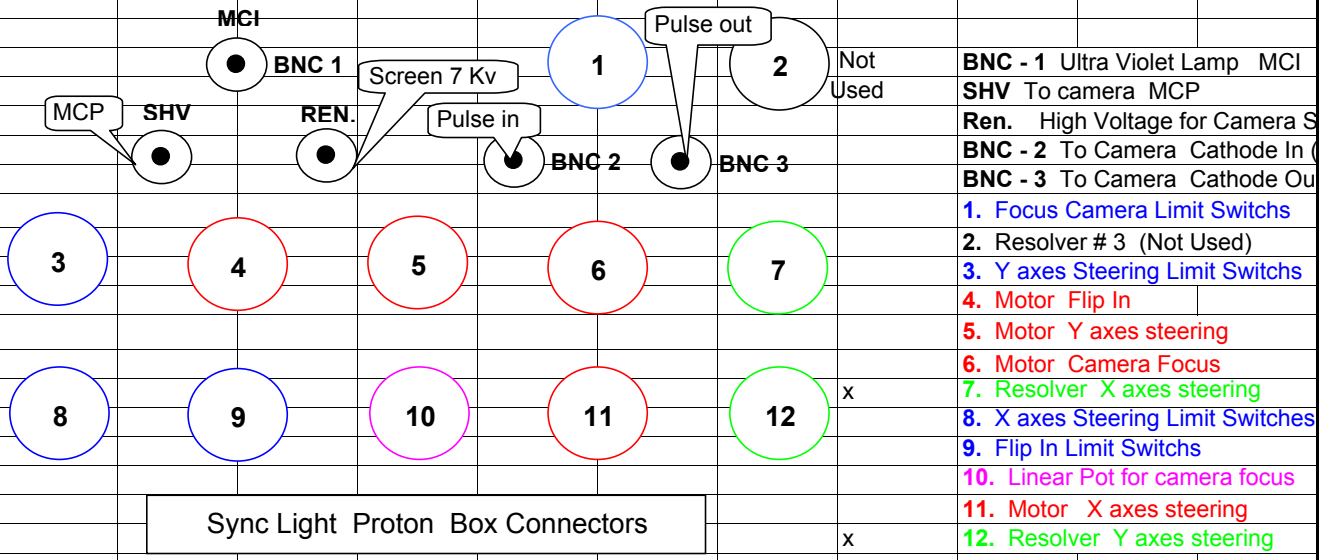
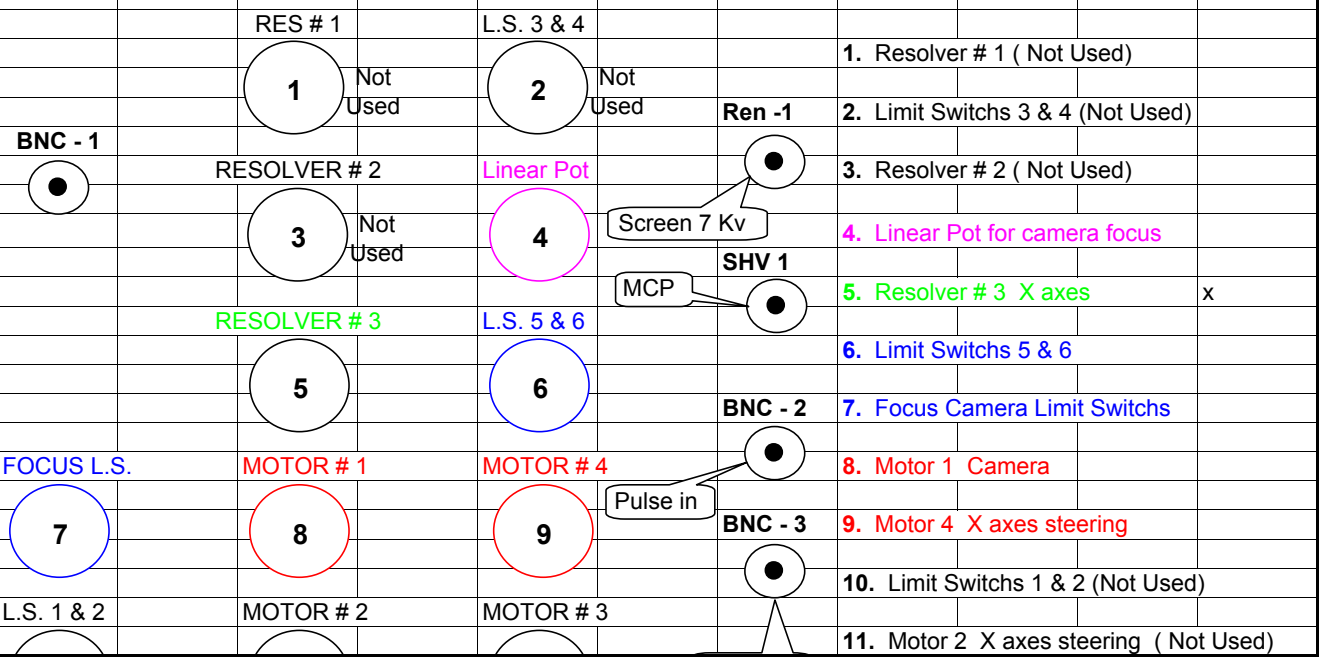


**This is a display of the connectors on the end of the SyncLite Boxes!
and what they are for!**



Sync Light Proton Box Connectors



10		11		12		Pulse out			
Not Used		Not Used		Not Used					
							12. Motor 3 Y axes steering (Not Used)		
							Ren 1 High Voltage for Camera Screen		
							SHV 1 To camera (3KV from Lacroy 2415 H.		
							BNC -1 To Ultra Violet Lamp		
							BNC -2 To Camera Cathode In (jumper from		
							BNC -3 To Camera Cathode Out (Cable# 5)		
Sync Light P-Bar Box Connectors									
Proton		P-Bar		Pick off		total	cond	cables	cond/cable
4 - limit sw's - 6 cond		2 limit sw's		2 limit sw's		8	48	3 22/10	30
								3 22/6	18
									48
4 - Motors - 6 cond		2 Motors		2 Motors		8	48	5 16/8	40
								1 16/8	8
									48
2 - Resolver - 8 cond		1 Resolver				3	24	3 22/10	30
1 - Linear Pot - 3 cond		1 Linear Pot		2 Linear Pot		4	12	2 22/6	12
1 Pico Motor		1 Pico Motor				1	6	1 22/6	6
						need total cond. =		138	
Spare cables								1 16/8	8
								1 22/6	6
total cables			Org.		additional				
			6		1	7		22/6	42
			0		6	6		22/10	60
			5		2	7		16/8	54
						20		total cond. =	156

This is a list of the wires & pin connections and colors of the wires, of the cables to the NuDrive													
		G6F12 88 PNE Pins	A	B	C	D	E	F	G	H	Shield	N. C.	
		3-16-2000 Motor #1	1	2	4	5	3	3	3	3	3		1 Red, 2 Blk, 3 Grn & Sh
	connects between Nu Drive	X ENCODER	6	5	4	3	2	1			8	7	1 Red, 2 Blk, 3 Grn, 4 B
		Y ENCODER	6	5	4	3	2	1			8	7	1 Red, 2 Blk, 3 Grn, 4 B
		Z ENCODER	6	5	4	3	2	1			8	7	1 Red, 2 Blk, 3 Grn, 4 B
		PICK - OFF	5	4	2	1	3	3			3		1 Brn, 2 Org, 3 Shield, 4
		X MOTOR	5	4	2	1	3	3	3	3			1 Blk, 2 Wht, 3 Grn & Sh
		Y MOTOR	5	4	2	1	3	3	3	3			1 Blk, 2 Wht, 3 Grn & Sh
		#2 MOTOR	5	4	2	1	3	3	3	3			1 Blk, 2 Wht, 3 Grn & Sh
		#3 Focus MOTOR	5	4	2	1	3	3	3	3			1 Blk, 2 Wht, 3 Grn & Sh
		LM #1	2 & 3	5	1	5	5	5				4	1 Red, 2 Wht & Grn, 3 C
		LM X	3 & 2	5	1	5	5	5				4	1 Red, 2 Grn, 3 Wht & C
		LM Y	3 & 2	5	1	5	5	5				4	1 Red, 2 Grn, 3 Wht & C
		#2 LM Focus Limit	3 & 2	5	1	5		5	5			E & 4	1 Red, 2 Grn, 3 Wht & C
		Flip-In Limit	3 & 2	5	1	5	5	5				4	1 Red, 2 Grn, 3 Wht & C
screen		PICK - OFF LIMIT	2 & 3	5	1	5	5	5			5		1 Red, 2 Wht, 3 Wht, 5 B
Cable # 4)													
	(to P-bar BNC-2)	Flip In Reasolver	Burndy male to Burndy Female Pin A to Pin A and so on.										
		X Reasolver											
		Y Reasolver											
These are lables I put on the cables													
			PICK OFF					P-Bar					
			PROTON					PROTON					
			P-Bar P.O. Linear Pot					X Axis Motor					X Axis Motor
			Proton P.O. Linear Pot					Y Axis Motor					Y Axis Motor
			Flip In Limit Sw.					X & Y Axis Motor					Flip in Motor
			Proton Focus Limit Sw.					Camera Motor					X Axis Motor
			X Steering Limit Sw.					Camera L. Pot					Y Axis Motor
			Proton X Resolver					Camera Limit Sw.					Camera Motor
			Proton Y Resolver					Limit Sw. 5 & 6					Camera L. Pot
			P-Bar Resolver #3										Y Steering Limit Sw.
		16 / 8	What different cables were used for!										
		Cable #'s											
		1	6. Motor Camera Focus										
		2	6 P.O. Limit Switch				P-Bar						
		3	4. Motor Flip In										
		4	11. Motor X axes steering										
		5	5. Motor Y axes steering										
		6	4 P.O. Motor				P-Bar				2 LINEAR POT	5 LINEAR POT	
		7	3 P.O. Limit Switch										
		8	8. Motor 1 Camera				P-Bar				7 Pico MOTOR	7 Pico MOTOR	
		9	1 P.O. Motor										
		10	9. Motor 4 X axes steering				P-Bar						

			22 / 6										6 Pick Off	3 Pick Off	
			Cable #s										LIMIT Sw.	LIMIT Sw.	
				Limit Switches									P-Bar	Proton	
V. PS)			1	9. Flip In Limit Switches									Pick Off	Pick Off	
			2	7. Focus Camera Limit Switches								P-Bar	MOTOR	MOTOR	
Proton BNC-3)			3	8. X axes Steering Limit Switches											
			4	3. Y axes Steering Limit Switches									P-Bar	Proton	
			5	1. Focus Camera Limit Switches											
			6	6. Limit Switches 5 & 6								P-Bar	P-Bar	Proton	
			7	Pico Motor control								RR C005 - C11 #1			
													1 Motor	1 Motor	
			12	2 P. O. Linear Pot Protons											
			14	5 P. O. Linear Pot P-Bars								P-Bar	2 Linear Pot		
			16	10. Linear Pot for camera focus											
			17	4. Linear Pot for camera focus								P-Bar	3 LIMIT Sw.	3 LIMIT Sw.	
			22 / 10										4 Motor	4 Motor	
			Cable #s												
				Resolvers									5 Linear Pot		
			11	7. Resolver X axes steering											
			13	5. Resolver # 3 X axes								P-Bar	6 LIMIT Sw.	6 LIMIT Sw.	
			15	12. Resolver Y axes steering											
													Video 1		Video 2
													Proton		P-Bar
													Ultra V.	Pulse's	Video 1
				Pico Motors									Lamp		Proton

Five Box					
Shield, 4 Wht, 5 Blk					
Blk, 5 Wht, 6 Blk, 8 Shield					
Blk, 5 Wht, 6 Blk, 8 Shield					
Blk, 5 Wht, 6 Blk, 8 Shield					
Blk, 5 Red					
Shield, 4 Blk, 5 Red					
Shield, 4 Blk, 5 Red					
Shield, 4 Blk, 5 Red					
Shield, 4 Blk, 5 Red					
Grn, 5 Blk & Shield					
Grn, 5 Blk & Shield					
Grn, 5 Blk & Shield					
Grn, 5 Blk & Shield					
Grn, 5 Blk & Shield					
Blk & Shield					
	These are labels I put on the cables				
		5	11	1	7
		Y MOTOR	X MOTOR	FOCUS LIMIT SW.	RESOLVER X AXIS
P-Bar P.O.	P. Pick Off	6	4		
LINEAR POT	LINEAR POT	FOCUS MOTOR	FLIP IN MOTOR	9 FLIP IN LIMIT SW.	12 RESOLVER Y AXIS
P-Bar P.O.	P. Pick Off	8	3		
LINEAR POT	LINEAR POT	X LIMIT	Y LIMIT		
		5	11	1	7
P-Bar P.O.	P. Pick Off	Y MOTOR	X MOTOR	FOCUS LIMIT SW.	RESOLVER X AXIS
Y MOTOR	X MOTOR				
		6	4		
P-Bar P.O.	P. Pick Off	FOCUS MOTOR	FLIP IN MOTOR	9 FLIP IN LIMIT SW.	12 RESOLVER Y AXIS
MOTOR	MOTOR				
P-Bar P.O.	P. Pick Off	8	3		
LIMIT Sw.	LIMIT Sw.	X LIMIT	Y LIMIT		
				P BAR	
P-Bar P.O.	P. Pick Off			6	5
LIMIT Sw.	LIMIT Sw.	4 LINEAR POT	8 FOCUS MOTOR 1	LIMIT SW. 5 & 6	RESOLVER #3 X AXIS
P. Pick Off	P. Pick Off				
LIMIT Sw.	LIMIT Sw.				
10	10	4	8	6	5
LINEAR POT	LINEAR POT	LINEAR POT	FOCUS MOTOR 1	LIMIT SW. 5 & 6	RESOLVER #3 X AXIS
			9	7	
2	5		MOTOR 4 X AXIS	CAMERA LIMIT SW.	
LINEAR POT	LINEAR POT				
			9	7	
7	7		MOTOR 4 X AXIS	CAMERA LIMIT SW.	
Pico MOTOR	Pico MOTOR				

6 Pick Off LIMIT Sw. P-Bar	3 Pick Off LIMIT Sw. Proton				
6 Pick Off LIMIT Sw.	3 Pick Off LIMIT Sw.				
LINEAR POT	LINEAR POT				
7 Pico MOTOR	7 Pico MOTOR				
	Video 3 Spare				
	Video 2 P-Bar				
	Video 3 Spare				