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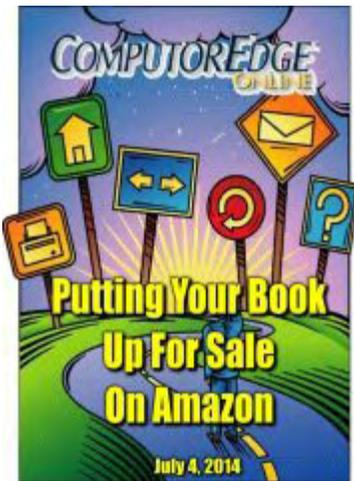**Hi-Tech Computers**

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Magazine Summary

List of *ComputorEdge* Sponsors

Digital Dave
by Digital Dave

Digital Dave answers your tech questions.
Laptop "Working" Hard; Long Open and Close Times for Windows; Restart vs. Shutdown and Auto-Restart.

How to Publish Your E-Book on Amazon
by Jack Dunning

Questions to Ask Yourself When Self=Publishing on Amazon
Anyone can put an e-book up on Amazon. It's easy! But here are some considerations if you want to actually sell a few.

Automate Any Program in Windows: Part II
by Jack Dunning

Find the Hidden Name of Program Controls to Automate Windows Applications
Last week, we used some basic AutoHotkey to automate programs. This week we use a little more advanced (and in many cases easier) technique with hidden control names.

Wally Wang's Apple Farm
by Wally Wang

The Philosophy of Microsoft, Google, and Apple
The Philosophy of Microsoft, Google, and Apple; Buying a Macintosh Cheaply; The Death of Aperture; How Not to Make User-Friendly Software; New Operating System Updates; Blocking or Allowing Plug-ins to Run in Safari.

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by Charles Carr

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Digital Dave

"Digital Dave answers your tech questions." by *Digital Dave*

Laptop "Working" Hard; Long Open and Close Times for Windows; Restart vs. Shutdown and Auto-Restart.

Laptop "Working" Hard

Dear Digital Dave,

Thanks for your expertise. I'm a long time reader of your column and this magazine. You have helped me in the past.

I have a six year old HP laptop. I have experienced, for as long as I can remember, a lot of noise from the computer activity. At first when I start up the computer it runs relatively quiet. After the computer has been running for a little—I don't have to be doing anything on the computer it can just be sitting there—it starts to make a lot of noise.

The noise is not an unusual noise. The noise sounds to me like a fan. The noise continues to run at a steady rate until the next time I turn off the computer. The time it takes for the noise to kick in is variable, and once it does start it doesn't stop, at least until I shut down the computer.

When I open the viewer (CTRL-SHIFT-ESC), I see no programs open, and the biggest process is in the high nineties and is system idle.

I suspect it is some sort of thermal regulation with a thermostat that senses heat, then a switch responds by turning on a fan (if that is what the noise is), but I don't know what is causing the heat since I don't have to be using the computer in order for it to turn the fan on. The computer just has to be on for any amount of time, and it never turns back off.

Do you have any kind of idea what exactly is going on here based on my description?

Paul Anthony
San Diego, CA

Dear Paul,

You are probably right. I would suspect that a cooling fan is turning on in response to a thermal sensor. There are a number of fans inside of the computer including the power supply fan which is always on. The CPU has a cooling fan and some graphics cards have cooling fans. It's not unusual for a laptop to have three fans.

It can take a little while for the computer to reach a temperature where the extra fans turn on. But usually, it will wind down once the temperature is reduced. However, the buildup of dust over time can make the fan less efficient resulting in the continuous operation of a fan once it gets started.

You best bet is to open your computer per the manual and suck (or blow) out the dust. You should also check the air vents which are pretty fine in laptops and can become clogged pretty easily.

It's probably worthwhile to try a BIOS update. The fan not shutting off could be a bug. More likely, it's just never getting cool enough to shut off, so either dust or a faulty component is generating lots of heat or acting as insulation and the fan doesn't keep up with it. If dusting doesn't help, it's possible to replace the fan with something bigger or put in a bigger heat-sink. (This may not be an option in a laptop.) For desktop PCs make sure there is sufficient airflow around the PC. If it's closed in a cupboard, the fan isn't going to be able to do its job.

This may not solve the problem. Sometimes a component within an older computer will develop a heat problem. Or, even a thermal sensor may be flaky. In those situations the fan may only reset when you restart the computer.

I have a computer that will start roaring occasionally. A reboot will fix it, but sometimes it stops on its own. There is a logical reason why it's doing this. I just don't know what it is. If it's a faulty component, then I will probably have to wait until it fails to find it. As long as the computer runs, it's not worth my time to seek out the problem with so little to go on. It's been running for years with this behavior. Come to think of it I haven't had a problem lately. Humm.

Digital Dave

Long Loading and Shutting Down Times for Windows

Dear Digital Dave,

May I offer some advice to those with Windows loading and closing problems which I don't recall if you've mentioned prior?

When odd issues start occurring such as these, or more importantly your computer slows down, it may just be a USB peripheral that is the root of your problem. A friend had a new computer built for himself, and after setting it up at home, error messages began, slow operations and boot times. Nothing in particular was jumping out as to the cause. He returned it multiple times to the dealer, who exhaustively tested it and found nothing wrong! I got involved and saw his setup.

His profession required him to have multiple backups of all his casework, so he had the following USB connected devices: one - 5 disk RAID; two - 4 Disk Raid's and at least two other one TB Standalone single Drive backup devices. All USB 2.0 connected. He had so many USB backups installed, they required him to have one (1) 10 Slot USB extension to accommodate all of them!

After great protest by him, I disconnected all his outboard USB devices except for the mouse and keyboard. As soon as I booted the computer, all was well again. We then methodically re-installed each device one at a time—booting each time until we found the offending raid device (which had a failed internal board). But even with that, the system still took boot times longer as the computer attempted to load all these devices. So before raising the red flag, unhook your USB devices to pinpoint a possible problem.

Marc M
Tierrasanta

Dear Marc,

You're absolutely right! That's why I normally suggest that there may be a hardware problem. We tend to concentrate so much on software problems that we get trapped into not even looking at possible hardware issues.

I once had a computer that randomly crashed. I finally disabled the USB ports in the Device Manager. The crashing stopped, but I needed USB ports. I added an expansion card and the problem was solved. Sometimes we must go to a minimal installation with both hardware and software to resolve some of these problems.

If you don't mind me saying, your friends backup solution is ridiculously overdone.

Digital Dave

Restart vs. Shutdown and Auto-Restart

Dear Digital Dave,

I have a two-part question. You've mentioned the value of shutting down the computer once

in a while. If I remember correctly, it was to clean up system files. Does restarting do the same?

If restarting offers the same advantage, is there a way to have the computer restart at a specific time, like 3 a.m. Sunday morning?

Poz
San Diego, CA

Dear Poz,

Yes, restarting a computer would have the same effect as a shutdown since they are essentially the same thing from the operating system point of view—at least once you start up the shutdown computer again. The one difference is that a warm boot (restart) does not power down everything.

Yes, you can schedule a restart at a particular time with Windows Task Scheduler (Control Panel => Administrative Tools => Task Scheduler of type "task" in the Search field and select Task Scheduler). In Task Scheduler you may find a built in Windows task for (Task Scheduler (Local) => Task Scheduler Library => Microsoft => Windows => RestartManager; at least on a Windows 7 computer). Select Create Task and you will find everything you need for a regularly scheduled restart.
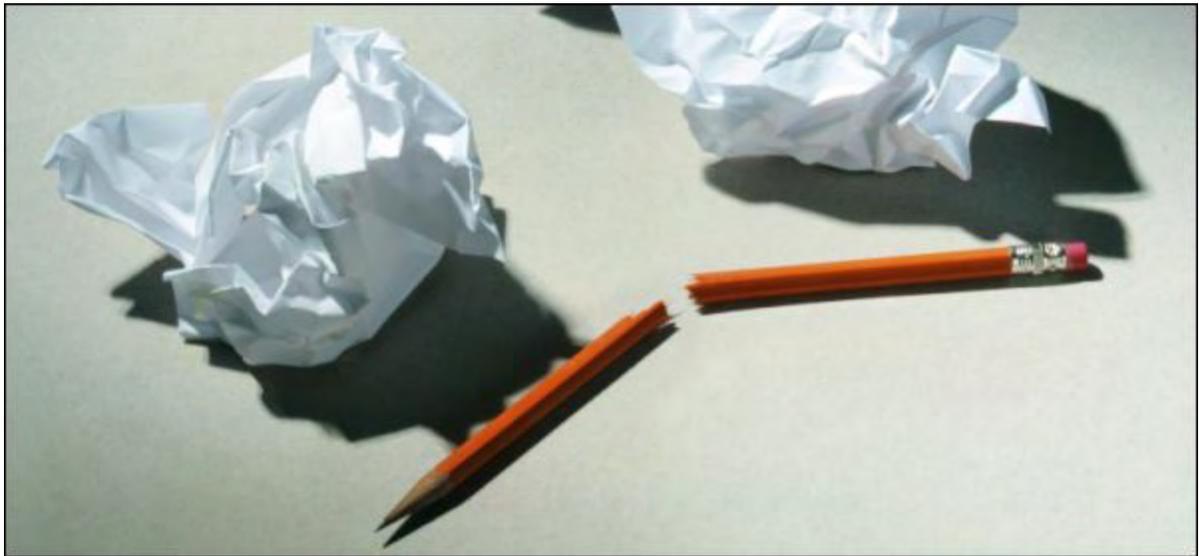
You can also set up your own task in Task Scheduler for running the command:

```
Shutdown.exe -r -t 00
```

which will cause the computer to reboot at the time designated in Task Scheduler. The -r is for restart and the -t 00 means right now.

If Windows is setup for automatic updates, I find those updates restart the computer regularly enough.

Digital Dave

How to Publish Your E-Book on Amazon

"Questions to Ask Yourself When Self=Publishing on Amazon" by Jack Dunning

Anyone can put an e-book up on Amazon. It's easy! But here are some considerations if you want to actually sell a few.

Last week I discussed the "rules" which apply to working with Amazon as an e-book self-publisher. Amazon has designated the size and shape of the self-publishing box and anyone who wants their books on the mega site must conform. For most people, the Amazon guidelines will work out fine. It's just a matter of writing a book and adding it to your [Kindle Direct Publishing](#) (KDP) account. If you don't have an account, it's easy to start one.

You will need to provide personal information such as your bank account number and social security number, but that's to be expected since (hopefully) Amazon will be sending you money as your books sell. Amazon makes payments approximately 60 days after the close of the month. This is a standard practice with most book e-tailers. Amazon used to wait until you accumulated at least $10 in sales before making a payment, but that has recently changed that policy. As long as you're using direct deposit, all royalties due are paid in the second month following the month of any sales regardless of the amount.

Adding a Book to Amazon

Once you have an account adding a new book is as simple as filling out a Web form. However, it is worthwhile to take your time and carefully consider each step. Your answers may significantly impact how well your book sells. The goal is to make the book easy to find and help the reader in the buying decision. I won't cover every blank on the Web form needing completion, but I will highlight those items which deserve the most thought.

To add a new book to Amazon KDP open the Bookshelf page and click "Add new title" (see Figure 1). A new screen will open for entering all of the pertinent information. This same screen is also used to edit the information for any other book you have already added to Amazon.

Figure 1. The Bookshelf section of KDP lists all of the current books. Click "Add new title" to start the publishing process.

If editing an older book, merely click the book cover image or title to load the first information editing page "Enter Your Book Details." The first item you will encounter is the title of the book (see Figure 2).

Choosing a Book Title

The book title (or book name as Amazon calls it) is one of the most important decisions that you make when selling a book. It serves the same purpose as the headline for an ad. A good title will do 80% of the work in getting a book noticed. This is certainly true in a bookstore and is even more so when marketing books online. Don't be too vague and don't be too clever. (My thoughts apply only to non-fiction books. I don't have a clue what would work for fiction titles which may have all kinds of strange names—although I suspect that a good subtitle would be helpful.)

Remember that people often search Amazon when they are looking for something on a particular topic. The book title is one of the most important factors in returning results for any search. If there are keywords that are integral to the topic, then they should appear in the title in some form.
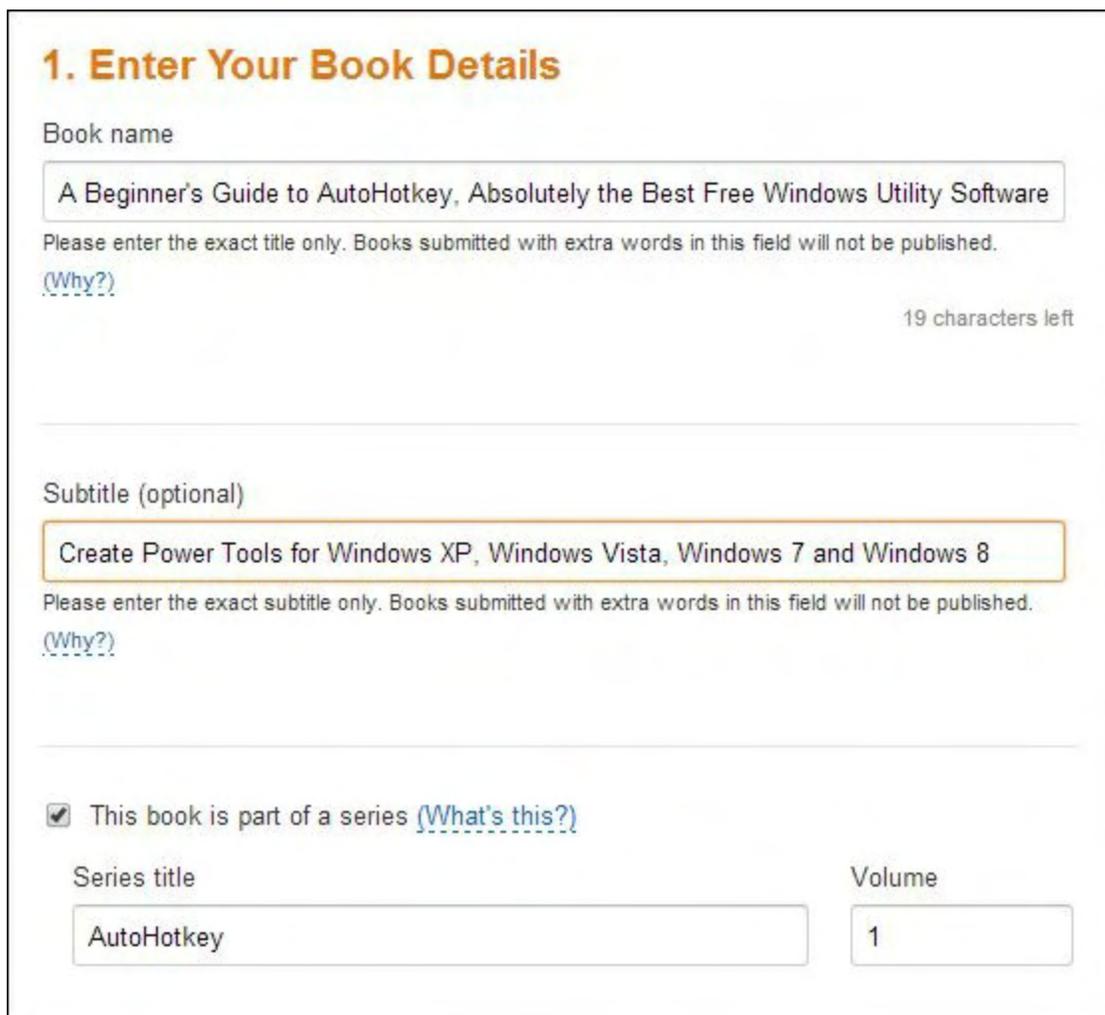
Figure 2. The title of a book is a quick glimpse inside.

As I pointed out last week, I would be foolish to ever publish an AutoHotkey book without the

word "AutoHotkey" in the title. That is probably the number on reason why my books come up first when you search "AutoHotkey" on Amazon. You may notice that I also included the words "free software" in the title of *A Beginner's Guide*. It is important for people to know that AutoHotkey is free, but the added benefit is that an Amazon search of "free software" in the Kindle Store displays the book on the second page. That's not bad considering how many books there are about "free software."

I see many non-fiction books on Amazon which give no hint as to their content through the title. Some such as *Working Smarter, Faster, Better!* may sound better to the author, but if it's a computer book, it should say so. A Windows book should use the word "Windows." Graphic artist usually prefer a simple, clean cover, but saving space wins no prizes if the wrong words are left out of the book title.

There is no point in trying to trick someone into buying a book. On Amazon any book purchased can be returned within seven days—and it will be if it doesn't meet expectations. On top of that the book will probably receive bad reviews which dampen the sales of any title. (Any book will get the occasional bad review. Some people are never happy. The only thing that you can do about it is write useful and/or interesting books. Hopefully, the good reviews will more than outweigh bad ones.)

The combination of the title and subtitle may be no longer than 200 characters on Amazon. That's one heck of a long title and the words you use need to make the case for why someone should look at your book.

At the bottom of Figure 2, there is a opportunity to say a book is part of a series. There is no requirement to make any book part of a series, but if you have more than one book on a given topic it's worthwhile to note that it's not a lone work. Telling readers that there are more books might prod them to either buy the set or return later for the other books.

The Book Description

One of the biggest mistakes I see are books with little or no description. Amazon gives you 4000 characters to tell potential buyers what's inside the book. Use it! Some authors think that buyers don't want to read too many details. They're wrong! Advertising studies show that long detailed copy almost always outsells short, clever copy. Prospects want to know the details. The more useful information you can fit in the description the better.

Figure 3. The book description is an important part of an Amazon e-book listing.

Put your most powerful lines in the beginning of the description. Only about 25% of a full 4000 character description will immediately pop-up on the Amazon book page (click "Show more" to expand the description on any Amazon page). The goal is to get the user to open the full description when making a decision.

Be brutally honest about what's in and what's not in your book. The clearer you make the

description, the more likely that someone will buy and keep it. There is no point in tricking someone into buying. In fact, you want to discourage people who are not likely prospects. For example, anyone with competent programming skills can quickly pick up the AutoHotkey scripting language without any help from my books. While it's possible that someone at an advanced programming level might pickup an idea or two from the books, they would disappointed if they are looking for advanced AutoHotkey techniques. I work to make it very clear in the description who is the target reader for each book, plus in some books I add just enough jargon to possibly interest the right people while dissuading the wrong people.

People will make their buying decision based upon the book description (and any reviews). Don't waste this opportunity by inserting only one short paragraph. People will think that's the same amount of energy you put into the book.

The E-Book Cover

Since e-books don't have real covers to protect them, the book cover now becomes an image for identifying and selling the book. In most cases people will only see a thumbnail image of the cover (see Figure 4). Again, the most important function of the cover is selling. The image should look professional while conveying the contents of the book. This isn't always easy since there is a limited amount of space available for text. Don't use one of those standard default images that come with some programs. At a minimum you should use Amazon's Cover Create (click Cover Creator beta) which allows you to pick images and styles to combine into a clean, professional looking graphic.

Figure 4. If you create your own cover, you can upload it directly to Amazon. If not, use Cover Create to produce a professional looking design.

The same marketing guidelines apply to covers as the title and description—create something

that sells. If you use a background image, use something that fits the topic. The most important keywords in the title should be easily read in the thumbnail image. Even though Amazon requires a larger cover image with at least 1000 pixels on one edge, the smaller thumbnail images are the ones that most people will encounter on the Web. Make sure something pops through even at those tiny sizes.

E-Book Formats

After messing with some miscellaneous items such as Categories and search keywords, the next step is uploading your e-book. (I'm not saying that Categories and search keywords aren't important. I just don't know how important, since there is no way to know how much impact they have. You should take your be guess at items.) Amazon is pretty flexible in the formats that it accepts, but it may be better to use a natural e-book format such as MOBI (Amazon's default format) or EPUB (the most popular e-book format used everywhere else). These formats are considered natural for e-books because they flow chapter by chapter into the e-reader, whether a computer, tablet, or smartphone, reformatting each page depending upon the user selected font size and page layout. Microsoft Word format (DOC or DOCX) or the Adobe PDF format are page oriented which is ideal for printing, but hard to read on many devices. These formats could run into some problems when converting them into an e-books where are pages are relative to the type size used by the reader. While Amazon will convert those files for you, you may not like the way it turns out.

I recommend downloading the free Calibre software. You can use it to load almost any type of e-book into it and convert to the other common e-book formats. The reason for this is you want to know how it going to look as an e-book before you upload it to Amazon.

I would first convert it to EPUB format. This is the form of e-book used by almost everyone accept Amazon. Plus, you can then load the new e-book into Sigil EPUB Editor—another free program. Sigil is the best that I've seen for the self-publishing author—especially for the price. Not only can you see how each chapter is formatted and make changes directly on the screen, but it will automatically fix many common EPUB errors. I always run an e-book through Sigil before I publish it. If you want the final version converted to MOBI for Amazon Kindle, put it back into Calibre for conversion.

Once the e-book file is uploaded, then Amazon does some rudimentary checks such as spelling. I suppose the Amazon system will tell you if you have a problem with the conversion, but I've never run into an issue. I always upload MOBI files which I've previously debugged as an EPUB in Sigil and converted with Calibre. This may be why I haven't had any issues.

Amazon offers an online viewer for checking out how the e-book will look on various devices (see Figure 5). I use this primarily to make sure that I've uploaded the right file. I look for those changes which I know appear in the latest version.
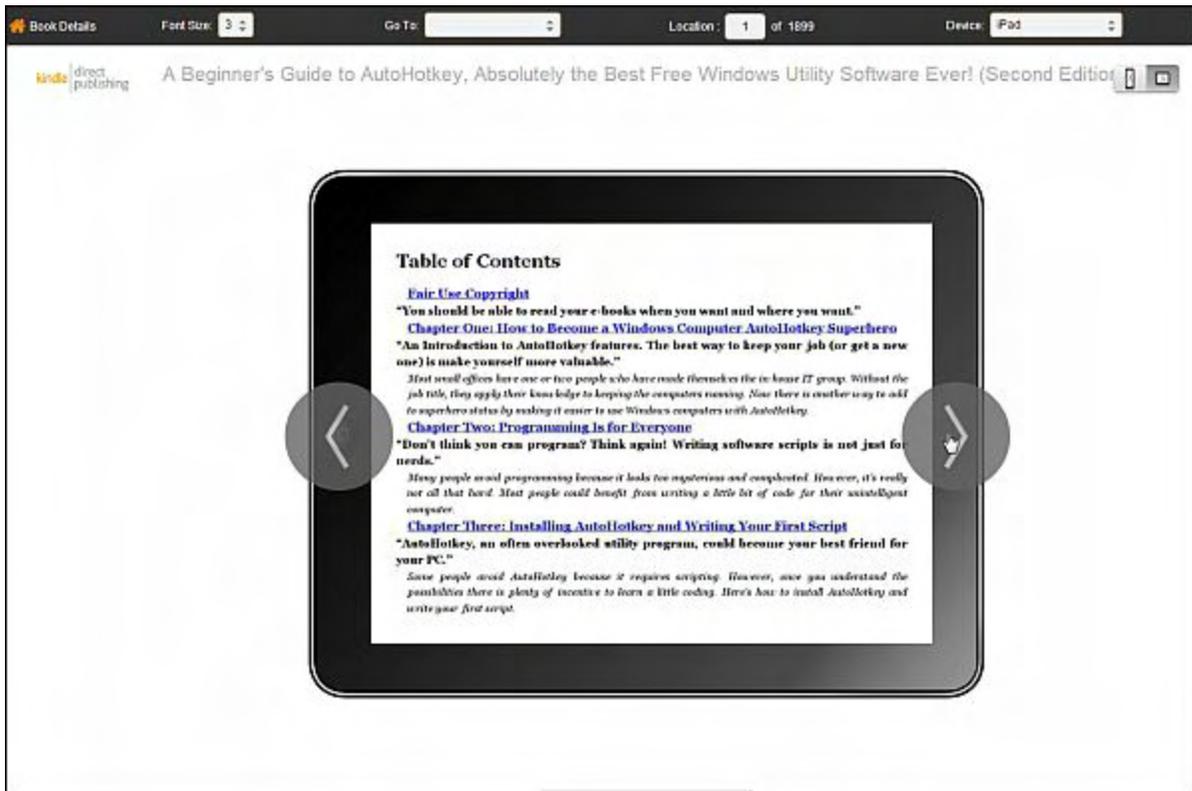
Figure 5. The Amazon online e-book viewer helps you see how your e-book will look on various devices.

If it's a short book, you may want to review the entire book. However, if it is a long book, this process can become pretty tedious. It is easier to load the book directly onto a device such as an iPad or Kindle. Then you get a real view with all the handy menus and searches.

Pricing the Book

At the bottom of the page click "Save and Continue." The Rights and Pricing page opens (see Figure 6). This is where you need to make your decision about the best price for your book. In one way the Amazon rules help to make the decision. If you want 70% royalties (who doesn't?), the book must be priced between $2.99 and $9.99. As annoying as this restriction is, it does simplifies the process.
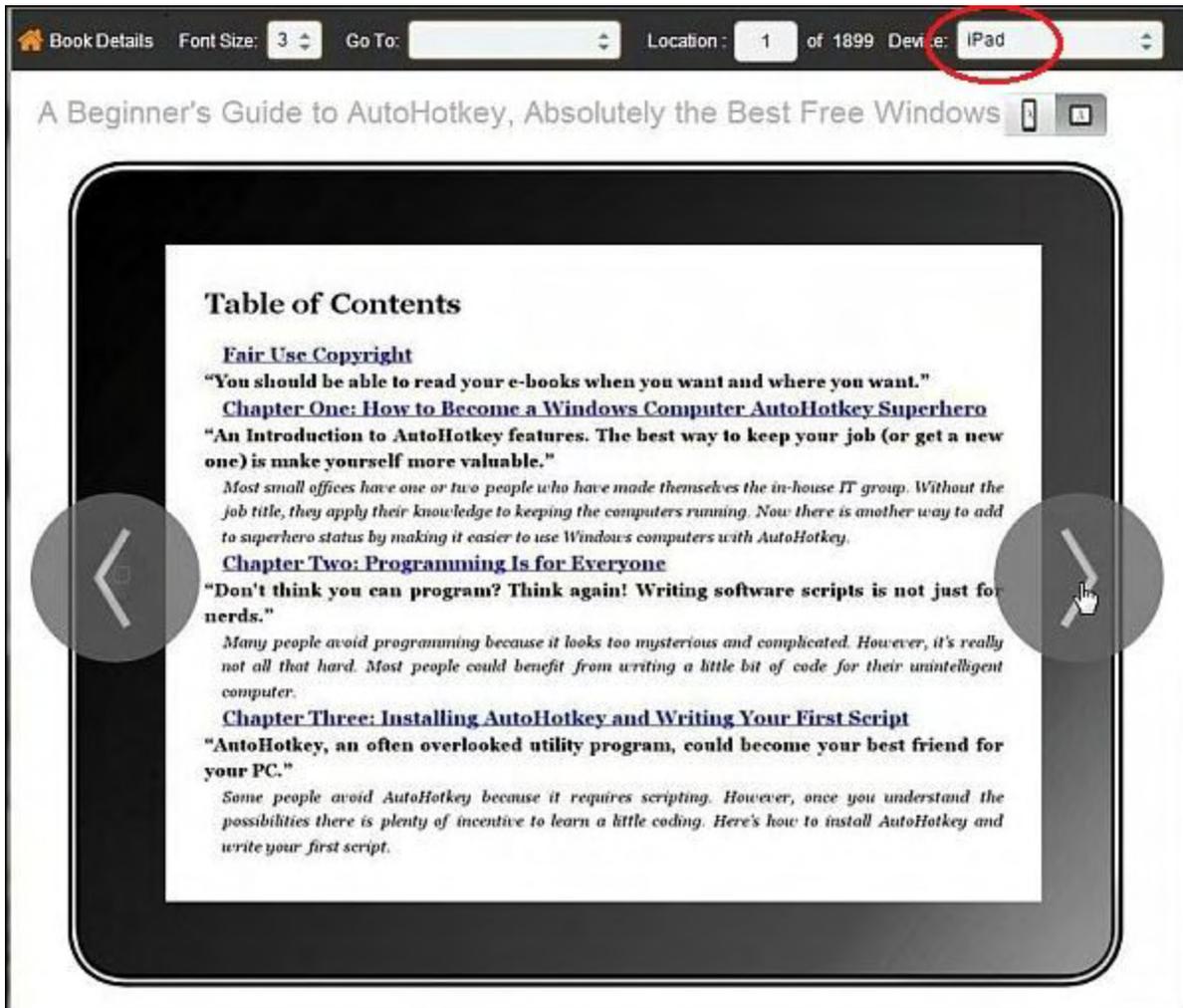
Figure 6. On Amazon you can opt for either 35% royalties or 70% royalties. If you choose 70%, then the price of the book must be between $2.99 and $9.99.

There are a number of considerations when pricing a book. Generally, the lower the price the more books you will sell. However, if the price is too low, then the book may drop in that metaphysical category called "cheap." It is not easy to reconcile these issues. The price of a book is a judgement call for the author. You need to decide how much value is offered and price it accordingly. However, it does no good to put a higher price on a book only to see no sales.

One advantage to Amazon is that you can test various price levels by changing it whenever you like. At times, I would drop the price of a book temporarily to pump the sales and improve its position on Amazon. However, I'm not sure that this is a good strategy in the long run.

For example, I wrote *Getting Started with Windows 7* as an introductory book which would lead into the other four Windows 7 books. However, the Windows 7 market is so crowded that the initial pricing of the books was too high for the average user. I have since combined the four other books into one bundle which sells for $5.99 and dropped the price of the

introductory book to 99¢. While I get considerably less for each introductory book at 35¢ royalties, I actually sell more of the four-book bundle—which, with Amazon gouging a delivery fee of over $1.50 for each book (discussed last week), yields a royalty of about $3.00 per book. The combination is selling more books than previously at the higher prices. This is probably the optimum which can be done in this saturated Windows market.

The AutoHotkey books are a different story since there are not many people writing them. (I don't expect that this will last forever.) The *Beginner's Guide to AutoHotkey* is priced low because it's not overly long and is aimed at people who are just dipping their toes in the water. If someone continues on with AutoHotkey (many won't for a variety of reasons), then the slightly higher price of *Digging Deeper Into AutoHotkey* won't appear too expensive for a book with much more information. Finally, I've maxed out the allowed Amazon price with *AutoHotkey Applications* which has considerably more information at a slightly higher level than either of the first two books. The combination of all three books creates a total price of over $20—still at the 70% royalty level. This approach seems to be working with some individuals who start with the beginning book and later buy the other follow on books, while other people buy all three. In this case, the Amazon rules for the 70% royalties have led me to publish three separate books at a relatively low price, rather than one large tome at a much higher price.

I have since published on the ComputorEdge E-Books a [free AutoHotkey book](#) strictly for marketing purposes. (Since it's free I can't post it on Amazon.) I'm marketing both the free AutoHotkey software and my three other AutoHotkey books. I also have a longer range goal for the free book, but I'll discuss that in more detail when I hit upon marketing e-books.

As you enter your book price into the Amazon Rights and Pricing page everything else is recalculated automatically while telling you the rules. If you don't like the price in a particular geographic zone, you can enter one manually. This recalculation works in a spreadsheet fashion. You can see the impact of various price levels on royalties and the damage caused by the delivery fee as you test alternatives.

Publishing the Book

Once you've completed everything, clicking the Save and Publish button tells Amazon you're ready to start selling. The book goes into a review process, then takes about 12 hours (or less) to go live. There are a few things that can cause a hang-up in the process, but you will receive an e-mail if there is an issue.

Don't have the book listed on other sites at a lower price. If Amazon finds out, then your book will automatically be matched to that price. Amazon has software that searches for your book. If you have it on iTunes or Barnes and Noble it will most certainly be found and compared.

Don't put any Web URLs in the book description. Amazon doesn't want you to advertise other

sites.

Once the book is published on Amazon, then the only problem is getting attention. And this is a huge problem!

Jack is the publisher of ComputorEdge Magazine. He's been with the magazine since first issue on May 16, 1983. Back then, it was called The Byte Buyer. His Web site is www.computoredge.com. He can be reached at ceeditor@computoredge.com. Jack is now in the process of updating and compiling his hundreds of articles and columns into e-books. Currently available:

Recently released is Jack's FREE AutoHotkey book, [AutoHotkey Tricks You Ought to Do with Window](#), available exclusively at ComputorEdge E-Books in the EPUB for e-readers and tablets, MOBI for Kindle, and PDF for printing formats.

ComputorEdge E-books offering is his [AutoHotkey Applications](#), an idea-generating intermediate level e-book about using the AutoHotkey Graphical User Interface (GUI) command to write practical pop-up apps for your Windows computer. (It's not as hard as it sounds.)

[*Hidden Windows Tools for Protecting, Problem Solving and Troubleshooting Windows 8, Windows 7, Windows Vista, and Windows XP Computers*](#).

Jack's [*A Beginner's Guide to AutoHotkey, Absolutely the Best Free Windows Utility Software Ever!: Create Power Tools for Windows XP, Windows Vista, Windows 7 and Windows 8*](#) and [*Digging Deeper Into AutoHotkey*](#).

Our second compilation of stupid *ComputorEdge* cartoons from 2011 and 2012 is now available at Amazon! [*That Does Not Compute, Too! ComputorEdge Cartoons, Volume II: "Do You Like Windows 8 or Would You Prefer an Apple?"*](#)

Special Free Offer at ComputorEdge E-Books! [*Jack's Favorite Free Windows Programs: What They Are, What They Do, and How to Get Started!*](#).

[*Misunderstanding Windows 8: An Introduction, Orientation, and How-to for Windows 8 (Seventh Edition)*](#)!

[*Windows 7 Secrets Four-in-One E-Book Bundle*](#),
[*Getting Started with Windows 7: An Introduction, Orientation, and How-to for Using Windows 7*](#),
[*Sticking with Windows XP—or Not? Why You Should or Why You Should Not Upgrade to Windows 7*](#),
and [*That Does Not Compute!*](#), brilliantly drawn cartoons by Jim Whiting for really stupid gags

by Jack about computers and the people who use them.

AutoHotkey Tips for Windows

Yet, One More Reason to Use AutoHotkey Free Software!

Automate Any Program in Windows: Part II

"Find the Hidden Name of Program Controls to Automate Windows Applications" by Jack Dunning

> *Last week, we used some basic AutoHotkey to automate programs. This week we use a little more advanced (and in many cases easier) technique with hidden control names.*

In response to last week's column about automating any Windows program I received the following question from Paul Anthony:

Jack,

Is there a way to access the control directly? For instance if I wanted to select "save file as" from the menu, then click the mouse on the field where you would type the filename into the save as window, then type the name that you want to name the file as, and then hit enter to save.

Is there a way to just move the name into the control and save the file, effectively bypassing all the navigation and all the potential timing issues that may occur with the navigation?

Paul, the short answer is yes, if the program supports control names. In the example that I used last week, most of the controls did not support individual names. However, the program you're using may—especially if you are using a Save dialogue. The best way to determine if one exists is with Window Spy. Look for *ClassNN* in the *Now Under Mouse Cursor* section. When you hover over the field it should show something like *ClassNN: Edit1*. The name of the control might be *Edit1*, *Edit2*, *Edit3*, etc. In this situation you can use the ControlFocus command to move directly to the field, then use the Send command to input your filename. Next, you may see that the *Save* button is something such as *Button5*. It may be as simple using ControlClick, Save to complete the action.

None of this guarantees that you won't need to use the Sleep command between some of these steps—especially if you're doing the paste of a variable or from the Clipboard. The problem is that certain windows and controls need to be available before AutoHotkey can do its work. There are various *Wait* type commands such as *WinWaitActive*, but I've found them to be inconsistent.

This is a little more advanced than last week's topic, but deserves more attention. For anyone new to AutoHotkey I recommend you review last week's column and/or see the Web page, "Installing AutoHotkey and Writing Your First Script."

Using Control Names to Automate Programs

One of my favorite free programs is [IrfanView](#) graphics viewer. I've been using it for decades and it only gets better. It is far more than just a viewer. I use it to capture screen images and resize them for use with *ComputorEdge*. You can also play video and audio files, convert file types, print and scan, and more. IrfanView is one of the first free programs that I install on any computer. This week I will demonstrate how to resize any image in IrfanView to 600X600 pixels with a short AutoHotkey script using control names.

Windows has hidden control names for objects such as edit fields, buttons, text, etc. They are not always in available, but when they are it is often easier to use these names to automate actions within a program. By directly accessing these controls with AutoHotkey, we can bypass the need to define mouse cursor coordinates, count down menus, or tab through fields.

Finding Control Names

One way to determine if these hidden control names are available is to use AutoIt Window Spy which is installed with the main AutoHotkey program. (An easy way to find the program is to type "spy" into the search field in the Start Menu in Windows Vista and Windows 7 or the Everywhere Search, +q, in Windows 8. You can also right-click on the System Tray icon of any running AHK file and select it from the menu.) As you hover the mouse cursor over the control of an active window, the control name (if there is one) will appear as the *ClassNN* in the *Now Under Mouse Cursor* section (see Figure 1).

Resize/Resample image

Current size: 725 x 474 Pixels

New size: 725 x 474 Pixels

● Set new size: **Edit1**   **Edit2**

Width: [725]   Height: [474]

Units: ● pixels ○ cm ○ inches

○ Set new size as percentage of original:

Width: [100] %   Height: [100] %

Button6

☑ Preserve aspect ratio (proportional)

☐ Apply sharpen after Resample

☐ Adjust DPI based on new sizes (asp. ratio)

DPI: [96]   (auto calc. for cm/inches)

Button19

[OK]   [Cancel]

Some standard dimensions (pixels):

[New size: ⌄] (ratio option used)

○ 640 x 480 Pixels

○ 800 x 600 Pixels

○ 1024 x 768 Pixels

○ 1920 x 1080 Pixels

○ Best fit to desktop

○ Desktop size (no aspect ratio)

[Half]   [Double]

[Swap sides]   [Add to standard box]

Size method:

● Resample (better quality), use Filter:

[Lanczos (slowest)   ⌄]

○ Resize (faster, lower quality)

☑ Use fast Resample filter for image shrinking

☐ Try to improve gamma for Resample

Active Window Info (Sh...

```
>>>>>>>>>( Window Title & Class )<<<<<<<<<<
Resize/Resample image
ahk_class #32770

>>>>>>>>>>>( Mouse Position )<<<<<<<<<<<<<
On Screen:         634, 337  (less often used)
In Active Window:  99, 143

>>>>>>>>>( Now Under Mouse Cursor )<<<<<<<<
ClassNN: Edit1
Text:
Color:     0x8B622C  (Blue=8B Green=62 Red=2C)

>>>>>>>>>( Active Window Position )<<<<<<<<<
left: 535    top: 194    width: 498    height: 416

>>>>>>>>>>>( Status Bar Text )<<<<<<<<<<

>>>>>>>>>>>( Visible Window Text )<<<<<<<<<<<
pixels
cm
inches
&Set new size:
Set &new size as percentage of original:
Preserve &aspect ratio (proportional)
App&ly sharpen after Resample
DP&I:
So&me standard dimensions (pixels):
&640 x 480 Pixels
&800 x 600 Pixels
```

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Figure 1. If they exist, AutoIt Window Spy can be used to find the hidden control names (ClassNN) of objects with Windows. The top window is the image resizing window from IrfanView graphics viewer. The bottom window is AutoIt Windows Spy showing information from the first edit field in the IrfanView window.

The names of the controls pertinent to our problem have been added to Figure 1 in red— although not all of them will be needed. Depending upon the formatting of the window, there are a couple of alternative methods that can quickly bypass using the names.

There are two primary commands employed here to directly access controls within a window: ControlFocus command and ControlClick, Save. *ControlFocus* sets the cursor to a named control. *ControlClick* simulates a mouse click on a named control. However, there are times when we can bypass even using them.

In Figure one the first edit field (*Edit1*) is selected by default. This indicated by the blue background commonly used when text is selected (CTRL+a for select all). Since this default field is pre-selected when the resize window opens, the control name (*Edit1*) is not needed unless AutoHotkey must return to that field. In this case the new width in pixels can be sent directly to the control immediately after the resize window opens.

The other time that we are unlikely to need the control name is for the OK button (*Button19*). This button is pre-selected by default for action if the ENTER key is pressed, which will occur when the line of AutoHotkey code *SendInput, {Enter}* is issued. Both of these quick exceptions are based upon the default formatting of the window itself and may not be available in many situations.

A script to resize an image in IrfanView is as follows:

```
#y::
  SendInput, !im
  SendInput, 600        ; selected Width edit field
  Sleep 200
  ControlClick, Button6, A
  Sleep 200
  ControlFocus, Edit2, A
  Sleep 200
  SendInput, ^a
  Sleep 200
  SendInput, 600
  Sleep 200
  ControlClick, Button19, A  ; could be replaced with SendInput, {En
Return
```

One thing that I discovered pretty quickly (and suspected all along) is that the *Sleep* command was needed in numerous places. In fact it turned out to be easier to just place it between every other line of code. (I also had to adjust it from 100 to 200 microseconds.) It wasn't just the *SendInput* command which needed more time, but the *ControlClick* and *ControlFocus* commands couldn't keep up with the script either. I know that using the *Sleep* command to

slow things down seems a little lame at first glance, but I'm guessing the problem of adding action feedback to every step of an AutoHotkey script is far more complicated than it's worth. The fact is that some script actions just take time and it would be impractical to build in a feedback loop for all these situations. At least, that's my take.

The hotkey combination is WIN+y (⊞+y) is setup by the code *#y::* (the same as last week). Using the ALT menu key technique introduced last week, the resizing windows was quickly opened with the menu shortcut key i and m (!im => ALT+i, m), see Figure 2.
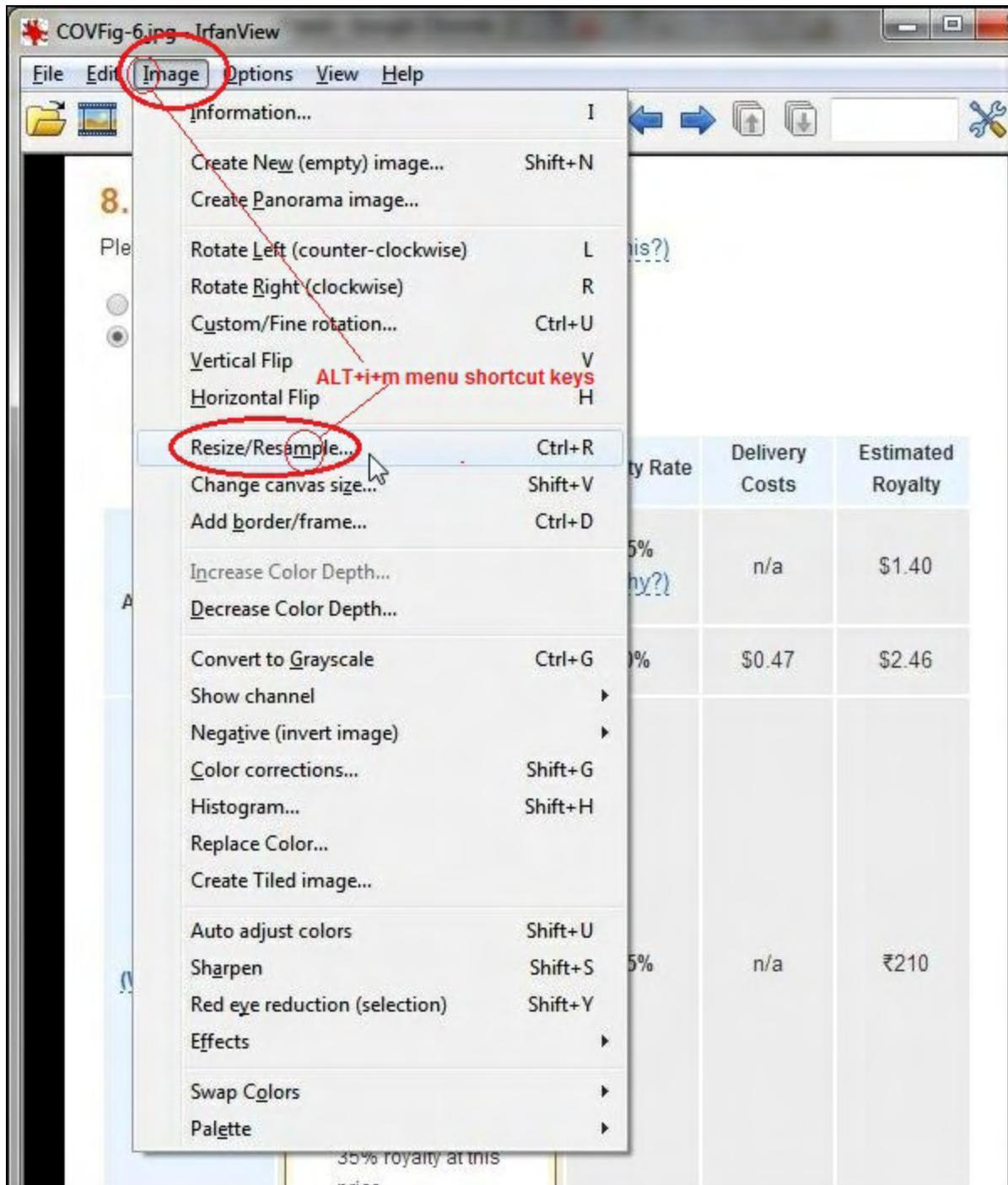
Once the window is open and active, the Width field (*Edit1*) is selected by default. Since this is one of the fields that must be edited, there is no need to move the cursor. The *SendInput, 600* line adds the width to *Edit1*.

One problem with moving directly to the Height text edit field (*Edit2*) is as long as "Preserve aspect ratio (proportional)" is checked (*Button6*), the Width will change with any input to the Height. Therefore the *ControlClick, Button6, A* line of code jumps to *Button6* and simulates a mouse click which deactivates the feature. I found that if a control is named in *ControlClick*, the window name must be used. The command does not automatically default to the current window, therefore *A* is required to designate the active window.

The only problem with the "Preserve aspect ratio (proportional)" checkbox *(Button6)* is it's a toggle and remains in its last state. That means if you run the hotkey again it will activate the feature and ruin the result. To ensure that the script only deactivates the feature, use the ControlGet command to determine the state of the checkbox before clicking by replacing the one line of code with the following:

```
ControlGet, IsChecked, Checked,, Button6, A
If IsChecked = 1
  ControlClick, Button6, A
```

The *ControlGet* command saves the state (0 for not checked and 1 for checked) of *Button6* to the variable *IsChecked*. The following *If* conditional code (*If IsChecked = 1*) only fires the *ControlClick* line "if" *Button6* is checked.

Next, the script jumps back to the Height field with *ControlFocus, Edit2, A*, then inserting the next dimension with *SendInput, 600*, but before inserting the new dimension the old text must be selected with *SendInput, ^a* (CTRL+a). Otherwise the 600 would merely be concatenated to the old value rather than replacing it. This is one advantage to using the *SendInput, {Tab}* command discussed last week. By sending the TAB key the cursor jumps from the Width field (*Edit1*) to the Height field (*Edit2*) automatically selecting all the text for replacement.

While that method works, the ControlSetText command does the same job for *Edit2* with less code. The *ControlSetText* command automatically replaces the text in the field—no selection required. This eliminates the *SendInput, ^a* to select the current text. The line:

```
ControlSetText, Edit2, 600, A
```

can replace the following lines in the script:

```
ControlFocus, Edit2, A
Sleep 200
SendInput, ^a
```

```
    Sleep 200
    SendInput, 600
```

That's pretty slick! No moving to the focus to *Edit2*. No selecting the current text (CTRL+a). The text is directly replaced in the edit field.

Now all that is required is to click the OK button (*Button19*). There are a few ways to do this. I used *ControlClick, Button19, A* which directly clicks the button using its hidden name. But you can also use the text in the button:

```
    ControlClick, &OK, A
```

Notice that the text detected by Window Spy included the ampersand (*&*) before *OK*. This ampersand makes the O into a menu shortcut key and must be included in the text for the *ControlClick* command to work.

Since it is a menu shortcut, it's possible to just send the letter O to activate the *OK* button, but, as mentioned last week, the cursor must not be focused on a control which changes, such as a menu or text editing field, when the key is pressed. It's easier to use one of the other methods.

Maybe the easiest method for activating the OK button is to use *SendInput, {Enter}* or *SendInput, {Return}* which pushes the default button.

Save As… Dialogue

In answer to Paul's question, the same techniques can be used with the "Save as…" dialogue box in almost any Windows program. The cursor usually defaults to the *File name:* field (often *Edit1*) with the text pre-selected. By using the *Send* command, a new file name and be inserted from any predefined variable or the Windows Clipboard (*SendInput, %Clipboard%*). In any case, the *ControlSetText* command could be used to insert a new file name directly into the proper edit field (probably *Edit1*).

If you need to create unique file names, then you can adapt the technique used in this column, "Incremental Backup to Protect Your Computer Work."

<div align="center">*   *   *</div>

Free AutoHotkey E-Book

Just released! *AutoHotkey Tricks You Ought To Do With Windows!* This e-book includes both those tips and the reference material (Table of Contents and indexes) from the other three AutoHotkey books. Pick up a copy free and share it with your friends.

Jack is the publisher of ComputorEdge Magazine. He's been with the magazine since first issue on May 16, 1983. Back then, it was called The Byte Buyer. His Web site is www.computoredge.com. He can be reached at ceeditor@computoredge.com. Jack is now in the process of updating and compiling his hundreds of articles and columns into e-books. Currently available:

Recently released is Jack's FREE AutoHotkey book, [AutoHotkey Tricks You Ought to Do with Window](#), available exclusively at ComputorEdge E-Books in the EPUB for e-readers and tablets, MOBI for Kindle, and PDF for printing formats.

ComputorEdge E-books offering is his [AutoHotkey Applications](#), an idea-generating intermediate level e-book about using the AutoHotkey Graphical User Interface (GUI) command to write practical pop-up apps for your Windows computer. (It's not as hard as it sounds.)

[Hidden Windows Tools for Protecting, Problem Solving and Troubleshooting Windows 8, Windows 7, Windows Vista, and Windows XP Computers](#).

Jack's *[A Beginner's Guide to AutoHotkey, Absolutely the Best Free Windows Utility Software Ever!: Create Power Tools for Windows XP, Windows Vista, Windows 7 and Windows 8](#)* and *[Digging Deeper Into AutoHotkey](#).*

Our second compilation of stupid *ComputorEdge* cartoons from 2011 and 2012 is now available at Amazon! *[That Does Not Compute, Too! ComputorEdge Cartoons, Volume II: "Do You Like Windows 8 or Would You Prefer an Apple?"](#)*

Special Free Offer at ComputorEdge E-Books! *[Jack's Favorite Free Windows Programs: What They Are, What They Do, and How to Get Started!](#).*

[Misunderstanding Windows 8: An Introduction, Orientation, and How-to for Windows 8 (Seventh Edition)](#)!

[Windows 7 Secrets Four-in-One E-Book Bundle](#),
[Getting Started with Windows 7: An Introduction, Orientation, and How-to for Using Windows 7](#),
[Sticking with Windows XP—or Not? Why You Should or Why You Should Not Upgrade to Windows 7](#),
and *[That Does Not Compute!](#),* brilliantly drawn cartoons by Jim Whiting for really stupid gags by Jack about computers and the people who use them.

Wally Wang's Apple Farm

"The Philosophy of Microsoft, Google, and Apple"
by Wally Wang

The Philosophy of Microsoft, Google, and Apple; Buying a Macintosh Cheaply; The Death of Aperture; How Not to Make User-Friendly Software; New Operating System Updates; Blocking or Allowing Plug-ins to Run in Safari.

In the book *Digital Wars,* author Charles Arthur documents the history of all three companies and their basic philosophies. Microsoft tends to be market-focused so they try to create products that appeal to everyone, even if it means offering features that only a handful of customers actually want and need. The advantage is that Microsoft products tend to be the most flexible, but the drawbacks are that Microsoft products tend to be overly complex and rarely optimized for anyone.

Apple's philosophy is to focus on offering a small number of features but making sure that customer experience is the key. As a result, Apple products tend to offer far fewer features and options than rival products, but their simplicity makes their products far easier to use. With Microsoft the philosophy is to cram as many features as possible into each product. With Apple the philosophy is to eliminate as many features as possible until only a core number of features remains. Then focus on optimizing those core features for the majority of users.

Google has a different philosophy that stems from their founders' engineering background. Google doesn't care about anything but hard data. At one time, Google's engineers discovered that a certain shade of blue tended to generate more clicks on links than the normal shade of blue Google had been using. Rather than ask users what they wanted (Microsoft's approach) or look for the most aesthetically appealing color (Apple's approach), Google chose to exhaustively test forty different shades of blue on their actual users until they could statistically prove which shade of blue most users clicked on.

Google had a different way of thinking that wound up turning them into the largest search engine. At one time, AltaVista dominated the search engine market with other competitors like Excite, Lycos, Hotbot, Yahoo, and AskJeeves fighting for their share. What Google did differently was focus on user satisfaction.

In the early days of the Internet, companies were focused on making money, so search engine sites tended to display lots of ads in addition to lots of irrelevant search results. The idea was that by displaying so many irrelevant search results, users would stay longer on the search engine site, increasing their chance of clicking on one of the ads cluttering up the search engine site.

Google focused on a clean interface with no ads whatsoever. Then they focused on eliminating irrelevant links and finding only those links that seemed most relevant to the user's search query. Google even approached Yahoo with their search engine, but Yahoo turned them down because Yahoo felt if Google only showed the most relevant links to a search query, users would click on those links too soon and leave the search engine site. If users left the search engine site, they wouldn't see or click on any of the ads on that search engine site. So Yahoo turned Google down because they wanted to cling to their advertiser business model, even if that model made searching frustrating for users.

By maximizing user experience in speed and accuracy, Google became popular to the point where they surpassed Yahoo and the then reigning search engine giant, AltaVista. Google wanted to make searching fast and easy for users. Every other search engine wanted to make searching slow and inconvenient for users to keep them stuck on the search engine's site to look at ads. When given a choice between making the customer happy or making the customer unhappy, guess which business model will be more successful in the long run?

By reading *Digital Wars*, you can see how Apple and Google embraced the new world of the Internet and mobile computing, and how Microsoft clung to their cash cows of Windows and Office, and largely missed multiple opportunities because they threatened their revenue stream from Windows and Office.

As a general rule, simply assume that your current way of making money were to disappear overnight. What would you do then? Now why aren't you doing that even if it threatens your current way of making money?

What stops so many companies from innovating is when they don't want to threaten their current revenue stream. Borders Books thought online book buying would threaten their retail stores, so they cheerfully sent all of their online customers to buy books from Amazon instead. Kodak thought that digital photography threatened their film and film processing business, so they ignored the digital photography market until it was too late. Blockbuster Video felt that streaming video had no future, so they focused on DVD rentals until all their stores went out of business.

By reading *Digital Wars*, you can get a greater insight into Microsoft, Google, and Apple. It's easy to see how Google and Apple thrived in the new Internet world while Microsoft stuck to Windows and Office for too long and missed the mobile computing revolution.

When asked which company he feared the most, Bill Gates once said, "I fear someone in a garage who is devising something completely new."

The iPhone and iPad helped kill Microsoft's Windows Mobile and Windows market. Yet now streaming audio threatens Apple's iTunes market of digital audio downloads. Why download and buy music when you can just stream it instead?

Once any company starts getting complacent about their revenue, that's the moment when they'll start going down the drain while hordes of critics will simply ignore all the evidence around them until it's too late.

Buying a Macintosh Cheaply

Many people will come up with all sorts of creative reasons why they can't afford a Macintosh. However, if you apply just a fraction of that creativity into looking for ways that you might be able to afford a Macintosh, you might be surprised at what you'll find.

If you're shopping for a new Macintosh, never pay retail. Instead, look at AppleInsider's price guide to help you find who has the lowest price on each particular Macintosh model.

Figure 1. AppleInsider lists the retailers who offer the best deals.

Besides shopping for the lowest price, make sure you time your purchase to buy the latest model as soon as possible (and avoid buying an older model just days before a newer model is likely to appear). MacRumor's Buyer's Guide tracks the average release cycle of different

Apple products so you can estimate when a newer model will likely appear.
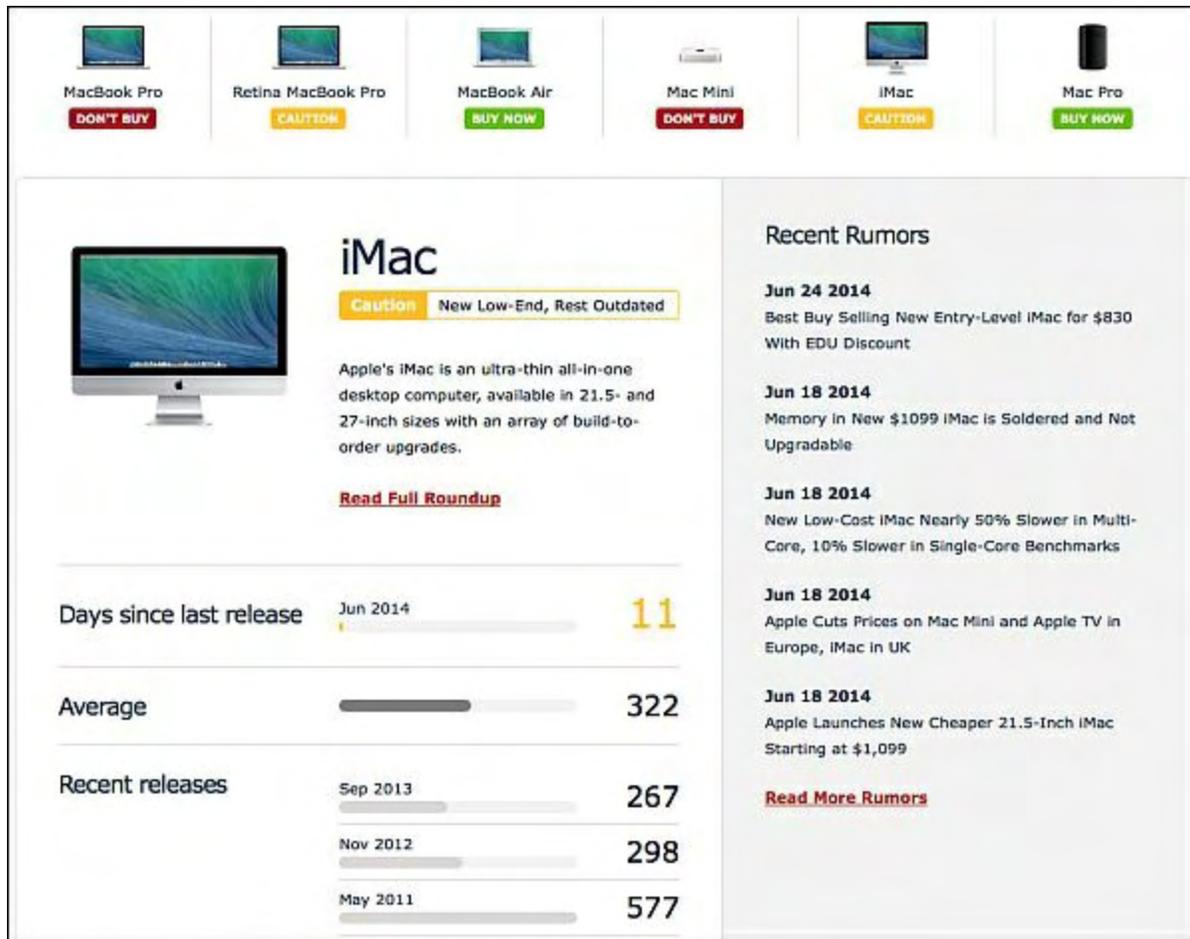

Figure 2. By tracking the average time between releases, you can buy the newest product possible.

If you'd rather not buy a new Macintosh as soon as the latest model arrives, you can buy a refurbished version of the previous generation of a product. Just visit Apple's refurbished store and shop for different generations of Macintosh computers.

Figure 3. Apple sells refurbished computers with the same warranty as a new model.

If refurbished computers are still too expensive for you, try hunting eBay or Craigslist to find used Macintosh computers that others are selling so they can upgrade and buy a newer computer. While used computers may not offer the latest features, it can still let you buy a Macintosh relatively cheap.

If you still think that you can't afford a Macintosh, you're probably not looking hard enough. You can afford a Macintosh at different price ranges whether new, refurbished, or used. If you insist on believing that you can't afford a Macintosh but can afford a Windows 8 PC that will cost you time to learn and frustration to maintain, then you're probably just using price as an excuse to justify your pre-formed decision not to buy a Macintosh no matter what the price might be.

The Death of Aperture

When Apple first released Aperture, they marketed is as a professional version of iPhoto. Initially, Aperture was poorly coded, bloated, slow, and limited. After releasing the last major version of Aperture in 2010 (version 3), Apple has finally decided to stop developing Aperture

and iPhoto in favor of a new Photos app that will ship with OS X Yosemite (version 10.10).

Aperture originally cost $499, but Apple soon dropped the price to $299 and then $79.99. Despite the price drop, Apple soon lost interest in Aperture and now users will have to migrate to the new Photos app or to Adobe's rival program called Lightroom.

While you can still use Aperture if you wish, it's now officially dead software so you might as well make plans to migrate your pictures out of Aperture and into another photo managing program like Lightroom instead. Although Apple tends to offer unique and interesting software, Aperture started off poorly and gradually evolved to become a decent but not spectacular program.

Apple tends to drop hardware and software (MobileMe, Ping, iWeb, etc.) fairly quickly if it doesn't become an instant hit while Microsoft kept Windows XP alive for over a decade. Even Google tends to drop projects fast when they don't prove to be a massive success such as their [QuickOffice apps](#) for iOS and Android that Google will no longer develop.

The next time Apple introduces something new, feel free to buy it if it meets your immediate needs. Otherwise wait a while and see if Apple starts to lose interest in it or if rivals offer something better. Any time Apple slows down their development cycle, that's a warning sign that they're either planning a massive new upgrade or simply winding down the product until they kill it altogether.

How Not to Make User-Friendly Software

In the old days with command-line interfaces, you had to know the exact command to type correctly. Misspell a word or put a punctuation mark in the wrong place and you'd have to type it all over again since the computer wouldn't understand what you typed. Needless to say, command-line interfaces proved frustrating for so many people (except for tech-savvy users who enjoy learning arcane skills).

Graphical user interfaces appeared to eliminate the need to type. Instead, you could just point at the option you wanted. With graphical user interfaces having been around for decades, you'd think everyone would design software to allow users to point at what they want rather than force them to type long, error-prone commands.

Yet just look at the differences between Word 2011 for the Mac and Word 2013 for Windows. With Word 2011 for the Mac, you can specify a default folder for storing templates just by clicking the Modify button, which displays a dialog box so you can click on the folder that you want to use.
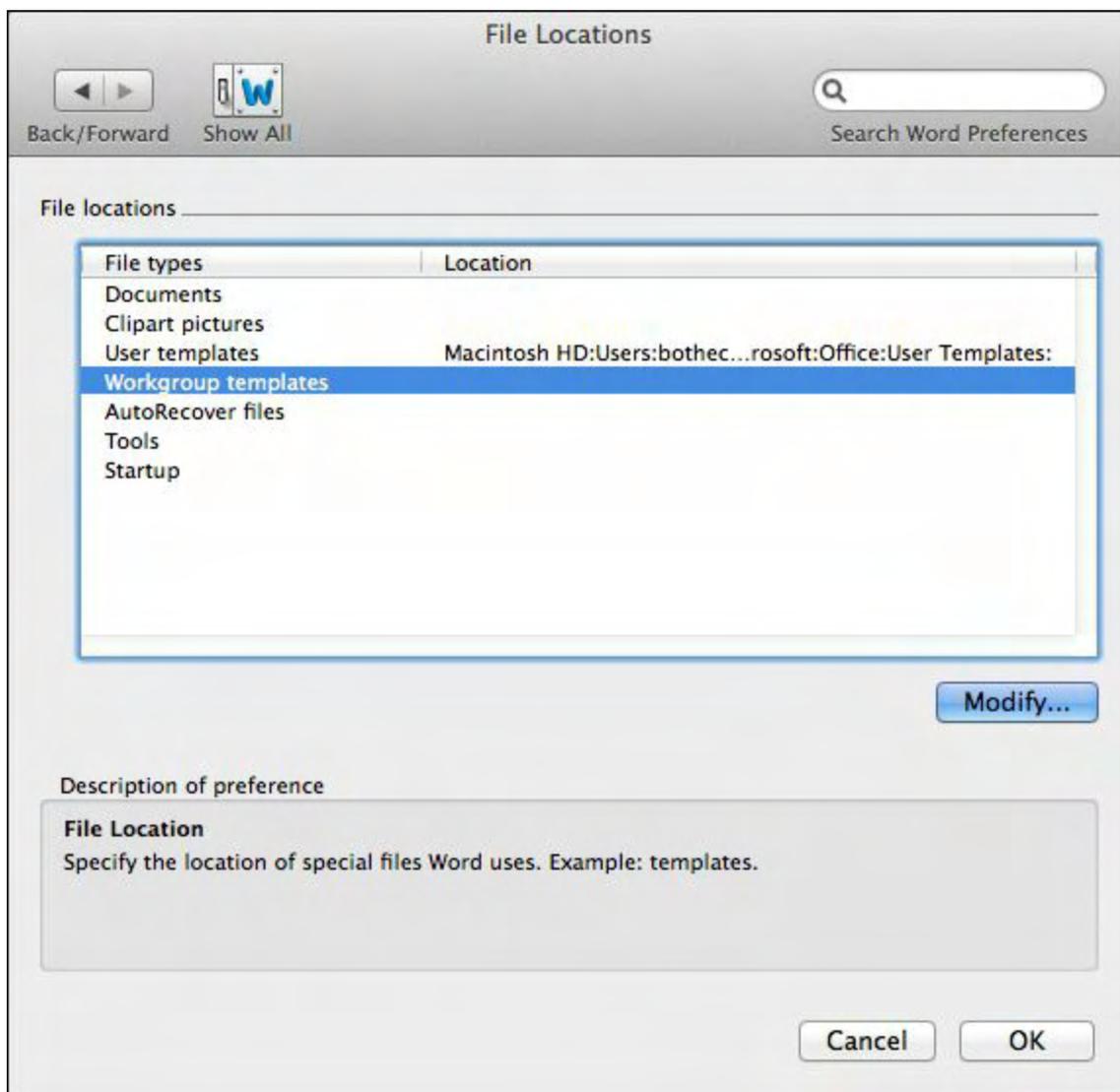
Figure 4. Word 2011 for the Mac lets you click and point at a folder location.

Yet that exact same feature in Word 2013 requires you to type the specific folder location to define a default folder for your templates. Mistype a single character and Word won't know where to store your templates, increasing the chance of error and failure.
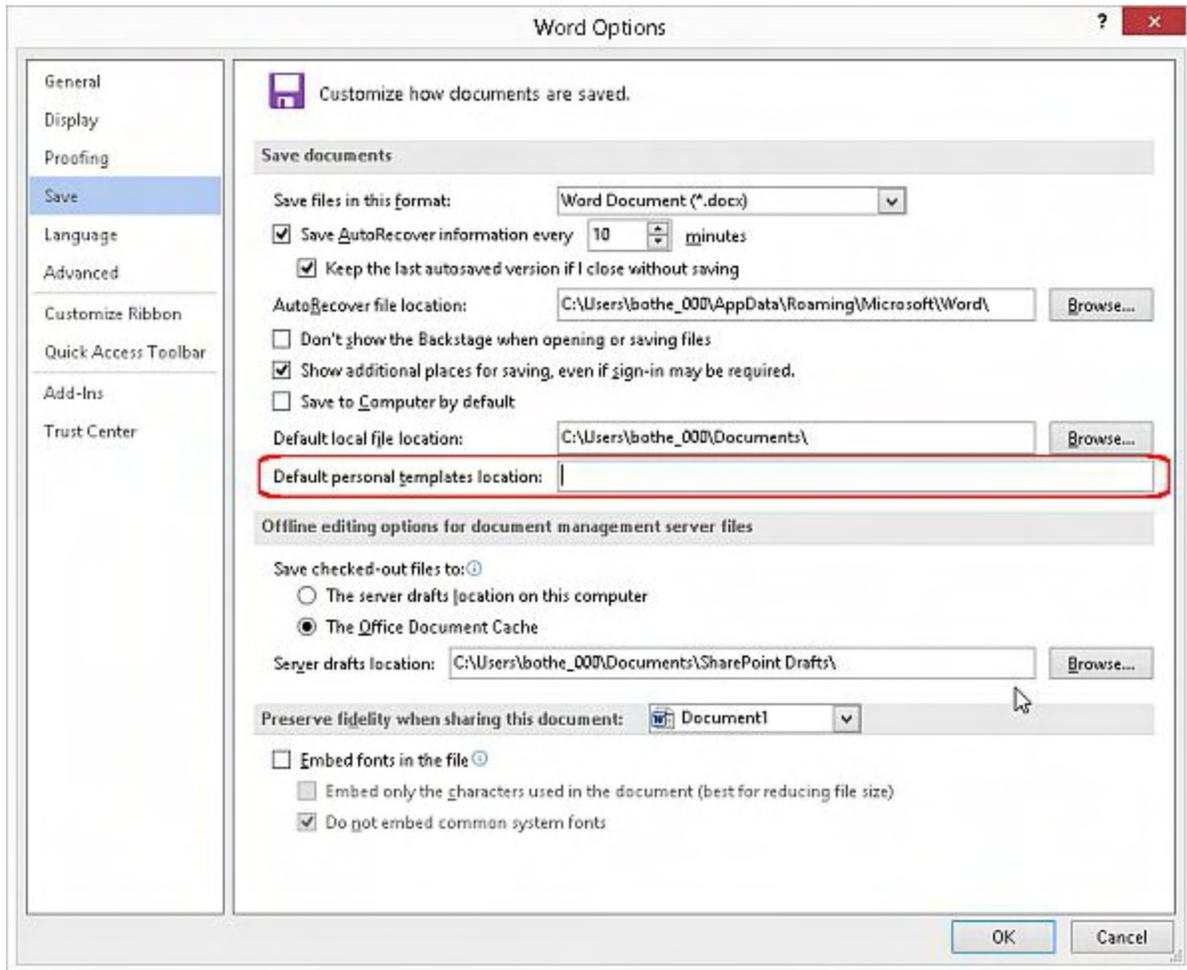
Figure 5. Word 2013 for Windows forces you to type a directory path exactly.

Since Word 2013 runs on the graphical user interface known as Windows, you would think you could define a default folder location for Word templates just by clicking and pointing on the folder you want to use. Instead, Word 2013 throws you back to the dark ages of command-line interfaces where typing a single character wrong can completely stop everything from working.

Why did Microsoft make it easy to point and click on a folder in Word 2011 for the Mac, but force Word 2013 for Windows users to type a directory path, which can be as cryptic as C:\appdata\Microsoft\Templates\?

If anyone thinks typing a directory path is faster and easier than pointing and clicking on a folder icon, then perhaps Word 2013 for Windows might seem like an improvement. For the rest of us who actually value our time to achieve results rather than learning cryptic software, it's time to judge more software with a critical eye and wonder why programmers keep making such horrible design decisions on a frighteningly regular basis.

New Operating System Updates

For anyone using an iPhone or iPad, Apple just released iOS 7.1.2. Just tap Settings, General, and Software Update to update your iOS device to the latest version.

For anyone using a recent Macintosh, you can update to OS X 10.9.4. Just click the Apple menu, and choose Software Update. Of course if you're using an older version of OS X such as 10.8 or earlier, the Software Update will just check to make sure you're using the latest version of your particular operating system version such as OS X 10.7.5.

In both cases, the latest versions of iOS 7.1.2 and OS X 10.9.4 simply irons out more bugs and fixes more nagging problems, so you should see better results with less problems (hopefully).

Just keep in mind that Apple plans to release a new iPhone this fall and will likely release new Macintosh models at that time as well. If you can, hold off on purchases of any Apple products unless you absolutely need them. By just waiting a few more months, you can get the newest products at the same price as today's products.

<p style="text-align:center">*   *   *</p>

If you're a Netflix subscriber, you need to download and install Microsoft's Silverlight plug-in to watch streaming videos. However, Safari may try to block the use of plug-ins for security reasons. So to tell Safari to allow plug-ins, click the Safari menu and choose Preferences. When the Preferences window appears, click the Security icon and select the "Allow plug-ins" check box.

Figure 6. You can block or allow plug-ins to run in Safari.

If you click the "Manage Website Settings" button, you can click on individual plug-ins and specify whether to let them run all the time (Allow) or whether to ask you first before running (Ask). For convenience (at the expense of security), choose the Allow option. For better security but at the cost of inconvenience, choose the Ask option.
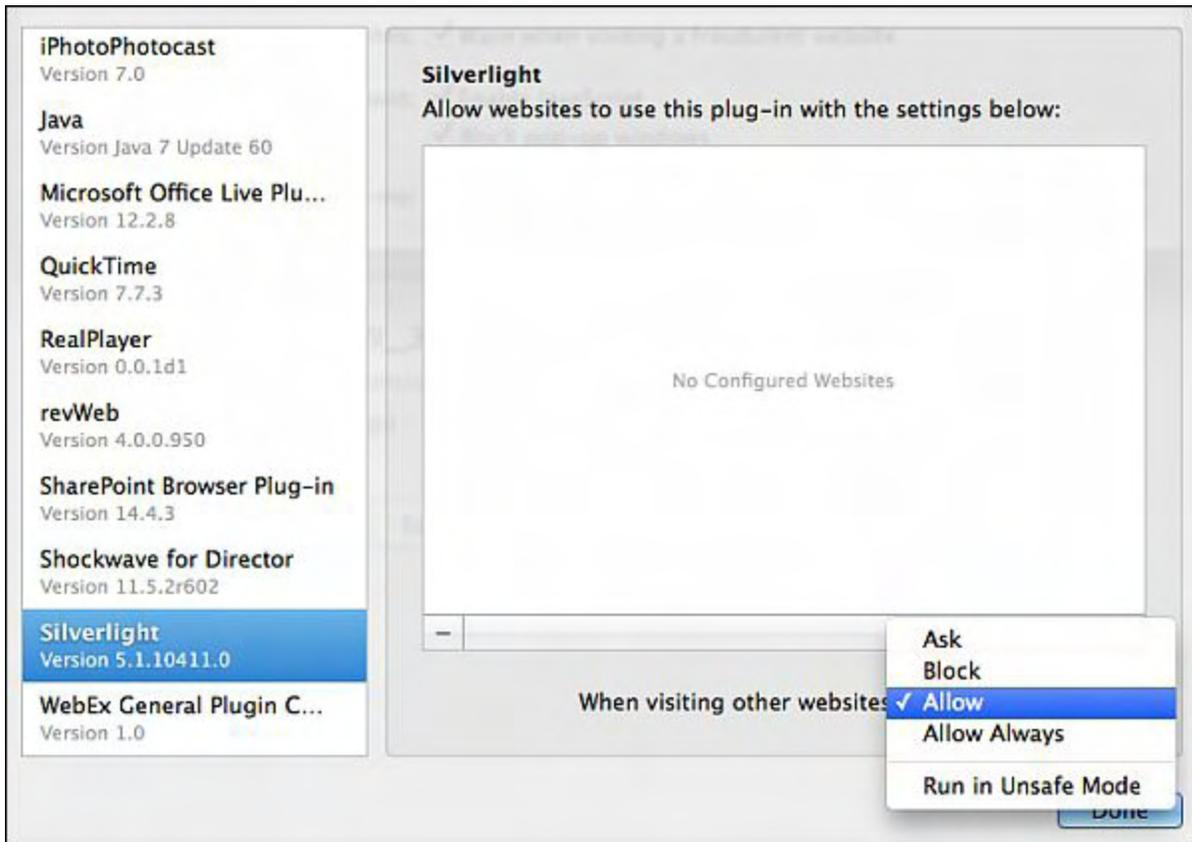
Figure 7. You can control whether plug-ins can run by themselves or need to ask for permission.

In the early days, before Wally became an Internationally renowned comedian, computer book writer, and generally cool guy, Wally Wang used to hang around The Byte Buyer dangling participles with Jack Dunning and go to the gym to pump iron with Dan Gookin.

Wally is responsible for the following books:

Microsoft Office 2013 For Dummies

Beginning Programming for Dummies

Beginning Programming All-in-One Reference for Dummies

Breaking Into Acting for Dummies with Larry Garrison

Strategic Entrepreneurism with Jon and Gerald Fisher

How to Live with a Cat (When You Really Don't Want To)

The Secrets of the Wall Street Stock Traders

Mac Programming For Absolute Beginners

[Republican Fairy Tales (Children's Stories the 1% Tell About the Rest of Us)](#)

[The Zen of Effortless Selling with Moe Abdou](#)

[The 15-Minute Movie Method](#)

[Erotophobia (A novel)](#)

[Math for the Zombie Apocalypse](#)

[How to Write a Great Script with Final Draft 9](#)

[How to Write a Great Script with Fade In](#)

[The Elements of a Great Script: Star Wars](#)

[The Elements of a Great Script: Die Hard](#)

[The Element of a Great Script: Back to the Future](#)

[The Elements of a Great Script: Rocky](#)

[The Elements of a Great Script: It's a Wonderful Life](#)

In his spare time, Wally likes blogging about movies and writing screenplays at his site "[The 15 Minute Movie Method](#)," finding interesting news stories about cats at his site "[Cat Daily News](#)," giving advice to authors who want to self-publish e-books at his site "[The Electronic Author](#)," and providing the type of advice he wishes someone would have told him when he was much younger at his [personal Web site](#). Wally can be reached at *[wally@computoredge.com](#)* or you can follow him on Twitter @wallacewang_com.
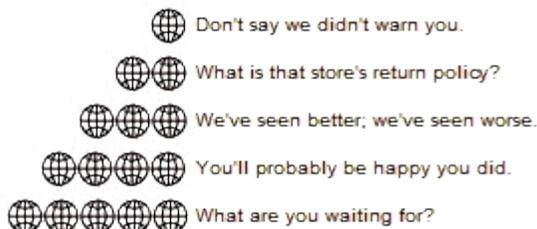
Worldwide News & Product Reviews

"The latest in tech news and hot product reviews." by Charles Carr

What if Your Pet Goes Missing During 4th of July Fireworks? There's an App for That; Researcher: Facebook Research Raises Ethical Questions; HiRise Revisited; Gamers' Over-ear Headphones Lose Out; LG Google Nexus 5 Smartphone.

What if Your Pet Goes Missing During 4th of July Fireworks? There's an App for That

Alison Jimenez from the ASPCA (aspca.org) writes in this week with some helpful info for pyrotechnic-loving pet owners (or pyrotechnic-loving neighbors):

Nearly one-in-five pets goes missing after being scared by the sound of fireworks, thunderstorms or other loud noises according to recent survey findings. Because having the right information at your fingertips is key when the unthinkable happens, the ASPCA (The American Society for the Prevention of Cruelty to Animals) has developed its first-ever interactive smartphone app to help pet parents find their lost animals. Developed by the ASPCA and utilizing the latest field research, the free tool provides users with an individual search plan based on their pet's behavior and individual circumstances so they can search quickly and effectively to recover their lost pet.

"Whether your pet goes missing as a result of fireworks or a bad storm, the best, most proven tactics to recover that pet may not be as obvious as you might think," said Dr. Emily Weiss, vice president of shelter research & development for the ASPCA. "When lost, a shy dog may behave very differently from a bolder, friendlier dog. And a gregarious cat may be found in a completely different location than an independent cat. Searching for your missing pet the right way is vital, and could make the difference between reuniting with your beloved pet and never seeing them again."

The free app—available for download from both Google Play and the Apple App Store—will provide pet owners with a personalized recovery kit, � including step-by-step instructions on

how to best search for and recover a lost animal in a variety of circumstances. Users will also be able to easily build a digital lost pet flyer that can be shared instantly on social media networks. In addition, the app provides news, tips and advice on ensuring a pet's safety before, during and after a storm or natural disaster. It also allows owners to store their pet's vital medical records—shaving off precious minutes during an emergency.

You may think that it could never happen to you but in fact, nearly two-thirds of those surveyed who lost pets (64 percent) said they had never anticipated losing a pet the way they did. For the nearly one-in-five lost pets (19 percent) who went missing after being scared by the sound of fireworks or other loud outside noises, 70 percent of their owners were completely caught off guard that their pet was lost in that way.

Losing a pet is not only heartbreaking for a family, but also very dangerous for the animal, especially if the dog or cat ends up roaming busy streets. The best way to keep your pets safe is to make sure they don't go missing in the first place: Double check leashes and collars and make sure your pet's ID tag is up to date. Be mindful when opening outside doors. Keep your cats inside if you can. And give your pets access to safe, quiet places during those very colorful, loud fireworks. And if the unthinkable does happen, the ASPCA app is there to help.

In developing the app's lost pets tool, the ASPCA consulted with Missing Pet Partnership, one of the nation's foremost experts in reuniting lost pets with their guardians.

Researcher: Facebook Research Raises Ethical Questions

In the past week or so Facebook research reported finding evidence of "emotional contagion through social networks," but FB's methodology raises question of ethics with Pamela Clark-Dickson, a Senior Analyst, Consumer Services with the independent analysis firm, Ovum (ovum.com):

"Facebook recently published the results of a one-week study conducted in January 2012, which found that when the number of positive posts in a Facebook user's News Feed were reduced, the user posted fewer positive posts and more negative posts. The social network cited this finding, among other findings in the same research, as evidence that social networks can spread "emotional contagion," that is, the wide-scale transfer of positive or negative emotions between users.

Facebook's researchers selected 689,000 users for the project and, using Linguistic Inquiry and Word Count Software, anonymously analyzed the 3 million posts from these users, which contained 122 million words, 4 million of which were positive, and 1.8 million of which were negative. None of the words were actually seen by researchers, and Facebook justified the experiment by saying that users' agreement with the social network's terms and conditions when creating their account constituted "informed consent on this research".

But, with this research, Facebook has skated too close to the edge of online users' willingness to share data. Users do accept that any data that they share online is likely to be analyzed and studied by the company with which it is shared, typically for the purposes of the company providing a better service or product. What users don't typically expect is that their "informed consent" would include their willingness to participate in what was essentially a sociological study that comprised the manipulation of their emotional health.

The way in which the study was conducted could have had tragic consequences for those unwitting participants who may already have been suffering poor mental health, but who were randomly selected to receive a higher proportion than usual of negative posts. In the UK and in the US, for example, about one in four people will suffer from a mental illness in any given 12-month period. Given the nature of this particular research, Facebook should have sought explicit consent from participants prior to embarking upon it.

Adam Kramer, one of the Facebook researchers who conducted the study, has at least had the good sense to quickly issue an apology for the study, now that it has been made public, and states that the company has since improved its "internal review practices." In his own words: "In hindsight, the research benefits of the paper may not have justified all of this anxiety."

But the irony is that the way that Facebook has tried to address its concerns about whether users would avoid visiting Facebook because of exposure to friends' negativity, the likelihood is that a proportion of Facebook users may now well avoid visiting the site because of their own concerns about whether they will be unknowingly involved in another potentially harmful social experiment. This is an outcome that could have been avoided had Facebook been more transparent at the outset."

HiRise Revisited

Product name: HiRise
Manufacturer: Twelve South LLC
Web site: www.twelvesouth.com
Price: $69.99

Twelve South's HiRise accessory, reviewed in *ComputorEdge*'s February 15, 2013 issue, elevates a notebook computer's screen to an ergonomically proper eye level. This accessory consists of a brushed metal base, a cylindrical post, and two arms arranged like the letter "V" upon where almost any MacBook (or potentially other brand) rests (Figure 1). The V-shaped arms are lined with ridged silicone strips on their upper side and the brushed-metal base has two polymer rails on its underside; these materials are intended to provide stability.

Figure 1. HiRise consists of a brushed metal base, cylindrical post, and vertically adjustable inner post that supports two "V"-shaped arms upon which any current size or model MacBook rests.

HiRise earned a high rating—4.5 globes—because of its ergonomic relief for the user, heat relief for the computer, aesthetically and ergonomically satisfying design, and durable materials which should last longer and resist breakage or cracking better than competitors made of plastic. But how does this product stand up to the test of time?

After more than one year of daily usage, my notebook computer (15" MacBook Pro) unfortunately began sliding down the HiRise's arms. It reached a point where the MacBook Pro, on too many occasions, was dangerously close to completely falling off the HiRise.

This sliding problem is addressed in one of Twelve South's support pages. However, I was surprised by the solution in the first paragraph.

The most common reason for a MacBook to slide forward on HiRise is due to the stand being placed upside down on the desk. The flat plate should be on the desk, while the v-shaped arms should be up, holding the MacBook.

This solution was of little help because my HiRise was right side up. Thankfully paragraph two provided a more promising remedy.

The other reason a MacBook may slide forward is if the soft silicone on the arms has dust or a film build-up (such as furniture cleaner, hairspray, or cooking spray), causing it to lose its ability to hold. In these cases, wiping the silicone gently with water to remove the dust or film should restore the grip.

After following the above instructions several times without any obvious improvement, I resorted to contacting Twelve South's customer service. They replied promptly and asked whether I had carefully cleaned the MacBook Pro's bottom case to remove accumulated hand oils or lotions, dust, and/or furniture polish.

I didn't think so, and inquired about the possibility of replacing the ridged silicone strips on the arms' upper sides. Customer service's reply was "no," but instead the entire unit could be replaced. So they initiated an RMA process for swapping the evaluation unit with a replacement which arrived about a week later.

Regrettably, the replacement HiRise had two problems which the original unit did not—the MacBook Pro sat unevenly on the unit's arms, and the arms were unstable (they jiggled back and forth). Consequently, my MacBook Pro was less stable on the replacement unit than on the original one.

Upon receiving my e-mail explaining these issues with the replacement, customer service replied that, upon receiving the replacement unit, the warehouse manager would "hand inspect a new one" and ship it to me.

I dispatched the replacement unit and waited two weeks, then followed up because another replacement had not arrived yet. Customer service's prompt reply said that the warehouse had received only one HiRise from me and asked how many units remained in my possession. Actually, the unit they received from me was the returned defective replacement unit; only the original review one remained in my possession.

Another week passed before customer service sent a second replacement unit which

unfortunately had two entirely different problems—the base was unstable (it rocked from front to back) and the arms were not level (the left one was distractingly lower than the right). Thus, two replacement units had various quality control problems which the original HiRise did not.

Due to the time and resources that the RMA process had cost, without success, I informed customer service that I would return the second replacement unit and decline the opportunity to test yet another replacement unit. Hopefully Twelve South's customers do not experience this kind of scenario.

Review contributed by Barry Fass-Holmes

Gamers' Over-ear Headphones Lose Out

Product name: SteelSeries H Wireless Headset
Manufacturer: SteelSeries
Web site: steelseries.com
Price: $299.99

Fasten your seat belt, readers; this is going to be a rough-ride product review.

We live in an era of widespread downsizing—employees, computers, cell phones, even audio accessories have been downsized dramatically over the years. Downsized audio accessories include earbuds, in-ear canalphones, and canalbuds that many mobile users prefer over traditional non-downsized on-ear headphones. For gamers, however, traditional headphones might be the way to go because their larger drivers and earpieces often translate into higher audio quality and listening comfort with prolonged usage. I wish that were the case with SteelSeries' H Wireless Headset, but testing for this review turned out otherwise.

The H Wireless Headset comes in a package that might best be described as massive (Figure 1A). The package measures 5.5" high, 9.75" wide, 9.75" deep; it tips the scale at about one pound sans product, about three pounds with product. Removing the package's illustrated cardboard sleeve reveals a jet-black cardboard box containing two black molded plastic inserts that securely hold the headset and its glossy jet-black plastic transmitter box in place (Figure 1B). Removing the inserts reveals the box's interior which contains a smaller jet-black cardboard box that holds some of the product's other accessories.

Figure 1. SteelSeries' H Wireless Headset, along with its transmitter box and other accessories, comes in a sizable

This product is [marketed as](#) a "premium multi-platform wireless gaming headset." Its signature feature is Dolby technology (details in a moment) "…for use with virtually all media and gaming systems." The "wireless" in this product's name refers to its communication mode with the aforementioned transmitter box (1.25" high, 4.25" wide, 4.25" deep; 7.7 oz.) which comes with an OLED screen for displaying audio information, user profile's configuration, and system's settings.

The headset's and transmitter box's (Figure 2) official specs are as follows.

Figure 2. The H Wireless Headset is a gamer's over-ear-headphone that communicates wirelessly with a computer or console via a radio frequency transmitter box.

Headset
Frequency response: 20Hz - 20000Hz
Weight (without battery): 297 gm. (~10.5 oz.)
Maximum volume: 100dB* SPL @ 1kHz
Ports: wired mode / share port; chat port; mini USB; firmware update port

Transmitter
Wireless range: 12 m (40 feet) straight line
Latency: <16ms, fixed
Ports: analog in; analog out; mini USB, optical in, optical out, power
Battery type: rechargeable lithium-ion, 1000mAh
Battery life: 20 hours per unit under ordinary usage

Microphone
Frequency response: 100Hz - 10000Hz
Mic pattern: Unidirectional
Indicator: red LED on mute

In addition to the transmitter box, the headset's other accessories include an English-only user guide containing drawings with limited written instructions; two thin rectangular rechargeable lithium-ion, 1000mAh batteries (one is a backup; they are officially rated at 20 hours each) for the headset; a power adapter for the transmitter box; four international plugs for the power adapter; and six black cables covered with a rubbery-feeling material. These cables include an optical cable for use with Xbox, Playstation, or computer; an analog cable; a "mobile" cable for listening to music while on the go; an Xbox chat cable; a USB cable; and a power cable that connects the transmitter box to the power adapter.

Wait a second…six *cables*? Although the H *Wireless* Headset can function wirelessly, it requires the transmitter box for use with a supported gaming platform. And the transmitter box, in turn, requires at least the USB cable if you choose to use it with a computer. During testing, the USB cable (even with its excess length downsized into a tied bundle) occupied an inconvenient amount of space on my workstation's desktop. The transmitter box's power cable and plugged-in power adapter (to ensure sufficient power and to recharge the second, unused battery made matters worse.

The space occupied by the USB cable was a relatively minor issue compared with usage issues that impeded testing for this review. The first usage issue that delayed testing was due to my (incorrect) expectation that the headset's wireless pairing protocol was Bluetooth. After looking fruitlessly through the product's user guide and online pages for instructions on how to pair the headset, my message to my contact person prompted the following reply. "…the headset's audio isn't delivered via Bluetooth, it uses radio frequency." Further details are included in an online press release. "The H Wireless achieves this through a fixed-latency, frequency-hopping system that is continuous and automatically searches between available wireless frequencies to ensure responsive and uninterrupted audio performance for the listener."

The next issue that impeded testing for this review was my choice of platforms—an iPhone and an iPad. These mobile iDevices support a ton of games from Apple's iTunes App Store, plus movies, videos, and music that potentially could be enhanced by the headset's signature feature—Dolby virtual 7.1 surround sound technology. After several weeks of reading and rereading the headset's printed user guide, plus reviewing information on SteelSeries' Web site (including the FAQs), I still was stuck on how to pair the headset with either of my iDevices. My contact person for this review solved this dilemma with the following response to my inquiry. "For iPhone/Android…Wireless functionality with mobile devices isn't something we offer just yet." Major bummer.

This issue brings up a caveat for readers—if a product has Apple's "Made for iPod, iPhone, iPad" logo, you can be pretty confident that the product will function as intended with those

iDevices; otherwise, you could be out of luck. Apple's logo is missing from the H Wireless Headset's package and Web site, leaving this review out of luck.

What's not missing from the H Wireless Headset's Web site, however, is the following claim —"PERFORMANCE ON ANY PLATFORM" (Figure 3). This claim was still displayed on SteelSeries' Web site when I checked back during the third week of June 2014. Unless SteelSeries has a narrow definition of "any" and/or "platform" their claim seems just a bit misleading.
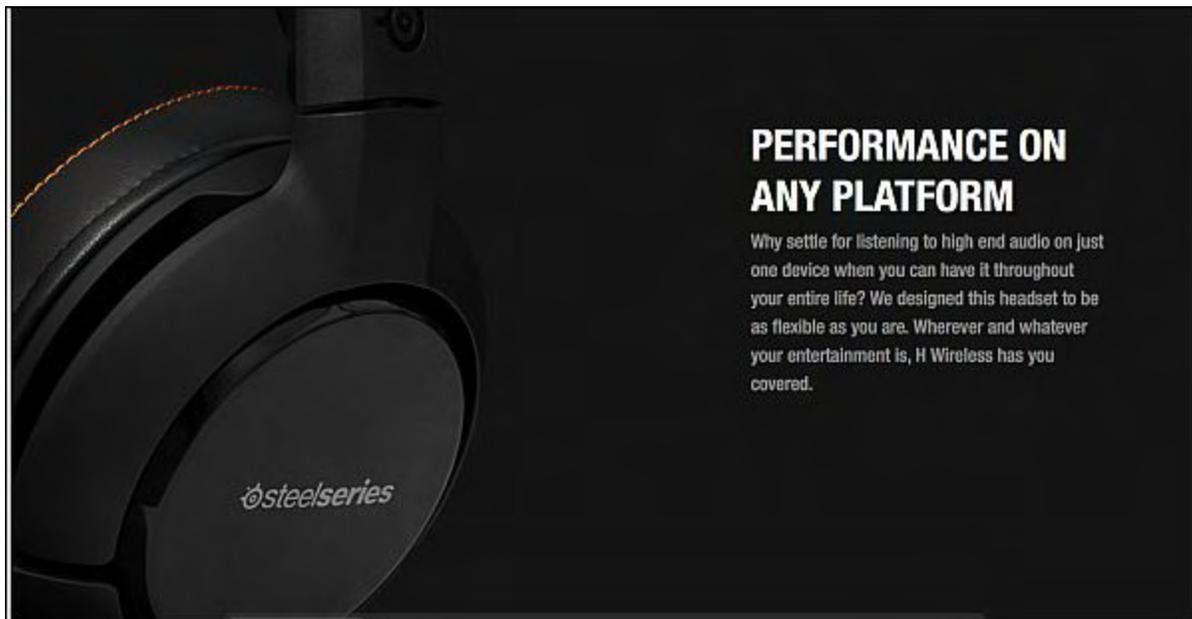

Figure 3. The H Wireless Headset's Web page clearly states that this product performs on "any platform" despite the fact that "Wireless functionality with mobile devices isn't something [SteelSeries] offer[s] just yet."

The next issue that impeded testing for this review was getting the transmitter box to function properly with my computer. Despite having successfully created a profile on the transmitter box and getting the transmitter to recognize the powered-on headset, no audio came out of the ear pieces' drivers. I remained stuck after reviewing the user guide and information on SteelSeries' Web site.

To resolve this issue on which I was stuck, I decided to find out how the company's support staff would respond without revealing my role as a product reviewer. SteelSeries' customer support provides an online ticketing system that requires a user login, which in turn requires disclosing various personal informations. After creating my login and submitting a ticket request, the same-day reply asked me questions that already were answered in my ticket request.

ComputorEdge: I'm trying to use SteelSeries H wireless headset with a MacBook Pro (MBP).

The transmitter control box is connected to the MBP via USB (as shown in this

message's attached file).

The headset is turned on and connected with the transmitter control box (as shown in this message's attached file).

When I rotate the headset's volume control to the max, it emits an audible beep.

However, when I play a video or music file on the MBP, no audio comes through the headset regardless of the headset's volume level and regardless of the MBP's volume level.

Support: The optical connection provides the best sound quality as well as Dolby Digital surround sound. You should use the optical connection for all consoles and computers that have an optical audio output. The optical port is a small door with a red light inside. In addition to Optical, it might also be labeled Optical for S/PDIF, TOSLINK, or Digital.

If your console does not have an optical audio port and you connect your console to your TV using an HDMI cable, then you can take digital audio out of most TVs' optical connection and Dolby Digital surround sound will be supported.

If you do not have an optical output on your console, TV, or computer, then you should use USB, which provides high quality digital audio and Dolby Headphone and Dolby Pro Logic IIx surround sound. If your system has neither optical nor USB outputs, then use the analog connection.

I was still stuck after receiving the above reply. My follow up posting in the ticketing system went unanswered for nine days. My follow up to the followup elicited a prompt and apologetic reply from "The QA Team" asking what software I was using. Nine days after answering that question (iTunes for OS X), I followed up again. The same-day reply finally gave the required answer.

Sorry for the delay. So if we understand correctly, you can't hear any audio coming out of the H-Wireless on your MacBook correct? If that's the case, please do the following to setup the H-Wireless properly.

…make sure that your H-Wireless headset is paired up to the H-Wireless base. After you've done that, open System Preferences and click on Sound. On the Output section, select SteelSeries H-Wireless and do the same for the Input section. Adjust the volume on both your Mac and on the H-Wireless and you should be able to hear sound through the headset.

The only place where I could find this information was buried in an [online FAQ](#) rather than in the user guide.

The above experiences gave me the impression that the H Wireless Headset's printed user guide and online instructions were intended for experienced users rather than novices needing a

modicum of handholding, and that iDevice users were not expected to use this product.

What was the H Wireless Headset's audio quality after properly setting it up to work wirelessly with my computer? Surprisingly, it was about as good as my less expensive, far more convenient (despite being wired), and high-quality sounding (despite being Dolby-less) go-to in-ear-headphones.

One more thing…the H Wireless Headset can be used with iDevices in wired mode using the included "mobile" cable. What was this product's audio quality under this condition? Surprisingly disappointing—the overall sound was muddy to my ears, especially compared to my go-to in-ear-headphones. Note that the H Wireless Headset lacks a remote for controlling your music tracks; instead, you need to use your portable music device's controls. Very inconvenient and time-consuming.

In summary, the H Wireless Headset is marketed as a "premium multi-platform wireless gaming headset…for use with virtually all media and gaming systems," and that might be true for tech-savvy gamers using a Playstation, Xbox, or Windows PC. This product's price tag (MSRP $299.99) almost certainly warrants the buzz-word "premium," but the price in time that novices could pay getting up to speed or the audio quality that mobile device users could experience almost certainly does not. Let's hope that SteelSeries improves their printed user guide and upgrades the H Wireless Headset so that it "just works" wirelessly with iDevices and Android mobile devices out of the box.

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Review contributed by Barry Fass-Holmes

# LG Google Nexus 5 Smartphone

Product category: Smartphone
Model: Nexus 5
Web site: play.google.com
Price: $349 list, from Google

To my mind, the Nexus 5 is very special because, not only is it from straight from Google, but it doesn't contain all of the unwanted programs you get with other phones that you might not feel you want but automatically load into memory anyway. It's pretty much pure Android. This makes the phone itself run noticeably faster and, because it's Google's "baby," you get updates as soon as they're available.

While there aren't that many changes from the last model—the Nexus 4—what Google *did* change has made it an excellent successor.
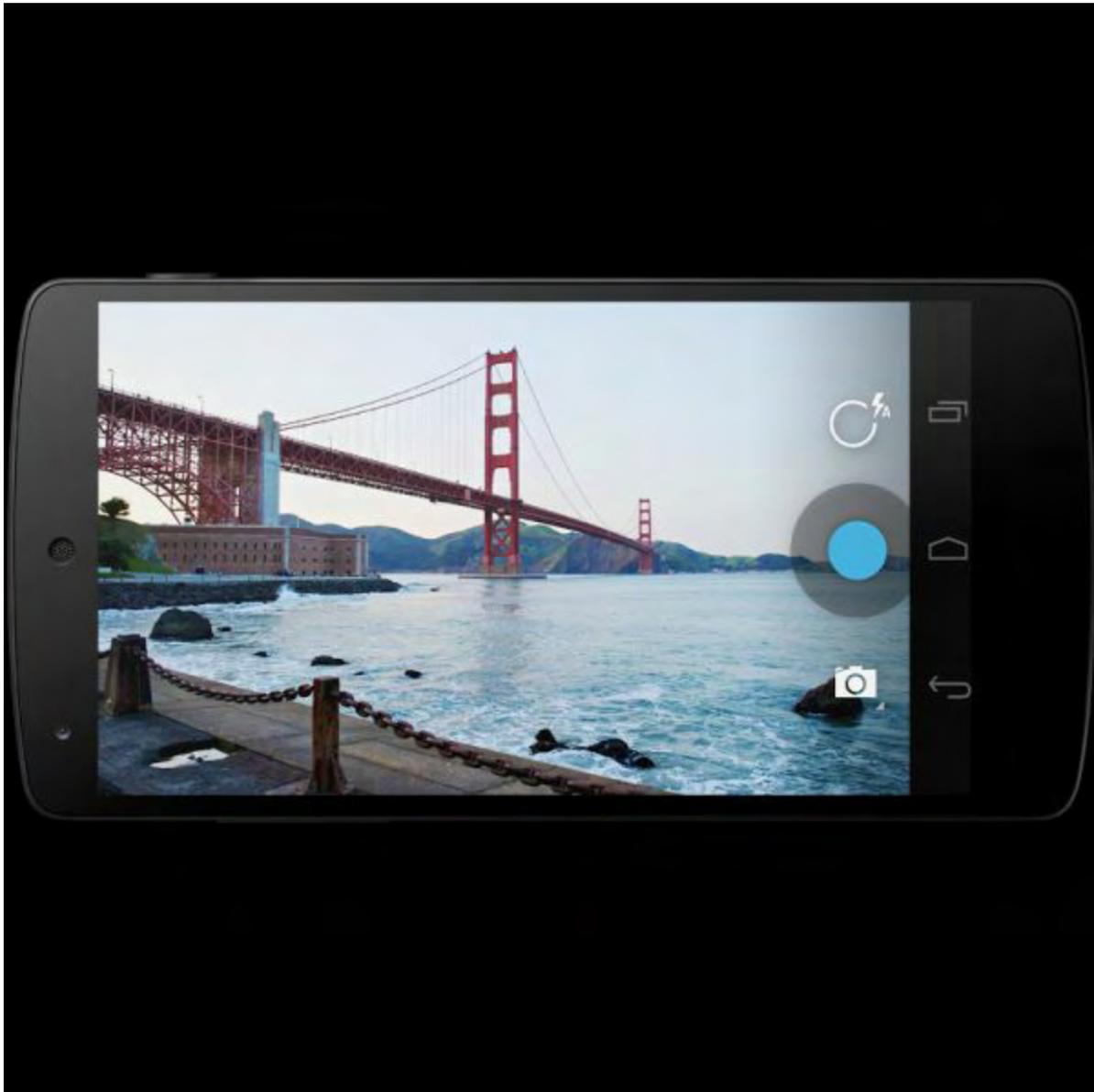
The Google Nexus 5 is available in 16GB and 32GB versions, in either black or white. The 16GB black-shelled model I reviewed is sleek and the case material itself feels smooth and comfortable to hold in your hands. The large display is bright and shows off any background pictures in bright, crisp colors.

As you hold the Nexus 5 in your hand, you'll notice it feels light, not heavy, and seems to fit nicely in big or small hands alike. The backside is a rubber material which feels smooth yet, not slippery, so it sits well in your hand, not like some phones that feel like a bar of soap, always seeming to fall out over muddy puddles and bottomless pits.
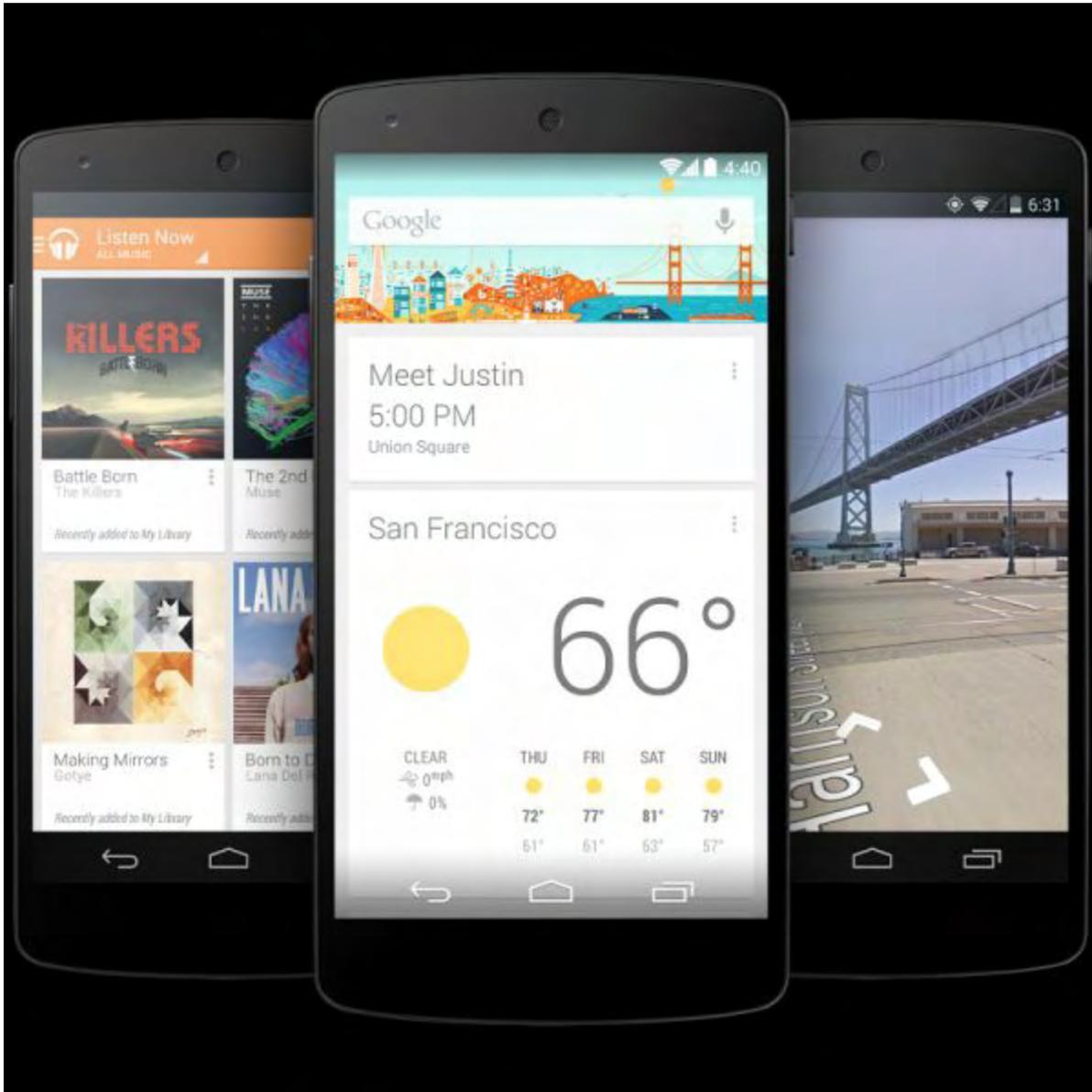
The HD display shows crisp and accurate pictures with nice color depth. The Nexus 5 gets its name from the size of its display screen (OK, it's only 4.95-in. but close enough!)

Playing music or videos is no problem for the Nexus 5. The built-in speakers are what you'd expect from a small device and, of course, there's a 3.5 mm aux input for headphones.

Google gave the Nexus 5 a better camera than the Nexus 4. Not only because they improved the camera app (which was also updated on the Nexus 4) but also because the camera has a fast-focus and makes good 8 MP pictures.

One thing that concerns me about the Nexus 5's camera is that the backside lens sticks out quite a bit. If you lay it on a flat surface all will be fine, but if you put it on an uneven surface the lens-glass could get scratched. For this reason and plenty of others *always* make sure you protect any smartphone this expensive with a good case—especially one that protects the corners.

To my mind, the combination of hardware, software and reasonable price allows the Nexus 5 to compete with other high-end smartphones from a myriad of manufacturers.

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Review contributed by Tobias Waldenmeier

Specs (source: Google)
• Android 4.4 (KitKat, latest version)

- *2.3GHz quad-core Snapdragon 800 chipset*
- *2 GB RAM*
- *8MP camera with Optical Image Stabilization*
- *Front camera 1.3MP*
- *4.95" 1920x1080 display (445 ppi)*
- *Adreno 330 GPU at 450MHz*
- *Size 69.17 x 137.84 x 8.59 mm*
- *Weight 4.59 oz (130 g)*

What's in the Box
- *Nexus 5 (16GB, Black)*
- *USB sync/charge cable*
- *AC Adapter*
- *SIM ejection tool*
- *Safety and Warranty information*
- *Quick start guide*

Multiple award-winning author Charles Carr has written more than two thousand newspaper articles, magazine stories, and columns for many publications including the San Diego Union Tribune, The Californian, The North County Times, Parent Magazine, ComputerScene, and ComputorEdge Magazine where he has been an editor for more than two decades. He is also a television producer/director with shows both currently airing and in production on Cox Cable and elsewhere.

In the 1990s, Charles wrote 3DHouse, a complete inside-and-out virtual reality tour of his family's log home in Southern California. One of the first virtual reality programs ever created, 3DHouse enjoyed tens of thousands of shareware downloads on all major portals. He also sold the rights to Radio Shack and Egghead Software. 3DHouse has since been featured in many books and articles about VR.

Carr has also been commissioned to write and/or directed many of his own stage plays. Several years ago, Carr and others looking for ways to help organizations struggling in difficult economic times, founded Art Animates Life (*www.artanimateslife.org*).

To date, Art Animates Life, a CA incorporated, federal non-profit, has raised tens-of-thousands of dollars for San Diego area disaster relief, an arts non-profit and municipal gallery, a community outreach center, and several struggling community theaters.

Several years ago Carr was commissioned to adapt and direct the beloved Dickens classic, A Christmas Carol. The play, titled "Mr. Scrooge & Mr. Dickens," has sold out So Cal theaters for the past several years. Six shows will take place Dec. 2013 to benefit the San Marcos Historical Society.

Another original play, "All the Time in the World," has been performed many times and

garnered broad acclaim from audiences and critics alike. Carr is working on a brand new adaptation of the classic Hitchcock thriller, "The Lady Vanished," to be performed spring 2014.

Carr has won many writing accolades, including San Diego Press Club awards for Best Column Writing, Best Consumer Writing, and Best Arts and Entertainment. He has repeatedly taken top honors in San Diego Songwriter's Guild competitions for his original musical compositions.

Carr is also a noted producer, director, and videographer. Several of his documentaries can currently be seen on So Cal's Cox Cable. Since its inception he has produced the Fallbrook International Film Festival's red carpet event and panel discussions.

Charles receives dozens of requests each year to appear on Southern California television and radio stations to talk about important tech events. He also speaks from time-to-time to high schools and organizations about his eclectic life in the arts.

Learn more at *www.charlescarr.com*.

Editor's Letters: Tips and Thoughts from Readers

"Computer and Internet tips, plus comments on the articles and columns." by ComputorEdge Staff

View System Files; Solid State Drive and Windows Page File; Devices That Know When You Are Asleep Or Awake.

View System Files

[Regarding the June 13 Use Hidden Files to Avoid Prying Eyes column:]

I use the "toggle hidden files" app mainly to make System files visible when necessary. For example, sometimes some of my user folders in Windows 8 mysteriously have the word "my" in front of them. (They got rid of that nonsense in Vista. Of course they're my files, all of them in fact.) Thanks to Google I discovered that an easy way to fix the problem is to delete the "desktop.ini" file within the folder.

-Ron Cerrato, San Diego, CA

Solid State Drive and Windows Page File

[Regarding the June 13 Digital Dave column:]

Your "reservations" about moving the Pagefile off the primary C drive were well founded as I discovered. Though the method I followed was successful (supposedly) by others, the problem I soon encountered was shutting down the computer. It would take 10 minutes plus to do so, and I think I know why.

As I moved the Pagefile to a separate 1TB conventional drive, I failed to take into consideration that it goes to sleep after a period of non use. So, when I attempted to shut down, the Pagefile was evidently not available for Windows to see it and access the file.

Thanks again for your guidance,

-Marc

Devices That Know When You Are Asleep Or Awake

[Regarding the June 6 Wally Wang's Apple Farm column:]

Wally,

Perhaps it is only Santa Claus who knows when you've been sleeping.

My experience with a Fitbit reflected the complexity of an accelerometer and software algorithm being combined to know when you are immobile ("asleep" and not merely reading news on an iPad in bed) versus moving ("awake"). I found it highly inaccurate, though not as bad as the algorithm used to determine actual physical activity. I could play racquetball aggressively for two hours yet only receive one minute of activity credit. So we are very dependent upon hidden vendor algorithms which tend to be hidden from us, at least so far.

-Doug Brown, Lone Tree, CO

Our lives are controlled by hidden algorithms from banks determining our risk for loans to governments determining national policy based on algorithmic projections of the future. So the real question is whether the risk of dealing with flawed algorithms is worth the potential reward if they're actually right.

Most likely Apple's rumored iWatch will be more of a storage device for health information that will tie into devices that other companies develop such as glucose monitoring sensors. That way the liability of flawed algorithms lies more with the third-party device while the iWatch is more of a database for health data.

-Wally Wang

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