

Multi Balun Specifications:

Models and Dimensions

UDR-Multi (in-wall Decora™ version): 4.1"h x 1.4" w x 2.0"d.

UDS-Multi (in-wall Decora™ version): 4.1"h x 1.4" w x 2.0"d.

Video Bandwidth: 450 MHz @ -3 dB.

Video Input and Output: 0.5 V to 2V p-p.

Audio Input Impedance:

Receive Unit: 20k ohms, max 3 Vp-p.

Frequency Response: 10Hz-50kHz +/- 3 dB

Input and Outputs:

Send Unit: six gold RCA input jacks, two RJ-45 out-jacks, one-DC power input, one 3.5mm stereo infrared emitter output jack.

Receive Unit: six gold RCA output jacks, two RJ-45 in-jacks, one-DC power input, one 3.5 mm triple jack to connect a [three wire Knoll or other infrared receiver](#).

Power: Send and receive units: 12 VDC 250 mA. We suggest using the Knoll PS1205.

Infrared:

Send Unit: One stereo 3.5mm jack to connect one single or one dual emitter.

Receive Unit: One triple 3.5 mm jack to connect a three wire Knoll or other infrared receiver. Supplies 12 VDC power for infrared receiver without requiring another power supply.

Warranty

Knoll Systems warrants its products sold in the USA and Canada by authorized Knoll dealers to be free of defects in materials and workmanship. This warranty extends for three full years from the date of purchase by the original consumer. Any products returned to Knoll Systems and found to be defective by Knoll Systems within the warranty period will be repaired or replaced at Knoll Systems option, at no charge. Knoll Systems will not be responsible for the actual cost of installation or removal of the product, nor for any incidental or consequential damages. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation may not apply to you. This warranty gives you specific legal rights. You may have additional legal rights that vary from state to state.

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UDR-Multi A/V Receiver UDS-Multi A/V Sender



Installation Instructions v1.4

Warning: To be installed and/or used in accordance with appropriate electrical codes and regulations. If you are not sure about any part of these instructions, consult a qualified electrician.

Caution: Do not install this product in an electrical junction box with 110V or higher unless an approved barrier separates the high and low voltage sections.

Introduction: Thank you for your purchase of a Knoll active balun system. This system is designed to send a three wire Pb, Pr, Y component or RGB, digital audio (Dolby® digital or DTS®), analog stereo audio and infrared signals safely down two CAT5 or CAT5e wires up to 500 feet without encountering signal degradation problems. Balun is an acronym for:

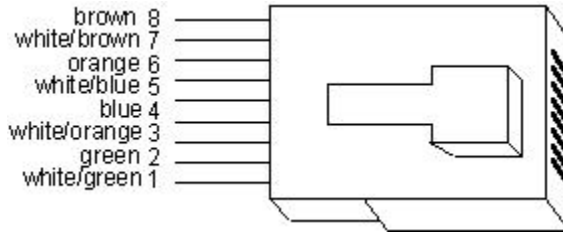
BALance – **UN**balance

The send module takes a conventional component signal, analog and digital audio and balances it (signal is not tied to a ground reference) then sends it via two cat 5 wires to the receive module (with power from the send module). The receive module unbalances the signals back to their former state. This process does not allow any stray magnetism of any sort to contaminate the signal while it is being transported.

Features:

- Send component video signals.
- Will safely send 480i/p, 720p and 1080i/p signals.
- Send analog audio and digital audio.
- Send infrared signals
- Two CAT5 or CAT5e wires required.

Wiring: A send module (UDS-Multi) needs to be connected to a Knoll receive module (UDR-Multi) to work correctly. The send and receive modules are connected using two CAT5 wires using all 8 conductors on both wires. Connection is made with the RJ45 connector (RJ45 plug not supplied). Always use standard CAT5 wiring practices. Using the correct wire pairs and polarity is **VERY** important.



Connection to stereo video source equipment: Connect the one or three UDS-Multi gold video RCA jacks with a good quality gold connector RCA jumper cable to the appropriate **three component output** jacks on your DVD, dish receiver, D-VHS, VCR, stereo or other equipment.

Connect the analog stereo or digital audio output to the UDS-Multi.

If there is a switched outlet on your output equipment, you may want to plug the PS1205 power supply to the switched outlet.

Power requirements: The Knoll multi balun system requires one PS1205 power supply connected to either the send or receive unit but not both.

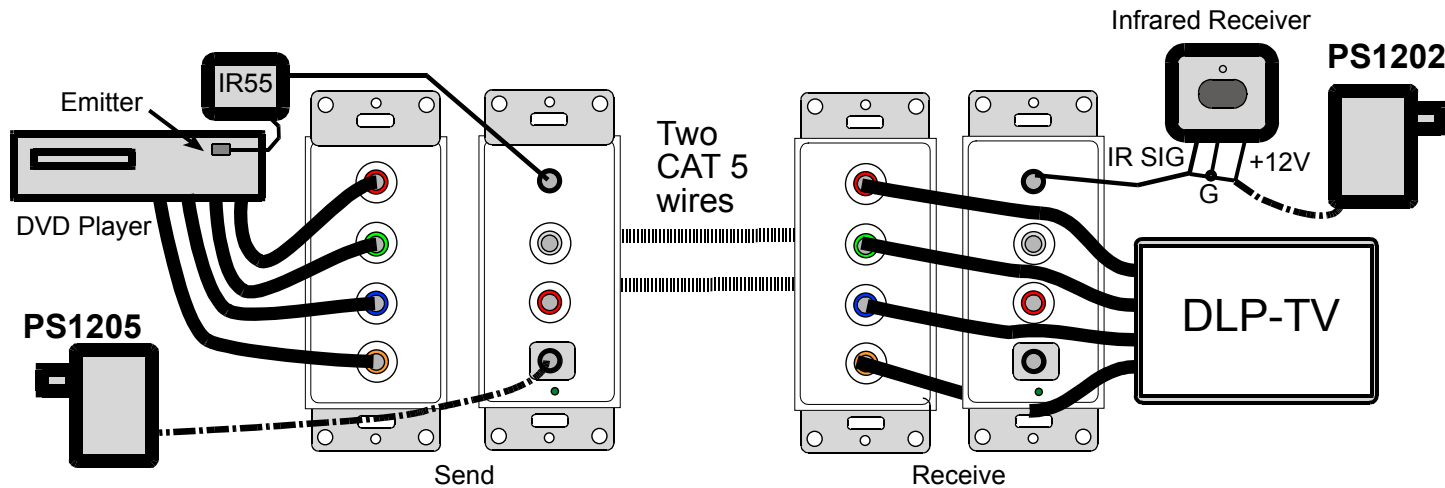
Connection to the Projector, TV or other components: Connect the one or three video gold RCA jacks with a good quality gold connector RCA jumper cable to the appropriate **three component input** jacks on your projector, plasma, TV or other component. Make sure the correct projector, plasma, TV or other component input is selected. Connect the analog stereo or digital audio input to the UDR-Multi.

Infrared: The Knoll stereo balun system can carry infrared signals in either direction. An infrared receiver (not supplied) is connected using its signal and ground outputs connected to the mono jack on either the send or receive balun (tip is signal or IR output and sleeve is ground on the 3.5mm jack). A separate power supply for the infrared receiver is required.

An IR54 or IR55 connection module is connected using the ground and IR signal terminals on the IR54 or IR55 and a mono 3.5mm jack connected to the other balun. Again the 3.5mm jack tip is the IR output and the sleeve is ground. Plug emitters to the IR54 or IR55.

Make sure a good quality RJ45 8-8 crimper is used to connect the RJ45 connector to the CAT5 wire. Poor crimping and mismatched wires are the most frequent cause of installation problems.

If an emitter is directly connected to the send unit without a connection block, a 470 ohm dropping resistor needs to be inserted in series in the emitter wire or the emitter will fail after a short period of time.



The Knoll send receive system does not have any user adjustments and is completely automatic. If need be, please call our tech line for details at 1 800 566 5579.

This product may contain lead that some states have determined are harmful. Wash you hands after touching this product.

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