



**AnalogHD cameras will only function when connected to an AnalogHD DVR.**

**If you are upgrading from a standard Analog system, you will be able to use the existing BNC power/video cable but you must to replace both the recorder and the cameras with AnalogHD technology equipment.**

## WHERE TO LOCATE THE CAMERA:

When installing your camera, it is important to select a proper site not only for field of view, but for other considerations as well:

**Distance from viewing/recording device.** The further the camera is from the DVR or monitor, the higher the chances of signal degradation. Typical 75Ω Video Cable provides acceptable signal at distances up to 60m. At greater distances, UL-Listed shielded RG59 should be used. The camera's power supply should be located as near to the camera as possible when the distance exceeds 60m as the power level will drop over extended distances resulting in a decrease in video quality.

**Do not place near high voltage wires or other sources of electrical interference.** Electrical interference will degrade the quality of the signal.

**Place camera out of reach to avoid damage.**

**Avoid direct exposure to weather.** Do not place the camera where rain or snow will hit the lens directly nor should the camera be placed so that the sun or bright light shines directly into the lens. Your camera is weatherproof, but it will not work when submerged in water. Ensure that all power and video connections are not directly exposed to water and are protected from the elements.

**Indoor cameras should not be used outdoors.** Even if they are in a sheltered location, they can still suffer damage due to humidity, dust and other environmental factors.

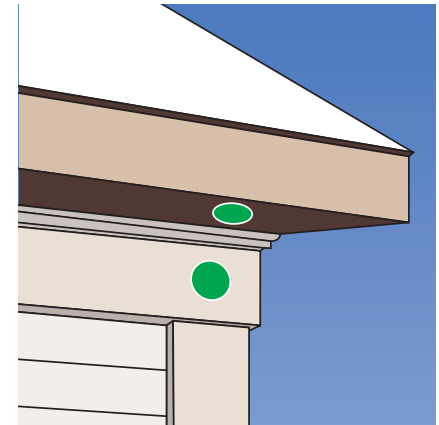
**Mounting surface** The mounting surface must be sturdy and able to hold at least five times the camera's total weight.

**Legal Considerations** Always check laws before installing cameras.

**Do not place camera behind a window.** If there is a light source behind the camera, it can cause a reflection in the window that will obscure events on the other side of the glass. Likewise, the camera's infrared LEDs will reflect off the glass and shine into the lens, thus degrading the image.

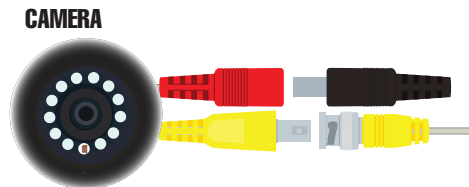
**Light levels should be approximately the same between camera and target area.** A camera in a brightly-lit area looking into a shaded area, or vice versa, may produce inadequate results.

The above are guidelines and the optimal location for your camera will depend on your unique circumstances. As a general rule, the locations highlighted in **Green** in the picture to the right indicate the best locations to mount your camera. Both locations are sheltered from rain or snow and offer good sight lines to allow your camera to monitor a wide area. Because your camera is weatherproof, it requires less protection than weather-resistant cameras and it can be placed in more exposed locations if needed. Keep in mind that this camera is designed to operate between -10°C to 50° with a relative humidity of up to 95%) and consider wind chill and other environmental factors when selecting your location.



## TO CONNECT TO A SECURITY DVR SYSTEM:

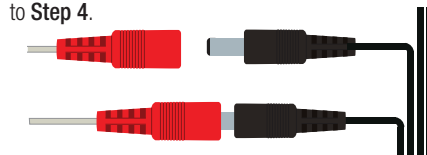
**STEP 1** Connect the BNC and power leads from the camera to the matching connectors on one end of the power and video cable.



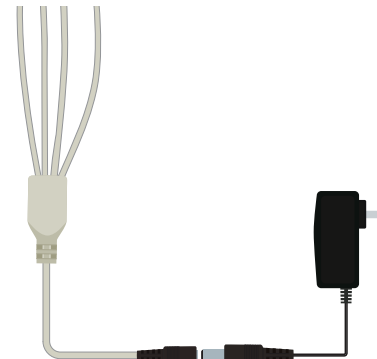
**IMPORTANT!** When connecting the power and video cable between the camera and the DVR, the "male" power end (red plug) connects to the matching power lead on the camera.

**STEP 2** For multi-camera packs, connect the power connector on the other end of the cable to the power splitter.

For single camera packages, connect the power lead into the power adapter itself. In this case, you can skip to Step 4.

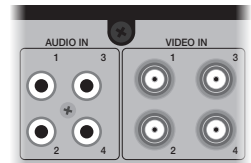


**STEP 3** Plug the power splitter cable into the camera power adapter. **DO NOT** plug the adapter into an outlet at this time.



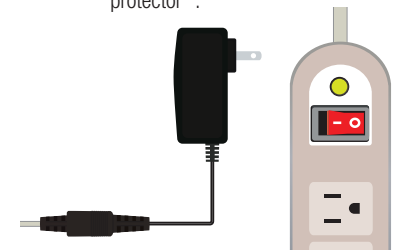
**WARNING!** If you have a multi-camera package, the included power adapter is designed to provide enough voltage to operate multiple cameras. Connecting a single camera to the adapter can cause the optical chipset of that camera to burn out and become useless.

**STEP 4** Connect the BNC connector on the other end of the power and video cable to a **Video In** port on the back of the DVR.



**Repeat Steps 1 through 4 for all cameras before continuing.**

**STEP 5** Plug the power adapter into a surge protector\*.



\*When selecting a surge protector, it is **STRONGLY** recommended to use one that is UL-1449 rated, for a clamping voltage of 330 or lower, a Joule rating of at least 400 and a response time of 10 nanoseconds or less.

## EXTENSION CABLES

For more information on which cable to use for your application, please see the extended chart at [www.q-see.com/cableselection](http://www.q-see.com/cableselection) To purchase, order online at [www.Q-SeeStore.com](http://www.Q-SeeStore.com)

Q-See Model Number	QS50B (50') QS100B (100')	QSVRG60 (60') QSVRG100 (100') QSVRG200 (200')	QS59500 (500') QS591000 (1000')
Maximum Run Length	200'	1650'	1650'
Quality Output	Standard	High	High
Type	75Ω Video Cable	RG-59	RG-59
Shielded	No	Yes - UL Rated	Yes - UL Rated
Plenum Rated	No	No	No
Pre-Attached Connector	Video BNC	BNC	BNC
	Audio N/A	N/A	N/A
	Power 2.1 mm	2.1 mm	2.1 mm
Usage	<b>Indoor/Outdoor - Do not run inside walls or underground</b>	<b>Indoor/Outdoor - In-wall or along wall</b>	

### Other Notes:

- If a cable run exceeds 200ft (240M), we recommend using RG-6 coaxial cable which is available at most retail building supply companies.
- Longer cable runs will require a stronger power supply or for the power supply to be closer to the camera.

### To maintain video quality:

- Video quality is always enhanced by using shielded cables.
- To prevent video signal loss, run one continuous cable between the camera and DVR for best results. If more length is required, use the minimum number of inter-connection points possible.



**WARNING!** Always check state and local laws before installing cameras and cables.

## PRECAUTIONS:



**CAUTION! Risk of electrical shock.** To prevent electric shock, do not remove screws or cover.



**Do not attempt to disassemble camera.** There are no user serviceable parts inside. Service should be performed by a qualified Q-See technician only.



**Handle camera with care.** Do not hit, shake, puncture or drop the camera as this could cause damage and prevent proper operation.



**Avoid strong light.** Do not aim camera at sun or aim strong light directly into the lens as it will degrade image quality and could cause damage. Camera should ideally be placed out of direct sunlight for improved performance.



**Protect from elements.** Indoor/outdoor cameras are weatherproof but direct exposure to excessive rain, sun or marine environmental conditions will degrade their performance and shorten the life of the product. Indoor-only cameras should NEVER be used outdoors. Even if sheltered from direct exposure, they will still be damaged by dust and moisture in the air.



**Avoid excessive moisture within camera or adapters.** Do not use strong or abrasive detergents when cleaning camera body. Clean with dry cloth or mild detergent, wiping gently.



**Do not use camera beyond prescribed voltage range.** Only use included power supply. Ensure power input source conforms to local voltage. Voltage outside of range could cause damage or abnormal performance.

## FREQUENTLY ASKED QUESTIONS:

Below are some frequently asked questions regarding cameras. Additional information, plus live chat (during regular business hours) can be found at [www.Q-See.com/Support](http://www.Q-See.com/Support)

**Lines in the video images.** Check the cable. If you connect a camera that is working to the cable of the camera that has the lines and it too shows lines, replace the cable. If you are in an area with a lot of electrical interference, switch to a shielded cable such as RG-59.

**No video from camera.** Check all connections and make sure that camera is connected to proper power supply. Check to see that the camera is receiving power by cupping hand over lens. You should see a faint red glow from the LEDs. Check camera on known functioning cable to determine if issue lies with camera or cable.

**Cable extended to more than 18 meters and no video or video only during the day.** The camera power supply/power splitter combination is only designed to power cameras up to 18 meters. Any cameras beyond that distance will need their own power supply which is available at [www.Q-SeeStore.com](http://www.Q-SeeStore.com)

**Dark video image.** Some cameras feature an infrared cut filter to improve daytime video images. This can sometimes become stuck. Place a hand over the lens for 10 seconds to trigger night vision mode. You may hear a soft click as the filter resets.

**Upside down video image.** Change the orientation or position of your camera to correct. Video images cannot be flipped within the DVR.

**Camera looking through window has video image during day, but not at night.** The LEDs on the camera act as a flashlight and, at night, this light is being reflected by the window back at the camera. You will need to reposition the camera outside the window.

**Camera video is very dark during one time of day, but lighter during others.** The camera may be positioned so that the sun shines directly into it. This will backlight the subjects in the camera's field of view and cause them to appear dark and washed out. Reposition the camera to avoid this, keeping in mind that the sun will change positions over the course of a year as well as during the day.

**Camera on metal building has excessive static.** The camera will need to be separated from the metal building by using a rubber gasket.

## LEGAL:

**Trademarks:** All brand names and products are trademarks or registered trademarks of their respective owners.

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Manufacture shall not be liable for any damages whatsoever from misuse of this product.

## DISPOSAL:

If the camera no longer functions or can no longer be repaired, it must be disposed of according to regulations regarding electronic waste. By not disposing of electronic items in household waste you will not only be following the law, but contributing to the protection of the environment.



### Digital Peripheral Solutions, Inc.

8015 E. Crystal Dr., Anaheim, CA 92807  
[www.q-see.com](http://www.q-see.com)

### Q-See Customer Support (USA)

FAQ, videos, guides 24/7 & live chat  
(M-F 6am-7pm, S-S 8:30am-5pm PST) at  
[www.Q-See.com/Support](http://www.Q-See.com/Support)