

PRODUCT reviews

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iClone Studio 2.5

By J.V. Bolkan

Reallusion calls its iClone 2 Studio a 3D real-time filmmaking package. I think they may have been watching some awfully low-budget films. However, despite the hyperbole, the program is really pretty terrific at what it does. When you consider that it retails for just under \$200, it's understandable if the marketing folks got a bit carried away.

Fans of the Sims or Second Life denizens will quickly be comfortable. iClone is much more adventurous and flexible than either of those applications. The quality is much, much higher, but in ways that only a sophisticated and experienced 3D modeler is likely to notice. Despite the ultra-realistic half-human, half-wireframe on the product box, iClone is more about realistic cartoons than true virtual realism.

Although you might be surprised at what you actually bought, you're even more likely to be delighted. 3D modeling has a long-standing and well-deserved reputation as an arcane, power-hungry, patience-busting, incredibly hard to learn and time-wasting affair. iClone takes those problems and renders them moot (bad rendering puns are the result of too many years with old-style 3D modelers). My wife, a Sims player with virtually no 3D experience, created a custom model with my face and had it do a little dance in a 3D environment. She didn't read the manual and the whole thing took her 30 minutes.

I spent even less time responding by importing her photo, mapping it to a



Customizing characters with great animation, assembling 3D environments, and creating fancy special effects are all things you can do within minutes in iClone.

pre-created mesh template, and then giving her avatar absurd vampire teeth and making it hop up and down while “announcing the news” on a pretty believable television studio set. It was fun. It was fast. The preview video was fast and smooth. I finally was able to make my wife do exactly what I wanted, sort of.

It did kind of look like her, and I had lots of options for things like hair style/color, hand positions/movements, backgrounds, actions, even expressions. What I didn't have was enough options—the real world has more movements, scenes, and details than any template package can begin to touch. Of course, templates can be just the beginning of iClone—and the learning curve barely makes a bump.

As the name suggests, the strength of iClone is in its facile human (or hu-

manoid) models and excellent animation with awesome realism. My wife model won't fool anyone into believing it is a real person, but strangely, looking closely, you could believe that the model was really breathing, really walking, really alive. That is a hugely powerful and creativity-inspiring feature.

Digging into the program will yield much better models than I put together, but it isn't really needed to tap into the potential. Reallusion offers a plethora of add-on templates. I got Xtreme Elements 1 with my review copy. The four-disc set includes Natural Human Base (nine typical human forms that can easily be tweaked into an army of “individuals”), CloneCloth (cloth mesh for “virtually unlimited” clothing options), World Wilderness (3D movie sets in motion), and Work-

ing Fashion (modern characters, accessories, and gestures). Additionally, a burgeoning community of creators already exists online, sharing models and scenes for little or no cost.

iClone 2.5 has almost comically low system requirements—when taken in context of real-time 3D modelers which typically bring even University-based supercomputers to their knees. A Pentium III at 600 MHz with a mere 256 MB RAM can run the program under Windows XP/2000—I have socks that almost have that much computing power. Version 2.5 sup-

ports Windows Vista, but again, any computer that will boot Vista has plenty of horsepower for iClone. The kicker is that iClone heavily relies on the computer graphics card.

You'll want a pretty good embedded graphics card in your Vista machine—the ATI Radeon 1250 in my wife's desktop worked very well. I'd recommend a discrete graphics solution for best performance, preferably a card that supports DirectX 10. For XP/2000 users, the best DirectX 9.0 card you can get should suffice (DirectX 10 is not available except in Vista).

Easy, fun, powerful, and a gateway to extreme creativity—it's an excellent deal for \$199, even if you might need to invest \$100–\$200 in a graphics card. Although iClone isn't going to challenge the high-end 3D modeling systems that actually do make films (and can cost \$10,000 or more), it really can show the power of creation and make very compelling “semi-real” movies.

iClone Studio 2.5

Reallusion

\$199.99

<http://www.reallusion.com/iclone/>

Panasonic D4000U

By J.V. Bolkan

Classroom projectors are great, but sometimes it's necessary to combine multiple classes or even the entire school for a presentation—in those instances, a \$1,000, 850-lumen projector just won't do. Enter the Panasonic D4000U, a virtual binary star of projection intensity with a whopping 4,000 ANSI lumens blasting forth from its dual bulbs.

As you'd expect, the D4000U is a beast of a projector. Weighing in at a bit more than 30 pounds and 20.9 x 17.4 x 6.6 inches of massiveness, this projector needs stout mounting bolts and a permanent location. With a list price of \$6,499 (about \$4,800 retail) you'll also want it where you can use it fairly often.

The advantages of a monster projector are great. The D4000U's extreme brightness makes it practical to use in areas where having the audience in darkness is unwanted or impossible. Although your middle and high school students would be perfectly behaved when massed together in a dark auditorium, not every school is as fortunate. Four thousand lumens is bright enough that you can project a fairly crisp image even in normal



Rugged and dependable large-format projector.

lighting. Alternately, in a darker room, that brightness can be used to expand the image size to a cinema-like 50 foot display (measured vertically) with plenty of contrast.

The D4000U is a DLP-based projector, meaning it shares its basic imaging technology with the most inexpensive projectors on the market. However, DLP technology does provide exceptionally vivid colors and most reviewers agree it delivers slightly better video motion quality than the slightly more expensive LCD technology. I can attest to the vivid colors and smooth motion of the images produced by the D4000U. Although I didn't have an auditorium to test in, I was able to project a fairly large image (about 18-foot diagonal) in a fully lit room and was quite pleased with the image saturation.

There's more to image quality than sun-like intensity and superior motion and color attributes. You also need resolution, especially if you're

going to show the image in an extremely large size. The D4000U's native resolution of 1024 x 768 (XGA) is adequate, but at the larger display sizes, pixilation will be noticeable. This shouldn't be a problem at all for typical PowerPoint presentations, but video and photos will not be as sharp as they could be. The projector can accept signals in all the common video formats ranging from standard television (480i) through HD 1080p as well as standard computer resolutions. Of course, as with all LCD and DLP devices, the projector's native resolution is fixed and all other formats are converted to the fixed image grid.

Connectivity for the D4000U is solid, if again, not exceptional. The projector is network capable, but only through wired Ethernet, not wireless. Inputs include DVI-D 24-pin (digital video computer), D-Sub 15-pin (standard computer video), BNC (5-plug component video), serial (for up to 2 external controls), and parallel. Additionally, the D4000U has a wireless remote with up to 90-foot range.

Although the D4000U will most likely be the most expensive projector in the school, it is important to note that within the “large audience” category (projectors designed for 100–500 people with 3,500 lumens or more) the D4000U is actually an entry-level

model, with many costing \$10,000 or more. Furthermore, Panasonic estimates lamp life at 3,000 hours, as much as 50% longer than many projector bulbs. Of course, there are two bulbs to replace, but even that has a positive side: if one bulb dies in the middle of a presentation, the display

doesn't stop, only dims a bit, avoiding an interrupted presentation.

Panasonic has made an excellent projector that should allow more schools to install large format presentation facilities. Although it doesn't have some of the bells and whistles (no widescreen format or wireless net-

working) of its much more expensive siblings, it does strike a very sensible cost-performance balance.

D4000U

Panasonic
\$6,499
<http://www.panasonic.com>

Adesso AKB-220

By **J.V. Bolkan**

It is rubber, extremely rugged, and about as sexy as a \$40 piece of electronics hardware can be. The AKB-220 from Adesso can be folded, rolled, or stuffed into less space than a regular-sized mouse. It weighs little and thanks to its USB cable (it does come with a PS/2 adapter for old school PCs) it should work with virtually any computer, Windows or Mac. Oh, did I mention it is virtually indestructible?

When I received the evaluation unit, I paraded the AKB-220 around the office, reveling in the sheer geekiness it imparts. When my coworkers became indifferent to my antics, I was forced to actually plug it into my laptop in the hopes of renewing that geeky glow. Instead of sparking fresh interest and envy, people began avoiding my work area, evidently distressed by the near constant grumbling and cryptic utterances that the keyboard elicited from me.

A couple days of wrestling with the darn thing filled me with despair. Despite really wanting to love this keyboard, I couldn't even bring myself to continue using it. In geek terms, it is a tribble—cute and cuddly, but much more trouble than it's worth. I probably couldn't even break the accursed thing! Maybe a few more days and I'd have begun liking the device again, but I didn't have the level of patience needed to find out.



Too cool for school?

The biggest problem is the lack of dependable tactile feedback coupled with balky switches. An almost silent keyboard with only the tiniest amount of key travel is in itself a bit disorienting. When pressing keys seems to only occasionally send that letter to the computer, you end up writing coded messages such as “ths keybrd isdrivng me crazy! !”

Being a reviewer (and incredibly childish), I couldn't wait to test the indestructibility aspect, once I was sure that I was done with the usability testing. In the press materials, I'd read you “could” run over the keyboard, although it wasn't recommended. I ran over the keyboard with my fairly heavy cruiser motorcycle—twice. Although it wasn't connected to my computer at the time, I'm guessing that the keyboard probably didn't notice the tire weight on about 1/3 of the keys. When I reattached keyboard to laptop, it seemed to work as well as it ever had.

Even if you like keyboards that perversely ignore every 4th or 5th character input, there are a couple other things I disliked about the AKB-220. The rugged rubber keys have almost

absurdly delicate lettering. With my limited use, already a couple of the letters were wearing off—granted, I'd resorted to what I like to call thunder strokes, but still, a keyboard without markings is no fun, and I hadn't even washed the thing yet. Second, it is almost totally flat—putting my hands and wrists into a slightly uncomfortable typing position.

Although I can't recommend this keyboard as anything more than cube décor, I do admit to being impressed that it survived the fully-dressed Vstar Classic tire tread test (roughly 800 pounds vehicle weight) twice. Being able to literally hose off a dirty keyboard or spill a cup of precious java on it without effect does have its charms. The \$39.95 list price is deceiving; I found it all over the Web for less than \$25, including shipping. If you only need light typing and work in a dirty or hazardous area (wood shop, PE, political science) then it might be worth the aggravation and \$25 or so it'll cost you.

AKB-220

Adesso, Inc.
\$34.99
<http://www.adesso.com>



J.V. Bolkan is the acquiring editor for ISTE's book publishing department. He has been reviewing and writing about multimedia and technology for more than 20 years.