Switcher System Timing (SST) => This is the switcher system timing. The position of SST to reference is controlled by H and V Offsets in the Switcher Video Timing Menu.



IP signals MUST be received earlier than SST time. Another way of saying the same thing is that SST time must be later than the IP inputs. It's the same thing it just depends on your point of reference.

The IP front end has about a line of delay in it. So this means that the IP inputs must be at least 1 line early.

The Decap Packet buffers can accommodate multiple line difference between IP inputs but the output of the Decap must be at SST + a few usec in order to line up all inputs for video processing.

Rough numbers:

1080p IP Inputs must be 1 to 6 lines earlier than SST 1080I IP Inputs must be 1 to 6 lines earlier than SST 720P Inputs must be 1 to 9 lines earlier than SST

Encap time is the amount of time it takes to accumulate a packet of data. You can't send a packet until you have the entire packet. This time varies by video line rate.

1080i/p ~= 1/4 video line 720p ~= 1/3 video line