IR Remote Extender Kit (500600)
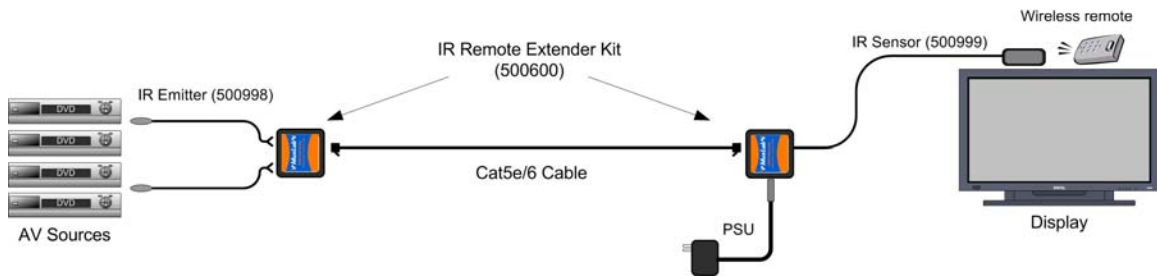

Application Guide
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Purpose

The purpose of this document is to explain how to apply the IR Remote Extender Kit under different configurations and to discuss issues that are not necessarily covered in the Product Datasheet or Installation Guide.

Controlling an AV Source Device from the Display Side

The typical application for the 500600 is to extend the range by which one can control an AV source via IR remote control. For example in a large manufacturing facility, an AV source may be on one end of the plant and a viewing screen on the other end.


Controlling a Display Device from the AV Source Side

In retail video or digital signage applications, the 500600 allows a display screen to be shut down at the end of a day without having to go the actual screen. Up to four (4) screens could be turned off on one location when all four (4) IR emitters are connected.
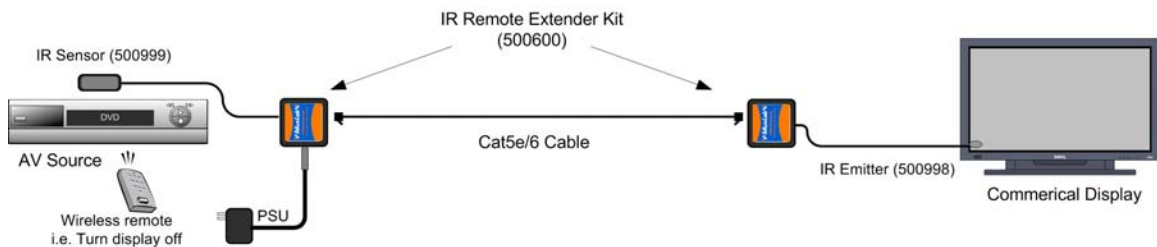
Integrating Balun Pass-Thru With IR Remote

The pass-thru terminals on the 500600 allow other low voltage services to share the same Cat5e cable as the IR. For example, the unused twisted pairs could be used to transmit composite video, S-Video or component video via the use of MuxLab baluns.
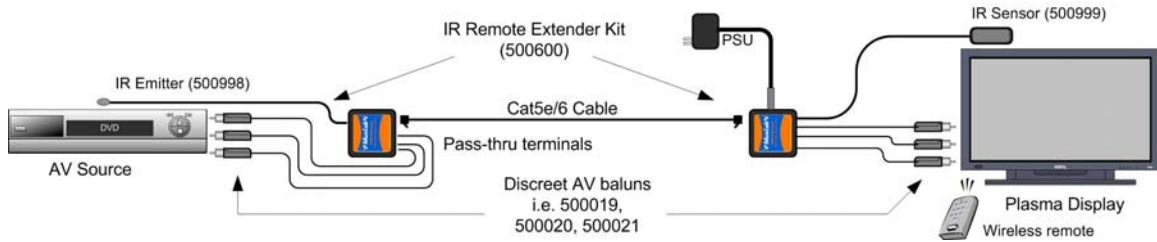

Using the Pass-Thru Terminals with Other MuxLab Baluns

The pass-thru terminals are mapped to specific twisted pairs as identified on the product. The IR rem ote signal is on pins 7&8 which is the brown pair according to EIA568A.

Using Jumper Cables To Connect MuxLab Baluns to the Pass-Thru Terminals

By using unterminated RJ45 jumper cables, almost any MuxLab AV balun may be connected through the 500600 thereby providing extended IR remote control for any AV over Cat5e application.
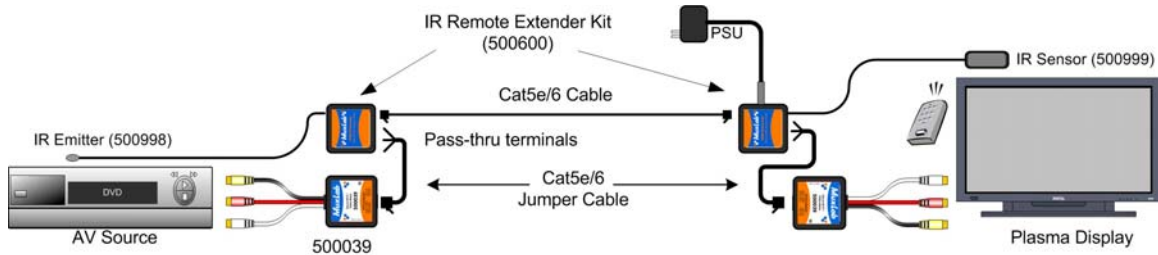
EIA568A Color Coding

MuxLab baluns follow the EIA568A standard. Therefore, when preparing customer jumper cables to use match the baluns with the 500600, terminate the cables according to EIA568A. Then use the table in the following section to connect the unterminated end of the jumper cable to the 500600.
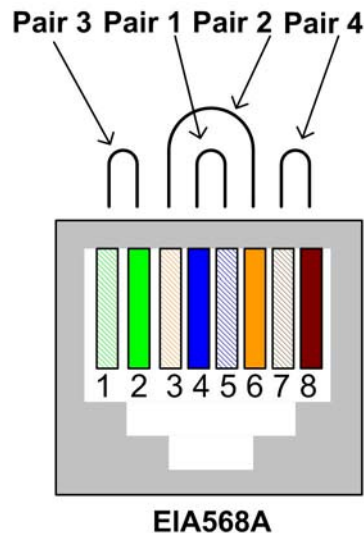
RJ45 Pin	Wire Color
1	Green/White
2	Green Solid
3	Orange/White
4	Blue Solid
5	Blue/White
6	Orange Solid
7	Brown/White
8	Brown Solid

Wiring Table for Jumper Cable to Pass-Thru Terminals

The following table specifies the color pairs to connect from an Cat5e/6 jumper cable between a MuxLab balun and the pass-thru terminals on the 500600. Must be a twisted pair connected to each block. Suggested wiring table. The pin numbers on top row correspond to the pin numbers on the RJ45 of the 500600. The pin numbers beside each balun p/n correspond to the pin numbers on the RJ45 of the balun.

	IR Pass-Thru Terminal Blocks on 500600					
	Terminal Block #1		Terminal Block #2		Terminal Block #3	
	RJ45 Pin on 500600		RJ45 Pin on 500600		RJ45 Pin on 500600	
	4	5	3	6	1	2
P/N						
500000	7	8				
	Video		Not used		Not used	
500001	7	8	3	6	1	2
	Video		Audio 2		Audio 1	
500002	7	8	3	6	1	2
	Red (Pr)		Green (Y)		Blue (Pb)	
500012	7 (or 4)	8 (or 5)	3	6	1	2
	Video		Audio 2		Audio 1	
500016	7	8	4	5		
	Luma (Y)		Chroma [C]		Not used	
500017	7	8	4	5	1	2
	Luma (Y)		Chroma [C]		Audio 1	
500018	7	8	4	5	1	2
	Luma (Y)		Chroma [C]		Audio 1	
500019	R	T				
	Audio					
500020			R	T		
			Digital Audio			
500021					R	T
					Video	
500025/26	R	T				
	XLR Audio					
500027			3	6	1	2
			Audio 2		Audio 1	
500028			3	6	1	2
			Audio 2		Audio 1	
500030			3	6	1	2
			Audio 2		Audio 1	
500031	7	8				
	Video		Not used		Not used	
500038	7	8	4	5	1	2
	Luma (Y)		Chroma [C]		Audio 1	
500039	7	8	3	6	1	2
	Video		Audio 2		Audio 1	
500050/51	7	8	3	6	1	2
	Red (Pr)		Green (Y)		Blue (Pb)	
500052/53	7	8	3	6	1	2
	Red (Pr)		Green (Y)		Blue (Pb)	

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