

DCIF

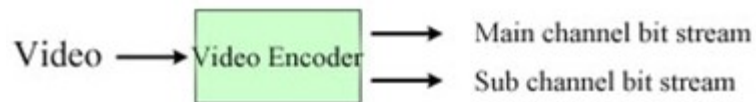
The standard 2CIF (704 * 288, also known as Half D1) resolution has doubled the level of CIF (352 * 288) in horizontal direction, while remains the same in vertical direction. The display ratio, which we are used to, is 4: 3, however. Thus the zooming of images in both horizontal and vertical directions will lead to visual imbalance.

If we use an odd HALF D1 and an even HALF D1 to form a D1 format after anti-interlaced transformation, with a 3/4 reduction in horizontal and a 2/3 reduction in vertical, the D1 format will be transformed to 528*384, whose pixel number is precisely twice of CIF format (352*288). In order to be different from the commonly-called 2CIF, we call it DOUBLE CIF or DCIF for short. Obviously, in both horizontal and vertical directions, DCIF is more balanced than Half D1, and it has better resolution in both directions than CIF.

After testing a large number of video signals, DCIF (528*384) can solve the not clear problem of CIF and large stream data problem of D1 based on the current video compression algorithm, and acquire stable, high-quality image with bit rate between 512K-1M.

Dual Stream

It means a channel of video images passing through the video coder, and output 2 independent bit streams as shown in the figure:



The resolution, frame rate, bit rate and other parameters of output bit stream can be set independently. The output dual stream can meet different demands, for example, one for hard disk storage and the other for network transmission.

Dynamic Adjustment of Encoding Parameters

The user adjusted encoding parameters can take effect at once without pausing or restarting of network transmitting and recording.

In the surveillance system, for static monitoring scene, video can be recorded in low bit rate through reducing resolution, image quality, bit rate and frame rate, while changing of image scene requires higher resolution, bit rate and frame rate of video, etc to get high quality video stream. Since the above parameters can be dynamically modified, continuous images can be maintained without switching files frequently. And it does not only meet the requirement of high-quality images at critical moments, but also save the disk space and network bandwidth