Quantar to Quad Port Radio Card
Interface and configuration

RJ-45	Pullup?	Function	Color	Function	PIN	PIN	Function	Color	Function	Pullup?	RJ-45
7		Tx Audio	Blue/White	TX +	1	26	TX -	White/Blue	Ground		8
1		RX audio	Orange/White	RX +	2	27	TX -	White/Orange	Ground		8
					3	28					
					4	29					
					5	30					
					6	31					
8		Ground	Orange/Red	Ground	7	32	Ground	Red/Orange	Ground		8
		5v for pullup	Green/Red	+5V (1A)	8	33	+14.2V (1A)	Red/Green	NC		
					9	34					
					10	35					
	10k to 5v	NC	Blue/Black	AUX IN 1	11	36	AUX OUT 1	Black/Blue	ALRM	10k to 5v	3
	10k to 5v	NC	Orange/Black	AUX IN 2	12	37	AUX OUT 2	Black/Orange	PL/DPL	10k to 5v	6
					13	38					
					14	39					
					15	40					
					16	41					
					17	42					
2	10k to 5v	COR (+5v)	Green/Yellow	AUX OUT 7 RLY A	18	43	AUX OUT 7 RLY	Yellow/Green	Input to relay	10k to 5v	
					19	44					
					20	45					
					21	46					
		10k to 5v	Orange/Violet	AUX 9, PTT + in	22	47	AUX 9, PTT -	Violet/Orange	PTT out		5
					23	48					
					24	49					
					25	50					

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Pullup resistors are required on outputs between +5v and the pciradio card input on the signal line

A switch on the PTT line (47) between the repeater and the pciradio card is helpful

Wild card tables are as follows

Table	Name	Function			
1	COS	Setup COS to activate and enable audio on carrier squelch			
	State	RX CAR DETECT			
		Action	Set output	7	
		Action	RX Qual Force		
		Inaction	CLR output	7	
		Inaction	RX Qual Norm		
2	PTT	Key the transmitter from the wireline upon grounding 47			
	State	Input 9			
		Action	Key from WL		
		Inaction	Unkey from WL		
3	PL Active	If PL/DPL is matched, line 37 (out2) goes high			
	State	RX PL Detect			
		Action	Set output	2	
		Inaction	CLR output	2	
4	Alarm	If any alarm on station set 36 (out1) high			
	State	STN Alarm			
		Action	Set output	1	
		Inaction	CLR output	1	
5	ASTRO CHAN 2	If any P25 user, switch to channel 2			
	State	RX ASTRO ID, or, ASTRO RPTR PTT, or, DATA PTT			
		Action	CHN	2	
		Inaction	NULL		
6	Analog User	If any Analog PTT, switch to CH 1			
	State	LINE PTT, or, LOCAL PTT			
		Action	CHN	1	
		Inaction	NULL		

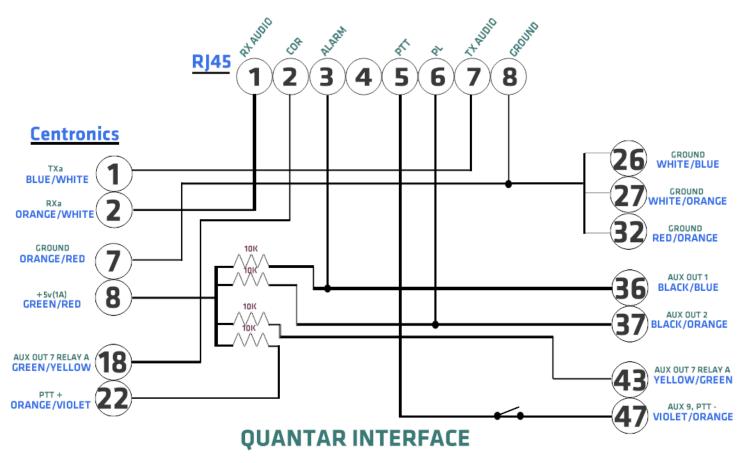| Wildcard Setup		
Input	1-8	Low
Input	9-12	Low
Output	1,2	High
Output	3-10	Low

This needs enhanced wildcard to work

If you only have 4 wire, set it to 8 wire on the config screen and then enhanced wireline, the functions will still work, with the exception of IO or anything that needs the hardware of the 8 wire board

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This is useful to let the station do in cabinet repeat for P25 (ASTRO) and then have the controller handle analog repeate. The problem with this is the station ID will activate for analog and digital users, giving two IDs, one from the staiton and one from app_rpt. The soultion is programming channel 1 with out an ID and then channel 2 with an ID. When an P25 user keys up, it will switch to channel 2 and stay until the controller keys up and then switch back to channel 1.

Example codeplug

RJ45

1	2	3	4	5	6	7	8
RX AUDIO	COR	ALARM		PTT	PL	TX AUDIO	GROUND

Centronics

TXa BLUE/WHITE	1
RXa ORANGE/WHITE	2
GROUND ORANGE/RED	7
+5v(1A) GREEN/RED	8
AUX OUT 7 RELAY A GREEN/YELLOW	18
PTT + ORANGE/VIOLET	22

26	GROUND WHITE/BLUE
27	GROUND WHITE/ORANGE
32	GROUND RED/ORANGE
36	AUX OUT 1 BLACK/BLUE
37	AUX OUT 2 BLACK/ORANGE
43	AUX OUT 7 RELAY A YELLOW/GREEN
47	AUX 9, PTT - VIOLET/ORANGE

10K 10K 10K 10K

QUANTAR INTERFACE

This works well if built in a cat5 wall box, up to four interfaces can be put in a box.

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