

# PCB Voltages at the 47-20 CCD

Best measured with the camera running in TV mode to ensure that the clocks are active.  
 Approx the same for all 47-20 based cameras

4720 CCD Peltier Package	CCD Function	Bias Voltage	Clock Hi	Clock Lo
1	thermistor			
2	thermistor			
3	VSS	0		
4	ABD	20		
5	I3		2	-10
6	I2		2	-10
7	I1		2	-10
8	VSS	0		
9	OG	-6		
10	RDL	8		
11	n/c			
12	OSL	<- should see a 9.5K load looking into PCB		
13	ODL	21		
14	VSS	0		
15	PhiRL		2	-8
16	R3L		1	-8
17	R2L		1	-8
18	R1L		1	-8
19	R1R		1	-8
20	R2R		1	-8
21	R3R		1	-8
22	PhiRR		2	-8
23	VSS	0		
24	ODR	21		
25	OSR	<- should see a 9.5K load looking into PCB		
26	n/c			
27	RDR	8		
28	DG		2	-10
29	VSS	0		
30	S1		2	-10
31	S2		2	-10
32	S3		2	-10
33	ABG	0		
34	VSS	0		
35	n/c			
36	n/c			

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