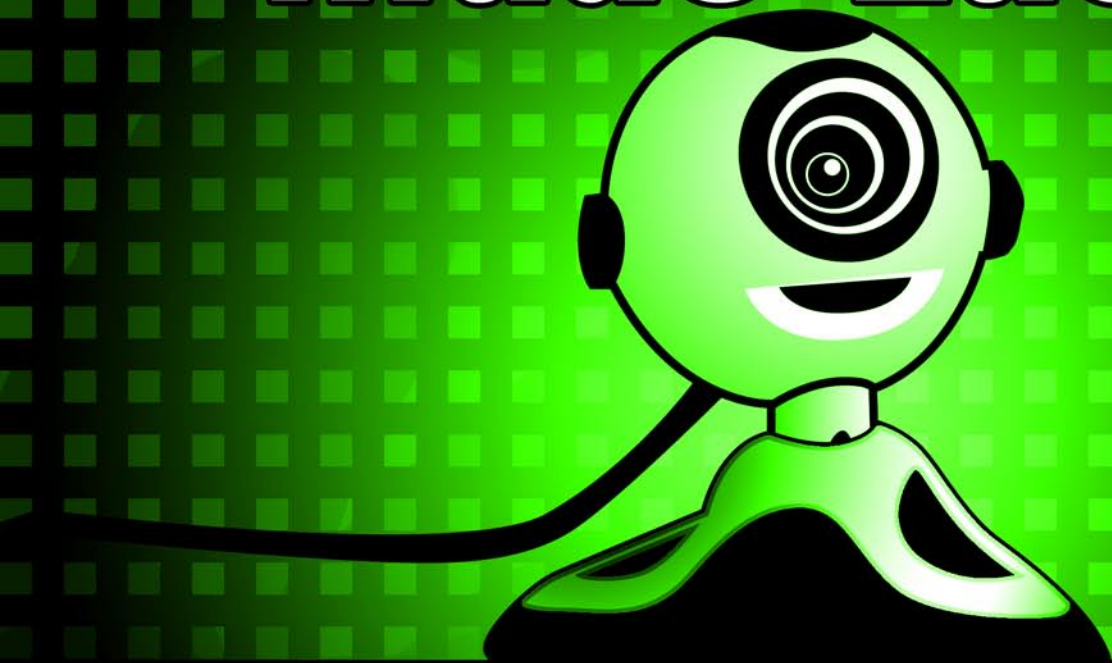


Spy Gadgets & Surveillance Made Easy

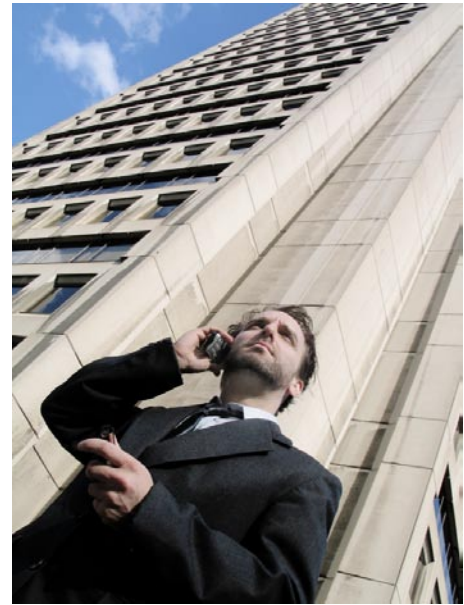


**WANT TO USE SPY GADGETS
TO CATCH YOUR CHEATING PARTNER?
WE SHOW YOU WHERE TO
GET THEM FROM & HOW TO DO IT!**



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Introduction

We live in a culture where all sorts of devices are continually watching us, recording us, and storing us. When we enter banks or airports, go over bridges, use cash machines, or even stroll through urban centers, we're often being videotaped. When we make phone calls, we're reminded that the call may be recorded for quality assurance purposes.

Our computer activity is tracked in a number of ways: by the inner workings of the machine (even the act of deletion leaves a trace); by an Internet service provider that tracks your total online usage; by all of the websites that you know log your visits and transactions you make; and quite possibly many other websites that you don't know are doing the same.

At every moment in every online computer there are "spyware" applications at war with anti-virus applications. Your email address has been harvested and sold on a virtual black market that has added it to its spam factory. Every network exchange including email and instant messaging is potentially monitored by your employer. (And, if you happen to be on the FBI's list for any reason, you can bet your computer is being watched, and maybe your phone and your car and your house as well).



We live in a society where surveillance is a fact of life. Sometimes we don't take notice. Other times it's just second nature. Some of us make use of various surveillance techniques ourselves, whether we are monitoring a crying baby down the hall, keeping tabs on the family dog from a remote location, or providing some added security for the prized sports car in your driveway. And, of course, the sacred institution of marriage offers a wonderful opportunity for a wide spectrum of surveillance and counter-surveillance measures.

Whatever the situation, often we think that we don't have the technical knowledge, the money, or simply the power to use them. But that's not necessarily the case. Many of the spying technologies out there are much easier to understand than you might think - and they are only getting easier. Not only that, the quality of these devices is getting better (for example, digital cameras can capture images of a person 3,000 feet away with as much resolution as one taken by an older analog camera at 30 feet away). Much of this stuff can be found for dirt cheap.

Surveillance has its uses, and you have the ability to use it. But whether you're taking the first steps toward a new hobby, or what seems like the final steps toward resolving a desperate situation, a responsible spy always works within confines of the law, and respects the rights of others. If you're not sure what's legal and what's not where you live, it's best to find out first.

Now it's time to arm yourself with some simple yet potent surveillance tools and techniques. Soon, you'll be able to revel in your newfound powers of perspective.



Computer Monitoring

Given that computers are still the relative new kid on the block with regard to communication technologies, they are also the newest way to spy. There are several advanced methods that you can use to monitor and track the activity and communication of someone else online, but it's also important not to forget about the basics.

Basic Computer Monitoring Skills

History function

Web browsers contain some basic information about the user's activity. First there is the "History" function, which will yield a chronological list of recently visited websites. You can use a keyboard shortcut (Ctrl+H) to view the user's browsing history, or the History icon located on the horizontal menu at the top of the screen (there is also a drop-down menu you can use to locate this function). In Microsoft Internet Explorer, there is a blue clock icon with a green arrow (pointing back in time) for the History function. In Mozilla Firefox, the History is located in the drop-down menu under "Go." In both, the keyboard shortcut Ctrl+H will work, and there is also a "Search" function that allows you to search for keywords among the web pages listed in the browsing history.





Tracking "Cookies"

Another basic way to monitor computer use is by viewing what are called web "cookies." Cookies are used in an exchange between the browser (what you see and interact with onscreen - the interface) and the browser (the thing that "talks" to the browser and delivers what you see on the screen). Cookies are little packets of textual information designed to verify certain websites and maintain some information about your interaction with them, such as site preferences and settings or the contents of an electronic shopping cart. You can access these cookies through the drop-down menu at the top of the screen under "Tools." In Firefox, select "Options," then select "Privacy" (the icon with the padlock). At the lower left of that window, you can select "View Cookies." In Internet Explorer, from the Tools menu, select "Internet Options," then the tab that says "General" (if it is not already selected). In the middle of that window, you'll see "Temporary Internet Files." Select "Settings" and then select the "View Files" button. Like the browser History, this list is searchable.

Cache

Finally, all Internet enabled computers maintain a "cache," which is a temporary file store related to all web pages visited by a user. It allows pages to load faster when they are re-visited at a later time. The cache can offer a good map of a user's recent activity, since often users leave the files in there undeleted or simply do not know it exists. In Internet Explorer, the cache entries are found in the same list of files that displays tracking cookies, and are accessed the same way. In Firefox, these temporary files are found in a different way: go to the address bar in the Firefox web browser and type the following: "about:cache." You will see a menu that will link to a list of the cache entries.





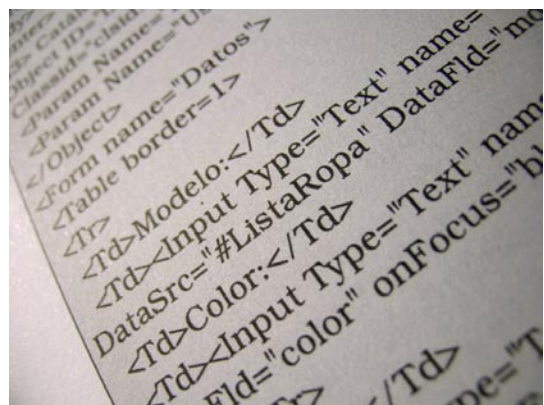
It is possible to copy the cache or cookies by simply selecting the list of files and copying some or all of them to a removable storage device (such as a USB "memory stick" or a network drive that will store this file on the web). This will allow you to view the list from another location at another time.

(NOTE: sometimes a website or ad is accessed unintentionally, as in the case with "pop-up" windows, so keep this in mind if and when you find anything of interest).

These basic techniques may provide solid information about where the user has been online. In addition, don't forget about the obvious: sometimes users leave items in the Recycle Bin before they "empty" it, and sometimes users leave passwords stored using their browser settings for quick access to email or other websites. If the user relies on a "password manager" to remember login details so they don't have to enter it each time, this information is available in the same menu: Tools > Options > Passwords tab. Also, the browsing history of users is readily available for viewing, both in terms of web addresses (urls) listed in the address bar drop-down menu, and an itemized list of search phrases, which appears in under the "Go" menu of Firefox.

Advanced Computer Monitoring Skills

There are more advanced ways to keep tabs on someone's computer activity. If you're not having any luck searching traces of past activity, there are ways to generate a record of the process of a user's activity. It is even possible to remotely access that record and be alerted to any activity immediately after it occurs.





Key Logging Software

The most common method for generating this information is by covertly installing a software program, known as a “key logger.” This is software that will basically “read” and record every single keystroke that the user makes on his or her keyboard, and then save it to a plain text file to be reviewed at another time and place. The recording is done all before the computer itself processes the input. The result is not pretty, but this text file will contain all sorts of juicy details, such as passwords and login details that only appear as hidden symbols on the user’s screen.

Key loggers work at the level of basic computer operations, so it is necessary that when the user inputs various keystrokes, the logger will output all of the “codes” associated with the keystrokes of special characters (so, for example, it will indicate that the user has pressed the Shift key to specify a capital letter). Some key logging software has more advanced features, such as a function that streamlines the keystroke log so that you are able to read it more coherently. But as any master spy will tell you, there is a potential drawback in that some of the vital details may be lost in translation, and sometimes it just pays to do the extra deciphering work.





The most important factor to consider when implementing key logging software is that it will be absolutely and completely undetectable to the user who is being watched. When someone installs software on a computer, it usually shows up in a list of "programs" or "applications" that is easily accessible from the start menu. Good key logging software is designed so that it will not show up here as installed - which would, of course, defeat the whole point of the exercise. Another way that users view what programs are operating AS they are working at the machine is by opening the Task Manager. Pressing Ctrl+Alt+Delete will open the Task Manager. In MAC computers, it's called the "Activity Monitor," and can be found through the Applications, then Utilities menu. Good key logging software will also hide itself from detection here as well.

There are a couple ways for you to access this treasure trove of data after your key logger has mined it for you. The first is through the same computer on which the software is installed. You will be able to set up your own password (usually a sequence of keystrokes) that will allow you to move back and forth from the secret surveillance mode that watches and records another user, to an administrator mode, in which you can read and review their input.

It is also possible with some software to access the log data remotely. It sets up their system so that a record of their activity is instantly generated and sent to you via email, all in good stealth, so to speak. This record is delivered to you in the form of "activity reports" that can include the user's emails, online chat and instant messages, and websites viewed in addition to keystrokes.

You can set the interval at which you want to receive the reports. And, in the rare event that the person you are spying is also spying in you, you will find out right away when you start seeing your own emails sent back your way!





Key logging software is available as both a free-ware and a commercial product, and there is no lack of them. Most retail for around \$100, and there is even a slightly more expensive version that allows you to remotely install the software if you do not have direct access to your target's computer. Your best bet is to hit the discussion groups and forums online to get an unvarnished and unbiased opinion about what works and what doesn't.

Key Logging Hardware

One more option with regard to key logging is using hardware instead of software. There are small electronic devices that attach directly to a keyboard and record keystrokes without having any dependence on the computer's processes. It's like a "tap" that is paying attention to which keys are pressed and in what order.



This means no software installation at all. The key logging device stores the keystrokes in its own memory, which in most cases can keep more keystrokes than you will ever have time to trawl through.

The advantages of this method include fast and uncomplicated insertion and removal of the device and the fact that, once removed, the data on the device can be viewed easily on another computer. In addition, because the hardware is only interested in the physical keyboard, the device will work on any computer, no matter what operating system it is (it only needs the computer to steal enough power to operate).

Key logging hardware can be smaller than a triple A battery and can be concealed in an "extra" length of cable that will attach the existing keyboard cable to the port at the back of the computer. A drawback of this device - as with many hardware devices - is its cost, which can be upward of \$200. Amateur hobbyists, however, will find a worthy challenge in building one from scratch, which, with the right recipe, will cost under \$20.



Audio Surveillance

When you talk about audio (and location) surveillance, there's a few obvious things that come to mind: phone taps, body wires, micro-transmitters, tracking devices. Many of these devices have been impressed on our popular imagination through spy thrillers or detective movies. The good news is that most of these methods are available to us in some form. The not so good news is that many of them are expensive and, in their real-life form as commercial products, are not all that practical or necessary for an amateur spy.



There's a few simple questions that any spy will need to consider before seizing on any one particular spy tactic:

- Do you need to identify actual content of a conversation, or is it enough to determine the identity of the people talking by hearing just a sampling of voices? Or perhaps even a recorded log of inbound and outbound phone numbers will suffice?
- Do you want to listen in to a conversation in "real time," as it occurs, or are you able to entertain the (more convenient) option of recording calls and listening to them later?



- Do you have direct access to the phone or location you would like to tap into? Do you require a portable device that allows you to monitor multiple locations?
- How much do you want to spend?

Short of building your own electronic devices - and there are plenty of hobbyist manuals available to this end - you should expect to fork out anywhere between \$25 and \$100 for some worthwhile equipment.

These questions can help guide you toward the simplest and most potent spy arsenal for our own situation. Now let's see what's on offer...

Telephone Monitoring

A telephone tap is a device that connects directly to a telephone that enables you to listen to phone conversations and also record them. It got its name of "phone tap" or "wire tap" from the fact that the earliest models would be attached directly to the phone wires of the user being monitored and would draw a small amount of the electronic signal carrying the conversation.



Today phone taps come in many forms, and they are still used by law enforcement agents to gather information in a manner that, while controversial, is legal. This process is referred to as "lawful interception," and the privilege doesn't exactly extend to you and me. In some places, the act of installing a phone tap is illegal in itself. These are things you should be aware of when you go the road of audio surveillance. In any case, it's all the more reason to make sure you get the job done right, in undetectably sublime fashion!



In the past, you would have to do a lot of work to reap the rewards of a tapped phone. You would have to sit somewhere in the vicinity of the tapped line and physically transcribe what you heard over your earphones. Today, when you tap an analog phone, you can record the conversations without having to be there when they occur. To maintain the tap, all you need to do is change the tape on the recording device according to its duration. The best taps can signal the recorder to kick into action only when the phone line is in use.

The ability to tap phones also has become much easier for cable companies providing digital phone services. All they have to do is get their centralized computer system to record the digital information that travels over their wires (in the form of the 0's and 1's of binary digits) and store it on their computer network. Even though your own powers of telephone surveillance are for the most part limited to recording on your own phone line or one that you have direct access to, digital technology has made life easier for you as well. It is now possible to record both analog as well as digital phone calls by connecting recording devices up to computers, which can convert the conversations into digital format and save them as sound files. Here are the details...

Call Logging Services and Devices

Your covert operations might be as simple as purchasing a device that will log and display all incoming calls to your phone line, also known as Caller ID. You will need to subscribe to this service from your network provider (which you should note will show up on your phone bill). In addition, you will either need a phone that can display the incoming number or a Caller ID box. (The name of the incoming caller is not provided with the service in certain countries, including the U.S.). These are not simple devices to conceal. But depending on where and how it is installed, the other phone-using members of the household will not necessarily know it is there. Or if they do see it, perhaps their reaction to its existence will be revealing in itself.



If you are using a covert recording device to monitor your phone line, you can use a touch tone recorder (roughly \$100), which will “listen” to dialed phone tones and display the numbers on the screen. Because this device has a microphone built into it, you don’t need to connect it to the recorder. To make use of this device, however, you will need to record the touch tones that are dialed on the phone using a tape recorder or digital recording device, one that is concealed near enough to the target phone. Computer technology, however, might offer you better comprehensive options...

Call Recording Software

It is possible to have a calling log sent directly to your computer with the right software set-up. The same software can be used to automatically record the content of incoming calls. This method is quite simple - and quite common - for those who are recording their own phone conversations for business purposes. But it can be trickier, not to mention legally problematic, to use the same method to record someone else’s conversation. For example, if you share a computer with the target of your surveillance operations, then they will likely be able to detect its presence.

Still, call software that logs incoming calls and records the conversation may be your first port of call when it comes to audio surveillance, simply because it both logs numbers and records content for you. It will cost you around \$50 and can be downloaded from the Internet. There is more advanced software dedicated to telephone services that will automatically record outgoing calls as well, which will cost more in the range of \$150.



Conventional Phone Taps

Phone taps can be used for audio surveillance in a number of ways. They can be used to transmit a conversation to a remote location, where someone else can listen to it; they can tap a phone to record a conversation as it occurs (with the option to manually or automatically record); or they can simultaneously transmit and record the content of a call.

Some taps can be placed either directly in the ear piece ("coil taps") or somewhere on the telephone line. For those that go on the line, there is also a basic difference between "series" phone taps and "parallel" phone taps. A series tap, which is the more common, inserts the bugging device into the existing wire, so the existing phone line must be temporarily cut to install the device. The effect is to intercept the signal flowing "downstream" from the main exchange. That means a series tap must go somewhere between the incoming telephone line and the phone that is the target of your operation.



In a home residence, if all the phones are on the same line, then a series tap will be able to target all of them provided it is placed "above" each of them on the incoming line. If there are different lines, it will only target the phone or phones that are downstream from the tap on that particular line. A parallel phone tap is installed across the existing wires without having to cut them. Its wires attach to the same terminal points that anchor the existing wires. This, by contrast, can target every telephone on the line no matter where it is placed on the line.

A series tap can transmit a conversation to a receiver approximately 100 to 500 feet away. They are typically "parasitic" devices, which means they can suck



enough power directly from the phone line without the need for any batteries or external power source. The range for a parallel tap transmission is greater, with a range of between 200 and 1000 feet. It does require an external power source. These phone taps are both readily available from a local hardware or electronics shop, and retail for anywhere between \$30 to several hundred dollars depending on the recording and transmitting capabilities you are after.

Another form of tap that is worth consideration is called a "modular jack" transmitter, and its beauty is in its ability to remain disguised in plain view. It simply plugs into the existing phone jack and looks like nothing other than an additional splitter. It can receive at a range over 1000 feet with a decent receiver. You can order it online fully assembled for about \$75.

A Most Unconventional Phone Tap

With regard to audio surveillance, I've saved the best for last, if "best" refers to the most devious device on the market. It's called the "Infinity Transmitter," and although the technology has been around for decades, the product has only recently been released to the public.

Basically, if you install this transmitter on a target phone, you can then call the number of the target phone from any location. Your call will remotely activate the microphone on the target phone and begin transmitting whatever conversation (or other audible activity) is occurring in the room back to you. In this sense, it's more of an audio transmitter than a phone tap. In effect, it transforms a remote phone into a potent bug. And its potency resides in the fact that once planted on the target phone, it can be activated from literally anywhere in the world that can directly dial it.

The device has had a lot of hype in cult circles, with many questioning its existence in the first place. It does exist, but perhaps not on the same all-



powerful scale that some descriptions afford it. Some of the devices require the target phone to be picked up, at least briefly, then put down again, so repeated one-ringers can get suspicious. Also when the transmission is in process, some units will render the phone line "busy," and you can imagine that this will arouse immediate suspicion when a determined caller informs the target that their line has been busy for hours at a time when in reality it has not.

Newer models have apparently been designed so as not to require the initial ring to activate the transmitter, but these are not easily available for purchase online. In any case, an Infinity Transmitter will set you back at least \$600-\$800, and buyers should be warned about the importance of establishing a reliable vendor. Even if this thing is no longer a black market item, it's still without a doubt in the grey area.

Cellphone Monitoring

To say cellphones are an epidemic would be an understatement. Everyone is either using, about to use, or has just finished using their cellphone for something. Every time they use it, there are signals that are sent through the air that, with the right equipment, may be yours for the taking - or at least yours for a peek before they continue on their way.



For several hundred dollars, you can purchase a cellular scanner device that will allow you to intercept cellphone transmissions. This requires that you are well positioned to actually intercept this cross traffic, and also does not guarantee that you will locate the transmission you desire. If you're willing to up the ante to around \$3000, you can get a souped-up version of this device that allows



you to pre-program up to 20 cellphone numbers that will be recognized and intercepted automatically. Advanced cellular interceptors can also provide the identity belonging to unknown cellphone numbers, hook up easily to recording devices, and be used as regular cellphone.

Just in case you have just joined us, this method of audio surveillance, like most of the methods outlined here, is not legal.

A final spy tactic involves a slightly different form of cellphone surveillance - one that actually turns the phone itself into a listening bug. The Nokia 3310 Spy Phone is a popular example. You can leave the phone somewhere and then dial in to listen to the remote location (though admittedly it would seem a bit odd for anyone to leave their cellphone anywhere other than their purse or back pocket). You may even consider giving it as a gift to someone you'd like to keep tabs on. Sneaky.

Area / Room Audio Monitoring

There are many inexpensive devices that will transmit audio from a remote target location to you, as you remain nestled safely in your special spying spot. They work in the same way as a baby monitoring device, but can be concealed in much more cunning ways (though you can find instructions on how to "hack" a baby monitor, which is a powerful audio transmitter, to quite effectively work as a concealed spy gadget).

Wall Plug Transmitters

Audio transmitter bugs come in all shapes and sizes and can be planted just about anywhere (a private investigator from San Francisco named Hal Lipset gained fame in the 1960s after successfully concealing a listening bug in a Martini olive!).



Some of the least expensive and most effective transmitters are available to you in the form of wall plugs and outlets. These devices are perfectly disguised and will clearly convey all conversation and sound from a 20ft square room. There are several variations as well, including plug adaptors and power strips that all would need to be disassembled in order to be detected.

There is, for example, a wall outlet transmitter that can be installed directly into the wall. Its advantage is that, because it is placed directly into the wall as a standard outlet, it is able to have a 3-foot long antenna that can be concealed by tacking it up inside the wall itself. This device has a substantially greater range (over 1500ft), but of course is a bit trickier to install. In addition to wall plugs and outlets, you can find other devices that will perform the same function, such as a popular lamp audio transmitter that can be set to transmit only when the light is turned on. Most of these devices retail between \$60 and \$100.

It helps to bear in mind that if you are in the least bit technically inclined, you may want to consider putting together some of these devices on your own (the same might apply to you if you are on a super tight budget and have no other option!). For example, an audio transmitter bug that will retail for \$100 can be assembled using electronics parts from a local store that cost under \$5 in total. With these bits, a few parts from a broken transistor radio, enough patience to wind a wire around a bolt, and a battery source to power it all you've got enough to get you going. Many schematics for assembly of such devices are available online, but perhaps the most reliable book on the topic is Brad Graham and Kathy McGowan's *101 Spy Gadgets for the Evil Genius* (McGraw Hill 2006).



Video Surveillance

Sometimes you need to see it to believe it. It may take hours of listening to audio recordings in order for your espionage efforts to bear fruit. But it might only take one fleeting image to pinpoint a thief, an adulterer, or even a disobedient dog if they are caught with video surveillance techniques.

Some general questions to consider before hatching your plan:

- Do you need constant video footage to monitor a specific location?

This can be more labor intensive if you are using video tape rather than digital video because you have to constantly change the tape. In both cases, if you are not monitoring in real time, recorded footage is easily time and date stamped for quicker access.



- Does the camera need to be concealed?

In the case of security monitoring, the very presence of a camera can deter any criminal activity - or even a fake camera, or even a sign that says that there is a camera on the premises (but not a sign that says that there is a fake camera!). In any case, you will obviously need to position this device so that it is not easily deactivated or vandalized.

- Does the camera need to be portable? Wireless?



Sometimes concealed cameras, such as one, say, hidden in a clock, are incredibly effective surveillance devices. But you can't keep moving the clock around to different rooms without it looking quite odd. In this case a wireless webcam might be a better option, but it is of course more difficult to conceal. Because of its cost, it is also not something you'd want to plant anywhere that there's a risk of losing it. The important thing to remember is that with audio, all you need to do is expose the microphone in the direction of the targeted sound source; but with video, you will need to be more precise in how you aim the eye of the camera.

Motion detection and night vision are other options you have with video surveillance. It is possible to set video recording devices to record only when motion is detected. And, for an added cost, you can purchase an infrared camera that will help you see in the dark (by sensing radiation and turning that heat into images on your screen).

Any video surveillance system will include the same basic components: a video camera, a recorder / playback device, and a monitor. For wireless devices, include a transmitter and receiver in this list, although some devices bundle these functions into one unit. In the past, these systems were difficult and costly to install. But they are continually getting smaller and less expensive; and anyone who owns a personal computer likely already owns most of the components necessary to implement one form of video spying.

Here is a sampling of some of the most popular and effective forms of video surveillance and the devices that make it all happen...



Overt Video Surveillance

To monitor a location over a continuous basis you can use a fixed camera that transmits to a single monitor. This is the same type of Closed Circuit TV (or CCTV) system used by security operations worldwide. Digital technology has vastly improved the versatility of this method, as digital images can be taken at a much higher resolution, and the footage is easier to study and store.

You can get a quality video surveillance camera for \$50-\$120 that includes audio as well, with color image and night vision at the higher end of the scale. Installation is a straightforward process. If the unit will be exposed to the elements, make sure you are purchasing a system that is weatherproof. Double that price and you'll find a remote controlled camera that can swivel 360 degrees and see in the dark.



If you are after a cheap and easy security device, you may even want to consider a dummy video camera, which uses motion detection to pan an area (and flash a green LED light) in order to appear as if it is actively recording. You can find one for under \$30.

Covert Video Surveillance

If you need to conceal your video surveillance device, there is a huge range of devices available, some of them so small that they can fit inside a single screw. These items have a pinhole lens that is no bigger than several millimeters in diameter, and a resolution of over 300 lines. But bear in mind that smaller is not always better and it will almost always make things more expensive. A creative plant is much more important to your snooping success.



Concealed cameras can be fixed inside your home, such as in a clock or fire alarm for example, or they can be portable, such as in a boom box radio. Coupled with motion detection, they can be a potent part of your spy arsenal. The concealed clock-radio camera, for instance, can be set to begin recording a few seconds after motion is detected, then switch off if there is no longer any motion. They can even be worn on your body, in a baseball cap or in a pair of sunglasses for example, recording everything you look at. Hidden cameras that are wireless typically transmit their video and audio back to a receiver that is up to 100 feet away.

Depending on the type of camera you use, you will be able to connect it to either your TV/VCR, camcorder, or computer for recording options. Some digital cameras can have built in digital video recording (DVR) capability, so that your footage can be easily transferred and stored to your computer.

Webcam (as spy cam)

Webcams are relatively inexpensive devices that are used often in business situations for video conferencing, and for personal use in live video chat environments. They can come with a microphone as part of the unit, and some more advanced models include zooming, tilting, and panning functions.



Most webcams are used to monitor their immediate surroundings. They can be placed anywhere provided they can remain connected to their host computer or, if wireless, within range of it. There is, however, a range of webcams that are "network cameras," which means they contain their own web servers and connect directly to the Internet without the need for a computer on site. This enables you to see what it sees from any computer anywhere in the world that



is Internet connected, no matter where the camera is placed. These devices are more expensive than regular models and might not suit you if you have to leave the camera in potentially hostile territory.

With any webcam, images can be sent immediately to the owner via email in the form of several still photos, or to a website that has been set up to stream images. (Burglars have been caught in the act this way, and even despite stealing the computer that was transmitting the images!) Again, if you are covertly monitoring an environment, creative placement is the key. Even though webcams are not typically built to be concealed, they are compact enough to conceal. Wireless webcams, which are not too much more expensive, might be even better toward this end. You may also want to consider using multiple webcams in different locations, which can all quite easily be attached to the same computer.

Most webcams are peculiar to either PC or MAC computers, and there are far more products available for PC owners. Apple makes its own webcam, however, for MAC users that is an excellent piece of equipment even if a bit pricier at \$150. It automatically sets the focus and exposure of the lens, and its built-in microphone delivers superior quality audio. In general, PC users can follow the "above or below \$50" rule when choosing a webcam. Webcams under \$50 usually have relatively low resolution - too low to print a picture from. For over \$50 you will find nearly double the image resolution (at 640x480 pixel, or "VGA" quality). This resolution is considered as standard, with anything above it placing too much drain on your computer processor.





When thinking about what webcam to get, you should consider frame rate, which is the speed at which your webcam can process video. Not enough frames per second (fps) will give you a choppy picture. Most video software will allow about 15fps, even if the cameras themselves are able to work at a higher frame rate. Also, because this method of video surveillance is reliant on the Internet, you will want to have a high-speed Internet service. Without broadband Internet, this is not a good option.



Tracking Systems

One of the most useful but often overlooked tactics for the amateur spy involves tracking devices of various sorts, and it's much cheaper than hiring a private investigator. Older devices and more traditional tracking devices included "bumper beepers." These are small devices that can be placed under or inside the car bumper belonging to your tracking target. They are only a few inches long and wide, and attach to the bumper with strong magnets or double-sided adhesive.

Their function is to assist you in following a vehicle that is under your watch. They are radio transmitters that will give you certain information regarding the bearing and relative speed of the vehicle being tracked. These things are pricey too, \$400 or so at the low end, and the more expensive units will be able to give more information with regard to the specific location of the vehicle. A familiar tool for private detectives, bumper beepers give you an idea of how close to stay to the vehicle to avoid losing it, and how far away to stay to avoid detection.

One benefit of this method is that since anti-surveillance legislation is focused mainly at the act of intercepting verbal or textual communications, laws in most places do not account for bumper beepers. They do, however, require a degree of know-how to be used effectively. More importantly, digital technology and global positioning systems (GPS) make this a more or less obsolete option.





Vehicle Tracking

Think of a bumper beeper that transmits the time and location of your target directly to a digital map view in real time. This is what you get when tracking systems go digital. You attach your tracker in a similar way, but instead of using radio frequencies to transmit data back to you, the GPS system beams detailed information up to satellites in orbit that beam it back down to you - either on a hand-held display (PDA device) or computer. You monitor everything using a website interface. Many of these devices interface with the popular mapping website MapQuest.



If you cannot monitor your target in real time, one of the most powerful advantages of this tracking system is the fact that you can get automated reports that will give you a log of the target's location over the course of a day (or even several days). The cost of these systems is consistently falling, though the most potent and complete systems are still at least a couple thousand dollars. Luckily, there are several variations of this technology that can give you options in the two, three, and hour hundred dollar range.

For example, instead of planting a tracker on the target vehicle, you might use a "tracking stick" that you conceal somewhere on or in the target vehicle and retrieve it in order to collect (download) the surveillance data. These sticks are smaller than a candy bar, and can run for up to a week on a pair of AAA batteries. Just plug it into your computer's USB port, and you can retrieve the data in several formats, including HTML, Microsoft Excel, or Google Earth's own KML format, which is custom built to handle 3D three-dimensional geo-spatial data.



Cellphone Tracking

Mobile cellphone tracking follows the same basic process as GPS, only that local cellphone towers are used to record and convey the location of a certain user (at a certain time etc). The technology allows this data to be similarly viewed via an Internet connection from a remote position. Basically, you can monitor anyone who has a cellphone based on where and when they are using it. But there are a few conditions.

There are a number of service companies who can easily set up this method of surveillance, but legally you must get approval from the owner of the cellphone you want to monitor. If you are a father monitoring your child, this may not be an issue (especially if you are the one who buys the phone!). It's more of a problem, however, when you need to spy. In the past, it was possible to circumvent this approval process by "borrowing" the target phone and approving the tracking operation yourself. This is of course against the rules. Today, these services are issuing periodic reminders to the cellphone being tracked informing its user of this fact. Nevertheless, it remains a much less expensive option for individuals compared to GPS tracking, as there is no need for additional hardware.





Chemical Tests

There are ways to track your target by not actually tracking where they are but rather where they have been. Sometimes it is possible, that is, to track the traces people leave behind. Those traces might not even belong to your surveillance target, but quite possibly whomever your target was with, and this might be all you need to know.

We're talking about tracking sexual activity here, and there is a host of methods that can help you detect such foul play.

Whether you're wanting to check up on a spouse or a teenage son or daughter, you might consider using a UV light (available online for under \$15) to locate stains that may be of a seminal or vaginal nature but are not normally visible to the human eye. The next step is using a chemical test (you can get a 5-test kit for under \$30) to confirm or refute the presence of sexual fluids. You can get both items packaged together for around \$30 as well.





Conclusion

There's a common saying in the surveillance world that goes something like this:

"Trust in God and monitor everybody else"

While it might not be necessary to be so unconditionally paranoid, there is no harm in knowing what's out there if you find the need for surveillance. Of course, using the toys and techniques of the amateur spy can be an enjoyable end in itself. Whatever the case may be, there is no denying that the world is truly a different place when seen through the eyes of a spy.

Although there is no shortage of places to shop for spy equipment online, here are a few sites worth mentioning:

SpyShops.com <<http://www.spyshops.com>> is a comprehensive spy supplies shop based in Florida that specializes in GPS Trackers, Video Cameras, Private Investigation, Secure Cellular Phones, DVR, Night Vision, Video Cameras, Bug Sweeps, Voice Recorders, Counter-Surveillance, and Audio Surveillance.

Eyetek Surveillance <<http://www.eyetek.co.uk>> Really well resourced UK-based spy and surveillance stockist. Eyetek carry a stock of spy cameras, vehicle trackers and spy gadgets for demonstration on their premises and they can often build a customised spy camera or audio device at short notice.

MySpyCameras <<http://www.myspycameras.com/>> for a huge range of well-priced video devices.

SpySupplyStore <<http://www.spysupplystore.com/>> and Spy Chest <www.spychest.com> are two other popular sources both with impressive stock ranges.

If you're hot on the trail of some sexual dishonesty, go to the website for Check Mate at <www.getcheckmate.com>.

We hope Spy Gadgets and Surveillance Made Easy has armed you with the knowledge you need, and may each and every one of your spying missions be a success. All the best with tracking and catching your cheating spouse!