

**The 10 biggest facts you need to know  
before you purchase or install your own  
Surveillance system.**

Here at **CCSG, Inc.**, we strive to provide our customers with the most up to date information. We have put together several informational packed reports and video's to help anyone who may be a beginner or even experienced, to be able to **Design, Build and Install their own surveillance system.**

Many dealers provide DIY packages that require very little experience or knowledge in operation or installation. However, these type of packages are not always the best way to go. Read the following report, and purchase our DVD set and be able to install your own surveillance system just like the professionals.



**DVR's**



**Cameras**




**Powering**



**Cabling**

## The 10 biggest facts you need to know before you purchase or install your own Surveillance system.

Fact	Category	Definition/Explanation/Information
<b>Fact 1</b>	<b>Terminology</b>	<p>How do you know what they are talking about? What does "FOV" mean?</p> <p>The surveillance field uses many acronyms and words uncommon to most. You should first familiarize yourself with these acronyms and terminology before to start planning your project. As this information will help you understand the big differences between certain products and their types. Making your research and design much easier to process.</p>
<b>Fact 2</b>	<b>Viewing</b>	<p>How do you plan to view your surveillance system. This is probably one of the most common mistakes made when designing your system.</p> <p>You must know how you plan to view your system before you can design or purchase your equipment. Not all equipment have the same capabilities for Video output. Knowing this ahead of time will smooth your process and decrease any delays or incompatibilities once ready to install.</p>
		
<b>Fact 3</b>	<b>Recording Method</b>	<p>How do you plan to have the DVR to record the video? All the time, only while your away, or when an event occurs?</p> <p>Most DVR's can be set several different ways to record the video from the cameras. These are commonly referred to as "Constant", "Motion/Event" or "Schedule". Each setting has it's own benefits and drawbacks. Knowing how each of these modes function, and what will best fit your situation the best, should always be determined before purchasing your equipment.</p>
<b>Fact 4</b>	<b>Record Speed and Display Speed</b>	<p>How fast or what frame rate will my DVR record the images at? Also, at what speed will the saved video be re-played for viewing? Remember, not all DVR's are the same.</p> <p>Frame rate is a very important issue to consider when designing your surveillance system. Some can display at the same speed at it was recorded, then others can record at half the speed it is displayed. The most important factor is to determine what frame rate fits your needs then design the system with these as Minimal specs.</p>

**The 10 biggest facts you need to know before you purchase or install your own Surveillance system.**

Fact	Category	Definition/Explanation/Information
<b>Fact 5</b>	<b>Storage Space</b>	<p>How much storage space will I need? How can I hold more information? What happens when my Hard Drive is Full?</p> <p>Understanding how the DVR records and saves your video is very important. Most systems work in a similar fashion, but some have better capabilities than others. Understanding <u>FACT 3</u>, will also help you understand this fact. Don't fall short, make sure you have enough storage space to hold the amount of video needed for your situation.</p>



The above 5 **FACT**s have been mainly directed as information pertaining to the DVR main features functions, options and capabilities. Knowing these 5 facts before you begin will not only save you an incredible amount of time, but will also save you money.

Not every website is going to sell you the truth on what is best for your situation. Only you can determine what is in the best interest for your location, purpose and budget. In most cases a residential location would not require such a high grade DVR with tons of storage and an extremely fast frame rate. So always keep in mind that "Bigger" is not always "Better".

The next few facts will pertain to Cameras, their locations and specifications.

It is always best to look at your surveillance system as 3 different departments.

- 1 The brain, or the CPU(Central Processing Unit) of the system. Also known as the DVR.
- 2 The input devices. The Eyes of the system. The Cameras.
- 3 The connections. The cabling. Tying it all together.

**The 10 biggest facts you need to know before you purchase or install your own Surveillance system.**

Fact	Category	Definition/Explanation/Information
<b>Fact 6</b>	<b>Field of View (FOV)</b>	<p>Where do I place the cameras? How far away can the camera be from the area I plan to View? How do I determine each camera's FOV?</p> <p>When designing your system, you need to examine and determine the FOV for each camera location. Many package systems have all the same type and size cameras. These may save you money, but will require that each of your camera locations have the same FOV. This is not always possible. Also You may need to see in closer on the front door or cash register.</p> <p>Knowing each FOV will enable you to know important factors once you are ready to start purchasing your cameras. The main factors you will learn are the Height, Width and Distance of the view and what size lens is needed. Determining each camera's FOV before you purchase your equipment will guarantee that you will have the correct and best view of each area.</p>



<b>Fact 7</b>	<b>Camera Type</b>	<p>Should I use Wireless Cameras? Are wireless cameras secure? Do hard wired cameras have the best picture? Are IP cameras the same as wireless?</p> <p>Once you have the information collected for <u>Fact 5</u>, you now need to determine which cameras to use. There are over hundreds of camera choices available. Each with their own special features, capabilities and application. Using the information from <u>Fact 5</u>, you can now determine how many indoor cameras you will need, how many outdoor, Color, Infrared, Day/Night, PTZ. You will also learn if any need to be wireless, IP or even a hidden style camera. Knowing these factors will help you research the camera specifications and find the camera that is best for each camera location. This is why we stress being careful when anticipating the purchase of a package deal. A good dealer will allow you the option to customize the system to meet your needs. But keep in mind that these options could change the overall price of the package.</p>
---------------	--------------------	--

**The 10 biggest facts you need to know before you purchase or install your own Surveillance system.**

Fact	Category	Definition/Explanation/Information
<b>Fact 8</b>	<b>Installation</b>	<p>How do I install my cameras? Where do I install my cameras? How do I run the cables to my cameras. How to I power the cameras.</p> <p>This fact works hand in hand with <a href="#">Fact 7</a>, and should be considered at the same time you are determining the elements of <a href="#">Fact 6</a>. As you determine the location of each camera, you should also be thinking of how you plan to get cables or power to each location. Wireless cameras do make installation easier, but you still have to have power at the location for the camera. So even with wireless cameras, you still may have to install some cables.</p> <p>Knowing your options and the different types of cabling choices available will help you in determining the installation procedures your location may require. You also want to learn the capabilities and limitation each choice has. In some cases, you may have to use a different wiring choice due to accessibility or distance limitations.</p> <p>Powering choices are also available, and must be recognized before you start your project. There are 3 basic type of powering choices. These are Local, Piggy-Back, PoC/PoE. Understanding these types and which one will best fit your installation, will help you in determining your power requirements and what you will need to have before you start your installation.</p>



<b>Fact 9</b>	<b>Programming</b>	<p>How much programming is involved? Will my DVR operate without any special programming? Should this be performed by a professional?</p> <p>Depending on the equipment you have chosen, and the options you would like to use, will determine how much and what type of programming will be required to obtain optimum performance. Most DVR's will come with basic programming for "Out-of-the Box" operation. However, this will not include any special Motion, Event or Schedule programs and may not perform to your expectations or requirements.</p>
---------------	--------------------	--

*Continued on next page.....*



**The 10 biggest facts you need to know before you purchase or install your own Surveillance system.**

Fact	Category	Definition/Explanation/Information
<u>Fact 9</u>	Programming	<p>..... Continued from previous page</p> <p>Referring back to the factors you determined in <u>FACTs 2 - 5</u> will also play a factor in knowing how much and what kind of programming your DVR will need. Each DVR is different and have different capabilities and limitations. Knowing what these are and how they pertain to your equipment will help in determining how detailed of programming your installation will require.</p>

**And Last but not least,**

<u>Fact 10</u>	Remote Access	<p>How can I access my DVR? Can I view my DVR from Work? What type of internet connection do I need? Can anyone view my cameras?</p> <p>This is probably the most popular fact of them all. With newer technology and advancements in equipment, the old "Time-Lapse" local systems are being upgraded so the video can be view from a different location. Both standalone and PC-Based DVR systems can have this capability. This new Triplex operation allows these DVR's to Record, Playback and allow remote access simultaneously. Many DVRs allow multiple users with different permissions, thus protecting your system from unauthorized users.</p> <p>Depending on the type of internet access you have available, will also determine how you can remotely access your surveillance system. If you also have a local LAN, most systems can be access from other computers located in your home or office. Many DVR's have an embedded operating system or server software, but may require additional software to be installed on your home or office computers that you plan to use to access the system.</p>
----------------	---------------	--

Now that you have the 10 biggest facts you need to know before you purchase or install your own surveillance system, you ask, where can I find all this information.

**That's the easy part, Just Call (904)626-9854**

We will come by your location and perform a site survey for you, and provide you with the best answers to the above questions and facts.





**The 10 biggest facts you need to know  
before you purchase or install your own  
Surveillance system.**