



# THE WYSIWYG



December 2021

Volume 33 Issue 10

## STERLING HEIGHTS COMPUTER CLUB

PO Box 385

Sterling Heights, Michigan 48311-0385

**MAIN MEETING:  
TUESDAY DECEMBER 7  
7:00 PM**

Meeting room is open from 7PM to 9PM only. Be on time!!!

**Faith Baptist Church  
34950 Little Mack Ave,  
Clinton Township, MI 48035**

Located on the south-east corner  
of 15 Mile Rd and Little Mack Ave.

➔ This is the SAME room location where we met  
when Baker College owned the building.



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**This Month's Main Meeting Topic:**

**PC Tools for Windows, Part 2**

We will continue to discuss and demonstrate more software tools to help keep our Windows PCs maintained and secure, including using a VPN (Virtual Private Network) as we surf the Internet. It's about news you can probably use!

This will be another interactive session. YOUR comments and experiences are important, too, to share how we protect our PCs and ourselves.

\*\*\*\*\*

Note the meeting location specifics above. The meeting room is only open to our group from **7pm to 9pm.**

Building door opens at 7pm — *please be prompt and grab a seat quickly.*

Face masks are optional.

Guests and visitors are welcome. People can attend any SHCC meetings during two consecutive months before deciding whether or not to become a member. July and August do not count since there is no main meeting in those months. Membership includes admission to all SHCC functions and the newsletter. Membership is open to anyone. It is not limited to the residents of the city of Sterling Heights.

**DUES: \$30/YEAR**

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**CLUB E-MAIL ADDRESS:** [Info@SterlingHeightsComputerClub.org](mailto:Info@SterlingHeightsComputerClub.org)  
**CLUB WEB PAGE:** <http://www.SterlingHeightsComputerClub.org>

## 2021 SHCC Officers – Thanks for all your hard work!!!

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Hardware	(open)
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Spreadsheets	Rick Schummer

### SHCC Coordinators

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Door prizes	Don VanSyckel
Greeter for visitors	Jim Waldrop
Newsletter Publisher/Editor	Paul Baecker
Program Coordinator	Mike Bader
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### Club Dues Amounts

The club dues were increased to \$30 per year at the November 2018 meeting.

This includes a digital version of the newsletter sent monthly, except for July and August, when the club does not meet.

A paper version of the newsletter is available in place of the digital newsletter, for an additional \$31 per year (increased at March 2019 meeting).

Associate memberships, for a second member of a household, remain at an additional \$15 per year.

### Two-Month Meeting Schedule

<b>December 2021</b>	<b>January 2022</b>
7 - SHCC Main Meeting	4 - SHCC Main Meeting
12 - SEMCO meeting	9 - SEMCO meeting

Newsletter submissions are due 10 days before the club meeting, but the earlier the better. They should be sent to : [newsletter@SterlingHeightsComputerClub.org](mailto:newsletter@SterlingHeightsComputerClub.org)

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## The President's Pen

by Don VanSyckel



Cyber crime is stepping up with the holidays' increased internet shopping and general use, so be on guard with every mouse click. Don't forget to shop local. Our local retailers, particularly small businesses, have been hard hit and are still attempting to recover. If you like having a store down the street that you can run to and quickly pick up an item you need, then you need to shop there other times also.

I sent an email a week ago with a question about meetings which hopefully you all read. The question was:

YES - I could attend a day time meeting  
 NO - Daytime doesn't work so good for me and I want to continue meeting at night, as we do now

As of writing this column the responses are  
 23 - yes  
 2 - no

The response to this question seems pretty clear; but frankly I was surprised there were any "no"s given the apparent ages of SHCC members. The officers will consider daytime meeting locations in our quest to tighten our budget. There is one location that we are interested in that is currently adjusting their room rental schedule because SHCC didn't fit into any of their existing categories, and we are waiting anxiously for the updated schedule.

A couple months ago when SHCC member Paul Baecker did a presentation on "PC Tools for Windows", I didn't have the password for the internet with me and Paul could only do local tools which was OK because there were enough tools and interest in them to fill the meeting time. This month we will have internet access and Paul will be able to present and discuss additional utilities and Windows configurations, with emphasis on online use.

Due to the way technical businesses are going, there are fewer businesses that are available to SHCC to request speakers from. You might have noticed that we have had more SHCC members presenting at meetings. To this end two things: First, if you know of a topic that you'd like to see a presentation about, let me know and we'll see if either an outside person or a club member can do one. Second, many SHCC members have interest in different subjects that the rest of us would be interested in hearing about, so consider doing a presentation on your favorite subject. It's simple; do a couple slides and rattle on about your favorite subject for a bit.

Remember, please be on time, 7:00 PM. We might have access to the building a few minutes before 7:00 PM but currently don't count on it. We will end promptly at 9:00 PM.

Last Month:  
 We had a presentation in November by Macomb County

Sheriff Department Detective Brant Perry. Detective Perry shared many useful and informative items about cyber security and staying safe in using the internet. It was a great presentation and it was well received. Even if you've seen a cyber security presentation a while ago, it's worth it to stay up to date on the current trends.



## Feeding Rocco

News and/or Opinion From The Editor

We recently became doggie parents again (for the sixth time) to the cutest little pooch (well, every pooch is the cutest one to *someone*), and I had to remind myself of the household items that he (well, it) should not be getting into, to avoid an unplanned veterinary appointment.



There is a link in the Web Page Reviews on page 14 to an ASPCA web page which lists "101 Household Pet Dangers". As they say, "Even when you take precautions to keep your pet safe, they sometimes still find ways to get into things they shouldn't." I recall one of our past curious furry pals getting into a pack of sugar-free mints in my wife's pants pocket one evening (she wasn't wearing them at the moment), which prompted an emergency visit to the animal hospital (expensive, as well). Even though the pooch had quite good taste, those sugar-free treats include xylitol, an ingredient that we quickly learned is very toxic to them. (The dog survived just fine.)

This is their list of 16 foods you should absolutely never feed your dog:

Chocolate	Garlic
Gum and candy	Salt
Xylitol	Tea leaves
Grapes	Raw yeast dough
Raisins	Spoiled foods
Macadamia nuts	Fatty foods
Avocados	Coffee
Onions	Alcohol

Our vet tells us that in the early months of the Covid period, pet adoptions were extremely busy with people looking to adopt little friends to keep them company while hibernating indoors, but then giving them up when things started to return to semi-normal this year. Now, new adoptions are picking up to take in these newly abandoned pets, but still not quickly enough to keep up with drop-offs.

So, if you have the financial ability (yes, having a pet *can* be somewhat pricy over time), skip the breeders and instead give an abandoned furry friend a safe new home. There are many to choose from at many adoption sources.



## Does Amazon Have Too Much Power?

By David Kretchmar, Computer Technician  
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I have been an Amazon Prime member for a couple of years and, like many people, have regularly made small and large purchases through Amazon. I enjoyed the fast, often two-day “free” shipping for a time with Prime, although more recently, this turned into two-week shipping on my sandals from Zappos (an Amazon subsidiary). The protection Amazon gives consumers is second to none in the online or offline world.



Amazon has become THE dominant online retailer in America, accounting for over 50% of online retail purchases in the United States. Despite most formerly 100% brick and mortar operations such as Walmart, Home Depot, Target, and Best Buy, moving into online selling.

Amazon’s third-party marketplace, made up of millions of merchants, has become a critical part of Amazon’s e-commerce business. The marketplace now accounts for more than half of Amazon’s overall sales.

With Amazon’s massive size comes power. It would be a miracle (and downright un-capitalistic) if Amazon did not take advantage of its enormous size. Sadly, in recent years, Amazon has been using its power to force consumers to pay more for an item than they would otherwise pay if Amazon did not exist.

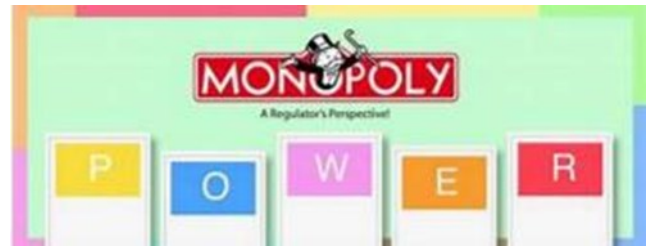
I can anecdotally attest to this as a result of my personal experience. I enjoy shopping online, at least much more than I like physically visiting a retail store. Therefore, I search a number of online resellers for each purchase, getting a good idea of who has the best price.

I continued to shop online at Amazon and other sellers for many years, sometimes finding that Amazon had the best price, yet also often finding a better buy elsewhere. Finally, I made a game of it and enjoyed finding a better price (including tax & shipping) on sites other than Amazon. I did this a little out of jealousy (I have never owned Amazon stock) and because of a nagging feeling that Amazon and Jeff Bezos were taking over the world.

I have found it increasingly difficult to find a better price than Amazon’s on many popular items in recent years. I did not know how or why, but the rules seemed to have changed.

### The Anti-Trust Lawsuit

On May 25, 2021, the Washington, D.C. Attorney Gen-



eral, Karl Racine, announced he was suing Amazon on antitrust grounds, claiming the company’s practices have unfairly raised prices for consumers and blocked innovation. The lawsuit alleges Amazon illegally maintained monopoly power through pricing contracts with third-party sellers. An Amazon spokesperson said Tuesday: “The DC Attorney General has it exactly backward — sellers set their prices for the products they offer in our store.” I believe this is untrue.

Karl Racine seeks to end what he alleges is Amazon’s illegal use of price agreements to reduce competition; the lawsuit also asks for damages and penalties to deter future similar conduct. In addition, the suit asks the court to block Amazon’s ability to harm competition by imposing a variety of reliefs, up to and including breaking up Amazon.

### How Amazon Raises Prices

The lawsuit, filed in D.C. Superior Court, alleges Amazon illegally maintained monopoly power by using contract provisions to prevent third-party sellers on its platform from offering their products for lower prices on other platforms. According to a press release, the attorney general’s office claimed the contracts create “an artificially high price floor across the online retail market-



place.” In addition, Racine stated that these agreements ultimately harm both consumers and third-party sellers by reducing competition, innovation, and choice.

Amazon requires third-party vendors who want to do sell on Amazon to abide by its business agreement. Until 2019, Amazon included a clause in that agreement that prohibited sellers from offering their products on a competitor’s online marketplace at a lower price than what their products sold for on Amazon. Amazon removed that rule in March 2019 as it faced growing antitrust scrutiny.

The complaint alleges that even after Amazon removed the “no cheaper” pricing provision from its agreements with third-party sellers, it added an identical policy called its “fair pricing policy.” The fair pricing policy enables Amazon to “impose sanctions” on a seller that offers their product for a lower price on a competing online

(Continued on page 10.....Amazon)

## Uninterruptible Power Supplies

By Dick Maybach  
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An **Uninterruptible Power Supply** (UPS) is a box that plugs into a power outlet on a wall into which you plug in your computer and its key peripherals. You connect it the same way you connect a power strip. Inside the box is circuitry that monitors the AC voltage, a lead-acid storage battery, a charger, a power supply that converts the battery voltage to 60-Hz ac line power, and a switching circuit that selects whether your computer is powered from the wall or from the UPS battery. Most units also include a surge suppressor. Normally, your computer and its peripherals are powered from the wall, and the UPS battery is charged, but if the AC voltage becomes too high or too low, the battery powers your devices through the AC converter.

Power companies in the U.S. provide reliable service, but sometimes this isn't easy. For example, they use the earth as part of their circuit, partly for safety reasons (to avoid high voltages building upon their wires). Service is difficult to maintain if the resistance of the earth is high, as is the case in the Freehold, New Jersey area, where I once was responsible for a lab. Partly as a result of this experience, I always used a UPS with my work computer. I saw the lights blink more than once, followed by streams of profanity from nearby offices where computers had crashed because they weren't UPS equipped. Although there may be no economic impact resulting from a power glitch while working on a home computer, it is most frustrating to have an editing or photo-retouching session ruined or an operating system corrupted by a power glitch during an update. Modern UPS units are cheap, and life is short, which often makes investing in one well worth its cost.

A surge protector has a device that is connected across the power line. If the voltage rises above a specific value, the resistance of the device becomes low. The hope is that the device will survive long enough to keep the voltage low until the surge is over. Most such devices will protect against one surge, but in doing so, they burn out, which is why many surge protectors have an indicator that is illuminated if the device is good. Of course, since most of us locate our surge suppressors on the floor with the dust bunnies, we can't see their indicators. Surge protectors do not protect from low voltages.

By the way, neither surge protectors nor UPS units can defend against direct lightning strikes, which can vaporize the wiring in your house as well as equipment connected to it. The voltages are high enough for lightning to arc hundreds of feet from a cloud to the ground, and the currents can be a million Amperes or more. Fortunately, direct strikes are rare. However, a lightning strike near the power grid can cause a momentary rise in the voltage, which is what a surge protector tries to prevent.

Most consumer UPS devices have the architecture shown in Figure 1. First, the Protected AC Out socket is connected through the AC In cord to a wall outlet in normal operation. At the same time, the input power is applied to a battery charger that keeps a lead-acid battery (which uses the same chemistry that starts your car) fully charged. Finally, control circuitry monitors the AC-In voltage. If it departs from what is acceptable, a relay switches Protected AC Out to a DC-to-AC converter that generates a 125 volt, 60 Hz waveform from the DC voltage on the battery. This does mean that the Protected AC Out voltage is zero during the time it takes for the relay to complete its operation. Still, this time is short compared to the 1/60 second period of our power system, and it doesn't affect a computer's operation. In addition, most UPS devices have additional outputs connected to the AC In port through a surge protector.

A push-button connects to the controller. When it turns off the UPS, Protected AC Out is turned off, but battery charging continues, and Unprotected AC Out remains hot. The last is important; to avoid unpleasant surprises, be sure to unplug any unprotected devices before working on them.

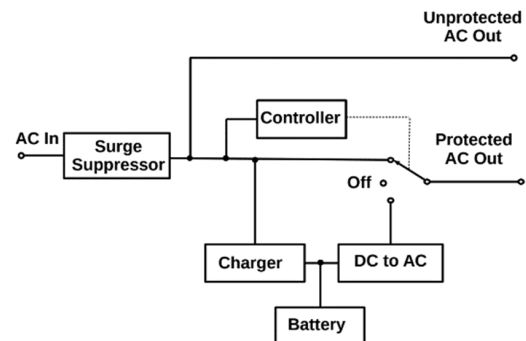


Figure 1. **UPS Architecture**

Some iMacs are incompatible with some popular UPS units. They work fine when the ac power is good, but the UPS will refuse to switch to battery when it fails. So if you have an iMac, do your homework.

Try to buy your UPS from a supplier that offers a "No questions asked" return policy on UPS purchases; not all do (in particular, Amazon the last time I checked). As soon as everything is connected and the battery is fully charged, pull the ac power plug to see if the unit switches to battery power. If it doesn't, you should trade it for a compatible one.

A UPS is designed to provide power when that from your power company fails. In particular, it assumes that commercial power is available when it's first turned on, and it may not start if this isn't true. This means you may not be able to use a UPS to provide power on a camp-

ing trip. You also may not be able to turn it on after the power fails.

Most UPS manufacturers specify the maximum output of their units in both Watts and Volt-Amperes, with the latter being larger. You should buy one with a maximum Wattage equal to or larger than your computer power supply rating. (We're discussing here only the total power supplied by the battery backup connectors; we can ignore the power supplied by the surge protected connectors.) I'm assuming that you purchased your computer system and that the manufacturer correctly sized its power supply. Make appropriate adjustments if you know you have a larger than necessary supply, which is usually the case if you built your system. The average power consumed by your computer is usually significantly less than its maximum power supply rating. We have to be concerned about the maximum because the UPS will shut down if you try to draw more than its rated power from its battery backup connectors.

To estimate how long you can run on battery power, you have to know the average power consumption of your computer. My desktop uses about 100 Watts, which is probably a good starting point, although I would double this for a game machine with a high-power display driver. If you're still using a CRT monitor, you should probably add 25 to 50 Watts for that. Some manufacturers, including APC, have graphs on their websites showing run time vs. load, although these are valid only for new batteries. Many USP manufacturers specify the length of time they can supply power at maximum load, and you can use this to estimate how long they will last. For example, my UPS is rated at five minutes at 600 Watts. Therefore, at 100 Watts, it should last six times as long, or 30 minutes. APC's chart shows 50 minutes at 100 Watts, so the rough estimate is comfortably conservative and allows for battery aging.

Decide what you want to keep running when the power fails. Your goal is to keep your computer running long enough so that you can save your work and power down normally. You may be able to work for a little while, but once the battery is exhausted, you're done. At a minimum, you need to back up your system unit and display. If you are visually impaired, you should also include your powered speakers. Everything else should have just surge protection; this includes your printer, scanner, and network equipment. It is especially important that you not try to back up a laser printer, as they draw so much current that your UPS may not turn on, even when your house power is normal.

Figure 2 shows the **rear panels of two American Power Conversion UPS devices**. Both have two cable-TV and two Ethernet connectors connected to surge suppressors. Both also have a USB connector, which allows your PC to monitor the UPS. The left one has two types of outlets labeled Battery Backup and Surge; the left-hand connectors are UPS protected, and the right ones



have only surge protection. The unit on the right is more complex. The top protected connector has the label Master. When current flows from this socket, the sockets labeled Master are also turned on. And when the current stops flowing from the master socket,

those controlled by it are turned off. I connect my PC to Master, my monitor to Battery Backup Controlled by Master, and my speakers to Surge Only Controlled by Master. As a result, when I turn on the PC, the monitor and speakers are also turned on. However, if the power fails, only the PC and monitor remain powered. My other peripherals, the printer, and scanner are neither controlled by the PC nor protected. Inkjet printers should always be turned off using their own power switches, which is controlled. Just pulling the plug can result in ink clogs.

Many UPS units have associated software that allows you to configure them and monitor their operation. It may also include a provision to shut down your computer if the battery becomes depleted during a power outage. However, UPS manufacturers are Microsoft-centric; their software may be Windows only, and if it does have Mac or Linux software, it probably has fewer features than the Windows version. Some higher-end units include front panels that provide much of the software's monitoring, which makes them less reliant on your operating system.

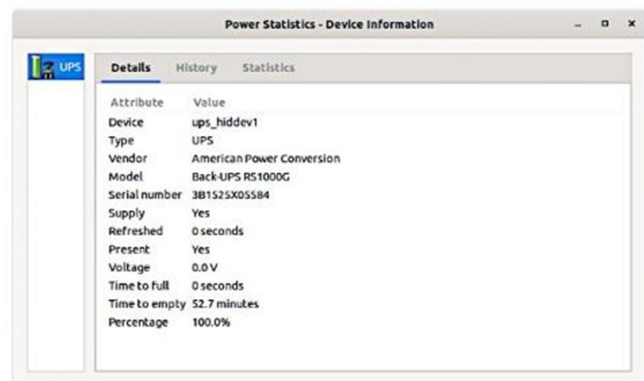


Figure 3 shows a **Linux UPS monitoring screen**. It shows that the battery is fully charged and will power the system for about 53 minutes at the current load.

The built-in Windows program that checks the battery is even terser, Figure 4.

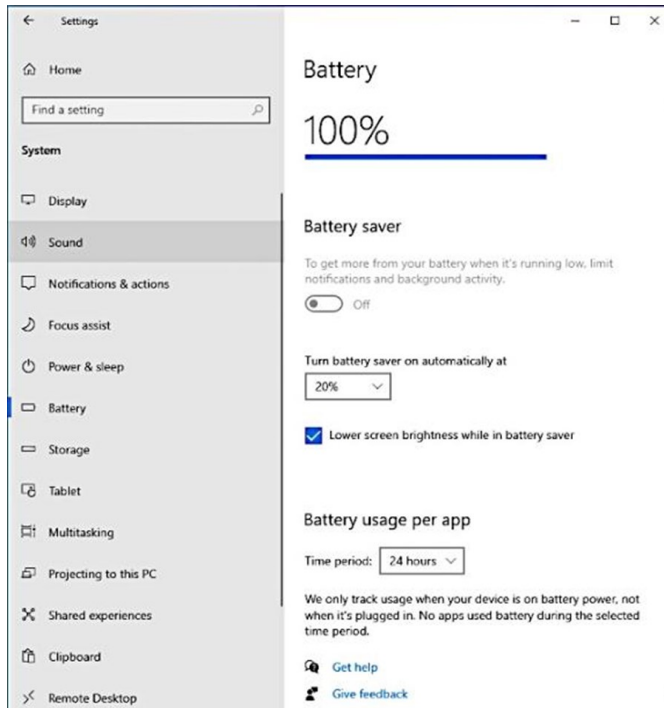


Figure 4. Windows Battery Monitor

Windows users can install APC's Power Chute software to get a better view: [PowerChute Personal Edition - APC USA](https://www.apc.com/usa). The following screen-shots are from this program. Figure 5 shows the current status.



Figure 5. Power Chute Window Showing Current Status.

Figure 6 shows the voltages that cause the UPS to switch over to battery power.



Figure 6. UPS Voltage Settings

Figure 7 shows the power drawn from the master outlet, resulting in the other connectors being shut off.

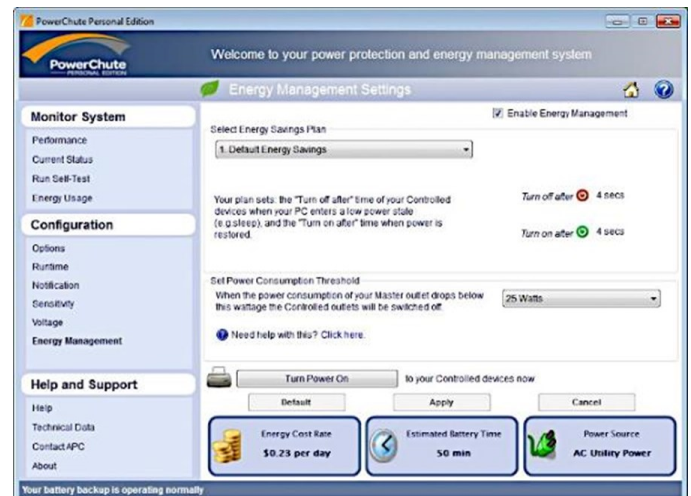


Figure 7. Shutoff Control Power

By the way, you can purchase smart outlet strips that claim to control power in this way. However, I've found that their threshold is far too low to make them usable with PCs. PC system units draw a little power even when off, and it's sufficient to keep a smart outlet strip on.

Regardless of its features, a UPS is a valuable peripheral that can save you much time and frustration.

*This article has been obtained from APCUG with the author's permission for publication by APCUG member groups.*



## Bitcoin - The New Gold?

By David Kretchmar, Computer Technician  
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In March 2021, the total market value of Bitcoin exceeded one trillion dollars for the first time. In addition, each individual bitcoin recently touched a value of over \$60,000 before falling back.

Bitcoin's pullback was precipitated by Federal Reserve Chairman Jerome Powell when he made what was perceived as negative comments about Bitcoin. "Crypto assets are highly volatile — see Bitcoin — and therefore not useful as a store of value. Moreover, they're not backed by anything. Instead, they're more of an asset for speculation. "It is essentially a substitute for gold rather than the dollar." Powell also reiterated the IRS's position that sellers and spenders of bitcoins would be required to report capital gains as though Bitcoins were stock.



To put this gold/bitcoin comparison in perspective, the total market value of gold in the world is about 10 trillion dollars, ten times the total market value of Bitcoin.

In this discussion, I'm using the term "Bitcoin" to represent the numerous

crypto currencies such as Ethereum and 100 smaller cryptocurrencies, many offering very different features and superior to bitcoin by some measures. Nevertheless, Bitcoin is the most widely known, and Bitcoin's value currently represents almost 90% of the total value of all cryptocurrencies.

### Durability

Gold is an inert element that does not oxidize. Bitcoin is dependent on the internet and all of the decentralized participants in its operation. So, if there is some global catastrophe that destroys the internet, then only gold survives. But for anything less than that, Bitcoin and gold are equally durable. A much more likely scenario is the internet suffering some serious but limited issues and being problematic for days or weeks. Without the internet, all financial institutions would have problems functioning. Some theorize that because of its decentralized structure, Bitcoin might emerge as "the peoples" money in the event of an internet meltdown. Bitcoin is currently preferred in nations like Venezuela and other third-world countries, where the fiat currency issued by the government has become virtually worthless.

### Transferability

You can trade gold on paper if you are willing to assume third-party risk, which defeats part of the purpose of holding gold. To transfer physical gold, you usually need to move it. Large quantities of gold are heavy and difficult, and expensive to transfer securely. Commissions can be excruciating for small gold transactions.



Bitcoin can be sent to another address controlled by somebody anywhere in the world in seconds, and the transfer is confirmed and permanently recorded in minutes. Thus, Bitcoin is infinitely more transferable than gold.

### Divisibility

It is difficult to divide gold, particularly for small amounts. Bitcoin can be subdivided today into 100,000,000 units called satoshis, and the protocol could be extended in the future to support even smaller amounts if that becomes necessary. Bitcoin is infinitely more divisible than gold.

### Scarcity



The scarcity of gold is well understood; in the history of humankind, about 6 billion troy ounces of gold have been produced, 90% of which is estimated to exist still. All the gold ever mined

would fit inside a 20-meter cube. The world's supply of produced gold increases by roughly 1 - 2% each year, depending on the metal price and discoveries of deposits.

Bitcoin has a limit of 21,000,000 units, including Bitcoins permanently out of circulation due to lost keys. Changing the rules to allow more units of Bitcoin would require a consensus of users. This is possible, but it is very doubtful that the Bitcoin stakeholders would choose a course that would hurt the value of their assets.

Interestingly, both gold and Bitcoin are produced by "mining." Each has been mined to the extent estimated to be approaching 85 - 90% of the total quantity that will ever be produced. Thus, Bitcoin and gold are both scarce commodities.

## Recognizability

Gold can be counterfeited and sometimes needs to be tested for purity. Authentication can be tricky, but not that difficult for experienced people.

Bitcoin cannot be counterfeited, and it is easy to verify the validity of Bitcoin based on the blockchain, the shared Bitcoin ledger. As a result, Bitcoin is more recognizable than gold, at least among people who understand what a Bitcoin is.

## Taxation

Bitcoins are taxed just like stocks, with a maximum 15% or 20% rate on long-term capital gains (assets held for at least a year). That compares favorably with most other alternative investments. But, as Jerome Powell stated, people who use Bitcoin to make a purchase create a taxable event they have to report.

Gold is taxed as a collectible, and sales do not have the advantage of favorable long-term capital gain treatment. When sold, gold gains are taxed at the individual's ordinary income tax rate to a maximum of 28%. Gold buyers may also have to pay sales tax, depending on relevant state laws.

## Conclusions

Gold and Bitcoin, as different as they are, both have good investment vehicles and sound money characteristics. As more people grow comfortable with Bitcoin and understand how it works, Bitcoin will replace gold as a store of value. This is precisely what we see happening right now. If this continues, some specialists predict the price of Bitcoin in US dollars should stabilize at \$300,000 - \$500,000, but it's going to be volatile. Any investment with tremendous upside potential also has massive downside risk.

Price is ultimately determined by supply and demand. Demand comes from widespread recognition, a liquid market, and sustained interest. Bitcoin has been unique, achieving a worldwide network in less than 15 years. Other currencies are acknowledging Bitcoin and even inking their value to Bitcoin. The US and other countries are looking into issuing their digital currencies. Individuals and vendors worldwide are beginning to adopt Bitcoin as a payment mechanism and as stored value.

Bitcoin is becoming a valued currency not by force of government declaration or people's acquiescence but by recognition and widespread acceptance.

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*(Cleaning....continued from page 11)*

## Screen Cleaning Products Exist if You Need Them

Some experts recommend using a small amount of dishwashing liquid dissolved into distilled water to remove oily stains with a microfibre cloth. Once you've attacked the effective area, a clean microfibre cloth that's been moistened with distilled water should remove any remaining residue.

If you're not comfortable doing this, there exist purpose-built cleaning solutions like [AudioQuest CleanScreen](#) that promise to safely clean display surfaces without damaging them. There's always a risk of damage when using any product, though purpose-made solutions are a lot safer than household cleaners and tap water.

## Don't Forget About the Back, Too

LCD screens use LED backlights which can kick out a fair bit of heat, while OLED displays also generate heat as a byproduct of the chemical reaction that lights up individual pixels. Plasmas and [CRTs](#) were also notorious for heat production, so cleaning the back of a display is equally as important as cleaning the front.

Make sure you take the time to blow out any dust from vents using canned air or use a microfibre cloth to remove any material that may hinder cooling. Take care not to use a vacuum or similar since static electricity can build up and cause damage to internal components.

## Clean Springly for Best Results

While you should take care to make sure dust buildup at the back of the unit is kept to a minimum, you're better off cleaning the front of the display as sparingly as possible to avoid scratching glass or wearing down panel coatings.

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## Door Prize Winners!

**November 2021**

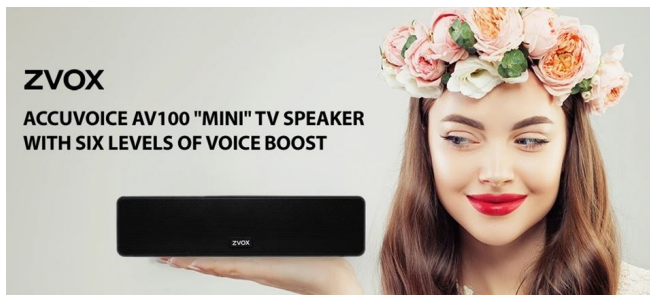
Tom Miller — Sharpie marker set  
 Mary Ann Warner—Earbuds  
 Bill Appleberry — 16GB flash drive  
 Mike Bader — Blank DVDs  
 James Waldrop — Coast flashlight

## Accuvoice V100 "Mini" TV Speaker

By George Harding, Treasurer  
Tucson Computer Society  
<https://aztcs.apcug.org>  
[actuary110@yahoo.com](mailto:actuary110@yahoo.com)

I was given an Accuvoice V100 M "Mini" TV Speaker for review. It is a product made by the ZVOX company.

It is an addition for your TV, smart or otherwise. It is smaller than the sound bars I've seen in retail stores, and it fits nicely below my TV, beside my Dish controller.



The kit comes with a remote (yet another one!) with five buttons: power, sound up and down, mute, and Accuvoice. That last button has a remarkable ability to increase voice when a program has both music and voice, and it is hard to hear the voice. In addition, there are six levels of music suppression, so you can get more voice and less music when you want it.

I've never seen this feature on any other device, but it may become more popular as users realize that such a device is available.

The kit also has several connectors. Only one is used, but you must refer to the brief manual to determine which one to use to connect to your TV set. I had some trouble with this and had to call their support to get the job done. Support was extremely helpful and very patient.

The soundbar includes its own speakers, which are a bit better than my TV's speakers.

My Dish remote turns on both my TV and the Dish controller. The ZVOX's remote turns on the soundbar. Two LEDs let you know what the status is. One is blue, which indicates power on, volume down, or mute, and the other is amber, which indicates volume up. When you push Accuvoice, the blue LED shows briefly.

A standard power cord and plug power the soundbar. The sound bar's dimensions are 10" X 2.5" X 3".

The company provides free shipping and a 60-day free home trial. In addition, the product has a one-year parts and labor warranty.

I'm very satisfied with this product. It provides a measure of relief for those situations where the program's voice is nearly unintelligible because of the overriding music or other background sound.

### ACCUVOICE AV100 "MINI" TV SPEAKER

<https://zvox.com/collections/accuvoice/products/av100-accuvoice-speaker>

Price \$100

***This article has been obtained from APCUG with the author's permission for publication by APCUG member groups.***

*(Amazon.....Continued from page 4)*

marketplace.

### Do Sellers Really Set Their Own Prices?

Yes, they do – but only as long as they follow Amazon's pricing rules. Amazon's pricing agreements were also a topic of scrutiny in the House Judiciary subcommittee. In their final report, lawmakers agreed that Amazon uses its dominant position in e-commerce as leverage with third-party sellers to require they adhere to pricing restrictions.

These clauses are at least anti-competitive, especially when a company like Amazon has virtual monopoly powers.

***This article has been obtained from APCUG with the author's permission for publication by APCUG member groups.***

*{Editor's note: From my experience as the Amazon Seller manager at my local public library, I can agree with many comments in this article. Amazon does cause prices to often be inflated. When we sell books, CDs, DVDs, puzzles and such on Amazon, Amazon takes 20%-23% of the sales price as their "fee" for using their service, so we have to take that into consideration when we price our listings. I personally shop on Amazon as seldom as I possibly can, for two primary reasons: I've found better prices elsewhere (from reputable sources), and I do not care for how Amazon treats its sellers. It's all about the shoppers. They can (and do!) scam the sellers and Amazon looks the other way, presumably just so that they don't get negative social media posts (and fewer shoppers and profits). A seller can complain and contest their actions until the cows come home, and Amazon will do all they can to ignore you or blow you off (by replying with unrelated 'help' links or totally ignorant responses). And of course they do not offer a hotline (phone number). Noooo! That would be too convenient for us sellers to get account assistance.}*

## How To Safely Clean Your TV Or Monitor

By Tim Brookes

<https://howtogeek.com>

There's definitely a wrong way to clean your TV or monitor screen. Mess it up and you'll be looking at scratches, smears, or worse for a long time. Get it right and your display will gleam like the day you bought it.

Before you reach for a duster or cleaning solution, make sure you read this.

### First: Consult The Manufacturer's Instructions

Your TV or monitor manufacturer likely has its own set of cleaning instructions for your specific display type. This goes for LG OLEDs, Samsung QLEDs, and Dell touchscreen monitors. *{Other brands as well.}*

While these manufacturer guides often err on the side of caution and recommend very little in the way of cleaning products, you may also find some specific advice to your particular display and the types of coatings used on it.

Some manufacturers, like Dell, recommend 70-90% isopropyl alcohol on some products. Others like LG recommend never even moistening the display. If your display is still under warranty, you might want to carefully follow these instructions to avoid any problems if you have to make a claim later on.

### Avoid Harsh Cleaning Chemicals



By far the most important thing to remember is to avoid any harsh cleaning chemicals, including glass cleaners like Windex, polishes, and even isopropyl alcohol unless you have specific clearance from the manufacturer that this will not damage the screen.

Such cleaning products are usually made with ammonia, alcohol, and contain other products and fragrances that could damage the display. These screens often have protective coatings on them to combat glare and reflections, or [oleophobic coatings](#) to repel fingerprint oil in the case of touchscreens.

If you've already used something like this will no ill-effect, consider yourself lucky and avoid using it again in the future. Many displays will be utterly ruined by the application of these household cleaners, leaving streaks and clouding that could render the display worthless.

### Air and Microfiber Cloths Are Your Friends

Canned air is a great way of removing dust from a dis-

play surface without causing any damage. Dust particles, though small, may scratch sensitive surfaces when pressure is applied. By not touching the display, you're minimizing your risk of scratching the delicate surface. This is especially true of glass TV and monitors, like those that use [OLED technology](#).

Second to canned air is a high-quality microfiber cloth, ideally one with deep grooves to catch all of the dust without moving it over the screen. Use the lightest of touches when cleaning to avoid undue pressure on the display. You may need to turn to a microfibre cloth when canned air simply won't cut it.

Avoid any paper-based cleaning products like tissues or kitchen towels since this contains lots of small fibers that can scratch the display. This is good advice in general when cleaning anything reflective, whether it's a shiny plastic gadget or a pair of reading glasses.

You should take care when cleaning the microfibre cloths too. Avoid putting them in the wash with any fabric softeners or in the dryer with a dryer sheet since these products contain oils and waxes that may transfer to any surfaces you wish to clean. This will leave unwanted streaks on your display.

Lastly, if your microfibre cloth has a tag then be aware that the tag probably isn't made of the same microfibre material and may cause damage to your display. For peace of mind, snip off any tags with a pair of scissors before using the cloth.

### Use Distilled Water Where Necessary

When air and dry microfibre cloth don't cut it, you may need to turn to distilled water instead. While tap water often contains [particles and minerals that may scratch your screen](#), distilled or "pure" water does not.

Use a pump spray bottle to mist a microfibre cloth until just damp, then spot-fix any stubborn grime that has adhered itself to your screen. This will likely only work for dry matter. Oil and other streaky marks will likely need a different approach.

Be aware that some manufacturers will never recommend using any moisture near your display. LG is one such display manufacturer that dissuades customers from doing so, though the company does not acknowledge that a dry microfibre cloth is often not enough to remove stubborn dirt.

You'll have to use your intuition at this point. We've used distilled water and a microfibre cloth to remove dried-on grime from a glass-panel LG OLED with no ill effect since the alternative was a distractingly dirty screen.

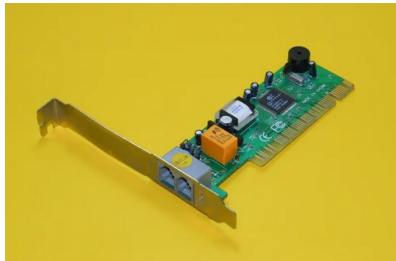
*(Continued on page 9.....Cleaning)*

## What Is A Network Adapter?

By John Bogna

<https://www.howtogeek.com>

If you've ever tried to fix a networking issue, you've likely come across discussions about network adapters. So what are they, and why does your computer need them? Let's take a closer look.



Network adapters are one of the many pieces that connect us to the internet. They're usually an antenna or card built into your device, but can also be plug-in USB dongles or antennae that allow purely wired devices to receive data wirelessly.

Network adapters allow computers and other devices to interface with a [local area network \(LAN\)](#) or another type of network in order to access the internet. They can work with wireless connections like [Wi-Fi](#) or [wired ones like Ethernet](#).

A network adapter is not the same thing as a [router](#). Your router is the gateway that directs wireless traffic to your devices from the internet, while the adapter allows your device to connect to the network and receive that data.

When using external network adapters on a PC, you'll need to [download and install the driver software specific to that adapter](#) before you can use it. The manufacturer will often package this software along with the adapter, or your computer will automatically install the driver when your adapter is first plugged in.

### Types of Network Adapters

Both wired and wireless network adapters can be used on a variety of devices.

#### Network Interface Card (NIC)

One of the most common network adapters available today is the Network Interface Card (NIC), also called the network interface controller. They're usually built into the motherboards of today's internet-capable devices and allow both wired and wireless connection to the internet.

NICs all usually use the 802.11 [standard for Wi-Fi connectivity](#), so the one that comes with your laptop can work with any router using that standard to get online. Since it's the standard for most wireless internet connections, it's pretty easy for most devices to interface with.

#### USB Adapters

This type of adapter is typically a USB dongle that plugs into a wired computer. It will have an antenna attached to receive the signal from a wireless network, and transmit the data it receives through the USB connection to the computer.

These adapters are a good option for enabling older computers with a wireless connection because they don't require physically opening the computer's case to install an internal network adapter. A popular choice is the [TP-Link N150](#).

[USB network adapters](#) can also support wired network connections. Wired or wireless, they're often packaged with [home routers](#) to form a home LAN.

#### Peripheral Component Interconnect (PCI) Network Adapters

Similar to USB adapters, a PCI adapter connects to a PC computer or laptop via a PCI card slot. These adapters



also have an attached antenna designed to receive a wireless internet signal.

Though external, they're built in a similar way to the NIC adapter most modern computers come with and can enable both wired and wireless connections.

Developed in 1992, the PCI standard was later replaced with PCI Express (PCIe). A variant of the PCI card called a PCMCIA card or Ethernet card was also used with laptops for a time until technology improved enough for network adapters to be built into laptops.

#### Virtual Adapters

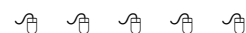
Some adapters are software-only and built to mimic the functions of a NIC. You'll most often see this type of adapter in products like a [virtual private network \(VPN\)](#), which uses another computer's local network connection to make it seem like your computer is also using that connection from the same location.

#### Improve Your Network Connection

If you're having trouble connecting to your network, you may need to [upgrade your router](#).

***This article is republished, with permission, from the How-To Geek web site.***

*{Editor's note: The images here are network 'cards' that can be installed in a desktop computer. The first one has two network connection ports (the blue "LAN ports") for when a port is not already built into the PC's motherboard (although generally only one port is necessary). A similar, although much more compact, network card is built into laptop computers. In either case, the LAN port is exposed to the exterior of the computer where you can connect your computer to your home network using a "wired" connection — that is, using a "LAN cable". A LAN cable has connectors at each end that are physically similar to the connectors on phone receiver cables on home land-line systems, except they are just a bit wider and have more wires inside. The second image is of a wireless network card, of course with an antenna and no physical network connection ports.}*



## 3 For A Quarter

By Debra Carlson, Editor  
CLC Computer Club, Illinois  
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### Number 1 — Refurbs

Buying items refurbished seems like the perfect solution. Products labeled “refurbished” are fully functional but can’t technically be sold as “new” anymore for reasons that vary by manufacturer. Because of this, they’re typically cheaper, though “hundreds of dollars” is unlikely for a current model.

Refurbished can mean something different depending on the manufacturer. However, it usually means that a product was purchased by a customer and eventually returned while still under warranty because the buyer had an issue. The machine is “repaired” and resold. The amount of upgrade/repair differs by manufacturer.

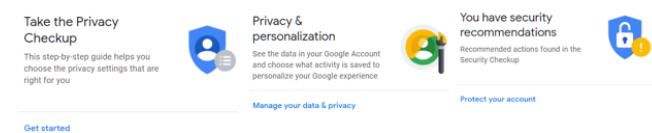
Many people assume all of the following definitions, seen on outlet sites, are refurbished. They are not. Here is the list of terms to help --

- *Shipping and/or exterior damage:* Dents, scratches, or other surface damage.
- *Open box:* Purchased, used, then returned by a customer. They might show small signs of wear and cosmetic damage but are considered “refurbished” because they were examined and found to be in resale condition.
- *Unopened/returned:* A return that was never even opened.
- *Demo models:* Products used in stores, displayed at trade shows, or loaned to reviewers might be repackaged and eventually sold as refurbished items.
- *Renewed models:* Generally, preowned machines have been cleaned and, perhaps, loaded with a new operating system for resale.
- Check with your retailer and for the *certifications and warranties* offered on machines (note: some open box machines, e.g., only carry what is remaining on the original warranty. If this was a display machine, the warranty might be almost over by your time of purchase.). Retailers that don’t offer a return policy are best avoided since you have no guarantee that you’ll actually get your money’s worth or have support if something malfunctions. Refurbished items being sold “as-is” are a gamble, so you have to weigh your purchasing decisions carefully.
- Good refurb machines can be great for trips or students where there is a higher possibility of breakage. They can also be great for learning “deep dives” before spending money for a new computing adventure.
- Remember to check out the *current supported technology level* and look at the *life expectancy* for the device. For example, if it is a certified refurb, but the model will not support operating system upgrades after two years,

then the device has a 2-year life. Is it worth the price you are paying with this in mind?

### Number 2 — Google Privacy Check (and others) [myaccount.google.com/data-and-personalization](https://myaccount.google.com/data-and-personalization)

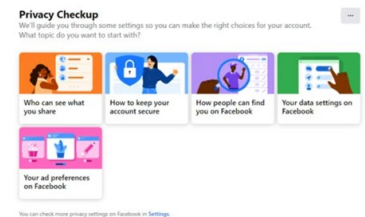
Go to the link above when you are logged into your Google account, and you might be surprised at the number of options available for your customization.



If you’ve never been through this area and you have a Google account, DO IT NOW. The Google home page will have taunted you to do it – you may have even gotten emails about it. DO IT.

The Privacy checkup will walk you through all the settings.

Not a Google customer?  
How about Facebook? ⇒



Most online platforms let you choose at least some of your information that others can see or search. Review this often. Your information should be yours to control.

Note: *2-factor authentication*. If you read email in a “client” rather than from a web page, you may avoid getting to your email. It’s worth asking for help or guidance on this option.

### Number 3 — Zooming with a Mouse

If you have a mouse with a scroll wheel, holding down your CTRL key in Windows and most Windows-compliant apps will Zoom in or out (up for in, down for out). Great for viewing small print on one part of a page.

For Mac desktops, go to Accessibility in System Preferences, and click the box shown below it.

Note: This will Zoom the currently viewed area of a web page, so you will need to Zoom out to move to another area of the page.

***This article has been obtained from APCUG with the author’s permission for publication by APCUG member groups.***

*{Editor’s note: Keep in mind that refurbished items are normally set to a condition state determined by the refurbisher, and NOT to the original condition set by the item’s manufacturer, unless the refurbishing company is representing the item’s manufacturer, which is not very common. Read the fine print in your purchase agreement.}*



## Web Page Reviews

Collected by Paul Baecker — [webwatch@sterlingheightscomputerclub.org](mailto:webwatch@sterlingheightscomputerclub.org)



This column attempts to locate sites containing valuable, amusing, and free content, with no overbearing pressure to purchase anything. **Our club members only** are encouraged to submit favorite sites (a description is optional) to the e-address noted above, for inclusion in a future WYSIWYG issue. Also check the SHCC web site (“Web Page Reviews”) for previous gems.

Even when you take precautions to keep your pet safe, they sometimes still find ways to get into these 101 things they shouldn't.

<https://www.aspcapetinsurance.com/101-things-you-didnt-know-could-harm-your-pet/>

4 ways your Amazon Echo devices can be hacked and how to protect them.

<https://www.makeuseof.com/how-amazon-echo-devices-hacked/>

When Windows 10 hits its end-of-support date in October 2025, hundreds of millions of PC owners will have four options, none of them good. Windows 10 is a security disaster waiting to happen. How will Microsoft clean up its mess? <https://www.zdnet.com/article/microsoft-windows-10-is-a-security-disaster-waiting-to-happen/>

With rollout of Feature Update 21H2 (on Nov. 16, 2021), Microsoft moves Windows 10 to annual updates.

<https://www.zdnet.com/article/with-rollout-of-21h2-microsoft-moves-windows-10-to-annual-updates/>

Some Amazon Kindle tablets won't connect online after December 2021. Here's how to check if yours is affected.

<https://www.tomsguide.com/how-to/how-to-check-if-your-kindle-will-lose-internet-access>

Why does your Internet connection randomly stop working? Some fixes that you can perform. (6-min. video — ignore the long ad at the end if you wish)

<https://www.youtube.com/watch?v=WXbidC6q5-Y>

Has your Android device stopped syncing your email? Here are probable causes to get it back on track.

<https://www.space.com/beaver-moon-lunar-eclipse-2021-guide>

Did you miss the 97% 3.5-hour long lunar eclipse of Nov.18/19, 2021? Here is a replay of the longest partial eclipse in almost 600 years from several vantage points around the U.S. (4-hour video)

<https://www.youtube.com/watch?v=NL5sRCRa7AE>

When pilots treat their aircraft like a toy. This is the story of Pinnacle Airlines flight 3701. (41-min. video)

[https://www.youtube.com/watch?v=DCMmCekKO\\_c](https://www.youtube.com/watch?v=DCMmCekKO_c)

Tips and tricks to help you make the most of OneNote, the free note-taking application from Microsoft.

<https://www.makeuseof.com/tag/12-ideas-run-life-like-boss-onenote/>

How to safely use public Wi-Fi networks.

<https://www.consumer.ftc.gov/articles/how-safely-use-public-wi-fi-networks>

How to easily download streaming video on any platform.

<https://www.maketecheasier.com/stream-video-downloader/>

Steam offers some games to play for free (create a free Steam account first).

<https://store.steampowered.com/genre/Free%20to%20Play>

Tiny trains traversing the “land under”. (5-min. video)

<https://www.youtube.com/watch?v=NL5sRCRa7AE>

10 things to know before you buy refurbished electronics.

<https://www.pcmag.com/how-to/10-things-to-know-before-you-buy-refurbished-electronics>



## Web Watch Column on the Club Web Site

Check out the **WebPageReviews** section on the club's web site. There you can see past web sites reviewed in this column. They are arranged into various *keyword* categories to help locate a specific topic or site.

**NOTE:** Many of the links in the digital newsletter connect to the Internet if clicked. For those that do not, copy and paste the link into your Internet browser.