



5200 Live Series EventCD Operator's Guide

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Welcome to the 5200 Series CD Recorder/Duplicator

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Corporate Headquarters:

MFDIGITAL

155 Sherwood Avenue
Farmingdale, NY 11735

Tel: (631) 249-9393

Fax: (610) 249-9437

Web site: www.mfdigital.com

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About MF DIGITAL

Thank you for purchasing MF DIGITAL's 5200 Series Copier Module duplicator. MF DIGITAL manufactures a wide variety of CD / DVD duplication equipment, including manual and fully automated CD / DVD duplicators and printers. We hope you will consider us for all of your duplication needs.

What To Expect From Your MF DIGITAL Product

Your MF DIGITAL 5200 Series copier module duplicator is professionally designed and manufactured to give you years of trouble free operation. To avoid accidental damage to your new duplicator, 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 5200 Series product.

Getting Started

Carefully remove the 5200 Series duplicator 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 new 5200 Series duplicator includes:

- 5200 Series duplicator
- Power cord
- Firmware CD
- Manual CD
- LAN cable for network hook-up

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 5200

The best operating location for the 5200 Series duplicator 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 5200 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 5200 is no exception. The use of a power conditioner, such as an Uninterruptible Power Supply (UPS) or a surge protector, is highly recommended. The minimum required size is 500VA.

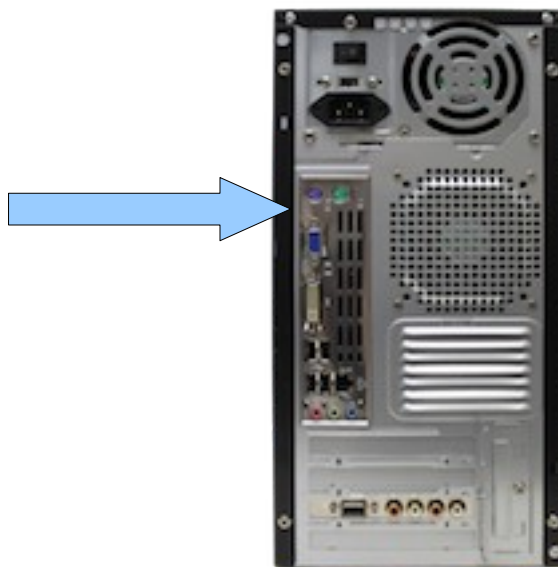
Repairs or alterations should only be attempted by an authorized, factory-trained technician. MF DIGITAL reserves the right to void the warranty if unauthorized service is performed.

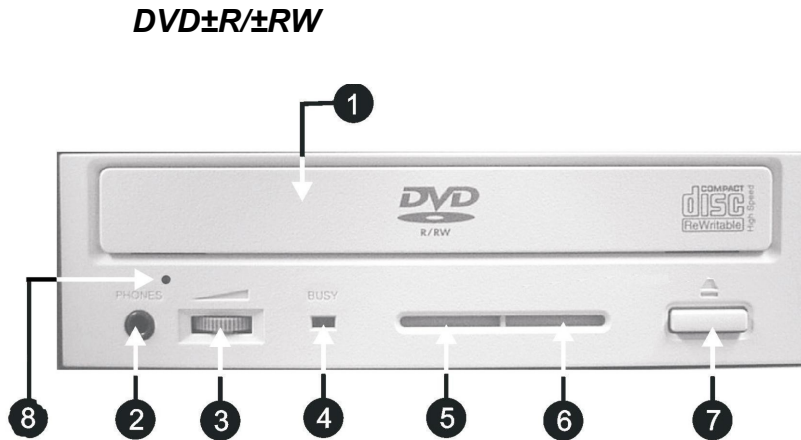
Location Of 5200 Series Components



Connect a Keyboard, Monitor and Mouse (not supplied) To the corresponding connections below.

Rear View





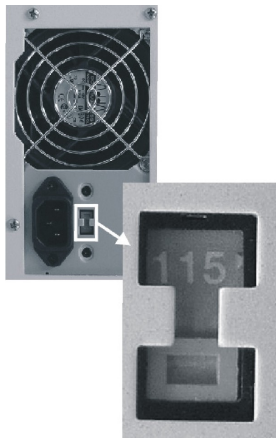
Legend

- 1) **Disc Tray** - Discs are loaded and removed from this tray. Clicking the eject button will open the tray when the power to the 5200 Series is switched on.
- 2) **Headphone Jack** – Connect headphones here.
- 3) **Volume Control Knob** – This controls the volume level of the headphones.
- 4) **Disc Indicator** – Light indicates presence of disc in drive.
- 5) **Ventilation Hole** – Do not block.
- 6) **Ventilation Hole** – Do not block.
- 7) **Eject Button** – This button is used to manually open the disc tray.
- 8) **Emergency Eject Pinhole** – In the event that the disc tray will not open by clicking the eject button, insert the tip of a large paper clip into this hole.

System Startup

Before operation can begin it is necessary to review a few details.

- Plug one end of the supplied power cord into the upper receptacle at the rear of the unit.
- Next, verify that the voltage selector switch is set correctly. It is located between the two power receptacles. The 5200 Series supports both 115 VAC and 230 VAC at 50 ~ 60 Hz. Please confirm that the appropriate voltage (115 VAC for North America) has been selected.



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.

- Make sure you power on the unit using the primary power switch (located on the rear of the unit) and secondary power switch (located on the power supply).

Loading A Disc

- After the 5200 Series' power has been switched on, click the eject button on the front of the recorder to open its disc tray.
- Load by carefully placing the disc (label side up) into the recessed area of the disc tray, so that the disc lays flat.
- Click the eject button on the front of the recorder to close the disc tray.



Removing A Disc

- While the 5200 Series' power is still switched on, click the eject button on the front of the recorder to open the disc tray.
- After the disc tray has completely opened, lift the disc by its edges and carefully remove it.
- Click the eject button on the front of the recorder to close the disc tray.

Digital recording with the 5200 Live enabled systems

Introduction

The 5202 “Live” is designed for audio recording directly to the system’s HD. This proves to be an ideal solution for live event recording, enabling the user to go from recorded event to making multiple CDs with in only a few minutes of the event.

Features:

- 2 x 2 analog I/O
- 24-bit/96kHz fidelity
- S/PDIF digital I/O with 2-channel PCM
- 1 x 1 MIDI I/O
- Analog I/O with gold-plated RCA jacks
- Non destructive Start ID editing.

Specifications:

Frequency response:	22Hz-22kHz, -0.4, -0.4dB
Dynamic range:	104dB (A-weighted) (D/A) 100.4dB (A-weighted) (A/D)
THD:	< 0.002%

Input / Output





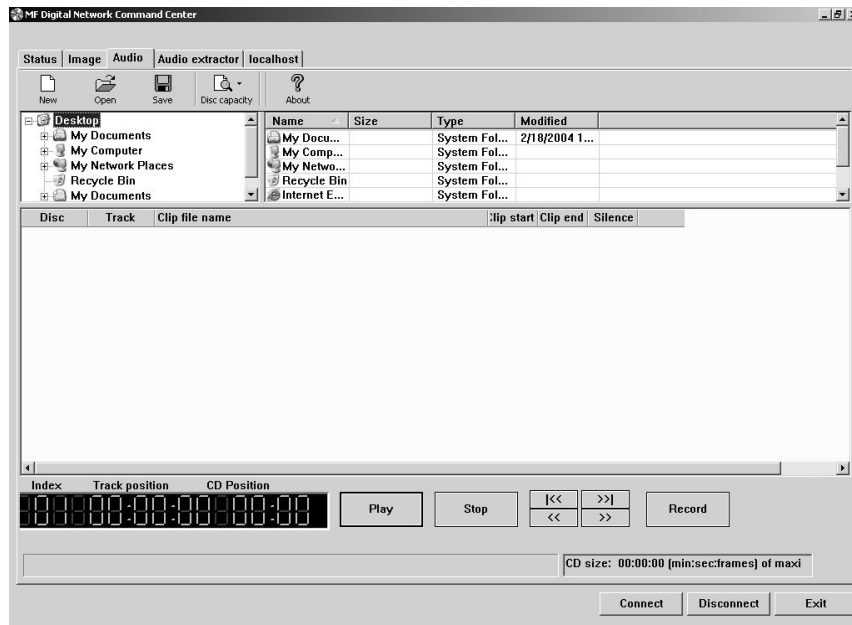
CAUTION

Your 5200 uses Microsoft Windows XP Operating System. While this may appear to be a conventional PC, XP Embedded is specially designed for embedded applications. Do not install any non MF Digital supported software. Any damage as a result of this will not be covered under warranty.

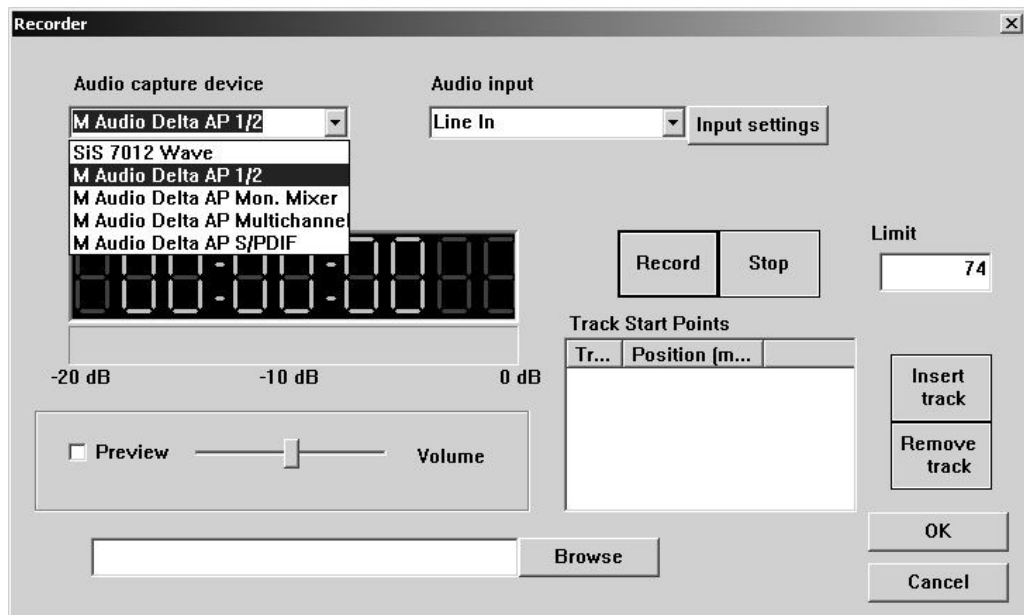
Using the 5200 Live

Recording

- Connect the desired input to either the S/PDIF Digital IN, the analog IN, or Midi In. Note that the S/PDIF and Midi inputs are made via the included breakout cable and each connector is labeled INPUT or OUTPUT.
- Using your mouse, click on the AUDIO TAB and the following screen should be displayed:

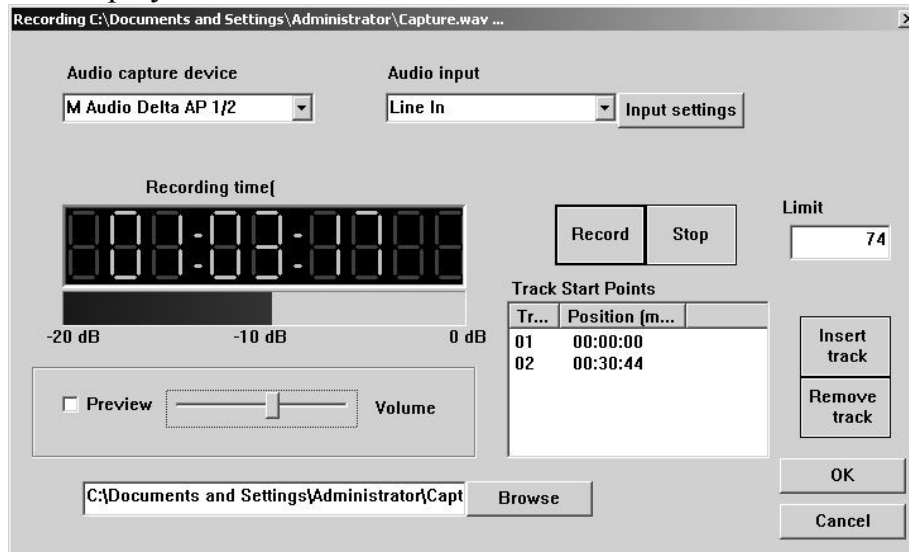


- Click on RECORD to bring up the RECORDER dialog



Using your mouse, select the desired input from the Audio Capture Device pull-down.

- Click on browse to select location and a filename to save the recording to. Keep in mind that CD-DA quality recording consumes about 10 MB/min
- Click on the RECORD button to start recording. During recording, the following screen is displayed:



Browse: Selects the desired folder and filename. You will be prompted to overwrite existing files.

Preview: Check this box to preview the audio as it is being recorded. Attach speakers to the green jack on the back on the 5200. The output may be adjusted using the slider.

Stop: allows you to end recording.

Limit: Allows you to set a maximum record time. Entering 74 here will stop recording from the select input in 74 minutes.

Insert Track: Inserts a START ID at the point the button is clicked. A START ID serves as a track point in your live recording. These may also be added and removed manually once recording has been completed. START IDs have no effect on the audio being recorded but merely serves as the “track” points.

Remove Track: Removes the selected START ID. All Audio CDs must have an INDEX 1 so START ID 1 cannot be removed.

OK: Closes the dialog box.

- Click “STOP” to end recording and then “OK” to close the dialog.

Editing your recording and Adding tracks

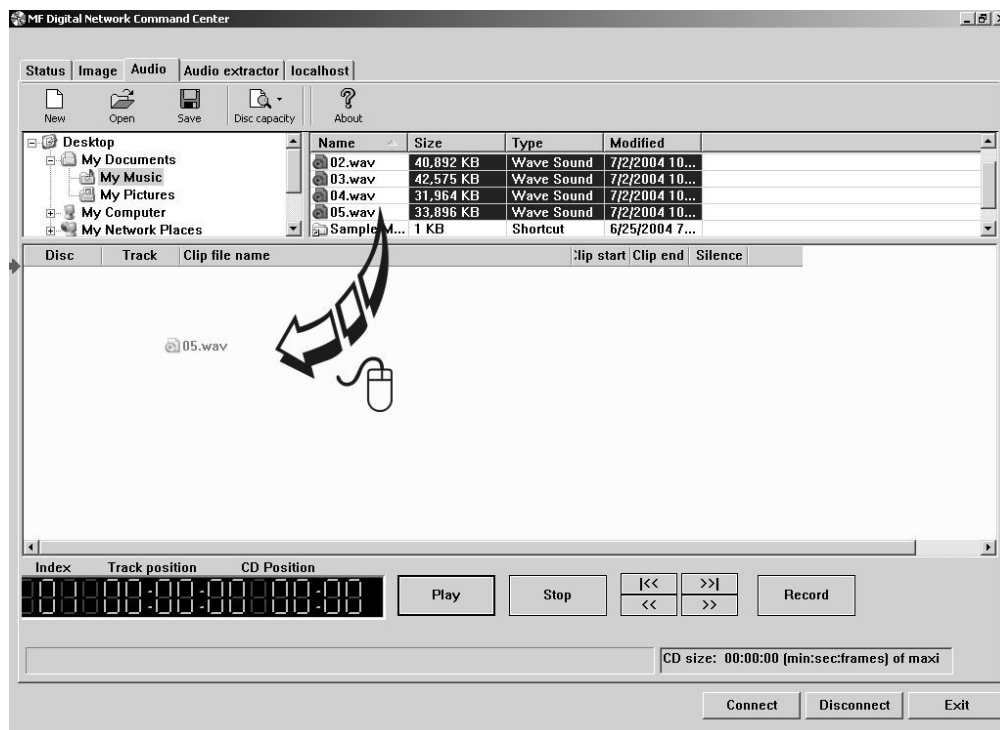
The AUDIO TAB is where you create your CD projects. WAV files and MP3 files may be dragged and dropped into your project and represent a single track. WAV files must be

44.1 kHz, 16-Bit, and stereo. The CD-DA standard does not allow for mono CDs. A mono CD is simply one where the left and right channels are the same.

Adding Tracks

By default, each WAV, or MP3 file represents a single track. Certainly there are times, especially in live recording, where a single large WAV file, which might represent 60 minutes or more, may slit into multiple tracks, edited for in point, out point, and start IDs. We'll touch on this in just a minute. First let's add a track or two. Here's how:

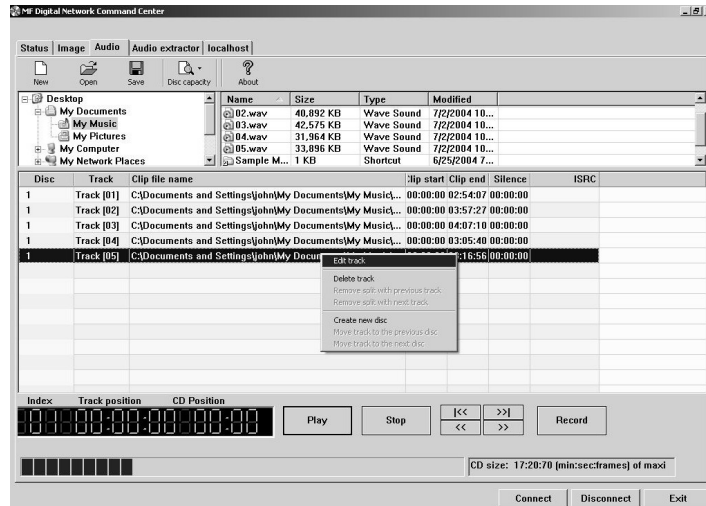
- From the AUDIO TAB, use the top two panes of the window to navigate your PC to find the desired WAV file. Left click to select a file then drag the WAV file into the project to the bottom pane of the screen. You can click CTRL or SHIFT when clicking on files to select multiple files or a range of files.



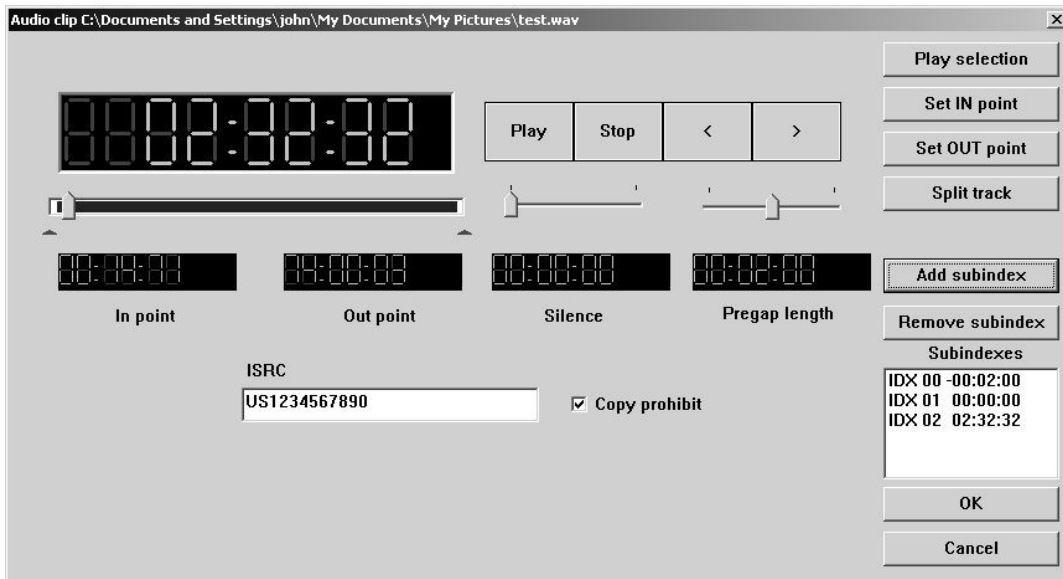
You may rearrange the order of tracks simply by dragging them to their desired position on the play list.

Editing tracks

Tracks (WAV and MP3 Files) may be edited for In Point, Out Point, Track Silence, Track Pre-gap length, ISRC Code, sub-indexes, setting the copy prohibit flag (this is not copy protection), and the ability to split a track into multiple tracks. This is extremely handy on long recordings where several tracks are desired. Note this is non destructive and does not effect the source file in anyway but merely sets the a START ID, or track mark, at the location inserted.



- To edit a track, right click on the desired track and select EDIT. A screen similar to the following will be displayed:



The operations available are as follows:

Set In Point: In Point is the point where you wish to begin the track. Adjust using the slider above IN POINT digital display. Use the up and down arrow keys for fine adjustments, or click on IN POINT time display for direct entry. You will see the following:



Once you are satisfied, click on the SET IN POINT button

Set Out Point: Out Point sets the end of the track. If you are making a disc from a single WAV file, you may want to use SPLIT TRACK (See below) to set all track START IDs and use SET OUT POINT only to trim the end of the last track if desired. Adjust using the slider above OUT POINT digital display. Use the up and down arrow keys for fine adjustments, or click on the green LCD digital OUT POINT time display for direct entry as above. Once you are satisfied, click on the SET IN POINT button

Silence: Allows you to set the amount of silence between tracks. Set using the slider and arrow keys as you did with the IN and OUT points, or click on the green LCD digital SILENCE time display for direct entry.

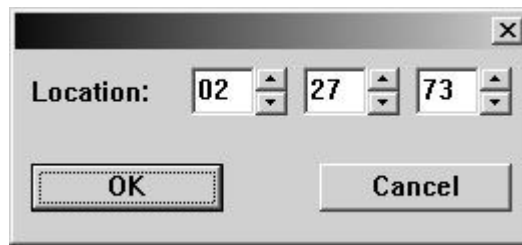
Pregap Length: Set the “countdown” time between tracks. Set using the slider and arrow keys as you did with the IN and OUT points or click on the green LCD digital PREGAP LENGTH time display for direct entry.

ISRC Code: Allows you to enter an ISRC code for the track. ISRC, or International Standard Recording Code, is the international identification system for sound recordings. For more information, please visit <http://www.ifpi.org/isrc/> or http://www.riaa.com/issues/audio/isrc_faq.asp.

Copy Prohibit: This allows you set the copy prohibit bit. This is not copy protection but merely serves to indicate that digital copying is not allowed and that this is copyrighted material. Most recorders ignore this bit, except those that are SCMS capable. Checking this 'flag' on any CD tracks identifies these tracks as the first copies, so you won't be able to record them digitally from the CD onto an SCMS-equipped digital recorder.

Sub-indexes: or indexes provide additional starting points within a single audio track. Indexes are stored in the Q sub-channel and are most often found on classical music and sound effects CDs. Please note that many CD players cannot make use of sub-indexes. To add a sub-index, adjust the slider above IN POINT digital display to the desired insertion point. Use the up and down arrow key for fine adjustments. Once you are satisfied, click on the ADD SUBINDEX button.

Split Track: Perhaps the most used button on this screen. This allows you to divide the current track into multiple tracks. This is common on live recordings where you desire to track points in the recording. For example, let say you just recorded a speaker for over 60 minutes. A CD with a single track may not be desirable. To split a track, adjust using the slider above IN POINT digital display to the desired point you would like the new START ID to appear. Use the up and down arrow keys for fine adjustments, or click on the large main green LCD digital time display in the top left corner for direct entry. You will see the following:



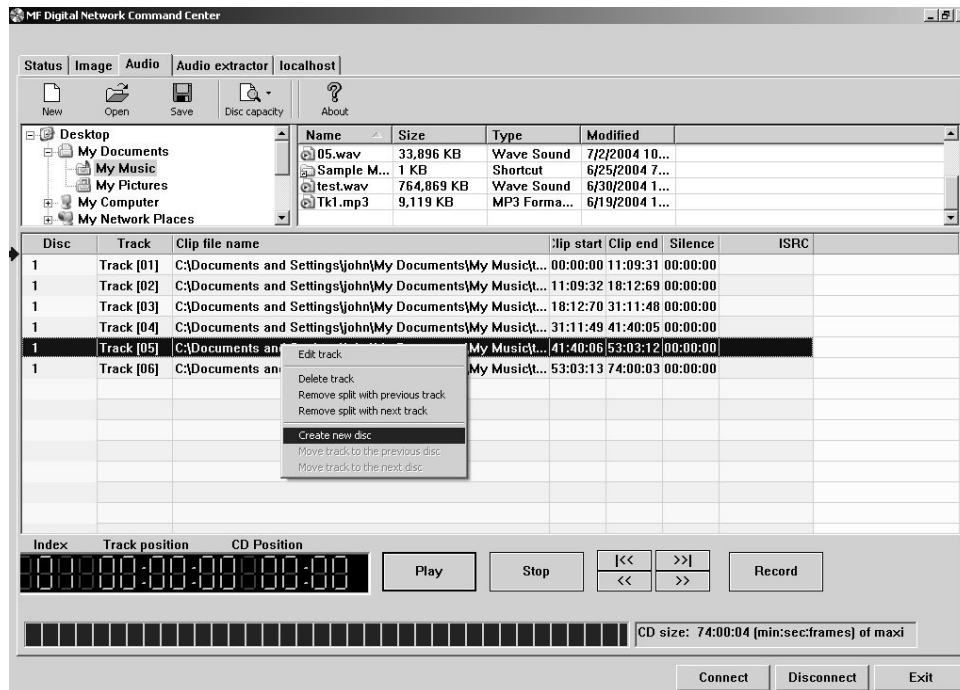
Once you are satisfied, click on the SPLIT TRACK button.

A handy trick to delete undesired content is to create a track out of the content you do not wish to include then delete the track. The source .WAV will remain unaffected but the resulting CD will not contain the content removed.

Disc Spanning

There are times when your recording will not fit on a single disc. The 5200 Live gives you the ability to choose the point at which you wish span to the next disc. To do so, here's how:

- Right click on the track you desire to be the first track on the next disc. You may repeat this for each subsequent disc desired.



- Select “Create New Disc”. You will notice the disc number in the left most column increment along with all tracks below. If a third disc is desired, left click on the track you wish to be the first track of the next disc, right click and select “Create New Disc” once again.
- Once you are happy with the disc set, click on SAVE and you will be prompted to save one .ISC file for each disc created. .ISC files, or image scripts, are images from which you can create discs. These files are relatively small as they contain simply the location of IDs and disc splits. You will need the source WAV for future use.
- To undo a span, simply click on the track you wish to move back to the previous disc, right click on it, and select “Move track to the previous disc...” by left clicking on it.

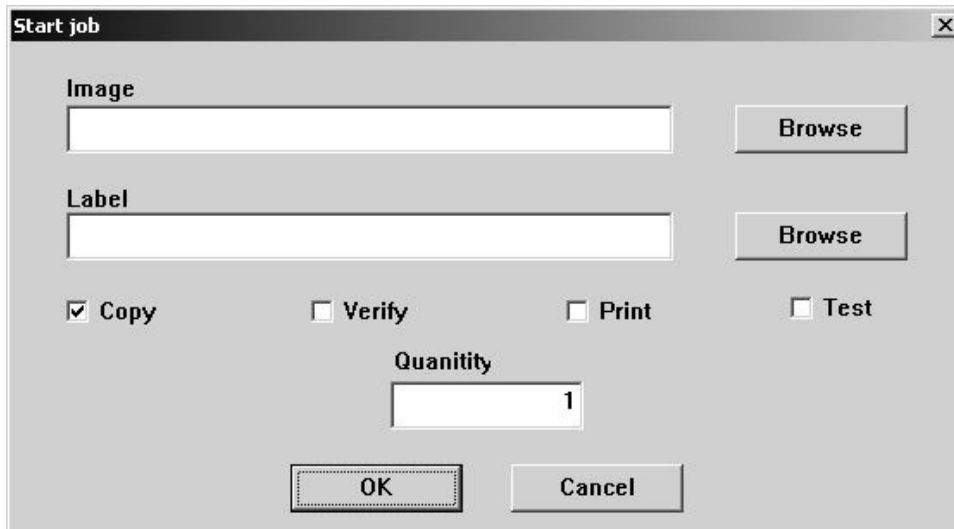
Making the disc(s)

Making discs is easy. Jobs can be started from either the STATUS tab or the LOCALHOST tab. STATUS TAB is best if you wish to start the job on multiple MF Digital CD copiers. Optionally you may use the network client remotely.

Method 1

Starting a job from LOCALHOST:

- Click on the START JOB button



- Click on the BROWSE button and select an image file to use (.ISC, .ISO, or .IMG). Likely this will be the .ISC file made in the previous step.
- Leave LABEL blank as the 5200 does not support in-line direct to disc printing so you need not enter anything here. Consider the MF Digital 3000 Series for automating duplication and printing if desired.
- Select the desired job options:

COPY: If you would like to write the disc, check this option. Typically this will always be checked

VERIFY: If you would like to verify the disc, select this option. This will perform a bit-for-bit verify of the disc. Selecting COPY and TEST at the same time will perform a **VERIFY** on the disc once written

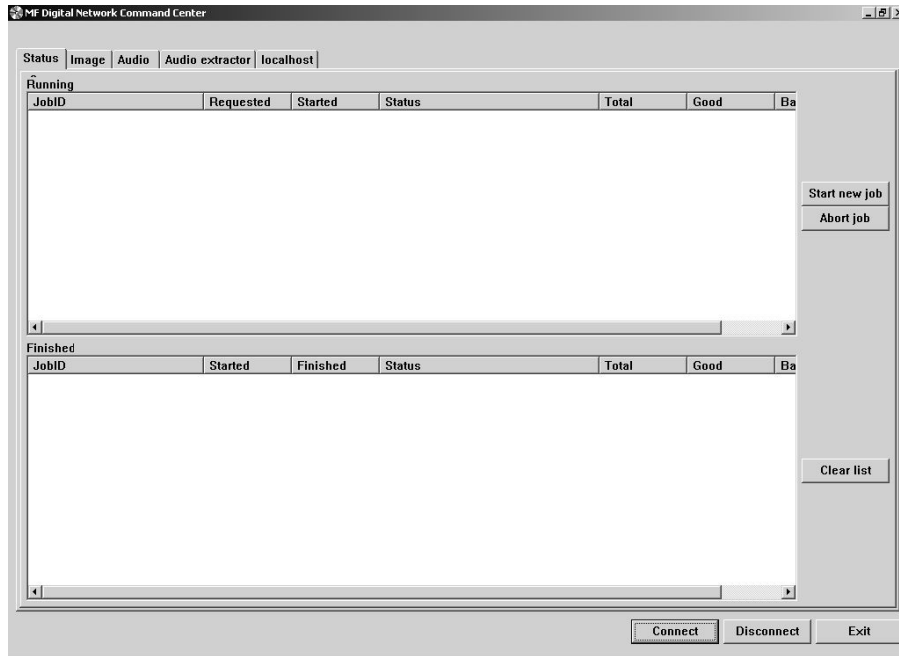
PRINT: Not applicable here, but on systems supporting direct-to-disc in-line print, this option could be selected to enable printing

TEST: Select this option, to perform a SIMULATED write of the disc. The disc will not actually be written. This is great for learning how to use your system, or for troubleshooting purposes. Selecting TEST and VERIFY at the same time will result in ALL discs being rejected as they contain no data.

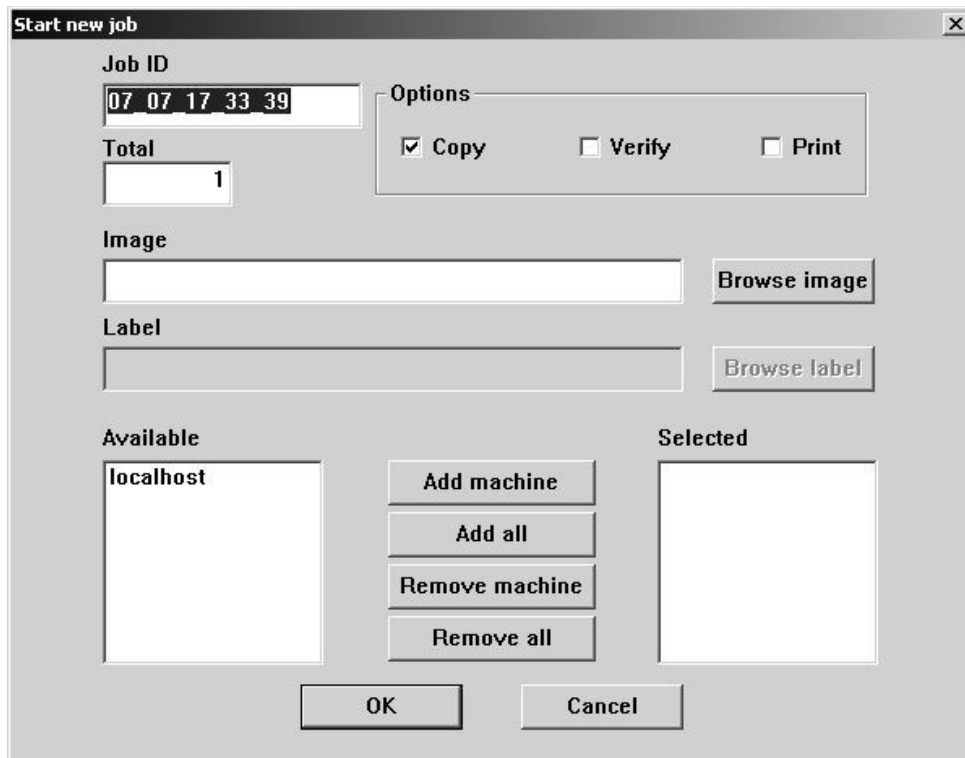
- Enter the desired quantity of discs and then click on OK and your job will start: If it does not, be sure you have 1 GB of free space on the hard disc

Method 2

Starting a job from the STATUS tab:



- Click on the START NEWJOB button



- Use the default JOB ID or enter your own. This is a handy way to identify your job making it easy to recognize what job is running.
- In the box under TOTAL, enter the desired quantity of discs
- Click on the BROWSE IMAGE button and select an image file to use (.ISC, .ISO, or .IMG). Likely this will be the .ISC file made in the previous step.

- Leave LABEL blank as the 5200 does not support in-line direct to disc printing so you need not enter anything here. Consider the MF Digital 9000 Series for automating duplication and printing if desired.
- Select the desired job options:

COPY: If you would like to write the disc, check this option. Typically this will always be checked

VERIFY: If you would like to verify the disc, select this option. This will perform a bit-for-bit verify of the disc. Selecting COPY and TEST at the same time will perform a **VERIFY** on the disc once written

PRINT: Not applicable here, but on systems supporting direct-to-disc in-line print, this option could be selected to enable printing

- Next choose which systems you wish to allocate to the job. If not networked, or if this is the only MF Digital stand-alone system on your network, only LOCALHOST will appear. If you have other unit but they do not appear, go to the LOCALHOST TAB, click on connect to add other stand-alones. Once connected, you may start up jobs on multiple systems simultaneously. To add systems, simply left click on the desired system to use and then click on the ADD MACHINE. Optionally you may add all available systems by clicking on ADD ALL. The REMOVE buttons can be used to unallocated that system from the job you are about to launch.
- Once you have filled in the appropriate fields and you are happy with your selections, click on the OK button and your job will start: If it does not, be sure you have 1 GB of free space on the hard disc