



HD-SDI Balun (500701) Frequently Asked Questions (FAQ)

1. **The maximum bandwidth of Category twisted pair cable is typically 500 MHz. How can this cable support HD-SDI which has a bandwidth requirement of 1.5 GHz?** The bandwidth of Category cable is primarily based on the ability to support Ethernet. On the otherhand, SDI signal transmission is not as much dependant on whether the cable is twisted pair or coaxial but rather on cable length. Furthermore, since SDI has good equalization, signal attenuation (and therefore distance) is more important than bandwidth and therefore bandwidth is not defined the same way. From the technology standpoint, SDI may be compared to DSL modem technology.
2. **Can the unused twisted pairs be used for remote power without interfering with the video?** According to MuxLab's R&D Dept, passing DC remote power on the unused pairs should work fine. However, AC voltage maybe problematic as there can be some interference from the 60Hz AC voltage. This interference may affect the image quality depending on the type of display and its immunity to outside interference.

For more information, please contact MuxLab Customer Technical Support at 877-689-5228 (North America) or (+1) 514-905-0588 or at videoease@muxlab.com or visit <http://www.muxlab.com/>.

Dec 10, 2012
Rev A