Standard CPC display (excluding hsync/vsync etc)

R0 = 63 (value – 1)

R1 = 40 (value)

R4 = 38 (value – 1)

R6 = 25 (value)

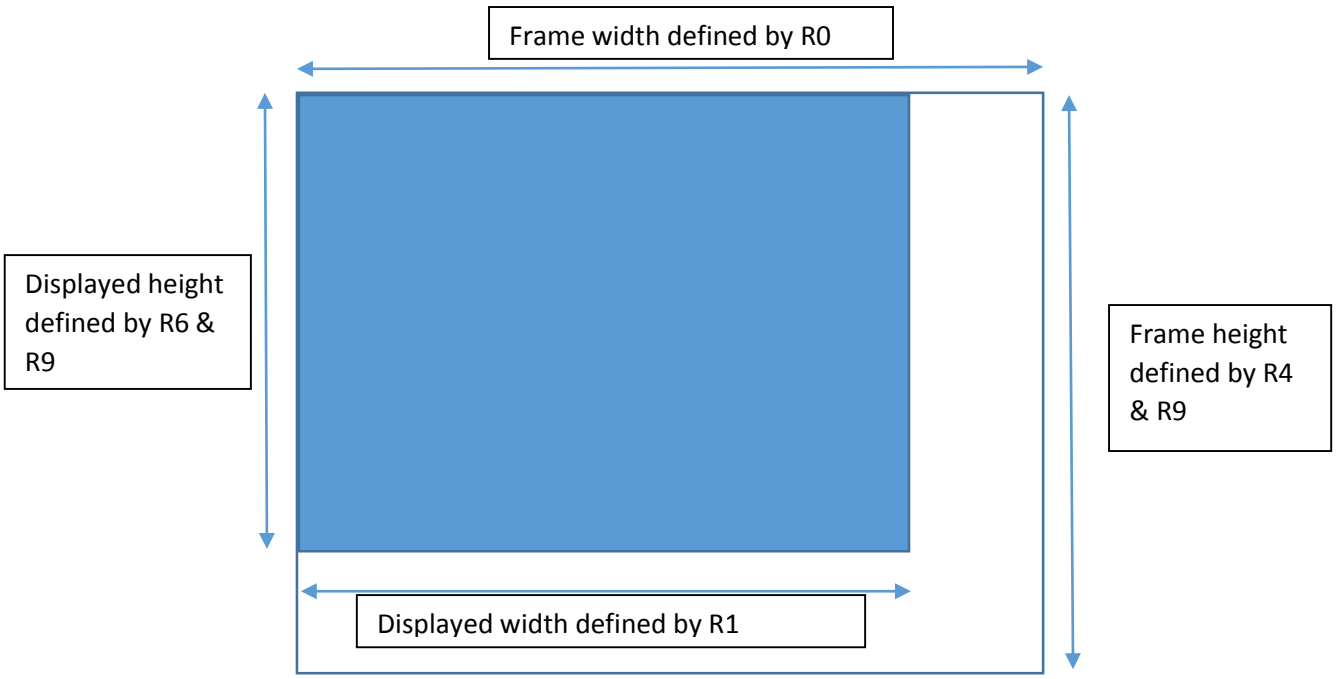
R9 = 7 (value-1)

Frame width of 64 equals horizontal frequency of 15Khz which matches the television/monitor frequency.

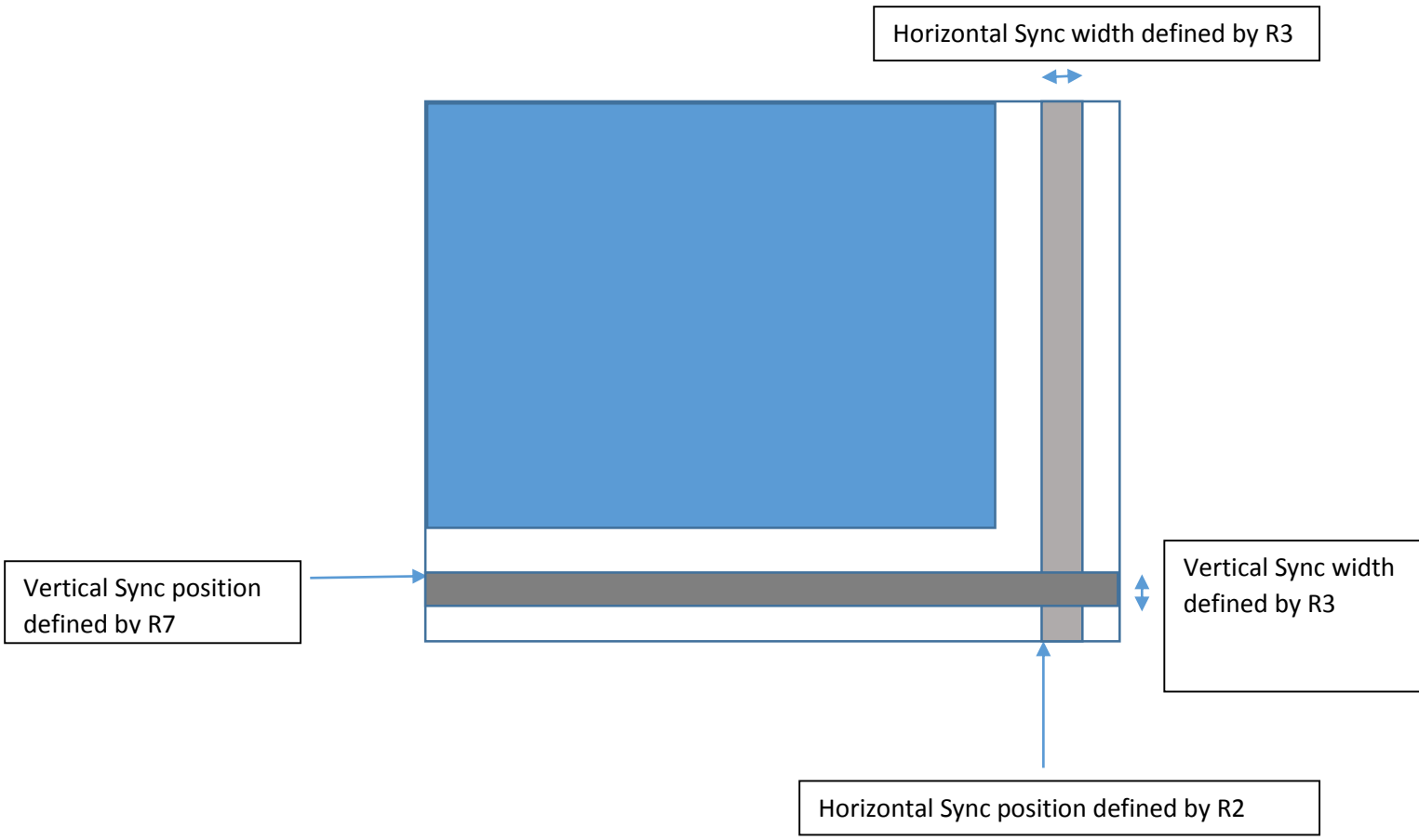
Displayed in scanlines is R6*(R9+1) = 200 lines

Frame height is (R4+1)*(R9+1) = 312.

312 lines is for 50Hz.



Standard CPC display (showing hsync and vsync)



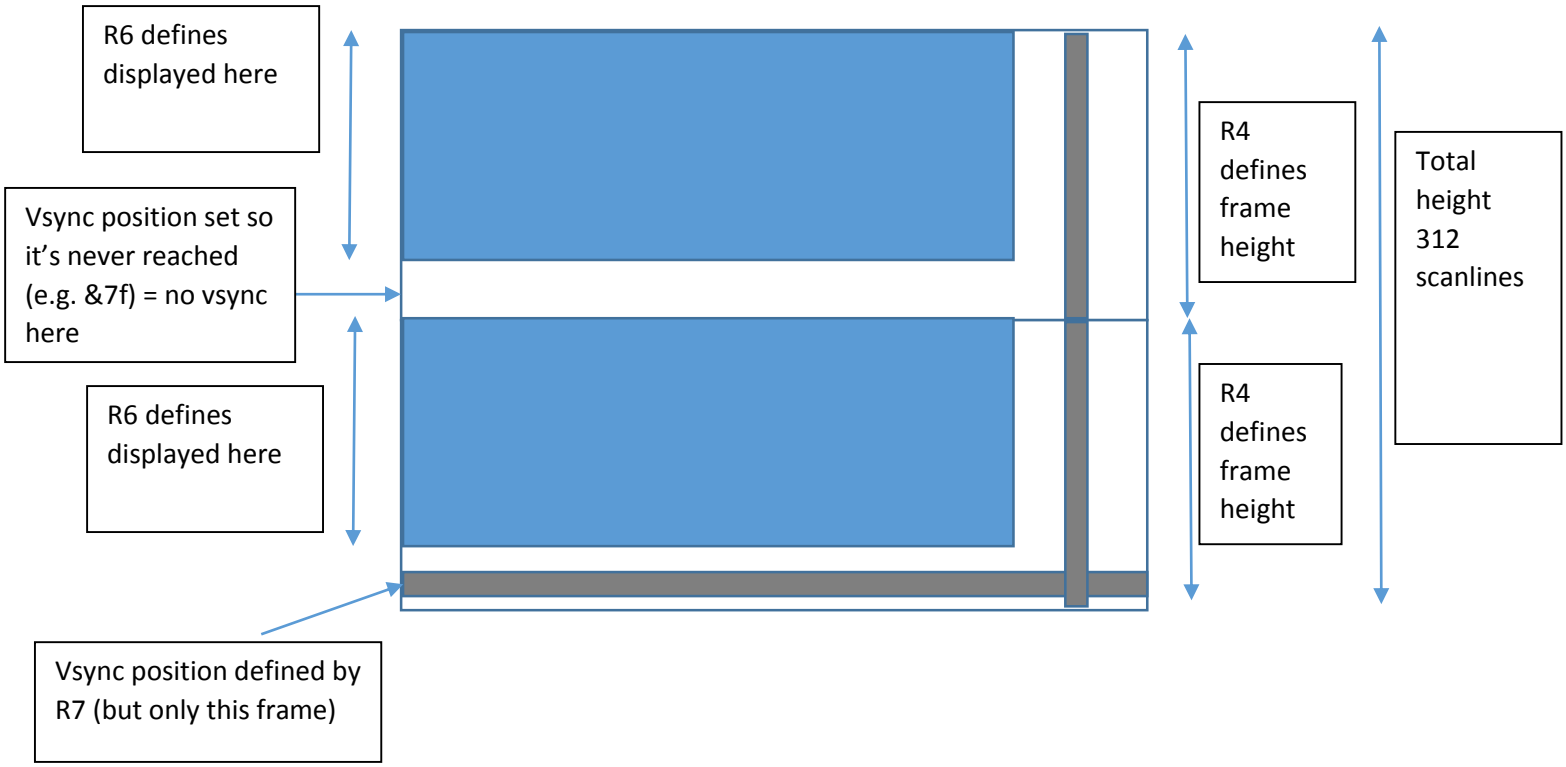
Standard CPC display how monitor displays it.

When the start of the horizontal sync is seen by the monitor it starts the next line. This means border is effectively split between left and right side of the display.

When the start of the vertical sync is seen by the monitor it starts the next line. This means border is effectively split between top and bottom of the display.

Rupture technique

- We make multiple frames using R4 to define the height of each.
- Set Vsync position so it is not triggered until we want it to.
- IMPORTANT: Make sure all the frames add up to 312 scan-lines so that display is stable.



Normally R6 is set so that we don't see border between each frame.

If we don't set the total frame height to be 312 lines then some monitors will not display it correctly.

NOTE: Rupture requires good timing. We can split the screen as we want adding as many frames as we want with differing heights. Each frame can have it's own R12/R13 values so we can scroll them independently or have one static and one scrolling.