

Technical Bulletin

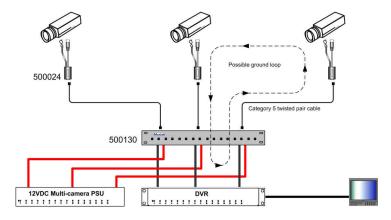
Product: 500130, 500022, 500024, 500009

Subject: Multi-Camera 12VDC Power Supplies - Ground Loop Issues

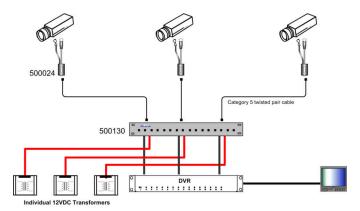
Date: Apr 18, 2007

Purpose: This technical bulletin covers the issue of using multi-camera 12VDC power supplies (PSU) with CCTV balun and copper twisted pair cable.

Problem: It has been found that when using multi-camera 12VDC power supplies in conjunction with CCTV baluns and copper twisted pair cable, ground loop problems can arise. The problem arises due to the fact that the power supply wires going to each camera are not isolated from each other and therefore there is a greater likelihood of a ground loop being created. When a ground loop is present, there are usually horizontal lines moving upward on the screen. Sometimes the problem only becomes apparent after connecting three or four cameras to the power supply. The problem has been known to occur after three (3) or four (4) cameras have been connected to the PSU. Adding additional cameras reveals the ground loop between one or more cameras.



Solution: In order to avoid the problem, it is recommended to use individual 12 Volt DC transformer-based power supplies instead of multi-camera 12VDC camera power supplies.



For more information, please contact MuxLab Technical Support at 877-689-5228 (toll-free in North America) or (+1) 514-905-0588 or at videoease@muxlab.com.

