Meridian 1

Meridian SL-1 data feature

Installation Apple and Hewlett-Packard

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Revision history

December 1994

Standard, release 1.0. The following two documents have been combined to create this document.

— *Apple-Macintosh Interface installation* (553-2731-200, Appendix 2)

— *Hewlett Packard Interface installation* (553-2731-200, Appendix 3)

This document replaces these two appendices.

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Apple Macintosh Interface

General

This appendix describes, with the aid of illustrations, the connection of the Apple Macintosh computer to the SL-1 switch.

The Apple Macintosh can be connected with twisted pair wire to a port of an Asynchronous Interface Line Card (AILC) to allow it access to the SL-1 switching capabilities.

The Macintosh may then access local or remote terminals, personal computers, other computers and data bases by using the SL-1 networking features.

Equipment interface

The QPC430 AILC is used to connect the Macintosh to the SL-1 Switch (Figure 1 and 2).

The Macintosh may be located up to 4,000 ft (1,220 m) from the AILC.

Related Documents

Detailed information about the AILC and AILC installation procedures may be found in the following Northern Telecom Practices (NTP):

— *Meridian Data Services description* (553-2731-100)

— *Meridian data features operation and tests* (553-2731-300)

Installation

Pins 4, 5, 8, and 9 of the Macintosh modem jack are connected via twisted wire pairs to the AILC. The signals provided at the pins are:

Pin 5	SDA
Pin 4	SDB
Pin 9	RDA
Pin 8	RDB

Without telephone

Use a 6-wire teledapt cord that is equipped with a 9-pin subminiature D jack on one end. The other end of the cord should be equipped to connect through a plug/jack or connecting block arrangement to the AILC (Figure 1).

Connect the 9-pin subminiature D jack to the modem plug of the Macintosh.

Connect the other end of the cord through the SL-1 MDF to the AILC.

With telephone

Use a 4-wire teledapt cord that is equipped with a 9-pin subminiature D jack on the one end. The other end of the cord should be equipped to connect to a RJ-11 telephone connection block (Figure 2).

Use a 6-wire teledapt cord to connect from the RJ-11 telephone connection block the SL-1.

Connect the 9-pin subminiature D jack to the modem plus of the Macintosh.

Connect the 6-wire teledapt cord to the other side of the RJ-11 block.

Connect the other end of the 6-wire cord to the SL-1 MDF to the AILC and the Voice Line Card (VLC).

> ***Note:*** Ensure that the pin wire connections and continuity are maintained.

Attach a 500 or 2500 telephone set to the RJ-11 block.

Figure 1
Macintosh to SL-1 connection—without telephone

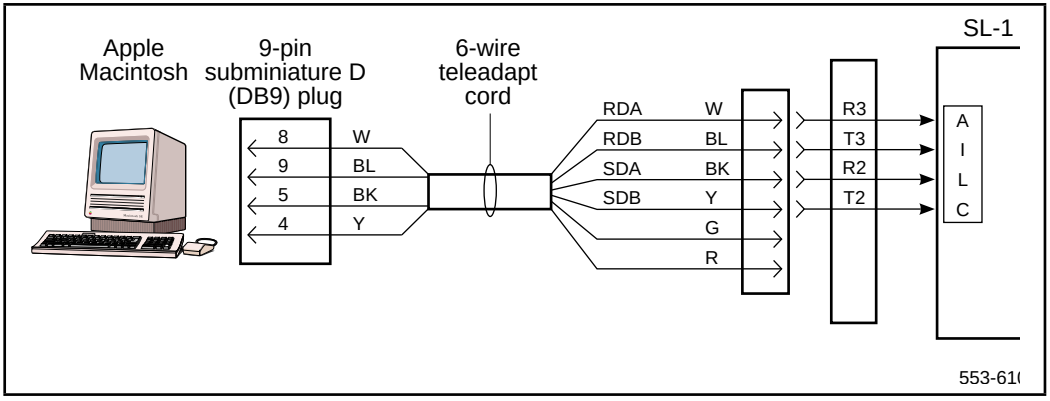
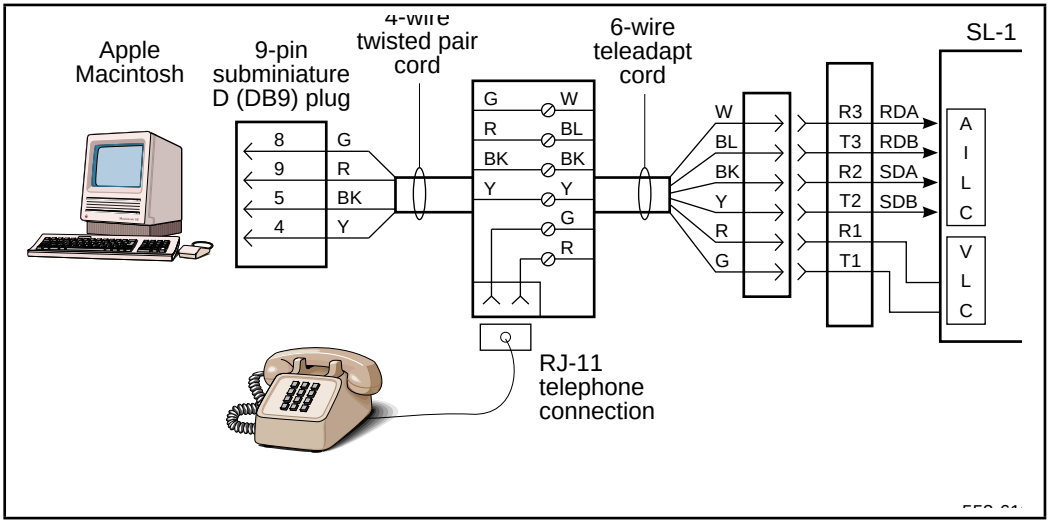


Figure 2
Macintosh to SL-1 connection—with telephone



Hewlett Packard Interface

General

This appendix describes the configuration that allows the Hewlett Packard 3000ATP to be directly connected to the Meridian SL-1.

Related Documents

Detailed information about the Asynchronous Interface Line Card (AILC) and related installation procedures are found in the following Northern Telecom Practices (NTP):

— *Meridian Data Services description* (553-2731-100)

— *Meridian data features operation and tests* (553-2731-300)

HP3000 ATP

The HP3000 ATP to Meridian SL-1 interface on the HP3000 provides twelve ports of RS422 interface which are compatible with the AILC. The ports have the capability to convert long breaks from the AILC into modem control signals. When caalls are dropped, sessions are closed properly. It also allows long breaks to be generated from the HP3000 to initiate a call disconnect.

Installation

A typical connection requires 3 QPC430D (or higher vintage) AILC to provide twelve pins.

Teh QPC430D can be configured for hosts or terminals (Figure 3). Configure each AILC prot to the host mode (switches on the AILC faceplate operated to the left).

Terminate a 50-wire telecom connector (a breakout box is recommended) from the MDF onto 12 RJ-11 jacks like an AIM drop (Figure 4).

Use twelve 6-wire modular line cords to connect the jacks to the ATP/HP3000 interface where similar RJ-11 jacks are provided.

> ***Note:*** It is recommended that the line cord length should be limited to 25 ft (7620 mm) maximum.

Figure 5 shows a complete path of signals from the Meridian SL-1 to the HP3000 for one of the twelve paths.

The physical connection of the modular line cord to the HP3000 interface is normally performed by a Hewlett Packard representative.

The breakout box can be obtained from Nevada Western (part number 024-4098-12-4D). Table 1 provides the wiring list for the 50-pin Amphenol/12RJ-11 breakout box.

A 7-foot teledapt cord (A0301005) to plug into the RJ-11 jack can be ordered through Northern Telecom.

Fault clearing

Two LED per port are provided on the AILC faceplate to assist in fault clearing.

— The LED are extinguished when the line is in the *mark* condition and lit when in the *space* condition.

— When the AILC is connected to an external device, both SD and RD LED will be extinguished and will blink with data traffic.

— When a break is sent from the AILC, the RD LED will light and when a break is sent from the HP3000 the SD LED will light.

— If the SDA and SDB leads from the HP3000 are open or reversed constantly lit, indicating a fault.

— If the AILC is plugged into the shelf but not connected to a physical device, all four SD LED on the faceplate will be lit.

In case of trouble, perform the following test procedure:

1 Unplug the line cord from the RJ-11 jack at the breakout box.

2 Connect the AIM (QMT9) or AILU to the jack of the breakout box.

3 Connect a terminal to the AIM/AILU.

4 Make a call from another data module to the AIM/AILU under test.

5 The two terminals should be able to communicate with each other. If so, the trouble is probably in the HP3000 side. Follow the normal procedure for obtaining HP service.

6 Ensure that the line cord between the breakout box and the ATP port is not faulty.

7 If the trouble is determined to be on the Meridian SL-1 side, follow the normal fault clearing procedure for AIM/AILU and AILC. If necessary, switch the AILC mode to terminal in aid in fault clearing, since the terminal mode allows the menu from the AILC to be displayed. Remember to switch it back to host afterwards.

Table 1
Breakout box wiring (Part 1 of 2)

Jack number	RJ-11 jack	Signal name	50-pin amphenol
1	6	RDB	1
	1	RDA	26
	5	SDB	2
	2	SDA	27
2	6	RDB	3
	1	RDA	28
	5	SDB	4
	2	SDA	29
3	6	RDB	5
	1	RDA	30
	5	SDB	6
	2	SDA	31
4	6	RDB	7
	1	RDA	32
	5	SDB	8
	2	SDA	33
5	6	RDB	9
	1	RDA	34
	5	SDB	10
	2	SDA	35
6	6	RDB	11
	1	RDA	36
	5	SDB	12
	2	SDA	37
7	6	RDB	13
	1	RDA	38
	5	SDB	14
	2	SDA	39
8	6	RDB	15
	1	RDA	40
	5	SDB	16
	2	SDA	41

Table 1
Breakout box wiring (Part 2 of 2)

Jack number	RJ-11 jack	Signal name	50-pin amphenol
9	6	RDB	17
	1	RDA	42
	5	SDB	18
	2	SDA	43
10	6	RDB	19
	1	RDA	44
	5	SDB	20
	2	SDA	45
11	6	RDB	21
	1	RDA	46
	5	SDB	22
	2	SDA	47
12	6	RDB	23
	1	RDA	48
	5	SDB	24
	2	SDA	49
		Not used	25
		Not used	50

Figure 3
QPC430D faceplate

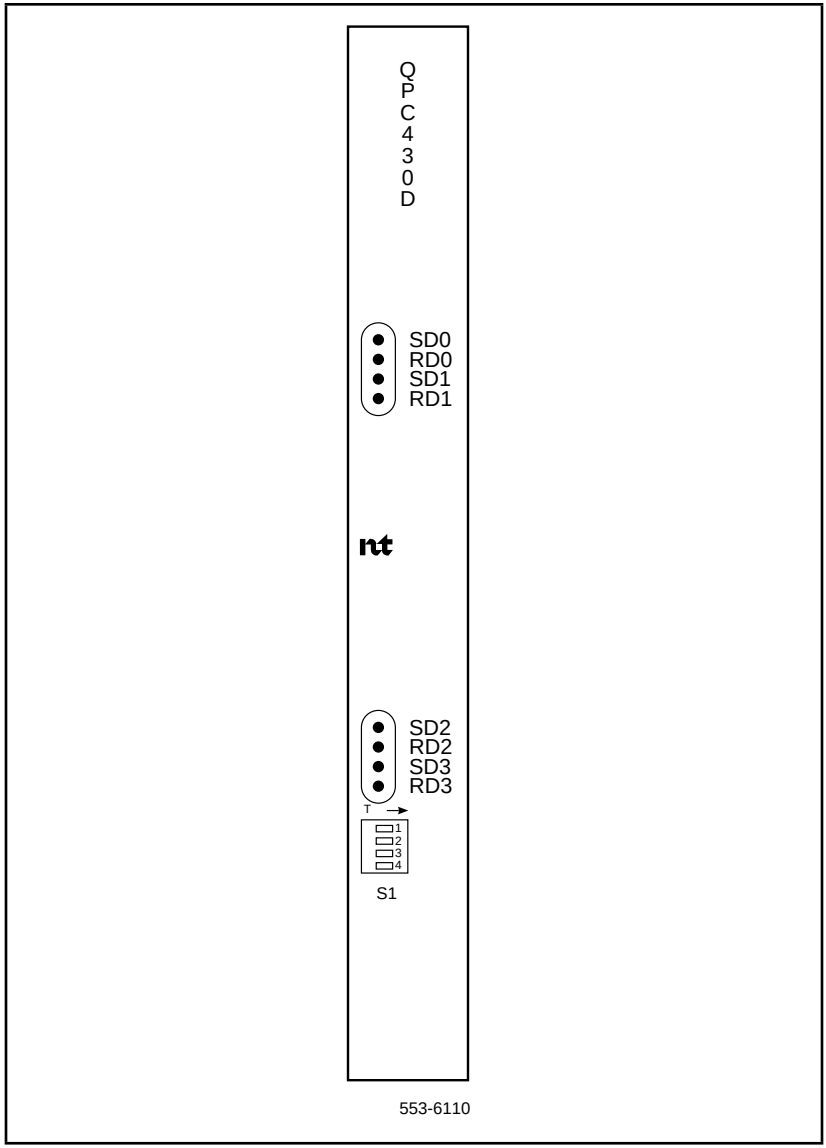


Figure 4
HP3000 Meridian SL-1 host connection

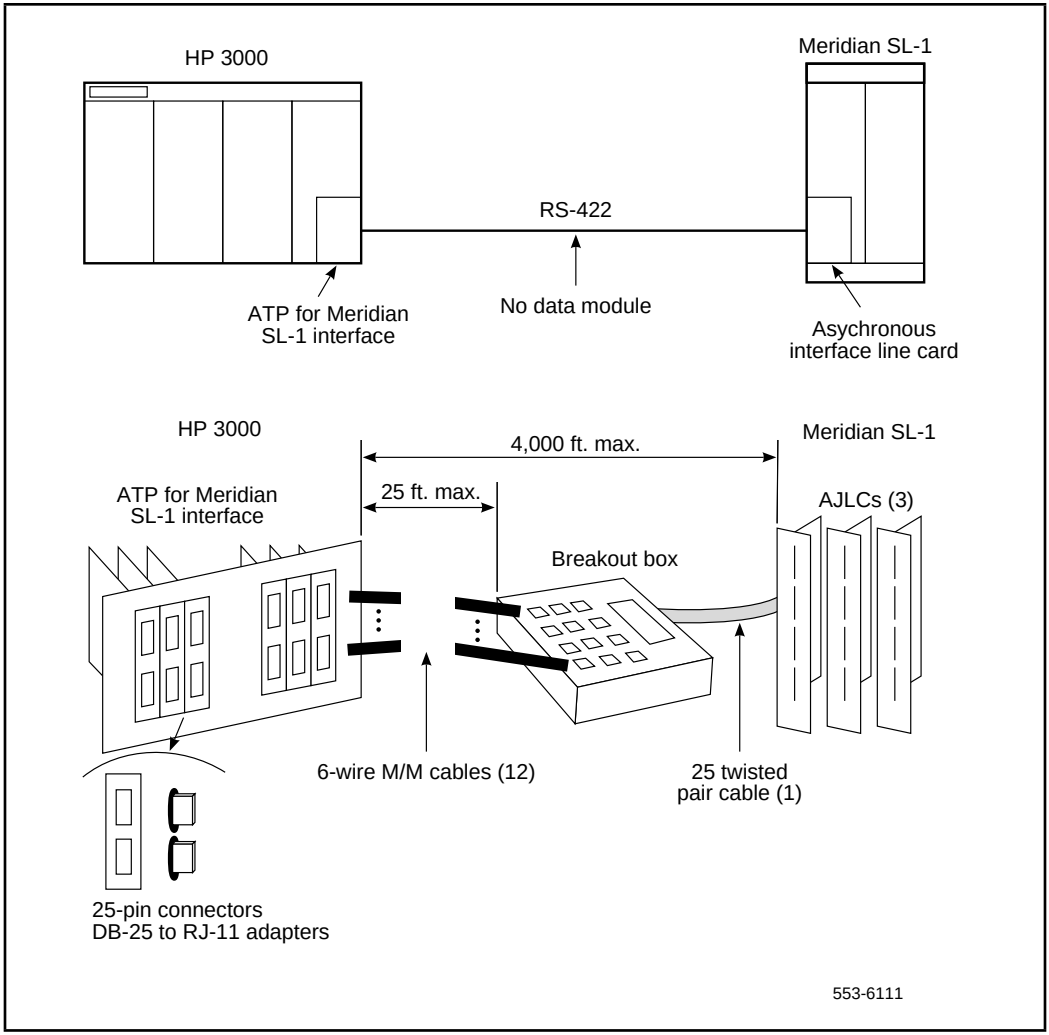
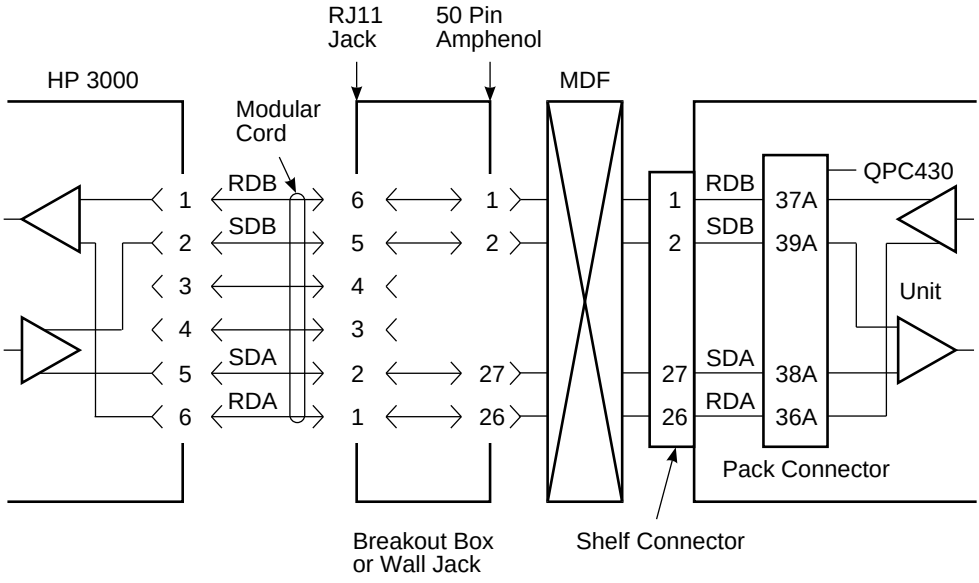


Figure 5
Signal path—HP3000 to Meridian SL-1



This drawing shows a complete path of signals from the SL-1 to HP 3000 for one of the 12 ports.

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