## THE SPORT OF DIGITAL LIVING

## E EAR



SAMSUNG N2000 DVD PLAYER

## What DVD Ought to Be

By Grant Clauser

Last fall, just as a friend and I were chatting about the fact that DVD players had reached a point of almost becoming dull, a press release from a company called VM Labs came out of the fax. The company claimed that a new technology, called Nuon, was going to revolutionize the DVD world. With a little skepticism, I followed the Nuon trail to Samsung. Now, about nine months later, I've got that Samsung N2000 player and can confidently report that Nuon has indeed done some very appealing things for DVD.

First, let's talk about what Nuon is. It's a chip

good assortment of traditional DVD features into the box. The smokey gray front bezel is attractively styled with silver accents and a two-color display panel. There's a large jog/shuttle dial, skip, open/close and stop buttons. On the front, you'll also find a headphone jack and level control and two Nuon ports for connecting peripherals. On the back are digital optical and coaxial outputs, six 5.1

DVD remote. It's sturdy, fits the hand well, and uses a joystick instead of navigation buttons. A closer look at the remote reveals a few Nuon extras, but we'll come to those soon.

On video material, the N2000 performed like a top-of-the-line player should. I hooked it up with Belkin's Gold Synapse series cables to a 36inch Hitachi Ultravision multimedia monitor. Test patterns showed 480

SAMSUNG
POLYCICO DE GAME DOD 1988

POR 18 E 17:18

POR 18 E 17:18

POR 18 E 17:18

## Samsung N2000 Nuon DVD Player

**Price: \$399** 

+ Unmatched movie control, enhanced zoom, visual CD display, video game play.

- Slight jagged edges and shimmer.

**Target Buyer:** Families who want a combination component, and movie enthusiasts who like to scrutinize details.

and an operating platform designed to both streamline the internal functions of a DVD player and act as a stage for enhanced features, including video games. A Nuon DVD player acts somewhat like a computer, offering the user more interaction and more control over the media playback experience. Sound too techie? Suffice it to say a Nuon player does neat stuff that others can't.

Nuon-stuff aside, the N2000 crowds a

RCA audio outputs, two sets of stereo outputs, two video outs, one S-Video and one set of Y, Pr, Pb component video outs. You can run two video signals out at the

same time to display on two separate monitors, if so moved. It does Dolby Digital decoding, so you only need a ProLogic receiver for surround sound or you can use the Spatializer for simulated surround from stereo speakers. It also boasts an HDCD decoder, providing enhanced low-level detail and ambience for CDs with HDCD encoding. There's also a black level enhancer, accessed through the menu.

The remote looks like a standard Samsung

lines of resolution, the best you can expect from any player, and passed the PLUGE test on the *Video Essentials* DVD. Color accuracy, based on *Video Essentials* test patterns and movies, looked great. I noticed some shimmering in chapters 10 and 11 of *The Fifth Element* when Lelu jumps off the ledge, and a bit of a jagged edge on the police car as it turns in mid air, but you've got to really be looking for it. Meat Loaf was particularly jaggy around the edges during chapter 2 of *Fight Club* as he crushed Edward Norton to his chest.

Now what Nuon brings to the table is a set of control tools in a unique graphical interface. In other DVD players, you have to go through the setup menu before you insert a disc, and, if you

want to change any of the parameters, you've got to stop the movie. The N2000 lets you access the setup menu at any time while the film keeps going in a picture window. The Smart Matrix menu, reached by pressing the display button, shows all the current parameters, including the audio settings, subtitle language, title, chapter, time and bookmark, all while the film plays in a center window.

Other cool features let you interact with a DVD with much greater detail than traditional players. First, Nuon enhances the zoom and pan functions. The 20x zoom is the cleanest I've seen and allows you to pan around the zoomed image. Pressing the snapshot button brings up gamma, contrast, brightness and color settings, which you can change to get a clearer look at individual frames. It's especially useful in dark scenes when you want to get a better look at a face. Using the feature in chapter 35 of Fight Club reveals the gaping hole in the back of Tyler's head in more detail than you need. The strobe button splits a scene into nine consecutive frames for detailed look at action. The smart fit button stretches video material to fill the entire screen. The effect works okay on 4:3 screens with movies done in 1.88:1 ratio, but 2.35:1 movies appear too stretched.

The few DVDs with multiple angles, mostly music videos and adult films, are enhanced through Nuon. When *Sweet Surrender* came up on Sarah McLachlan's

Mirrorball DVD, a little camera icon appeared, announcing the availability of alternate angles. With other players, you press the angle button and another angle appears. Pressing the angle button on a Nuon player displays all the alternative angles in windows at the bottom of the screen. You then use the joystick to select the angle you want to view.

Since DVD players aren't only for DVDs, VM Labs applied Nuon to music CD playback as well. I slipped in Santana's *Supernatural* CD and was greeted with a stunning display of colors, swirls and fractals, like moving tye-dye patterns. On a large TV, the effect is truly impressive and acts as a logical bridge between CD and DVD. It would be great to show off at parties and is one good reason to play your CDs on a DVD player. The first manufacturer to put Nuon on a multidisc changer will have me sold on using a DVD as my main CD component.

The last thing to set this player apart is probably the feature Samsung downplays more than anything, and that's video games. It makes sense that a DVD player could be built to play games, so it's interesting that it took so long to happen. First, it's important to point out that the N2000 is



primarily a DVD movie player and not a game machine, as opposed to Sony's PlayStation 2, which is primarily a game machine with DVD movie playback sewn on as an afterthought. Games designed for Nuon players don't compare, graphically, with anything Sony, Sega or Nintendo currently has on the market. The unit ships with a simple gamepad that hooks into one of the two front ports. NYKO also manufactures a step-up Nuon game pad with an analog joystick.

The player comes with one full game, *Ballistic*, and a few playable demos. *Ballistic* reminds me of shooting marbles, but it's entertaining for short periods. *Myst*, *Tempest*, *The Game of Life* and *Monopoly* are supposed to be coming out in Nuon-compatible versions. Nuonenhanced movie DVDs, similar to movies with DVD-ROM features, are supposed to be in the works as well. Imagine accessing the PC features of *The Matrix* through your DVD player.

One of the most promising things about Nuon DVD players is that they are supposed to be upgradeable. Planet Web, the company that designed the Web browser for Sega's Dreamcast machine, has already inked a deal to design a Web browser for Nuon. Theoretically, a modem will be available that plugs into one of the Nuon

ports, making the DVD an Internet appliance.

Samsung had originally planned to call the N2000 the Extiva, and that is the name you'll see on the first production line. But the company ended up scraping the name and redid the ink on the front faceplate to emphasize the Nuon brand. It's the equivalent of Dell putting an Intel Inside sticker on a PC.

Presently, Samsung is the only company to ship a Nuon DVD player, but Toshiba has also committed to one model. The more companies to adopt the technology, the faster features and enhancements will be designed to run

From the Virtual Light
Machine (top) to the
graphical interface (bottom), Nuon changes the
look of DVDs and CDs.

with it. As the first Nuon product, Samsung's N2000 is a real showcase. As a DVD player with a list price of \$399 and estimated street price of \$350, the N2000 still costs a bit more than many standard play-

ers, but the control and playback features should appeal to serious movie watchers and to those with a soft spot for hi-tech toys.

Reprinted by permission from the publisher of E-GEAR, The Sport of Digital Living, November/December 2000; a NAPCO publication.

For subscription information call 215-238-5300 or visit www.e-gear.com.