



Component Video/Stereo Audio Balun (500058) Frequently Asked Questions (FAQ)

1. **Is the 500058 compatible with the 500050/51/52/53/54/55/56/57 and 500250/251/252/253?** No. The transmission technology is completely different and not compatible with the part numbers listed above..
2. **Does the 500058 support true stereo audio?** Yes.
3. **Does the 500058 have greater immunity to ground loop issues?** Yes. The 500058 has a US patent-pending design called Ground Loop Coupling (GLC) that helps eliminate hum bars.
4. **Does the 500058 have full ground loop isolation?** No.
5. **Is the 500058 expected to replace the 500050 family of baluns?** No. In many applications, only component and/or mono audio is required and therefore the standard HD baluns will be used.
6. **Is there a noticeable difference in image quality between the 500050 and the 500058?** No. There is no perceptible difference.
7. **Is the 500058 available with only RCA receptacles instead of video cable leads?** No. Due to space constraints, the product is only available with video cable leads.
8. **Does the 500058 need to be used with STP cable?** No. UTP cable is recommended.
9. **Can video be sent in one direction and the audio in the opposite direction?** Yes.
10. **How is it possible that the 500058 can support both component video and stereo analog audio on four twisted pairs? It seems like one would need five twisted pairs for this to work?** Normally five twisted pairs are needed to transmit RGB and stereo audio. However, the 500058 uses proprietary technology to combine RGB and true left/right stereo audio over four twisted pairs while maintaining true left/right audio separation.
11. **Is there any performance differences between the 500058 and the 500050/500028 combination?** Yes. In regard to the 500058, it is necessary to ensure that either the video source or receiver is connected to local ground via a 3-prong AC power cord. Furthermore, the 500058 has an additional feature that helps eliminate "hum" bars in the presence of a ground loop.
12. **Is there any noticeable difference in audio performance between the 500058 and the 500028.** No. There is no noticeable difference.
13. **Is it still recommended to lift the ground connection on the send or receive side if herring bone or hum-bar noise still results, despite the unit's Ground Loop Coupling (GLC)?** Yes. If there are hum bars with the 500058, it is still recommended to lift ground. GLC does not provide ground loop isolation. Rather it helps cancel out ground loop effects.
14. **I understand the 500058 supports component video and stereo audio over one Cat5e cable. What are the pin assignments?** The 500058 pin assignments do not assign video and audio to separate pairs. Rather, they are combined over the same twisted pairs in a more complex manner versus the 500052. Therefore the pin assignments are not published as they would not help in troubleshooting. As long as the Cat5e cable is wired according to EIA 568 (A or B), the connection is good.
15. **Does the 500058 allow Audio Channel 1 (Left) to be transmitted in one direction and Audio Channel 2 (Right) to be transmitted in the opposite direction?** Yes.

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/>.
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