



Tech Tip 090029

IP Camera *Pre Buffer* must be set to a value higher than the maximum time between *I frames*

Tech Tip Number:	090029
Date:	October 27, 2009
Product Affected:	Vigil Server
Purpose:	This bulletin provides a description of how to calculate the ideal minimum value for the camera <i>Pre Buffer</i> based on the camera <i>I Frame</i> rates.

Situation: Vigil Server requires a full frame called an “I frame” before it can begin recording. The *Pre Buffer* and *I frame* settings must be adjusted so that the *Pre Buffer* is higher than the maximum time between *I Frames*.

Symptoms: Symptoms of a *Pre Buffer* value that is too low includes not seeing a second of video leading up to a motion event or missing the very first moments of a motion event.

How to calculate the number of seconds between I Frames:

Seconds between I frames = I Frame Rate ÷ Frames per Second

To calculate the number of seconds between I Frames, we must first find the values for the I Frame rate and the number of Frames per Second. Then the I frame can be calculated by dividing the I frame rate by the number of frames per second. The I frame rate should be set to a value equal to or higher than the number of frames per second.

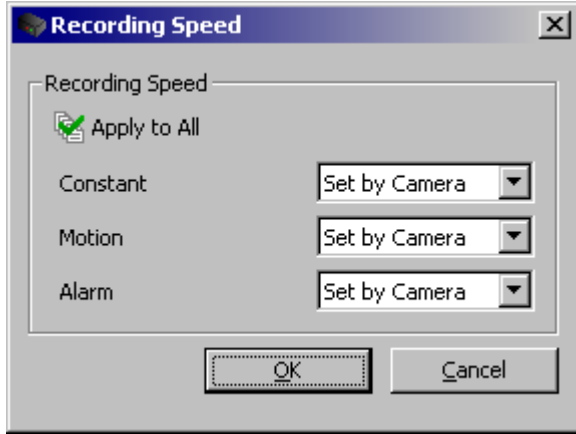


Note: For IP Cameras, the I Frame rate and Frames Per Second values are often found in the camera web settings.

Example:

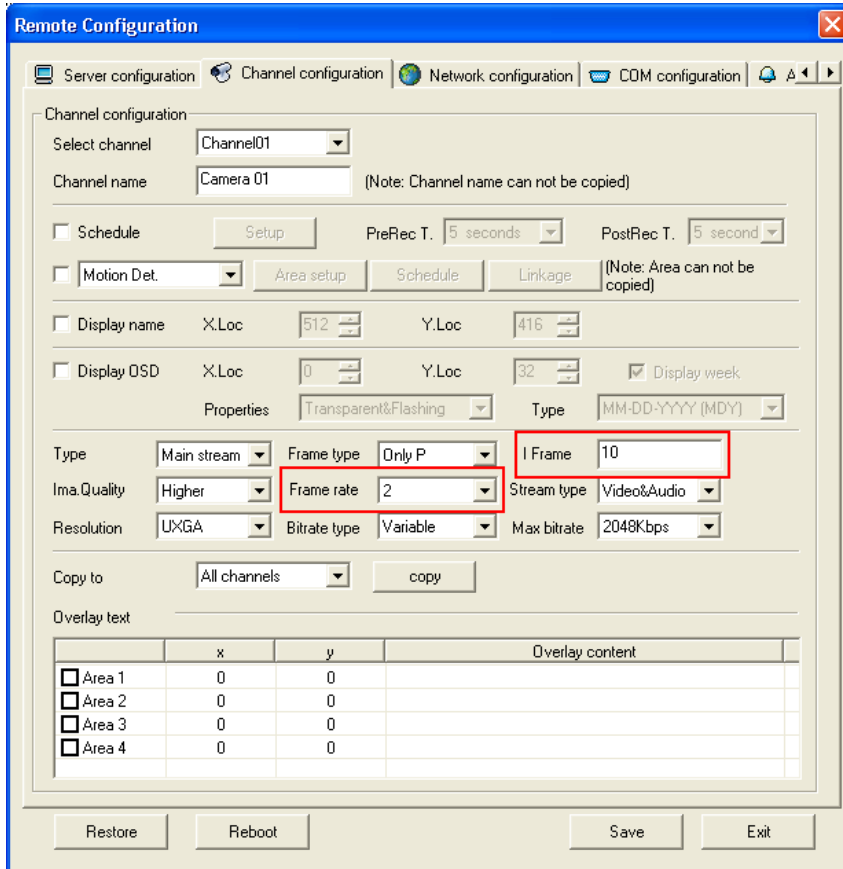
VSX Camera recording at 2 FPS with I Frame rate 10 requires a Pre Buffer minimum of 5 seconds

The VSX Camera Vigil Server recording speed is "Set by Camera":

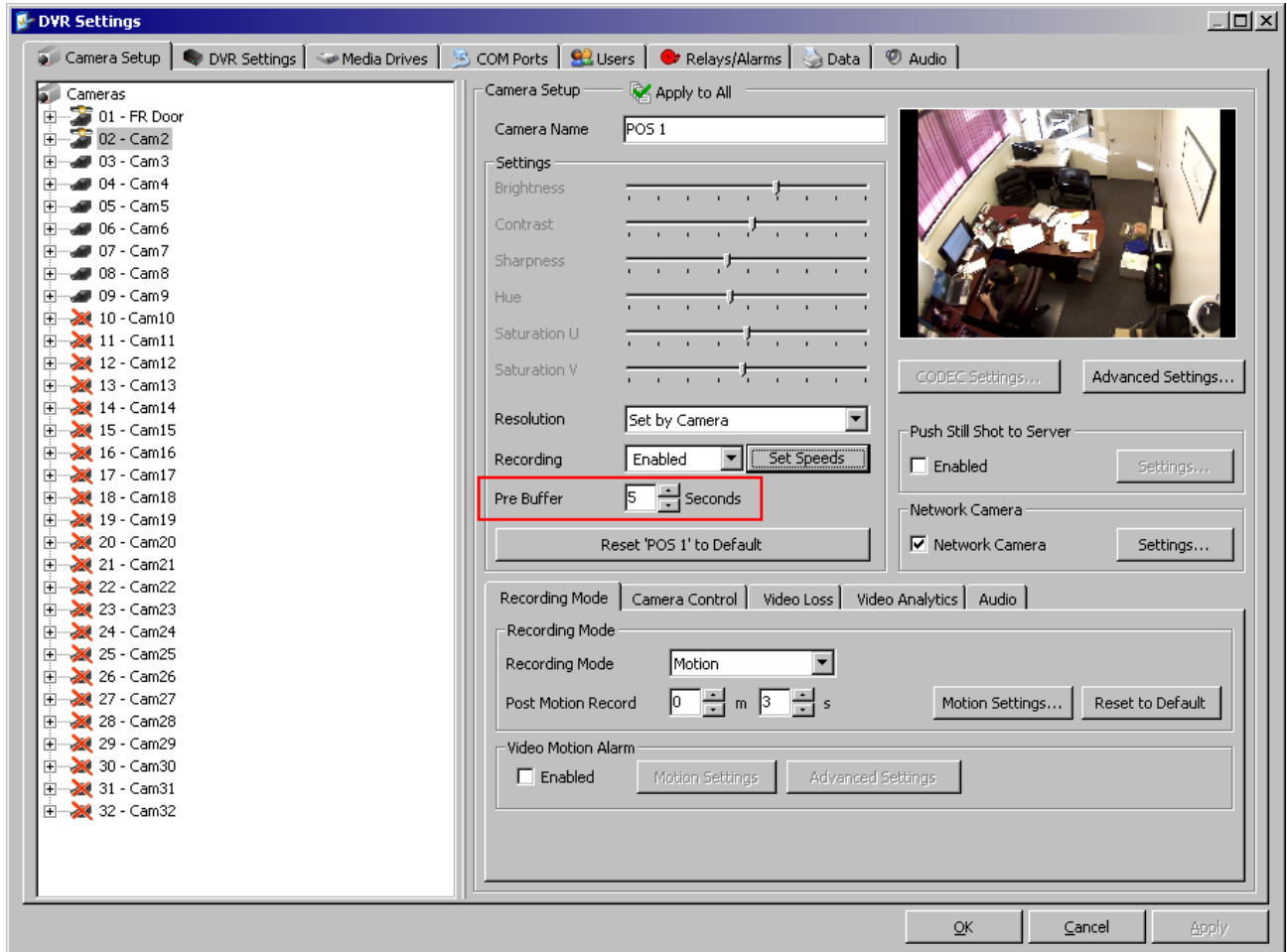


To find the value set in the camera we need to look at the camera web settings "Frame rate" value.

The VSX camera web settings have an I Frame rate of 10 and a Frame Rate (FPS) of 2:



The Pre Buffer value must be at least 5 seconds:



Contact Information

If you require more information, or if you have any questions or concerns, please contact 3xLogic Technical Support:

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