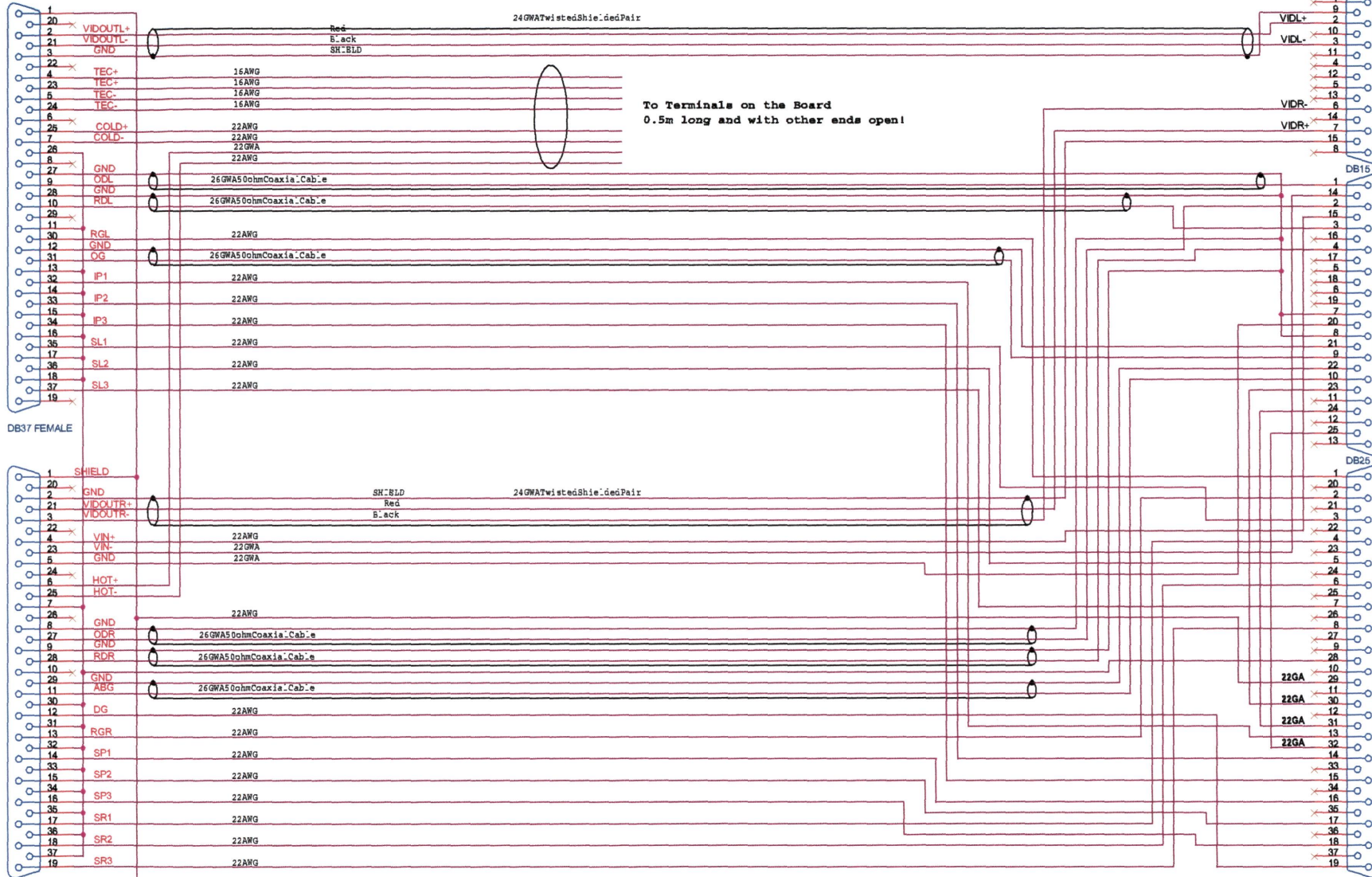


ESO SYSTEM ASSEMBLY FILES

Astronomical Research Cameras Inc

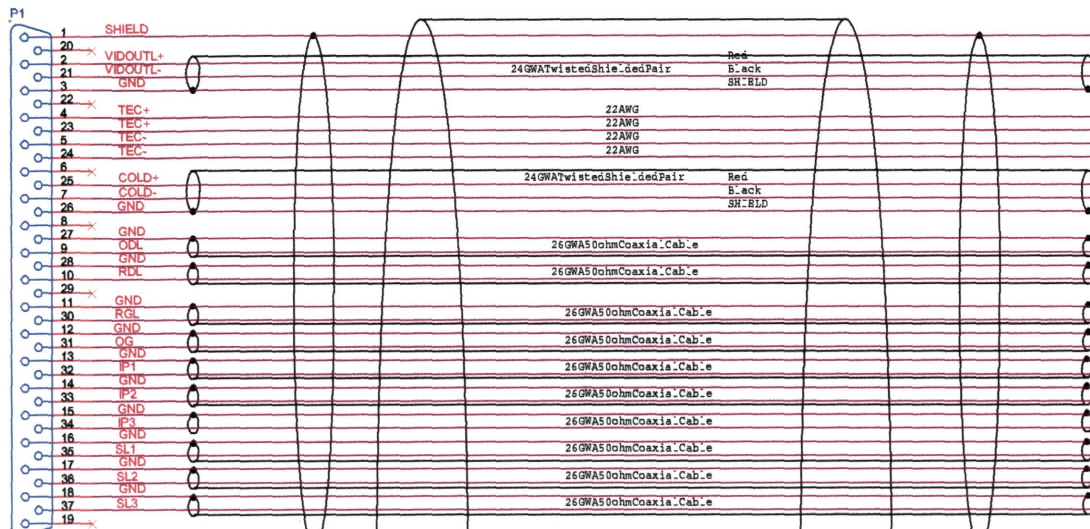
December 3, 2003



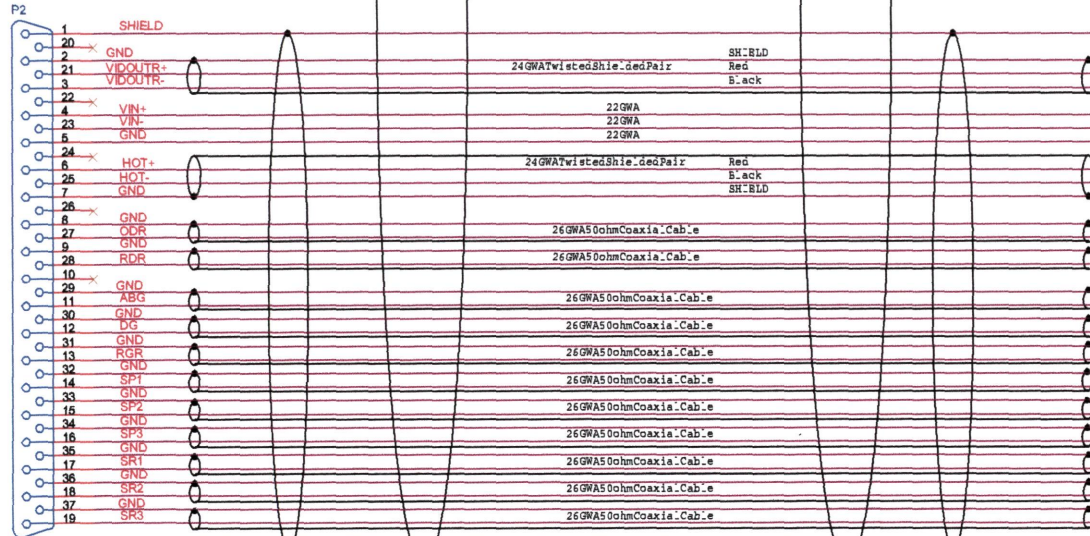
To Terminals on the Board
0.5m long and with other ends open!

Ring Terminal
Case GND

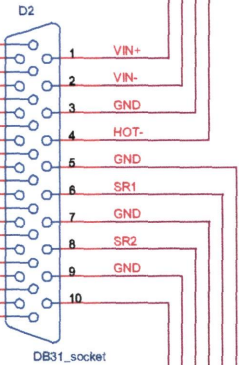
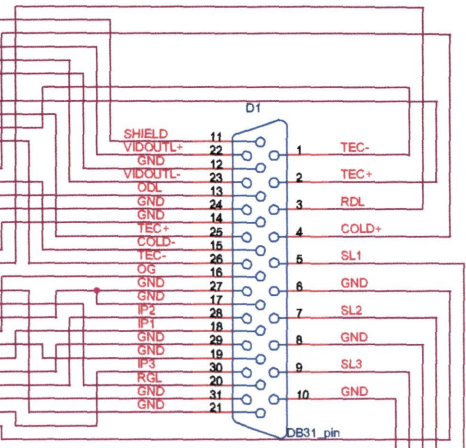
Astronomical Research Cameras Inc.		
Title	ESO System Harness	
Size	Document Number	Rev
B	ESO_Harness_sch	1A
Date:	Wednesday, December 03, 2003	Sheet 1 of 1



DB37 MALE

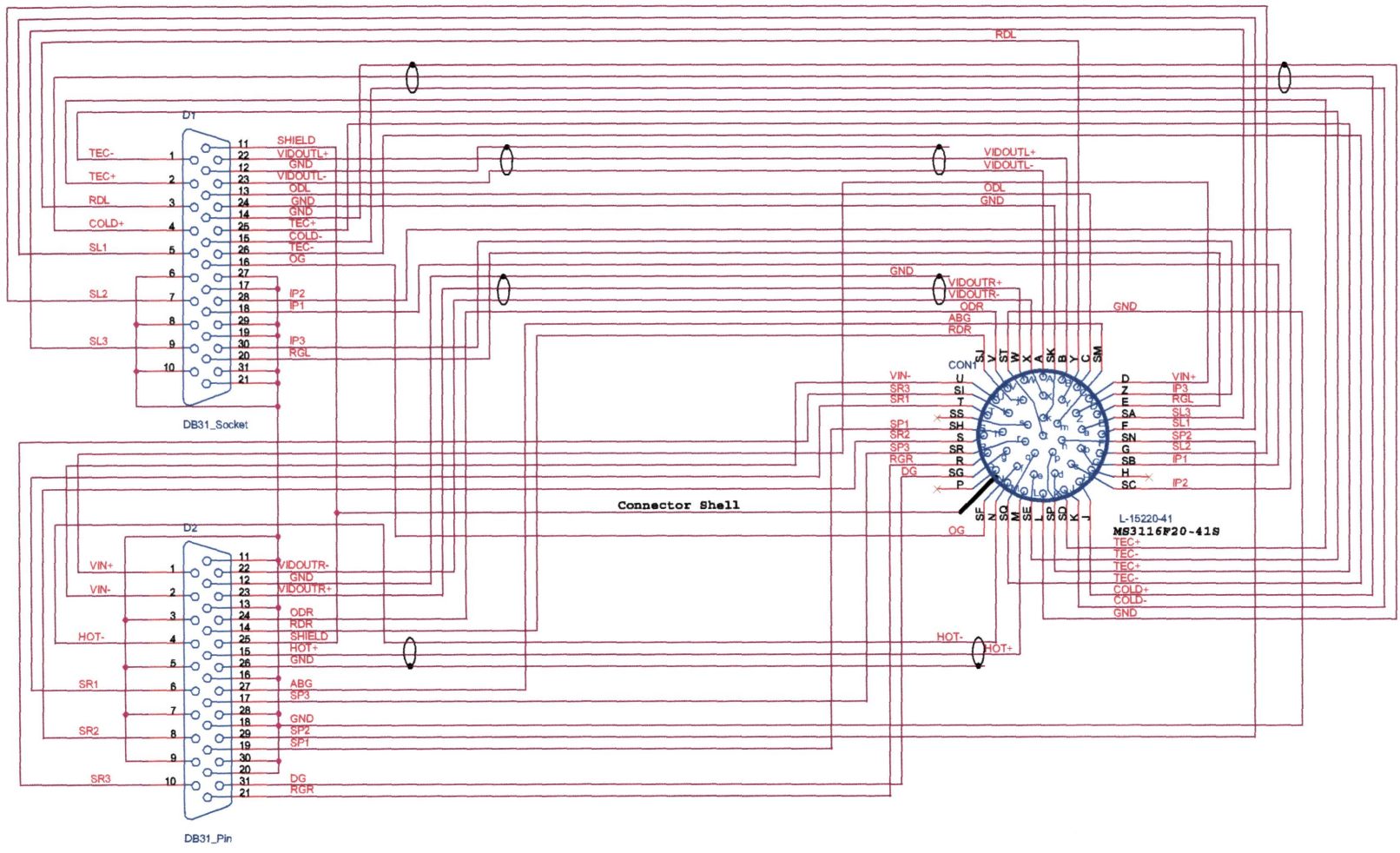


DB37 FEMALE



Cable Length: 1.5m

Astronomical Research Cameras Inc.			
Title			
ESO System Cable			
Size	Document Number	Rev	
B	ESO_Cable_sch	1A	
Date:	Wednesday, December 03, 2003	Sheet	1 of 1



Cable Length: 0.15m

Astronomical Research Cameras Inc.		
Title		
ESO System Test Adaptor		
Size	Document Number	Rev
B	ESO_Adaptor_sch	1A
Date:	Tuesday, December 02, 2003	Sheet 1 of 1

ESO SYSTEM ASSEMBLY SPREAD SHEET

Cable				Harness			CCD	Name	Description
ITT Cannon (Socket)	ITT Cannon (Pin)	DB37 (Female)	DB37 (Male)	Video DB15(S)	DB25(S)	Clock DB37(S)	C41 (Socket)		
1		4			15		D	VIN+	Supply voltage +12..+15V
2		23			14		U	VIN-	Supply voltage -12..-15V
3		9			7,8			GND	GND RDR
4		25					N	HOT-	AD590 hot side neg.
5		35				28		GND	GND SR1
6		17				4	T	SR1	Serial Phase 1 right
7		36				28		GND	GND SR2
8		18				6	S	SR2	Serial Phase 2 right
9		37				28		GND	GND SR3
10		19				8	i	SR3	Serial Phase 3 right
11		5			20			GND	Shield VIN+ / VIN-
12		2		15				GND	Shield VIDOUT+ / VIDOUT-
13		8			7,8			GND	GND ODR
14		28			4		j	RDR	Reset Drain right
15		6					M	HOT+	AD590 hot side pos.
16		34				28		GND	GND SP3
17		16				18	r	SP3	Storage Phase 3
18		32				28	t	GND	GND SP1
19		14				16	h	SP1	Storage Phase 1
20		31				28		GND	GND RGR
21		13				2	R	RGR	Reset Gate right
22		3		6			X	VIDOUTR-	Buffered CCD video signal neg.
23		21		7			W	VIDOUTR+	Buffered CCD video signal pos.
24		27			2		V	ODR	Output Drain right
25		1				29	CASE	SHIELD	Global Shield
26		29			22			GND	GND ABG
27		11			10		m	ABG	Anti Blooming Gate
28		33				28		GND	GND SP2
29		15				17	n	SP2	Storage Phase 2
30		30				28		GND	GND DG
31		12				19	g	DG	Dump Gate
	1		5				e	TEC-	Peltier cooler neg.
	2		4				d	TEC+	Peltier cooler pos.
	3		10		3		Y	RDL	Reset Drain left
	4		25				J	COLD+	AD590 cold side pos.
	5		35			3	F	SL1	Serial Phase 1 left
	6		16			28		GND	GND SL1
	7		36			5	G	SL2	Serial Phase 2 left
	8		17			28		GND	GND SL2
	9		37			7	a	SL3	Serial Phase 3 left
	10		18			28		GND	GND SL3
	11		1			29	CASE	SHIELD	Global Shield
	12		3	9				GND	Shield VIDOUTL+ / VIDOUTL-
	13		9		1		C	ODL	Output Drain left
	14		28		7,8		L	GND	GND RDL
	15		7				K	COLD-	AD590 cold side neg.
	16		31		9		f	OG	Output Gate
	17		12			28		GND	GND OG
	18		32			13	b	IP1	Image Phase 1
	19		13			28		GND	GND IP1
	20		30			1	E	RGL	Reset Gate left
	21		11			28		GND	GND RGL
	22		2	2			B	VIDOUTL+	Buffered CCD video signal pos.
	23		21	3			A	VIDOUTL-	Buffered CCD video signal neg.
	24		27		7,8		k	GND	GND ODL
	25		23				p	TEC+	Peltier Cooler pos.
	26		24				q	TEC-	Peltier Cooler neg.
	27		12			28		GND	GND OG
	28		33			14	c	IP2	Image Phase 2
	29		14			28		GND	GND IP2
	30		34			15	Z	IP3	Image Phase 3
	31		15			28		GND	GNDIP3
					23	30		GND	GND between CLK and VIDEO
					24	31		GND	GND between CLK and VIDEO
					25	32		GND	GND between CLK and VIDEO