

## Architectural Specification for the Intelix AVO-V3AD Component Video/Digital Audio Balun

The unit shall be a rack-mountable component video and digital audio balun that transmits one HDTV component video (Y, Pb, Pr or RGB) signal and one digital audio signal over unshielded twisted pair cabling, such as Cat 5. The maximum distance of the digital audio shall be 600 feet. The maximum distance of the 480i/p video shall be 1,000 feet. The maximum distance of the 480i/p with digital audio shall be 600 feet. The maximum distance of the 720p video shall be 500 feet. The maximum distance of the 720p with digital audio shall be 500 feet. The maximum distance of the 1080i/p video shall be 500 feet. The maximum distance of the 1080i/p with digital audio shall be 500 feet. The video bandwidth shall be 60 MHz with 3 dB roll off and the audio bandwidth shall be 25 MHz with 1 dB roll off. The impedance shall be 75 ohms at 2 MHz. The maximum input of the unit shall be 1.1 Vp-p. The insertion loss for the video channel shall be 0.1 dB for 0.1 MHz, gradually increasing to 2.5 over the frequency range. The insertion loss for the audio channel shall be less than 1 dB over the frequency range. The return loss for the video channel shall be greater than 15 dB over the frequency range. The return loss for the audio channel shall be greater than 15 dB over the frequency range. The common mode rejection shall be -55 dB at 0.1 MHz, gradually increasing to -20 dB at 60 MHz. The RJ45 pinout for the red (Pr) video channel shall be pins 7 and 8 (pair 4). The RJ45 pinout for the green (Y) video channel shall be pins 3 and 6 (pair 3). The RJ45 pinout for the blue (Pb) video channel shall be pins 1 and 2 (pair 2). The RJ45 pinout for the digital audio channel shall be pins 4 and 5 (pair 1). The connectors shall be four gold-plated female RCA. The unit shall be an Intelix AVO-V3AD component video/digital audio balun.