of error correction mechanisms.*
- Test + Copy** Use the *Test + Copy* menu option to simulate the copying process initially. Then, the duplicator performs the copy process on the blank disc(s) that passed the simulation.
- Copy + Compare** Use the *Copy + Compare* menu option to make 100% reliable copies. After the copy process is done, the duplicator automatically compares the copies from the content of your original master disc.
- Select Burn Speed** Use the *Select Burn Speed* menu option to adjust the duplication speed for the various blank disc formats. For additional information, see **Select Burn Speed** on page 11.
- Select Source** Use the *Select Source* menu option to specify which drive is being used as the master drive. You should always select the DVD-ROM drive or the hard drive (if available) as the source unless there is a specific need to use one of the recorders as the master drive.
- Erase** Use the *Erase* menu to erase your Rewritable discs.
- Hard Drive Setup** Use the *Hard Drive Setup* menu to access the Hard Drive functions. You can scroll between the various options using the **▲ Up** or **▼ Down** button. For information on the Hard Drive Setup functions, please see page 12.
1. **Select Partition**
  2. **Load Partition**
  3. **Rename Partition**
  4. **Delete Partition**
  5. **Partition Info**
  6. **Select Loading Drive**
  7. **Format Hard Drive**

**Print Setup** Use the *Print Setup* menu to access the LightScribe Printing functions. You can scroll between the various options using the ▲ **Up** or ▼ **Down** button. For information on the Print Setup functions, please see page 13.

1. **Load Label**
2. **Rename Label**
3. **Delete Label**
4. **Print Surface Info**
5. **Label Info**
6. **Select Loading Drive**

**Setup** Use the Setup menu options to control how the Duplicator operates. You can scroll between the various options using the ▲ **Up** or ▼ **Down** button.

1. **Language**
2. **Auto Start**
3. **Read Error Skip**
4. **CD Writing Mode**
5. **Max Audio, VCD & CDG Speed**
6. **Buzzer**
7. **Startup Menu**
8. **Screen Saver**
9. **Duplication Mode**
10. **Counter**
11. **DVD+R High Compatibility Mode**
12. **ISRC**
13. **Disable Drives**

**Chain Setup / DC Link Setup** This menu will appear as either **Chain Setup** or **DC Link Setup**, depending on whether your towers are in NET mode or Standalone mode, respectively.

The **Chain Setup** menu options control the NET configuration. You can scroll between the various options using the ▲ **Up** or ▼ **Down** button.

The **DC Link Setup** menu options allow you to specify the NET configuration. You can scroll between the various NET configurations using the ▲ **Up** or ▼ **Down** button, pressing **ENT** to select the displayed position in the chain of duplicators.

**Utilities** The Utilities menu includes a number of functions that are not related to the actual duplication process.

1. **Disc Info**
2. **Prescan**
3. **System Info**
4. **Device Info**
5. **Load Default**
6. **Update Firmware**
7. **Save**

**Manage Accounts** The Manage Accounts menu includes optional User functions that allow you to limit access to the duplicator.

1. **View User**
2. **Create User**
3. **Edit User Info**
4. **Delete User**
5. **Password on Bootup**

**AutoCopy** The AutoCopy function simplifies the copy process. After the initial round of blanks is burned, you only need to load the drives again and close them. Once the drives detect the new blank media in the drives, duplication begins without you having to touch the control panel.

**Shutdown** Use this menu option to save any setting changes you may have made and 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 duplicator without performing this function increases the risk of damaging it. Additionally, if you made any setting changes, those changes may not be saved if you simply turn off the power to the duplicator.

## Setting Counters

The LightScribe DVD Premium Pro NET Series 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:

```
Microboards B.30
1. Copy
```

```
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 duplicator 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 **ENT** 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 **ENT** 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 input a four-digit number. If you need to specify a number that is less than four digits, fill the leading spaces with zeros. Examples 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 **ENT** 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 **ENT** button.

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 the **ENT** button once to move the cursor to the next position.
- Press the **▼ Down** button repeatedly until “0” is displayed.
- Press the **ENT** button once to move the cursor to the next position.
- Press the **▼ Down** button repeatedly until “2” is displayed.
- Press the **ENT** button once to move the cursor to the next position.
- Press the **▼ Down** button repeatedly until “1” is displayed.
- With “0021” displayed, press the **ENT** button once and the cursor moves to “OK”.
- Press the **ENT** button once more to submit your counter value and start duplication.

## Using the LightScribe DVD Premium Pro NET Duplicator

### Copy

This process will copy your master disc on to several blank discs simultaneously.

Use the **▼▲** buttons to navigate to the *1. Copy* Menu.

Insert your blank discs in the recorder drives. Next, you will see the *Counter Selection* menu:

```
Counter:
No Counter
```

Follow the instructions shown in **Setting Counters** to continue. Once the counters have been set, press the **ENT** button to confirm.

As the blank discs are recognized, the number detected will increase. Press the **ENT** button to start the duplication. If you have Autostart set, duplication will begin either once all recorders have been found to contain blank media or until the Autostart time interval passes.

```
Preparing... 4063MB
3 Discs Detected, Go?
```

After a few seconds of processing time, one of the following *Copy Progress* screens will appear.

Copying... 4063MB 0/21 12% 488MB	or:	Copying... 4063MB 0 12% 488MB
<ul style="list-style-type: none"> <li>➤ “4063MB” indicates the capacity of the master disc.</li> <li>➤ “0/21” indicates you have a project size of 21 copies and you have made 0 copies so far.</li> <li>➤ “12%” indicates the current progress of the duplication.</li> <li>➤ 488MB indicates the amount of data burned so far.</li> </ul>		<ul style="list-style-type: none"> <li>➤ “4063MB” indicates the capacity of the master disc.</li> <li>➤ “0” indicates you have made 0 copies so far.</li> <li>➤ “12%” indicates the current progress of the duplication.</li> <li>➤ 488MB indicates the amount of data burned so far.</li> </ul>

**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 recorder drives will eject and the number of successful and failed discs will be displayed. The number in parentheses shows the number of successful discs copied since the current master was selected.

Pass 20 Fail 0 ( 20) Waiting for Blanks
--

At this point, you can add more blank discs to the recorder drives and repeat the process. If you have the Counter set, only the number of discs selected will be burned.

### **Print**

The Print function allows you to burn the selected LightScribe image to LightScribe media.

Microboards B.30 2. Print
------------------------------

The LightScribe file must be created using the supplied LightScribe Template software and either burned to a disc or saved to the hard drive of the duplicator when using the External Connection feature. Note that you must have the External Connection setting OFF for labels on the hard drive to be accessible to the duplicator.

Regardless of the source, you will use the ▼▲ buttons to move between the available labels, pressing the ENT button when the name of the label you want is displayed. The printing process will begin at that point; when the printing is complete, the drives will eject.

### **Test**

The Test function is useful to determine if your master disc can be successfully read.

Microboards B.30 3. Test
-----------------------------

This process is identical to the Copy process, with the one exception being that the discs will not be burned to if the media supports test mode.

**DVD+R media does not support test mode.**

**Running rewritable media in Test mode will cause any data on the discs to be erased.**

## Compare

The Compare function is used to compare the master disc with the copied discs. The Compare function will only work with Data masters. If your master disc has audio or video (VCD) on it, the Compare function will not work.

Microboards B.30 4. Compare
--------------------------------

To use the Compare function, press the ▼▲ buttons until 4. *Compare* is displayed.

Place your master disc into the DVD reader drive and your copied discs into the DVD recorder drives.

Press the **ENT** button on the controller interface.

The duplicator will now compare the copies to the master disc. When completed, the display will read:

Compare	OK: 7
Fail: 0	Diff: 0

Press the ▼ button and the following screen will appear:

Src:01	CD-RW
Total:	15.2MB

Press the ▼ button again and the following screen will appear. Use the ▼ button to scroll through each drive that was used during the Compare.

Tgt: 00	CD-RW
Identical	

## Test + Copy

The Test + Copy function first simulates the burn to the media and then burns to the media if the Test simulation is successful.

**DVD +R media does not support test mode.**

Microboards B.30 5. Test+Copy
----------------------------------

## Copy + Compare

The Copy + Compare function first burns to the media and then runs a comparison of the burned discs to the master disc.

Microboards B.30 6. Copy+Compare
-------------------------------------

## Select Burn Speed

This menu option allows you to change the duplication speed for each of the duplication job types. Available burn speeds will vary, depending on the model of the recorder drives installed in your duplicator. Press the **ENT** button to change burn speeds.

Microboards B.30 7. Select Burn Speed
--

Since speeds can be set based on media type being used or whether the hard drive is being used as the source, press the ▼▲ buttons to navigate to the duplication type whose burn speed you wish to change, then press the **ENT** button. Use the ▼▲ buttons again to display the burn speed you would like to choose and press **ENT**.

When you have changed the burn speed, press **ESC** to return to the main menu.

## Select Source

Use this menu to select which drive will be used as the master drive, in which you would load your master disc. By default, the top drive is set as the source.

Microboards B.30 8. Select Source
--------------------------------------

Press the **ENT** button to change the source drive. Use the ▼▲ buttons to navigate through the drives, pressing **ENT** when the drive you want to use is shown.

It is not recommended that you change the source to anything other than the top drive or the hard drive unless it is necessary to do so.

## Erase

This menu option is used to erase rewritable media placed in the recorder drives. The Erase function has 2 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.

Microboards B.30 9. Erase
------------------------------

## Hard Drive Setup

This menu option is used to access the Hard Drive functions.

If you are operating the towers in NET mode, you will only have access to the hard drive in the **First** tower.

If it is not already set so, you will be asked if you want to set the hard drive as the source. Press the **ENT** button to set the hard drive as the source and enter the Hard Drive Setup menu.

### 1. Select Partition

This function is used to select the default partition on the hard drive for duplication. Use the **▼▲** buttons to move between the available partitions, pressing the **ENT** button when the partition you want is displayed. The partition selected will become the first that is displayed after you press the **ENT** button when the display reads *1. Copy*.

### 2. Load Partition

Use this function when you want to add a new master disc partition to your hard drive.

Load Partition[231GB] Load- New Partition
--

After pressing **ENT** when the display reads *2. Load Partition*, you will be asked to verify that you want to load a partition. Press **ENT** to continue loading.

Enter in the partition name of up to 14 characters, using the **▼▲** buttons to change the first character. Press **ENT** when the character you want is in the cursor position. To leave a position blank, press **ENT** when the space is empty.

After entering in all 14 characters, press **ENT** to highlight OK on the display. If the name is correct, press **ENT**. If you need to make changes, press the **ESC** button until the cursor is on the character that needs to be changed.

You will be asked to verify the name one last time before the master inserted in the reader drive is copied to the hard drive. The copy progress will be shown on the display. Once the master disc is copied to the hard drive, the reader drive will be ejected.

The master under the partition name you entered will now be available for duplication from the hard drive.

### 3. Rename Partition

The Rename Partition function allows you to change the name of an existing partition on the hard drive.

Use the **▼▲** buttons to move through the list of partitions until you get to the partition you want to rename. Press **ENT**, then use the **▼**, **▲**, and **ENT** buttons as in the Load Partition function to change the name. Press the **ENT** button when the cursor is on OK to save the new partition name.

### 4. Delete Partition

Use the Delete Partition function to remove a master partition that is no longer in use or if you need to clear hard drive space for new partitions to be added. Use the **▼▲** buttons to select the partition to delete, then press **ENT**. You will be asked to confirm deletion of the selected partition; press **ENT** if you are sure you want to remove the partition from the hard drive.

The Delete Partition function cannot be undone.

### 5. Partition Info

Use the **▼▲** buttons to scroll through the loaded partitions. The type of master used, size of the data in the partition, and the name will be displayed.

### 6. Select Loading Drive

By default, the drive selected as the source will be used for transferring a master from disc to hard drive, but you can use this function to select a different source drive. Use the **▼▲** buttons to scroll through the available drives to find the drive you want to use. Press **ENT** to select the displayed drive.

This will not change the Source Drive in the Main Menu; it will only be used as the source for loading discs to the hard drive.

## 7. Format Hard Drive

The Format Hard Drive function will clear all contents from the hard drive. If you want to delete all partitions from the hard drive, this function is a quicker method than using the Delete Partition function on each individual partition.

The Format Hard Drive function cannot be undone.

## Print Setup

### 1. Load Label

This function is used to load labels from a disc in the loading drive to the hard drive. Use the ▼▲ buttons to move between the labels on the disc, pressing the **ENT** button when the label file you want to load is displayed.

You can have multiple label files on the disc and use the *Select All Labels* option to transfer any .lsi file from the disc inserted in the loading drive to the hard drive.

The label files on the disc cannot be in a directory, but must be at the root of the disc.

Label files loaded to the hard drive will appear in the label list using the file name. Each file on the hard drive must have a unique name. Attempting to load a label file to the hard drive with a name that already exists on the hard drive will generate an error.

### 2. Rename Label

Use this function when you want to change the name of an existing label already loaded to the hard drive.

Use the ▼▲ buttons to move through the list of labels until you get to the label you want to rename. Press **ENT**, then use the ▼, ▲, and **ENT** buttons to change the name. Press the **ENT** button when the cursor is on OK to save the new label name.

### 3. Delete Label

Use the Delete Label function to remove a label file that is no longer in use or if you need to clear hard drive space. Use the ▼▲ buttons to select the label to delete, then press **ENT**. You will be asked to confirm deletion of the selected label; press **ENT** if you are sure you want to remove the label from the hard drive.

The Delete Label function cannot be undone.

### 4. Print Surface Info

Use the Print Surface Info function to verify the drive and disc identifiers on each piece of LightScribe media loaded into the drives. Use the ▼▲ buttons to scroll through the drives with LightScribe media loaded to view the information on each drive.

### 5. Label Info

Use the ▼▲ buttons to scroll through the loaded label files. The name and size of each label file will be displayed.

### 6. Select Loading Drive

By default, the drive selected as the source will be used for transferring a label from disc to hard drive, but you can use this function to select a different source drive. Use the ▼▲ buttons to scroll through the available drives to find the drive you want to use. Press **ENT** to select the displayed drive.

This will not change the Source Drive in the Main Menu; it will only be used as the source for loading labels to the hard drive.

```
Microboards B.30
11. Print Setup
```

```
Load Label[231GB]
[Select All Labels]
```

## Setup

The Setup menu includes many functions that affect the operation of the LightScribe DVD Premium Pro NET Duplicator. Please see page 17 for more information on the Setup menu options.

```
Microboards B.30
12. Setup
```

## Chain Setup / DC Link Setup

This menu option changes, depending on whether the duplicators are operating in NET mode (Chain Setup) or Standalone mode (DC Link Setup).

```
Microboards B.30
13. Chain Setup
```

The **Chain Setup** menu includes the functions related to the NET configuration options of the LightScribe DVD Premium Pro NET Duplicator.

### 1. Chain Info

This function will show you information on the NET configuration, both for the current configuration as a whole and for each tower within the NET configuration. The current configuration information will be displayed first, followed by the individual tower information. Use the ▼▲ buttons to move between the configuration displays.

```
Chain Info
2 Link(s)   20 Drives
```

```
Chain Info
Link #1    10 Drives
```

### 2. Chain Re-scan

Use this function when you want rescan the tower configuration. This function is useful identifying if a tower has been accidentally disconnected, for instance.

### 3. Chain Abort

The Chain Abort function will temporarily disconnect the individual towers, returning them all to Standalone mode and allowing the towers to operate independently.

Since this is only a temporary disconnect, the towers will return to the prior configuration after the duplicators are rebooted.

This form of disconnect is useful if you want to briefly operate each tower as an independent duplicator.

### 4. Chain → Standalone

Use the **Chain → Standalone** function to disconnect the towers from NET mode in a way that will be preserved after rebooting. If you will primarily be operating the towers as standalone duplicators, using this disconnect method is more convenient than the temporary Chain Abort command.

You will be asked to confirm that you want to change the mode to Standalone. Press ENT to continue with the disconnect. You will be prompted to reboot the towers to operate them in standalone mode.

After reboot, the Chain Setup menu changes to the DC Link Setup menu.

The **DC Link Setup** menu will only appear when the duplicators have been rebooted into Standalone mode. This menu allows you to reconnect or reconfigure the NET connections. You must set the configuration for each tower if you have restarted in Standalone mode and wish to return to NET mode.

There are 4 options available in the DC Link Setup menu: **Standalone**, **First**, **Middle**, or **End**.

**Standalone** - Use this option to keep the tower operating as an independent duplicator.

```
DC Link Setup
Standalone
```

**First** - Select **First** for the tower that is the master tower. This tower must have the **Blue** end of a NET Connection cable connected to the **Blue** port on the back of the tower, with the **Black** end connected to the **Black** port of the next tower in line.

```
DC Link Setup
First
```

**Middle** - If you have 3 or more towers that you are connecting together, you should select **Middle** as the option for all towers that have both a connection coming in from a previous tower in the line and a connection going out to the next tower in the line.

```
DC Link Setup
Middle
```

Remember, the **Black** end of the NET Connection cable coming from the previous tower must be connected to the **Black** port, and the **Blue** end of the NET Connection cable going to the next tower must be plugged into the **Blue** port.

**End** – Select **End** as the configuration on the tower that is last in line. This tower will only have the **Black** end of the NET Connection cable from the previous tower plugged into the **Black** port.

DC Link Setup End
----------------------

**You must end every tower chain with a duplicator set to the End configuration.**

If you do have other towers connected after any tower configured as **End**, they will not connect to any of the previous duplicators.

The **End** configuration setting is useful for splitting up your towers into groups without having to disconnect any cabling. If, for example, you have 5 LightScribe DVD Premium Pro NET duplicators and want to split them into groups of 3 and 2, you would set the DC Link Setup Configuration of the 5 towers as **First, Middle, End, First, and End**, respectively, without disconnecting the NET Connection cable between towers 3 and 4. Towers 1, 2, and 3 would be joined together with tower 1 the master, while towers 4 and 5 would be joined together with tower 4 as the master.

Once each tower has been configured to your satisfaction, you will need to reboot all towers to have them operate in NET mode.

If the display remains on **DC Link Listening** for several minutes after rebooting the towers, you may have the configuration incorrect or the cabling incorrect. After 5 minutes or so of attempting to connect, the towers will generate an error, allowing you to verify and change the NET chain configuration if necessary.

You can shorten the wait time by holding in the **ESC** button on the towers for 5 seconds. This will cause the link attempt to be halted and allow you access to the menus on the individual towers, as if the **Chain** → **Standalone** function were used.

The keypad and reader drive will only be used on any tower specified as First. Any tower connected as Middle or End will be controlled from the First tower, with the keypad disabled.

## Utilities

The Utilities menu provides you with hardware information and a few maintenance functions. Please see page 19 for more information on the Utilities menu.

Microboards B.30 14. Utilities
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## Manage Accounts

The Manage Accounts menu includes optional User functions that allow you to limit access to the duplicator.

Microboards B.30 15. Manage Accounts
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You must either log in as the Admin user or have the Password on Bootup setting as <b>NO</b> if you want to access the Manage Accounts menu.
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You will be asked for the password when you enter the Manage Accounts menu. The default password is 0000, which should be changed if you plan on using the user account security features. Keep a record of the Admin account password.

### 1. View User

This function allows to you see the list of available user accounts. Use the ▼▲ buttons to scroll through the user list.

### 2. Create User

Use the Create User function to add a new user account.

You will first be asked to enter in the new user name. Use the ▼▲ buttons to select the first character, then press **ENT** to move to the next, or **ESC** to move to the prior character. You can enter in up to 14 characters. After the 14<sup>th</sup> character is entered, press **ENT** when the cursor is on **OK**.

Next, enter the user's password. The password is limited to numerals, and will be 4 digits long. Again, use the ▼▲ buttons to change the number of the current digit, pressing **ENT** when the number is correct. After the 4<sup>th</sup> digit is entered, press **ENT** when the cursor is on **OK**. The display will briefly show that the user has been added.

### 3. Edit User Info

Use the Edit User Info menu to change an existing user's name or password.

You will first be able to change the user's name. Use the **ENT** or **ESC** buttons to move right or left in the user's name and the ▼▲ buttons to change the highlighted character and press **ENT** to accept the character. When all changes are complete, move the cursor to **OK** and press **ENT**.

The password can be modified next using the same method. When the new password is entered, press **ENT** to move the cursor to **OK** and press **ENT** one more time to save the changes you have made. The display will briefly show that the user information has been changed before returning to the menu.

### 4. Delete User

The Delete User is used to remove users account from the list. The Admin user account cannot be deleted.

Use the ▼▲ buttons to scroll through the list of existing users. When the display is showing the user you want to remove, press the ENT button. You will be asked to verify that you want to remove the user; press ENT if you do, or ESC if it is not the correct user to delete. The display will briefly show that the selected user has been deleted.

### 5. Password on Bootup

To use the Managed Accounts Users to limit access to the duplicator, you must turn the Password on Bootup setting to **YES**. This will take effect the next time the duplicator is turned on.

***You must use either the Save function in the Utilities menu or the Shutdown function prior to turning the duplicator off, or changes you have made to the accounts may not be saved!***

## AutoCopy

The AutoCopy function simplifies the copy process. After the initial round of blanks is burned, you only need to load the drives again and close them. Once the drives detect the new blank media in the drives, duplication begins without you having to touch the control panel (Auto Start must be set to **Auto** or **Full**).

Microboards B.30 16. AutoCopy
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## Shutdown

When turning off your LightScribe DVD Premium Pro NET Duplicator, it is highly recommended that you do so using the Shutdown menu option. Not only does this function save any system settings that you may have changed in the Setup menu, it also shuts down the duplicator components in a safe way.

Microboards B.30 17. Shutdown
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When the display reads **Ready to Power OFF** after selecting the Shutdown function, you can use the power switch on the front.



## The Setup Menu

The Setup menu includes many settings the user can select to customize the use of the LightScribe DVD Premium Pro NET duplicator. A description of the options in the setup menu follows.

**Note: You must use either the Shutdown menu or manually run the Save function from the Utilities menu, or any changes you make to the Setup Menu settings will be lost when you turn off your duplicator.**

### Language

The LightScribe DVD Premium Pro NET duplicator has multiple language options, with English being the default setting.

### Auto Start

The Auto Start feature is used to automatically start recording, once the master disc and blank discs are inserted into the drives. The Auto Start feature applies to Copy, Test, Test + Copy, Copy + Compare, and Erase.

There are 3 options for this setting, **Auto**, **Full**, and **Off**.

- **Auto:** Starts the duplication process when all detect recordable media or 30 seconds has passed after the first blank disc is recognized, allowing you to leave some recorders empty while still using the Auto Start feature
- **Full:** Only starts the duplication when all drives report media as being present.
- **Off:** You must press the ENT button to begin the duplication process, regardless of the number of discs loaded.

### Read Error Skip

With Read Error Skip **OFF**, the duplicator will halt any job when the reader encounters an error on your master disc. By changing this setting to **ON**, duplication will continue after finding a read error on the master. **Please note that this does not fix the error, and may result in unusable discs.**

It is strongly recommended that you do not change this setting from the default value of **OFF**.

### CD Writing Mode

This setting allows you to change the CD writing mode between the 2 options, **Disc at Once** and **Track at Once**. The default setting is **Disc at Once**, which should be used unless you have a specific need to change the mode.

### Max Audio, VCD, CDG Speed

Audio CD and Video CD disc formats do not have internal error checking capabilities, so duplicating at high speeds may cause more instances of errors on the copies. This setting allows you to reduce the burn speed of these specific types of discs without lowering the burn speed of Data CD discs.

### Buzzer

The Buzzer function will turn the beeper on the controller **ON** or **OFF**. Using the default of **ON**, a beep is heard when a button is pressed or when any job completes.

### Startup Menu

Allows you to specify what the default menu item will be when the LightScribe DVD Premium Pro NET is turned on.

### Screen Saver

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

### Duplication Mode

This setting cannot be changed.

### **Counter**

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

### **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.

### **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.

### **Disable Drives**

Use this utility to allow the system to disable certain drives/trays when certain drives/trays are producing high failure rates.

**Remember, you must use the Shutdown menu or manually Save the settings under the Utilities menu if you want any changes you have made to remain after the Duplicator is shut down!**

## The Utilities Menu

A description of the options in the Utilities menu follows. Use the ▼▲ buttons to scroll through the menu, pressing the **ENT** button when the display shows the function you want to perform.

### ***Disc Info***

The Disc Info function will display the information regarding the blank recordable media you have loaded in the recorders. The media format, capacity, manufacture ID, and certified writing speed of the media will be displayed.

Information regarding any master disc loaded into the reader drive will also be displayed.

Load your media into the drives before pressing **ENT** when the display shows ***Disc Info***. Each drive will be checked to see if media is present. If all drives are not filled, you will be shown the number of discs detected and be prompted to press the **ENT** again.

Use the ▼▲ buttons to scroll through the drives in which media has been detected.

### ***Prescan***

The Prescan function is used to verify the readability of the master disc by scanning for bad sectors on the master. Performing the Prescan on your masters before duplicating will help reduce the number of duplication failures caused by a master that contains uncorrectable errors.

You should load your master into the source drive prior to pressing the **ENT** button when the display shows ***Prescan***. Your master will be scanned, with the results being displayed when the analysis is complete.

If the results show that the master disc **Failed**, you should not attempt to use that master as a source disc.

### ***System Info***

The System Info menu selection displays the model and firmware versions of the installed controller. Use the ▼▲ buttons to scroll through the system information.

### ***Device Info***

The Device Info menu selection displays the model and firmware versions of the drives installed in your LightScribe DVD Premium Pro NET Duplicator. Use the ▼▲ buttons to scroll through the device information.

### ***Load Default***

This option restores all Setup and Advanced Setup options to the default settings, as well as the default Burn Speed and the selected Source drive settings.

### ***Update Firmware***

Use the Update Firmware menu option to update the programming on your Duplicator. To update the firmware, you will need to have the correct firmware file burned to a CD.

Please note that “drag-and-drop” burn methods such as the Windows XP burn utility generally will not be recognized as valid as the disc format they create is not recognizable by the duplicator. Use a disc burning application to burn the Update files to a CD.

To update the duplicator firmware when your towers are in NET mode, select the first **Update Firmware** option to load the firmware to the Master tower. Once the Master tower has been updated and rebooted, use the **Synchronize Firmware** option to load the firmware from the Master tower to any towers connected to it. Each tower updated will need to be rebooted.

***Firmware Updates should only be performed after contacting Technical Support to ensure that you are attempting to install the correct firmware for your duplicator.***

### ***Save***

This function will save any system settings that you have changed since the last time the duplicator was booted. This function is part of the process that occurs when you run the Shutdown process from the Shutdown menu.

## LightScribe Template Labeler

The LightScribe Template Labeler and LightScribe System Software included with the Premium Pro LightScribe Series duplicator are required for creating the necessary print image files for the LightScribe Print feature to work.

**Do not update or attempt to use any version of the LightScribe Template Labeler or the LightScribe System other than those provided by Microboards Technology.**

To successfully create print image files that can be used with the Premium Pro LightScribe Series duplicator, launch the LightScribe Template Labeler application using the LightScribe shortcut on your desktop.

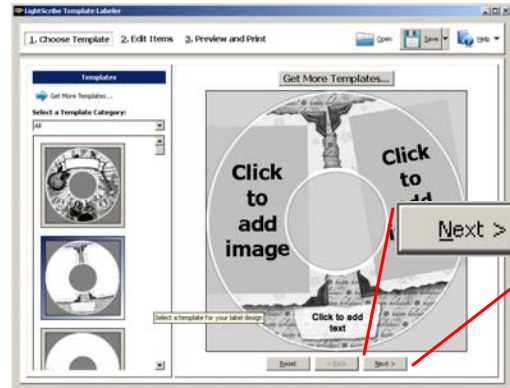


**For all LightScribe printing, you must use .lsi files created by following the steps below using the LightScribe Template Labeler provided with your Premium Pro LightScribe Duplicator.**

The first step is to select the template you wish to use for the print image. The number of images you would like to add to the print image, the amount of text you need to include, and the background image will all determine which template to select.

Click **Next** when you have chosen your template.

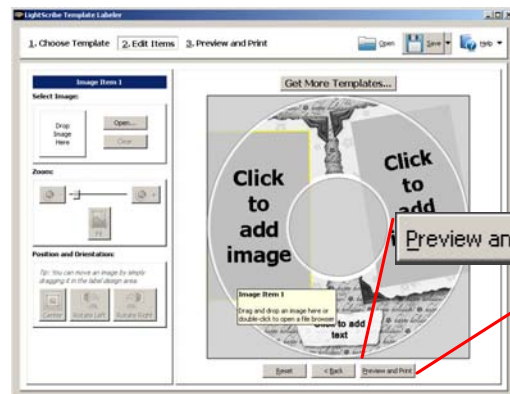
Additional template packages are available for downloading at [www.lightscribe.com/go/labelgallery](http://www.lightscribe.com/go/labelgallery).



After choosing your template, add images or text to the design. For more information on this process, please review the Help menu in the application.

When you are done with this step, click the **Preview and Print** button.

**Do not create a file using the Save button, as this will not give you a printable file.**

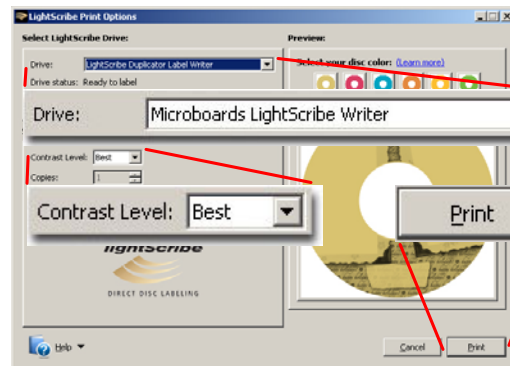


In the Preview window, select **Microboards LightScribe Writer** as the Drive.

Select the **Contrast Level**. Options are **Best**, **Normal**, and **Draft**. By default, **Best** is selected.

The **Disc Color** will only change the color of the displayed preview, and will have no impact on the printed disc. The base color of the disc will not be changed during printing.

Finally, click the **Print** button and provide the name of the print image file and location to which you would like to save the file.



Once your .lsi print image file is created, burn the print image to a disc for use in the Premium Pro LightScribe Series duplicator, or use the External Connection setting to allow you to copy the .lsi file from your PC directly into the **Duplicator/labels** directory on the duplicator hard drive.

**Note: Using the Windows XP or Vista burn to disc utility will result in print images that cannot be recognized by the LightScribe tower. You must use another burn utility, such as Zulu2 (included with your LightScribe tower) to burn your images to disc.**

# Specifications – LightScribe DVD Premium Pro NET Series

Model	Recorders	Dimensions, inches (H x W x D)	Weight (lbs)	Buffer (MB)	Power Rating
LightScribe DVD Premium Pro NET (per tower)	10	24.5 x 7.5 x 16.5	43 lbs	128	Rated: 115/230V~, 8/5A, 60/50Hz Output: 5Vdc, 25A; 12Vdc, 28A 400W Max

- Max Read Speeds: CD 48x, DVD 16X
- Max Write Speeds: CD 48x, DVD 24X
- System Display LED
- Write Method Auto Detect (DAO, TAO)
- Operation Mode COPY, TEST, PRESCAN
- Firmware Upgrade Via CD-ROM
- AC Input: 115/230 VAC; 8/5 AMPS MAX; 50-60Hz
- Maximum Operating Temperature: 25 Degrees C.
- Relative Humidity: 30% - 80% non-condensing.
- Supported Formats: CD-ROM Mode 1 & 2 CD-DA, CD-ROM/XA Video CD, Game CD, Mix Mode, Multisession, HFS CD Bridge, Photo CD, CD Extra, CD Text; DVD-ROM, DVD+R, DVD+RW, DVD+R DL, DVD-VIDEO

**CAUTION:** Disconnect AC Power Cord Before Servicing. High Voltages Present with Unit Powered Off and Line Cord Connected.

## Technical Support

For technical questions or support issues, contact Microboards Technology technical support:

### United States

PH: 952-556-1639

FAX: 952-556-1628

[support@microboards.com](mailto:support@microboards.com)

[www.microboards.com](http://www.microboards.com)

### Europe

PH: +44 (0) 845 230 7800

[www.microboards.co.uk](http://www.microboards.co.uk)

### Japan

PH: 03-3561-2266

[www.microboards.co.jp](http://www.microboards.co.jp)

Please have the Model and Serial Number of your LightScribe DVD Premium Pro NET available when contacting Technical Support.

***Your master discs should always be clean and free of scratches. If you notice your master disc has a dirty or scuffed data surface, you should replace the master as soon as possible!***

**Remember – the quality of duplication depends on the quality of master and blank discs used!**

# Appendix 1: List of Functions

1. Copy
2. Print
3. Test
4. Compare
5. Test + Copy
6. Copy + Compare
7. Select Burn Speed
8. Select Source
9. Erase
10. Hard Drive Setup
  1. Select Partition
  2. Load Partition
  3. Rename Partition
  4. Delete Partition
  5. Partition Info
  6. Select Loading Drive
  7. Format Hard Drive
11. Print Setup
  1. Load Label
  2. Rename Label
  3. Delete Label
  4. Print Surface Info
  5. Label Info
  6. Select Loading Drive
12. Setup
  1. Language
  2. Auto Start
  3. Read Error Skip
  4. CD Writing Mode
  5. Max Audio, VCD & CDG Speed
  6. Buzzer
  7. Startup Menu
  8. Screen Saver
  9. Duplication Mode
  10. Counter
  11. DVD+R High Compatibility Mode
  12. ISRC
  13. Disable Drives
13. Chain Setup ..... or .....
  1. Chain Info
  2. Chain Re-Scan
  3. Chain Abort
  4. Chain → Standalone
11. DC Link Setup
  1. Standalone
  2. First
  3. Middle
  4. End
14. Utilities
  1. Disc Info
  2. Prescan
  3. System Info
  4. Device Info
  5. Load Default
  6. Update Firmware
  7. Save
15. Manage Accounts
16. AUTOCOPY
17. Shutdown

## Appendix 2: Error Messages

**Master Discs should always be clean and free from scratches to reduce the number of duplication failures.**

If an error situation occurs during duplication, the display will show both an error code and an error message.

Error Code	Error Message	Description and Recommended Solutions
200	Source Disc Empty	The master disc was detected and identified successfully, but is blank. <b>Check the master to ensure it contains data.</b>
201	Bad Master	The master disc is detected but can't be identified. <b>Check the master disc for defects or errors.</b>
202	No Targets!	All blank discs are missing once the job has already started. <b>Verify that blank discs are loaded into the recorders.</b>
203	Burner Mixed or Firmware Version Mixed	The model or firmware versions of all installed recorders are not the same. <b>Drive may have been replaced. Contact Tech Support.</b>
204	Targets & Master Not Compatible!	The master disc and target discs do not have the same format. <b>Verify that the master and target discs are the same format (CD master and CD blanks, for instance). You can use Disc Info in the Utilities menu to verify the disc formats.</b>
205	Targets Not Blank!	Existing data has been detected on the target discs. <b>Verify the discs are blank, replace if not.</b>
206	Targets & Master Size Mismatch!	<i>During Compare:</i> The sizes of the master disc and successful copies are different. <i>During Copy:</i> The capacity of the blank discs is less than the data size of the master. <b>During Compare: Contact Tech Support</b> <b>During Copy: Use Disc Info in the Utilities menu to verify that the blanks capacity is large enough for the data on the master disc.</b>
208	Targets are not RW Discs!	The target discs are not Rewritable during an Erase attempt. <b>Verify that each loaded disc is rewritable.</b>
209	Master Disc is CSS Protected!	The master disc is copy protected. <b>Copy protected masters cannot be duplicated.</b>
210	Bad Discs!	The target discs are detected but cannot be identified. <b>Replace discs that cannot be identified.</b>
211	This format can not be tested!	Target discs during a Test attempt are DVD+R, DVD+RW, DVD+R DL, BD-R, or BD-RE. <b>Disc formats listed above are not supported by the test function.</b>
251	Copy Audio Error	<i>Applies to Mix Audio Tracks.</i> An error occurred during the Mix Audio process. Could be caused by either a master error or a recording error. <b>Try a different master or blank disc.</b>
252	Not Audio CD	<i>Applies to Mix Audio Tracks.</i> The master disc is not an Audio CD. <b>Verify the master disc is an Audio CD.</b>

Error Code	Error Message	Description and Recommended Solutions
253	Over Blank Disc Capacity	<p><i>Applies to Mix Audio Tracks.</i> The total size of the selected tracks is larger than the remaining capacity of the target discs.  <b>Select alternate track of smaller size, or remove selected track.</b></p>
260	No Update File	<p>A valid firmware file was not detected on the disc during a Firmware Update attempt.</p> <ol style="list-style-type: none"> <li>1. <b>Confirm the file on the disc is not a “zip” file. If so, extract the file and burn to another disc.</b></li> <li>2. <b>Confirm that the update disc was burned as a “Mode 1” Data CD. Drag-and-drop burn methods such as the Windows XP burn utility generally do not use this format and will not be recognized as valid.</b></li> <li>3. <b>Verify that there are no other discs loaded into the duplicator. Insert the update disc in another drive tray and repeat.</b></li> </ol>
261	Wrong Update File	<p>The Firmware Update File is either not compatible with your duplicator or is corrupted.  <b>Download and burn Update File again. Contact Tech Support if this error persists.</b></p>
262	Unknown Flash Model	<p>The Firmware Update File is not intended for your duplicator.  <b>Contact Tech Support for the correct file. Have Duplicator Model and Serial Number available.</b></p>
263	User Abort	<p>A duplication job has been deliberately cancelled by the user by pressing the ESC button for more than 5 seconds during a duplication attempt.  <b>Once the reason for cancellation has been corrected, restart the job after replacing any partially burned media.</b></p>



