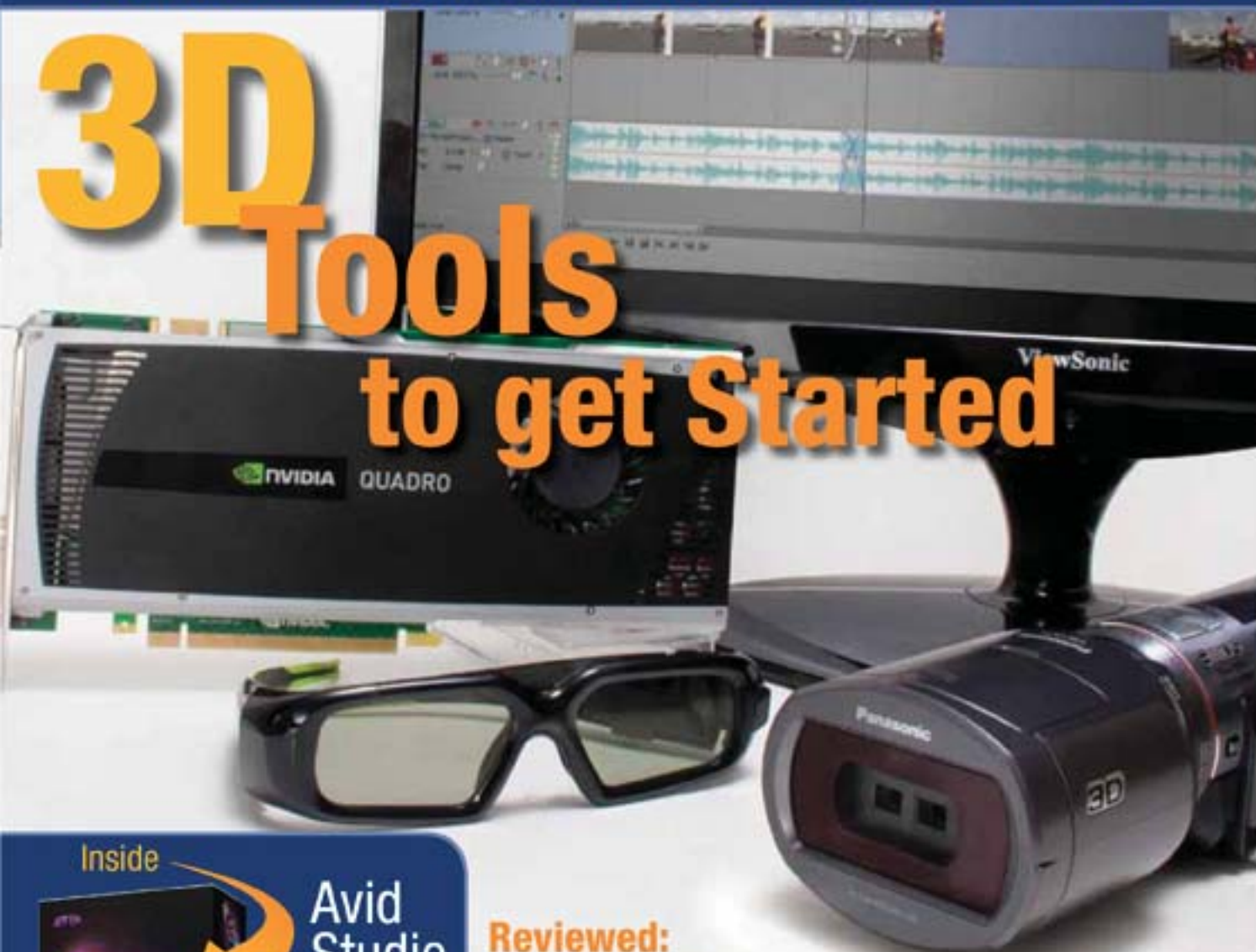




Videomaker

YOUR GUIDE TO CREATING AND PUBLISHING GREAT VIDEO AUGUST 2011

3D Tools to get Started



Inside

Avid Studio



Reviewed:

- **Panasonic** HDC-SDT750 3D Camcorder
- **ViewSonic** VX2268wm FuHzion 3D Display
- **NVIDIA** Quadro 4000 Graphics Card and 3D Vision Kit



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DUPE

Duplicating a DVD of your video project - or even that awe-inspiring vacation trip - has been simplified by the advent of the DVD burner found in computers.

it

Times many!

BY MARSHAL M. ROSENTHAL

Disc Duplicators Buyer's Guide

Disc Duplicators Buyer's Guide

Those with good memories will remember the time and effort it used to take to get the computer, DVD burning program and DVD burner to all work together. Now the process is almost ridiculously simple — except that one thing hasn't changed. If you're going to duplicate a number of DVDs, you still have to make the first one, and then duplicate it one-at-a-time using a computer's duplication program that has you inserting and removing DVD discs one after the other.

That's where a disc duplicator comes in; it's an external machine that doesn't even need a computer. You give it your completed DVD and it does the rest — providing you've "fed" it with blank discs and set the control appropriately.

The best part is the price — we're not talking about tens of hundreds of dollars (remember how much the first DVD burner for your computer cost?), but a few hundred dollars (unless you go for a "Ferrari-like" model, instead of a sturdy and dependable "Ford"). Of course if you want to automate the process or add Blu-ray burners instead of DVD (which is the same kind of rodeo, just Blu-ray uses different types of horses and a different burner technology to saddle up,) then the price goes up, but so too does the quality.

To speed up your duplicating process, here are a few things to consider about duplicators where anything less than ten copies coming at you is the loneliest number that you'll ever know.

Manual Disc Duplicator

At its most basic, your finished DVD goes into one side of the duplicator while the blank disc goes in the other. A few buttons, switches and other Mad Scientist-inspired controls later, the duplicator has copied the contents from the finished DVD to the blank, creating a perfect clone. Pop the clone out, insert another blank, rinse and repeat. This becomes even faster when multiple DVD burners are added, so that each burning cycle results in a number of clones. The disc speed is usually conformed to all of them — so if you're able to do "20X" speed for burning, it will apply to every disc being burned. No mix and match.



Example - Manual Disc Burner -

Virpower Digital SharkCopier SATA Duplicator. This series of stand-alone disc duplicators provides up to 15 burners - no PC is needed whatsoever. A built-in 160GB hard drive (500GB for Blu-ray duplicators) allows for blanks to be burned without needing the original. An LCD display provides all the necessary information for making intelligent choices, and the counter keeps track of the discs that have been burned versus the total number required for the project. 20X burning speed ensures quick copies — for example, up to 120/hour with a 10-burner model.

Automated Disc Duplicators

Automated (or "Robotic") disc duplicators say goodbye to you once the master disc has been

Printing A Label On The DVD

The presentation of a DVD disc can be as important as the contents on it — the rule of first impressions taking precedence here. Just writing the title on the surface of the DVD with a felt marker won't score points. To give your DVD copies a look that suggests quality, the label that is on it must appear professional — and it doesn't hurt if the label can avoid being smudged or easily pulled off the disc as well. There are a number of ways to accomplish this, short of drawing a label on the disc yourself.

LightScribe

LightScribe-enabled DVD burners add the ability to burn an image directly on a DVD — in effect creating text and graphics cover art that is indelible. No muss or fuss with sticking a label on here. Of course the DVD must be LightScribe-enabled, adding to its cost compared to that of regular blank DVDs. A program provided with the LightScribe-enabled DVD player is used to do the burning. Manufacturers of LightScribe-enabled DVD burners include Microboards, Alterac and U-Reach among others. www.videomaker.com/r/524

Inkjet Printers

There are inkjet printers which are designed to print directly onto the label of a special blank DVD disc, for example, the Stylus brand of Epson inkjet printers. The advantage of these printers is that you are printing directly onto the disc, using a printer that has an added capability, as opposed to a stand-alone printer that does nothing but print labels. Inkjet-compatible discs must be used, and these are available from a wide variety of manufacturers, that includes Imation, Maxell, TDK, Memorex and others. Epson America, Inc. <http://www.epson.com>

Standalone Thermal Label Disc Printers

A thermal label disc printer accepts a blank DVD in a slot. A keyboard is then used for printing text on the disc or, if the model allows a connection to a computer via a USB cable (for example, the Casio CW-L300), the computer can provide the input to put on the disc. No graphics can be included as the printer is text only. The number of lines that can be printed is limited also, depending on the printer model. Casio CW-L300 www.videomaker.com/r/525

Company	Website	Internal DVD Burners	External DVD Burners	Internal Blu-ray Disc Burners	External Blu-ray Disc Burners	DVD Duplicators	Blu-ray Disc Duplicators
Acronix	www.acronix.com						
Adiotech	www.adiotech.com						
Altec	www.altec.com						
All Top Solutions	www.all-top.com						
Apricom	www.apricom.com						
ASD	http://www.asd.com						
Asia	www.asiaproductions.com						
Bufile	www.bufile.com						
Bufile	www.bufile.com						
Capa Store	www.capastore.com						
CDLight	www.cdlight.com						
Clara Blue	www.clarablue.com						
Clara Masters	www.claramasters.com						
CD Shop	www.cdshop.com						
Clear World	www.paperfront.com						
Clug Technologies	www.clugtech.com						
CP	www.cp.com						
CD Magic	www.cdmagic.com						
CD	www.cd.com						
Media	www.media.com						
Image	www.image.com						
Image	www.image.com						
Image	www.image.com						
Info	www.info.com						
CD Electronics	http://www.cd.com						
CD-It	http://www.cd.com						
MSI Technology	www.msi.com						
Multibit	www.multibit.com						

Company	Website	Internal DVD Burners	External DVD Burners	Internal Blu-ray Disc Burners	External Blu-ray Disc Burners	DVD Duplicators	Blu-ray Disc Duplicators
Multibit	www.multibit.com						
Multibit	www.multibit.com						
Native Computing	www.nativecomputing.com						
Novus	www.novus.com						
NO	www.no-global.com						
NO Technology	www.notechno.com						
Power	www.power.com						
Power	www.power.com						
Power	www.power.com						
Power	www.power.com						
Power	www.power.com						
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Power	www.power.com						
Power	www.power.com						
Power	www.power.com						
Vinpower/Xerox	www.vinpowerdigital.com						
Media	www.media.com						
Media	www.media.com						



put in the drive and the input bin has been loaded with blank discs. The procedure is set and activated through a control panel that doesn't require a computer. Changes in the burning speed (up to the maximum the drive allows) and other variations are available. You just sit back and recite the three laws of Robotics, or hum an Eminem tune as the discs pop out just like candy from a Pez dispenser.

Example - Automated Disc Burner -

Two DVD/CD recordable drives and a 100 blank disc capacity sounds good; add a built-in thermal inkjet printing on the discs and it's gotten even better. Discs are picked up and transported robotically (high-speed belt drive) — the speed of the burners bringing the ability to burn up to 150 discs per hour into play. LED lighting shows you what is going on inside, PC/Mac integra-

LIKE CARS, DUPLICATORS COME WITH OPTIONS THAT ADD TO THE VALUE.

tion means ease of control and front dispensing of the final discs means they're ready to be taken out without having to open a drawer or door. All for under \$3,500 retail. (Check out our *Disc Publisher* review in this issue on page 20.)

Options

Like cars, disc duplicators come with options that add to the value — and

price. Some models perform diagnostics upon startup to ensure that everything is ready to party, while other models add basic copy protection to the copies to drive a wedge against piracy. Some duplicators even add a hard drive that can copy the contents of the master disc and then transfer that data to the blanks in a more efficient manner. This doesn't enable the drive that holds the master disc to copy discs, but it does allow you to place your master away for safekeeping after just having played it once. It also lets you reselect the "disc" for burning at a later time. And of course those burners that do Blu-ray handle high-definition BD discs.

Example - Automated Blu-ray Disc

Yep, they should work on the name, but for under \$3,000 you're getting the ability to do Blu-ray copies (you can use it for DVD too, obviously). It knows enough to understand different master discs when confronted by it, and the 100-disc capacity gives the three BD burners a workout — DVDs go lickety-split, while Blu-rays follow just a few steps behind. Blanks that don't make the copy cut get ejected, while those that do go into a storage area to keep them safe and clean.

Companies

The manufacturers of disc duplicators are a varied bunch. Most of their names are not well known to the buying public. This pretty much obliterates the idea of brand-loyalty, so it's the features that should be considered, as opposed to how many models each company makes, or what the price is. Research into the company, the disc duplicator you're interested in and other buyer's remarks on their purchase will be needed. ■

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