

Sector and ARCA-DACS Cable Reference Guide

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Requirements

Hardware:

50 pin Amphenol cable

- 50 pin Amphenol Connector (Male)
- Unshielded, CAT 3, 25 twisted pairs (50 wires) of 26 AWG wire, copper core/tin plated (Recommended)

CRAFT Cable

- RJ-45 (Female) to DB-9 (Female) straight through connector
- RJ-45 (Male) to RJ-45 (Male) CAT 5, straight through cable

EXT CLK 1 and 2 cable

- RJ-45 (Male) to RJ-45 (Male) CAT 5 cable

Alarm cable

- DB-25 straight through connector (Female)

NMS (Network Management System) cable

- DB-25 connector straight through (Male)

TBOS cable

- RJ-45 (Male) to RJ-45 (Male) straight through connector
- CAT 5 straight through cabling

BNC cable

- BNC connector (Male)
- 75 Ohm Coax cable

FXS POTS cable(s)

- RJ-11 (Male) to RJ-11 (Male) straight through cable
or
- RJ-45/48 (Male) to RJ-48 (Male) straight through cable

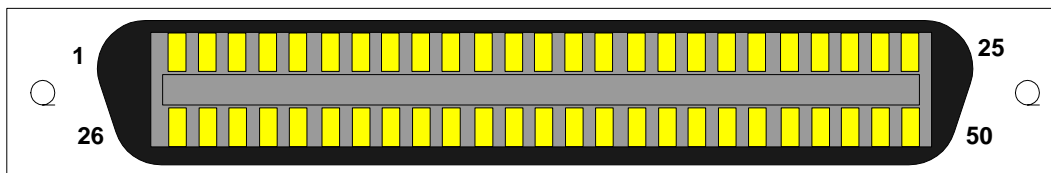
FXS POTS card interface

- 50 pin Amphenol Connector (Male)
- Unshielded, CAT 3, 25 twisted pairs (50 wires) of 26 AWG wire, copper core/tin plated

Cables

1. T1 I/O Card 50-Pin Amphenol Connector Pinouts

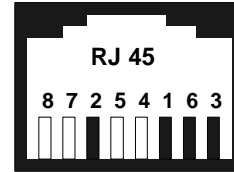
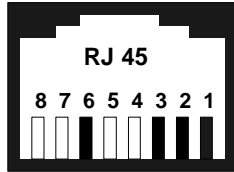
PIN	FUNCTION	WIRE COLOR		PIN	FUNCTION	WIRE COLOR
1	RX_RING8	Blue/White		26	RX_TIP8	White/Blue
2	TX_RING8	Orange/White		27	TX_TIP8	White/Orange
3	Not used	Green/White		28	Not used	White/Green
4	RX_RING7	Brown/White		29	RX_TIP7	White/Brown
5	TX_RING7	Slate/White		30	TX_TIP7	White/Slate
6	Not used	Blue/Red		31	Not used	Red/Blue
7	RX_RING6	Orange/Red		32	RX_TIP6	Red/Orange
8	TX_RING6	Green/Red		33	TX_TIP6	Red/Green
9	Not used	Brown/Red		34	Not used	Red/Brown
10	RX_RING5	Slate/Red		35	RX_TIP5	Red/Slate
11	TX_RING5	Blue/Black		36	TX_TIP5	Black/Blue
12	Not used	Orange/Black		37	Not used	Black/Orange
13	RX_RING4	Green/Black		38	RX_TIP4	Black/Green
14	TX_RING4	Brown/Black		39	TX_TIP4	Black/Brown
15	Not used	Black/Slate		40	Not used	Slate/Black
16	RX_RING3	Blue/Yellow		41	RX_TIP3	Yellow/Blue
17	TX_RING3	Orange/Yellow		42	TX_TIP3	Yellow/Orange
18	Not used	Green/Yellow		43	Not used	Yellow/Green
19	RX_RING2	Brown/Yellow		44	RX_TIP2	Yellow/Brown
20	TX_RING2	Slate/Yellow		45	TX_TIP2	Yellow/Slate
21	Not used	Blue/Purple		46	Not used	Purple/Blue
22	RX_RING1	Orange/Purple		47	RX_TIP1	Purple/Orange
23	TX_RING1	Green/Purple		48	TX_TIP1	Purple/Green
24	Not used	Brown/Purple		49	Not used	Purple/Brown
25	Not used	Slate/Purple		50	Not used	Purple/Slate



2. Ethernet Cross Over Cable Pinouts

PIN	FUNCTION		PIN	FUNCTION
1	TX+		1	RX+
2	TX-		2	RX-
3	RX+		3	TX+
4	Not Used		4	Not Used
5	Not Used		5	Not Used
6	RX-		6	TX-
7	Not Used		7	Not Used

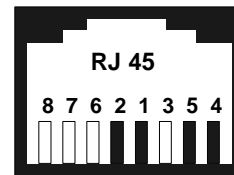
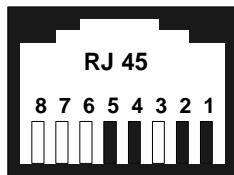
8	Not Used		8	Not Used
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Note: On an Ethernet cross over cable only pins on one side of the cable are modified. The other end should be left only as a straight through.

3. T1 Cross Over Cable Pinouts

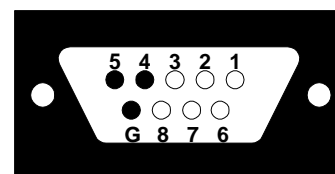
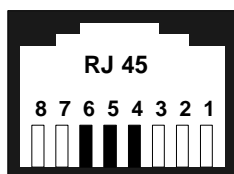
PIN	FUNCTION		PIN	FUNCTION
1	TX+		1	RX+
2	TX-		2	RX-
3	Not Used		3	Not Used
4	RX+		4	TX+
5	RX-		5	TX-
6	Not Used		6	Not Used
7	Not Used		7	Not Used
8	Not Used		8	Not Used



Note: On a T1 cross over cable only pins on one side of the cable are modified. The other end should be left only as a straight through.

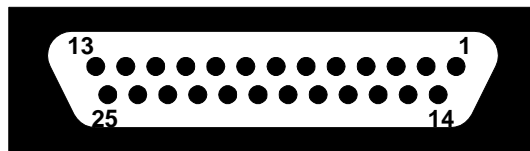
4. CRAFT cable Pinouts

PIN	FUNCTION		PIN	FUNCTION
1	Not Used		1	Not Used
2	Not Used		2	Not Used
3	Not Used		3	Not Used
4	Signal Ground		4	Signal Ground
5	TXD		5	TXD
6	RXD		6	RXD
7	Not Used		7	Not Used
8	Not Used		8	Not Used



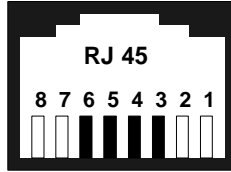
5. Network Management System (NMS) Interface Pinouts

PIN	FUNCTION
1	Chassis Ground
2	TXD
3	RXD
4	RTS
5	CTS
6	DSR
7	Signal Ground
8	DCD
9	Not Used
10	Not Used
11	Not Used
12	Not Used
13	Not Used
14	Not Used
15	TXC
16	Not Used
17	RXC
18	Not Used
19	Not Used
20	DTR
21	Not Used
22	RI
23	Not Used
24	Not Used
25	Not Used



6. TBOS Connector Interface Pinouts

PIN	FUNCTION
1	Signal Ground
2	Chassis Ground
3	RXD-
4	RXD+
5	TXD-
6	TXD+
7	Not Used
8	Not Used

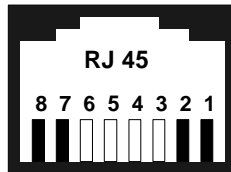


7. External CLK 1

PIN	FUNCTION
1	CLK TX+
2	CLK TX-
3	Not Used
4	Not Used
5	Not Used
6	Not Used
7	Bits 1+
8	Bits 1-

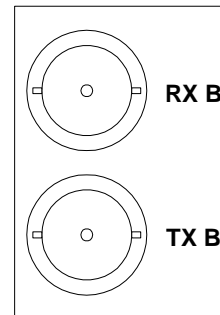
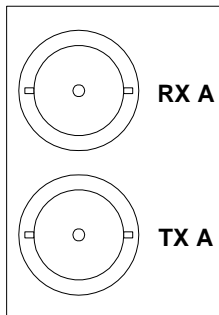
External CLK 2

PIN	FUNCTION
1	CLK TX+
2	CLK TX-
3	Not Used
4	Not Used
5	Not Used
6	Not Used
7	Bits 2+
8	Bits 2-



8. BNC CONNECTOR

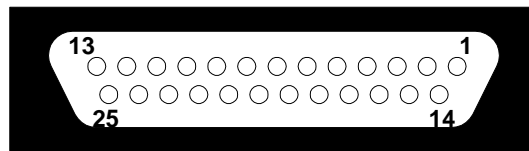
CONNECTOR	WIRE	FUNCTION	CONNECTOR	WIRE	FUNCTION
TXA	1	DS3-TX1	RXA	1	DS3-RX1
	2	COM		2	COM
TXB	1	DS3-RX2	RXB	1	DS3-RX2
	2	COM		2	COM



9. Alarm Connector Interface Pinouts

PIN	DESCRIPTION	STATUS
1	Visual Minor Alarm	Closed connection when there is no alarm

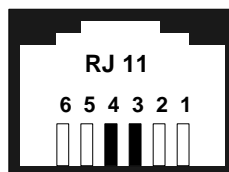
2	Visual Minor Alarm	Open connection when there is an alarm
3	Visual Minor Alarm	Common
4	Power Alarm	Closed connection when there is no alarm
5	Power Alarm	Open connection when there is an alarm
6	Power Alarm	Common
7	Chassis	Ground
8	Visual Major Alarm	Open connection when there is an alarm
9	Visual Major Alarm	Closed connection when there is no alarm
10	Visual Major Alarm	Common
11	Visual Critical Alarm	Closed connection when there is no alarm
12	Visual Critical Alarm	Open connection when there is an alarm
13	Visual Critical Alarm	Common
14	Not Used	N/A
15	Not Used	N/A
16	Audible Minor Alarm	Not Supported
17	Audible Minor Alarm	Not Supported
18	Audible Minor Alarm	Not Supported
19	Chassis Ground	Ground
20	Audible Major Alarm	Closed connection when there is no alarm
21	Audible Major Alarm	Open connection when there is an alarm
22	Audible Major Alarm	Common
23	Audible Critical Alarm	Closed connection when there is no alarm
24	Audible Critical Alarm	Open connection when there is an alarm
25	Audible Critical Alarm	Common



Note: The Alarm Interface is the only Male interface on the Sechtor and ARCA-DACS chassis. The interface on the cable terminating into the Alarm interface should be of a female gender.

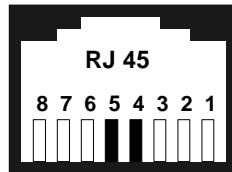
10. FXS POTS Modular Interface (RJ-11) Pinouts

PIN	FUNCTION
1	Not Used
2	Not Used
3	TIP
4	RING
5	Not Used
6	Not Used



FXS POTS Modular Interface (RJ-45/RJ-48) Pinouts

PIN	FUNCTION
1	Not Used
2	Not Used
3	Not Used
4	TIP
5	RING
6	Not Used
7	Not Used
8	Not Used



11. FXS Card 50-Pin Amphenol Connector Pinouts

PIN	FUNCTION		PIN	FUNCTION
1	RING 1		26	TIP 1
2	RING 2		27	TIP 2
3	RING 3		28	TIP 3
4	RING 4		29	TIP 4
5	RING 5		30	TIP 5
6	RING 6		31	TIP 6
7	RING 7		32	TIP 7
8	RING 8		33	TIP 8
9	RING 9		34	TIP 9
10	RING 10		35	TIP 10
11	RING 11		36	TIP 11
12	RING 12		37	TIP 12
13	RING 13		38	TIP 13
14	RING 14		39	TIP 14
15	RING 15		40	TIP 15
16	RING 16		41	TIP 16
17	RING 17		42	TIP 17
18	RING 18		43	TIP 18
19	RING 19		44	TIP 19
20	RING 20		45	TIP 20
21	RING 21		46	TIP 21
22	RING 22		47	TIP 22
23	RING 23		48	TIP 23
24	RING 24		49	TIP 24
25	Not Used		50	Not Used

