

TECH NOTE

U97-ULTRA-2B



Receiver Video Output Adjustment

Excerpts from UMA1158 Rev. F

Sender Front Panel Controls and indicators



Keep the VIDEO ADJUST switch in RUN mode for normal operation. Set it to CAL (calibrate) mode to adjust the video at the remote unit per the following descriptions

Receiver Front Panel Controls and indicators

The Console Extender-Remote unit can be operated in two different modes, which are RUN - mode and CAL-mode.



In RUN-mode, all LEDs and buttons for video adjust are off. And tapping on the control buttons have no effect. This prevents accidental and unintended video adjustment, though it is possible to make adjustments in RUN mode by long pressing the Select button as described below.

In CAL-mode, the Sender disconnects the user's video input and substitutes an internally generated video test pattern that is designed to aid in video calibration. The Receiver automatically recognizes the CAL mode and lights the video adjust LEDs

Lit LED	Mode
A	Calibrating Video A (Select, Up, and Down buttons adjust Video A output)
В	Calibrating Video B (Select, Up, and Down buttons adjust Video B output)
RED	Up and Down buttons adjust the horizontal position of Red components
GRN	Up and Down buttons adjust the horizontal position of Green components
BLU	Up and Down buttons adjust the horizontal position of Blue components
R+G+B	When all 3 LED's are lit the Up and Down buttons adjust the high-frequency gain of all video components

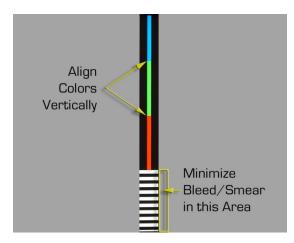
Notes:

- 1) Press and hold the UP or Down buttons to ramp through the adjustment
- 2) When you reach the max or min limit of any adjustment all 3 LEDs flash
- 3) To quickly jump to minimum setting press both UP and Down buttons together

Adjusting Video compensation for long cables

Use the VIDEO ADJUST switch on the Sender and set it to CAL. This puts the Receiver in the calibrate mode and also activates a test pattern. The Receiver stays in this calibrate-mode until the VIDEO ADJUST switch is set back to RUN.

The following figures show how an image can be adjusted to become perfect by using the receiver front panel controls.



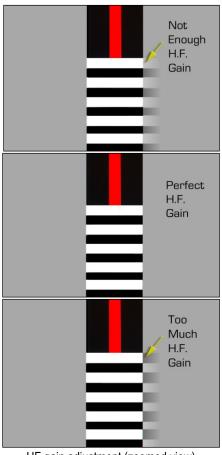
Test Pattern for HF Gain and Skew adjustments

Select the video channel that you are going to adjust (A or B).

Start by adjusting HF gain (hit Select button as needed to light all 3 LED's on the Receiver). It is best to start at the min compensation setting. To do this either press the Down button repeatedly until the LED's blink (indicates you are at min), or simply press both Up and Down buttons simultaneously (this will set the adjustment to minimum).

If the UTP cable is long then the black and white horizontal lines tend to appear smeared (black smears as black, and white as white). Press the Up button one click at a time paying particular attention just to the right of the horizontal lines. Your goal is to make the transition between the horizontal black and white lines and the grey background to have as little smear as possible. Do not over adjust. If you do, some smear comes back particularly near the transition but in reverse sense (white lines smear as black and vice versa). The following

images depict the adjustment results as seen on the screen:



HF gain adjustment (zoomed view)

Once you have adjusted the HF Gain, hit the select button to cycle through the Red, Green and Blue colors and use the Up and Down buttons to align the colors vertically.

When you are all done, go back to the Sender and put the switch in the RUN mode. The Receiver's Calibration LED's will go out and the buttons will not be operative.



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