





DIRECTOR

**DIRECTOR/DIRECTOR PRO
Series
Disc Publishing System
User Manual**

Welcome to the Director/Director Pro System

Copyright Notice

Copyright ©2003, 2004, 2005, 2006 & 2010 by MF DIGITAL (All rights reserved)

This manual and the accompanying illustrations may not be copied, reproduced, electronically transmitted, or translated into another language, in whole, or in part, without the written consent of MF DIGITAL.

MF DIGITAL, Director & Director Pro are trademarks of MF DIGITAL.

Other trademarks referred to are the property of their respective trademark or registered trademark holders.

Blu-ray / DVD-R/RW Recorder Warranty Policy

Individual Blu-ray and DVD-R/RW recorder manufacturers are responsible for the products they provide. As a convenience, MF DIGITAL will honor any service issue related to a defective recorder while under its respective manufacturer's warranty providing that the recorder has been purchased from MF DIGITAL either directly or indirectly. MF DIGITAL assumes no responsibility for products NOT purchased through MF DIGITAL.

Piracy

The copying of audio, video, or software without the permission of the copyright holder is illegal. MF DIGITAL accepts no responsibility for the copyright use or misuse of this equipment. It is the sole responsibility of the user to ensure that the legal rights of copyright in duplicating are respected.

Corporate Headquarters:

MF Digital
155 Sherwood Avenue
E. Farmingdale, NY 11735
phone: 631 249-9393
fax: 631 249-9273
e-mail: support@mfdigital.com
website: <http://www.mfdigital.com/>

About MF Digital

Thank you for purchasing MF Digital's DIRECTOR/DIRECTOR PRO publishing system. MF Digital manufactures a wide variety of software and audio duplication and production equipment, including manual and fully automatic Disc duplicators and printers. We hope you will consider us for all of your production needs.

What To Expect From Your MF Digital DIRECTOR/DIRECTOR PRO Publishing System

The MF Digital DIRECTOR/DIRECTOR PRO publishing system is professionally designed and manufactured to give you years of trouble free operation. To avoid accidental damage to your new DIRECTOR/DIRECTOR PRO publishing system, please read and understand this manual thoroughly before operating the unit.

About This Manual

This manual is written for both novice and experienced users. Please read through this Operator's Guide from beginning to end before using the unit. Once having read the manual, follow along chapter by chapter. This will provide the necessary understanding of your new DIRECTOR/DIRECTOR PRO publishing system.

WELCOME TO THE DIRECTOR/DIRECTOR PRO SYSTEM	2
COPYRIGHT NOTICE.....	2
BLU-RAY / DVD-R/RW RECORDER WARRANTY POLICY	2
PIRACY	2
CORPORATE HEADQUARTERS:	2
ABOUT MF DIGITAL.....	3
WHAT TO EXPECT FROM YOUR MF DIGITAL DIRECTOR/DIRECTOR PRO PUBLISHING SYSTEM	3
ABOUT THIS MANUAL.....	3
INSTALLING THE DIRECTOR/DIRECTOR PRO	7
WHAT'S IN THE BOX.....	7
PACKING MATERIALS	7
THE BEST PLACE TO PUT THE DIRECTOR/DIRECTOR PRO	7
SAFETY PRECAUTIONS	7
LOCATION OF DIRECTOR/DIRECTOR PRO COMPONENTS	9
FRONT VIEW.....	9
REAR VIEW.....	9
REMOVING PACKING RESTRAINTS	10
INPUT AND OUTPUT SPINDLES	10
INSTALLING THE MONITOR, KEYBOARD AND MOUSE	11
CONNECTING THE MONITOR	11
CONNECTING THE MOUSE AND KEYBOARD.....	11
INSTALLING THE NETWORK CABLE	11
CONNECTING THE NETWORK CABLE	12
STARTING THE DIRECTOR/DIRECTOR PRO FOR THE FIRST TIME	13
POWER CONNECTION AND SETTINGS	13
APPLICATION STARTUP	14
STARTING THE DIRECTOR/DIRECTOR PRO APPLICATION	14
DIRECTOR/DIRECTOR PRO APPLICATION LAYOUT.....	14
DIRECTOR/DIRECTOR PRO APPLICATION CONFIGURATION	15
PRINTER DRIVER (REQUIRED)	16
OPERATOR'S EMAIL ADDRESS (OPTIONAL)	16
RECORDING SPEED (REQUIRED)	16
ASYNCHRONOUS MODE (REQUIRED).....	17
DESCRIPTION	17
DISABLED	17
JOBS=SYNCHRONOUS (FIFO), DRIVES=SYNCHRONOUS	17
LEVEL 0.....	17
LEVEL 1*.....	18
LEVEL 2*.....	18
JOBS=ASYNCHRONOUS (FIFO), DRIVES=ASYNCHRONOUS.....	18

DEFAULT JOB FILE FOLDER (REQUIRED)	18
DEFAULT IMAGE FILE FOLDER (REQUIRED).....	19
DEFAULT LABEL FILE FOLDER (REQUIRED).....	19
CREATING NEW PRIVILEGES PROFILE	19
EDITING EXISTING PRIVILEGES PROFILE	21
DELETING EXISTING PRIVILEGES PROFILE	22
CREATING NEW USERS.....	22
EDITING EXISTING USERS	23
DELETING EXISTING USERS	23
DEFAULT JOB OPTIONS.....	23
SYSTEM DRIVES	25
CONTROLLING THE DIRECTOR/DIRECTOR PRO FROM CUSTOM APPLICATIONS	25
CREATING DISC LABELS.....	27
LABEL EDITOR MENU BAR	27
CREATING TEXT	28
CHANGING TEXT AND TEXT ATTRIBUTES	29
IMPORTING GRAPHICS	29
RESIZING GRAPHICS	30
REPOSITIONING TEXT, GRAPHICS AND DATES	31
CENTERING TEXT AND GRAPHICS.....	31
SAVING THE CURRENT DISC LABEL.....	32
OPENING EXISTING DISC LABELS	33
UTILIZING .PDF FILES FOR PRINTING (COMMAND MODULE CLIENT ONLY)	34
UTILIZING .PDF FILES FOR PRINTING – CON’T (COMMAND MODULE CLIENT ONLY).....	35
CREATING DISC IMAGES	36
DATA DISC IMAGES	36
DATA IMAGE EDITOR TOOLBAR	37
STATIC AND DYNAMIC CONTENT.....	38
ADDING FILES AND FOLDERS.....	38
REMOVING FILES AND FOLDERS	38
CREATING NEW FOLDERS.....	38
NAMING A FOLDER	39
SAVING THE CURRENT DISC IMAGE FILE.....	40
LOADING AN EXISTING SCRIPT FILE.....	43
AUDIO DISC IMAGES.....	43
AUDIO IMAGE TOOLBAR.....	44
ADDING TRACKS	45
SELECTING DISC CAPACITY.....	45
REMOVING TRACKS.....	46
EDITING A TRACK.....	46
CHANGING ISRC CODES AND COPY PROHIBIT FLAGS	46
INSERTING, EDITING AND REMOVING SILENCE	47
INSERTING, EDITING AND REMOVING SUB-INDEXES	48
SAVING THE CURRENT AUDIO DISC IMAGE	49
LOADING AN EXISTING AUDIO DISC IMAGE	50
CREATING JOBS.....	51
CREATING NEW JOBS.....	51
JOB MENU BAR	52
GENERAL OPTIONS	52
JOB ID (REQUIRED)	53
USER ID (REQUIRED)	53
PASSWORD (REQUIRED)	53

IMAGE (NEEDED IF "COPY" OPTION IS CHECKED)	54
LABEL FILE (OPTIONAL)	54
COMMENTS (OPTIONAL)	56
QUANTITY (REQUIRED)	56
PRIORITY (REQUIRED)	56
SAVING THE CURRENT JOB	56
LOADING AN EXISTING JOB	57
SUBMITTING JOBS	58
SUBMITTING A JOB	58
THE PRODUCTION PROCESS	59
REMOVING A JOB	60
CLEARING THE COMPLETED JOBS LIST	60
STARTING A NEW JOB	60
ABORTING A JOB	60
VIEWING LOGS	61
VIEWING THE ERRORS REPORTED BY DIRECTOR IN THE EVENT VIEWER.	62
UPDATING JOB RECORDS	64
NAVIGATING JOB RECORDS	64
DELETING ALL JOB RECORDS	64
RESUBMITTING JOBS	64
DUPLICATING EXISTING DISCS	65
CREATING AN IMAGE FILE	65
VIEWING RESOURCES	68
UPGRADING DIRECTOR/DIRECTOR PRO SOFTWARE	69
OVERVIEW OF THE PROCESS	69

Installing the DIRECTOR/DIRECTOR PRO

Carefully remove the DIRECTOR/DIRECTOR PRO publishing system from the shipping container. Inspect the contents and verify them against the packing slip. Report any errors in shipping as soon as possible.

What's in the Box

Your DIRECTOR/DIRECTOR PRO is a complete publishing system containing all necessary components. The package includes:

- DIRECTOR/DIRECTOR PRO publishing system (either CD/DVD, or CD/DVD/Blu-ray)
- Power cords
- Operator's Guide (on CD/DVD)
- Windows license pack
- MF Digital Product & Warranty Registration card
- Printer (see Setup Guide for printer setup)

To obtain optional Director Client software (DClient) software visit www.mfdigital.com/techsupport.html

Packing Materials

Please retain the original box and packaging in the event that the unit requires future servicing. This will help to reduce the possibility of damage occurring in transit.

The Best Place to Put the DIRECTOR/DIRECTOR PRO

The best operating location for the DIRECTOR/DIRECTOR PRO publishing system is in a climate controlled area, free of dirt, dust, humidity, excessive heat, and electronic or electromagnetic interference. Room temperature should be between 65 and 75 degrees Fahrenheit, or between 18 and 23 degrees Celsius. Place the DIRECTOR/DIRECTOR PRO on a solid, steady work surface and allow sufficient room for all incidental work materials. Provide at least six inches of clearance on all sides of the unit for ventilation.

Safety Precautions

The system is shipped with a three-prong power connector and must be used with a properly grounded AC receptacle. **DO NOT** try to defeat the

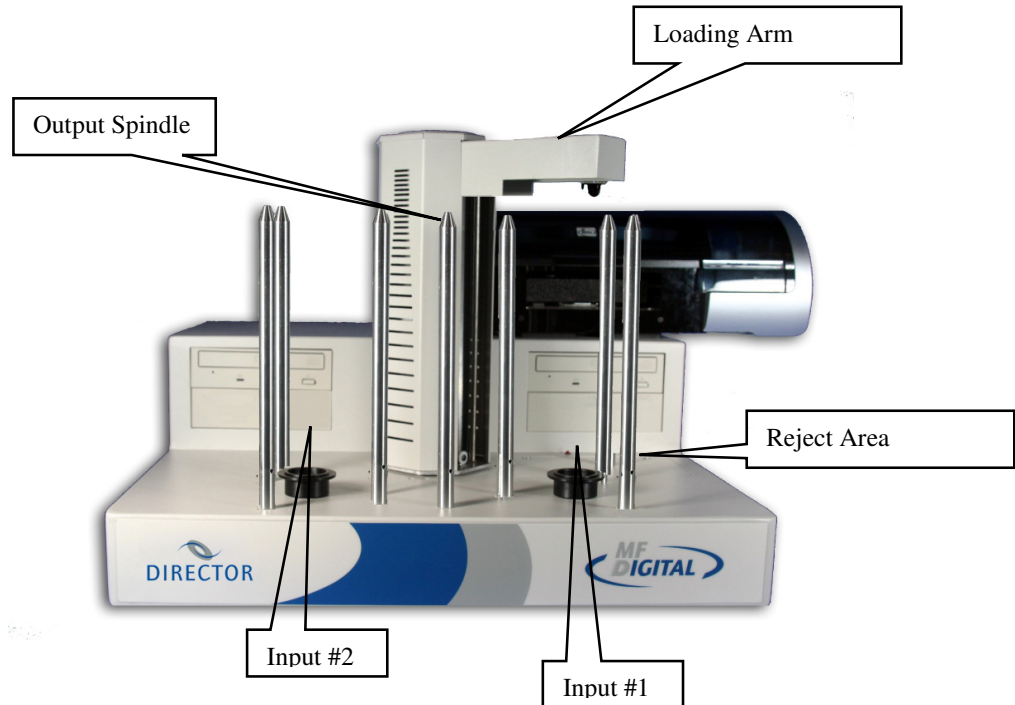
third “ground” prong. All computer peripherals must be properly grounded and the DIRECTOR/DIRECTOR PRO is no exception. The use of a power conditioner such as an Uninterruptible Power Supply (UPS), or a surge protector is highly recommended. At the very least you should consider

connecting the PC portion of the DIRECTOR/DIRECTOR PRO to a UPS. The minimum required size is 500VA.

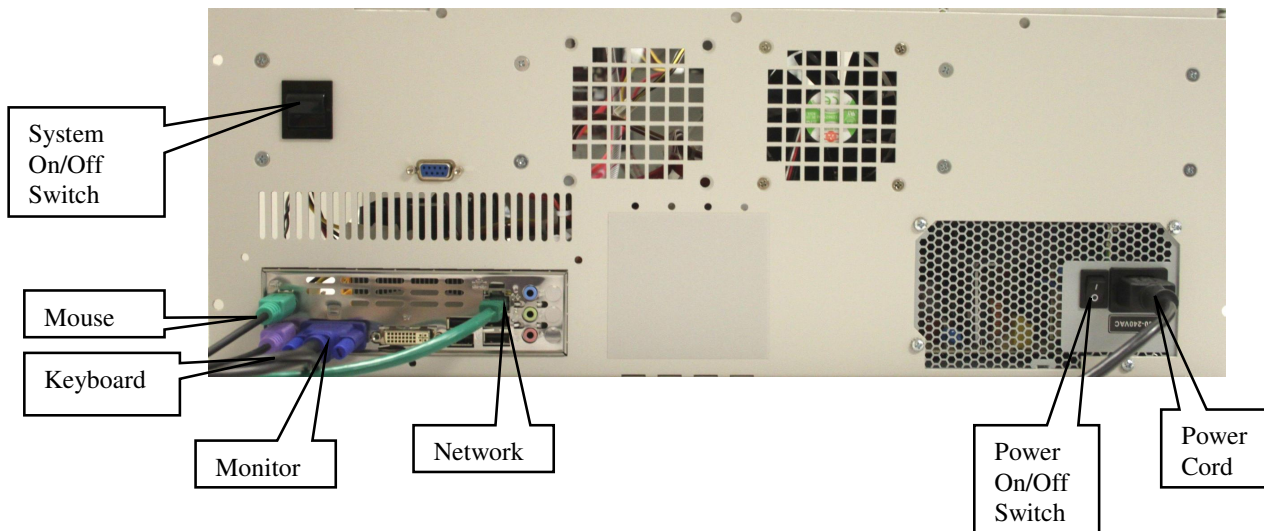
Repairs or alterations should only be attempted by authorized factory trained technicians. MF Digital reserves the right to void the warranty if unauthorized service is performed.

Location Of DIRECTOR/DIRECTOR PRO Components

Front View



Rear View



Removing Packing Restraints

The DIRECTOR/DIRECTOR PRO ships with a picker arm restraint to reduce the possibility of damage in transit. This restraint must be removed before operation or power-on. Remove the foam block above the transfer arm. Save the foam block, as you will need to return it to its place if you need to transport the unit in the future.

Input and Output Spindles

The input bin and the output spindle and bins serve as the containers to store up to 150 blank and recorded discs per bin.

NOTE: See section entitled, Loader Options when activating separate CD/DVD spindles.

Installing The Monitor, Keyboard And Mouse

Before operating the DIRECTOR/DIRECTOR PRO, the user supplied monitor, keyboard and mouse must be attached.

Connecting The Monitor

- Place the monitor on either side of the DIRECTOR/DIRECTOR PRO unit.
- Make sure the monitor power switch is set to the off position.
- Connect one end of the power cord to the VAC Out on the monitor and the other to the wall power outlet.
- Connect the DB15 male connector of the video cable to the High Density DB15 female Video In port on the back of the host computer.

Connecting The Mouse And Keyboard

- Connect the PS/2 male connector of the mouse cord to the PS/2 female Mouse In port on the back of the DIRECTOR/DIRECTOR PRO. If using USB, then connect to one of the free USB ports on the rear of the unit. Keep in mind you may need a free USB port for your printer.
- Connect the PS/2 male connector of the keyboard cord to the PS/2 female Keyboard In port on the back of the DIRECTOR/DIRECTOR PRO. If using USB, then connect to one of the free USB ports on the rear of the unit. Keep in mind you may need a free USB port for your printer.

Installing The Network Cable

In addition to operating as a standalone duplicator the DIRECTOR/DIRECTOR PRO can be connected to a network to receive files for pre-mastering or even be remotely controlled by use of the DIRECTOR/DIRECTOR PRO's Network Client Software, or your own application by way of the Director's advanced Application Program Interface (SmartAPI). The unit comes equipped from the factory with onboard gigabit LAN port for network attachment.

Note:

While networks are commonplace, their connection and interconnection require specific expertise far beyond the scope of this manual. For our purposes here, we will assume you either have expertise with networking computers, or had your unit professionally installed by MF Digital.

Connecting the Network Cable

Connect a suitable patch cord to the RJ45 network port on the back of the DIRECTOR/DIRECTOR PRO unit. A Category 3 or better cable should be used for 10Base-T, Category 5 for 100Base-T network connection, and category 5E or 6 for 1000Base-T (Gigabit)

Starting the DIRECTOR/DIRECTOR PRO For the First Time

Before Disc creation or duplication can begin it is necessary to review a few details.

Power Connection and Settings

- Make sure the DIRECTOR/DIRECTOR PRO power switch is set to the off position or “0”.
- The unit has an auto switching power supply that supports 100 – 240V AC.
- Plug one end of the supplied power cord into the receptacle at the rear of the unit and the other end into the wall or UPS power outlet.



CAUTION

Always use properly grounded receptacles, or severe damage to your system may result. The use of a surge protector or Uninterruptible Power Supply (UPS) is highly recommended.

Note:

The DIRECTOR/DIRECTOR PRO uses Microsoft's Windows For the operating system. To get the most out of the DIRECTOR/DIRECTOR PRO it is recommended that users supplement this manual with a Windows guide.

Starting Up

- Flip the DIRECTOR/DIRECTOR PRO power switch to the “on” position.
- Switch on the power to the printer.
- Wait a minute or two while the system starts up. A series of diagnostic information will be displayed and once complete the unit will display the *Windows* desktop.

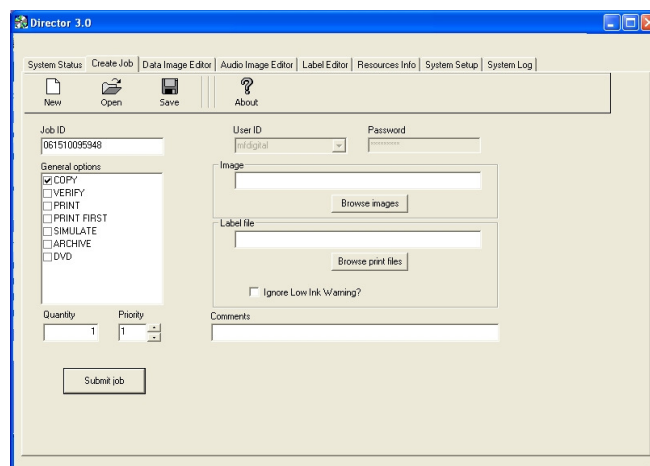
Application Startup

The DIRECTOR/DIRECTOR PRO is a state-of-the-art disc publishing system and duplicator. It is designed to create, duplicate, print and verify most standard disc formats. This startup section will guide you through starting and configuring the DIRECTOR/DIRECTOR PRO application.

Starting the DIRECTOR/DIRECTOR PRO Application

To start the DIRECTOR/DIRECTOR PRO application the steps are as follows:

- From the DIRECTOR/DIRECTOR PRO desktop, double click the “DIRECTOR/DIRECTOR PRO” icon on the Windows desktop. The DIRECTOR/DIRECTOR PRO application screen will now be displayed:



- Place as many blank discs as required onto the input spindle.

DIRECTOR/DIRECTOR PRO Application Layout

The DIRECTOR/DIRECTOR PRO application is organized into a sequence of eight pages accessible by tabs at the top of the screen (*System Status*, *Create Job*, *Data Image Editor*, *Audio Image Editor*, *Label Editor*, *Resources Info*, *System Setup*, *System Log*). By completing information on these cards you control the actions of the DIRECTOR/DIRECTOR PRO to create, duplicate and verify discs as well as print discs labels.

Tabs:

System Status	Displays the status of jobs after they have been submitted for production.
Create Job	Brings together the data or audio contents and label components of a disc so it can be produced.
Data Image Editor	Specifies the contents of a data disc to be recorded.
Audio Image Editor	Specifies the contents of an audio disc to be recorded.
Label Editor	Creates labels to be printed on the surface of discs.
Resources Info	Displays the hardware elements connected to the DIRECTOR/DIRECTOR PRO.
System Setup	Defines operating settings and user privileges.
System Log	Displays the database of information maintained on all jobs.

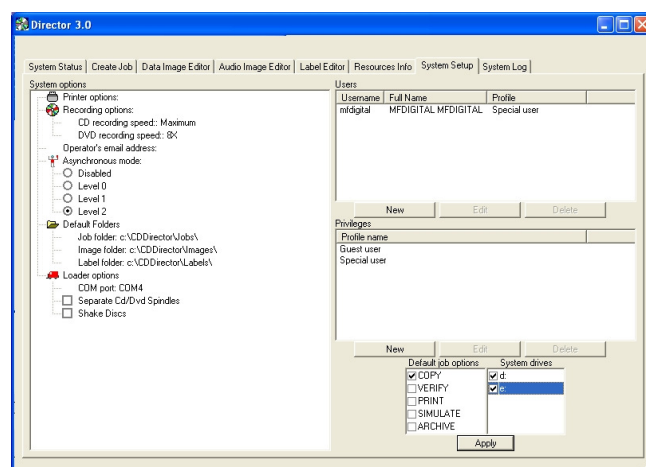
DIRECTOR/DIRECTOR PRO Application Configuration

Before creating or duplicating a disc the DIRECTOR/DIRECTOR PRO application must first be configured. The **System Setup** tab is used to establish a number of important settings including basic operation parameters as well as the authorized users and privileges they have using the DIRECTOR/DIRECTOR PRO.

Note: Apply button must be clicked in order for any changes to take effect, except for modification of users and privileges.

To begin or modify an existing setup of the DIRECTOR/DIRECTOR PRO:

- Click the **System Setup** tab. The screen will now display:



The **System Setup** tab is divided into a number of information fields that must be completed.

Printer Driver (Required)

The *Printer Driver* pull-down is used to indicate to the DIRECTOR/DIRECTOR PRO the type of printer that is installed.

- Click the *Printer Driver* pull down and select your printer.

Operator's Email Address (Optional)

The OPERATOR'S EMAIL ADDRESS field is a user defined email address to which a network attached DIRECTOR/DIRECTOR PRO will send a message when the unit requires attention (such as an empty input spindle, etc.). The email feature requires the presence of a POP3 or IMAP server on the network and that an email client account be created for use by the DIRECTOR/DIRECTOR PRO.

Note:

DIRECTOR/DIRECTOR PRO sends email via MAPI hence you must first setup a MAPI email client on the DIRECTOR/DIRECTOR PRO. Make sure you set this client to be used from MAPI based applications.

- Click the *Operator's E-mail Address* field and enter an email address. Leave the field blank if the DIRECTOR/DIRECTOR PRO is not attached to a network or if you do not want to receive unit attention messages.

Recording Speed (Required)

The *Recording Speed* pull-down allows you to set the recording speed as determined by the capabilities of the recorders installed in the DIRECTOR/DIRECTOR PRO.

- Click the *Recording Speed* pull down either for CD, DVD, or Blu-ray (if equipped) and select the desired recording speed.
- Click Apply to activate the changes.

Note:

For CD: "4x, 8x, 12x, 16x, 20x, 24x, 40x," or "maximum speed"

For DVD: "6x, 8x, 12x" or "maximum speed"

Asynchronous Mode (Required)

The *Asynchronous Mode* pull-down is used to instruct the DIRECTOR/DIRECTOR PRO how to process jobs. This affects both how jobs are handled and how the drives operate. Jobs and drives can run either synchronously or asynchronously. In the table below you will find each mode detailed. Let's define the basic modes first:

Jobs=Synchronous / Asynchronous

When jobs are Synchronous, they are completed in the order in which they were submitted. Take for example two jobs submitted for one copy each. The first job is of a 650MB master while the second job is only 10MB. While the second job submitted will be completed prior to the first job, it will not be outputted to the accept spindle until the second job has been completed. When jobs are Asynchronous they will be outputted to the accept spindle as they are completed.

Drives=Synchronous /Asynchronous

Drives can also run either synchronously or asynchronously. In synchronous mode, all the drives in use for a given job, run in tandem or parallel to one another. In asynchronous mode, all the drives in use for a given job, operate independently of each other. For example if you submit a job for three copies and the drives are operating synchronously, the copying process will not begin until all drives become ready. On the other hand, if the same job were submitted with the drives operating asynchronously, each drive would begin to write as soon as it becomes ready, independently of any other drives which may also be in use for this particular job. Asynchronous mode is more demanding of system resources.

The modes of operation are:

<i>Mode</i>	<i>Description</i>
<i>Disabled</i>	<i>Jobs=Synchronous (FIFO), Drives=Synchronous</i> When the setting is "disabled", jobs are processed on a first in/first out (FIFO) basis such that they will be kept together when placed on the output spindle. For example, let us say two jobs of one piece each are submitted. Job 1 is a 650 MB disc and Job 2 is a 10 MB disc. Even though Job 2 was submitted last, it will completed before Job 1 but it will NOT be outputted to the accept spindle until Job 1 is done.
<i>Level 0</i>	<i>Jobs=Asynchronous, Drives=Synchronous (Default)</i> When the setting is "level 0" jobs are still started on a first in / first out basis, but completed jobs will be outputted when they are done and

therefore discs will be mixed together on the output spindle. For example, let us say two jobs of two pieces each are submitted. Job 1 is a 650 MB

disc and Job 2 is a 10 MB disc. Even though Job 2 was submitted last, it will completed before Job 1 but unlike the DIASBLED mode, it will not be held but rather immediately outputted to the accept spindle when it is done. In processing the respective jobs, the two drives in use for each job will function in tandem such that they will not begin to write until both drives have become ready.

Level 1*

Jobs=Synchronous (FIFO), Drives=Asynchronous

When the setting is “Level 1”, jobs are processed on a first in/first out (FIFO) basis such that they will be kept together when placed on the output spindle. For example, let us say two jobs of two pieces each are submitted. Job 1 is a 650 MB disc and Job 2 is a 10 MB disc. Even though Job 2 was submitted last, it will completed before Job 1 but it will NOT be outputted to the accept spindle until Job 1 is done. In processing the respective jobs, the two drives in use for each job will function independently of one another and begin to write as soon as they become ready.

Level 2*

Jobs=Asynchronous (FIFO), Drives=Asynchronous

When the setting is “level 2” jobs are still started on a first in / first out basis but completed jobs will be outputted when they are done. For example, let us say two jobs of two pieces each are submitted. Job 1 is a 650 MB disc and Job 2 is a 10 MB disc. Even though Job 2 was submitted last, it will completed before Job 1 but unlike the DIASBLED mode, it will not be held but rather immediately outputted to the accept spindle when it is done. In processing the respective jobs, the two drives in use for each job will function independently of one another and begin to write as soon as they become ready. In this mode, disc placement on output spindle will be scattered.

- Click the ASYNCHRONOUS MODE pull down and select the desired “disabled” or “level O” setting (*level 1 and level 2 not used*).

Default Job File Folder (Required)

The DEFAULT JOB FILE FOLDER field is used to specify the default location where job files (*.JOB) will be saved. The factory setting (C:\discDIRECTOR\Jobs\) should be sufficient for most uses. To change the default setting:

- Click the *Browse* button below the DEFAULT JOB FILE FOLDER field.
 - Select the volume and DIRECTOR/DIRECTOR PRO where you wish to save job files.
 - Click the *OK* button.
-

Default Image File Folder (Required)

The DEFAULT IMAGE FILE FOLDER field is used to specify the default location where disc image script (*.ISC) will be saved. The factory setting (C:\discDIRECTOR\Images\) should be sufficient for most uses. To change the default setting:

- Click the *Browse* button below the DEFAULT IMAGE FILE FOLDER field.
- Select the volume and DIRECTOR/DIRECTOR PRO where you wish to save disc image files.
- Click the *OK* button.

Default Label File Folder (Required)

The DEFAULT LABEL FILE FOLDER field is used to specify the default location where disc label files (*.LBL) will be saved. The factory setting (C:\discDIRECTOR\Labels\) should be sufficient for most uses. To change the default setting:

- Click the *Browse* button below the DEFAULT LABEL FILE FOLDER field.
- Select the volume and DIRECTOR/DIRECTOR PRO where you wish to save disc label files.
- Click the *OK* button.

Loader Options

Shake Disc – By selecting Shake Disc the loader arm will shake the disc after picking to prevent multiple discs being lifted at the same time. Though, you should always separate the media as you load to the unit as this helps prevent discs from sticking together as well.

Spindle Select – By selecting this option the left and right spindles are separated respectively to DVD and CD. **NOTE:** Keep in mind, when selecting this option; you only load 75 Discs in each hopper. As the output hopper is now shared.

Creating New Privileges Profile

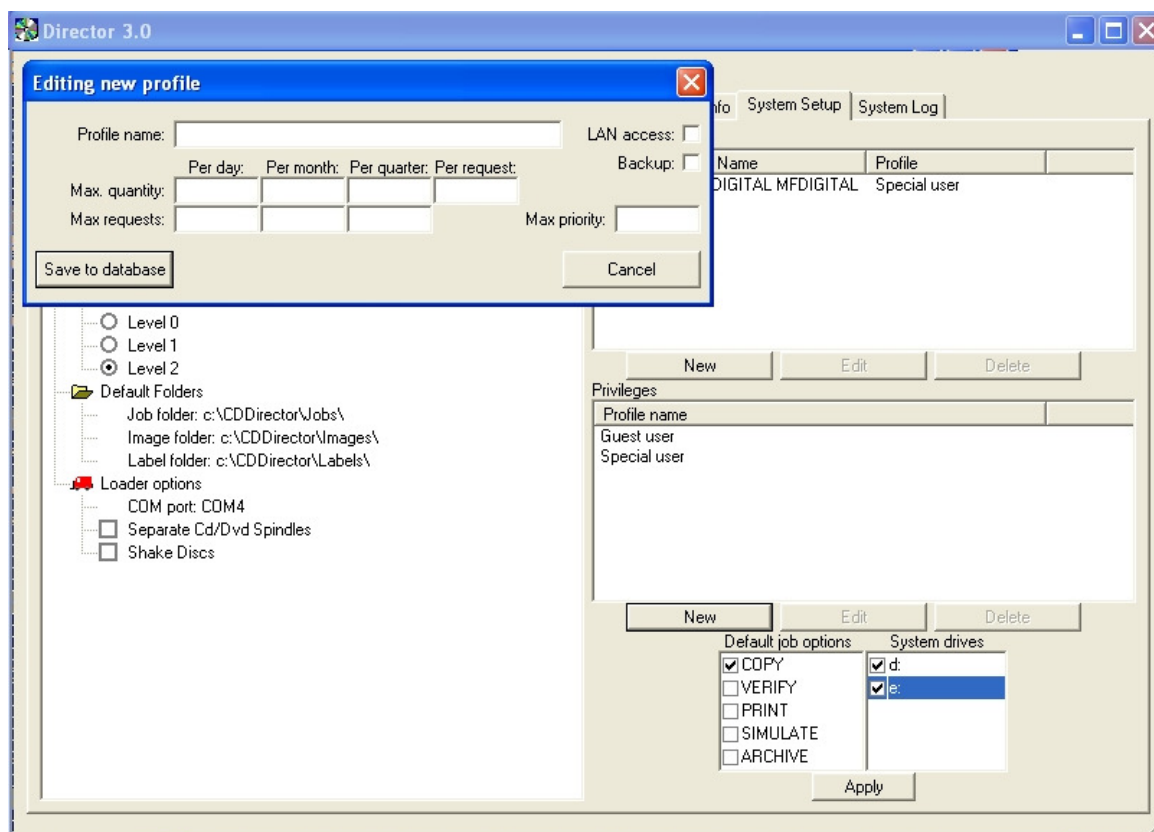
Control access to the DIRECTOR/DIRECTOR PRO by restricting use to only authorized users. The main intent of this is for jobs submitted remotely

through the included *Network Client*, or through other client side applications. New users must first be entered into the DIRECTOR/DIRECTOR PRO's database and their privileges or permissions assigned.

The first step in entering new users into the database is to create profiles, which define types or classes of users and their work privileges on the DIRECTOR/DIRECTOR PRO. For example, a "Team Leader" profile might be established for users who need to produce an unlimited number of discs and a "Team Member" profile created for other users in order to restrict the number of discs they can produce in a given period of time.

To create a new privilege profile:

- Click the *New* button below the PRIVILEGES window.
- Complete these required fields



Editing Privileges

Profile name	Required. Enter the profile name.
Max quantity per day	Required. Enter the maximum number of discs this type of user is allowed to record/print per day.
Max quantity per month	Required. Enter the maximum number of discs this type of user is allowed to record/print per month.
Max quantity per quarter	Required. Enter the maximum number of discs this type of user is allowed to record/print per quarter.
Max quantity per request	Required. Enter the maximum number of discs this type of user is allowed to record/print per job.
Max requests per day	Required. Enter the maximum number of jobs this type of user is allowed to submit per day.
Max requests per month	Required. Enter the maximum number of jobs this type of user is allowed to submit per month.
Max requests per quarter	Required. Enter the maximum number of jobs this type of user is allowed to submit per quarter.
Max priority	Required. Enter the maximum priority (1 lowest - 99 highest) this type of user is allowed to assign a job. Jobs are queued based on order of submission and priority. Jobs of higher priority will be queued before jobs of lower priority. If the priority level is the same, the job will be processed in order of submission.

- When finished entering the information, click the *Save To Database* button.

Editing Existing Privileges Profile

To edit an existing privilege profile:

- Click the privilege profile you wish to edit and click the *Edit* button below the PRIVILEGES window. The privileges information boxes will be displayed.
 - Make any changes as needed then click the *Save To Database* button.
-

Deleting Existing Privileges Profile

To delete an existing privileges profile:

- Click the privilege profile you wish to delete and click the *Delete* button below the PRIVILEGES window.
- Click the *Yes* button to confirm.

Note:

You may NOT delete a Profile while users are assigned to it. You must first either delete or assign the users a new profile, then the profile may be deleted.

Creating New Users

After creating suitable privileges profiles the next step is to enter new users and their personal information into the DIRECTOR/DIRECTOR PRO's database.

To create a new user:

- Click the *New* button below the USERS window.
- Complete the user information boxes:

Creating New Users

Username	Required. Enter a name for the user. (15 characters maximum, A to Z, 0 to 9)
First Name	Required. Enter the user's first name. (16 characters maximum, A to Z, 0 to 9)
Last Name	Required. Enter the user's last name. (31 characters maximum, A to Z, 0 to 9)
Password	Required. Enter the user's password. (15 characters maximum, A to Z, 0 to 9)
Confirm Password	Required. Enter the user's password a second time.
Privileges	Required. Select a defined privileges profile.
Max Quantity	Determined by privileges profile.
Max Requests	Determined by privileges profile.
Max Priority	Determined by privileges profile.
Company	Optional. Enter the user's company name. (63 characters maximum, A to Z, 0 to 9)
Department	Optional. Enter the user's department name. (31 characters maximum, A to Z, 0 to 9)

Street Address 1	Optional. Enter the user's street address. (63 characters maximum, A to Z, 0 to 9)
Street Address 2	Optional. Enter the user's street address. (63 characters maximum, A to Z, 0 to 9)
City	Optional. Enter the user's city. (31 characters maximum, A to Z, 0 to 9)
State/Province	Optional. Enter the user's state or province. (15 characters maximum, A to Z, 0 to 9)
Zip/Postal Code	Optional. Enter the user's Zip or postal code. (15 characters maximum, A to Z, 0 to 9)
Country	Optional. Enter the user's country. (15 characters maximum, A to Z, 0 to 9)
Phone	Optional. Enter the user's telephone number.
Fax	Optional. Enter the user's fax number.
Email	Optional. Enter the user's email address.
Date Entered	Automatic. The DIRECTOR/DIRECTOR PRO automatically registers the date and time the user's information is entered.

- When finished entering the information click the *Save To Database* button.

Editing Existing Users

To edit an existing user:

- Click the username you wish to edit and click the *Edit* button below the USERS window and the user information boxes will be displayed.
- Make any changes as needed then click the *Save To Database* button.

Deleting Existing Users

To delete an existing user:

- Click the username you wish to delete and click the *Delete* button below the USERS window.
- Click the *Yes* button to confirm.

Default Job Options

The DEFAULT JOB OPTIONS window allows you to specify which production options will be enabled on the ***Job*** tab when the DIRECTOR/DIRECTOR PRO application is started. Setting these defaults can save time if the type of jobs you produce fall into a regular pattern.

To change the job option defaults:

- Select or de-select the check box next to the appropriate option:

Default Job Options:

Copy	When checked the Copy option on the <i>Job</i> tab will be enabled by default.
Verify	When checked the Verify option on the <i>Job</i> tab will be enabled by default.
Print	When checked the Print option on the <i>Job</i> tab will be enabled by default.
Simulate	When checked the Simulate option on the <i>Job</i> tab will be enabled by default.
Archive	When checked the Archive option on the <i>Job</i> tab will be enabled by default.

Using Third Party pre-mastered DVD Image Files on MF Digital Director

Many DVD authoring and pre-mastering programs have the ability to create image files. Most will create a UDF compatible image file but filename extensions can vary. Some applications use .ISO, some .IMG, as well as various others. These image files can be used in MF Digital's Director, however they must be renamed *.UDF.

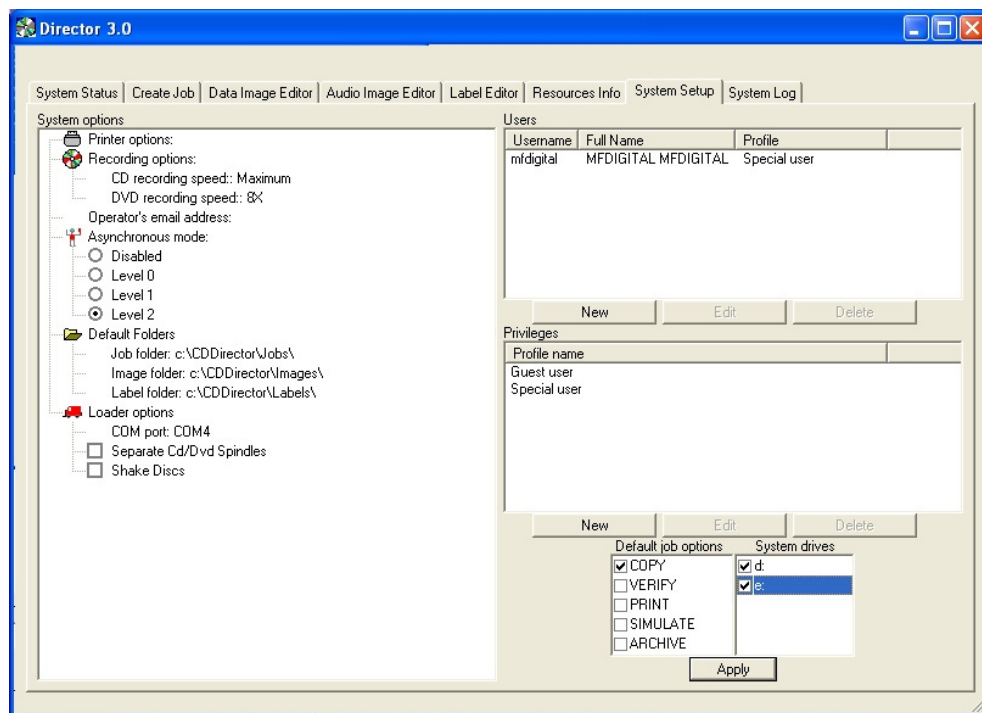
System Drives

The SYSTEM DRIVES window allows you to specify which hard disk drives the DIRECTOR/DIRECTOR PRO uses exclusively. The factory settings should be sufficient for most uses.

DIRECTOR/DIRECTOR PRO (2604 – 4 Drive): Be sure that drives **D**, **E**, **F** and **G** are selected.

Director Office Publisher (2602 – 2 Drive): Be sure that drives **D** and **E** are selected.

Example of DIRECTOR/DIRECTOR PRO



To change the SYSTEM DRIVES:

- Select or de-select the check box next to the appropriate drive.
- Click “Apply” after making the changes.

Controlling the DIRECTOR/DIRECTOR PRO From Custom Applications

In addition to operating the DIRECTOR/DIRECTOR PRO from its console, you have the option to remotely control the system from anywhere on the

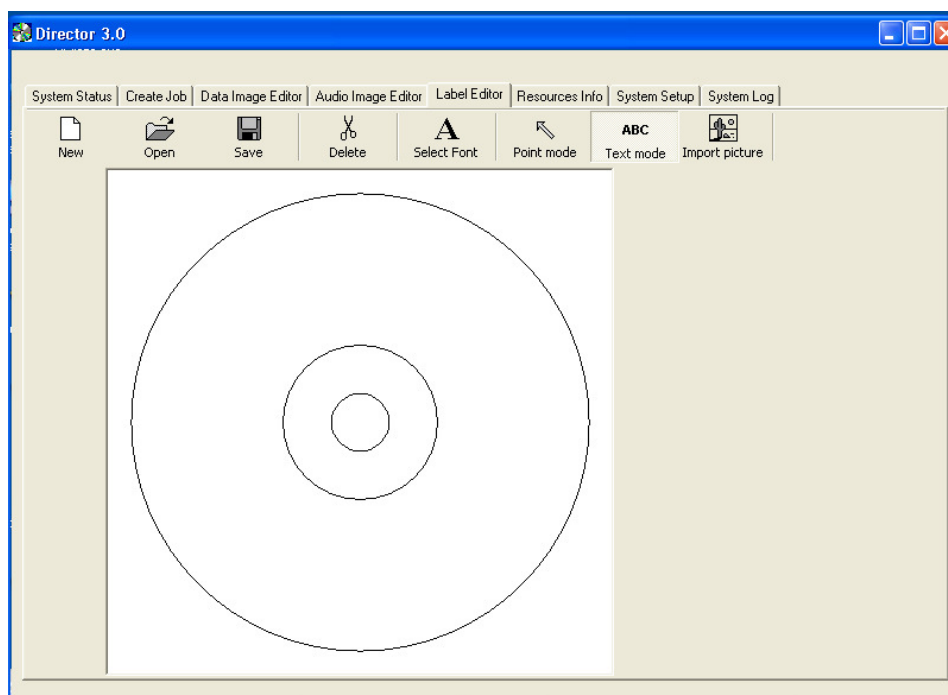
network using your own custom applications or scripts. This is accomplished using the DIRECTOR/DIRECTOR PRO's Application Program Interface (SmartAPI) after initial configuration using the ***System Setup*** tab. For additional information see the DIRECTOR/DIRECTOR PRO's SmartAPI Programmer's Guide.

Creating Disc Labels

The first step in creating a disc is to create a label that will be printed on the surface of the disc. The DIRECTOR/DIRECTOR PRO's built-in label design software provides a quick and easy way to create simple disc labels that contain text and graphics. More sophisticated labels can be created by using the provided software included with the printer.

To use the DIRECTOR/DIRECTOR PRO's built-in label design software:

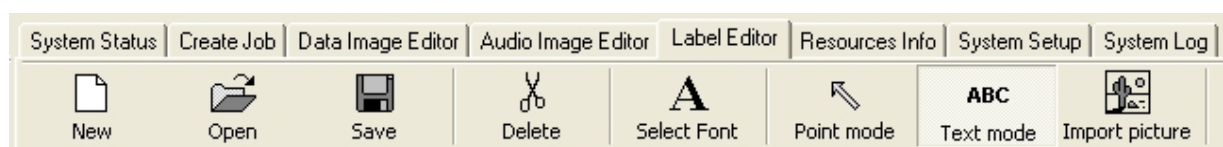
- Click the **Label Editor** tab. The screen will now display:



The **Label Editor's** main editing window consists of two concentric circles that graphically represent the surface appearance of a disc.

Label Editor Menu Bar

Horizontally along the top of the Label Editor window is the menu bar, as depicted below:



The menu bar contains eight buttons: *New*, *Open*, *Save*, *Delete*, *Select Font*, *Point Mode*, *Text Mode* and *Import Picture*.

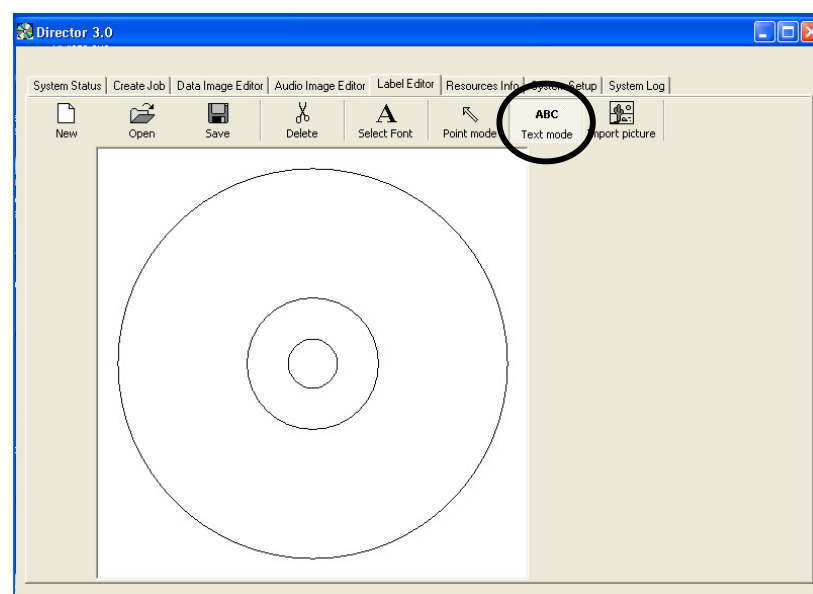
Label Menu Buttons:

New	Creates a new disc label.
Open	Opens an existing disc label file (*.LBL).
Save	Saves the current disc label.
Delete	Cuts the selected item
Select Font	Used to select the font, style, size and color before creating text on the disc label.
Point Mode	Used to select a piece of text, date field or graphic image so it can be moved, modified or deleted.
Text Mode	Used to create text on the disc label.
Import Picture	Used to place a graphic image file created using other software on the disc label.

Creating Text

Using the *Text Mode* tool, you can create horizontal text anywhere on your disc label. In addition, once the text has been entered it can be repositioned and its font and other attributes changed. To create text:

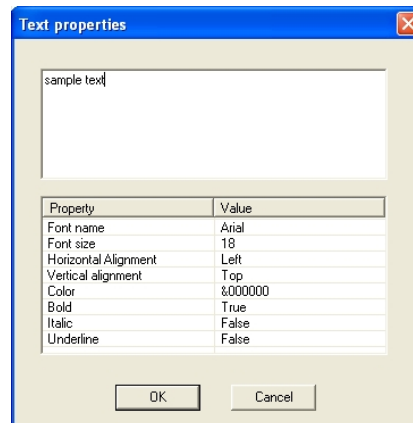
- Click the *Text Mode* button on the toolbar.
- Click where you want the type to begin.
- Enter the text you want.



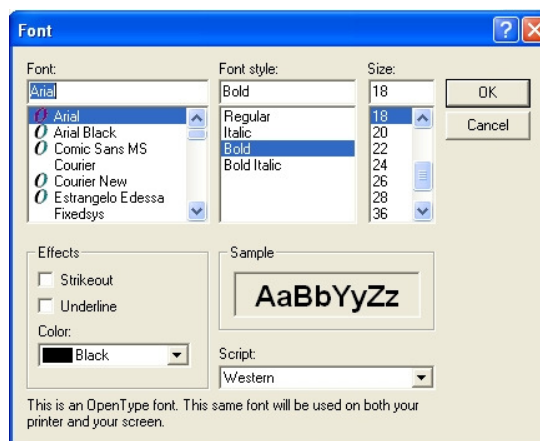
Changing Text and Text Attributes

To change the attributes of a piece of text once it has been entered:

- Click the *Point Mode* button on the toolbar.
- Double click the piece of text you wish to change. The screen will now display:



- To change the text that you previously typed in, edit the contents of the text box.
- To change the font, style, size or color, click the *Select Font* button. The screen will now display:

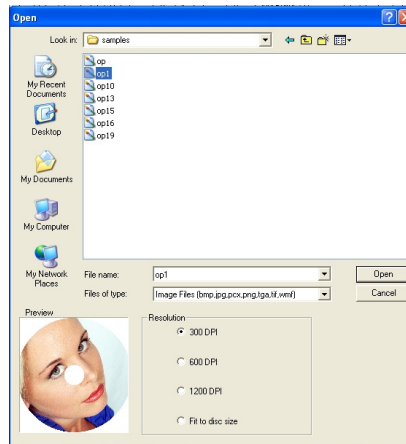


- After making the changes click the *OK* button.
- Click the *OK* button.

Importing Graphics

Using the *Import Picture* tool, you can place graphics created using other software anywhere on your disc label. To import a graphics file:

- Click the *Import Picture* button on the toolbar. The screen will now display:

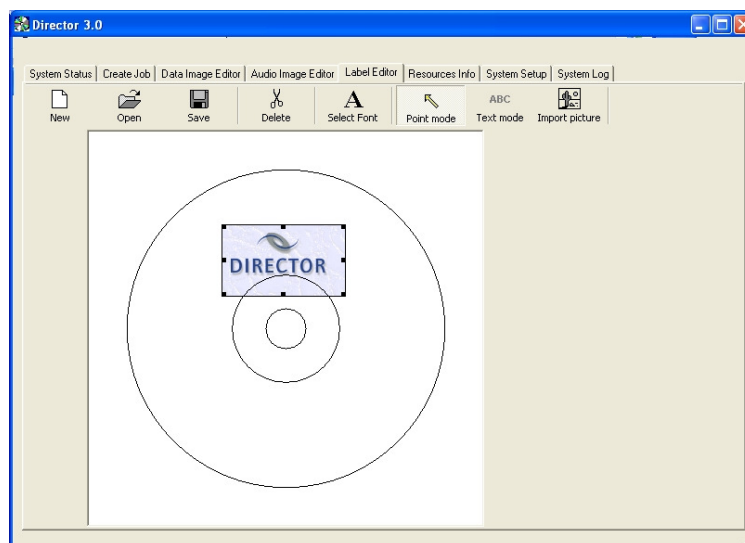


- Select the graphics file you wish to import (supported formats include BMP, JPG, PCX, PNG, TGA, TIF and WMF).
- Click the *Open* button.

Resizing Graphics

To proportionally resize a graphic image after it has been imported:

- Click the *Point* button on the toolbar.
- Click the graphic image you wish to resize. A bounding box will appear around the image with eight solid squares (handles).
- Click and drag the appropriate handle until the image is the correct size and release the mouse button.



Repositioning Text, Graphics and Dates

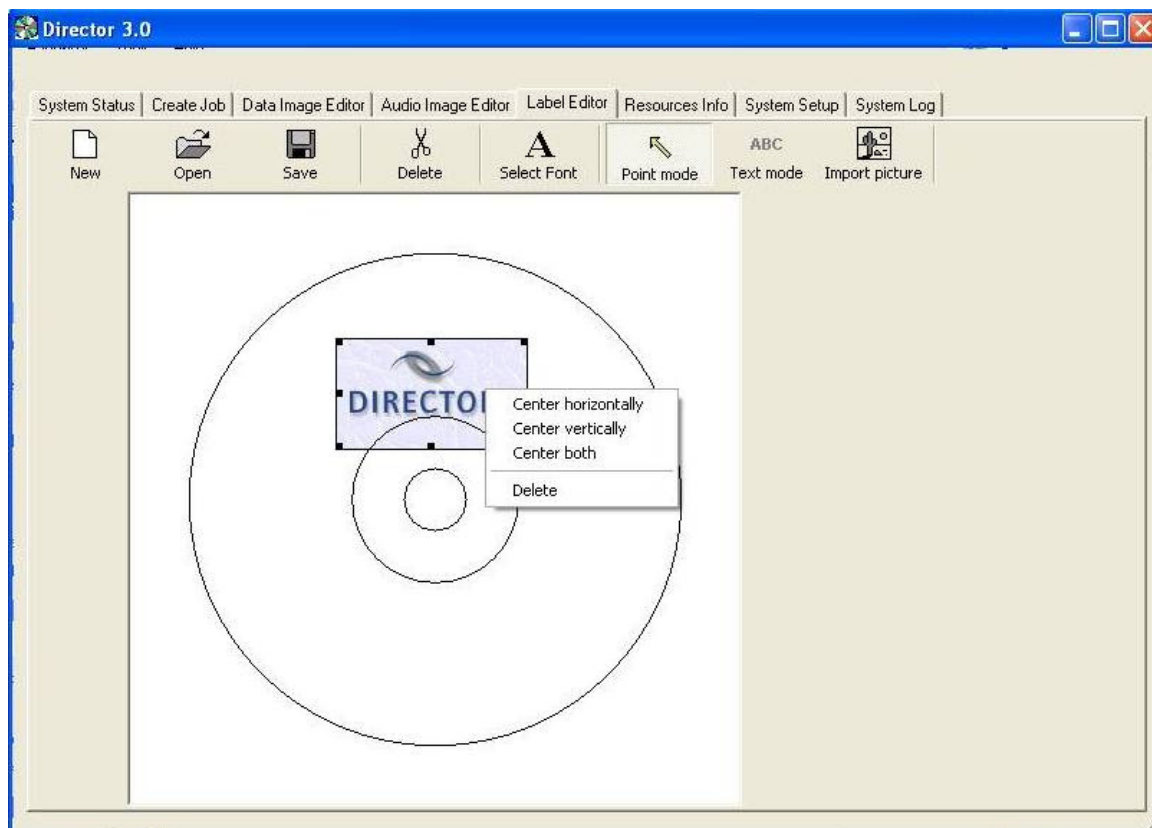
To reposition a piece of text, a graphic image or a date field after it has been created or imported:

- Click the *Point* button on the toolbar.
- Click and hold on the selected text or graphic image you wish to move.
- Drag the text or graphic image to the desired location and release the mouse button.

Centering Text and Graphics

To center text or graphic images after they have been created or imported:

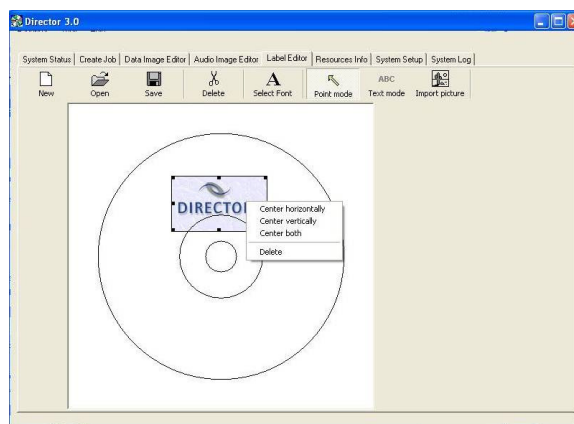
- Click the *Point* button on the toolbar.
- Right-click on the text or graphic image. A pop-up menu, as depicted below, will appear.
- You may center text horizontally only. You may choose to center graphics horizontally, vertically, or both. Clicking on the “Center” pop-up menu option centers the graphic horizontally and vertically.



Deleting Text, Graphics and Dates

To delete a piece of text, a graphic image or a date field after it has been created or imported:

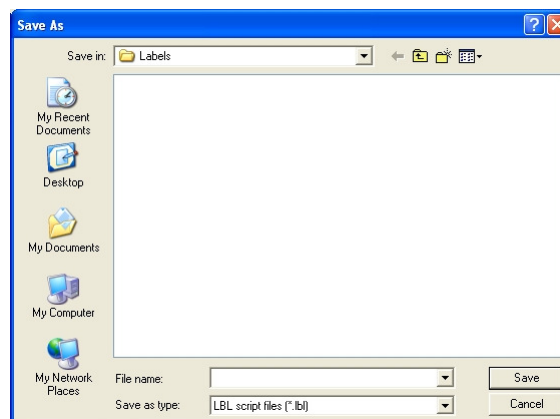
- Click the *Point Mode* button on the tool bar.
- Click the piece of text or graphic image you wish to delete.
- Click the *Delete* button on the menu bar or press the **DELETE** key on the keyboard. Optionally, you may right-click on the object as described in “Centering Text and Graphics” and then select delete in the pop-up that appears.



Saving the Current Disc Label

Once a disc label has been created, it must be saved in order for the DIRECTOR/DIRECTOR PRO to use it as a source label for printing. Disc labels are saved as files with an “LBL” extension. To save a disc label:

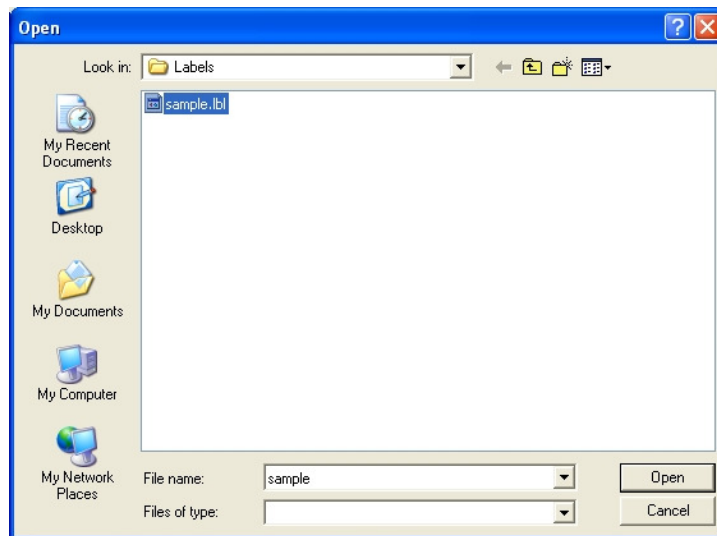
- Click the *Save* button on the menu bar.
- Select the proper folder where you want to save the disc label file.
- Enter the name for the disc label file and click the *Save* button.



Opening Existing Disc Labels

Once a disc label has been saved it can be modified at a later date. To open an existing disc label file:

- Click the *Open* button on the menu bar.
- Select the appropriate file and click the *Open* button.



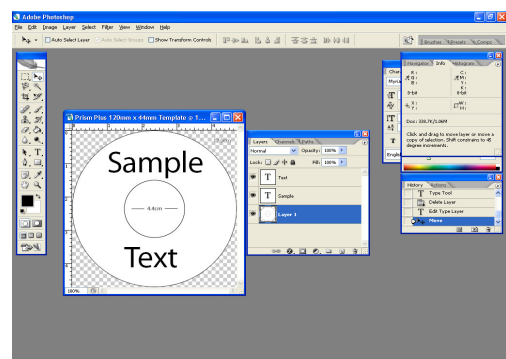
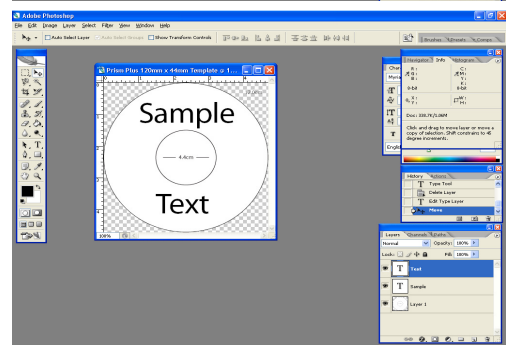
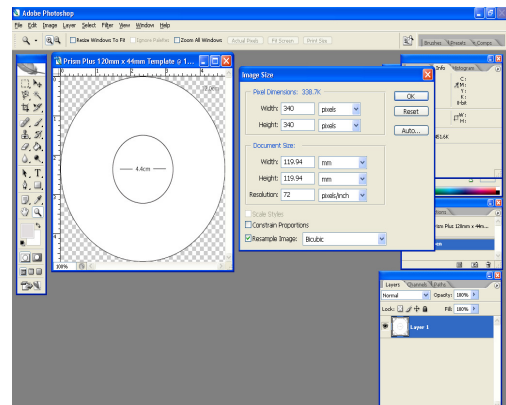
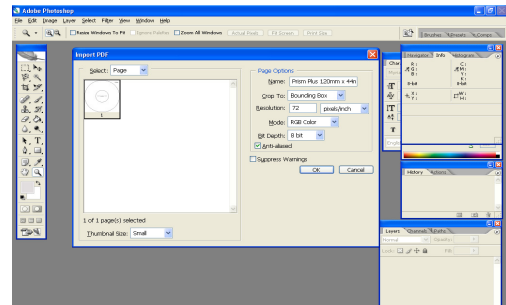
Utilizing .PDF Files for Printing (Command Module Client Only)

MF Digital Duplication Systems now allows you to create your Disc labels using the popular Adobe Acrobat File, PDF for printing. To make this process simple, MF Digital has created PDF templates for you to design your artwork on. These templates are located on our tech support page.

<http://www.mfdigital.com/techsupport.html>

To use these templates, please follow the instructions below. For this example we will use Adobe Photoshop.

- Open Adobe Photoshop and from the File Menu, choose Open. Browse to find the PDF template that you downloaded and choose that file, click the open button. You will be alerted with an IMPORT PDF dialog window. **Fig. A**
- Click the OK button.
- The template will open in Adobe Photoshop. If you select the IMAGE menu, then choose Image Size, the image size dialog will appear, verify the Document Size, Height & Width reads the correct size for the template you are working with. For this example, the document size reads, 119.94mm x 119.94mm. **Fig. B**
- When laying out text in Photoshop, Photoshop automatically creates a new layer, one for each piece of text you add, should you need to insert a graphic. From the Layer Menu, choose LAYER->NEW LAYER. Photoshop will insert a new layer for you. You can then add the graphic onto this layer.(Yellow Square) **Fig. C**



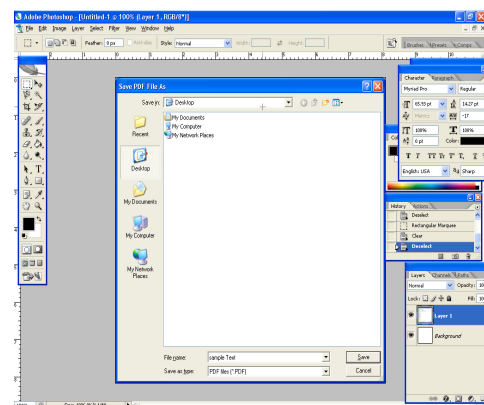
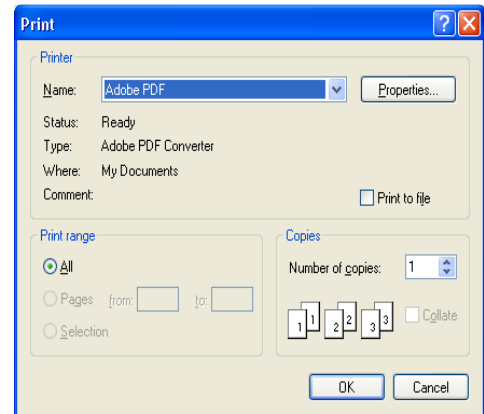
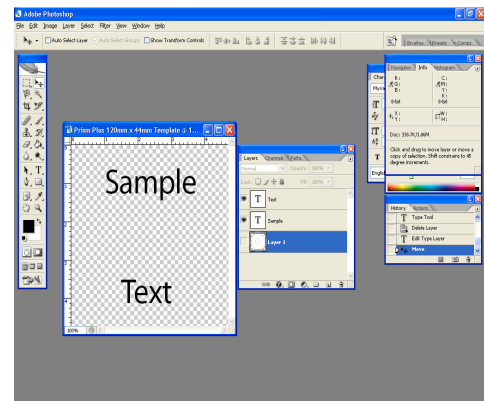
Utilizing .PDF Files for Printing – Con't (Command Module Client Only)

- After you lay out your design, the template layer needs to be “turned off”. This is simply done by using the layers palette. (red square, **Fig. D**) You'll notice to the left of each layer is an eye. Clicking the eye will turn that layer off. Notice the template now disappears. **Fig. E**
- You will now need to convert your design into a PDF file, to do this, make sure you have Adobe Acrobat installed. From the File Menu, choose Print. Under the Printer section of the Print Dialog, change the Printer name to the PDF Printer (acrobat versions vary in names). **Fig. F** Click the OK button.
- You will be prompted to give a name to the PDF file. The default name that should be used for Standalone units, is **1.PDF**. If this is a multi set of labels, then label the PDF filename accordingly (example, 1.PDF, 2.PDF, etc.). **Fig. G**



CAUTION

Please ensure the Client Machine or workstation where D-Client is being used, does not have the “full” version of Acrobat installed. Instead please install Acrobat Reader, v 6.0 or higher.



Note: When submitting PDF files for printing via D-Client. The drivers for the printer in which you are submitting to, must be loaded on the client machine or workstation as D-Client.

Please ensure that the printer that you are submitting to is set as the default printer.

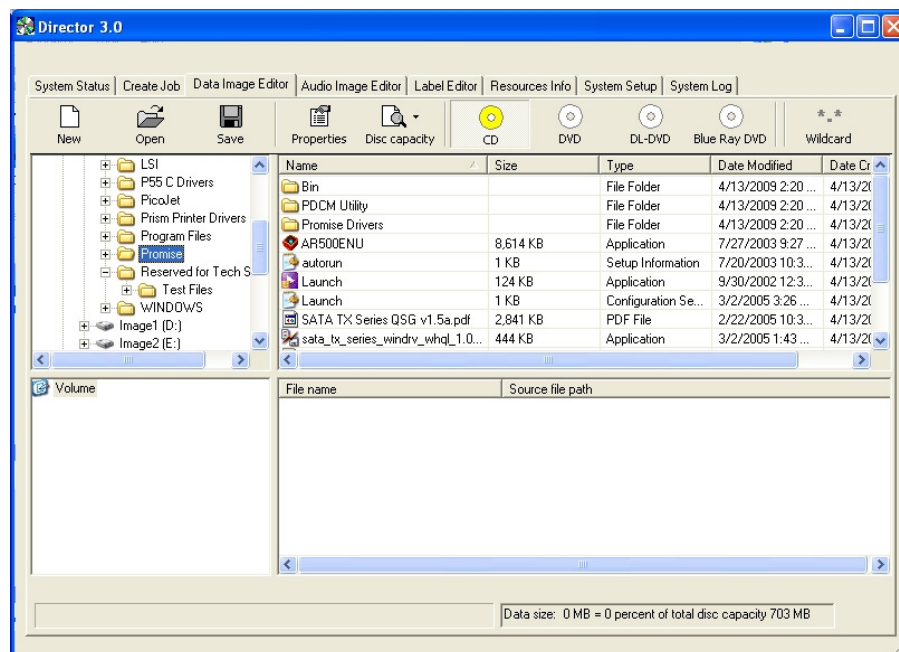
Creating Disc Images

After creating a label, the next step in constructing a disc is to specify its contents (disc image). The DIRECTOR/DIRECTOR PRO creates industry standard data (Mode 1 ISO 9660 level 2 with Joliet extensions) and audio (Red Book) discs from scratch as well as duplicates existing discs authored in most formats. In this section we cover how to create the disc contents from files residing on the local system or a remote system connected via a network. If you already have a disc and simply wish to copy it, refer to the section entitled *Duplicating Existing discs*.

Data Disc Images

To create a data disc image:

- Click the *Data Image Editor* tab. The screen will now display:



The *Data Image Editor* tab is divided into four panes. The top left pane lists all of the names and icons of the files and folders on the currently selected disk drive (source). The top right pane displays the contents of any item you click on in the top left pane along with its icon. The bottom left pane lists all the names and icons of files and folders on the disc that is being created (disc image). The bottom right pane displays the contents of any item you click on in the bottom left pane along with its icon.

Data Image Editor Toolbar

The toolbar is located horizontally at the top of the application window and contains ten buttons which are: New, Open, Save, Properties, Disc Capacity, CD, DVD, DL-DVD, Blu-Ray DVD and Wildcard.



Data Image Editor Toolbar:

New Folder	Creates a new volume.
Open	Opens an existing folder on the disc image.
Save	Saves files or folders.
Properties	Displays properties about the image: volume title, Publisher, Data Preparer, Copyright File, Abstract File and Bibliographic File
Disc Capacity	Allows selection of capacity of discs loaded into DIRECTOR/DIRECTOR PRO i.e. 74 minute/650MB, 80 minute/700MB, <i>DVD 3.95GB and DVD 4.7GB.</i>
CD	Lets DIRECTOR/DIRECTOR PRO know CD media is in use.
DVD	Lets DIRECTOR/DIRECTOR PRO know DVD media is in use.
Blue Ray DVD	Lets DIRECTOR/DIRECTOR PRO know Blu Ray media is in use.
. Wildcard	Allows specification of dynamic content

Static and Dynamic Content

The DIRECTOR/DIRECTOR PRO allows discs to be created from both *static* and *dynamic* content. A finished disc created from *static* content will contain the exact files and folders that are specified when the disc image is created. A finished disc created from *dynamic* content will contain the files and folders that exist in specified locations at the time the job is submitted for recording (rather than when the disc image is created).

For example, specifying *dynamic* content when creating a disc layout would allow a job to be run every week that records the contents of a specific folder onto a disc without having to create a new disc image every time. In this case the contents of the folder (not the folder itself) can change.

To specify a file or folder on a disc image as containing dynamic content:

- Highlight the Volume which will be using dynamic source then Click the *.* check box.

Note: Please be sure not to exceed the capacity of the disc being used.

Adding Files and Folders

- Click the desired file or folder in the top left or right pane (source) and hold down the mouse button.
- Drag the file or folder over the disc icon in the lower right then release the mouse button
- Files and folders can also be added to the disc image using the *Open* button. A box appears choose the image and click the *Open* button the image will be added.

Removing Files and Folders

- Click the desired file or folder in the bottom left or right pane (disc image)
- Right click the file or folder and choose *Delete* from the toolbar which appears.

Creating New Folders

- Click the desired root or folder area in the left or right pane (disc image).
- Click the *New Folder* button on the toolbar.

Naming a Folder

- Right click the desired folder in the bottom left or right pane (disc image).
- Choose *Rename* from the drop down menu, which appears.

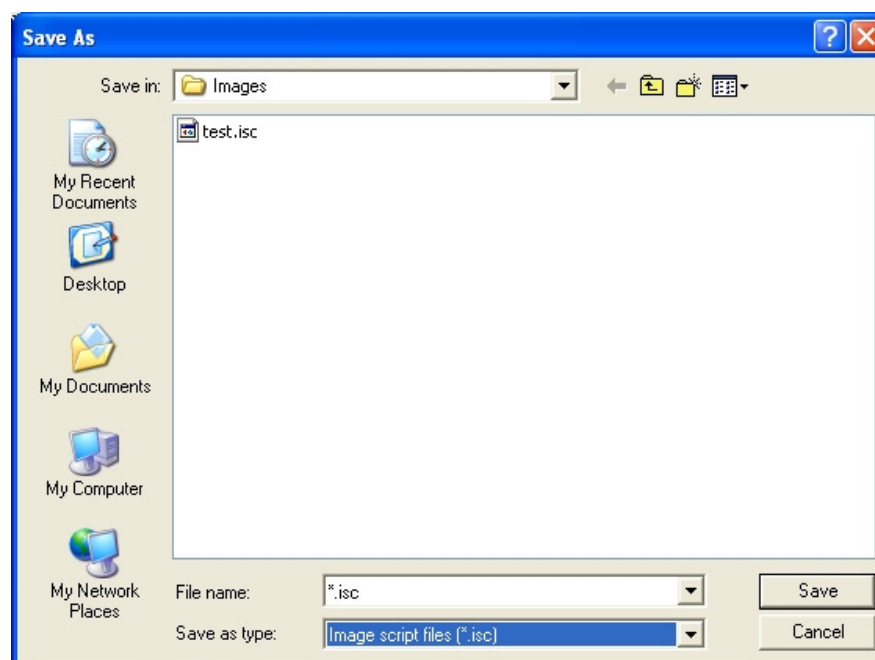
Saving the Current Disc Image File

Once a data disc image has been created, it must be saved for the DIRECTOR/DIRECTOR PRO to use it as a data source for recording. Disc images can either be saved as script files (with an “ISC” extension) or physical image files (with an “ISO” extension).

A script file (ISC) contains pointers to the source data files and is used as a guide at the time of recording the disc. Since a script file does not include the source data it is best used when producing unique projects with dynamic content, or when the source data will always be available to the DIRECTOR/DIRECTOR PRO. Or, if producing software, a “static” image would be best to ensure content.

A physical image file (ISO used for CD) or (UDF used for DVD) is an exact replica of the final disc and contains all of the source data. It is therefore best used when producing static projects that are recorded on a regular basis, and when source data will not always be available to the DIRECTOR/DIRECTOR PRO. Please note that, depending upon the amount of data to be recorded, a physical image file can occupy as much as 700 MB (CD) or 4.7MB (single layer DVD) of hard disk space. ***Note: If you are equipped with a Blu-Ray system, the resulting image file extension will be a *.UDF***

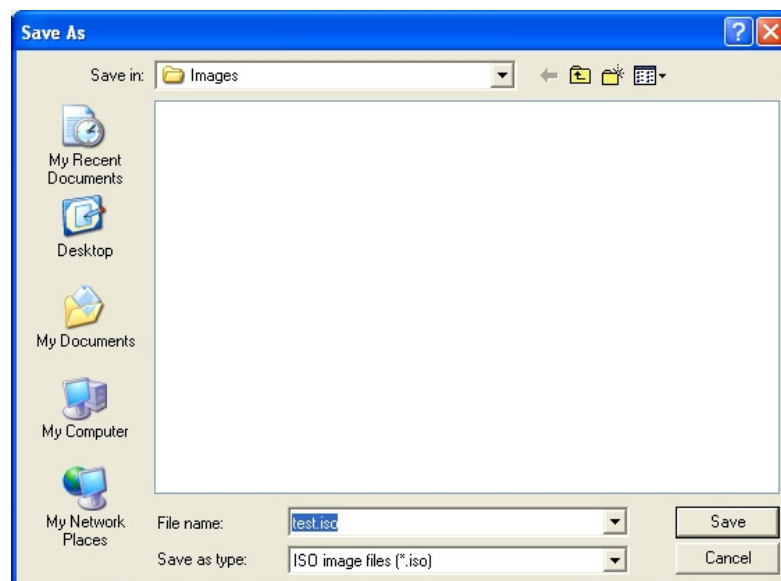
To save a data disc image script file:



The file will automatically be saved with the *.isc* extension

- Click the *Save* button on the toolbar. The screen will now display:
- Select the volume and directory where you want to save the script file.
- Enter the name for the script file and click the *Save* button.

To save a disc physical image file:



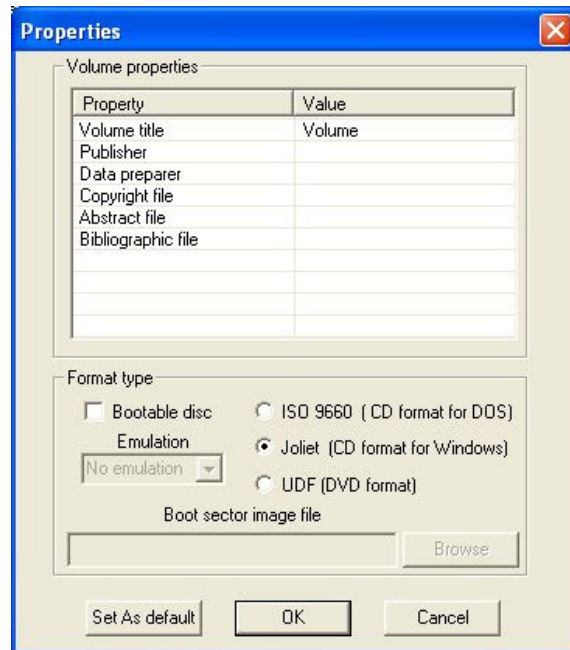
- Click the *Save* button on the toolbar. The screen will now display:
- Select the volume and directory where you want to save the image file.
- Enter the name for the image file.
- Change the Save as type to ISO.

This will make a standard ISO 9660 image file to the desired location.

Volume Properties

Volume Label	Enter the name you want to call the disc.
Publisher	Enter the name of the publisher.
Data Preparer	Enter the name of the person who prepared the disc.
Copyright File	Enter the file name that provides copyright information about the disc.
Abstract File	Enter the file name that describes the contents of the disc.
Bibliographic File	Enter the file name that provides bibliographic information about the disc.

- To Edit the Volume Properties, click on the Properties Button in the Menu Bar, a window will pop up. Fill in the necessary data as required.
- When done, click the OK button.

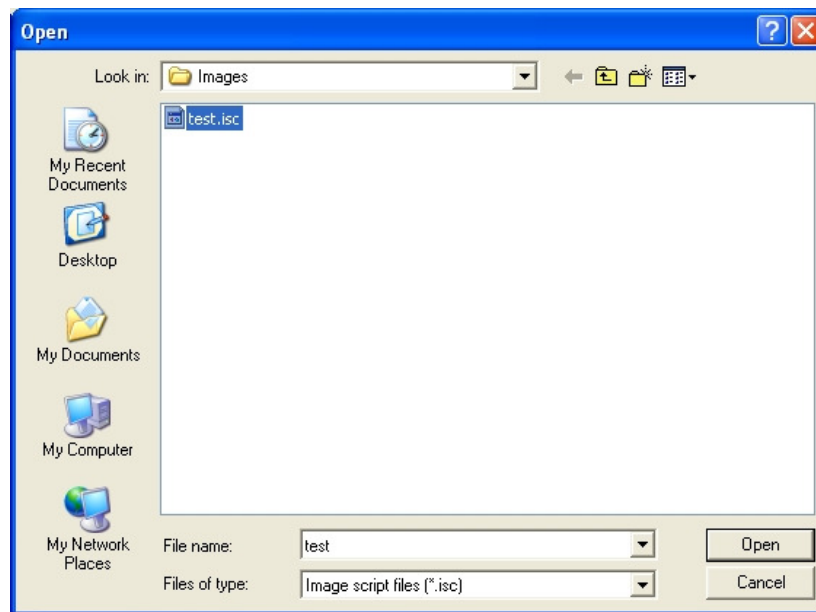


Loading an Existing Script File

Once a data disc image script file has been saved it can be modified at a later date.

To load an existing script file:

- Click the *Load Script* button on the toolbar. The screen will now display:



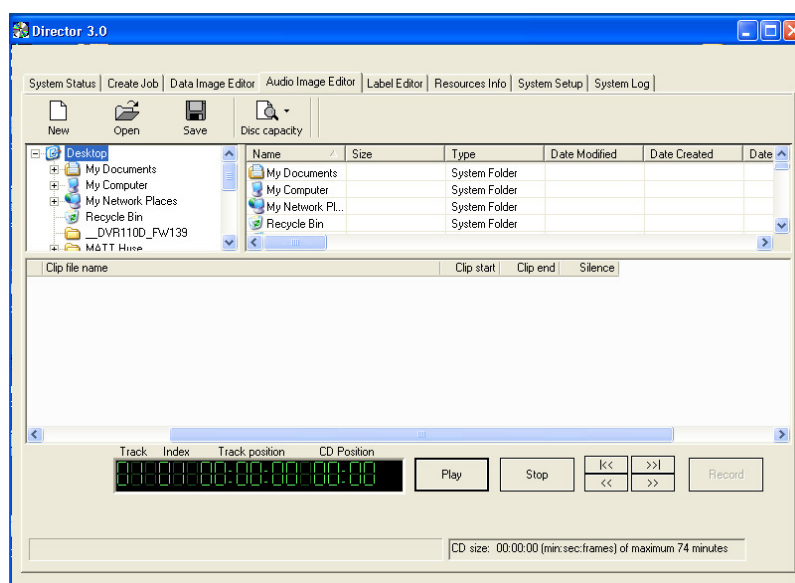
- Select the appropriate file and click the *Open* button.

Audio Disc Images

The DIRECTOR/DIRECTOR PRO creates industry standard audio (Red Book) discs from scratch that can be played on any home, car or portable compact disc audio player or computer disc or DVD-ROM drive. Audio tracks are created using any combination of 44.1 kHz, 16 bit stereo WAV or MP3 files.

To create an audio disc image:

- Click the *Audio Image Editor*. The screen will now display:



The **Audio Image Editor** tab is divided into three panes. The top left pane lists all the names and icons of the disk drives available to the DIRECTOR/DIRECTOR PRO, as well as files and folders on the currently selected disk drive (source). The top right pane displays the contents of any item you click on in the top left pane along with its icon. The bottom pane lists the names of audio files on the disc, which is being created (disc image) as well as their type (WAV or MP3), start position and end position, silence option (inserts silence into the audio disc image) and ISRC code.

Audio Image Toolbar

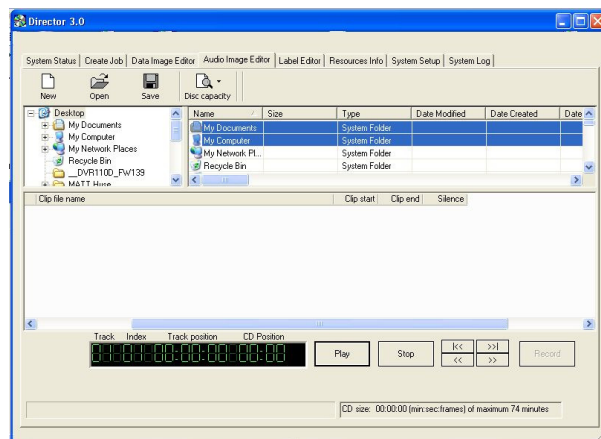
Horizontally along the top above the panes is a toolbar that contains five buttons: **New**, **Open**, **Save**, and **Disc Capacity**.

Image Toolbar:

New	Creates a new audio disc image.
Open	Opens an existing audio disc image script folder to allow selection of an existing file (*.ISC)
Save	Saves the current disc image contents to an audio disc image script file (*.ISC).
Disc Capacity	Selects the capacity of the CD-R or CD-RW discs that are loaded into the DIRECTOR/DIRECTOR PRO: 74 minutes/650 MB or 80 minutes/700 MB.

Adding Tracks

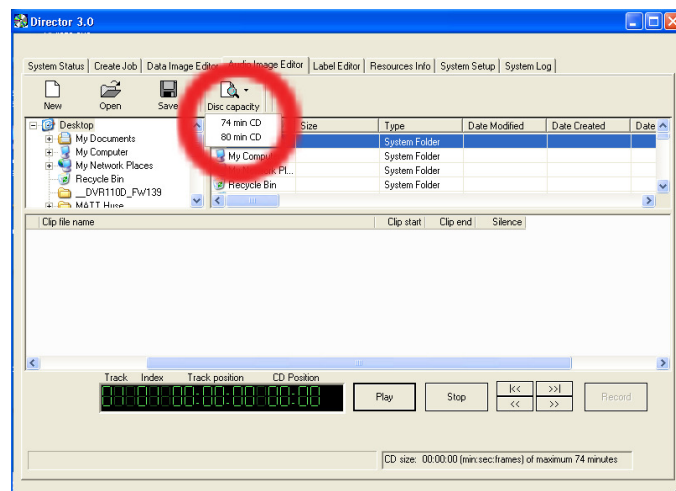
As depicted below, drag one or more WAV (44.1 kHz, 16 bit stereo) / MP3 (44.1kHz) files onto the text. Multiple files may be selected by pressing and holding down the SHIFT or CTRL key while clicking on the tracks. SHIFT allows you to select a range of contiguous tracks, while CTRL allows you to randomly pick multiple tracks. As additional tracks are added, drag and drop them in at the desired insertion point.



Selecting disc Capacity

On the horizontal toolbar is a button to select the capacity of the disc-R or disc-RW discs that are loaded into the DIRECTOR/DIRECTOR PRO: 74 minute/650MB or 80 minute/700MB (*DVD 3.95GB and DVD 4.7GB are not used*).

The Disc Capacity will displayed in the lower right hand corner

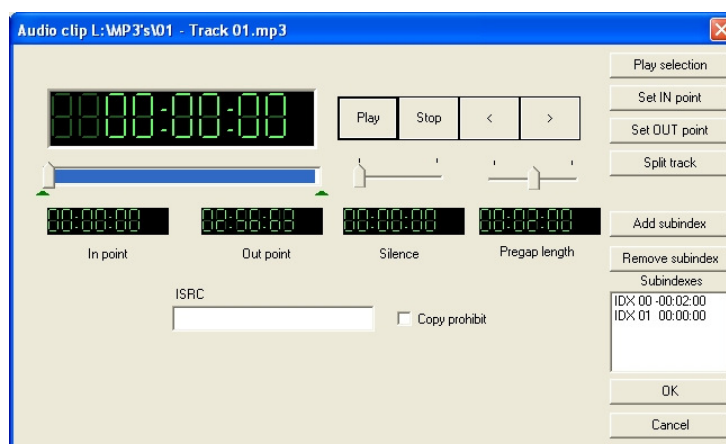


Removing Tracks

- Right click on the audio track you wish to delete.
- Choose *Delete Track* from the drop down menu.

Editing a Track

- Right click the track to be edited. The screen will now display:



The right hand buttons have the following options:

- Play Selection
- Set IN Point
- Set OUT Point
- Remove Sub index

These options allow custom changes to the tracks. Choosing *OK* sets the changes and *Cancel* cancels the changes.

Changing ISRC Codes and Copy Prohibit Flags

Note:

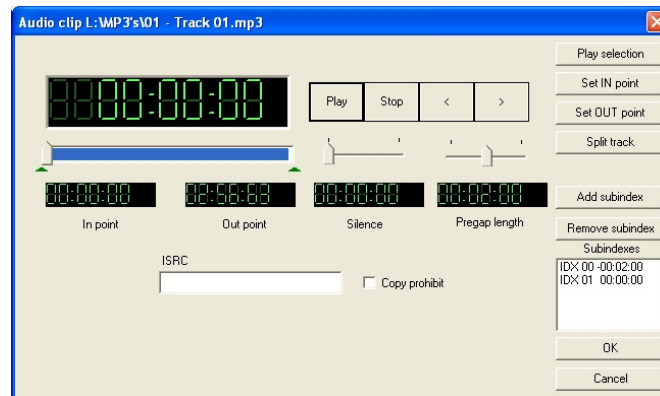
DIRECTOR/DIRECTOR PRO systems equipped with Pioneer DVD-R drives do not support MF Digital SmartDRIVE features.

The INTERNATIONAL STANDARD RECORDING CODE (ISRC) is an optional 12-character descriptor that identifies a specific track on an audio disc. Each track can have its own unique ISRC consisting of 2 alphanumeric characters (country), 3 alphanumeric characters (owner), 2 digits (year of recording) and 5 digits (serial number).

The COPY PROHIBIT flag is a setting in each track on an audio disc, indicating whether or not that track can be copied by a digital recorder.

To change an ISRC code:

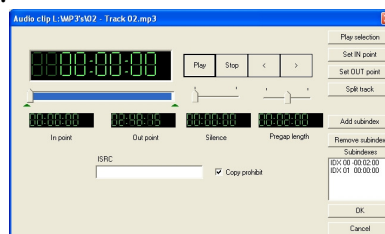
- Double click the desired audio track in the lower pane. The screen will now display:



- Enter the code in the ISRC line and click the *OK* button

To change a Copy Prohibit flag:

- Double click the desired audio track in the lower left pane. The screen will now display:



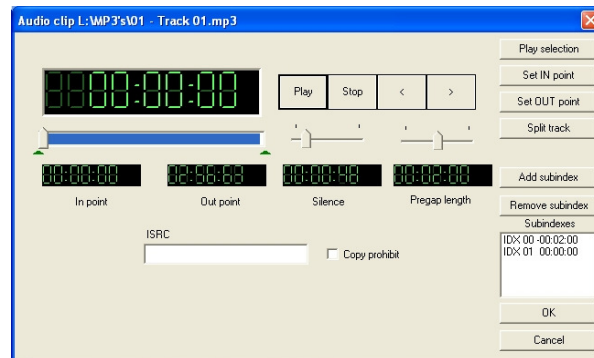
- To enable *Copy Prohibit* select the *Copy Prohibit* box so that it is checked, or uncheck the box to disable *Copy Prohibit*.

Inserting, Editing and Removing Silence

When assembling an audio disc image the DIRECTOR/DIRECTOR PRO application does not insert silences (gaps) between tracks.

To insert silence between tracks:

- Slide the control to the preferred length of silence. In the example: 48 seconds.
- When done, click OK.



To edit the amount of silence between tracks:

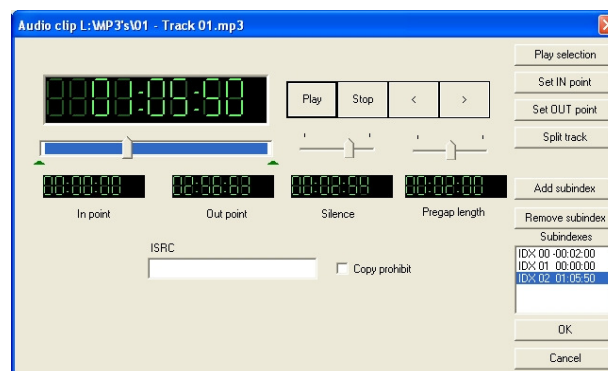
- Click on the track you wish to edit, use the slider control to edit the amount of silence required.

To remove silence between tracks:

- Use the slider control, and move it all the way to the left. The clock will now indicated all zeroes.

Inserting, Editing and Removing Sub-indexes

Sub-indexes are markers used by disc audio players to locate specific points inside an audio track. Sub-index 0 indicates the start of any silence before the beginning of a track and sub-index 1 indicates the beginning of a track's audio material. Other sub-indexes can also be assigned to allow some audio players to locate specified material within a track itself.



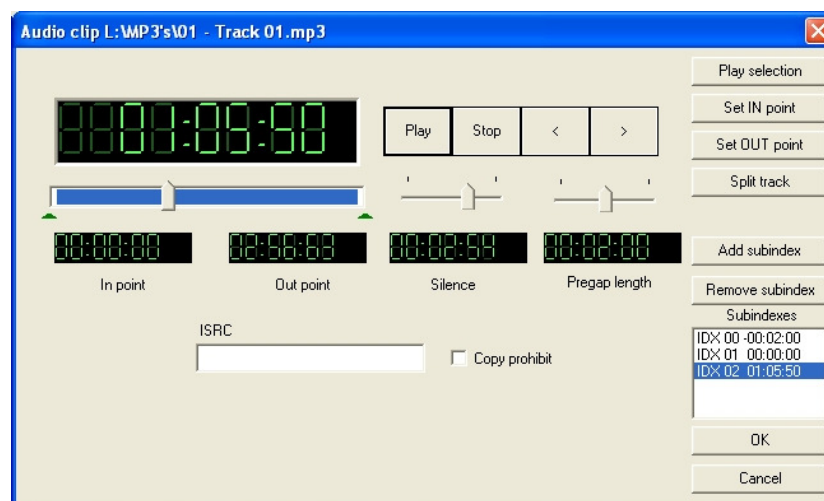
To insert sub-indexes in a track:

- Right click the audio track you wish to edit in the lower pane and select edit track.
- Move the slide control located at the top left (below large clock) to the location where you want to insert a sub index.
- Click the Add SubIndex button on the right.

Note: *In the above example, a sub index was added at 1:05:50*

To remove sub-indexes:

- Right click the audio track you wish to edit in the lower pane and select edit track.
- Highlight the sub index in the Sub index list box on the right.
- Click the Remove Sub Index button.

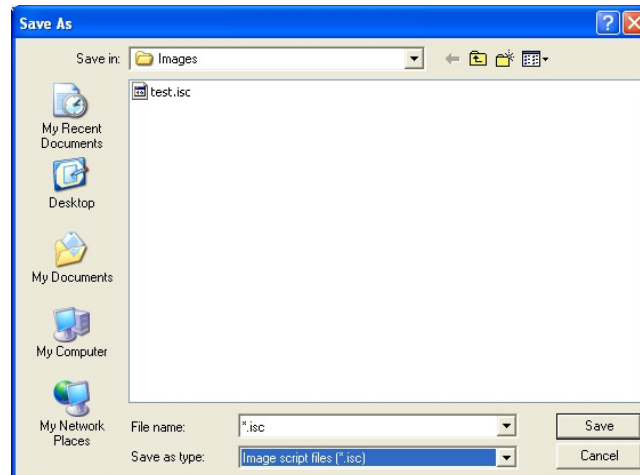


Saving the Current Audio Disc Image

Once an audio disc image has been created it must be saved so that it can be used by the DIRECTOR/DIRECTOR PRO as an audio source for recording. Disc images are saved as script files (with an “ISC” extension).

To save an audio disc image script file:

- Click the *Save* button on the toolbar. The screen will now display:



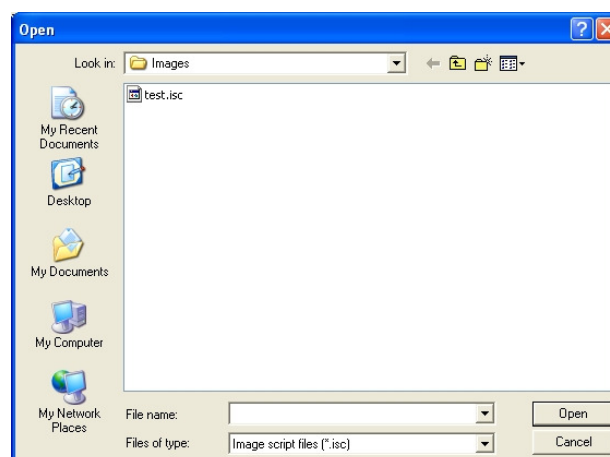
- Select the volume and directory where you want to save the script file.
- Enter the name for the audio disc script file and click the *Save* button.

Loading an Existing Audio Disc Image

Once an audio disc image script file has been saved it can be modified at a later date.

To load an existing audio disc image script file:

- Click the *Open* button on the toolbar. The screen will now display:



- Select the appropriate file and click the *Open* button.

Creating Jobs

After creating a data or audio disc image, the next step in constructing a disc is to create or define a job. A job brings together the various elements of the disc (label, disc image, etc.) so they can be recorded and printed.

Using Third Party pre-mastered DVD Image Files on MF Digital Director

Many DVD authoring and pre-mastering programs have the ability to create image files. Most will create a UDF compatible image file but filename extensions can vary. Some applications use .ISO, some .IMG, as well as various others. These image files can be used in MF Digital's Director, however they must be renamed *.UDF.

Creating New Jobs

To create a new job:

- Click the **Create Job** tab. The screen will now display:

The screenshot shows the 'Director 3.0' application window with the 'Create Job' tab selected. The interface includes a menu bar with 'System Status', 'Create Job', 'Data Image Editor', 'Audio Image Editor', 'Label Editor', 'Resources Info', 'System Setup', and 'System Log'. Below the menu bar is a toolbar with icons for 'New', 'Open', 'Save', and 'About'. The main area contains several input fields and checkboxes. The 'Job ID' field is populated with '061510095948'. The 'User ID' dropdown menu shows 'mfdigital'. The 'Password' field is empty. The 'General options' section has a list of checkboxes: 'COPY' (checked), 'VERIFY', 'PRINT', 'PRINT FIRST', 'SIMULATE', 'ARCHIVE', and 'DVD'. The 'Image' section has a text field and a 'Browse images' button. The 'Label file' section has a text field and a 'Browse print files' button. There is also an unchecked checkbox for 'Ignore Low Ink Warning?'. At the bottom, there are 'Quantity' and 'Priority' spinners both set to '1', a 'Comments' text area, and a 'Submit job' button.

The **Create Job** tab is divided into a number of check boxes and information fields that must be completed.

Job Menu Bar

Horizontally along the top of the **Job** tab is a menu bar that contains five buttons: *New*, *Open*, *Save*, *About*, *Help*.

Job Menu Buttons:

New	Creates a new job.
Open	Loads an existing job file (*.JOB).
Save	Saves the current job file (*.JOB).
About	Displays the current version information of the DIRECTOR/DIRECTOR PRO application.
Help	Displays on-screen help.

General Options**Note:**

DIRECTOR/DIRECTOR PRO systems equipped with Pioneer DVD-R drives do not support MF Digital SmartDRIVE features.

Vertically along the left side of the **Job** tab is a series of nine check boxes: *Copy*, *Verify*, *Print*, *Print First*, *Simulate*, *Archive*, *Align*, *SmartGuard Media*. The first step in creating a job is to set the general options so as to define which operations the DIRECTOR/DIRECTOR PRO will perform when the job is submitted for production.

- Check or uncheck the option boxes to enable or disable the production options needed for your job:

General Options:

Copy	When checked, the discs in the submitted job will be recorded using the disc image file selected in the IMAGE field.
Verify	When checked, the discs in the submitted job will automatically be compared against the source files after recording is completed. NOTE: <i>Director Blu-ray System Only</i> , audio CDs are verified via TOC only. All other files will be verified using the complete source.
Print	When checked, the discs in the submitted job after

	recording will be printed with the disc label selected in the LABEL FILE field.
Print First	When checked, the discs in the submitted job before recording will be printed with the disc label selected in the LABEL FILE field.
Simulate	When checked, the discs in the submitted job will not be recorded.
Archive	When checked, an existing disc is saved to the hard drive as a physical image file for later recording. This option is used for duplicating existing discs.

- After setting the general options, complete the required information in the related information fields:

Job ID (Required)

The JOB ID field is a user-defined descriptor that assists in identifying and tracking discs produced on the DIRECTOR/DIRECTOR PRO. Jobs can be given meaningful names such as date codes. In addition, jobs may receive product, invoice or work order numbers.

- Click the JOB ID field and enter a name for the job to a maximum of 20 alphanumeric characters.

User ID (Required)

The USER ID field is a descriptor that assists in identifying and tracking users operating the DIRECTOR/DIRECTOR PRO. User IDs are defined using the *System Setup* tab.

- Click the USER ID field and enter your assigned User ID.

Password (Required)

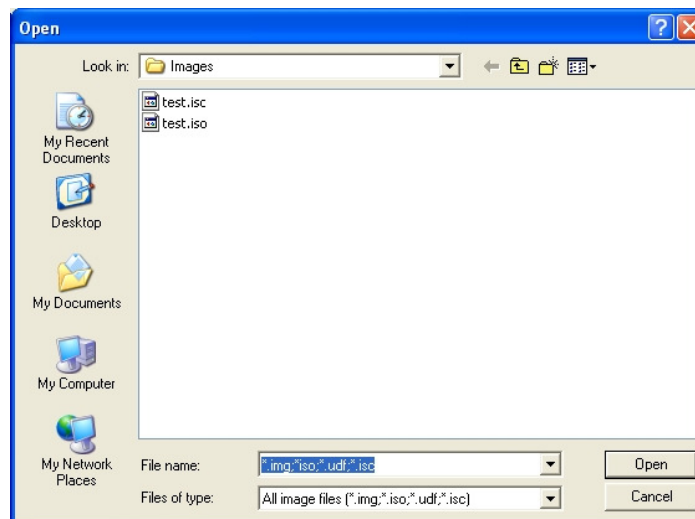
The PASSWORD field assists in controlling access to the DIRECTOR/DIRECTOR PRO. Passwords are assigned to specific User IDs using the *System Setup* tab.

- Click the PASSWORD field and enter your assigned password.
-

Image (needed if “Copy” option is checked)

The IMAGE field is used to specify the data or audio disc image, (ISC or ISO file) that was previously created, to be used as the data or audio source for recording. The DIRECTOR/DIRECTOR PRO also accepts standard Mode 1 data physical image files (such as ISO 9660, MacOS HFS, Unix UFS and Rock Ridge, etc.) created with other pre-mastering software (such as Roxio Easy disc Creator and Toast, GEAR Software GEAR Pro, etc.).

- Click the *Browse Images* button below the IMAGE field. The screen will now display:

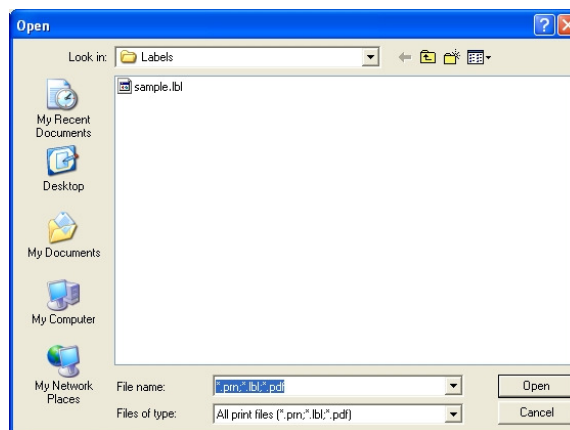


- Select the appropriate file and click the *Open* button. Leave the field blank if no image is to be recorded.

Label File (Optional)

The LABEL FILE field is used to specify the disc label (LBL or PRN file), that was previously created, to be used as the source label for printing.

- Click the *Browse Print Files* button below the LABEL FILE field the screen will now display:



- Select the appropriate file and click the *Open* button. Leave the field blank if no label is to be printed.

Comments (Optional)

The COMMENTS field is a user-defined descriptor that is entered into the database of all jobs completed by the DIRECTOR/DIRECTOR PRO. The COMMENTS field can contain meaningful information such as documenting operator observations.

- Click the COMMENTS field and enter your remarks. Leave the field blank if no information is to be logged into the database.

Quantity (Required)

The QUANTITY field is used to specify the number of discs to be recorded or printed as part of the current job.

- Click the QUANTITY field and enter the number of discs to be recorded or printed.

Priority (Required)

The PRIORITY field is used to specify the production priority assigned to the current job (1 lowest - 99 highest). The maximum allowable priority is determined by a specific user's privileges assigned using the *Setup* tab.

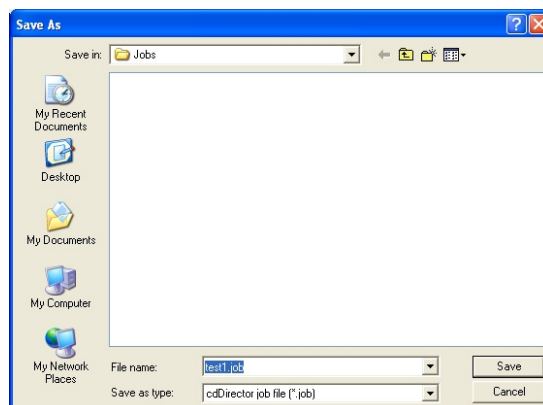
- Click the PRIORITY field and enter the priority number.

Saving the Current Job

Once a job has been created it can be saved and used by the DIRECTOR/DIRECTOR PRO for future recording. Job files are saved as job files with a "JOB" extension.

To save a job file:

- Click the *Save* button on the menu bar. The screen will now display:



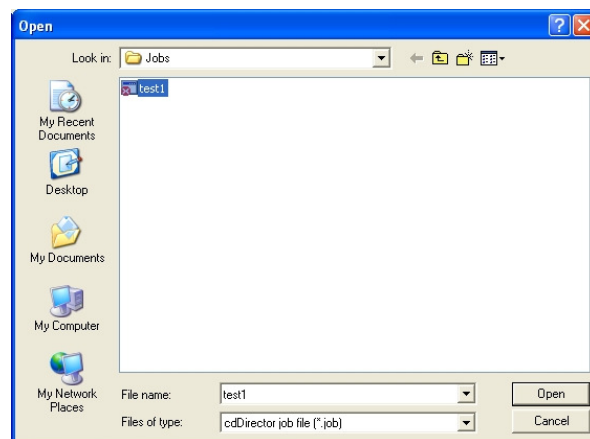
- Select the volume and directory where you want to save the job file.
- Enter the name for the job file and click the *Save* button.

Loading an Existing Job

Once a job file has been saved it can be modified at a later date.

To load an existing job file:

- Click the *Open* button on the menu bar. The screen will now display:



- Select the appropriate file and click the *Open* button.

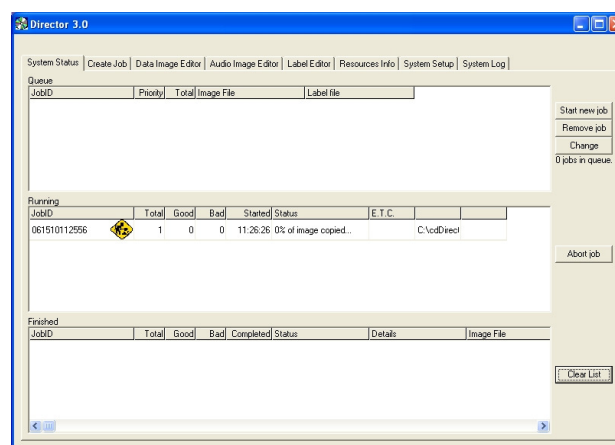
Submitting Jobs

After defining or creating a job, the final step in constructing a disc is to submit the job for production. During the production process the DIRECTOR/DIRECTOR PRO uses the job as a guide or map for bringing together the various elements of the disc (label, disc image, etc.) to print and record as needed. The DIRECTOR/DIRECTOR PRO processes up to eight different jobs simultaneously and offers unlimited job queuing.

Submitting a Job

To submit a job for production:

- Complete the details on the **Job** tab as desired or load an existing job file.
- Click the **Submit Job** button at the bottom of the **Job** tab. The screen will now display:



The screen is now switched to the **Status** tab where the progress of jobs submitted for production can be easily monitored. The **Status** tab is divided into three panes. The top pane is the JOB QUEUE window which lists all of the jobs waiting to be processed by displaying their assigned JobID, their assigned priority, the total number of requested discs as well as the names of their associated disc image and label files.

The middle pane is the ACTIVE JOBS window that lists all the jobs currently being recorded or printed by the DIRECTOR/DIRECTOR PRO. Information displayed for each job includes: its assigned JobID, the total number of requested discs, the number of successful discs produced, the number of failed discs produced, the time the job was submitted for production, the immediate status of the job (copying images, loading discs,

copying discs, unloading discs, etc.), and the estimated time of completion (E.T.C).

The lower pane is the COMPLETED JOBS window that lists all the jobs completed by the DIRECTOR/DIRECTOR PRO. Information displayed for each job includes: its assigned JobID, the total number of requested discs, the number of successful discs produced, the number of failed discs produced and the time each of the jobs was completed.

The Production Process

During production the blank discs will be loaded one at a time from the input spindle into the recorders and/or printer. Upon successful completion the discs will be unloaded onto the output spindle. This process will continue until the job is complete, and the DIRECTOR/DIRECTOR PRO will then advance to produce the next job in the queue according to its priority.

However, if the 1st input spindle empties before the job is complete the DIRECTOR/DIRECTOR PRO will then go to the 2nd input spindle. If the 2nd input spindle is empty the DIRECTOR/DIRECTOR PRO will go to the third spindle. If the third spindle is empty the screen will now display:



To continue producing the job, place additional blank discs onto the 1st input spindle and click the *Yes* button. To stop the job click the *No* button and the remainder of the job will be aborted. The DIRECTOR/DIRECTOR PRO will then advance to produce the next job in the queue according to its priority.

Any discs dropped on the reject/centering spike have failed to record properly and should not be used. Be sure to remove rejected discs periodically during operation, if the need arises.

Removing a Job

To remove a pending job from the queue so that it will not be produced:

- Click the job you wish to remove in the JOB QUEUE window.
- Click the *Remove Job* button.

Clearing the Completed Jobs List

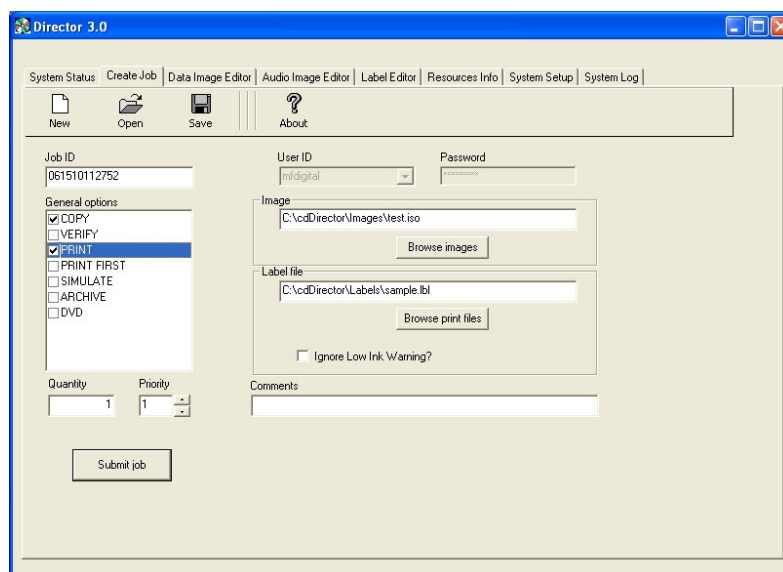
To clear the list of completed jobs:

- Click the *Clear List* button.

Starting a New Job

To start a new job:

- Click the *New* button. The screen will now display:



The screen is now switched to the ***Create Job*** tab where new jobs can be created or existing job files can be loaded and submitted for production.

Aborting a Job

To abort a job once its production has begun:

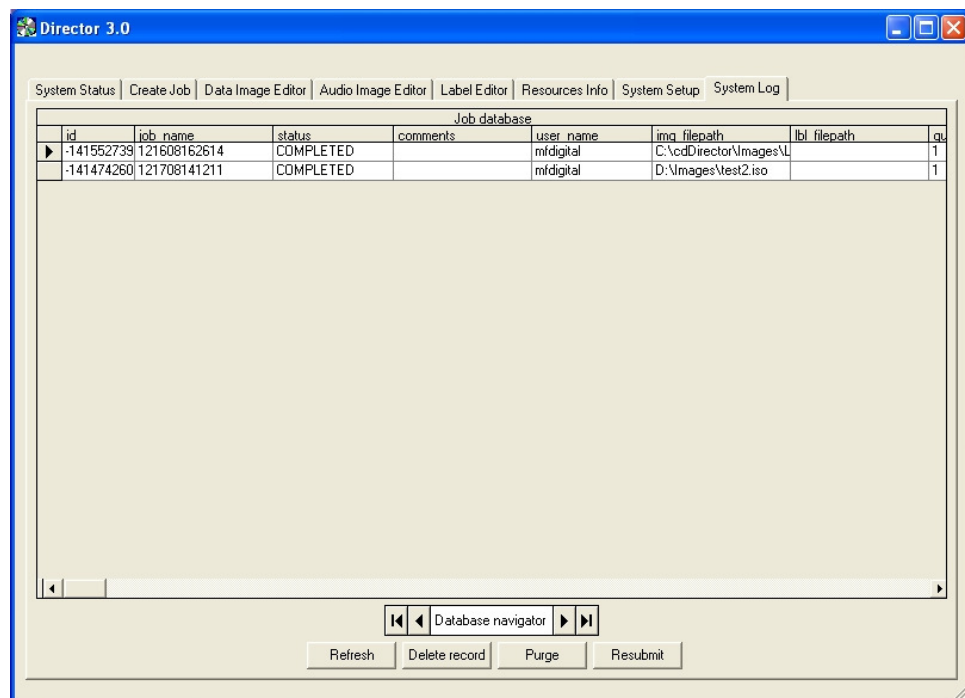
- Click the job you wish to abort in the ACTIVE JOBS window.
- Click the *Abort Job* button.

Viewing Logs

The DIRECTOR/DIRECTOR PRO maintains a comprehensive database of all jobs completed by the unit. The collected information is useful for a variety of reasons such as, tracking disc usage, helping to diagnose problems, or even for billing clients. The **Log** tab provides an easy way to review the history of all jobs completed by the DIRECTOR/DIRECTOR PRO.

To display the DIRECTOR/DIRECTOR PRO's history log:

- Click the **System Log** tab. The screen will now display:



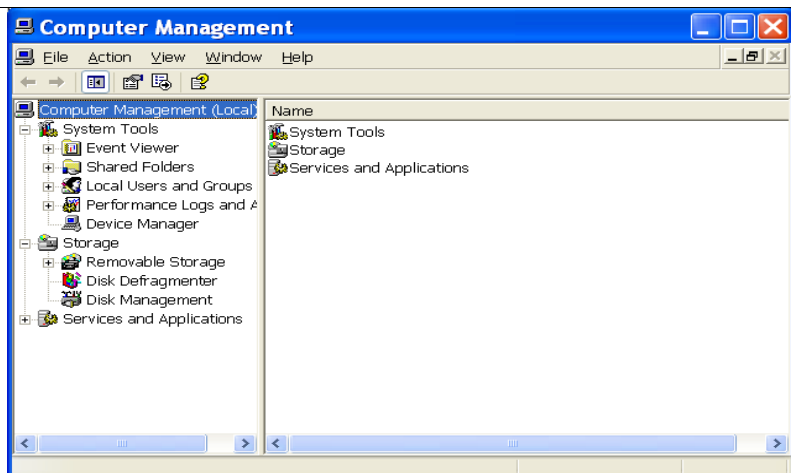
The **System Log** tab consists of one central JOBLOG windowpane, containing all job related information.

Viewing the Errors reported by Director in the Event Viewer.

When Director reports errors, they are also reported to the Event Viewer. The Event Viewer is apart of the Windows Operating System. To view the events in the Event Viewer, follow the steps below.

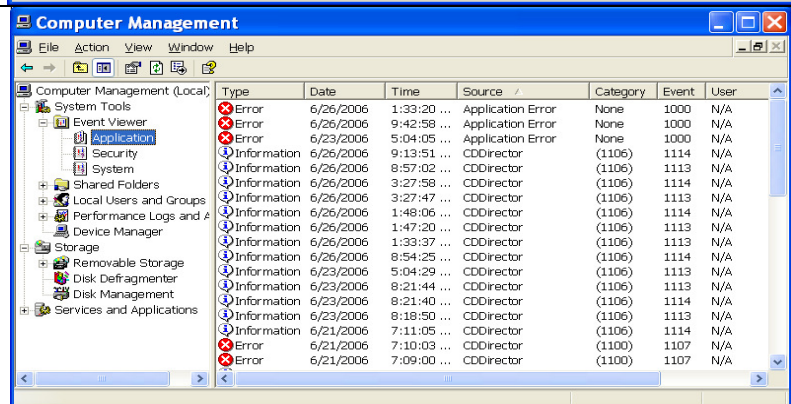
1. Right Click on the My Computer Icon and Choose Manage from the Context Menu.

2. The Computer Management Window will appear.



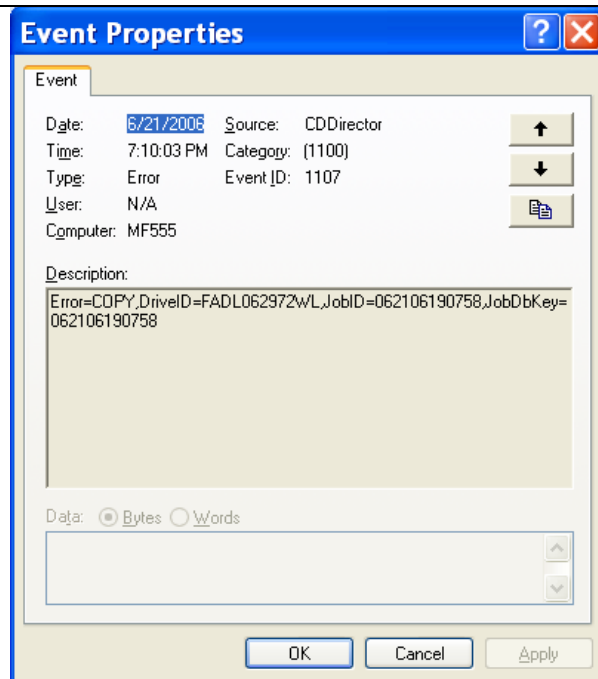
1. Click the Plus sign next to System Tools, to collapse the tree.
2. Now click the Plus sign next to Event Viwer. You will see another tree collapse.
3. Click Application

A list of Events will appear. Red circles with white X's show as errors in this list.



4. To view the error being reported, double click the error event in the list. The Event properties dialog will now appear.

In the Description field as shown to the right, the exact error is reported in this case a COPY error. This field also shows the Drive ID Number, which Job reported the error, and the assigned Database Number.



TIP: If you need to export the event list. You can do this by choosing the ACTION Menu, then choose SAVE LOG FILE AS. Next, choose from either a CSV(comma separate value) or a Tab Delimited TXT file, enter a filename and click SAVE.

Updating Job Records

To update job records in the history log:

- Click the *Refresh* button at the bottom of the JOBLOG window.

Navigating Job Records

To navigate among job records in the history log:

- Use the scroll bar at the bottom of the JOBLOG window to move left or right.
- Use the *Database Navigator* buttons to advance from record to record or to move to the top or bottom of the database.

Deleting Individual Job Records

To delete a job record from the history log:

- Click the job name you wish to delete and click the *Delete Record* button at the bottom of the JOBLOG window.

Deleting All Job Records

To delete all job records from the history log:

- Click the *Purge* button at the bottom of the JOBLOG window.

Resubmitting Jobs

To resubmit a job for production:

- Click the job name you wish to resubmit and click the *Resubmit* button at the bottom of the JOBLOG window.

Duplicating Existing discs

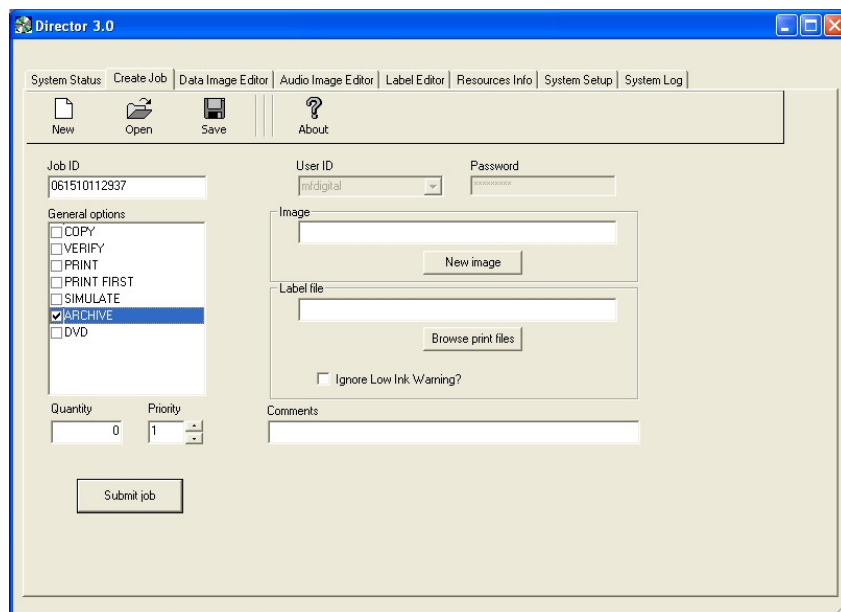
In addition to creating industry standard data and audio discs source files, the DIRECTOR/DIRECTOR PRO also duplicates existing discs authored in most formats.

Creating an Image File

The first step in duplicating an existing disc/DVD is to create an image file of it on the hard disk drive to be used as the master source for recording. Image files are saved with an “IMG” extension.

To create an image file of an existing disc/DVD:

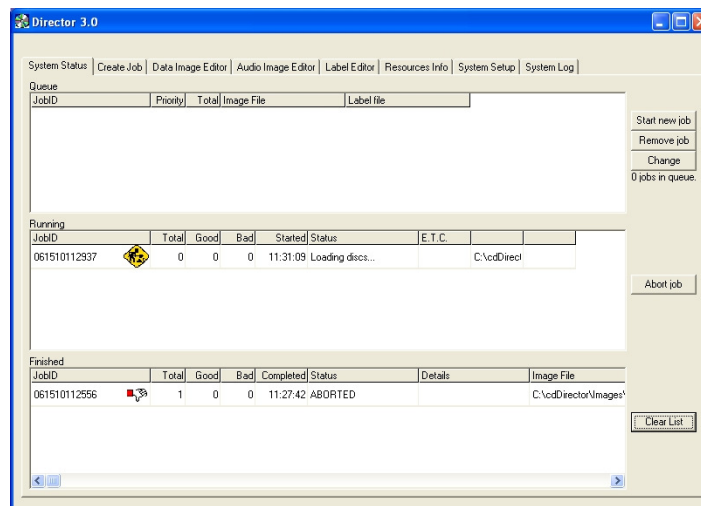
- Click the **Create Job** tab. The screen will now display:



- Check the ARCHIVE box in the general options window. Ensure that no other boxes are checked.
- Click the QUANTITY field and enter 0.
- Click the JOB ID field and enter a name for the job to a maximum of 20 alphanumeric characters.
- Click the USER ID field and enter your assigned User ID.
- Click the PASSWORD field and enter your assigned password.
- Click the *New Image* button below the IMAGE field. The screen will now display:



- Select the volume and directory where you want to save the image file. Please note that depending upon the amount of data to be recorded the image file can occupy as much as 4.7 GB (or 25 to 50 GB if Blu-Ray equipped) of hard disk space.
- Enter the name for the image file and click the *Save* button.
- Place your original disc to be duplicated (master disc) on top of the stack of blank discs on the input spindle.
- Click the *Submit Job* button. The screen will now display:



The screen is now switched to the **Status** tab to display the progress of the submitted job. During production the master disc will be loaded from the input spindle into the top recorder, and saved as an image file with the

specified name on the hard disk drive. Upon successful completion, the disc will be unloaded onto the output spindle.

Recording an Image File

Once created, the image file of the master disc is used as the source for recording.

To use the image file of the master disc as the recording source:

- Click the ***Create Job*** tab. The screen will now display:

The screenshot shows the 'Director 3.0' application window with the 'Create Job' tab selected. The interface includes a menu bar with 'System Status', 'Create Job', 'Data Image Editor', 'Audio Image Editor', 'Label Editor', 'Resources Info', 'System Setup', and 'System Log'. Below the menu bar is a toolbar with icons for 'New', 'Open', 'Save', and 'About'. The main area contains several input fields and checkboxes. On the left, under 'General options', there are checkboxes for 'COPY', 'VERIFY', 'PRINT', 'PRINT FIRST', 'SIMULATE', 'ARCHIVE' (which is checked), and 'DVD'. Below these are 'Quantity' (set to 0) and 'Priority' (set to 1) fields. At the bottom left is a 'Submit job' button. On the right, there are fields for 'Job ID' (061510112937), 'User ID' (mcdigital), and 'Password'. Below these are fields for 'Image' and 'Label file', each with a 'New image' or 'Browse print files' button. At the bottom right is a 'Comments' text area and an 'Ignore Low Ink Warning?' checkbox.

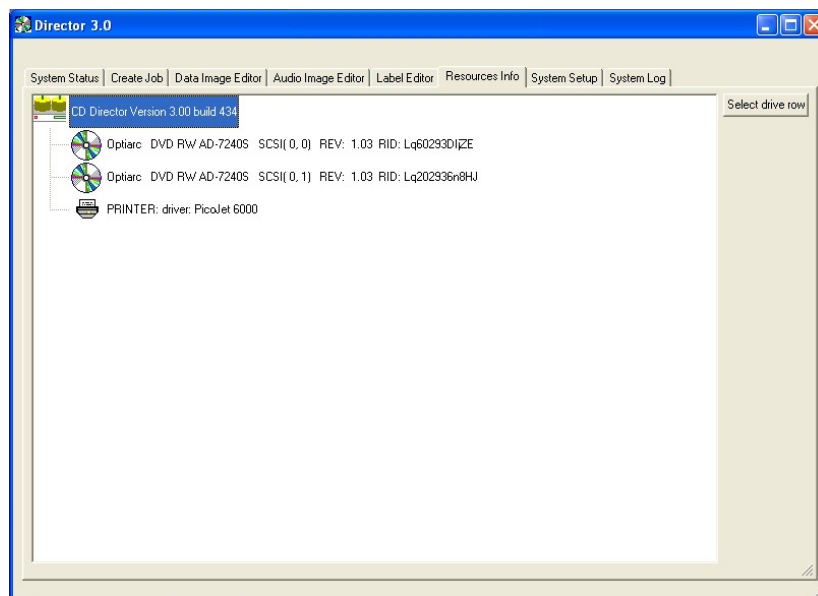
- Adjust the general options and complete the information on the ***Create Job*** tab as required. When completing the IMAGE field specify the image file created from the master disc to be duplicated.

Viewing Resources

The **Resource** tab is a simple diagnostic tool that displays the hardware elements connected to the DIRECTOR/DIRECTOR PRO. These include the disc autoloader, CD/DVD or Blu-ray recorders and the printer.

To display the hardware elements connected to the DIRECTOR/DIRECTOR PRO:

- Click the **Resources Info** tab. The screen will now display:



The **Resource Info** tab on a properly configured and correctly functioning DIRECTOR/DIRECTOR PRO system will display one autoloader, four, or two Blu-ray or DVD-R recorders (including ID string, SCSI channel and ID, and firmware version) as well as one printer.

Upgrading DIRECTOR/DIRECTOR PRO Software

Overview of the process

Uninstall Director from the unit by using the “Add/Remove Programs” in the control panel. The “Add/Remove Programs can be accessed by the following path; Windows Start Menu> Control Panel> Add/Remove Programs.

Click on the following link www.mfdigital.com/firmware.html and then scroll to the Director Publisher Series section, and then click on the link for “Update Version 3.00b434” to download the software.

Once the zip file containing the software has been downloaded extract the contents to your desktop.

Double click on the Build434.exe to run the set up wizard and follow the prompts for the installation process through to completion. Note – You may be required to select your printer in the system setup tab.