

Lynn Electric Communications Virtual Manager DVR Systems

Lynn Electric Communications --- Keeping an Eye Out For You!

Digital Video Recorders (DVRs) have been overtaking Time-Lapse VCRs as the primary recording mechanism in commercial surveillance since their introduction in 1995. DVR popularity has boomed as a result of the many features they integrate.

DVRs store data to a hard disk drive, in the same fashion a computer stores data, so you don't have to sacrifice data to store for any length of time. Additionally, every image can be recorded at a quality that provides the user with a desired result. The amount of time a DVR can store depends on a lot of factors, but the number of cameras is a major area to think about, so when making your decision on a DVR - "How many cameras do I need?" is an important question to ask.

A term you'll hear when people talk about DVRs is "frame rate". Frame rate is the number of images that the DVR stores over a specific period of time. To give you a few points of reference, consider the following.

- TV shows 60 frames per second.
- "Real-time" is 30 frames per second
- The human eye can process about 22 frames per second
- "Digital real-time" is 15 frames per second
- Sleight-of-hand can't be masked at 7 frames per second
- Police and insurance companies like 1-2 frames per second for prosecutable clarity
- Time-lapse recorders set for 24 hours record ONE FRAME PER EIGHT SECONDS – NOT FRAMES PER SECOND, SECONDS PER FRAME.
Hardware vs. Software DVR Systems

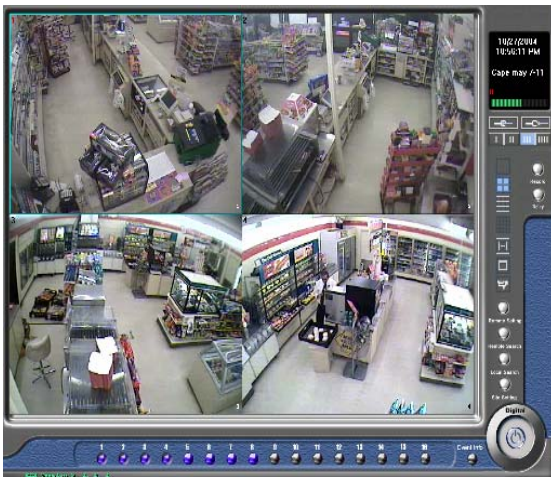
Many DVRs are simply software programs running on personal computers. This is a cost effective solution – depending of course on what you need. A single camera without much storage capacity can be handled well in this format, image quality suffers and flexibility is not an option – quite simply, they are what they are.

Digital video recording places a significant strain on a computer's resources. It physically challenges a computer, requiring a system to perform in ways it was never intended to. This can cause premature failure of primary components in a computer system, like the hard drive and video card. Additionally, it can cause other parts of the computer to function slowly or, even worse, not at all.

Software program DVRs capture and record images suitable for long-distance video chats over the Internet, and in some cases home security, but don't typically make the grade for businesses.

On the other end of the spectrum are the "firmware" or "solid-state" systems. These are not computer-based systems. They are essentially multiplexors, like we discussed earlier, with hard disk drives built in for recording. They are built for one purpose – to provide video surveillance – and they typically do it quite well.

There are two major shortcomings in this type of system are inflexibility and serviceability. In terms of inflexibility, you get what you get, nothing more – nothing less. There is no room for change or expansion and they will never have new features or functions, extra storage or camera capacity, remote transmission or anything else to add without expense. *Most people can accept this, understandably.*



Digital recorders allow viewing of up to 16 cameras at a time, in the business, or from almost any location in the world.

Many traditional surveillance functions coupled with intuitive software interfaces have fueled the popularity of DVRs in commercial applications.



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As for the serviceability – this may be more important. Hardware based systems, like your stereo and television set, have no user serviceable parts. This means for any warranty coverage, the equipment must be returned to the manufacturer. With few exceptions, manufacture of DVRs takes place in Japan and Korea. The result, of this is typically 6-12 weeks of “down-time”. *Most people cannot accept this, also quite understandably.*

Very informative, but which is better?

Well... they both have their strong and weak points. Accordingly, *the best choice is both.*

The benefits of Software based system are in its economics. It operates on readily available, easy serviceable PC platform computers. It can be run on special versions of Microsoft Windows® operating systems. It is compatible with many common peripherals such as printers, external storage components and displays and it uses storage that is available, convenient and relatively inexpensive.

Hardware based systems, though expensive, are reliable. They bring stability with their performance but offer little or no flexibility, peripheral compatibility or serviceability.

So, to better qualify “both” as being the best choice for business we insist on having the best qualities of both variations. We prefer when hardware-based video capture cards process the video and remove the heat and strain from the computer’s motherboard. But this hardware-based video capture card should reside in a software driven PC environment. This dedicated security computer should have removable hard disk drives for complete storage flexibility and use components that are readily available, inexpensive and easy to service. Stability must be demonstrated by a track record and service time – which the hardware based video cards offer but software is upgradeable, turning your PC-based security computer into technology that can grow with your business instead of being lapsed by it.

So, how do you determine which DVR is right for you?

Military and Government projects traditionally use hardware-based solutions. They have larger budgets and use equipment built to specifications for a particular project or purpose. Homeowners are the best candidates for software systems, their usage is primarily for playrooms, nannies, driveways and front doors – a few minutes or hours a day or less.

In most businesses the best solution is a hardware based capture device residing inside a dedicated, security-only, software-driven PC. This is the only way to get professional performance with reliable service at prices that are affordable.

They are both commercial DVRs that can manage up to sixteen cameras for expandability. They offer individually addressable recording schedules and frame rates and have removable PCI hard drives for user-definable storage capacity to suit any business.

Lynn Electric Communications manufactures custom configured DVR systems dubbed by our clients as “Virtual Managers.” LEC combines our extensive experience in loss prevention with high quality components from manufactures like Intel®, Microsoft®, Western Digital®, Antec®, and others to create stable, reliable, long-lasting systems to suit a wide range of our customers’ needs. Our products are in use in schools, government facilities, casinos, office buildings, managed properties, and businesses; large and small. Lynn Electric Communications builds each DVR to individual customer specifications. Every DVR is built from tested, proven components and is driven by Microsoft Windows® software. This is important since every one is still customized to perform optimally based on a system design by a Lynn Electric Communications specialist.

All of our custom-built DVRs offer record-on-motion capabilities as well as continuous, alarm-triggered or combination settings. Data is easy to retrieve by date and time and can be reviewed at user-controlled speeds and in one, four, nine or sixteen camera formats.



DVR search interface offers the convenience of point and click data retrieval, flexible amounts of storage capacity, and clear digital image reproduction.

Features such as watermarking, data transfer and system integration make digital recorders an excellent choice for all types of commercial management applications.

Remote Management Software offers the ability to view your location live from any where via telephone lines or hi-speed Internet access, even wireless with existing, available, inexpensive technology.

The DVR is the heart of every OSS system, but all of the supporting components are important too. We use only the best peripherals, like cameras, monitors, connectors, backup power supplies and electrical materials. We do this so that we can offer you a worry-free ownership experience with a 5-year service contract. Our systems are designed and installed by System Design Specialists who are experts in surveillance technology and our marketing is entirely based on referrals.

Our business is built on service.

So, what DVR is right for your business?

Kindly allow a Lynn Electric Communications Specialist an opportunity to demonstrate why a Virtual Manager® System has been the choice of businesses just like yours, and *see if you agree* that it will help your business as well.