



BLUMSAFE
YOUR WATCHES. SAFE WOUND, ACCESSIBLE.

HOME SECURITY **AND YOUR WATCHES**

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Introduction

Most retailer website e-books that we see impart little information, and are just meant to be advertisements for the product they are selling. This e-book tries to aim higher.

Property theft exists in good times and bad. We work hard for the money that allows us to buy watches, jewelry and other collectibles, items that we cherish and admire. To lose them to burglars or, more likely, invitees to our residences (like cleaning ladies, plumbers, etc.), can entail significant financial loss as well as a sense emotional violation.

The purpose of this e-book is to describe the most-likely, real world risks that threaten your home, family and contents. We also attempt to provide some common sense and affordable solutions to better protect your possessions, centered around attempting to protect your watches and other valuables in your [BlumSafe](#).

Whether your BlumSafe is mounted in a wall or cabinet, or you don't own one (yet), we feel you will benefit from the contents of this e-book. One warning: no precaution or set of precautions will protect against every risk. A skilled professional burglar, especially one with prior intelligence, can remove a 1,000 pound floor mounted safe in minutes (it happened to a friend). Accordingly, as a last line of defense, ALWAYS INSURE YOUR VALUABLES.

Finally, I would like to dedicate this e-book and the entire BlumSafe effort to my beloved wife and family, who with humor, patience, encouragement and some great ideas have permitted and helped me build BlumSafe from a seemingly fanciful idea. Thank you.

Enjoy this e-book, and please do not hesitate to reach out to us with your comments or questions.

Rob Blum

Founder

BlumSafe

Chapter 1:

Home Burglary and Theft Considerations



For most watch collectors, the BlumSafe represents an optimal security solution against home theft and burglary. Justice Department statistics show why.

In deciding whether to purchase a safe and what type, you must consider:

- the likely threats to your valuables (discussed in this chapter), and
- the type of protection reasonably necessary to protect against those threats (discussed in the next chapter).

General Property Theft Statistics

Fortunately, FBI and Justice Department statistics identify the most “likely threat to your valuables” in the US.

Here are some basic facts from the Department of Justice 2014 Criminal Victimization Survey and related sources:

In 2014 there were 114 burglaries or thefts per 1,000 households. In other words, more than one in ten households experienced one or more property victimizations —

- Approximately 80% of these “thefts” were by invitees — someone who had a legal right to be in the house (such as a housekeeper, delivery person or guest), and
- The balance of such thefts were by burglary – i.e., by unlawful entry (ostensibly by a stranger).

Detailed Theft Statistics

- Home burglary/theft typically happens between 10 AM and 3 PM, more during warm weather than cold weather.
- A typical incident lasts between 90 seconds and 12 minutes. This means that the thief only has time to go after low-hanging fruit, and not attack objects like safes that are sturdily mounted or attached to your house.
- A thief typically first targets the master bedroom is the first room, looking for items that are easily pawnable and in plain view or in drawers, jewelry boxes and bedroom closets. Think cash, electronics, jewelry, cash, guns.
- Most burglars are males in their teens, predominantly under age 25, and “amateurs” at their craft. They typically live close by.
- A home or apartment without a security system (or signs indicating a security system) is 3 times more likely to be burglarized than a home with an alarm system. [See Inexpensive Electronic Monitoring of the BlumSafe](#) for a simple solution.

- 34% of burglars enter through the front door, and almost 30% of burglars enter through an unlocked door or window.
- The typical burglar is armed with no more than a screwdriver, a hammer and maybe a knife. This means that a sturdily-mounted safe will be too much of a challenge for him, and too noisy a target at which to hammer away – especially if he has already found something of interest (for instance, a cheap, unattached but locked decoy safe). Interestingly, approximately 85% of burglaries are committed by such poorly-equipped fast moving, young amateurs.
- The average arrest rate for burglaries in the U.S. is only 13%.

The Logical Conclusion:

This pile of statistics indicates that the overwhelming threat against your stuff is presented by the stealthy invitee or a low-skilled, fast smash-and-grab home burglary — not a highly equipped, more brazen (and potentially dangerous) professional.

Taking into account these probable risks, in the next chapter we will discuss what a “reasonable type of threat protection” looks like, at least from our point of view.

Chapter 2:

The Layered Approach to Property Security



The layered approach to securing your home will afford your valuables the highest level of protection. This chapter describes the basic steps.

In our last chapter, we entertained you with numerous depressing home property theft statistics:

- According to the FBI, every year more than 1 in 10 homes is subject to property theft, and approximately 4 out of 5 of these thefts are committed by someone you invited into your home (i.e., a housekeeper, plumber or other invitee), not by anonymous burglars.
- A home thief of any stripe is usually an amateur who starts his or her search for valuables in your bedroom, during daylight hours.
- In the case of a burglar, they usually spend very little time on the crime scene — fewer than 12 minutes. As a result, they typically seek high value, small sized objects like cash, jewelry and watches.

You can reduce this risk by making your goods (including your beloved watches) more secure — but at what cost? A cheap locked hard box in your dresser drawer, or a thousand pound safe

bolted to a concrete floor behind a false wall in your basement — which makes your stuff virtually inaccessible? The logical solution is to obtain a “reasonable” level of protection that will deal with most risks, and this is achieved through a layered approach to home security.

Layer your security, but don’t forget that NO form of security is perfect — get a good insurance policy, itemizing your most valuable possessions, and when you go on vacation, deposit your valuables in your bank safe deposit box.

Most security professionals call for a layered approach, because no single countermeasure can be expected to prevent all crime. The object is to place as many hurdles in the thief’s way so that he gives up or seeks out a lower value target for theft. In other words, let her grab your three year old iPad on the kitchen counter instead of your \$5,000 watch.

Layers of protection in a typical home or apartment could consist of the following:

- 1. Perimeter defense**, such as a double-locked door and a tall wall or fence around your property. As we noted in the last chapter, close to one third of all burglaries involve entering a home through an unlocked window or door. Yes, really. A centrally monitored alarm system is also important, to both notify you or the police of the intrusion, and deter a burglary attempt. An alarm system, like a lock, is only good if it is armed.
- 2. Concealment of your valuables** is your next defense of your valuables. Remember, a burglar has little time in your home and an invitee does not want to draw suspicion — the longer they have to search for your valuables, the less likely they take something. The most important thing to remember is to avoid hiding things in the most likely places to search — your bedroom generally and the top drawer of your bedroom dresser or night table, specifically. And since most home thefts involve an “inside job” element, or knowledge of the target, no one should be told about your hiding places other than immediate family.
- 3. Deception** is one form of concealment. For example, a good burglar decoy is to leave a cheap, relatively portable safe on the floor of your bedroom or bedroom closet or in your socks drawer in your dresser (i.e., someplace obvious). Leave it locked but unattached to anything, containing nothing except for a couple of small metal chains or boxes to rattle around inside it. Your burglar will definitely take it and might leave before a more detailed search of your home — feeling they have already made their “haul”.

- 4. Hardened Protection.** At this point, you are probably pretty satisfied with your property defense plan, but most of us feel the need for a hardened hiding place, like a safe. And again, try to conceal your safe to give it extra time to protect your valuables. The BlumSafe is easily concealable behind a picture frame, an open door or in a closet.
- 5. Electronic Monitoring.** Electronic protection at the BlumSafe itself provides a final level protection for your watches and other valuables, and can be accomplished in several ways:

 - Place a Smart Sensor in your safe. We have tested the Samsung SmartThings Multipurpose Sensor and required hub, and are very satisfied with its performance with the BlumSafe. It is also very easy to install and configure yourself. This device communicates with your smartphone, by text, email or app notification, and is an all-in-one sensor that can detect the safe door opening and closing, vibration, orientation/tilt and temperature, as well as low batteries and internet connectivity loss. This sensor would alert you if, for example, someone hit your BlumSafe with a hammer, trying to get into it. It also tells you if a burglar has cut your internet line. If a burglar or invitee has evaded your alarm system, located your safe and is determined and equipped to attack it, this device is an essential last level of defense. It can also give early warning protection for your valuables against fire and flood damage.
 - Have your alarm company place a hidden “panic button” in your safe or wire a second alarm partition in your safe that is not triggered when the main house perimeter is penetrated (by the way, you can also purchase a panic button that ties into the Samsung SmartThings system above – no need for your alarm company to do anything). We prefer the panic button solution – in the unlikely event a thief gets in your house undetected and is willing to use violence to force you to open your safe, a silent panic button offers the ability to get help. A second alarm partition on your safe, which is armed even when your house alarm system is not, will just dissuade you from using your safe (each time you want to open the safe, you have to disarm it at the alarm keypad – a hassle).
- 6. Safe Deposit Box at your Local Bank.** At the end of the day, your safe deposit box at your local bank is the safest place for your valuables. Make sure to deposit your most cherished valuables there before you leave your home for any vacation of a week or more.
- 7. A Good Property Insurance Policy.** One last cautionary note — Safes are great, they deter or at least slow down all but the most committed thief, and cost him valuable minutes, increasing the odds of his detection and capture. However, no matter how colorful

the advertisement, no safe is impervious to a well-equipped and professional thief (which luckily, most are not). You might feel good about your 1,000 pound gun safe bolted to the floor, but against the right criminal, it doesn't stand a chance after 15-20 minutes. The same goes for the BlumSafe. Get a good insurance policy and itemize all of your most precious valuables.

So, to sum up, if your objective is a reasonable degree of added protection, that is what a safe will provide you within a layered property security approach— otherwise put all your valuables in a bank safe deposit box, and risk never seeing or enjoying it.

Lastly, always have a good property insurance policy.

Chapter 3:

Concealing Your Safe Behind a Canvas



Learn how to quickly and inexpensively hide your wall safe behind a canvas of a photo or painting.

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You've viewed the scene in old movies – the dapper, wealthy man, perhaps dressed in a silk robe, sporting a pencil-thin mustache and aristocratic accent, moving an old painting to reveal his concealed wall safe that was nestled behind the canvas.

As we have mentioned in prior chapters, concealment of your valuables is a critical defense against most home property thefts. A great form of concealment of your BlumSafe is to mount it in a closet or other non apparent space, like in a child's room (most burglars make a bee-line to the master bedroom as the likely source of easy-to-find valuables, and move in and out of the house very quickly).

Concealing your BlumSafe provides an extra degree of protection. You may not have a valuable oil painting of an old ancestor to hang in front of your BlumSafe, or may not wish to draw attention to your BlumSafe with a wall hanging that is too attractive or potentially valuable. Fortunately, remarkably cost-effective alternatives are available today to conceal your BlumSafe.

For less than \$100, a company can print a canvas for you from a photo or other image that you upload or email (or you can choose one of their images). We prefer these lightweight canvases over a picture mounted in a heavy frame.

After looking at several of these companies, we were very satisfied with the quality, multitude of choices and speed provided by Canvas Discount, but many companies offer similar products.

Concealment of your safe behind of painting or picture is a great form of protection. We found that a 24" X 36" canvas, hung vertically and centered over the frame of the BlumSafe, perfectly covers our deep wall safe. It is light enough to swing to the left or right on a pair of normal two-inch hinges from a hardware store (of course, you can just hang the canvas on wire and a hook, but we prefer the convenience of hinges).

You should order a 1.5" deep plain canvas, where the back of the canvas is "open" and unlined, to allow plenty of room for the keypad and handle without creating a bump in the surface of the canvas. We prefer to get the canvas with the optional black edging, to conceal fingerprints from opening and closing the canvas (and we think the black edging looks sharp, especially on a black and white photo canvas).

Just upload or email them a photo or image you like, and you are in business.

**NOTE:** Because your picture will be blown up to 24" X 36", try to use an image or photo taken with a higher mega pixel camera (a good photo at full resolution from a late model iPhone or Android phone is fine).

We mount the hinges on the back of the wood frame and to the wall (see photo). If there is a stud in the wall to attach the hinges to, great; if not, just put some light anchors into the wall for the hinges to screw into.



The hinges should be on the side away from easy sight by a stranger – even though the hinges will be mounted “blind”, they will still be visible to a careful eye.

For example, if the entry into the room is from the right of the canvas, mount the hinges on the left side of the canvas, so the right side shows no hinges and the canvas will swing to the left.

That’s really all there is to it. For less than \$100, you get a nice piece of artwork or photograph on the wall, and concealment for your BlumSafe. We highly recommend this solution.

## CHAPTER 4:

# Inexpensive Remote Electronic Monitoring of the BlumSafe



**A quick and inexpensive way to remotely monitor your wall safe from your smartphone, anywhere in the world, using Samsung SmartThings.**

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We have previously written about what makes a safe “safe”. Concealment, difficulty of removal, and speed of penetration are all considerations. Detection that someone has attacked your safe is the final step to preventing theft of your cherished belongings. We feel we have a solution on this front, with the Samsung SmartThings Multi-Purpose Sensor and hub, available from BlumSafe, Amazon and others. Collectively costing approximately \$100, this is truly one of the best remote monitor wall safe set ups you can have to protect your valuables from any location you have WiFi or cell service.

## Home Alarm Systems

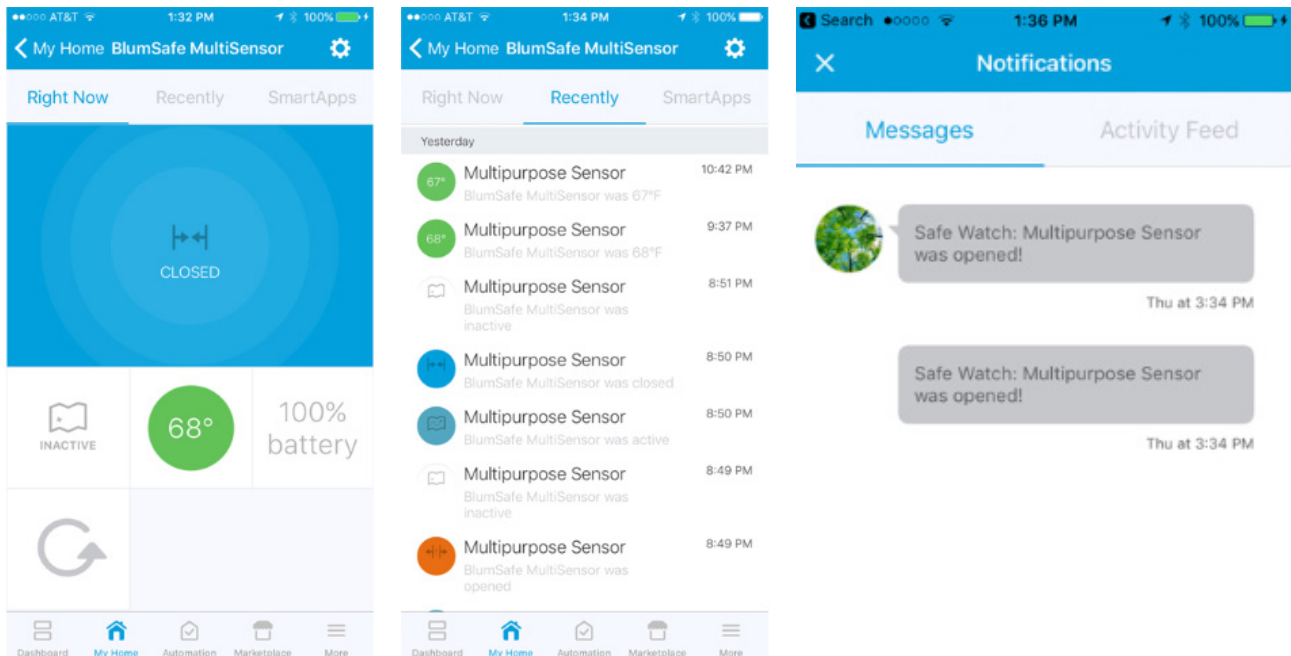
Your home or apartment alarm system (if you have one) is often your first line of defense against theft. But your home alarm often won’t stop the crime — you forget to arm your system, or the thief is in your home “legally” — as we indicated in Chapter 1 above, more than eight of ten home property thefts are by people you invited in your house, like a housekeeper or plumber. To protect your BlumSafe, you can pay your alarm company to connect your alarm system (if you have one) to your BlumSafe, with a shock and door opening sensor, even a silent panic button. A good idea, but it could be expensive (and complicated for the user), and not everyone has an alarm system.

## The SmartThings Alternative

Fortunately, we now have increasingly inexpensive and simple alternatives to detect and deter theft, as well as monitor other threats to your BlumSafe and home. In this regard, we believe that the Samsung SmartThings Multi-Purpose Sensor provides a very efficient and compelling solution, and we highly recommend it for the BlumSafe.

The SmartThings multi-sensor in your BlumSafe is always “on”. It will alert you anywhere in the world, by text message and/or app indicator on your smartphone, to any of the following occurrences:

- attempted opening of your BlumSafe door,
- attempted assault of the safe body (shock sensor),
- cutting of your home internet connection,
- if there is a temperature reading at your BlumSafe above or below a range that you set (i.e., if your home is on fire or your boiler went out during the winter), and
- if the battery on the multi-sensor is running out.



As you can see, some of these features not only protect your BlumSafe, but your home as well. If you don't already have a central alarm system in your home, the SmartThings system can also be configured to be centrally monitored by an alarm company, to call the police.

The Samsung SmartThings multisensor is a small, two piece electronic device. The transmitting unit attaches to the back of your safe door, and a small matching contact switch attaches to the inside frame of the safe magnetically.

The multi-sensor communicates via wireless connection to the SmartThings Hub in your home. This hub is the system's "brains" and communication portal. The hub can also be configured to communicate with a plethora of other sensors and items in your home.

For example, the hub can connect to door and window sensors, light switches, door locks, garage door controllers, thermostats, water sensors, video cameras, audio alarm, etc.

The SmartThings Multisensor, the larger of the two white components shown in this photo, is attached to the back of the door, to the right of and a bit below the LED contact switch (it will work either with the original BlumSafe all-steel door or the Display Door).

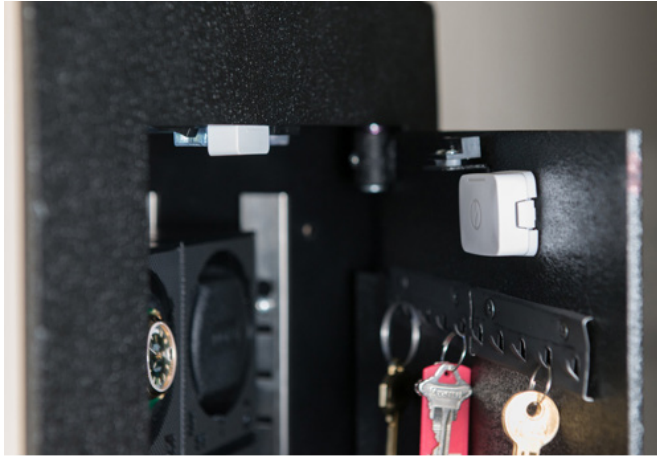
The smaller SmartThings switch is mounted on the front of the safe frame, to the left of the LED switch, to line up with the MultiSensor when the door closes. You can add components to your network as you go along, as it burrows its way into your life as a complete home automation (and security) solution. And with the Amazon Alexa or Google Home, you can control a wide-range of SmartThings home automation features by your voice.

Configuration of the system is easy, and customer service resources, like installation videos, are plentiful from a big company like Samsung.

You can set a breach of the BlumSafe to provide you silent notifications you can call the police, or you can configure the system to flash lights or activate an audible alarm so the thief knows they had better get out, fast.

The system can be configured to start "filming" on your video cameras (more on that in a subsequent Chapter), or if you pay for central monitoring, to alert your alarm company, which will then call the police.

Or you can use SmartThings to simply turn off the lights in the kitchen when you are in your bedroom, getting ready to go to sleep.



The Samsung SmartThings ecosystem is scalable and continues to grow. We strongly suggest you consider this solution for the BlumSafe, especially if you don't currently have a home or apartment alarm system. It may end up becoming your home's complete home protection and automation backbone.

**IMPORTANT NOTE :** We are not sure whether this magnet is close enough to even the top row of watch winders to magnetize a watch movement, but if you wish to be safe from movement magnetization, we suggest you pry this contact switch open and remove the magnet, and use two-sided tape instead.

## Chapter 5:

# Beware of “Fireproof” Safes to Protect your Watches



Some of our customers have asked why we did not make the BlumSafe “fireproof”, as some of the much more expensive jewelry safes profess to be, and as many cheaper safes available in your local big box store advertise. Why not? Because, in reality, most fireproof safes will not adequately protect your watches from fire, and we refuse to engage in deceptive advertising.

Now for the more detailed explanation. The lion’s share of commercially available fireproof safes are not fireproof-enough for watches. Under Underwriters Laboratory (UL) standards, which most safe manufacturers follow in designating their fireproof rating, safes are rated for the length of time they can maintain their internal temperature at or below 350 degrees Fahrenheit. Why 350F? Because the char point of paper is close to 400F. This makes a lot of sense most of the time, since safe fireproofing has traditionally been meant to protect valuable paper documents. And if you also had some gold jewelry in the safe too? Well, that won’t melt at 350F either.

We have seen other safe manufacturers offering watch safe configurations advertising 350 degree-rated safes as being fireproof — buyer beware!

The only problem is that most watch manufacturers caution you to avoid exposing your watches to high temperatures that are significantly lower than 350 degrees. Omega, for instance, the venerable manufacturer of robust watches (it was chosen by NASA to fly to the moon, after all), recommends for its watches to “Avoid extreme temperatures (above 60C, or 140F, below 0C, or 32F) or extreme temperature changes.” There is a good reason for this warning. The shellac used to hold your watch’s pallet jewels in place softens at 140F (60C) and melts at 160

to 185F (70 to 85C), and the lubricants and gaskets of your watches all deteriorate above 200F. And don't forget the impact of heat on certain watch face materials, which can melt or otherwise discolor from just sitting for too long underneath a lightbulb to charge its luminescence (come on... you've done it, I've done it). In other words, a fire engulfing a 350F degree-rated fireproof safe could easily severely damage your watch, with little practical difference than if it were in a non-fireproof safe.

After all, an insurance claim for a fire damaged watch is the same, at whatever temperature the watch is damaged or destroyed.

There is a second less-used UL rating for fireproofing safes, set at maintaining a temperature of only 125F internally. This rating is used for so-called "media" safes meant to hold digital tapes, film slides, disk drives and similar magnetic media. This would work just fine for our watches. However, media-rated safes are in a small minority of safes because they tend to be heavier, bulkier, provide less interior space and are generally more expensive – and require a fire temperature-knowledgable consumer. It simply takes a lot more insulation to get a rating down from 350 degrees to 125 degrees.

[We developed the BlumSafe](#) for our own personal purposes, with the desire for a concealable, chest-height safe that would not take floor space. So we really wanted a wall safe, not a floor safe. However, it would simply have been impracticable for our first product to design a wall safe that had fireproofing that protected to the 125F media safe rating. To fit within 16 inch on center wall studs, the insulation would have eliminated at least one column of winders – reducing us to a maximum eight winder capacity with no extra storage room, and instead of being able to fit the safe within an eight inch deep wall cavity, we would have needed twelve inches. We felt this was too impractical for most of our prospective clients, too limiting in storage capacity, and would add a good amount to expense.

Could we someday make a heavier double-wide (i.e., 32 inch O.C. studs with header) media-quality fireproof wall-cavity safe? Maybe – it would be cool, but it would cost a lot more and be for a much smaller, more specialized audience.

So, we decided to "keep it simple" for our first effort into a virgin market (i.e., reasonably-priced watch winder wall safes). Our product is better built than most other wall safes on the market today, a good amount safer, provides more fire and water protection than a dresser-top watch winder, and can be outfitted with a Samsung SmartThings MultiSensor (see prior chapter) to give you early warning of a fire, complementing your home's fire sensors. It also provides a similar amount of real world protection for your watches as offered by "fireproof safes" – but with more utility.

A final word of advice for all safe owners: always maintain full insurance coverage for your safe's contents— no safe will provide absolute protection. The only way to eliminate your risk is to put your watches in your bank's safety deposit box and properly insure them (but then you never get to wear or admire your watches!).

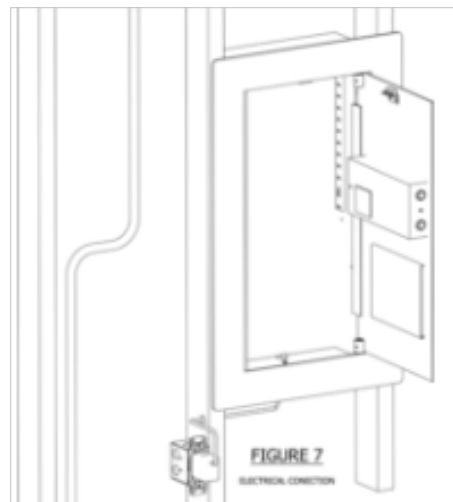
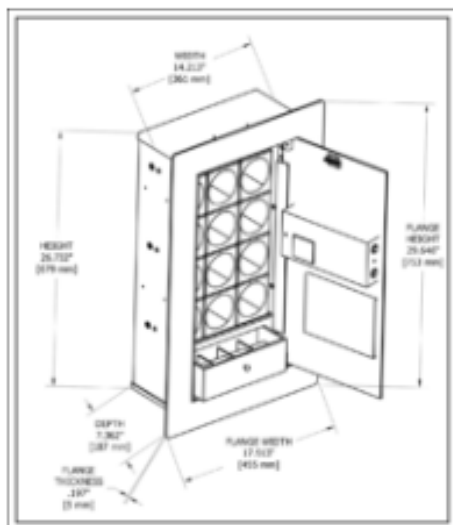
## Chapter 6:

# BlumSafe Mounting Ideas – Not Just For Walls



When I developed the BlumSafe, I must admit that I just built it for myself, my own needs and installation considerations. I was thinking about a wall-mounted situation — didn't have any wall units or custom cabinetry in my house.

The BlumSafe had to be deeper than a typical 2"X 4" interior wall, in order to accommodate the depth of the winders. That meant that I needed to either find or build a deeper wall (i.e., 2"X 8" construction or deeper), find a 2" X 4" wall that has crawl or utility space behind it so the safe can project out the back into that space and not bother anyone, or one could partially surface mount the BlumSafe with molding around the edges where the safe partially projects proud of the wall.



For more information on these different options, see this support page for [Installation Notes](#).

What I hadn't thought of was installing the BlumSafe in cabinetry. Kind of seems obvious, no? Well apparently not to me. Fortunately, I have been blessed with some very creative and sharing customers. I tend to get into email or telephone conversations with a subset of our buyers, both pre- and post-sale, who wish to ask questions about installation, the product or just talk about watches (by the way, the great thing about selling a niche, specialized product like the BlumSafe is that everyone who comes to me is an enthusiast or the spouse of an enthusiast, so I have many pleasant conversations with a very informed or enthusiastic customer base).

I learn things from every one of these conversations, and greatly appreciate the dialog. Anyway, the one idea I should have thought of is adding a BlumSafe to cabinetry or wooden wall units, like California Cabinet-type wall systems. It is easily done by a carpenter (or a handy owner).



Some photos from owners are shown here. In other words, this is one less reason for not getting a BlumSafe!

## CHAPTER 7:

# Protecting your BlumSafe: A Cellular Backup to Your Smart Things Connection



**The SmartThings Multisensor, IP video cameras and other devices can only protect your home and valuables if you have Internet connectivity.**

We have previously discussed using a Samsung SmartThings multisensor to keep you updated of various conditions that could imperil your watches. By using this method, you can be alerted on your smartphone to someone trying to open your safe door, shock detection, temperature rise (e.g., FIRE!), loss of internet connectivity and low battery alert on the SmartThings multisensor on your BlumSafe.



This is a great device that can be networked with other compatible devices in your house, like window and door sensors, but it has two weak spots – it relies upon

- 1.** The WI-FI in your house to connect your SmartThings multisensor to your Samsung hub (and then to your router), and
- 2.** the connection between your router and the internet, which can be cut off outside your house or inside, at the router.

## Loss of WiFi

These vulnerabilities threaten other aspects of your home's security as well, and this chapter will help you combat them. Let's focus on the first issue – loss of WI-FI. This can result from power loss in your house (whether by act of nature or criminal) or physical disruption by your intruder of the Samsung SmartThings hub or your home router. Power loss can be mitigated against by something as simple as using a UPS backup power battery/power strip.

To minimize the odds of a criminal physically disrupting or disconnecting your WI-FI or SmartThings hub, the best advice is to conceal them — do not leave these devices in an open, “please disconnect me” place. This is not a foolproof solution, but it will increase your odds greatly of protecting your WI-FI network.

## Cellular Hotspot -- Connection to the World

But what if your internet connection from your router/modem to the outside world goes down by act of nature, or is taken down by a criminal in preparation for his heist? If this happens, you will not get alerts if the felon attacks your BlumSafe, or for that matter, from the cameras or other sensors that you may have monitoring your house. Cellular service backup is the optimal solution to this problem. Basically, you use a cellular service “hotspot”/modem device to provide failover connectivity to the internet if your cable or fiber internet service is disrupted. The hotspot has its own sim card.

This is the method that old line, central service-monitored alarm companies sell with their expensive phoneline-communicating packages (i.e., the ADT's of the world), but this hotspot can be used for much greater backup flexibility for your entire home, and you can always take it with you on a trip if you wish (but remember to put your watches in your safe deposit box at the bank first!).

A hotspot can cost anywhere from being free to \$150 for the device, or is available for a low monthly rental. The cellular companies typically use a “razor and razor blade” pricing model – the hotspot hardware is priced cheaply to draw you into a monthly data plan for the hotspot that can cost \$20 or much, much more per month, depending upon the amount of data you want.

| Internet Connection                                                                                                                                                                                                                                         | Dual WAN                                                      | Port Trigger | Virtual Server / Port Forwarding | DMZ | DDNS | NAT Passthrough |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------|--------------|----------------------------------|-----|------|-----------------|
| <b>WAN - Dual WAN</b>                                                                                                                                                                                                                                       |                                                               |              |                                  |     |      |                 |
| RT-AC66R provides Dual WAN support. Select Failover mode to use a secondary WAN for backup network access. Select Load Balance mode to optimize bandwidth, maximize throughput, minimize response time, and prevent data overload for both WAN connections. |                                                               |              |                                  |     |      |                 |
| <b>Basic Config</b>                                                                                                                                                                                                                                         |                                                               |              |                                  |     |      |                 |
| Enable Dual WAN                                                                                                                                                                                                                                             | <input checked="" type="checkbox"/> ON                        |              |                                  |     |      |                 |
| Primary WAN                                                                                                                                                                                                                                                 | WAN ▼                                                         |              |                                  |     |      |                 |
| Secondary WAN                                                                                                                                                                                                                                               | USB ▼                                                         |              |                                  |     |      |                 |
| Dual WAN Mode                                                                                                                                                                                                                                               | Fail over ▼ <input type="checkbox"/> Allow fallback           |              |                                  |     |      |                 |
| <b>Auto Network Detection</b>                                                                                                                                                                                                                               |                                                               |              |                                  |     |      |                 |
| Detect Interval                                                                                                                                                                                                                                             | 5 seconds                                                     |              |                                  |     |      |                 |
| Failover Execution Time                                                                                                                                                                                                                                     | Continuous 3 times (= 15 seconds) detect network failed.      |              |                                  |     |      |                 |
| Enable Ping to Internet                                                                                                                                                                                                                                     | <input type="radio"/> Yes <input checked="" type="radio"/> No |              |                                  |     |      |                 |
| <b>Apply</b>                                                                                                                                                                                                                                                |                                                               |              |                                  |     |      |                 |

The typical speed of a hotspot today is 4G/LTE, though several hotspots are 5G forward-compatible (kind of). When you size your data plan and speed, remember that for pure backup purposes, you don't need the fastest and best service, especially if you don't expect to be using the hotspot for too long or to stream multiple high bandwidth video feeds (some of us are blessed with very reliable, stable internet service, some of us are not – plan accordingly).

For this solution to work, you need a router that is capable of being configured for automatic failover to a second, backup internet connection. In other words, when your main internet connection from your local cable company goes down, your router automatically switches to your cellular hotspot device. The hotspot device is plugged into the USB port of your router, and you configure the router software to failover to the hotspot when you lose your main internet connection.

A number of modern routers provide this capability, including routers from most of the major brands, but configuration can be trickier with some devices than others (ASUS's appears relatively straightforward, above). To save your precious expensive cellular hotspot data, routers can often be programmed to cut off access by certain services to the cellular service (e.g., barring your home's data-hogging Netflix video streaming from using your hotspot's data availability).

Again, just make sure your router and backup 4G hotspot device are:

- 1.** Compatible for the failover function,
- 2.** Located in a place not easily located by a criminal to disconnect,
- 3.** Connected to a backup power supply, like a UPS power strip.

By employing this backup data connection, you not only protect the SmartThings connectivity of your BlumSafe, but of all internet-connected devices in your home, which may be well worthwhile.

## Chapter 8:

# Protecting Your Watch Safe: My Experience With Security Cameras



A picture speaks 1,000 words.

In this chapter, I'd like to talk about a security camera for your watch collection.

I got into designing the BlumSafe because I like to tinker and perfect. As a scan of other chapters will show, once the safe was designed I didn't stop thinking about ways to make it work better for me.

So we tested and added the [Samsung SmartThings monitoring solution](#), we looked at the relatively simple hack of concealing the safe with a [wall hanging on hinges](#), and we pointed out the utility of placing an [atomic clock by your safe](#) so you can always make sure your watches are dead-on accurate.

None of this is rocket science, mind you, but each enhances your watch safety or user experience.

So here is another idea I have been playing with – a security camera for monitoring your BlumSafe. And like the other things we have done, this will not cost you an arm and a leg or require connection to an old-fashioned centrally monitored alarm system (unless you desire this – like through a SmartThings-available ADT or Scout interface).

A camera near your safe might seem like “belt and suspenders” duplication if you otherwise have cameras mounted outside your house to capture a screen image of a thief, or if you already use the SmartThings multisensor on your BlumSafe. However, layers of detection and deterrence can have a real impact, and are an affordable option to further protect your beloved watches.

The very appearance of a camera by your BlumSafe could be used to deter a criminal or an acquaintance, or, especially if it is stealthily hidden, could provide evidence to help catch the criminal after the fact.

First, some background on modern security cameras. Forget about old-fashioned, hardwired relatively bulky and aesthetically unpleasing CCTV cameras. Today, there are a plethora of convenient, attractive, WI-FI or cellular connected cameras that you can place on the wall over or somewhere near your BlumSafe.

Typically, these cameras can be monitored on an app on your cellphone, will send you notifications of activity, may allow two-way audio communication with your thief.

## **Storage:**

These cameras can usually store data three ways – by offering some form of cloud-based storage plan to keep the last seven or more days of recordings for free (and greater storage and flexibility at a price), on board storage on an SD card, or you can backup recordings from certain cameras to your local NAS (network attached storage) – the SD card and NAS solutions may present a weak points, however, because unlike cloud-stored video, your camera or NAS are subject to theft or destruction by a sophisticated criminal robbing your house.

The cameras themselves usually provide a high quality 1080p or even better picture with a wide field of vision, and are motion-activated and use infrared or other technology to record in the dark.



## Connection to Outside World

I wanted as few wires as possible and didn't want to have to add new wiring. I first was interested in battery operated cameras, but then I realized that since I had power near my BlumSafe for the winders anyway, I might as well go with the ease and reliability of a camera that can power off a wall outlet. However, like my router and computers, I would plug it in the wall via a standby UPS powerstrip, to keep the camera going during a power outage (caused either by act of nature or by act of a criminal).

## Interoperability

Other factors in my camera selection? I have too many apps on my smartphone already for monitoring all kinds of IOT (internet of things) devices, so, all things being equal, I preferred to select a camera brand that of the same type as other devices I was using.

And if you are already using a remote sensor like the Samsung SmartThings multisensor to monitor your Blumsafe, it would be nice for the camera to be compatible with the SmartThings monitoring ecosystem, such as the Ring or the Netgear Arlo cameras. If you are an Amazon Echo user, it could also be advantageous to have Alexa compatibility for alerts.



**Arlo wire-free HD security cameras are the perfect solutions for both outdoor and indoor security needs**

## Data Security

There is a wide range of cameras that serve the purposes outlined in this article, and your decision will come down to issues like cost (including for cloud storage solutions, though most choices now provide a free limited cloud solution that should fill most peoples' needs), aesthetics, concealability, and compatibility with any home automation controllers, apps and voice control devices (like Amazon's Alexa) you may already have. Security of your data and network is an often-overlooked consideration. For this reason, one is often better-advised to stick with a larger, name-brand product than a cheap but functional no-name product of uncertain security and support that you might find on Amazon, eBay or AliExpress. Cameras from Nest, Ring, Logitech and the Netgear Arlo are all good choices from well-known companies and are highly-rated.

## Cellular or WiFi?

One final consideration in choosing your camera involves connectivity. What if your internet goes down or is taken down by a criminal in preparation for his heist, meaning you will not get alerts from your camera on your smartphone if he approaches your BlumSafe? Cellular service backup is the optimal solution. This can be achieved in two ways, each of which has its plusses and minuses, but both involve the additional cost of maintaining a backup cellular connection. The first solution is to have a 4G hotspot/modem plugged into the USB port of your router, if the router is capable of being configured for automatic failover to a second, backup internet connection. This sounds exotic and possibly expensive, but it really isn't. A number of modern routers provide this capability. You can read more about this solution in the prior chapter. Just make sure your router and backup 4G hotspot device is in a place not easily located by a criminal to disconnect.



**The Ring is a battery-powered indoor/outdoor HD camera with two-way talk, night vision, and versatile mounting options.**



**With 24/7 live streaming, a versatile magnetic stand, person alerts with Nest Aware and one app for all your Nest products, Nest Cam Indoor helps you keep an eye on what matters. From anywhere.**

A second cellular solution, which is more direct cellular security and completely avoids relying upon WI-FI for ultimate connection to the cloud and your smartphone alerts, you can use a camera that has a cellular SIM card, the Reolink being a great example, providing a limited free cloud storage plan (as well as paid plans), 4G capability, on-board SD card storage, low light recording, a good 1080p high definition camera, motion sensing recording, etc. The negative to this solution is that these types of cameras usually cost somewhat more than the highly-rated WI-FI cameras mentioned above. Also, you will be paying for a SIM card for one device with a camera-mounted 4G connection, versus sharing that connection among all the devices in your house if you use a hotspot at your router location, as discussed above. So, bottom line, I prefer the first, whole-house 4G backup solution.

One last thing. As we have countlessly mentioned before, regardless of how many layers of security you employ in your house, it can all be defeated by the right criminal, so you should always have your BlumSafe's contents adequately insured.

## Chapter 9:

# Gun Storage in the BlumSafe



**A number of our clients have told me how great the BlumSafe is for storage of their handguns, in addition to their watches and other valuables. The BlumSafe's easy access, concealability as a wall safe, and its extra depth, are apparently a winning ticket for handguns and ammunition. This chapter will suggest some ways for gun owners to optimize their BlumSafe.**

Most gun owners would agree that handgun storage should be secure, preferably hidden, and quickly and easily accessible in case of emergency.

The BlumSafe easily checks off all those requirements -- an all-steel wall safe that can be concealed in a closet or behind a picture in your bedroom or anywhere in the house that is close at-hand when needed, with a quick-opening biometric (fingerprint) lock.

If you have a sizable gun collection, you probably (and should) have a large gun safe -- which is probably someplace out of the way, in your basement, garage, bonus room, etc. But you probably want a handgun more accessible, and the BlumSafe is the answer -- much better than storing your gun in an easily-stolen locked steel box under your bed, or worse, a shoe box (you know who you are).

And because the BlumSafe was designed to hold watch winders, it is almost three times deeper (over 7" deep) than a typical wall safe, which usually has the depth of an in-wall medicine

cabinet. With an internal height of over 26 1/2", this results in plenty of storage room in the space not taken up by our modular watch winders, which you can move around your BlumSafe to accommodate any gun storage format you can think of.

Since each BlumSafe comes with two, velvet-lined, adjustable shelves, you can simply place your holstered or unholstered handguns on the shelves, along with a box or two of ammunition. If you like things a bit fancier, there is also the option of getting a holster that attaches to your safe with hook and loop material (i.e., Velcro). These holsters would simply attach to one of the adjustable steel bars that screw into the back wall of your safe (two are included with your BlumSafe, for the winders to attach to with Velcro). You can also pick up a Velcro-mounted magazine holder.

Some vendors sell a magnetic plate for holding handguns in safes and other locations. While that would work with a BlumSafe, we highly recommend not using these in your BlumSafe if you are using it to hold watches – these very strong magnets will wreak havoc to your watches' innards.

If you put guns in your BlumSafe, you may wish to consider adding an electric dehumidifier rod to your BlumSafe. You can run the electric wire for this alongside the power for your winders, through the grommeted hole in the bottom of the safe. Or you can get a rechargeable one.

One BlumSafe client found that his growing watch collection was slowly edging his handgun and other valuables out of his safe. As he approached a collection that required twelve winders in his BlumSafe, he realized he needed more room, and bought a second BlumSafe to put side-by-side with the first, and reallocated his winders among the safes. This could make a pretty cool-looking installation, if you have the room.

Do you have an installation that you are particularly proud of? Send us some pictures to share with everyone!

In the meantime, please, always treat your guns with caution, store them carefully and securely, and keep them lubricated.