

The normal video modulation input is set up to accept NTSC video at a 1 volt peak to peak level. The video board has a standard NTSC 525 line pre-emphasis filter which the video passes through- see C47, R35 through 40, and L13 on sheet 2 of the video board schematic. This shapes the video response to follow a standard NTSC 525 line pre-emphasis curve. U12 will roll off the video level above 5 MHz, limiting the high frequency response of the transmitter.

The modulation level is set independently for each channel on the transmitter, step 7 of the tune-up procedure. This individual level control for each channel allows precise control of the occupied bandwidth of the transmitter. When it is set in the manner called out in the test procedure, it will not occupy more than the allowed modulation spectrum. A plot of the occupied spectrum was submitted in Exhibit ???.

Here is the data for the modulation response of the transmitter:

2 Hz to 5 MHz: The transmitter follows the EIA/TIA NTSC 525 line curve within .3 dB.

Above 5 MHz: The transmitter modulation response degrades to -4 dB at 10 MHz, and -15 dB at 20 MHz.