

## The Real Deal About Digital Systems *-and how to make sure you get what you paid for*

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Ok, so you need a good Surveillance System, and you've decided to go with a Digital System because you want the picture quality associated with Digital Systems but you don't want the hassle of changing tapes - ever! So with all the confusing statements about all the different kinds of systems out there, and all the hype and hoopla about why "Brand-X" is the best, why is it that I hear from people every day who have bought systems that they are not happy with?



Many, many Digital Video Firms told us that their system was the best, and promised a lot of frame rates and other specs that didn't turn out to be true when we actually bought and tested their system. Most of the systems we tested, flunked for one or more of the following reasons:

- The best Recording Resolution was obtainable only if you record at 1 to 4 frames per second maximum.
- The software was not intuitive or easy to navigate – in fact some of the systems made it tough to even figure out how to start or stop recording, much less how to set any parameters.
- The transmitted frame rate when connected to the system from a remote computer was less than quoted (most were horribly slow – average was 1 or 2 fps).

### ***Here's what those people had to say about why the system they bought turned out to be a mistake:***

- **56%** said that they bought a "really cheap DVR" online from some Internet site, and then found that it wouldn't do what they wanted, wouldn't record at any resolution but 320 x 240, and was "nothing but trouble from the beginning", and the customer support from the company was lousy at best.
- **38%** said that they had bought a "do-it-yourself" system consisting of PC Cards and software to make their own DVR, and that it was a nightmare to install and the system was not stable (crashed often), and/or had bad picture quality.
- **6%** said that their system was operating OK, but that the cost was way too high and the system was complicated to learn. One caller added: "I felt like I had to go back to school to be able to understand how to work the system".



- System crashed one or more times during normal testing.

After testing, we found very **few systems that were deemed useable**. Unfortunately, the best systems were very expensive (6-7 K before cameras were added), and usually required expensive Maintenance Contracts to ensure reliable operation.

## ***What did we learn?***

Well, we learned that **there is a great deal that some of these sellers don't want to tell you.** For instance:

- If you're buying a "do-it-yourself" kit (PC Cards & software), it is an involved process to build a system that is configured correctly and will be stable for long periods of time without crashing and re-booting. Windows was not designed to take the rigorous 24/7 frame crunching that these systems require. The result: frequent shut-downs, registry problems and system crashes due to software glitches, or running the consumer-grade processors and mother boards too hard, and/or overheating. And then, if you actually do get a system up and running, you are vulnerable to hacking or viruses, or employees that surf the Internet or load games on it.

- When they quote a frame rate of 60 frames per second, that is probably true when only one camera is connected to the system, but when you connect additional cameras, the quoted frame rate is then divided between cameras (2 cameras = 30 frames per second, per camera, 4 cameras = 15 frames per second, per camera, etc.)

- When they tell you that they can transmit to a remote computer at anywhere near real time, ask to see that for yourself. The fact is, even on high speed broadband lines, they have to compress the images (reduce the resolution), and make the file sizes very small to get any real speed through the Internet, and the smaller the file size means the less resolution it has, which results in grainy, blurry pictures.

***So, how do you get around all those limitations and still have a good system that doesn't cost an arm and a leg?***

Well, after **14 years of Manufacturing Digital Surveillance Systems**, we have to admit that it took us a few years to figure out how to build an **absolute, rock-solid, un-crashable, easy-to-use, low-cost Digital system.**

## ***How did we finally do it?***

First, we had to finally admit to ourselves, after many years and hundreds of thousands of dollars in software and hardware designs, that we weren't ever going to get around the multitude of problems that result from trying to make a Digital Video Recorder out of a Windows-based



PC. At best we were, like all the rest of the manufacturers out there, constantly coming up with new fixes and patches to make it all work for the long haul. And if it wouldn't, at least we could institute a software watchdog to make the system re-boot when it had problems so that it might continue again for a while.

***That's not a fix - that's a Band-Aid!***

**We needed a system that was designed solely as a Digital Surveillance System!** To get back all that lost processing power that is lost while the system is lugging around with Windows on it's back. **To make it so easy to use that a child could operate it.** To do away with so many screens to navigate through and put all the menus on the just a few screens. To make it where it comes out of the box fully operating and recording, and all the customer has to do is **hit the power switch and walk away!**



**That's when we came up with the idea that would propel our company to the top echelons of DVR Manufacturers.** The idea was: What if we designed a full-featured Digital Surveillance System on the ultra-stable Linux Operating System, and made it so that it would be easy to understand and operate. We, and

our software partners did just that, and ended up with a system that was virtually un-crashable! It just keeps on going and going, night and day, 365 days a year! (About the only thing that can go wrong is with the hard drives).

The idea is to shrink the whole software program down so that it could run **INSIDE** the Main **PROCESSOR!** We didn't invent the technology, but we're using it to great advantage! The end result is Simplicity with all the functionality of Windows systems. That means that the hard drives are now used solely to store archived footage.

*We are constantly adding new features that make Rugged CCTV's Workhorse and Premier DVR's the absolute best Digital CCTV systems in the Industry – at any price!*

Then, we perfected the system with the **very best frame rates, (120, 240 & 480 frames per second)**, with the most advanced MPEG-4 compression algorithms that use a **whole new way to compress each picture down for transmission and display**, but still retains **all the definition and quality** that other systems must strip out of each picture in order to transmit and display them.

Oh Yeah, and while you're at it, you buy and build with the best and most rugged parts and components available. We use special high-speed video processors, Digital hard drives and ball bearing fans for long life cooling.. Then you encase it all in a hardened **STEEL** rack-mountable case (**no plastic here!**).

Now you know why our customers, who include Fortune 500 companies as well as the Military and Universities, are happy with their systems. But we didn't stop there. We are constantly adding new features that make **Rugged CCTV's Workhorse** and **Premier DVR's** the absolute best Digital CCTV systems in the Industry – at any price!



Now add in the fact that we back up our equipment with the best Warranty in the Industry – **TWO YEARS** – and you'll find out why we are the best DVR Manufacturer out there!

Take a look at our Revolutionary Digital CCTV System - **ONLINE** - , and I think you'll agree that the **future of Digital Security Camera Systems is here!**

**Call us with questions at:  
1-866-301-CCTV  
or  
903-498-3240**

