

H.264 Camera Configuration for Time-lapse Recording

H.264 compression uses a Group of Pictures (GOP) or Group of Video (GOV) to define how many P-frames are sent between each I-frame. (I-frames are complete pictures, whereas P-frames are partial frames reconstructed based on the last I-frame and all the P-frames in between.) Time-lapse recording stores I-frames. If time-lapse recording is configured at short intervals (about 30 seconds or less) on H.264/MPEG-4, time-lapse scheduling might not be able to record as fast as desired.

To ensure time-lapse records at the desired rate, the camera must be configured for a GOP/frame rate setting equal to or less than the time-lapse setting, in seconds. For example, suppose you have a camera with a GOP of 30 configured to record 5 frames per second (fps), which produces an I-frame once every 6 seconds (30 divided by 5). In this case, time-lapse recording cannot capture I-frames more than once every 6 seconds. Thus, the time-lapse interval must be greater than 6 seconds. If you want to record time-lapse video at shorter interval, you must reduce the GOP setting.