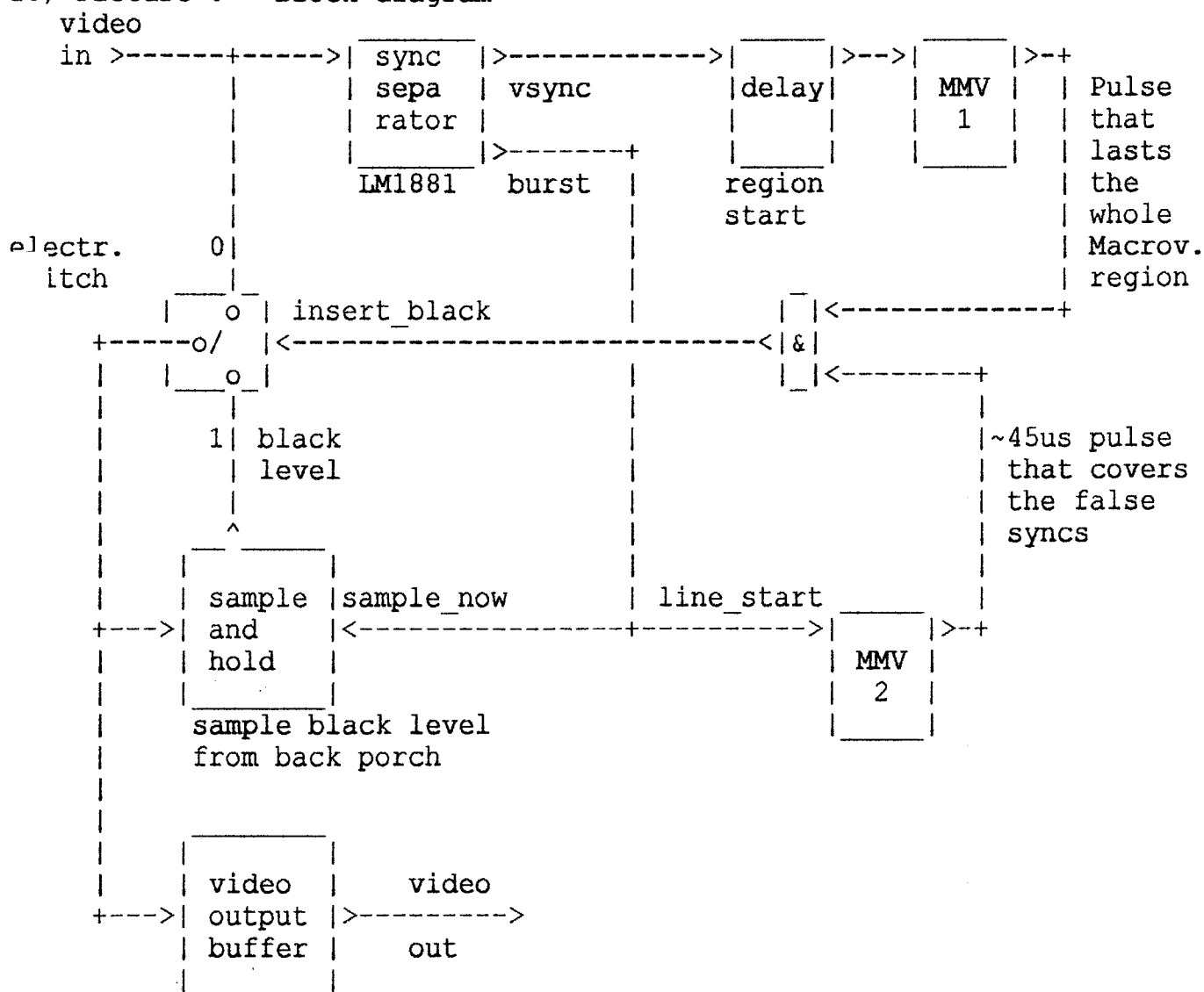


Too many cheap electronic switches along the signal path ==> visibly worse picture quality (soft, color fluctuations).
 Chops off color burst from protected lines ==> horrible color purity errors near the top edge of the picture (perhaps the most visible error).
 Below is a block diagram of my currently satisfactorily working device. It resembles only remotely the EE one. The basic idea is that the Macrovision pulses are replaced with a black level. I challenge anyone to make a simpler device.

15) Picture 8 - Block diagram



Some explanations:

Sync separator is the small and cheap LM1881. Only vertical sync and burst gate are used. I mention the explicit type here, because the device is practically built around it and because it replaces a whole chunk of analog electronics.

The sample and hold circuit is used to sample the black level. Although the sampling occurs at color burst time, I have not experienced any difficulties. 2 op amps, 1 electronic switch and a capacitor make a wonderful S&H circuit. The sampling input is from the output of the video switch, because the false syncs trigger LM1881 too.

The delay block delays the vertical sync until the Macrovision region is