SHEET INDEX

CONTENTS		SHEET NO.	SHEET ISSUE NO.
SHEET INDEX OPTION INDEX SUPPORTING INDEX		A1	13
AS 1	REMOTE OSC SITE WITH DEDICATED POWER PLANT AND LOCAL OPC P.D.	B1	4
AS 1A	REMOTE OSC SITE WITH DEDICATED POWER PLANT AND LOCAL OPC P.D.		
AS 2	OPC SITE SHARING POWER PLANT WITH 5ESS® AND OPC P.D. REMOTED WITH BST'S OR VDT'S	B2	4
AS 2A	OSC SITE SHARING POWER PLANT WITH 5ESS® AND OPC P.D. REMOTED WITH BST'S, VDT'S OR BOTH		
AS 3	RISLU CABINET (REMOTE OSC SITE)	B3	4
AS 3A	OSPS CO-LOCATED WITH 5ESS®		
AS 4	TYPICAL -48V BATTERY PLANT FOR REMOTE OSC EQUIPPED WITH DEDICATED POWER PLANT	B4	4
AS 5	-48V, -48RTN AND EQUIPGRD FOR BST AND VDT		
AS 6	DIRECT INTELLIGENT INTERFACE (DII) -48V DC	B5	8
AS 7	DIRECT INTELLIGENT INTERFACE (DII) 115V AC		
CIRCUIT NOTES		D1	13
EQUIPMENT NOTES		D2	13
		D3	13
		D4	13
		D5	13
		D6	13
		D7	13
		D8	13
		D9	13
		D10	13
		D11	13
		D12	13
		D13	13
		D14	13
		D15	13
		D16	13
		D17	13
		D18	13
		D19	13
		D20	13
		D21	13
		D22	13
		D23	13
		D24	13
		D25	13
		D26	13
		D27	13

*-SHEETS WITH SUFFIX A WERE FORMERLY WITHOUT A SUFFIX LETTER.

CONTENTS		SHEET NO.	SHEET ISSUE NO.
EQUIPMENT NOTES (CONT)		D28	13
		D29	13
		D30	13
		D31	13
		D32	13
INFORMATION NOTES		D33	13
CADS 1,2,3		G1	4
CADS 4,5,6		G2	4
CADS 7,7A,7B		G3	4
CADS 8,9,10,11,12,13,14,15		G4	4
CADS 16,17,18,19,20,21,22,23		G5	8
CADS 24,25		G6	10
CADS 28,29,30,31		G7	13
CADS 32,33		G8	13
BD 1	TYPICAL BLOCK DIAGRAM OF OSPS EQUIPPED WITH DEDICATED -48V POWER PLANT	H1	4
BD 2	TYPICAL BLOCK DIAGRAM OF OSPS SHARING -48V POWER PLANT	H2	4
BD 3	TYPICAL BLOCK DIAGRAM OF OSPS -48V POWER WHEN BST'S OR VDT'S ARE 400' OR LESS FROM POWER PLANT		
BD 4	BLOCK DIAGRAM OF OSPS REMOTE ALARMS	H3	4
BD 5	TYPICAL BLOCK DIAGRAM OF OSPS T-INTERFACE	H4	4,5
BD 6	TYPICAL BLOCK DIAGRAM OF OSPS ISLU INTERFACES	H5	4
BD 7	BLOCK DIAGRAM OF ICW SYSTEM CONFIGURATION	H6	4
BD 7A	BLOCK DIAGRAM OF ICW SYSTEM CONFIGURATION	H6A	5

CONTENTS		SHEET NO.	SHEET ISSUE NO.
BD 8	BLOCK DIAGRAM OF ICW NOT CO-LOCATED WITH 5ESS® SWITCH	H7	10
BD 8A	ICW NOT CO-LOCATED WITH 5ESS® SWITCH	H8	8
BD 9	BLOCK DIAGRAM OF ICW CO-LOCATED WITH 5ESS® SWITCH	H9	8
BD 9A	ICW CO-LOCATED WITH 5ESS® SWITCH	H10	8
BD 10	BLOCK DIAGRAM OF MUSIC ON QUEUE	H11	8
BD 11	BLOCK DIAGRAM OF OSPS-BTDI APPLICATION	H12	11

OPTION INDEX

APP OR WRG	RATED ON ISSUE	REF NOTES	LOCATION
Z	AVAIL	206	CAD 7
Y	AVAIL	206	CAD 7A
X	AVAIL	206	CAD 7B
W	AVAIL 5		CAD 16
V	AVAIL 5		CAD 17
U	AVAIL 5		CAD 21
T	AVAIL 5		CAD 20
S	AVAIL 5		CAD 19
R	AVAIL 5		CAD 18

DWG ISS	CD ISS	DATE ISSD	DRN	APP
1	1 APPX –	11-20-87		
2B	1 APPX 1B	08-08-88		
3B	1 APPX 2B	09-07-90		
4M	1 APPX 3M	01-03-92		
5B	1 APPX 4B	01-03-92		
6M	1 APPX 5M	01-03-92		
7B	1 APPX 6B	01-03-92		
8B	1 APPX 7B	04-19-92		
9AC	1 APPX 9AC	08-25-92		
10B	2B APPX 1B	12-15-92		
11B	2B APPX 1B	03-16-93		
12B	2B APPX 2B	5-7-93		
13B	2B APPX 3B	11-11-94		

SUPPORTING INFORMATION

SYSTEM USED ON	DESIGN CONTROL	CATEGORY	NO.
5ESS	IH		

SHEET INDEX NOTES

1. ONLY THE LATEST ISSUE, OR ISSUES IF CONCURRENT, ARE SHOWN IN THE INDEX.
2. FOR REISSUES, A CHANGED OR NEW SHEET IS ASSIGNED THE SAME ISSUE NUMBER AS SHEET 1.
3. THE ISSUE NUMBER OF SHEET 1 IS RECOGNIZED AS THE ISSUE NUMBER OF THE WHOLE DRAWING.

BT13

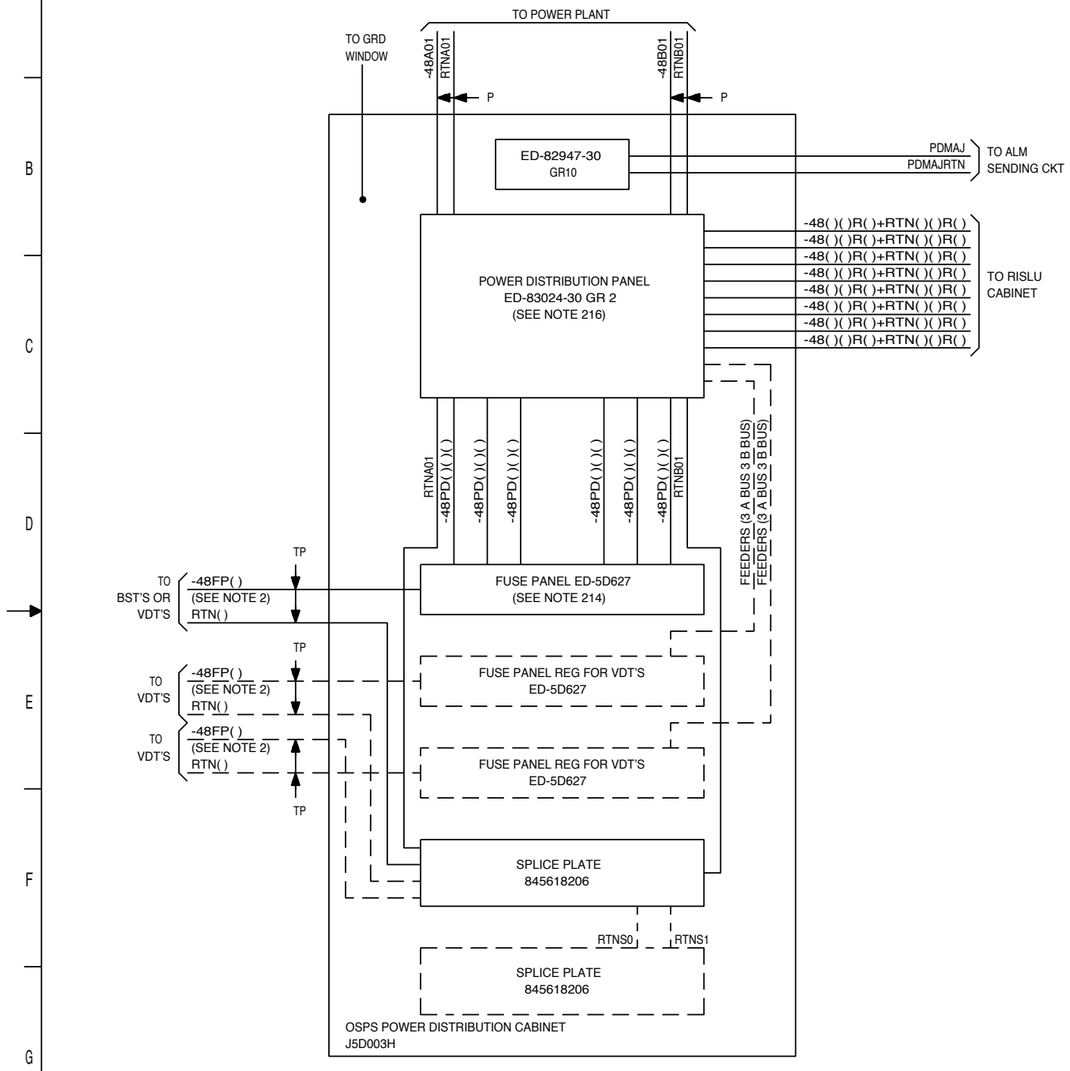
ELECTRONIC SWITCHING SYSTEMS 5ESS® OPERATOR SERVICES POSITION SYSTEM (OSPS) INTERNATIONAL APPLICATION SCHEMATIC

DWG SIZE	ISSUE
C2	13B

Lucent Technologies | SD-5X214-01 | SHEET 60 A1

AS 1

REMOTE OSC SITE WITH DEDICATED
POWER PLANT AND LOCAL OPC P.D.



NOTES:

1. POWER DISTRIBUTION PANEL TO FUSE PANEL FEEDER LEAD DESCRIPTION.

	P.D. CAB.	BUS	FUSE PANEL NO.	FUSE BLOCK NO.
-48	(P,D)	(A,B)	(1,2,3,4,5,6,7,8)	(1,2,3,4,5,6)

   EXAMPLE -48PDA26
   FEEDERS TO BE JOB ENGINEERED.

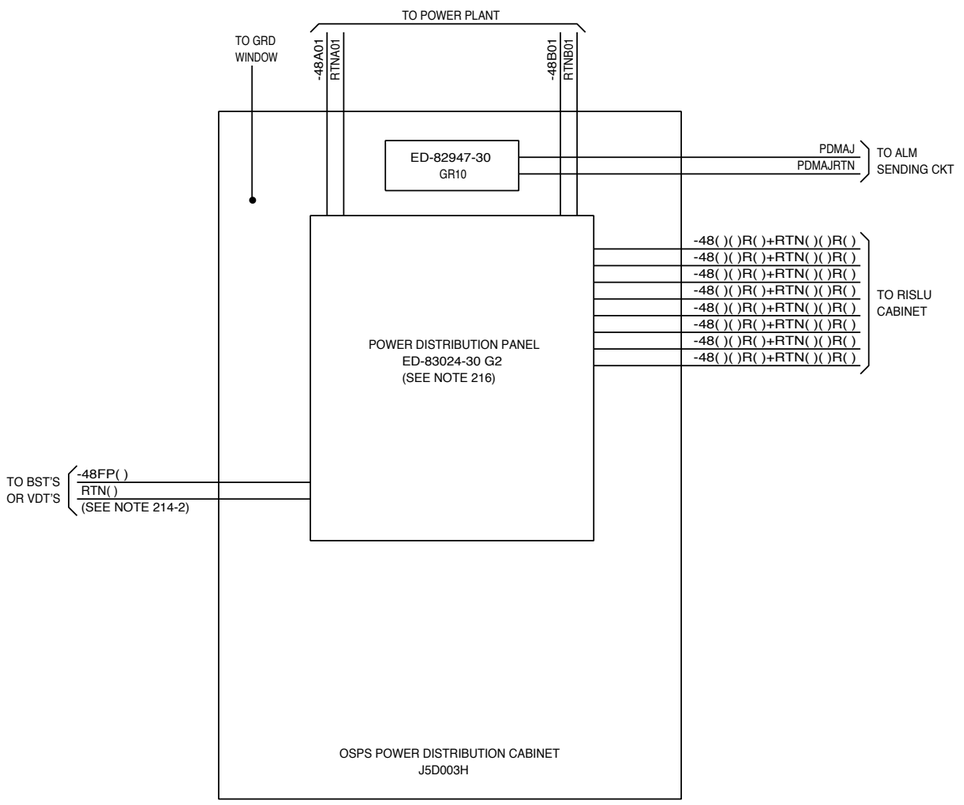
2. FUSE PANEL TO BST OR VDT FEEDER LEAD DESCRIPTION.

-48	FUSE PANEL	FUSE NO.
-48	FP(1-8)	(1 TO 24)

   EXAMPLE -48FP223

AS 1A

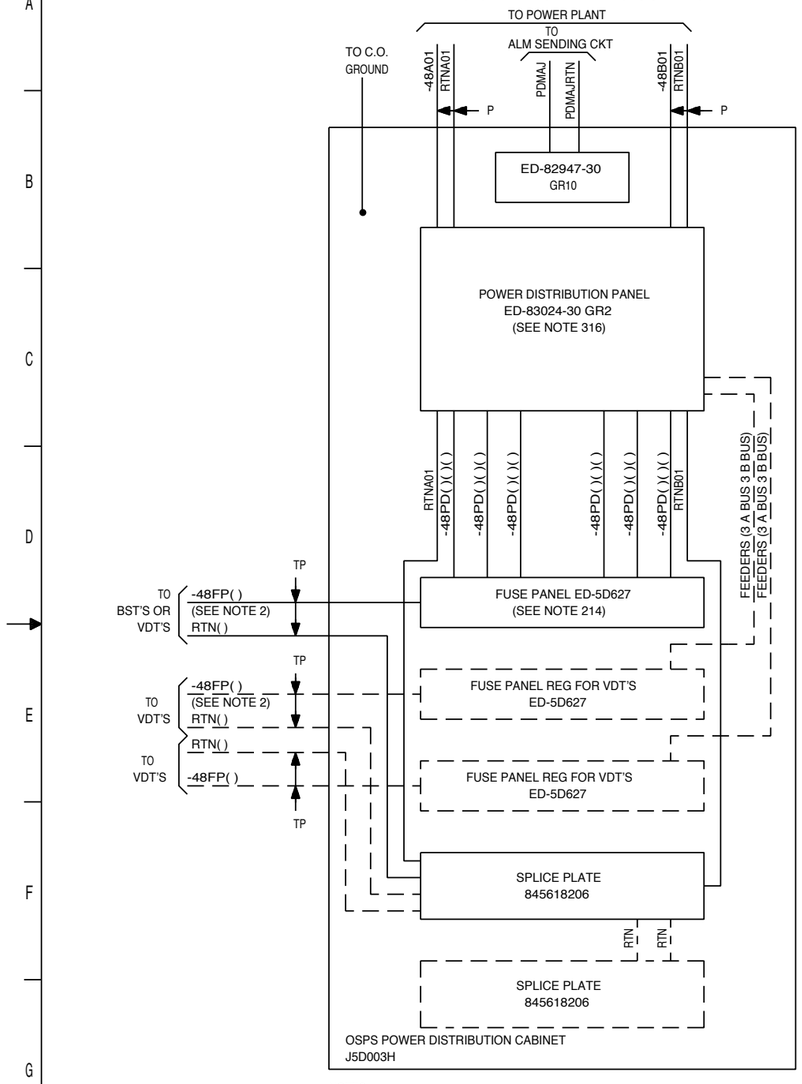
REMOTE OSC SITE WITH DEDICATED
POWER PLANT AND LOCAL OPC P.D.



OSPS INTERNATIONAL APPLICATION SCHEMATIC		
	DWG SIZE: C2	ISSUE: 4M
Lucent Technologies	SD-5X214-01	SHEET: B1

AS 2

OPC SITE SHARING POWER PLANT WITH 5ESS ® AND OPC P.D. REMOTED WITH BST'S OR VDT'S



NOTES:

1. POWER DISTRIBUTION PANEL TO FUSE PANEL FEEDER LEAD DESCRIPTION.

	P.D. CAB.	BUS	FUSE PANEL NO.	FUSE BLOCK NO.
-48	(P,D)	(A,B)	(1,2,3,4,5,6,7,8)	(1,2,3,4,5,6)

   EXAMPLE -48PDA26
   FEEDERS TO BE JOB ENGINEERED.

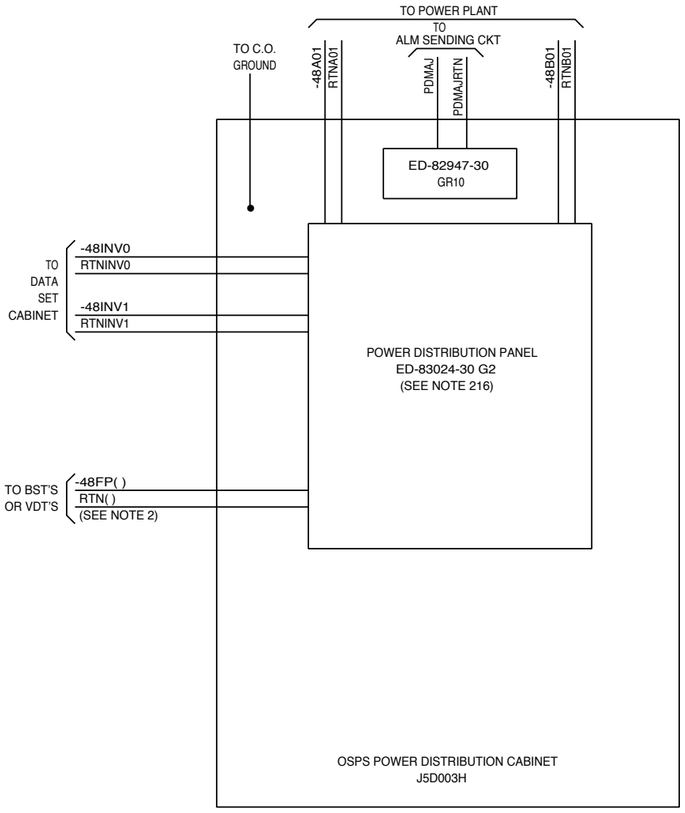
2. FUSE PANEL TO BST OR VDT FEEDER LEAD DESCRIPTION.

-48	FUSE PANEL	FUSE NO.
-48	FP(1-8)	(1 TO 24)

   EXAMPLE -48FP223

AS 2A

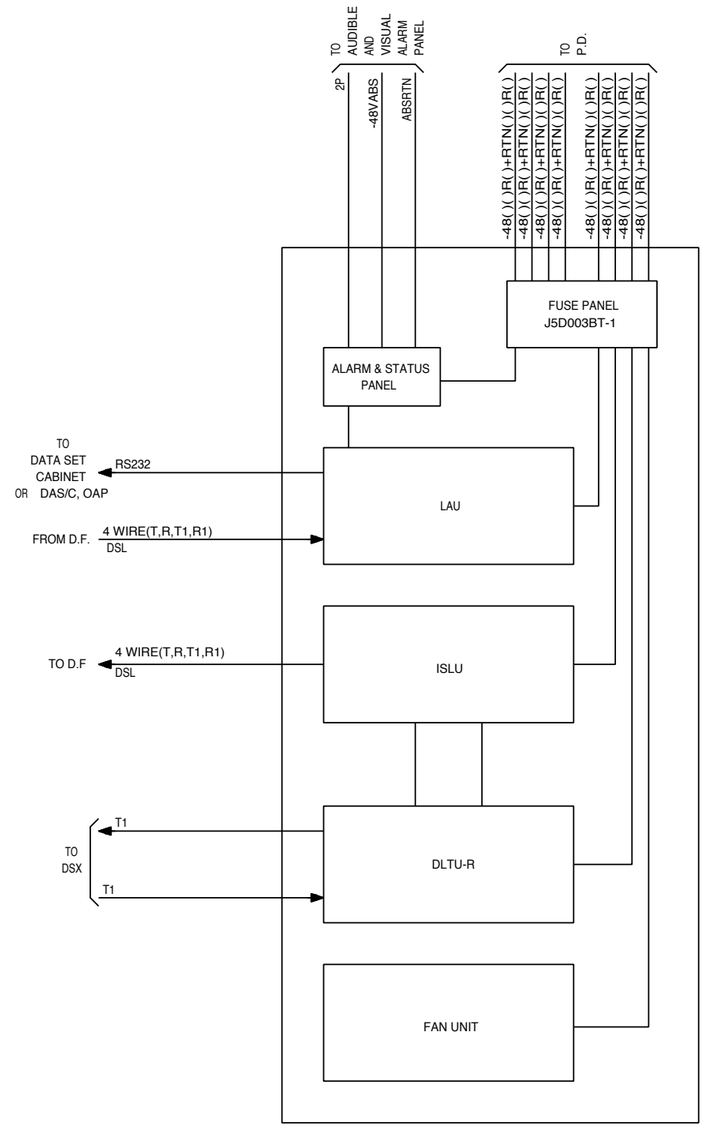
OSC SITE SHARING POWER PLANT WITH 5ESS ® AND OPC P.D. REMOTED WITH BST'S, VDT'S OR BOTH



OSPS INTERNATIONAL APPLICATION SCHEMATIC	DWG SIZE	ISSUE
	C2	4M
Lucent Technologies	SD-5X214-01	SHEET B2

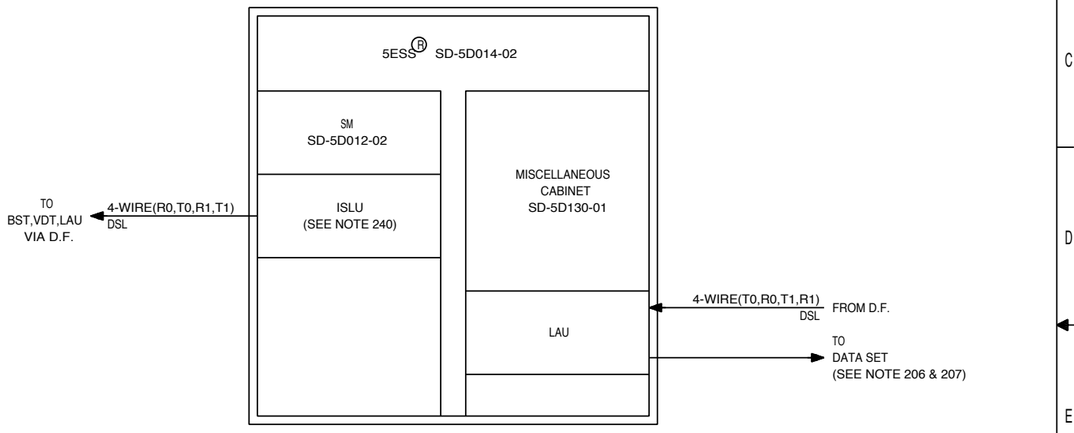
AS 3

RISLU CABINET
(REMOTE OSC SITE)



AS 3A

OSPS CO-LOCATED WITH 5ESS®



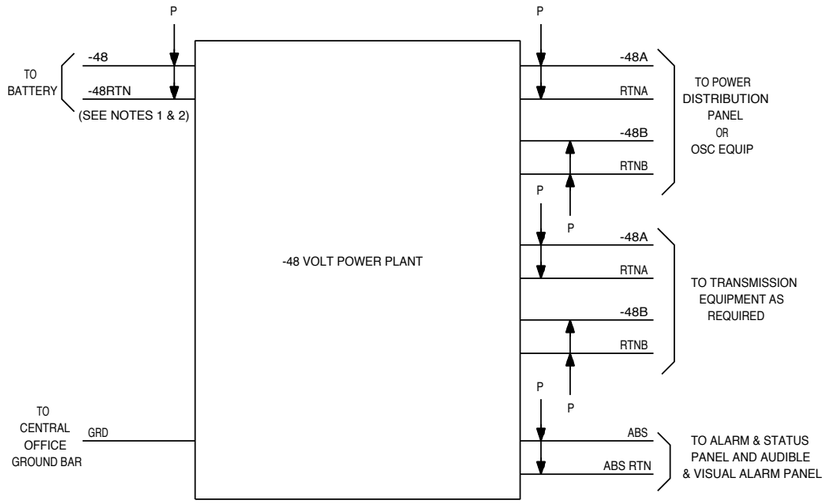
OSPS INTERNATIONAL APPLICATION SCHEMATIC

DWG SIZE	ISSUE
C2	4M

Lucent Technologies	SD-5X214-01	SHEET
		B3

AS 4

TYPICAL -48V BATTERY PLANT FOR REMOTE OSC
EQUIPPED WITH DEDICATED POWER PLANT



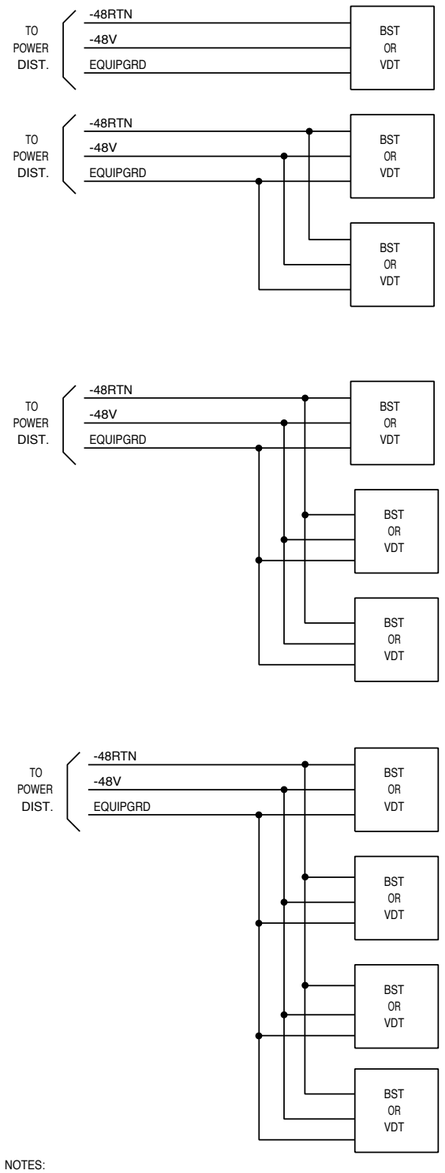
NOTES:

1. IN A REMOTE OSPS CONFIGURATION A BATTERY PLANT IS REQUIRED TO PROVIDE -48 VOLTS POWER AT AN ESTIMATED DRAIN BETWEEN 100 TO 200 AMPS. APPROXIMATELY 100 AMPS FOR 120 BST'S OR APPROXIMATELY 150 AMPS FOR 54 VDTS. HOWEVER THE EXISTING BATTERY PLANT MAY BE USED IF IT HAS ELECTRONIC SWITCH VOLTAGES AS SPECIFIED IN BSP 800-610-165 WHICH MEETS THE OSPS POWER AND GROUNDING REQUIREMENTS AS SPECIFIED IN ED-5D022-1.

2. THE REMOTE OSPS POWER PLANT MUST BE EQUIPPED WITH AN AUTOMATIC RESTART TYPE OF RECTIFIER.

AS 5

-48V, -48RTN AND EQUIPGRD
FOR BST AND VDT



NOTES:

1. SEE EQUIPMENT NOTE 214.

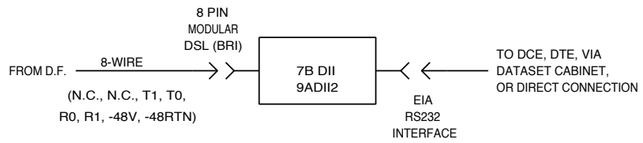
OSPS INTERNATIONAL
APPLICATION SCHEMATIC

DWG SIZE	ISSUE
C2	4M

Lucent Technologies	SD-5X214-01	SHEET
		B4

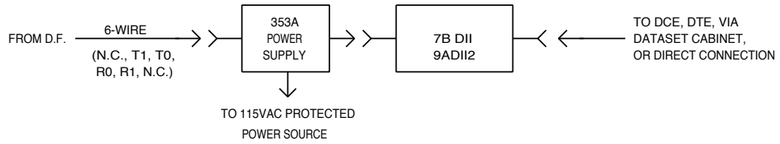
AS 6

DIRECT INTELLIGENT INTERFACE (DII)
-48V DC



AS 7

DIRECT INTELLIGENT INTERFACE (DII)
115V AC



OSPS INTERNATIONAL
APPLICATION SCHEMATIC

DWG SIZE	ISSUE
C2	8B

Lucent Technologies	SD-5X214-01	SHEET
		B5

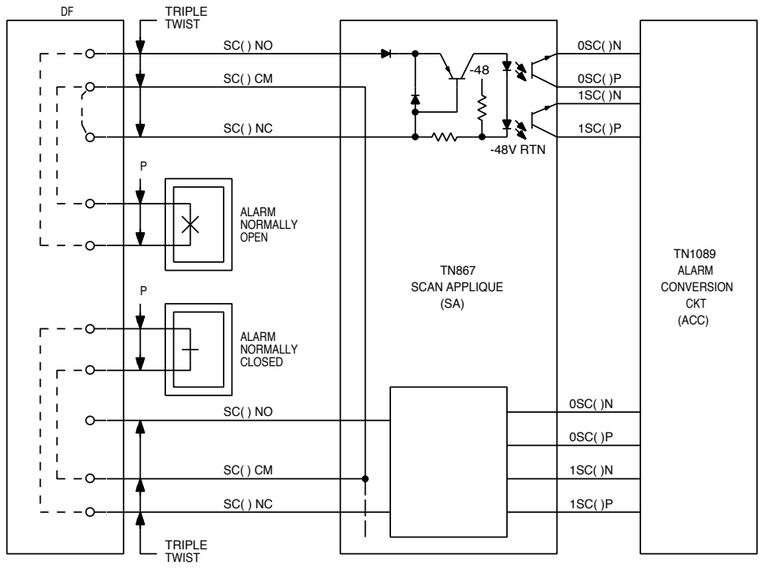
CIRCUIT NOTES:

101.

DESIG	FUSE AMP	POTENTIAL	ONE PER
	8/10	-48	BST LITTLE FUSE 510-B10 313. 800
	5	-48	VDT LITTLE FUSE NORMAL-B10 312. 005

BATTERY SYMBOL	VOLTAGE RANGE
-48	-42.75 TO 55.00

102. TYPICAL CONNECTION BETWEEN ALARM CONTACT AND THE ALARM SECTION OF THE LAU VIA DISTRIBUTING FRAME FOR SCAN POINTS THAT REQUIRE BUILDING ALARMS ARE SHOWN BELOW.



103. UNASSIGNED.

104. FOR COMMUNICATIONS LINK FROM HOST TO REMOTE OSPS SITE SEE SD-5D017-01.

OSPS INTERNATIONAL APPLICATION SCHEMATIC

DWG SIZE	ISSUE
C2	13B

Lucent Technologies	SD-5X214-01	SHEET D1

EQUIPMENT NOTES:

201. SOLID FRONT AND REAR DOORS REQUIRED ON THE DATA SET CABINET AND POWER DISTRIBUTION CABINET.

202. THE DIGITAL CROSS CONNECT (DSX) AND THE OFFICE REPEATER BAY (ORB) ARE TO BE SPECIFIED AND ENGINEERED BY THE LINE ENGINEER.

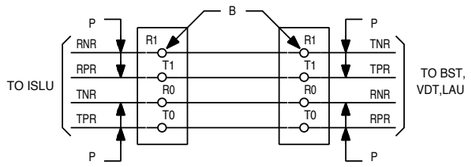
203. CABLE FROM TERMINAL ADAPTER TO DATA SETS:

ASYNCHRONOUS 9.6K BPS USED FOR: OAP

WIRING OPTION "Z" ED-5D621-11 G10

204. SHIELDED CABLE THAT IS USED BETWEEN EQUIPMENT ON AN ISOLATED POINT GROUND AND EQUIPMENT OUTSIDE THIS SINGLE POINT MAY HAVE ONLY ONE END OF THE CABLE SHIELD CONNECTED. THIS IS TO ENSURE THAT THE SINGLE POINT GROUND STAYS INTACT.

205. DISTRIBUTING FRAME T-INTERFACE CONNECTION.



THE LEAD DESIGNATIONS TPR,TNR,RPR,RNR ARE USED FOR OSPS CIRCUITS (IE: BST,VDT,LAU CIRCUIT PACKS) AND ISLU CIRCUITS (T-CARDS). THE LEAD DESIGNATIONS T0,R0,T1,R1 ARE USED FOR CABLING BETWEEN THE ISLU AND OSPS CIRCUITS.

206. CONNECTOR PINOUT INFORMATION LAU TO DATA SETS.

9.6K BPS, ASYCNCHRONOUS CABLE CONN (OAP)
WIRING OPTION "Z"

PIN NUMBER 982AC CONN. LOCATED ON LAU	LEAD DESCRIPTION	LEAD DESCRIPTION MODEM	PIN NUMBER RS232 CONN	PIN NO. 8 PIN MODULAR JACK FOR 3B2
045	SIGNAL GROUND	SIGNAL GRD	7	7
046	CDB	DSR	8	6
047	(SEE NOTE 1)	CTS	NC	
048	TXDB	TD	2	3
049	NC	–	NC	
050	NC	–	NC	
145	NC	–	NC	
146	DTRB	RTS	4	4
147	RXDB	RD	3	5
148	(SEE NOTE 1)	–	NC	
149	NC	–	NC	
150	NC	–	NC	

EQUIPMENT NOTES (CONT):

206. (CONT)

9.6 BPS SYNCHRONOUS CABLE CONN (DAS/C)
WIRING OPTION "Y" (SEE NOTE 2)

PIN NUMBER 982AC CONN. LOCATED ON LAU	LEAD DESCRIPTION T/A	LEAD DESCRIPTION MODEM	PIN NUMBER RS232 CONN.
045	SIGNAL GROUND	–	7
046	CDB	DSR	6
047	CTSB (SEE NOTE 2)	CTS	NC
048	TXDB	TD	2
049	TRANSMIT CLOCK	TC	15
050	(SEE NOTE 2)	–	NC
145	NC	–	NC
146	DATA TERMINAL READY	RTS	4
147	RXDB	RD	3
148	RTSB (SEE NOTE 2)	–	NC
149	RECEIVE CLOCK	RC	17
150	(SEE NOTE 2)	–	NC

1200 BPS ASYNCHRONOUS CABLE (PCDA)
WIRING OPTION X

PIN NUMBER 982AC CONN. LOCATED ON LAU	LEAD DESCRIPTION	LEAD DESCRIPTION MODEM	PIN NUMBER RS232 CONN.
045	(SEE NOTE 3)	–	NC
046	CDB	DSR	6
047	CTSB (SEE NOTE 3)	–	NC
048	TXDB	TXD	2
049	NC	–	NC
050	GRD	GND	7
145	(SEE NOTE 3)	–	NC
146	DTRB	DTR	20
147	RXDB	RXD	3
148	RTSB (SEE NOTE 3)	–	NC
149	NC	–	NC
150	NC	–	NC

NOTES:

1. PINS SHORTED TOGETHER ON THE 982AC CONN. FOR ASYNCHRONOUS ARE:

   PIN 047 TO PIN 148

2. PINS SHORTED TOGETHER ON THE 982AC CONN. FOR SYNCHRONOUS ARE:

   PIN 050 TO PIN 150
   PIN 047 TO PIN 148

3. PINS SHORTED TOGETHER ON THE 982AC CONN. FOR PCDA ASYNCHRONOUS APPLICATION ARE:

   PIN 045 TO PIN 145
   PIN 047 TO PIN 148

4. PINS SHORTED TOGETHER ON THE RS232 CONN. FOR SYNCHRONOUS ARE:

   PIN 15 AND PIN 24

5. WHEN USING AT&T PARADYNE 3820 OR 3830 MODEMS, FOR PCDA, AT 9600 BPS REMOVE THE STRAP BETWEEN 045 AND 145.

207. UNASSIGNED

208. UNASSIGNED

EQUIPMENT NOTES (CONT):

209. OSPS DATA SET CABINET:

1. OSPS DATA SET CABINET J5D003K TO BE LINE ENGINEERED.
2. MAX-CURRENT DRAIN ALLOWED FOR EACH OF THE -48VDC TO 115 VAC J1C134BA-1 INVERTER IS 2.5 AMPS EACH.
3. IN CASES WHERE THE CURRENT DRAIN FOR DATA SETS IN THE DATA SET CABINET EXCEED THE 2.5 AMPS ALLOWED FOR EACH 300 VA INVERTERS THEN THE LINE ENGINEER WILL SPECIFY AN ALTERNATE 115 V PROTECTED AC POWER SOURCE.
4. IN CASES WHERE ALTERNATE 115 VAC POWER SOURCE ARE SPECIFIED THE LINE ENGINEER WILL SPECIFY KS14532 POWER CORDS TO CONNECT TO THE KS22291-L1 POWER STRIPS OR EQUIVALENT POWER CORDS.
5. FAR END DATA SETS SHOULD BE THE SAME AS THE DATA SETS SPECIFIED IN THE OSPS OR 5ESS® DATA SET CABINET.
6. KS22291 POWER STRIPS ARE EQUIPPED WITH HUBBEL CAT NO. 7595 MALE CONNECTOR ON INPUT POWER CONNECTOR.
7. RECOMMENDED DATA SETS AND CURRENT DRAINS:

FEATURE	BAUD RATE	DIGITAL OR ANALOG	SYNC/ ASYNC	DATA SET TYPE	RANGE	CURRENT DRAIN
OAP	9.6K	A	SYNC	GANDALF RM3309A	< 6 MILES	.05A
	19.2K	A	SYNC	GANDALF RM3419	< 200 MILES	.265A
HOBIC/ HOBIS	1.2K	A	ASYNC	GANDALF 3120 AT&T 202T * OR EQUIVALENT	< 5 MILES UNLIMITED	.05A .043A
AUTOQUOTE	110/300	A	ASYNC	AT&T 4000 OR EQUIVALENT	UNLIMITED	.024A
AHLB	9.6K	A	SYNC	GANDALF RH3309 AT&T 2096A * GANDALF FASTRAK OR EQUIVALENT	< 6 MILES UNLIMITED UNLIMITED	.05A .077A .113A
		D	SYNC	AT&T 2596 OR EQUIVALENT	UNLIMITED	.055A
	19.2A	A	SYNC	GANDALF RH3309 OR EQUIVALENT	< 4 MILES	.05A
		D	SYNC	AT&T 2596 OR EQUIVALENT	UNLIMITED	.055A
MIS/C	9.6A	A	ASYNC	TELEBIT T1BSA-T1 OR EQUIVALENT	UNLIMITED	.50A
RCOS	4.8A	A	SYNC	AT&T 2096A * OR EQUIVALENT	UNLIMITED	.68A

* AT&T 829 DAS REQUIRED. 829 DAS CURRENT DRAIN IS .12 A PER UNIT AT&T 829 DAS MAY BE STAND ALONE OR MOUNTED IN A 4042 RACK.

** TO BE USED WITH CDH DESIGN TXTDC 4 CHANNEL PAD (SEE NOTE 211). GANDALF LDS 3000A RACK AND POWER SUPPLY REQUIRED .65 AMPS.

OSPS INTERNATIONAL APPLICATION SCHEMATIC

DWG SIZE	ISSUE
C2	13B

Lucent Technologies | SD-5X214-01 | SHEET D2

EQUIPMENT NOTES (CONT):

209. (CONT) AT&T 2096 MAY BE STAND ALONE OR MOUNTED IN 64A2 RACK WITH POWER SUPPLY THAT REQUIRES 5.12 AMPS WHEN FULLY EQUIPPED.

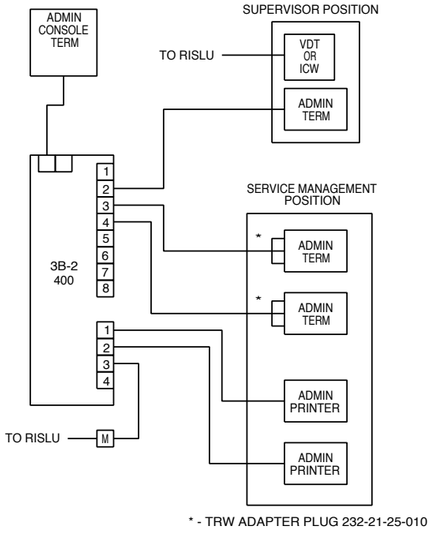
AT&T 2596 MAY BE STAND ALONE OR MOUNTED IN A Z108A1 MULTIPLE MOUNTING WITH WP90131 POWER PACK THAT REQUIRES .018 AMPS. THE 2596 STAND ALONE IS MODEL 2596AL1A/3. THE MULTIPLE MOUNT VERSION IS MODEL 2596AL1A/2.

GANDALF FASTRAK 96 RM9600A MAY BE STAND ALONE OR MOUNTED IN GANDALF RM8 RACK THAT REQUIRES 1.3 AMPS.

GANDALF RACK MOUNTED DATA SETS MAY BE REPLACED WITH STAND ALONE UNITS. RM3120 WITH LDS120, RM3419 WITH LDM419, AND RM3309 WITH LDS309A.

GANDALF 220V 50 HZ VERSION OF LDM419 EQUIPPED WITH BRITISH STANDARD POWER CORD IS DM49.

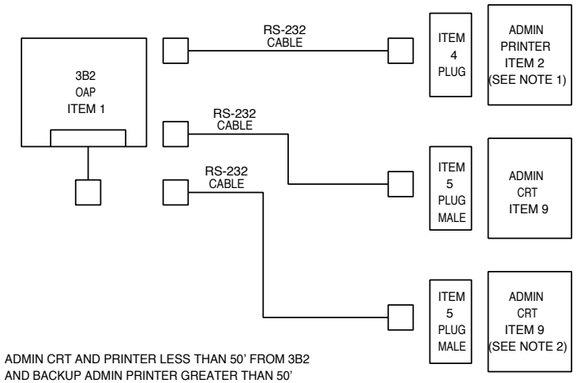
210. OAP EQUIPMENT



* - TRW ADAPTER PLUG 232-21-25-010

EQUIPMENT NOTES (CONT):

211. EQUIPMENT LIST REQUIRED FOR 3B2 OAP TERMINAL



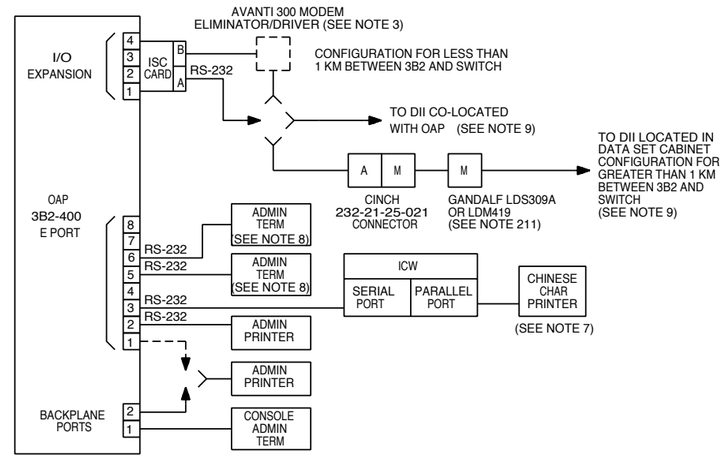
ADMIN CRT AND PRINTER LESS THAN 50' FROM 3B2
AND BACKUP ADMIN PRINTER GREATER THAN 50'

ITEM NO.	OAP EQUIPMENT
1	3B2 (SEE NOTE 1)
2	3B2 PRINTER
~~3~~	~~AUTODIAL MODEM ASYNC 300/1200 BAUD~~
4	PLUG TO ADMIN PRINTER
5	PLUG TO ADMIN CRT
~~6~~	~~PLUG TO ACUMODEM~~
~~7~~	~~MODEM GANDALF LDS120 ASYNC~~
~~8~~	~~MODEM ADAPTER PLUG FOR GANDALF~~ LDS120 MODEM TPW NO. 2322125033
9	ADMIN CRT

NOTES:
1. SEE ED-5X216-30 DRAWING TO ORDER OAP EQUIPMENT AND FOR ICW AND PRINT TICKET SEE ED-5X231-30.
2. 2ND CRT IS OPTIONAL FOR 5E4(1) OFFICES AND IS REQUIRED FOR 5E4(2) AND LATER GENERIC OFFICES.
~~3. OAP EQUIPMENT SHOULD BE ORDERED FROM ED-5X216-30 DRAWING.~~

EQUIPMENT NOTES (CONT):

212. TYPICAL 0SC/FMC CONFIGURATION



NOTES:
~~1. SEE NOTE 211 FOR OAP EQUIPMENT REQUIRED.~~
1. OSC/FMC IN 5EE4.1 IS EQUIVALENT TO OAP IN 5EE3.2.
2. ~~OAP~~ OSC/FMC EQUIPMENT SHOULD BE ORDERED FROM ED5X216-30 DRAWING.
3. USED TO PROVIDE LOCAL LOOP BACK TEST CAPABILITY TO TEST ISC BOARD.
4. IT IS RECOMMENDED THAT THE OAP 3B2 BE ON PROTECTED POWER WHEN EVER POSSIBLE.
5. ~~OAP~~ OSC/FMC 3B2 CURRENT DRAINS ARE:

3B2-400	115VAC 6 AMPS
560202AAG DISPLAY	115VAC .5 AMP

6. USING EPORTS ONLY (11 BOARDS MAX.) 3B2-400 SUPPORTS 90 SERIAL PORTS MAX. USING I/O EXPANSION BOARDS ONLY (11 BOARDS MAX.) 3B2-400 SUPPORTS 46 SERIAL PORTS MAX.
7. ONLY REQUIRED FOR CHINESE CHARACTERS.
8. IT IS RECOMMENDED THAT A MAXIMUM OF 4 AT'S BE USED. FOR OAP THAT HAS MORE THAN 4 AT'S THE 19.2K BPS SYNCHRONOUS DATA LINK IS REQUIRED.
9. IT IS RECOMMENDED THAT THE OAP THE DII (IF CO-LOCATED WITH THE OAP) AND THE SYNCHRONOUS MODEM (IF NEEDED) BE PROVIDED WITH A PROTECTED POWER SUPPLY.

OSPS INTERNATIONAL APPLICATION SCHEMATIC

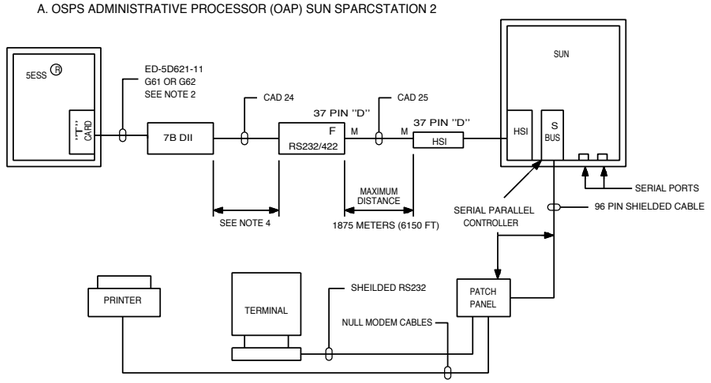
DWG SIZE	ISSUE
C2	13B

Lucent Technologies	SD-5X214-01	SHEET D3

EQUIPMENT NOTES (CONT):

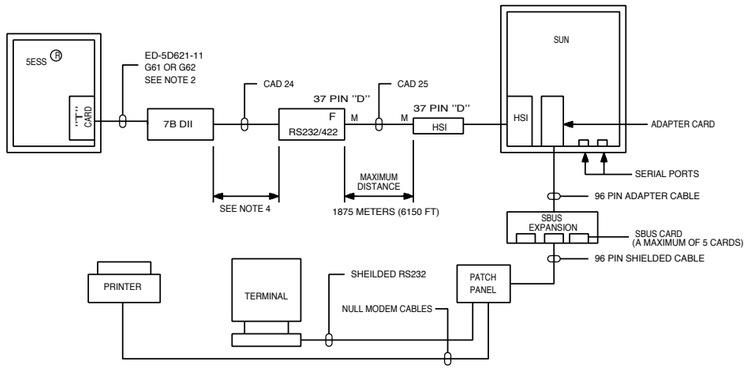
213.

A. OSPS ADMINISTRATIVE PROCESSOR (OAP) SUN SPARCSTATION 2



213.

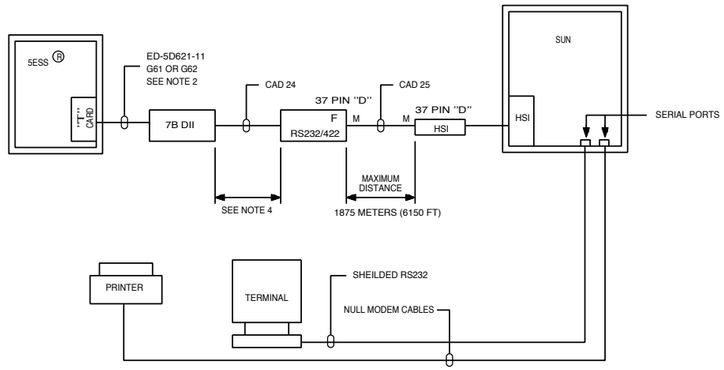
B. OSPS ADMINISTRATIVE PROCESSOR (OAP) SUN SPARCSTATION 2
EQUIPPED WITH SBUS EXPANSION.



EQUIPMENT NOTES (CONT.):

213. (CONT.)

C. OSPS ADMINISTRATIVE PROCESSOR (OAP) SUN SPARCSTATION 2
WHEN ONLY ONE (1) AT AND ONE (1) AP (MAXIMUM), AND NO
CUSTOM REPORT WRITING, (CRW) FUNCTION IS REQUIRED.



NOTES:

1. A MAXIMUM OF 10 SERIAL PORTS ARE AVAILABLE WITHOUT THE S-BUS EXPANSION CARD. WITH THE S-BUS EXPANSION CARD, 18 PORTS FOR PRINTERS AND 18 PORTS FOR TERMINALS ARE AVAILABLE.
2. USE ED-5D621-11,G61 WHEN POWER SUPPLY 353A IS USED TO PROVIDE 110V TO THE DII OR G62 TO THE DF WHEN -48V IS USED TO POWER THE DII.
3. THE INTERFACE CONVERTER IS TO BE CONFIGURED WITH THE RS422 SIDE AS "DCE" EQUIPMENT WITH DIP SHUNTS IN POSITIONS XW1B, XW2B AND XW3B AND THE RS232 SIDE AS "DTE" EQUIPMENT, WITH DIP SHUNTS IN POS1TIONS XW4A AND XW5A, SWITCH "S1" IS TO BE "OFF".
4. MAXIMUM DISTANCE 15 METERS (50FT). FOR LONGER DISTANCES 19.2KBS. MODEMS ARE REQUIRED.
5. FOR ORDERING INFORMATION SEE ED-5X216-30.
6. SUN SPARCSTATION 2 SPECIFICATIONS:

AC VOLTAGES	90-132 VAC OR 180-264 VAC
AC FREQUENCY	47-63 HZ.
POWER	.2K VA.

DIMENSIONS AND WEIGHTS SPARCSTATION 2 CHASSIS.

HEIGHT	7.1 CM	(2.8IN)
WIDTH	40.9 CM	(16.0IN)
DEPTH	40.9 CM	(16.0IN)
NET WEIGHT	10.4 KG.	(22.8LBS)

DIMENSIONS AND WEIGHTS FOR 19 IN. MONOCHROME MONITOR:

HEIGHT	45.0 CM	(17.7IN)
WIDTH	46.0 CM	(18.1IN)
DEPTH	41.0 CM	(16.1IN)
SHIPPING WEIGHT	27.7 KG	(61.0LBS)

DIMENSIONS AND WEIGHTS FOR 16 IN. COLOR MONITOR:

HEIGHT	41.6 CM	(16.4IN)
WIDTH	40.6 CM	(16.0IN)
DEPTH	45.3 CM	(17.8IN)
SHIPPING WEIGHT	27.3 KG	(60.0LBS)

7. THE 7B DII SHALL BE CONFIGURED AS A SYNCHRONOUS TERMINAL ADAPTER (S-TA) WITH THE DIP SWITCH SETTINGS AS FOLLOWS:
   LAPD SAPI 0; (1) D, (2) D, (3) U --- (9) D, (10) U
   LAPD ADDRESS; DCE (4) D
   CLOCK SOURCE; INTERNAL (5) U
   BAUD RATES; 19200 (6) D, (7) D, (8) U

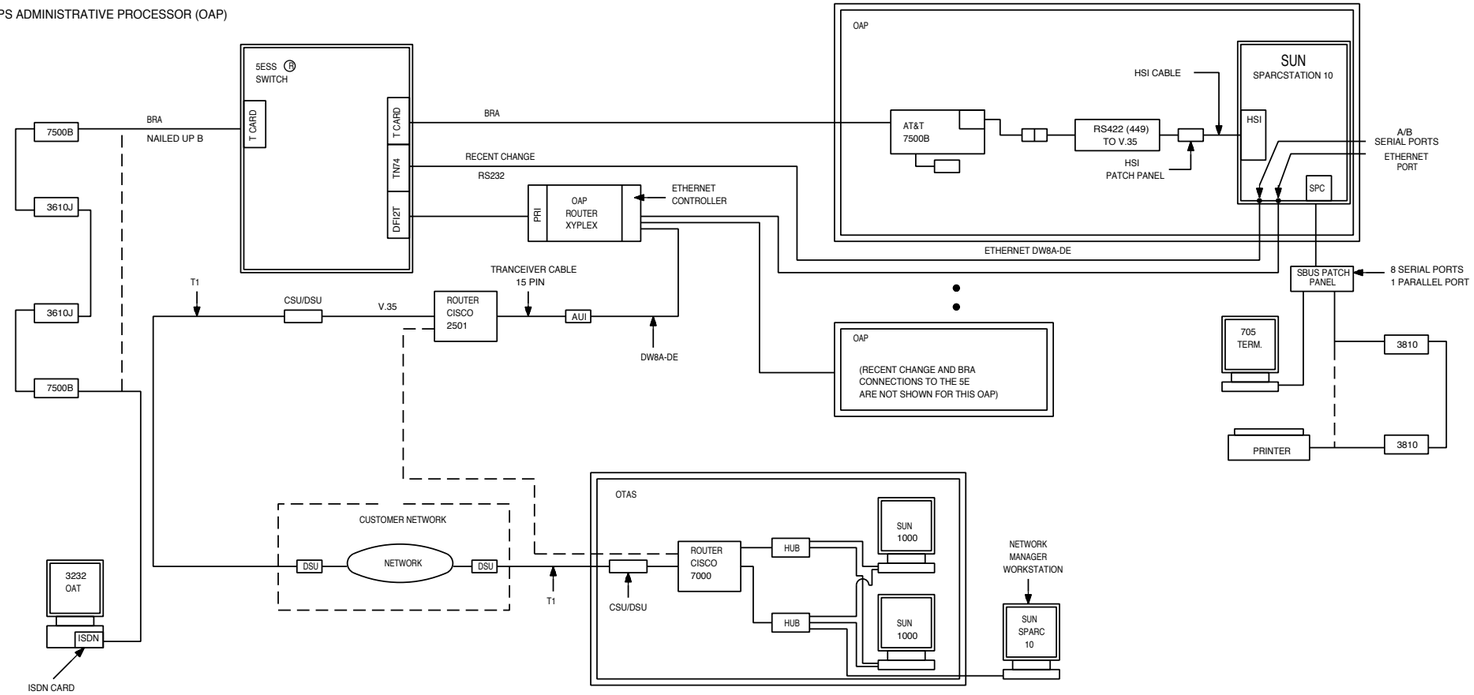
OSPS INTERNATIONAL
APPLICATION SCHEMATIC

DWG SIZE	ISSUE
C2	13B

Lucent Technologies | SD-5X214-01 | SHEET D4

EQUIPMENT NOTES (CONT):

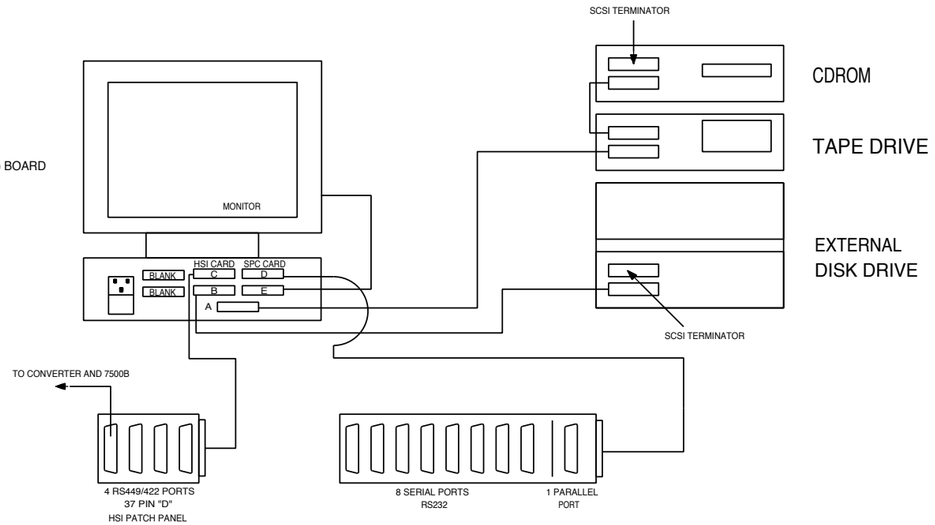
213. OSPS ADMINISTRATIVE PROCESSOR (OAP)



EQUIPMENT NOTES (CONT):

213. OSPS ADMINISTRATIVE PROCESSOR (OAP)
SUN SPARCSTATION 10

	A	SCSI PORT ESPO TO TAPE DRIVE
SBUS SLOT 0	B	FAST SBUS SCSI ETHERNET CARD TO EXTERNAL DISK DRIVE
SBUS SLOT 1	C	HIGH SPEED INTERFACE CARD TO HSI UNIT
SBUS SLOT 3	D	SERIAL PARALLEL CONTROLLER (SPC) BOARD
SBUS SLOT 2	E	TO MONITOR



OSPS INTERNATIONAL
APPLICATION SCHEMATIC

DWG SIZE	ISSUE
C2	13B

Lucent Technologies | SD-5X214-01 | SHEET D5

EQUIPMENT NOTES (CONT):

213. OSPS ADMINISTRATIVE PROCESSOR (OAP)
SUN SPARC STATION 10

NOTES: 1) FOR ORDERING INGORMATION SEE ED-5X216-30

2) SPARC STATION 10 SPECIFICATIONS ARE AS FOLLOWS:

A) ENVIRONMENT:

AC POWER : 100-240VAC, 43-63HZ, 0.4K VA.
OPERATING: 0 DEG. C TO 40 DEG. C ((32 DEG. F TO 104 DEG. F)
NONOPERATING: -40 DEG. C TO 75 DEG. C (-40 DEG. F TO 167 DEG. F)
5% TO 95% RELATIVE HUMIDITY, NONCONDENSING.
OPERATING ACOUSTIC NOISE 5.1 BELS (AT 28 DEG. C)
IDEL ACOUSTIC NOISE: 5.0 BELS (AT 28 DEG. C)
DECLARED NOISE EMISSIONS IN ACCORDANCE WITH ISO 9296.

B) REGULATIONS:

MEETS OR EXCEEDS THE FOLLOWING REQUIREMENTS;
SAFTY: UL1950, CSA 950, TUV EN 60950
RFI/EMI: FCC CLASS B, DOC CLASS B, VDE CLASS B, VCCI CLASS 2.
X-RAY DHHS 21, SUBCHAPTER J: PTB GERMAN X-RAY DECREE.

C) DIMENSIONS:

SPARCSTATION 10 CHASSIS

HEIGHT: 7.6 CM (3.0IN)
WIDTH: 41.7 CM (16.4IN)
DEPTH: 40.9 CM (16.2IN)
SHIPPING WEIGHT: 12.7KG. (27.0 LBS)

16 IN COLOR MONITOR

HEIGHT: 47.4 CM (16.4IN)
WIDTH: 40.6 CM (16.0IN)
DEPTH: 45.3 CM (17.8IN)
SHIPPING WEIGHT: 27.3KG (60.0 LBS.)

3) AT&T GLOBALIST 515 (3232) GRAPHICS TERMINAL CPU DIMENSIONS:

HEIGHT: 10.4 CIM (4.1IN)
WIDTH: 41.7 CIM (16.3IN)
DEPTH: 40.1 CM (16.1IN)
WEIGHT: 8.4 KG. (18.5 LBS.)

POWER REQUIREMENTS: 90VAC TO 132VAC; 198 VAC TO 264 VAC .2A.
POWER SUPPLY WATTAGE 150W
FREQUENCY REQUIREMENTS: 47 HZ. TO 63 HZ.

15 IN SVGA MONITOR DIMENSIONS ARE:
HEIGHT: 36.3 CM (14.26IN)
WIDTH: 37.3 CM (14.7IN)
DEPTH: 39.1 CM (15.37IN)
WEIGHT: 16.0 KG. (35.2LBS.)

EQUIPMENT NOTES (CONT):

213. (CONT)

3) AT&T GLOBALIST 515 (3232) GRAPHICS TERMINAL CPU DIMENSIONS (CONT):

B) REGULATIONS:
THE AT&T GLOBALYST 515 IS CERTIFIED AS CONFORMING TO THE FOLLOWING
SAFETY: USA: UL1950, UL LISTING MARK USED
GERMANY: VDEO805/ EN 60950, GS LABEL
NORWAY: NEMKO 950./ 89 WITH NEMKO MARK ON CABINET
CANADA: CSA C22.2 NO. 950-M89

THE AT&T 515 IS CERTIFIED TO THE FOLLOWING RFI STANDARDS:
USA: FCC CFR 47, PART 15, CLASS B
GERMANY: POSTVERFUEGUNG 243/91 (VDE 0871/ CLASS B)
JAPAN: VCCI CLASS 2
CANADA: CSA C108.8-M1983
NEW ZEALAND: RFS 49 (CISPR22) CLASS B
EUROPE: EN55022, CLASS B

C) MINIMUM AIRFLOW CLEARANCES ARE:
FRONT: 20.32CM (8.0") BACK: 7.68CM (3.0")
TOP: 2.56CM (1.0") BOTTOM: 0.64CM (0.25")
SIDES: 7.68CM (3.0")

4) SPECIFICATIONS FOR MODEL 3610J MODEM

A) ENVIRONMENTAL:

OPERATING TEMPERATURE: 4 DEG. C TO 49 DEG. C
40 DEG. F TO 120 DEG. F

RELATIVE HUMIDITY: 5% TO 90%
TEMPERATURE: 5 DEG. C TO 40 DEG. C
41 DEG. F TO 104 DEG. F

B) POWER REQUIREMENTS:

MODEL 3610J 90 VAC TO 123 VAC
45 TO 66 HZ.

C) PHYSICAL DIMENSIONS:

MODEL 3610J HEIGHT: 88MM (3.5IN)
WIDTH: 352MM (13.85IN)
DEPTH: 331MM (13.0IN)
WEIGHT: 7.5KG. (16.52LBS.)

EQUIPMENT NOTES (CONT):

213. (CONT)

5) SPECIFICATIONS FOR MODEL 3510 AND 3511 DSU'S

A) ENVIRONMENTAL:
OPERATING TEMPERATURE: 4 DEG. C TO 49 DEG. C
40 DEG. F TO 120 DEG. F
RELATIVE HUMIDITY: 5% TO 95% NONCONDENSING.
STORAGE TEMPERATURE: -20 DEG. C TO 70 DEG. C
-4 DEG. F TO 158 DEG. F
SHOCK AND VIBRATION: WITHSTANDS NORMAL SHIPPING AND HANDLING.

B) POWER REQUIREMENTS:
MODEL 3510 90 VAC TO 132 VAC 0.07 AMP AT 117 VAC.
60 HZ. +/- 3 5.8 WATTS (TYPICAL)
MODEL 3511 SUPPLIED BY CARRIER 6.0 WATTS.

HEAT DISSIPATION:
MODEL 3510 19.5 BTU/HR (TYPICAL)
MODEL 3511 20.5 BTU/HR (TYPICAL)

C) PHYSICAL DIMENSIONS:
MODEL 3510 HEIGHT: 5.4 CM (2.13IN)
WIDTH: 19.3 CM (7.6IN)
DEPTH: 30.8 CM (12.13IN)
WEIGHT: 1.2KG. (2.6LBS>)
MODEL 3511 HEIGHT: 18.1 CM (7.13IN)
WIDTH: 2.5 CM (1.00IN)
DEPTH: 34.0 CM (13.40IN)
WEIGHT: (NON-MODULAR) .4 KG. (.8LBS.)
WEIGHT: (MODULAR) .3KG. (.73 LBS.)

D) APPROVALS:
FCC PART 15: CLASS A DIGITAL DEVICE
FCC PART 68: REG NO. AW2USA-61422-DO-N
UL(3510) LISTED UL 478
UL(3511) 3000 CARRIER RECOGNIZED UL 478
CSA SAFTY: CERTIFIED CSA 22.2 NO. 220
EMISSIONS: CSA 108.8 CLASS A.
BELL CANADA: "DCTE SPECIFICATIONS" JULY 1989, ISS. 1

6) SPECIFICATIONS FOR NEC MODEL PC-PR3000PS/4 PRINTER

A) ENVIRONMENTAL:
OPERATING TEMPERATURE: 10 DEG. C TO 32.5 DEG. C
50 DEG. F TO 90 DEG. F
RELATIVE HUMIDITY: 10% TO 80% NONCONDENSING
STORAGE TEMPERATURE: 0 DEG. C TO 35 DEG. C
32 DEG. F TO 95 DEG. F

B) POWER REQUIREMENTS:
90 VAC TO 110 VAC
50/60 HZ. +/- 1 HZ. 800 W

C) PHYSICAL DIMENSIONS:
HEIGHT: 27.7 CM (10.9IN)
WIDTH: 46.0 CM (18.1IN)
DEPTH: 49.9 CM (19.65IN)
WEIGHT: 20.0KG. (44.1 LBS)

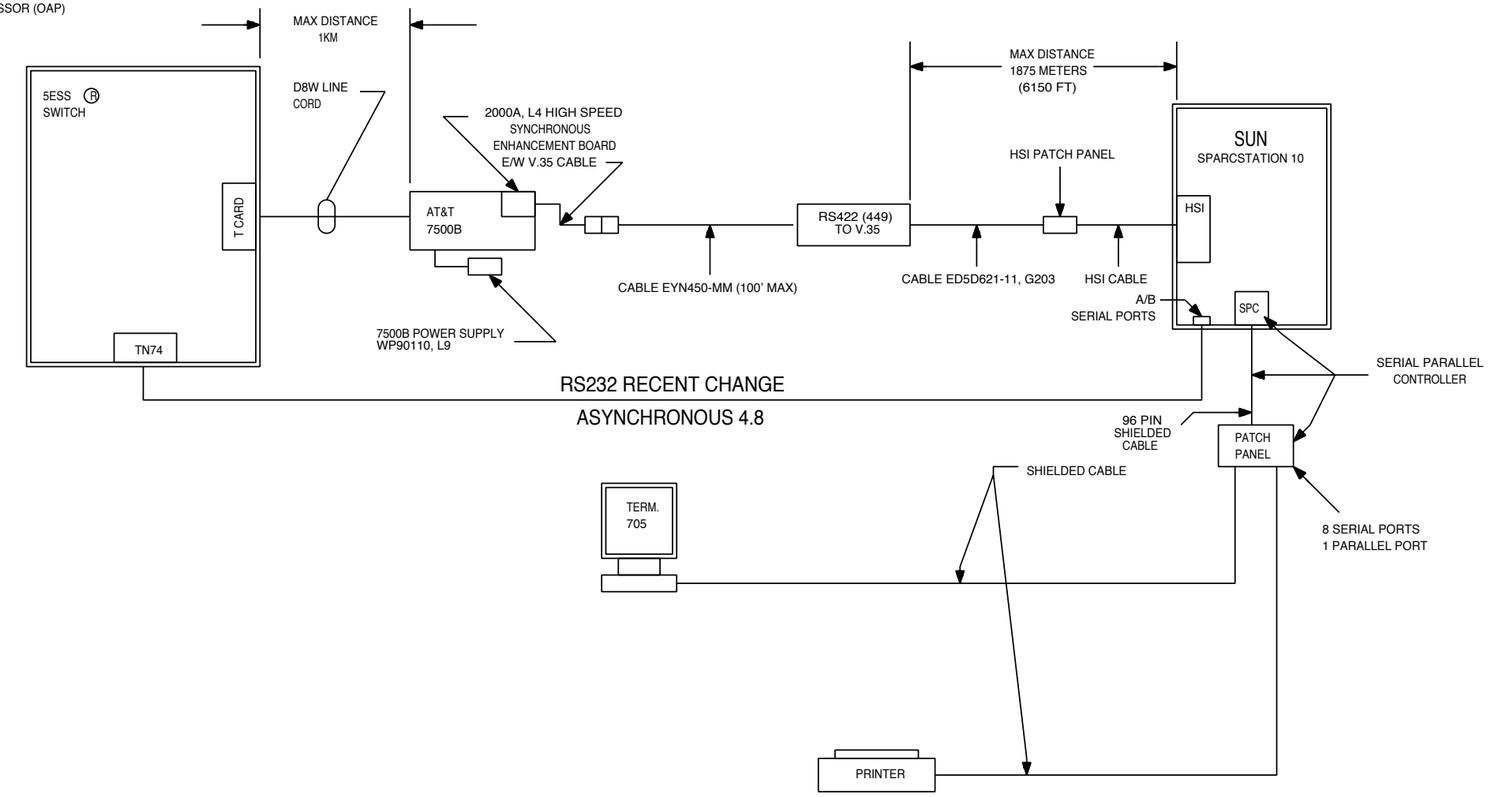
OSPS INTERNATIONAL
APPLICATION SCHEMATIC

DWG SIZE	ISSUE
C2	13B

Lucent Technologies	SD-5X214-01	SHEET D6

EQUIPMENT NOTES (CONT):

213. OSPS ADMINISTRATIVE PROCESSOR (OAP)
SUN SPARC STATION 10



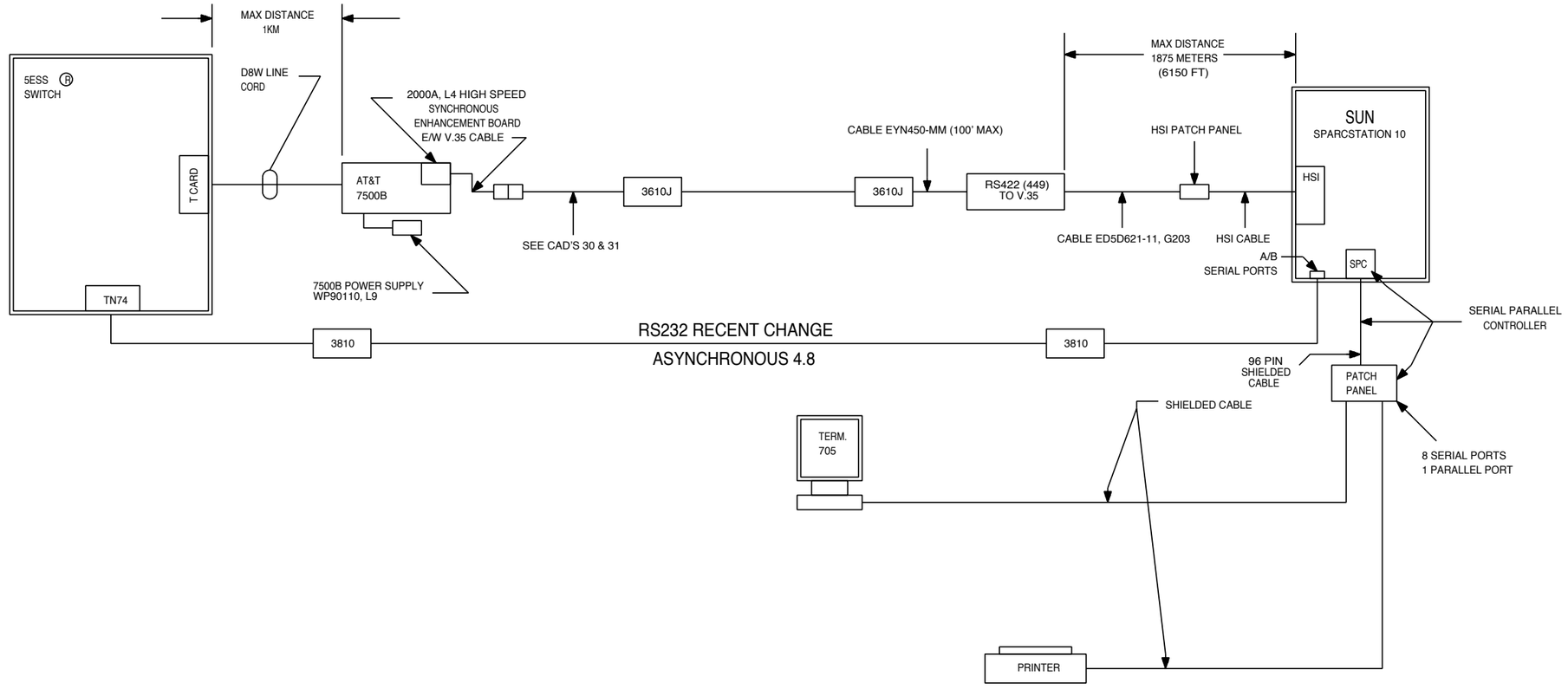
OSPS INTERNATIONAL
APPLICATION SCHEMATIC

DWG SIZE	ISSUE
C2	13B

Lucent Technologies	SD-5X214-01	SHEET
		D7

EQUIPMENT NOTES (CONT):

213. OSPS ADMINISTRATIVE PROCESSOR (OAP)
SUN SPARCSTATION 10 EQUIPPED WITH MODEMS (NOT CO-LOCATED).



OSPS INTERNATIONAL
APPLICATION SCHEMATIC

DWG SIZE	ISSUE
C2	13B

Lucent Technologies	SD-5X214-01	SHEET
		D8

EQUIPMENT NOTES (CONT):

214. POWER DISTRIBUTION IN OSC P.D. CABINET:

1. LOAD FUSES WILL BE SPECIFIED BY THE LINE ENGINEER.

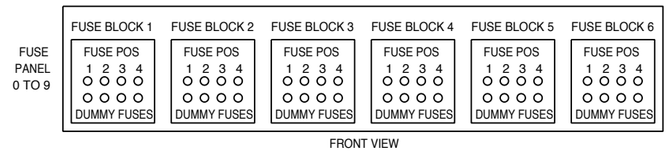
2. 74E TYPE FUSES SHOULD BE USED IN POWER DISTRIBUTION PANEL WHEN MORE THAN ONE VDT IS ASSIGNED TO A FUSE.

3. 74F TYPE FUSES SHOULD BE USED IN POWER DISTRIBUTION PANEL TO FUSE OPC DATA SET CABINETS, RISLU CABINETS, LTP CABINETS AND ED-5D627-30 FUSE PANELS.

4. THE MAXIMUM NUMBER OF BST'S OF VDT'S SHOULD BE ASSIGNED PER FUSE AT POWER DISTRIBUTION PANELS.

5. FUSE PANEL ED-5D627-30 NUMBER AS SHOWN:

FUSE PANEL NUMBERING ARRANGEMENT
ED-5D627



FRONT VIEW

6. THE MAX NO. OF BST'S PER FUSE IN THE ED-5D627-30 FUSE PANEL IS 4.
THE MAX NO. OF VDT'S PER FUSE IN THE ED-5D627-30 FUSE PANEL IS 1.
THE MAX NO. OF BST'S PER FUSE IN THE ED-83024-30 P.D PANEL IS 4.
THE MAX NO. OF VDT'S PER FUSE IN THE ED-83024-30 P.D PANEL IS 4.

7. P.D. TO RISLU FEEDER LEAD DESCRIPTION:

BUS	RISLU CABINET NO.	RISLU CAB.	FEEDER NO.
-48(A,B)	(1,2,3,4)	R	(1,2,3,4,5,6,7,8)

EXAMPLE:

	BUS		RISLU	FEEDER
-48	A	1	R	7

-48 RISLU CAB. NO.

BUS	RISLU CABINET NO.	CAB.	FEEDER NO.
RTN(A,B)	(1,2,3,4)	R	(1,2,3,4,5,6,7,8)

EXAMPLE: RTN B 1 R 7

215. HARDWARE REQUIRED FOR TERMINATION OF POWER FEEDER IN THE OPERATOR POSITION CONTROL P.D. IS FOUND IN J5D003H.

216. RISLU CABINETS HAVE 8 INPUT FEEDERS AND REQUIRE A AND B BUSES. FOR THE FIRST RISLU CABINET A 6 FEEDER GROUP IS APPLIED TO THE A BUS AND 2 FEEDER GROUP TO THE B BUS. WHEN ADDITIONAL RISLU CABINETS ARE PLACED IN LINE UP ALTERNATE THE 6 FEEDER AND 2 FEEDER GROUPS BETWEEN THE A AND B BUSES. SEE SD-5D134-01.

217. AT OSPS SITES SHARING THE SAME POWER PLANT WITH A 5ESS® SYSTEM, THE OSPS P.D. CABINET AND BST'S OR VDT'S WILL BE OUTSIDE 5ESS ®GROUND.

218. FOR GROUND WINDOW JUNCTION BAR LOCATED OVER POWER DISTRIBUTION CABINET SEE ED-4C471-30 DRAWING.

EQUIPMENT NOTES (CONT):

219. FEEDERS FROM POWER DISTRIBUTION PANEL ARE TO BE BALANCED ACROSS THE A AND B BUS FOR OSC SITES THAT SHARE POWER PLANT WITH 5ESS®AND WHEN OPERATOR POSITION CONTROL P.D. IS LOCATED WITH BST'S AND VDT'S.

220. EQUIPMENT GROUND TO TERMINATE AT CENTRAL OFFICE GROUND BUS ON SAME FLOOR AS BST'S OR VDT'S.

OSPS INTERNATIONAL APPLICATION SCHEMATIC

DWG SIZE	ISSUE
C2	13B

Lucent Technologies	SD-5X214-01	SHEET D9

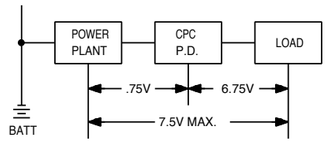
EQUIPMENT NOTES (CONT):

221. RECOMMENDED POWER DISTRIBUTION PANEL FOR USE WITH LINEAGE ™ 2000 POWER PLANT IN REMOTE OSC SITES WITH DEDICATED POWER PLANT AND WITHOUT OPC P.D. IS ED-83018-30.

222. APPLICATIONS

1. REMOTE OSC SITE WITH DEDICATED POWER PLANT AND LOCAL OPERATOR POSITION CONTROL (OPC) P.D.

2. OSC SITE SHARING POWER PLANT WITH 5ESS® AND OPC P.D. REMOTED WITH BST'S OR VDT'S.



MAX. CABLE LOOP FEET FROM OPC P.D. TO LOAD

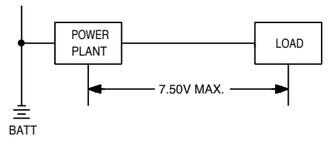
CABLE SIZE	1 VDT PER FUSE	2 VDT'S PER FUSE	3 VDT'S PER FUSE	4 VDT'S PER FUSE
#14	1000' **	500' **	350' **	250' **
#12	1700'	850'	550'	400'
#10	2700'	1350'	900'	650'
#8	3280' *	2150'	1450'	1050'
#6	----	3280' *	2300'	1700'
#4	----	----	3280' *	2750'
#2	----	----	----	3280' *

MAX. CABLE LOOP FEET

CABLE SIZE	1 BST PER FUSE	2 BST'S PER FUSE	3 BST'S PER FUSE	4 BST'S PER FUSE
#14	3280' *	3280' *	2700'	2100'
#12	----	----	3280' *	3280' *

* MAX. DISTANCE ALLOWED FOR DSL FROM ISLU TO BST'S OR VDT'S.
** 74E 15 AMP FUSE REQUIRED AT P.D. PANEL.

3. REMOTE OSC SITE WITH DEDICATED POWER PLANT WITHOUT OPERATOR POSITION CONTROL P.D. CABINET. (MAX. 800 CABLE LOOP FEET FROM POWER DISTRIBUTION TO BST'S OR VDT'S).



MAX. CABLE LOOP FEET

CABLE SIZE	1 VDT PER FUSE	2 VDT'S PER FUSE	3 VDT'S PER FUSE	4 VDT'S PER FUSE
#14	800'	600'	400'	300'
#12	---	800'	640'	480'
#10	---	---	800'	760'
#8	---	---	---	800'

#14 GA CABLE TO BE USED FOR ALL BST APPLICATIONS (UP TO 4 BST'S) MAX. CABLE LOOP FEET TO BE 800'

EQUIPMENT NOTES (CONT):

223. CURRENT DRAINS FOR BST ARE:

0.3 AMP + OR - 10% AT 42.5 VIN LIST 1
0.4 AMP + OR - 10% AT 55.0 VIN LIST 2

VDT ARE:

1.87 AMP + OR - 10% AT 42.5 VIN LIST 1
2.40 AMP + OR - 10% AT 35.0 VIN LIST 2

RISLU CABINET LIST 1 FEEDER CURRENT DRAINS AT 52.0V ARE:

15.0 AMPS

RISLU CABINET LIST 2 FEEDER CURRENT DRAINS AT 42.5V ARE:

FEEDER 1 0.80 AMPS	FEEDER 5 1.30 AMPS
FEEDER 2 3.35 AMPS	FEEDER 6 3.55 AMPS
FEEDER 3 0.80 AMPS	FEEDER 7 1.80 AMPS
FEEDER 4 3.35 AMPS	FEEDER 8 3.55 AMPS
	TOTAL 18.6 AMPS

224. TYPICAL GROUNDING ARRANGEMENT FOR REMOTE OSC SITE WITH DEDICATED POWER PLANT AND LOCAL OPC P.D.

NOTES:

1. FURNISHED BY CUSTOMER.

2. GROUNDING METHODS CALLED FOR IN BSP 802-001-180 AND BSP 802-001-195 SHOULD BE FOLLOWED EXCEPT WHERE SUPERSEDED HEREIN.

3. ALL WIRE LUGS AND CONNECTORS TO BE KS-15977 AND KS-21500 TPE OR APPROVED EQUIVALENT.

4. THE ESS DC GROUNDING MUST BE ISOLATED FROM THE BUILDING SYSTEM. IN ORDER TO ACCOMPLISH THIS THE FOLLOWING MUST BE TAKEN INTO CONSIDERATION:

A. ALL EQUIPMENT CABINETS IN THE OSPS SHALL BE BOLTED TO THE FLOOR AS SHOWN IN ED-1A210-11. EXTREME CARE MUST BE EXERCISED TO INSURE THAT THE EQUIPMENT CABINETS ARE INSULATED FROM BUILDING GROUND BY INSULATING THE ANCHOR BOLTS FROM THE CABINET. THIS PREVENTS ANY POSSIBILITY OF GROUNDING THE CABINETS TO REINFORCING STEEL, UNDER FLOOR DUCT, STRUCTURAL STEEL, BURIED PIPING, ECT. THE EFFECTIVENESS OF EACH INSULATED BOLT SHOULD BE VERIFIED BY TEST AT INSTALLATION.

B. NO METALLIC CONNECTION OF ANY KIND SHALL BE MADE BETWEEN OSPS EQUIPMENT CABINETS AND ANY PART OF THE BUILDING STRUCTURE EXCEPT AS DESCRIBED HEREIN.

C. ALL CABLE RACKS SUPPORTED ON OSPS CABINETS SHALL BE INTERRUPTED OR INSULATED AT ALL POINTS WHERE THEY LEAVE THE OSPS CABINETS SO AS TO AVOID ANY POSSIBILITY OF UNWANTED GROUNDS BEING BROUGHT INTO THE AREA. THIS ALSO APPLIES TO END GUARDS AND STANCHIONS.

EQUIPMENT NOTES (CONT):

224. (CONT)

D. THE "CENTRAL OFFICE" GROUND SHOULD BE CONNECTED TO THE OSPS SYSTEM AS FOLLOWS:

1. THE ONLY POINT OF CONNECTION IS THE MAIN GROUND BUS SPLICE PLATES LOCATED OVER THE POWER DISTRIBUTION CABINET.

2. ALL EQUIPMENT CABINETS IN THE OSPS AREA WILL BE GROUNDED THROUGH THE SAME SOURCE BY MEANS OF A COPPER CONDUCTOR (NO. 6 STRANDED) EXTENDING FROM THE MAIN GROUND BUS THROUGHOUT THE OSPS LINEUP.

5. ALL -48 VOLT RETURN FEEDERS FOR OSPS ARE TO BE ISOLATED FROM THE OSPS CABINETS. ALL "0" BUS RETURNS IN A LINE-UP ARE MADE COMMON AND ALL "1" BUS RETURNS IN THE SAME LINE-UP ARE MADE COMMON.

6. THE MAIN GROUND BUS IN THE "GROUND WINDOW" (BSP 802-001-195, PART 4) IS COMBINED WITH THE -48 VOLT RETURN DISTRIBUTION BUS BAR WHICH IS LOCATED AT P.D., OR WITH THE -48 RETURN DISTRIBUTION BUS BAR LOCATED IN THE POWER PLANT.

7. THE BUILDING GROUND REFERENCE FOR THE SINGLE POINT GROUND IS ESTABLISHED BY RUNNING A CONDUCTOR, TO BE DETERMINED BY THE LINE ENGINEER, BETWEEN THE MAIN GROUND BUS AND THE C.O. GROUND BUS DEFINED IN BSP 802-001-195.

8. IN NEW BUILDINGS PROVIDE GROUNDING ELECTRODE SYSTEM PER LATEST EDITION OF THE N.E.C. IN EXISTING BUILDINGS USE EXISTING GROUNDING SYSTEM. REF BSP 802-001-180 AND ASSOCIATED APPLICABLE PRACTICES.

9. TOLL AND TRANSMISSION EQUIPMENT IS PART OF THE INTEGRATED GROUND PLANE, NOT THE OSPS ISOLATED GROUND PLANE.

10. POWER DISTRIBUTION CABINETS FOR OSPS MUST BE GROUNDED WITH A SPECIAL 1/0 AWG WIRE THAT RUNS DIRECTLY TO THE OSPS GROUND WINDOW INSTEAD OF THE NO. 6 AWG GROUND WIRE USED ON ALL OTHER CABINETS.

11. POWER FEEDERS TO BE PAIRED IN SAME WIRING TROUGH WHERE EVER POSSIBLE.

12. THE SIZE OF THE EQUIPMENT GROUND CONDUCTOR FROM THE C.D. GROUND TO THE BST OR VDT POWER CORD MUST BE THE SAME SIZE AS THE POWER FEEDERS FROM THE POWER DISTRIBUTION TO THE BST OR VDT POWER CORD. MIN. SIZE CABLE IS #14 GA.

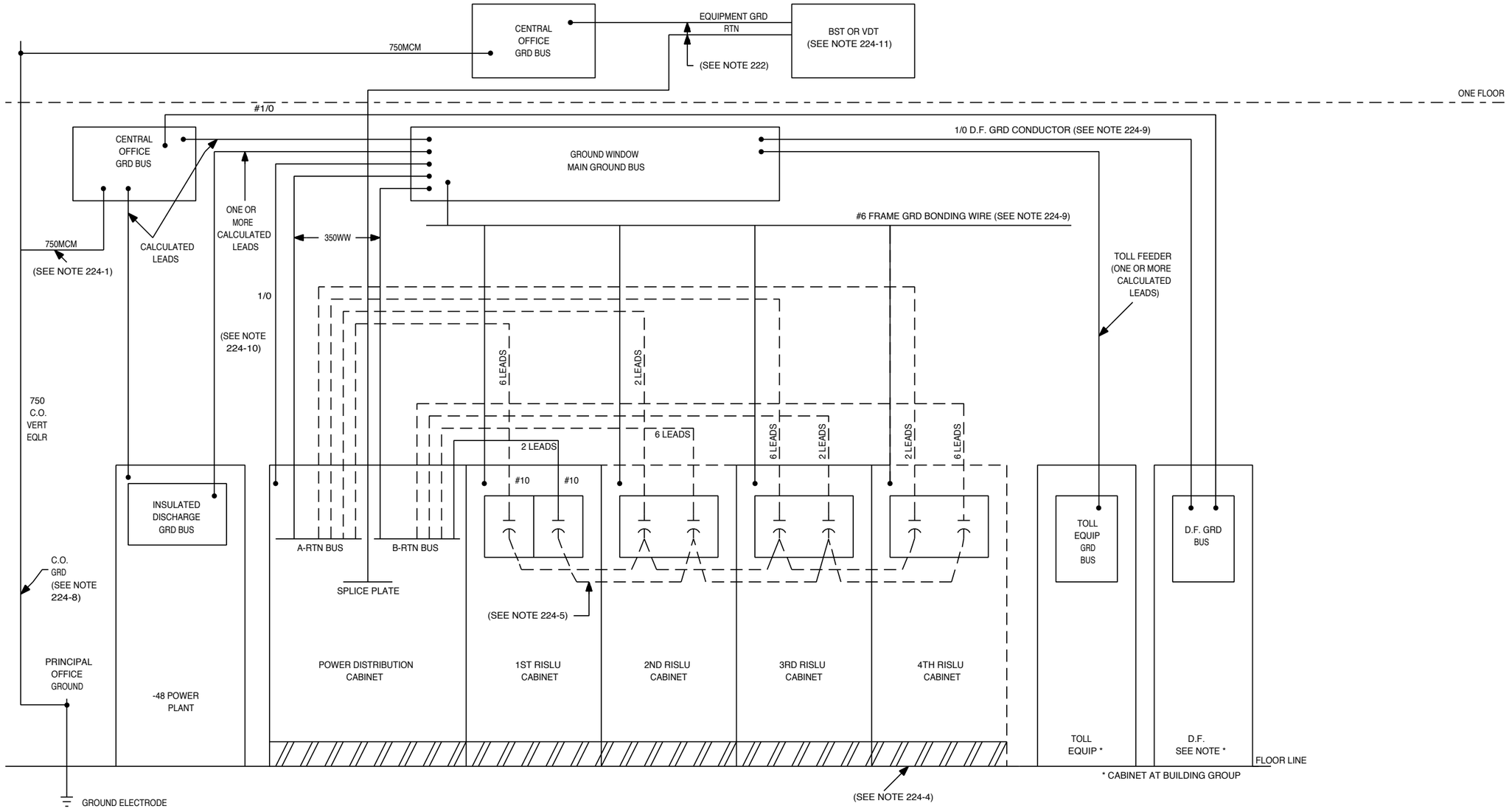
OSPS INTERNATIONAL APPLICATION SCHEMATIC

DWG SIZE	ISSUE
C2	13B

Lucent Technologies | SD-5X214-01 | SHEET D10

EQUIPMENT NOTES (CONT):

224. (CONT) TYPICAL APPLICATION FOR REMOTE OSC SITE WITH DEDICATED POWER PLANT AND LOCAL OPC P.D. (BST'S OR VDT'S OVER 800 CABLE LOOP FEET FROM OPC P.D.).



OSPS INTERNATIONAL APPLICATION SCHEMATIC

DWG SIZE	ISSUE
C2	13B

Lucent Technologies	SD-5X214-01	SHEET D11

EQUIPMENT NOTES (CONT):

224. (CONT)

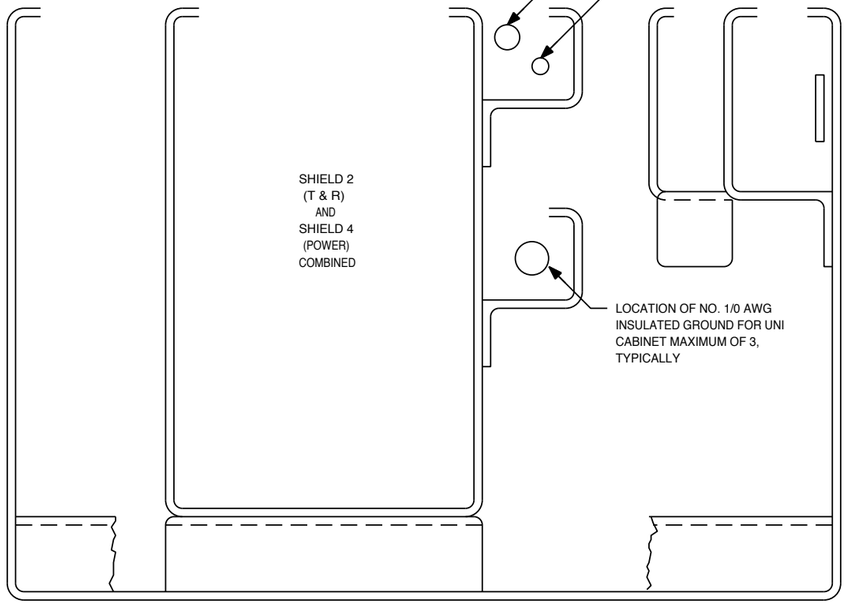


FIG. 1

END VIEW OF LINE-UP CABLE RACK SHOWING LOCATION OF GROUND WIRES FOR 6 FT. CABINETS.

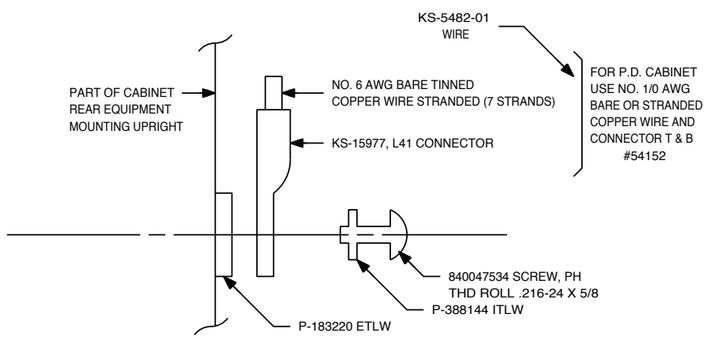


FIG. 2

METHOD OF ATTACHING CABINET GROUND CONDUCTOR TO 6 FT. CABINET UPRIGHT

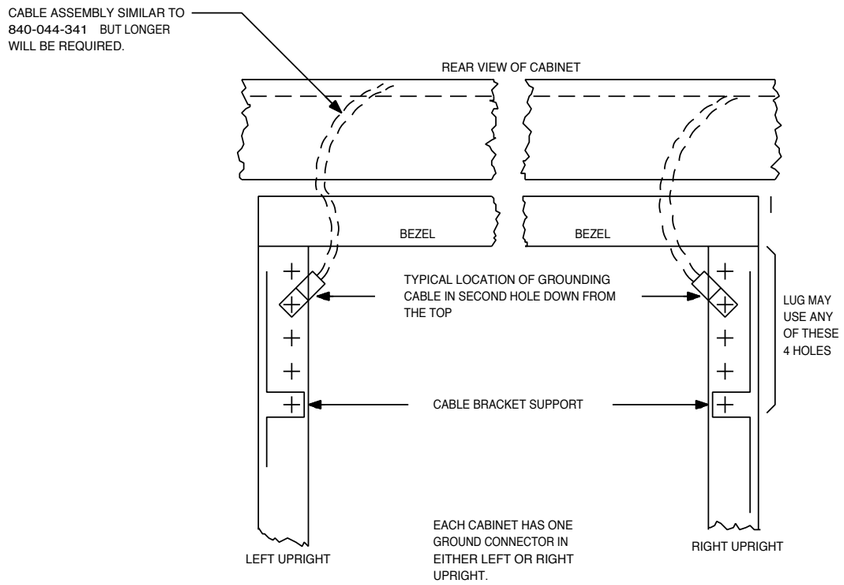


FIG. 3

LOCATION OF 6FT. CABINET HOLES FOR GROUNDING CONDUCTORS

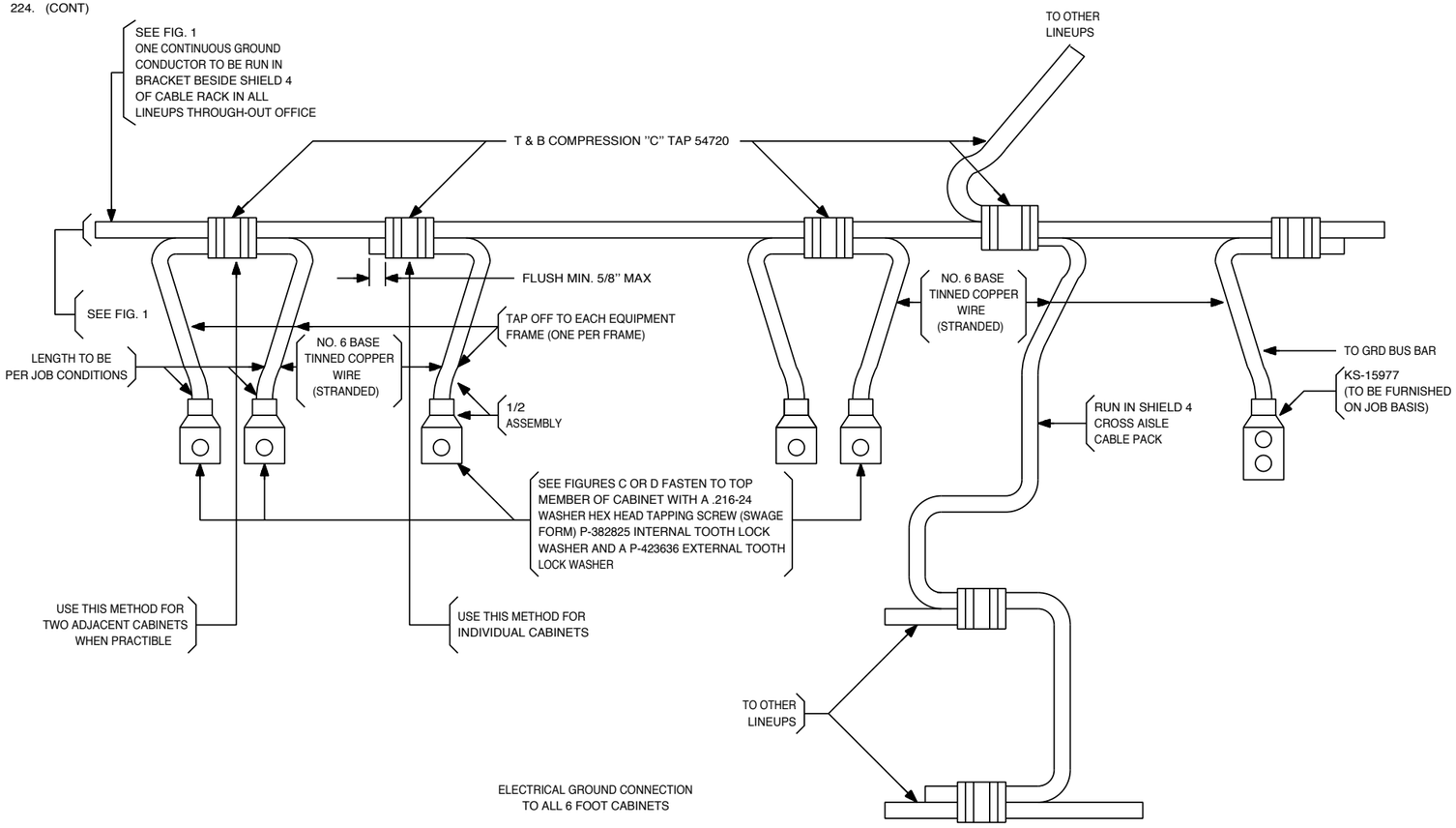
OSPS INTERNATIONAL APPLICATION SCHEMATIC

DWG SIZE	ISSUE
C2	13B

Lucent Technologies	SD-5X214-01	SHEET D12

EQUIPMENT NOTES: (CONT)

224. (CONT)



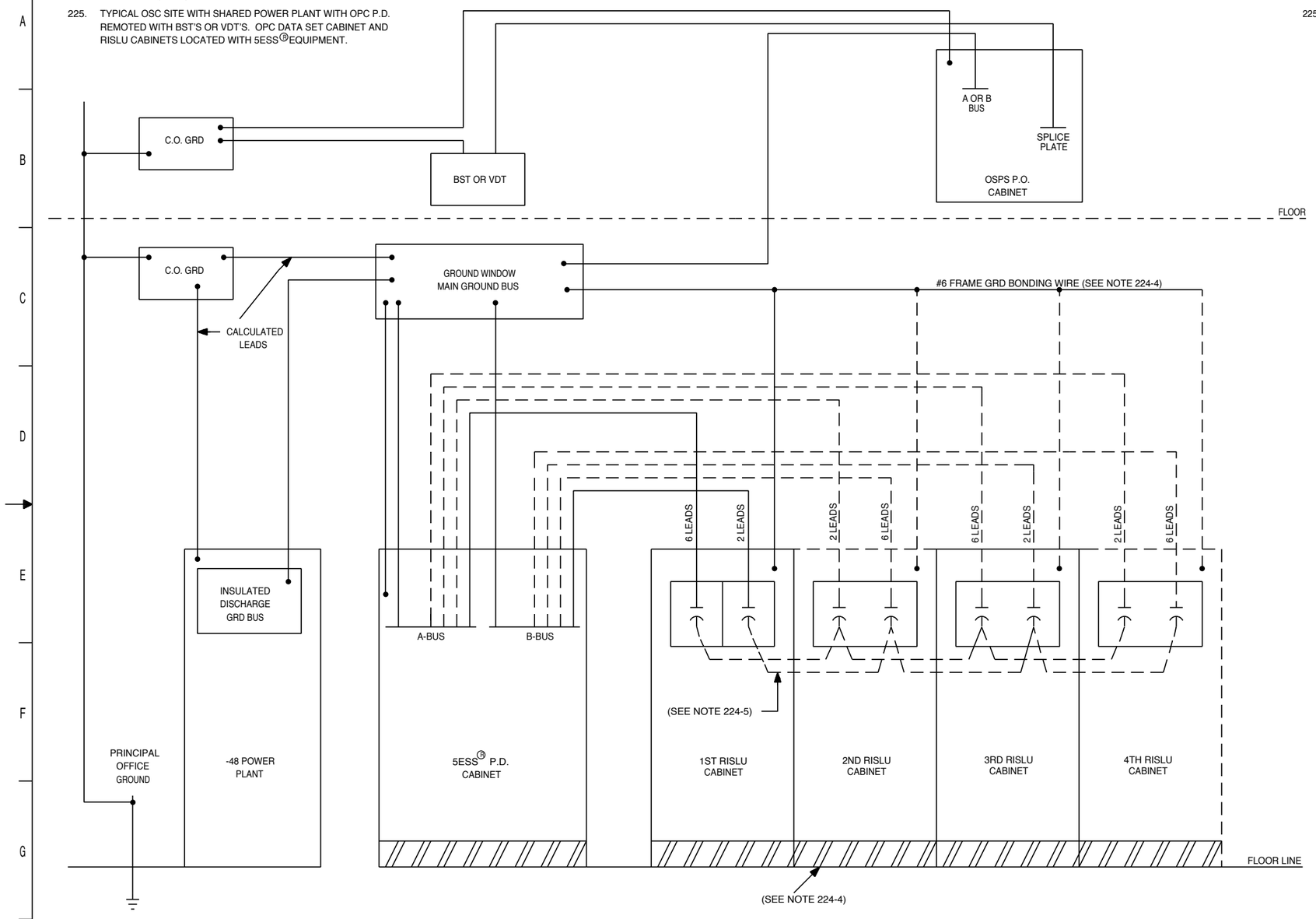
ELECTRICAL GROUND CONNECTION
TO ALL 6 FOOT CABINETS

FIG. 4

OSPS INTERNATIONAL APPLICATION SCHEMATIC		DWG SIZE C2	ISSUE 13B
Lucent Technologies	SD-5X214-01		SHEET D13

EQUIPMENT NOTES (CONT):

225. TYPICAL OSC SITE WITH SHARED POWER PLANT WITH OPC P.D. REMOTED WITH BST'S OR VDT'S. OPC DATA SET CABINET AND RISLU CABINETS LOCATED WITH 5ESS® EQUIPMENT.



EQUIPMENT NOTES (CONT):

225. (CONT) TYPICAL GROUNDING ARRANGEMENT FOR OSPS SHARING POWER PLANT.

1. RISLU AND DATA SET CABINET TO BE LOCATED WITH 5ESS® EQUIPMENT AND WILL CONFORM WITH ED-5D022-01 GROUNDING METHODS AND REQUIREMENTS.
2. OSPS POWER DISTRIBUTION CABINET WILL BE LOCATED ON SAME FLOOR AS CLOSE TO BST'S OR VDT'S AS POSSIBLE TO MINIMIZE CABLE LENGTH.
3. SPLICE PLATE TO BE MOUNTED IN OSPS P.D. CABINET.
4. GROUNDING METHODS CALLED FOR IN BSP 802-001-180 AND 802-001-195 SHOULD BE FOLLOWED EXCEPT WHERE SUPERSEDED HEREIN.
5. ALL WIRE LUGS AND CONNECTIONS TO BE KS-15997 AND KS-21500 TYPE OR APPROVED EQUIVALENT.
6. -48V AND RTN FROM POWER PLANT TO OSPS P.D. CABINET SHOULD BE PAIRED.

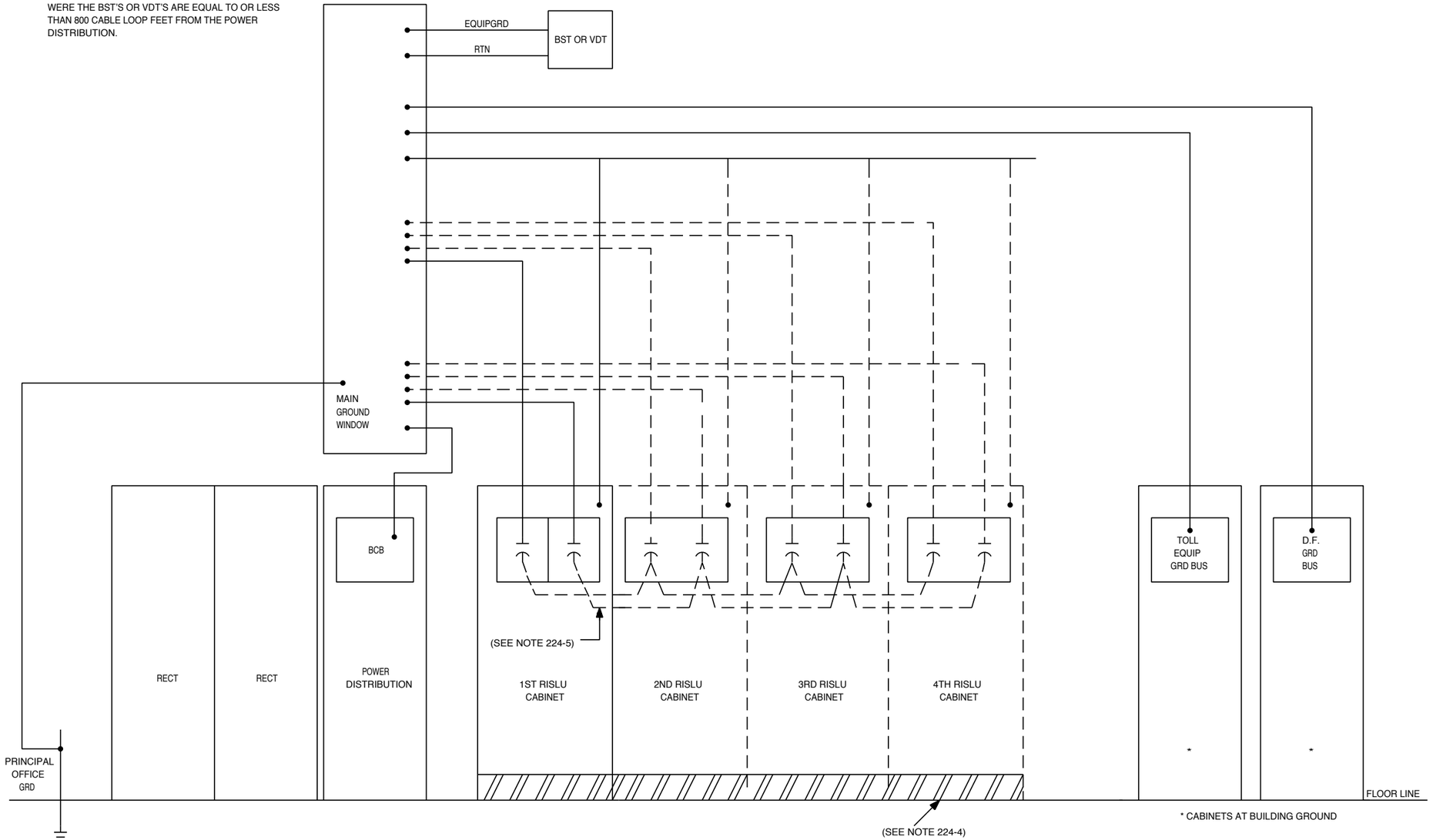
OSPS INTERNATIONAL APPLICATION SCHEMATIC

DWG SIZE	ISSUE
C2	13B

Lucent Technologies	SD-5X214-01	SHEET D14

EQUIPMENT NOTES (CONT):

226. TYPICAL GROUNDING ARRANGEMENT FOR REMOTE OSC SITE WITH DEDICATED POWER PLANT WITHOUT OPERATOR POSITION CONTROL (OPC) P.D. THIS ARRANGEMENT TO BE USED FOR NEW INSTALLATIONS WERE THE BST'S OR VDT'S ARE EQUAL TO OR LESS THAN 800 CABLE LOOP FEET FROM THE POWER DISTRIBUTION.



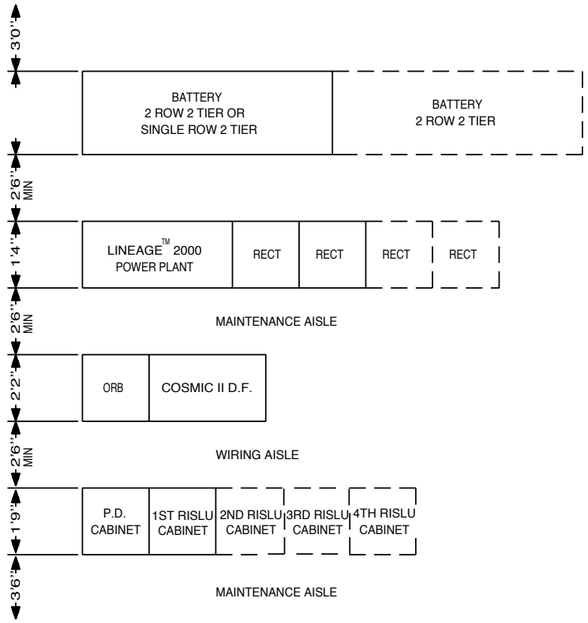
OSPS INTERNATIONAL
APPLICATION SCHEMATIC

DWG SIZE	ISSUE
C2	13B

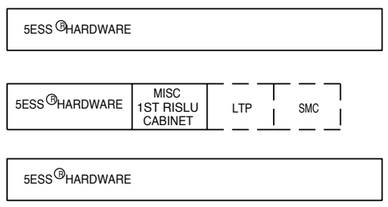
Lucent Technologies	SD-5X214-01	SHEET
		D15

EQUIPMENT NOTES (CONT):

227A. TYPICAL REMOTE OSC SITE WITH DEDICATED POWER PLANT AND LOCAL OPC P.D.

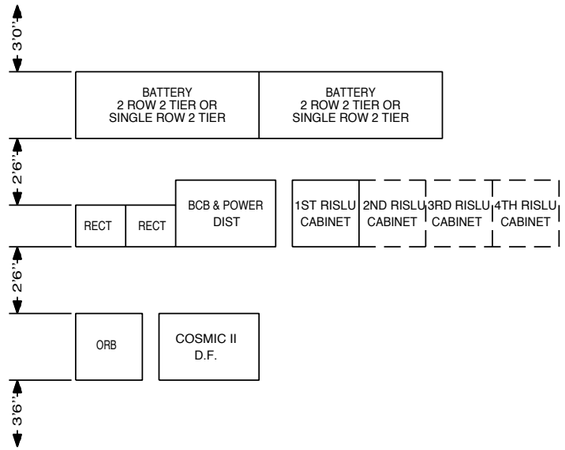


227B. TYPICAL OSC SITE SHARING POWER PLANT WITH 5ESS® OPERATOR POSITION CONTROL P.D. LOCATED WITH BST'S OR VDT'S. ISLU LOCATED IN 5ESS®SM AND LAU LOCATED IN MISCELLANEOUS CABINET.



EQUIPMENT NOTES (CONT):

227C. TYPICAL REMOTE OSC SITE WITH DEDICATED POWER PLANT WITHOUT OPERATOR POSITION CONTROL P.D. (MAX 800 CABLE LOOP FEET FROM POWER DISTRIBUTION TO BST'S OR VDT'S).



OSPS INTERNATIONAL
APPLICATION SCHEMATIC

DWG SIZE	ISSUE
C2	13B

Lucent Technologies	SD-5X214-01	SHEET
		D16

EQUIPMENT NOTES (CONT):

228. FLOOR PLAN DATA RISLU CABINET RISLU

MFR'S NAME: AT&T-T
MFR'S CODE: J5D003G
RATING: AT&T PROV.
NEBS COMPATIBLE: YES
HEIGHT: 6'-0''
DEPTH: 1'-9''
EFFECT WIDTH: 2'-6''
WEIGHT LBS: 600 *
FRWK TYPE: CABINET (5ESS®)
MIN FRONT AISLE: 2'-8''
MIN REAR AISLE: 2'-0''
SHIELD OR CLASS 3: 3.4 SQ. IN. *
4: 1.9 SQ. IN. *
HEAT RELEASE, WATTS PLANNING VALUE: 850 WATTS *
LIST 1 CURRENT DRAIN: 15.0 AMPS
LIST 2 CURRENT DRAIN: 18.6 AMPS

FLOORPLAN DETAIL
CROSS SECTION

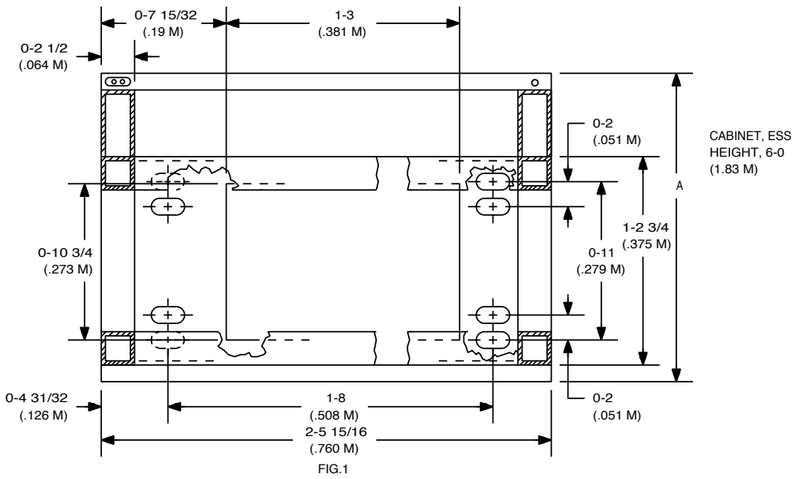
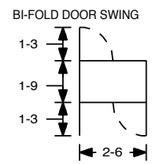


FIG.1

DOOR SWING:

BI-FOLD DOOR SWING



FRAME OUTLINE
FIG. 1

CABINET DET	A' DIM	
	WITH DOOR FRAMES ONLY	WITH DOORS
ED-5D184-70	1-9 3/64 (.535 M)	1-9 27/64 (.544 M)
ED-5D184-71	1-9 1/2 (.546 M)	1-9 3/4 (.552 M)

LIMITING CONDUCTOR INFORMATION:

1. MAX CABLE DISTANCE FROM THE RISLU TO THE DATA SET CABINET IS 50' FOR THE RS232 CABLE FROM THE LAU TERMINAL ADAPTER TO THE DATA SETS IN THE DATA SET CABINET.

CABINET PLACEMENT RECOMMENDATIONS:

1. RISLU CABINET SHOULD BE LOCATED AS CLOSE AS POSSIBLE TO THE D.F.
2. RISLU CABINETS SHOULD BE LOCATED AS NEAR OPC DATA SET CABINET AS POSSIBLE.

* ESTIMATED

EQUIPMENT NOTES (CONT):

228. (CONT)

FLOOR PLAN DATA OPC P.D.

MFR'S NAME: AT&T-T
MFR'S CODE: J5D003H
RATING: AT&T PROV.
NEBS COMPATIBLE: YES
HEIGHT: 6'-0''
DEPTH: 1'-9''
EFFECT WIDTH: 2'-6''
WEIGHT LBS: 650 *
FRWK TYPE: CABINET (5ESS®)
MIN FRONT AISLE: 2'-8''
MIN REAR AISLE: 2'-0''
SHIELD OR CLASS 4: 50.1 SQ. IN. *

HEAT RELEASE, WATTS PLANNING VALUE:

FLOORPLAN DETAIL
CROSS SECTION

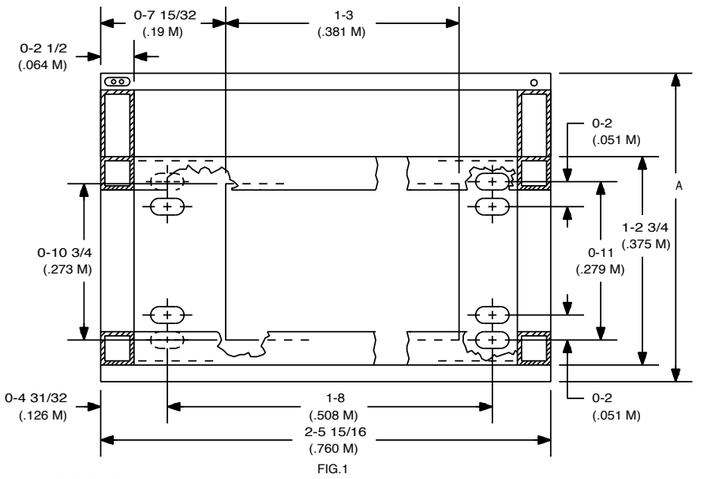
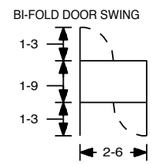


FIG.1

DOOR SWING:

BI-FOLD DOOR SWING



FRAME OUTLINE
FIG. 1

CABINET DET	A' DIM	
	WITH DOOR FRAMES ONLY	WITH DOORS
ED-5D184-70	1-9 3/64 (.535 M)	1-9 27/64 (.544 M)
ED-5D184-71	1-9 1/2 (.546 M)	1-9 3/4 (.552 M)

LIMITING CONDUCTOR INFORMATION:

1. POWER DIST CABINET SHOULD BE LOCATED AS NEAR POWER PLANT AS POSSIBLE TO REDUCE CABLE LENGTHS.

CABINET PLACEMENT RECOMMENDATIONS:

1. POWER DIST CABINET IS TO BE FIRST CABINET IN LINE UP AT REMOTE OSC SITES WITH DEDICATED POWER PLANT AND LOCAL OPERATOR POSITION CONTROL P.D.
2. POWER DIST CABINET IS TO BE LOCATED ON SAME FLOOR AND AS CLOSE TO THE BST'S OR VDT'S FOR OSC SITE SHARING A POWER PLANT WITH 5ESS®.

* ESTIMATED

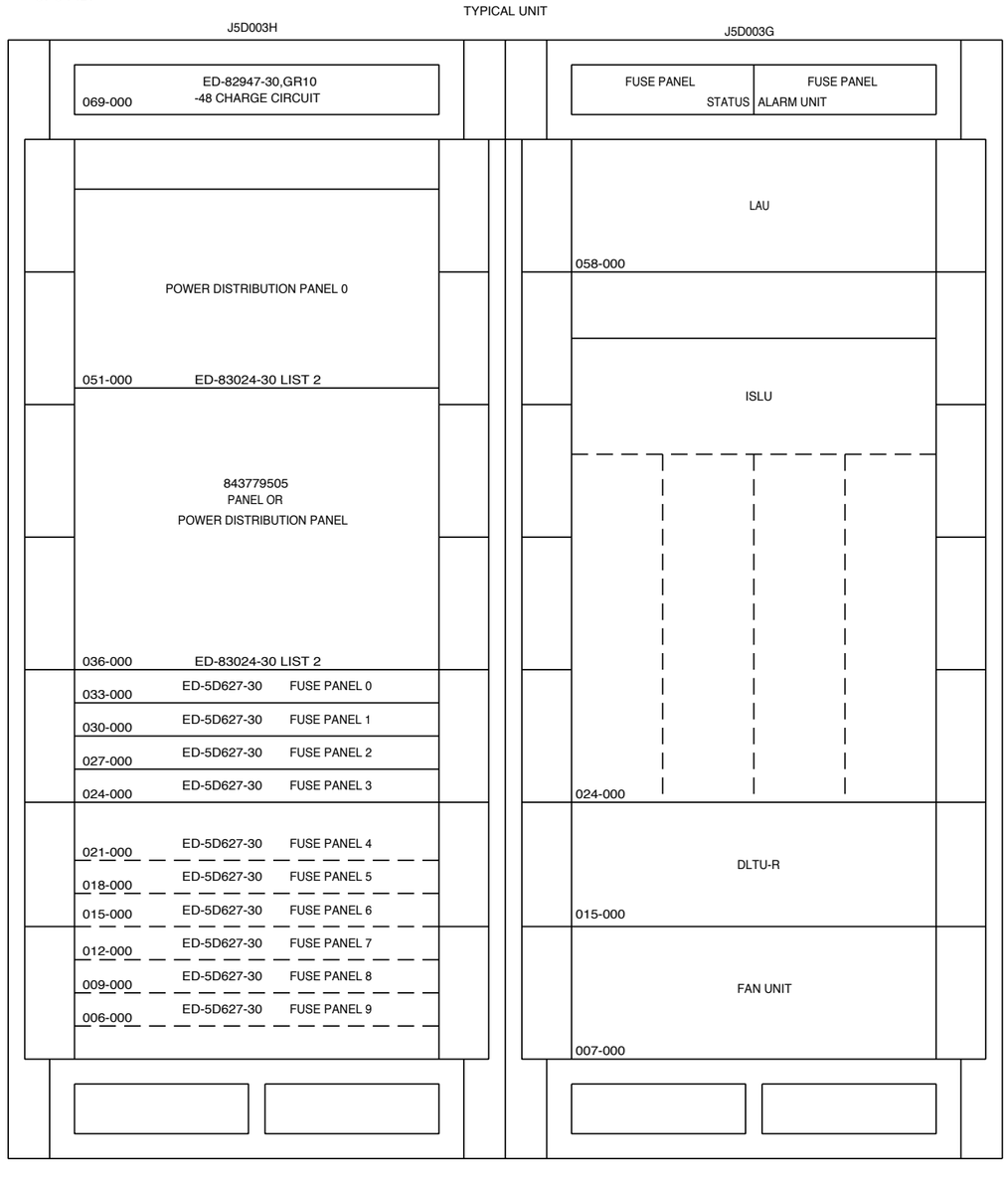
OSPS INTERNATIONAL
APPLICATION SCHEMATIC

DWG SIZE C2 | ISSUE 13B

Lucent Technologies | SD-5X214-01 | SHEET D17

EQUIPMENT NOTES (CONT):

229. TYPICAL REMOTE SITE LINE-UP WITH DEDICATED POWER PLANT LOCAL OPC P.D.



OSPS INTERNATIONAL
APPLICATION SCHEMATIC

DWG SIZE	ISSUE
C2	13B

Lucent Technologies	SD-5X214-01	SHEET D18

EQUIPMENT NOTES: (CONT)

230. ~~THE FOLLOWING HEADSETS ONLY MAY BE USED WITH THE BST OR VDT. 60A, 61A, KS-22915L17, KS-22915L18, KS-22990L8, KS-22990L9, OR EQUIVALENT.~~

230. THE FOLLOWING HEADSETS ARE APPROVED FOR OSPS. HEADSETS MUST DRAW A MINIMUM CURRENT OF 30 MA AND CANNOT PROVIDE AN ECHO PATH. MUTE BUTTONS OR KEYS SHOULD ONLY BE OPERATED BY SUPERVISORY PERSONNEL.

KS SPECIFICATION KS-23767:

LIST 1:
COMCODE 406180034 BUTTON TYPE RECEIVER HEADSET WITH EARHOOK AND STABILIZER.

LIST 2:
COMCODE 406180042 BUTTON TYPE RECEIVER HEADSET WITH THREE EARLOOPS.

LIST 3:
COMCODE 406180067 BUTTON TYPE RECEIVER HEADSET: WITH T-BAR TYPE HEADBAND.

KS SPECIFICATION KS-23653

LIST 1:
COMCODE 406216549 IN-EAR TYPE HEADSET.

LIST 2:
COMCODE 406216556 OVER-THE-EAR TYPE HEADSET.

LIST 3:
COMCODE 406219907 BUTTON TYPE RECEIVER HEADSET.

231. POWER CABLES TO THE BST'S & VDT'S MUST BE SEPARATED FROM BST & VDT DSL CABLE.

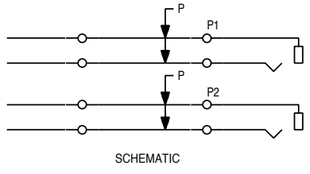
232. THE BASIC SERVICES TERMINAL AND VIDEO DISPLAY TERMINAL SHOULD BE ORDERED FROM ED-50522-33 DRAWING.

233. 12' POWER CABLE (#14-3 COND) SUPPLIED FROM BST OR VDT TO SPLICE POINT.

234. T & B MODULAR PLUG TCAP8 OR EQUIVALENT TO BE USED ON CAD 9 AT BST OR CST END OF CABLE.

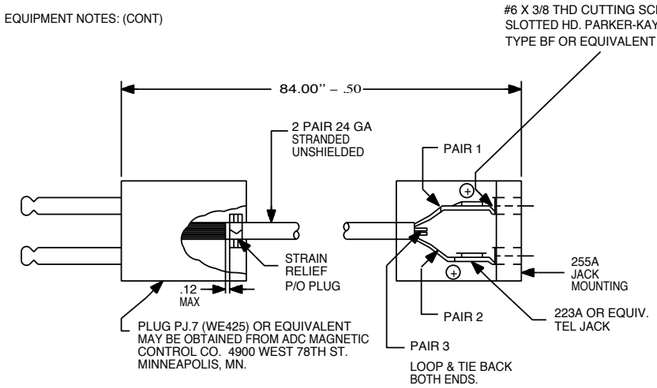
235. CABLE FROM BST TO CCI TERM WHEN REQUIRED IS SPECIFIED BY LINE ENGINEER FROM ED-5D621-11.

236. LINE ENGINEER TO SPECIFY AS SEPARATE ITEM. TWO CABLES REQUIRED PER BST OR VDT POSITION.



SCHEMATIC

EQUIPMENT NOTES: (CONT)



ED-5D621,GR11
PLUG & JACK ASSEMBLY
BST OR VDT TO OPERATOR HEADSET

NOTES:

1. PAIR 1 & 2 SHALL BE SOLDERED AT JACK END. PLUG IS SUPPLIED WITH WIRE TIPS FOR #2 SCREWS.

2. TWO CABLES REQUIRED PER OPERATOR POSITION. CABLE MUST BE ORDERED SEPARATELY BY LINE ENG.

237. BST AND VDT SPARING:

1. AT EACH DI OSC SITE 2 BST'S FOR 100 OPERATOR POSITIONS SHOULD BE MAINTAINED FOR SPARES. THIS IS BASED ON A 60 DAY TURN AROUND INTERVAL (SHIPPING AND REPAIR).
2. AT EACH TA OSC SITE 7 VDT'S FOR 100 OPERATOR POSITIONS SHOULD BE MAINTAINED FOR SPARES. THIS IS BASED ON A 60 DAY TURN AROUND INTERVAL (SHIPPING AND REPAIR).

238. TO ORDER FIRMWARE FOR BST'S OR VDT'S SEE ED-5X216-30 DRAWING.

239. OPERATOR POSITION NUMBERS ARE TO BE CALLED "POS NO." AND TO BE FOUR DIGITS LONG. THE FIRST DIGIT INDICATES OSC NUMBER AND THE LAST THREE DIGITS, THE RELATIVE OPERATOR POSITION IN THE OSC. EXAMPLE: 1056.

240. LINE CARD ASSIGNMENTS IN RISLU CABINET.

DEFINITIONS:

1. SUB-LINE GROUP - EACH LINE GROUP IS DIVIDED INTO 4 SUB-LINE GROUPS. EACH SUB-LINE GROUP MAY BE EQUIPPED WITH UP TO 4 LINE CARDS. (SEE FIG. 1 FOR SUB-LINE GROUP NUMBERING).
2. CLASS-1 DSL – PORT THAT USES A 'B' CHANNEL OR A 'B' AND A 'D' CHANNEL (E.G., BST,VDT).
3. CLASS-2 DSL – PORT THAT USES ONLY A 'D' CHANNEL (E.G.,OAP,DAS/C, "T" CARD).

EQUIPMENT NOTES (CONT):

240. (CONT)

TABLE 1
BREAKDOWN OF LINE GROUPS INTO SUB-LINE GROUPS

LINE GROUP	SUB-LINE GROUP A	SUB-LINE GROUP B	SUB-LINE GROUP C	SUB-LINE GROUP D
0	0	16	32	48
1	1	17	33	49
2	2	18	34	50
3	3	19	35	51
4	4	20	36	52
5	5	21	37	53
6	6	22	38	54
7	7	23	39	55
8	8	24	40	56
9	9	25	41	57
10	10	26	42	58
11	11	27	43	59
12	12	28	44	60
13	13	29	45	61
14	14	30	46	62
15	15	31	47	--

RULES:

1. THE MAXIMUM NUMBER OF LINE CARDS THAT MAY BE EQUIPPED IN A LINE GROUP IS 8. ALL SUB-LINE GROUPS "A" WILL BE FULLY EQUIPPED IN ALL LINE GROUPS BEFORE EQUIPPING SUB-LINE GROUPS "B".

2. THE MAXIMUM NUMBER OF OPERATOR POSITIONS ASSIGNED PER RISLU IS 100. (MAX. NUMBER OF OPERATOR POSITIONS PER PSM IS 100). THE ACTUAL NUMBER OF POSITIONS IS TRAFFIC ENGINEERED BASED ON THE APPLICATION (DI OR T&A). SEE OSPS ENGINEERING RULES FOR ADDITIONAL INFORMATION. ENGINEERING RULES CAN BE VIEWED IN THE ENGINEERING INFORMATION FILE OF 5E DOPS.

3. ACCORDING TO TABLE 2, THE NUMBER OF ACTIVE FACILITIES (DS1) DETERMINES WHICH SUB-LINE GROUPS CAN BE USED.

4. EACH SUB-LINE GROUP CAN TERMINATE UP TO THE NUMBER CLASS-1 DSL'S AS INDICATED IN TABLE 3. THE REMAINING SLOTS ARE RESERVED FOR CLASS-2 DSL'S.

5. EACH SUB-LINE GROUP SHOULD BE ASSIGNED AS MANY CLASS-1 DSL'S AS ALLOWED: OTHERWISE, TIME SLOTS ON FACILITIES MAY BE WASTED.

6. SLOTS ALLOCATED FOR (BUT NOT OCCUPIED BY) A CLASS-1 DSL'S CAN BE USED TO TERMINATE CLASS-2 DSL'S.

7. TO AVOID SIMULTANEOUS MULTIPLE LINK FAILURES, OBSERVE THE FOLLOWING RULES IN ASSIGNING DATA LINKS FOR WHICH THE POSSIBILITY FOR SUCH OCCURENCE SHOULD BE MINIMIZED:

   A. TERMINATE THEM ON SEPARATE LINE GROUPS, NOT JUST SEPARATE SUB-LINE GROUPS.

   B. IF POSSIBLE, THE SELECTED LINE GROUPS SHOULD BE AT LEAST FIVE LINE GROUPS APART. (E.G. LG 0 AND LG 5).

OSPS INTERNATIONAL
APPLICATION SCHEMATIC

DWG SIZE	ISSUE
C2	13B

Lucent Technologies	SD-5X214-01	SHEET D19

EQUIPMENT NOTES (CONT):

240. (CONT)

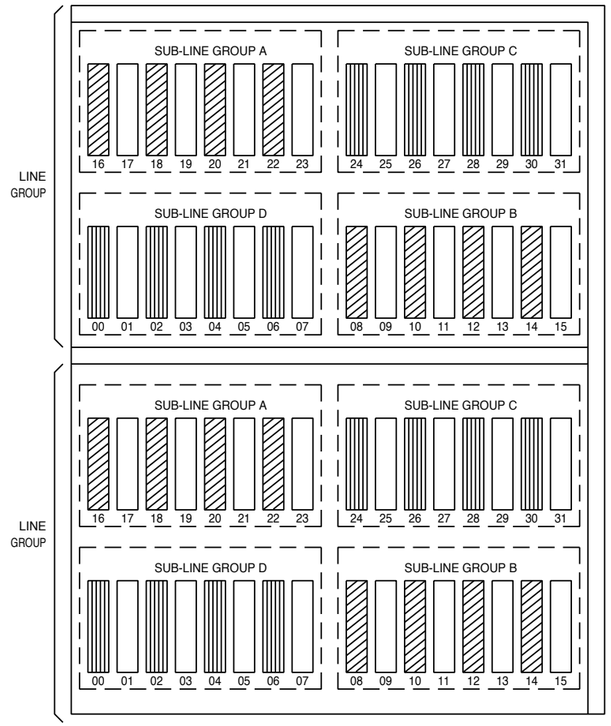


FIGURE 1

ISLU DRAWER

CARD SLOTS THAT MAY BE EQUIPPED WITH LINE CARDS

EQUIPMENT NOTES (CONT):

240. (CONT)

TABLE 2

USABLE SUB-LINE GROUPS

NUMBER OF ACTIVE FACILITIES	USABLE SUB-LG'S	
	FROM	TO
1	0	4
2	0	9
3	0	14
4	0	19
5	0	24
6	0	29
7	0	34
8	0	39
9	0	44
10	0	49
11	0	54
12	0	59
13 *	0	62

* A SECOND DLTU-RR IS REQUIRED.

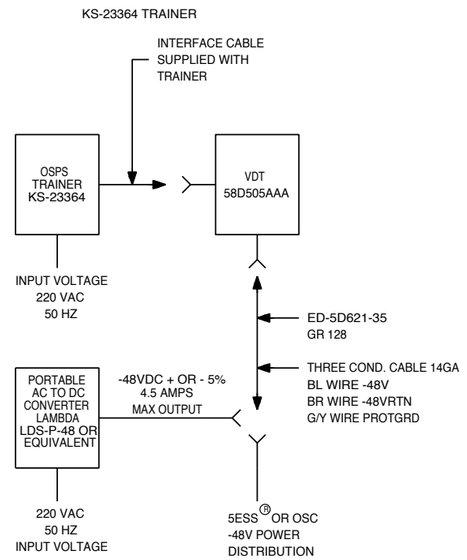
TABLE 3

MAXIMUM NUMBER OF CLASS-1 DSL'S PER SUB-LINE GROUP

SUB-LG #	MAX. CLASS-1 DSL'S	SUB-LG #	MAX. CLASS-1 DSL'S	SUB-LG #	MAX. CLASS-1 DSL'S	SUB-LG #	MAX. CLASS-1 DSL'S
0	3	16	4	32	4	48	4
1	4	17	3	33	4	49	4
2	4	18	4	34	3	50	3
3	4	19	3	35	4	51	4
4	3	20	4	36	4	52	3
5	3	21	4	37	3	53	4
6	4	22	3	38	4	54	4
7	3	23	4	39	3	55	4
8	4	24	3	40	4	56	4
9	4	25	4	41	3	57	3
10	3	26	3	42	4	58	4
11	4	27	4	43	4	59	3
12	4	28	4	44	3	60	4
13	3	29	3	45	4	61	4
14	4	30	4	46	3	62	3
15	4	31	3	47	3	–	–

EQUIPMENT NOTES (CONT):

241.



242. LINE TRUNK PERIPHERAL CABINET (LTP) IS REQUIRED WHEN THE NUMBER OF TERMINAL ADAPTER CIRCUIT PACKS (TA) EXCEEDS 14 IN THE RISLU. ONE LINK ADAPTER UNIT (LAU) CAN BE EQUIPPED WITH UP TO 14 TA CIRCUIT PACKS.

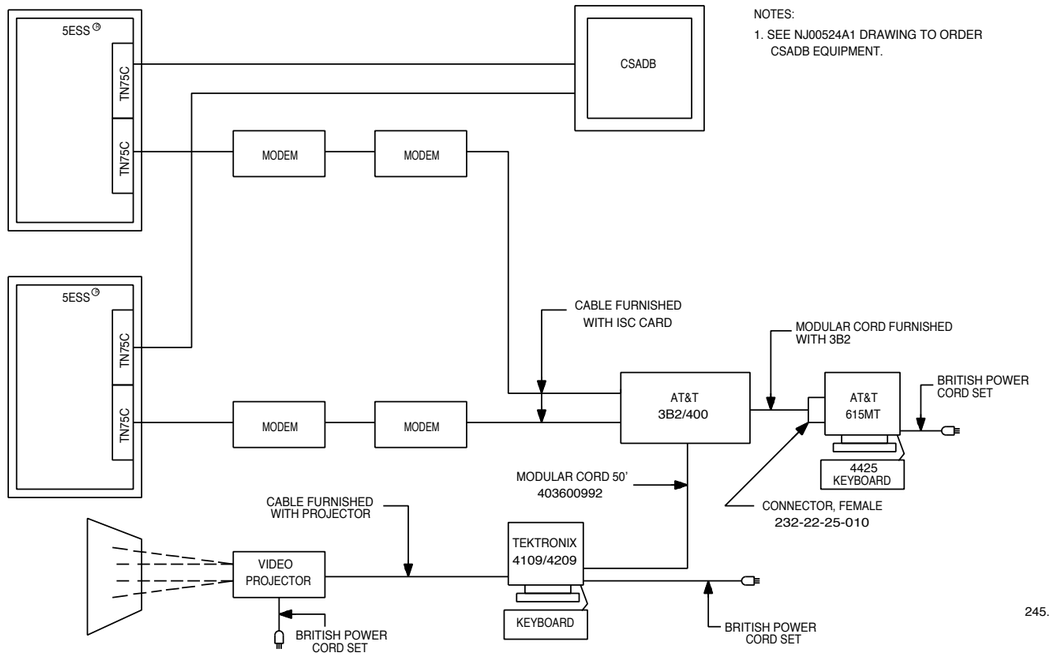
OSPS INTERNATIONAL APPLICATION SCHEMATIC

DWG SIZE C2 | ISSUE 13B

Lucent Technologies | SD-5X214-01 | SHEET D20

EQUIPMENT NOTES: (CONT)

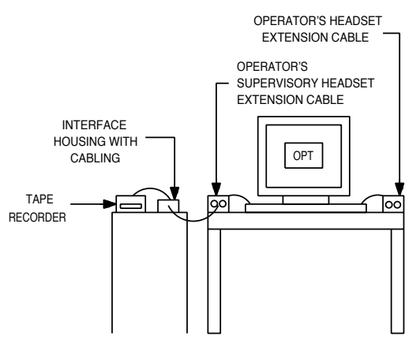
243. CSADB WILL BE LOCATED OFF THE 5ESS AM FOR 5EE4 AND LATER GENERICS.



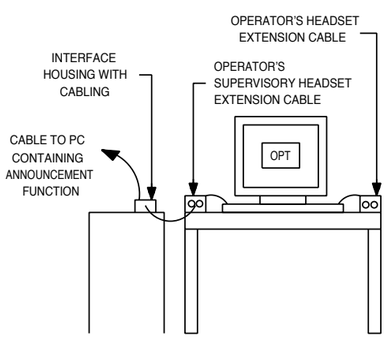
CSADB
TYPICAL CONFIGURATION FOR
CENTRALIZE SERVICE ASSESSMENT DISPLAY BOARD

NOTES:
1. SEE NJ00524A1 DRAWING TO ORDER CSADB EQUIPMENT.

244.



TAPE RECORDER INTERFACE



PC INTERFACE

EQUIPMENT NOTES: (CONT)

245. (CONT)

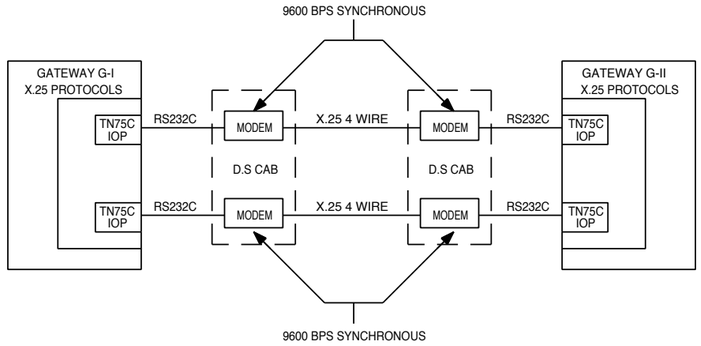


FIGURE 1
COMPLETED AND BOOKED
CALL RETRIEVAL LINK (CBCRL)

NOTES:
1. SEE J5X099A-1 DATA SET CABINET - EXPORT AND SD5X215-02 EXPORT DATA SET CABINET APPLICATION SCHEMATIC FOR ORDERING INFORMATION.
2. ONLY THE IGC CCITT NO. 7 SIGNALING SYSTEM WILL PROVIDE THE NEW SIGNALING MESSAGES REQUIRED BY OSPS - INTER - GATEWAY INTERACTION FOR OPERATED ASSISTED CALLS FOR PASSING CALL ORIGINATING AND TERMINATING INFORMATION BETWEEN THE DUAL GATEWAYS.

245. (CONT)

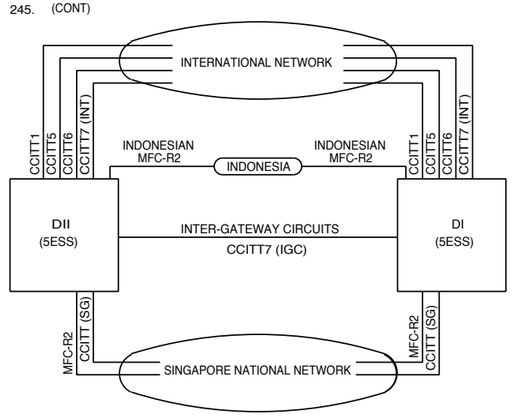


FIGURE 2
SINGAPORE DUAL GATEWAY CONFIGURATION IN 5EE4(1)
(SEE NOTE 2)

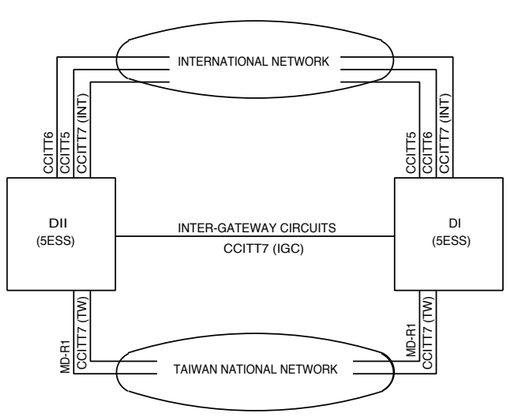


FIGURE 3
TAIWAN DUAL GATEWAY CONFIGURATION

OSPS INTERNATIONAL APPLICATION SCHEMATIC

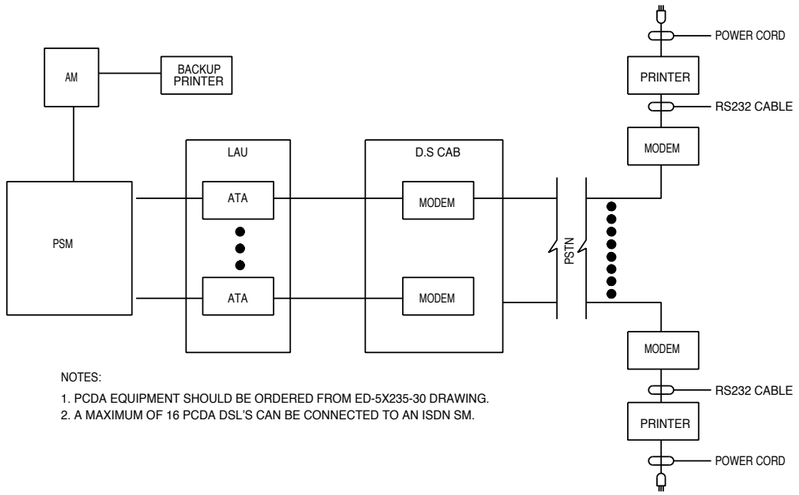
DWG SIZE	ISSUE
C2	13B

Lucent Technologies | SD-5X214-01 | SHEET D21

EQUIPMENT NOTES: (CONT)

246.

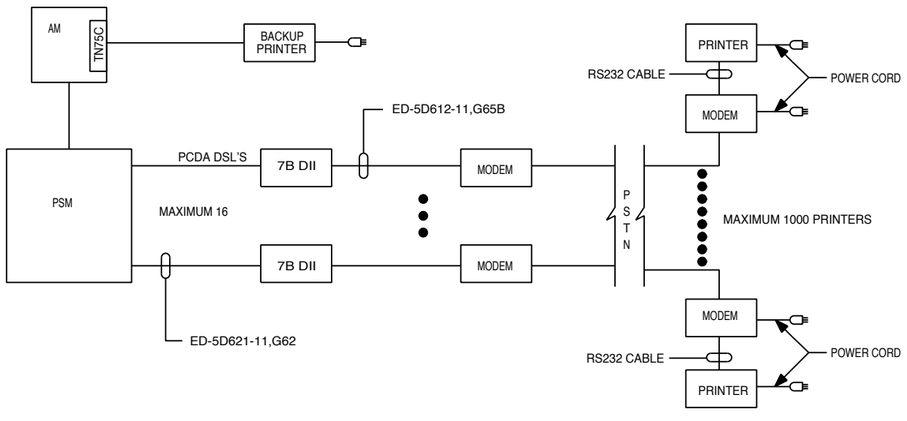
A. TYPICAL CONFIGURATION FOR PRINT OUT CHARGE AND DURATION ADVICE (PCDA).



NOTES:

1. PCDA EQUIPMENT SHOULD BE ORDERED FROM ED-5X235-30 DRAWING.
2. A MAXIMUM OF 16 PCDA DSL'S CAN BE CONNECTED TO AN ISDN SM.

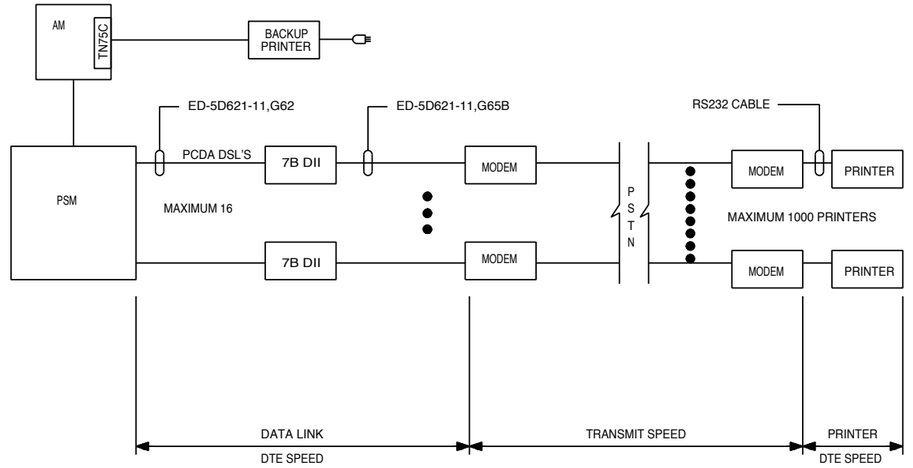
B. TYPICAL COMFIGURATION FOR PRINT OUT CHARGE AND DURATION ADVICE (PCDA) USING THE DIRECT INTELIGENT INTERFACE.



EQUIPMENT NOTES: (CONT)

246. (CONT)

C. TYPICAL COMFIGURATION FOR PRINT OUT CHARGE AND DURATION ADVICE (PCDA) USING THE DIRECT INTELIGENT INTERFACE.



TRANSMISSION SPEED TABLE

MODEM TYPE		TERMINAL	SPEED		
OFFICE	CUSTOMER	ADAPTER	DTE DATA LINK	TRANSMIT	PRINTER
AT&T3820	AT&T3820	7B DII	19.2	14.4*	9.6
AT&T3820	AT&T3820	LAU	9.6	14.4*	9.6
AT&T3820	AT&T3830	7B DII	19.2	14.4*	9.6
AT&T3820	AT&T3830	LAU	9.6	14.4*	9.6
AT&T3820	HAYES 2400	7B DII	19.2	2.4	2.4
AT&T3820	HAYES 2400	LAU	9.6	2.4	2.4
HAYES 2400	HAYES 2400	7B DII	2.4	1.2	1.2
HAYES 2400	HAYES 2400	LAU	1.2	1.2	1.2
AT&T3820	GANDALF 3242	7B DII	19.2	9.6*	9.6
AT&T3820	GANDALF 3242	LAU	9.6	9.6*	9.6
HAYES 2400	GANDALF 3242	7B DII	2.4	2.4	2.4
HAYES 2400	GANDALF 3242	LAU	1.2	1.2	1.2

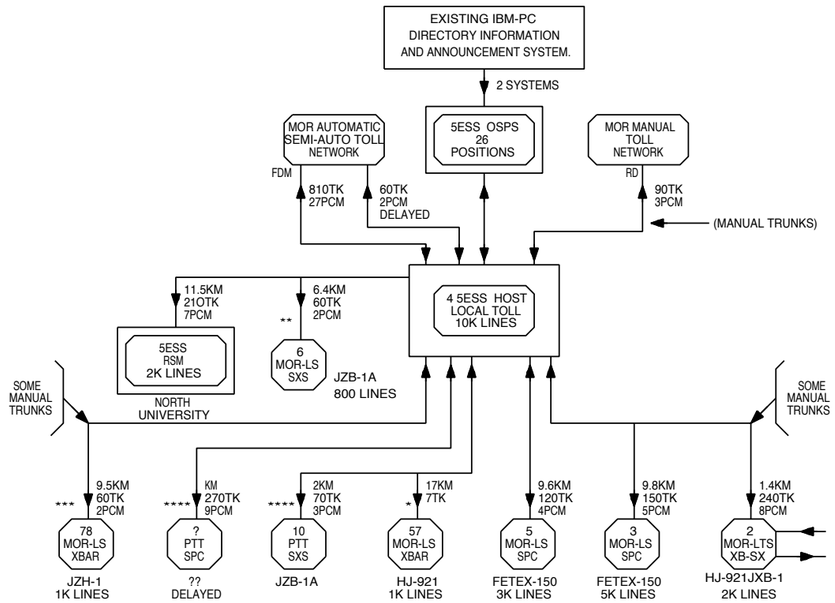
* ERROR CORRECTION AND DATA COMPRESSION

OSPS INTERNATIONAL
APPLICATION SCHEMATIC

DWG SIZE	ISSUE
C2	13B

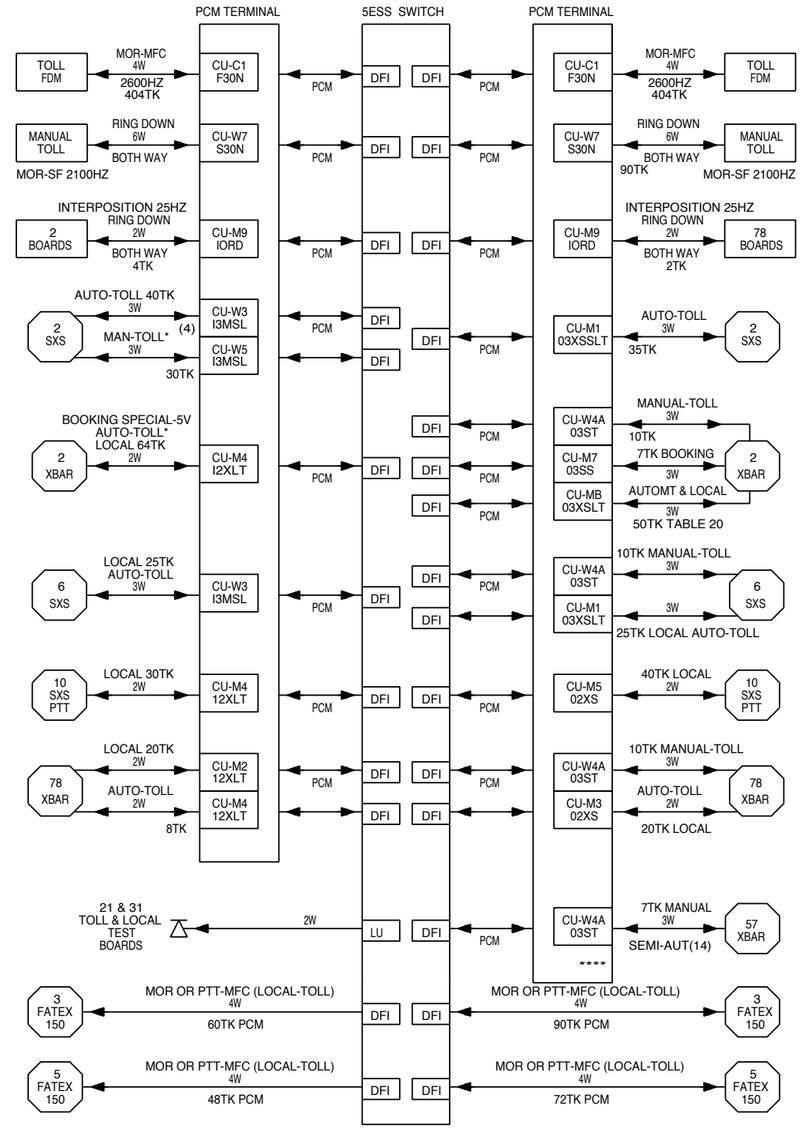
Lucent Technologies | SD-5X214-01 | SHEET D22

247. Ⓑ MOR 5ESS SWITCH CONFIGURATION.



EQUIPMENT NOTES: (CONT)

247. (CONT) MINISTRY OF RAILWAYS (MOR): PRC GENERAL TRUNKING CONFIGURATION - PHASE II WITH OSPS.



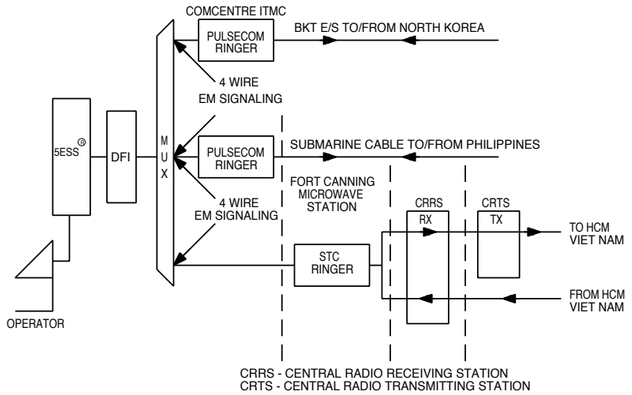
OSPS INTERNATIONAL
APPLICATION SCHEMATIC

DWG SIZE	ISSUE
C2	13B

Lucent Technologies	SD-5X214-01	SHEET
		D23

EQUIPMENT NOTES: (CONT)

248. TRUNKING DIAGRAM FOR SINGAPORE CCITT NO. 1 CIRCUITS.

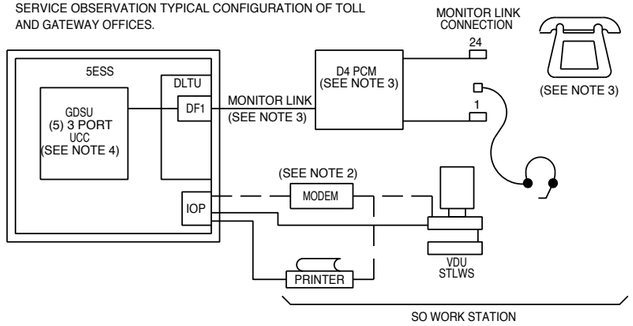


NOTES:

1. THE EXISTING 30+2 CHANNEL DFI IN THE DLTU WILL BE USED. THE DFI WILL BE INTERFACED TO A TELCOMS-SUPPLIED MUX WHICH WILL CONTAIN THE HARDWARE FOR INTERFACING TO THE TELCOMS-SUPPLIED RINGER CARDS.

2. FOR MOR AND SINGAPORE, NO MORE THAN 64 MANUAL TRUNKS PER SM.

249. SERVICE OBSERVATION TYPICAL CONFIGURATION OF TOLL AND GATEWAY OFFICES.



NOTES:

1. THE NUMBER OF WORK STATIONS PER SWITCH CAN NOT EXCEED 8 POSITIONS IN ANY COMBINATION OF SO, STLWS AND INCLUDING THE MCC. IN 5EE4(1). THE MAXIMUM NUMBER OF MFOS TLWSS IN 5EE(2) IS 32 WHEN USING THE MML COMMAND MODE (TEXT MODE) AND 16 MFOS TLWSS WHEN USING THE MENU DRIVEN MODE.

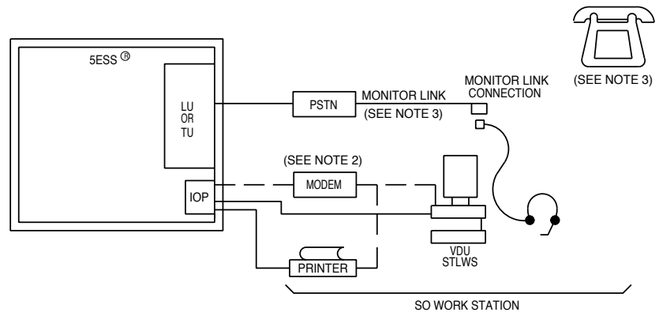
2. THE VDUS MAY BE CO-LOCATED WITH THE SWITCH (INCLUDING STLWS) OR PROVIDED AT A REMOTE LOCATION. IF THE VDU TERMINAL EQUIPMENT IS REMOTELY LOCATED FROM THE SWITCH, IT WILL REQUIRE A 9600 BPS ASYNCHRONOUS MODEM.

3. HARDWARE FURNISHED BY CUSTOMER.

4. A UNIVERSAL CONFERENCE CIRCUIT (UCC) IN THE GLOBAL DIGITAL SERVICE UNIT WILL PROVIDE THE INTERFACE IN THE SM BETWEEN THE TRUNK UNITS AND THE MONITOR LINK CONNECTIONS. THE UCC CIRCUIT PACK CONTAINS FIVE THREE-PORT UNIVERSAL CONFERENCE CIRCUITS SERVICING UP TO FIVE MONITOR LINKS. NO MORE THAN TWO OF THESE CIRCUIT PACKS MAY BE EQUIPPED PER A SERVICE GROUP.

EQUIPMENT NOTES: (CONT)

249. (CONT) SERVICE OBSERVATION TYPICAL CONFIGURATION OF PUBLIC SWITCH TELEPHONE NETWORK (PSTN).



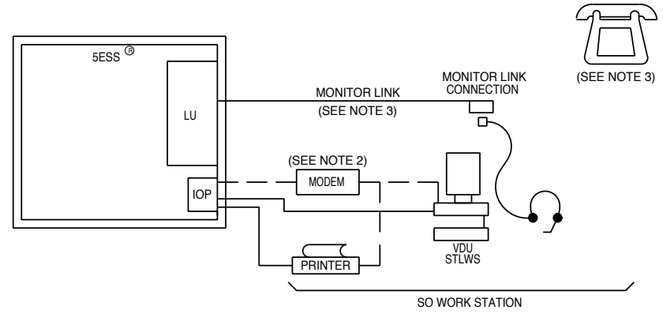
NOTES:

1. THE NUMBER OF WORK STATIONS PER SWITCH CAN NOT EXCEED 8 POSITIONS IN ANY COMBINATION OF SO, STLWS AND INCLUDING THE MCC. IN 5EE4(1). THE MAXIMUM NUMBER OF MFOS TLWSS IN 5EE(2) IS 32 WHEN USING THE MML COMMAND MODE (TEXT MODE) AND 16 MFOS TLWSS WHEN USING THE MENU DRIVEN MODE.

2. THE VDUS MAY BE CO-LOCATED WITH THE SWITCH (INCLUDING STLWS) OR PROVIDED AT A REMOTE LOCATION. IF THE VDU TERMINAL EQUIPMENT IS REMOTELY LOCATED FROM THE SWITCH, IT WILL REQUIRE A 9600 BPS ASYNCHRONOUS MODEM.

3. HARDWARE FURNISHED BY CUSTOMER.

SERVICE OBSERVATION TYPICAL CONFIGURATION OF LOCAL LINE UNIT.



NOTES:

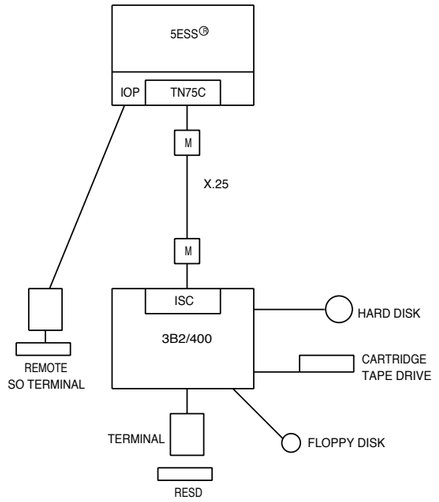
1. THE NUMBER OF WORK STATIONS PER SWITCH CAN NOT EXCEED 8 POSITIONS IN ANY COMBINATION OF SO, STLWS AND INCLUDING THE MCC. IN 5EE4(1). THE MAXIMUM NUMBER OF MFOS TLWSS IN 5EE(2) IS 32 WHEN USING THE MML COMMAND MODE (TEXT MODE) AND 16 MFOS TLWSS WHEN USING THE MENU DRIVEN MODE.

2. THE VDUS MAY BE CO-LOCATED WITH THE SWITCH (INCLUDING STLWS) OR PROVIDED AT A REMOTE LOCATION. IF THE VDU TERMINAL EQUIPMENT IS REMOTELY LOCATED FROM THE SWITCH, IT WILL REQUIRE A 9600 BPS ASYNCHRONOUS MODEM.

3. HARDWARE FURNISHED BY CUSTOMER.

EQUIPMENT NOTES: (CONT)

249. (CONT) REMOTE SO OFFICE 5ESS AND RESD CONNECTION MONDIAL.



NOTES:

1. FOR ADDITIONAL INFORMATION SEE SD-5X215-02 EXPORT DATA SET CABINET APPLICATION SCHEMATIC AND ED-5X235 5ESS® SWITCHING EQUIPMENT PERIPHERAL AND PROCESSOR I/O CONNECTION FOR OSS (OPERATOR SUPPORT SYSTEM).

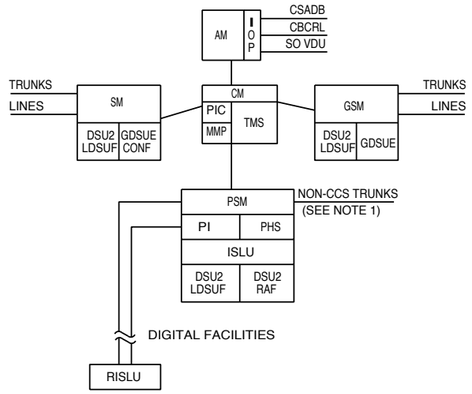
OSPS INTERNATIONAL APPLICATION SCHEMATIC

DWG SIZE	ISSUE
C2	13B

Lucent Technologies	SD-5X214-01	SHEET D24

EQUIPMENT NOTES: (CONT)

250.



NOTES:

1. POPULATING TRUNKS ON A POSITION SWITCHING MODULE (PSM) CAN REDUCE THE NUMBER OF SMS THAT A SMALL OFFICE MUST PURCHASE. SINCE THE EXTRA CAPACITY ON THE UNDERUTILIZED PSM IS NOT WASTED, NON-COMMON CHANNEL SIGNALING (NON-CCS) TRUNKS CAN BE POPULATED ON AN OPERATOR POSITION SWITCHING MODULE (PSM) NON-COMMON CHANNEL SIGNALING (NON-CCS) TRUNKS ARE TRUNKS THAT DO NOT PERFORM SIGNALING OVER A SEPARATE SIGNALING LINK. THE FOLLOWING TYPES OF TRUNKS WILL BE SUPPORTED ON A PSM:

   24 CHANNEL TRUNK DIRECT CONNECT (TDC) TRUNKS, OR SEIZURE-ONLY TRUNKS
   30 CHANNEL TRUNK DIRECT CONNECT (TDC) TRUNKS, OR SEIZURE-ONLY TRUNKS
   30 CHANNEL CCITT SIGNALING SYSTEM NO. 1 (CCITT1) TRUNKS, WITH ADAPTERS
   30 CHANNEL SEMI-COMPELLED MULTI-FREQUENCY (SCMF) TRUNKS
   30 CHANNEL R2 MULTI-FREQUENCY COMPELLED (R2-MFC) TRUNKS
   30 CHANNEL R2 SEMI-COMPELLED (R2-SC) TRUNKS
   30 CHANNEL SEMI-COMPELLED MULTI-FREQUENCY (R2-SCMF) TRUNKS
   30 CHANNEL CCITT SIGNALING SYSTEM NO. 5 (CCITT5) TRUNKS
   30 CHANNEL RINGDOWN TRUNKS, VIA NECESSARY CONVERSION EQUIPMENT
   30 CHANNEL MANUAL TOLL BOARD TRUNKS, VIA NECESSARY CONVERSION EQUIPMENT
   30 CHANNEL R2 MULTI-FREQUENCY PULSED (R2-MFP) TRUNKS
   30 CHANNEL R2 MULTI-FREQUENCY COMPELLED V1 (R2-MFCV1) TRUNKS
   30 CHANNEL R2 MULTI-FREQUENCY COMPELLED V2 (R2-MFCV2) TRUNKS
   30 CHANNEL R2 MULTI-FREQUENCY COMPELLED V3 (R2-MFCV3) TRUNKS
   24 CHANNEL MODIFIED R1 (MDR1) TRUNKS
   30 CHANNEL ANALOG AND DIGITAL LOOP-DISCONNECT TRUNKS
   30 CHANNEL EXTERNAL AUDIO RESPONSE UNIT (EARU) TRUNKS
   24 CHANNEL AND 30 CHANNEL MUSIC ON HOLD TRUNKS
   24 CHANNEL AND 30 CHANNEL 13A ANNOUNCEMENT TRUNKS
   24 CHANNEL AND 30 CHANNEL CONFERENCE TOUCH-TONE (TT-CONF) TRUNKS
   NON-CCS LOOP-AROUND TRUNKS, FOR OFFICES SUPPORTING LOCAL TRAFFIC

   EITHER 24-CHANNEL OR 30-CHANNEL TRUNKS CAN BE POPULATED ON A GIVEN PSM.

   THE FOLLOWING ARE NOT PROVIDED BY THIS FEATURE:

   COMMON CHANNEL SIGNALING TRUNKS ON A PSM
   24-CHANNEL AND 30-CHANNEL TRUNKS ON THE SAME PSM
   A PSM ACTING AS A HOST FOR AN RSM
   POULATION OF LINE UNITS ON A PSM

EQUIPMENT NOTES: (CONT)

251. ICW ENGINEERING RULES:

1. THE ICW POWER SUPPLY (6386SX/EL) OPERATES OVER TWO FREQUENCY RANGES:
   50HZ. +/- 3HZ. AND 60HZ. +/- 3HZ.
   IT OPERATES IN TWO VOLTAGE RANGES:
   -90VAC TO 132VAC (2 AMPS, PLUS 2 AMPS FOR A VIDEO DISPLAY CONNECTED TO THE VIDEO DISPLAY OUTLET).
   -180VAC TO 246VAC (1 AMP, PLUS 1 AMP FOR A VIDEO DISPLAY CONNECTED TO THE VIDEO DISPLAY OUTLET).

2. THE SOURCE FOR ICW POWER IS TO BE LINE ENGINEERED, HOWEVER, TWO CONFIGURATIONS ARE RECOMMENDED TO ASSURE RELIABILITY. BOTH CONFIGURATIONS ARE BASED ON THE PRINCIPLE THAT CONTINUOUSLY INVERTED AC POWER PROVIDES THE HIGHEST LEVEL OF RELIABILITY. THE FIRST CONFIGURATION CONSISTS OF CENTRALIZED INVERTERS, POWERED BY THE CENTRAL OFFICE BATTERY PLANT. THE SECOND CONFIGURATION UTILIZES UNINTERRUPTIBLE POWER SUPPLIES (UPS). UPS SYSTEMS THAT SPECIFY A SENSE TO SWITCH TIME OF GREATER THAN 1 MILLISECOND ARE NOT RECOMMENDED, AS CAL PROCESSING AND SYSTEM PERFORMANCE MAY BE JEOPARDIZED.

3. THE ICW AND ITS ASSOCIATED HARDWARE IS ORDERED BY ED-5X231-30, ICW SOFTWARE IS ORDERED BY THE 5ESS® SOFTWARE DRAWING J-5X110A-1. FOR 4(1) AND J-5X111A-1 FOR 4(2).

4. FOR PLANNING PURPOSES, CABLE LENGTH INFORMATION IS PROVIDED HEREIN.
   THE 115VAC POWER CORD FOR THE PC IS 8.0' (2.44M).
   THE 230VAC POWER CORD FOR THE PC IS 8.2' (2.5M).
   THE KEYBOARD CABLE WILL STRETCH TO A COMFORTABLE MAXIMUM OF 5.0' (1.5M).
   THE AC POWER CORD FROM THE PC TO THE MONITOR IS 3.3' (1M).
   THE VIDEO CABLE FROM THE PC TO THE MONITOR IS 5.0' (1.5M) IN LENGTH.
   THE THREE MAIN COMPONENTS OF THE ICW (PC BASE, MONITOR AND KEYBOARD) CAN BE SEPARATED FROM ONE ANOTHER WITHIN THE LIMITS OF THEIR RESPECTIVE CONNECTING CABLES. IT IS DESIRABLE TO LOCATE THE PC AWAY FROM DIRECT PHYSICAL AND VISUAL CONTACT OF THE OPERATOR.
   THE PC CAN BE POSITIONED VERTICALLY, STILL ALLOWING ACCESS TO THE FLOPPY DISK DRIVE LOCATED ON THE FRONT OF THE UNIT.
   FOR EXAMPLE, RECOGNIZING THAT THE PC HAS A COOLING FAN, IT IS DESIRABLE TO LOCATE THE PC HOUSING SUCH THAT THE OPERATOR WILL NOT HEAR THE FAN OR BE AFFECTED BY THE RESULTING AIR MOVEMENT.
   THESE DECISIONS WILL HAVE TO BE MADE ON A JOB BY JOB BASIS BY THE LINE ENGINEER, AS FURNITURE AND OFFICE LAYOUT WILL BE AFFECTED.

5. THE FLOOR PLAN OF AN OFFICE USING ICW'S MUST BE DESIGNED TO INSURE THAT VISIBLE EFFECTS OF ELECTROMAGNETIC INTERFERENCE BETWEEN MONITORS WILL NOT BE PRESENT. ALLOW FOR A MINIMUM DISTANCE OF 29'' (737MM) BETWEEN MONITORS WHEN PLACED BACK TO BACK (SEE FIGURE A).
   ALLOW A MINIMUM DISTANCE OF 36'' (915MM) BETWEEN MONITORS PLACED SIDE BY SIDE (SEE FIGURE A). ALLOW A MINIMUM OF 33'' (838MM).
   BETWEEN MONITORS PLACED AT 90 DEGREE ANGLES (SEE FIGURE B).
   ALLOW A MINIMUM DISTANCE OF 36'' (915MM) BETWEEN MONITORS PLACED IN A HEXAGONAL PATTERN (SEE FIGURE C).
   NOTE: ALL DIMENSIONS ARE MEASURED FROM MONITOR CENTER TO MONITOR CENTER.
   THESE MEASUREMENTS APPLY TO THE SONY 1304/1404 MONITORS.
   A GENERAL RECOMMENDATION, INDEPENDENT OF THE MONITOR AND CONFIGURATION IS TO ALLOW 48'' (1245MM) BETWEEN MONITORS.

6. REFER TO NOTE 240 FOR LINE CARD ASSIGNMENT RULES AS THEY PERTAIN TO THE ICW.

7. THE ICW (PC) WEIGHS 21.0 LBS. (9.5KG.), THE ICW MONITOR WEIGHS 29.1 LBS. (13.2KG.), THE ICW KEYBOARD WEIGHS 7.5 LBS. (3.4KG.).

8. ICW GROUNDING MUST BE LINE ENGINEERED ON A JOB BY JOB BASIS.
   THE EQUIPMENT GROUND (EG) LEAD (GREEN WIRE GOUND) ROUTED TO THE ICW IS CONSIDERED AN EXTENSION OF THE ESS GROUND (ISOLATED).
   IF THE ICW IS POWERED BY OFFICE BATTERY (INDIRECTLY, VIA INVERTER), AS AN EXTENSION OF ESS GROUND, RULES CONTAINED IN ED-5D022-11 MUST BE FOLLOWED. FOR EXAMPLE, THE ICW MAY NOT BE MORE THAN ONE FLOOR ABOVE OR BELOW THE GROUND WINDOW (SEE FIGURE 25 C & D). THIS RESTRICTION OF VERTICAL SPACING BETWEEN ICW AND SWITCH MAY BE UNACCEPTABLE TO SOME CUSTOMERS. AN ALTERNATIVE WOULD BE TO POWER THE ICW FROM AN INDEPENDENT UPS OR INVERTER SYSTEM (REFERENCE AT&T PRACTICES 802-001-196) IN THIS CONFIGURATION, THE EG LEAD (GREEN WIRE GROUND) WOULD NOT BE CONSIDERED AN EXTENSION OF THE ESS GROUND AND THEREFORE MAY BE TREATED AS AN INTEGRATED BUILDING GROUND. TO ASSURE PROPER EQUALIZATION, IT IS RECOMMENDED THAT AC DISTRIBUTION CABINETS LOCATED ON THE SAME VERTICAL GROUND FLOOR AS THE ICW BE GROUNDED TO THE CENTRAL OFFICE GROUND BUS (COGB) (SEE FIGURE E).
   EG WIRE SIZE MUST COMPLY WITH NATIONAL ELECTRICAL CODE REQUIREMENTS.

EQUIPMENT NOTES: (CONT)

251. (CONT)

9. IT IS IMPORTANT TO NOTE THAT THE ICW INCREASES THE AMBIENT NOISE LEVEL OF AN OPERATORS WORK AREA OVER THE VDT, THERFORE, IT MAY BE NECESSARY TO TAKE STEPS TO ENSURE PROPER SOUNDPROOFING FOR OPTIMAL OPERATION.
   WHEN PLACED DIRECTLY IN FRONT OF THE OPERATOR, THE AUDIBLE LEVEL TO THE OPERATOR FROM THE PC IS 47DB.
   WHEN PLACED 5.0' (1.5M) AWAY FROM THE OPERATOR, THE AUDIBLE LEVEL TO THE OPERATOR FROM THE PC IS 40DB.

10. THE ONLY RECOMMENDED AND SUPPORTED ICW CONFIGURATION (THAT IS, THE ONLY ICW CONFIGURATION THAT TAKES INTO ACCOUNT IPIB SIZE, EMC AND ESD CONSIDERATIONS AND PRODUCT SAFETY CONCERNS)IS IDENTIFIED IN PART 1 OF NOTE 251.
    NOTE, THE IPIB HAS BEEN DESIGNED TO BE OPERATIONALLY COMPATIBLE WITH A PC THAT MEETS THE INTEL CORPORATION, ''ISA BUS SPECIFICATION AND APPLICATION NOTES REV. 3.00,'' JANUARY 12, 1990. THE IPIB'S PHYSICAL SIZE IS SHOWN IN FIGURE 'D'.

11. FOR ICW ENVIRONMENTAL CONSIDERATIONS, SPECIFICALLY TEMPERATURE AND HUMIDITY RECOMMENDATIONS FOR STORAGE AND OPERATION, REFER TO PRODUCT (PC OR MONITOR, ETC.) DOCUMENTATION AS NEEDED.

12. FOR ISDN PLANNING AND INSTALLATION INFORMATION REFER TO:
    5ESS®SWITCH INTEGRATED SERVICES DIGITAL NETWORK CUSTOMER PREMISES PLANNING GUIDE. (AT&T 533-700-100).

OSPS INTERNATIONAL APPLICATION SCHEMATIC

DWG SIZE	ISSUE
C2	13B

Lucent Technologies | SD-5X214-01 | SHEET D25

EQUIPMENT NOTES: (CONT)

251. (CONT) ICW ENGINEERING RULES:

FIGURE 'A'

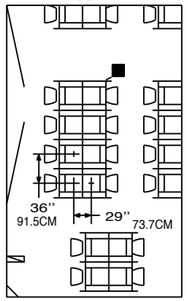


FIGURE 'B'

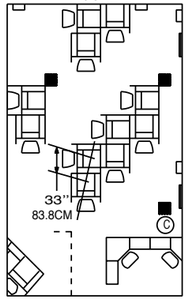


FIGURE 'C'

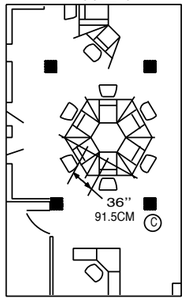
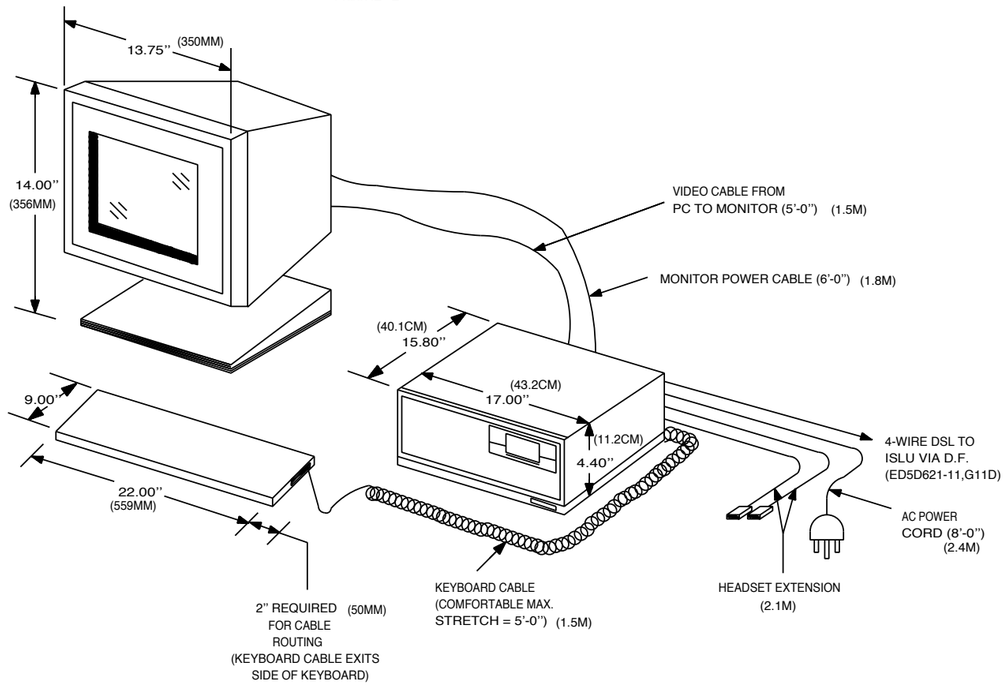


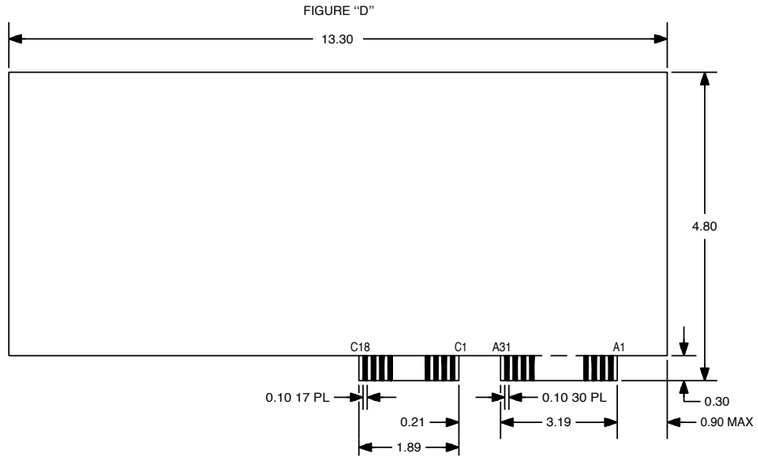
FIGURE "E"



EQUIPMENT NOTES: (CONT)

251. (CONT) ICW ENGINEERING RULES:

FIGURE "D"



OSPS INTERNATIONAL
APPLICATION SCHEMATIC

DWG SIZE	ISSUE
C2	13B

Lucent Technologies	SD-5X214-01	SHEET
		D26

EQUIPMENT NOTES: (CONT)

251. (CONT)

13. TERMINATING RESISTORS ARE REQUIRED IN THE RECEIVE AND TRANSMIT PATHS OF THE IPIB BRI FOR MOST POINT-TO-POINT APPLICATIONS. THESE TERMINATING RESISTORS MAY BE PROVIDED EXTERNALLY WITH THE AT&T TERMINATING RESISTOR 440A4 (105197784) OR INTERNALLY USING THE VERSION 2.0 (AM) IPIB.

THE AT&T EXTERNAL TERMINATING RESISTOR 440A4 (105197784) MAY BE USED WITH THE ICW AND EITHER VERSION 1.0 (AM4) OR VERSION 2.0 (AM6) OF THE IPIB, AS LONG AS THE INTEGRATED RESISTORS ON THE IPIB'S ARE CONFIGURED OUT OF THE BRI CIRCUIT.
THE ARRANGEMENT OF USING AN EXTERNAL TERMINATING RESISTOR IS STANDARD FOR MANY AT&T ISDN PRODUCTS.
WHEN USING THE 440A4 EXTERNAL TERMINATING RESISTOR THE TERMINATING RESISTORS ON THE CARD MAY BE CONFIGURED OUT OF THE CIRCUIT AS FOLLOWS:

ON VERSION 1.0 (AM4) COMCODE NUMBER 846455467, ONLY A RECEIVE TERMINATING RESISTOR IS PRESENT; NO TRANSMIT TERMINATING RESISTOR HAS BEEN PROVIDED.
THE RECEIVE TERMINATING RESISTOR IS CONFIGURED USING J5.
WHEN JUMPERS ARE IN THEIR (1-2) POSITION, (SEE FIG. 1A & FIG. 2),
THE TERMINATING RESISTORS ON THE CARD ARE CONFIGURED INTO THE CIRCUIT.
WHEN THE JUMPERS ARE IN THEIR (2-3) POSITION THE TERMINATING RESISTORS ARE EFFECTIVELY REMOVED FROM THE CIRCUIT.

ON VERSION 2.0 (AM6) COMCODE NUMBER 846541258, BOTH TRANSMIT AND RECEIVE TERMINATING RESISTORS ARE ON THE CARD. TO REMOVE THE RESISTORS FROM THE CIRCUIT, MOVE JUMPERS J5 AND J7 FROM POSITION 1-2 TO POSITION 2-3 ON THE CARD. (SEE FIG. 1B & 2).

FOR ADDITIONAL REFERENCE SEE 5ESS® SWITCH INTEGRATED SERVICES DIGITAL NETWORK PLANNING GUIDE (AT&T 533-700-100).

14. THE ICW (NCR 386) NCR PLATFORM REQUIREMENTS ARE:

VOLTAGE RANGE: 90VAC TO 136VAC
198VAC TO 264VAC

FREQUENCY RANGE: 47HZ. TO 63HZ.

CURRENT DRAIN: 5 AMPS (MAX)

PHYSICAL DIMENSIONS:

HEIGHT:	5.2"	(138MM)
WIDTH:	15.0"	(381MM)
DEPTH:	17.2"	(436MM)
WEIGHT:	24.2LBS.	(11KG)

THE SONY CPD-1304S COLOR MONITYOR REQUIREMENTS ARE:

POWER REQUIREMENTS:

100-120VAC,	MAX. 1.8A,	50-60 HZ.
220-240VAC,	MAX. 1.0A,	50-60 HZ

PHYSICAL DIMENSIONS:

HEIGHT:	14"	(355 MM)
WIDTH:	13.75"	(348 MM)
DEPTH:	16.25"	(411 MM)
WEIGHT:	30 LBS 14 OZ.	(13.1 KG)

THE ICW (NCR 486) NCR PLATFORM REQUIREMENTS ARE:

VOLTAGE RANGES: 90VAC TO 136VAC
198VAC TO 264VAC

FREQUENCY RANGE: 47HZ. TO 63HZ.

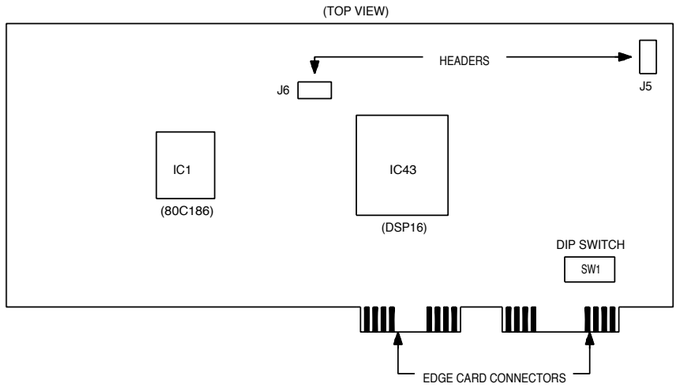
POWER SUPPLY: 145 W

PHYSICAL DIMENSIONS:

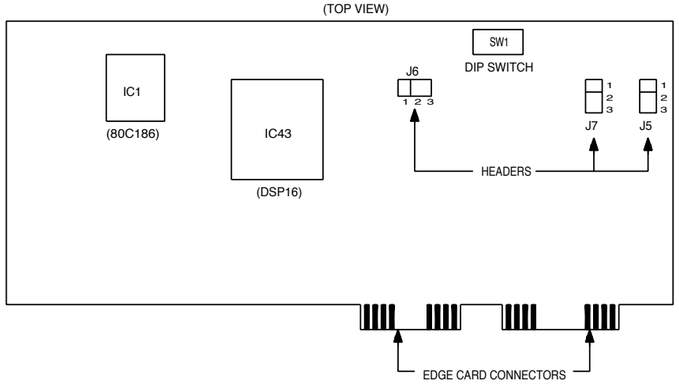
HEIGHT:	4.1''	(104MM)
WIDTH:	16.3''	(417MM)
DEPTH:	16.1''	(401MM)
WEIGHT:	18.5LBS	(8.4KG)

FIGURE 1

INTELLIGENT PERSONAL COMPUTER INTERFACE BOARD (IPIB)
(A) VERSION 1.N AND (B) VERSION 2.N



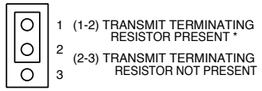
(A) IPIB VERSION 1.N 846-455-467



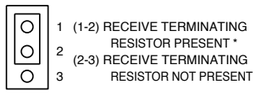
(B) IPIB VERSION 2.N 846-541-258

FIGURE 2

SETTINGS FOR THE JUMPERS ON HEADERS J5 AND (AND J7 FOR A VER. 2.N IPIB)



HEADER J7
(VERSION 2.0 ONLY)
(TOP VIEW)



HEADER J5
(TOP VIEW)

* FACTORY SETTINGS

OSPS INTERNATIONAL
APPLICATION SCHEMATIC

DWG SIZE	ISSUE
C2	13B

Lucent Technologies	SD-5X214-01	SHEET D27

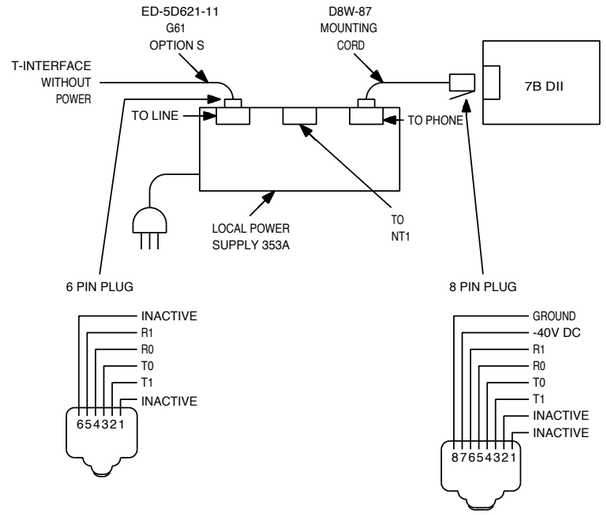
EQUIPMENT NOTES: (CONT)

252.

1. THE 7B DII IS AVAILABLE ONLY IN A UNIT MOUNTING CONFIGURATION.
2. WHEN USED IN A TYPICAL CONFIGURATION, THE 7B DII IS LOCATED IN THE OSPS DATA SET CABINET.
3. THE 7B DII DRAWS 2.4 WATTS OF -48 VOLT DC POWER DURING NORMAL OPERATION. MAXIMUM POWER CONSUMPTION FOR THE 7B DII IS 5 WATTS. THE -48 VOLT DC POWER CAN BE SUPPLIED FROM THE OFFICE BATTERY (LINE ENGINEERED) THROUGH PINS 7 (-48V) AND 8 (-48 RTN) OF THE DSL CABLE VIA THE OSPS POWER DISTRIBUTION CABINET OR EQUIVALENT, USING A 2A FUSE WITH NO MORE THAN 4, 7B DII'S PER FUSE. OPTIONALLY, A 353A POWER SUPPLY CAN BE USED TO ADD -40 VOLTS TO THE DSL CABLE AT THE LOCATION OF THE 7B DII. (NOTE THE 353A IS 115V INPUT).
4. 7B DII SETUP AND OPTIONS ARE DOCUMENTED IN THE 7B DII USERS GUIDE 555-021-723 WHICH IS SUPPLIED WITH EACH UNIT. ADDITIONAL COPIES MAY BE OBTAINED THROUGH C.I.C. A DIP SWITCH OPTION LABEL IS LOCATED ON THE BOTTOM OF THE 7B DII.
5. 7B DII ORDERING INFORMATION IS CONTAINED IN ED5X216-30.

252. (CONT)

7B DII & 9A DII2 POWER OPTIONS
LOCAL POWER (115V)



7B DII & 9A DII2 POWER OPTIONS
-48VDC VIA DISTRIBUTION FRAME

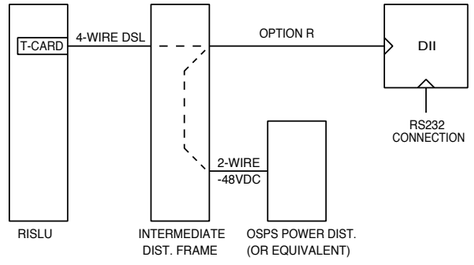


TABLE A

	FROM	TO	FUNCTION
DII	PIN 1	DISTRIBUTION FRAME, TIE BACK	INACTIVE
	2	-UNUSED	INACTIVE
	3	ISLU VIA DISTRIBUTION FRAME	T1
	4		T0
	5		R0
	6		R1
	7	OSPS POWER	-48VDC
	8	DIST. VIA D.F.	-48RTN

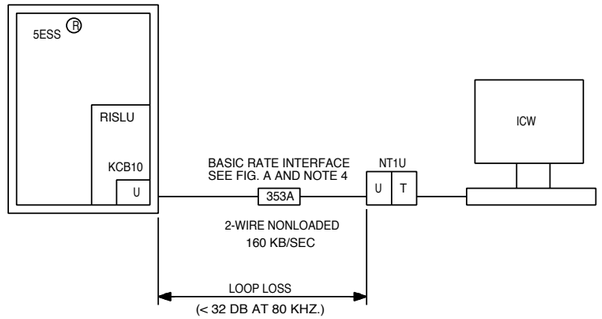
OSPS INTERNATIONAL
APPLICATION SCHEMATIC

DWG SIZE	ISSUE
C2	13B

Lucent Technologies | SD-5X214-01 | SHEET D28

EQUIPMENT NOTES (CONT):

253. REMOTE INTELLIGENT COMMUNICATION WORKSTATION (ICW)



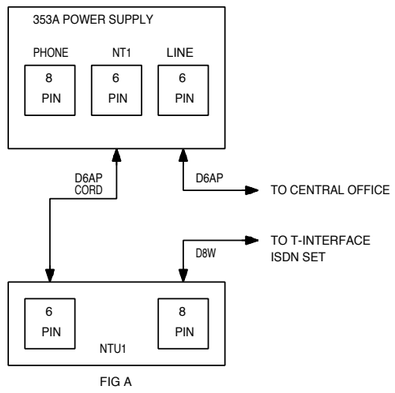
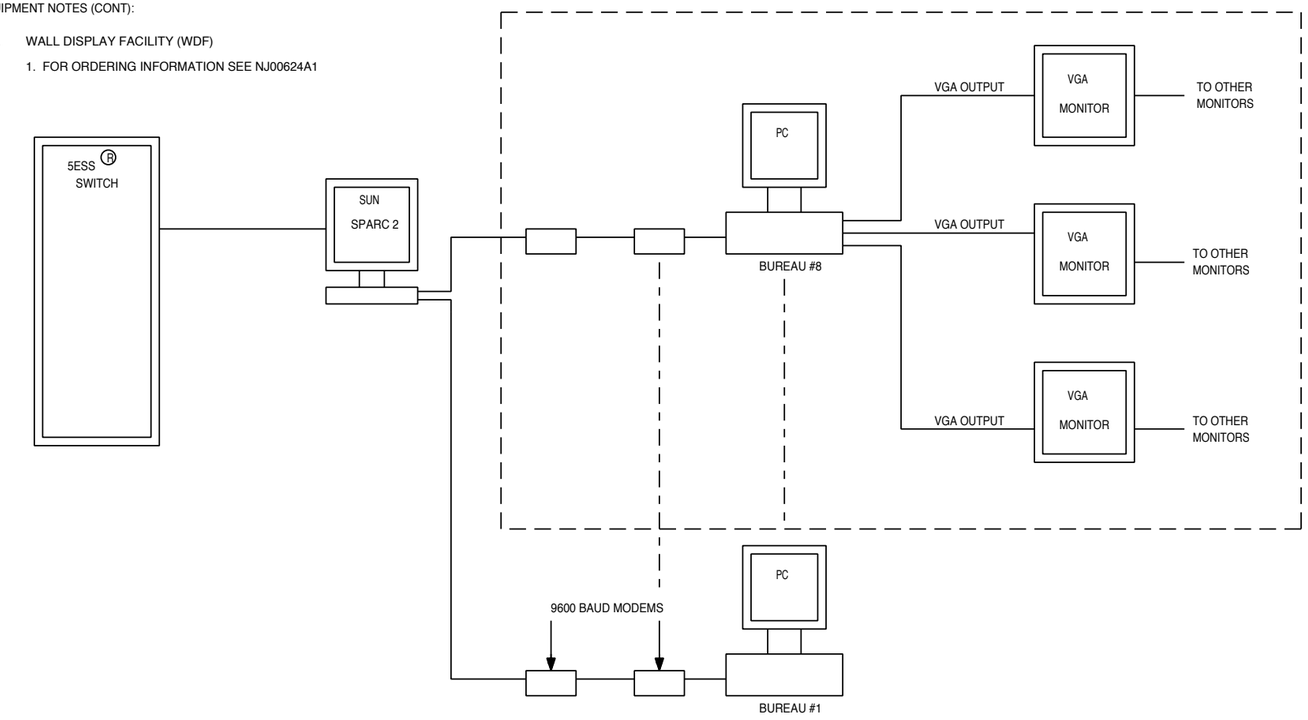


FIG A

EQUIPMENT NOTES (CONT):

254. WALL DISPLAY FACILITY (WDF)

1. FOR ORDERING INFORMATION SEE NJ00624A1



NOTES:

1. THE NT1 PROVIDES CONVERSION BETWEEN THE 2-WIRE
   U-INTERFACE AND THE 4-WIRE T-INTERFACE.
   THE NT1 SUPPORTS POINT-TO-POINT AND MULTIPOINT ISDN SERVICES.
   THERE ARE THREE KINDS OF NT1'S THAT SUPPORT AMI SIGNALING
   (NT1U, NT1P AND NT1P-100) THE NT1M IS A HOUSING FOR THE NT1P
   AND THE NT1P-100. EACH NT1 CONSUMES 1.2 WATTS OF POWER.
   THE NT1 MUST BE IN THE SAME BUILDING AS THE TERMINAL
   (THAT IS, NO OUTSIDE PLANT WIRING BETWEEN THE NT1 AND
   THE ISDN TERMINAL EQUIPMENT.)
   THE STAND-ALONE AMI NT1 IS THE NT1U.
   THE NT1M, IS THE MODULAR UNIT OF THE NT1, THAT CAN BE RACK OR
   WALL MOUNTED. THE NT1M IS EQUIPPED WITH TWO 50-PIN FEMALE
   RIBBON CONNECTORS FOR U- AND T- CONNECTIONS.
   THE NT1M HOLDS UP TO 12 NTP OR NTP-100 CIRCUIT PACKS.
2. FOR ORDERING INFORMATION SEE ED-5X231-30.
3. (R)ISLU MUST BE EQUIPPED WITH:
   - HLSC TN844B PACKS; FOR SG0 AND FOR SG1
   - ISAPC TO BE 553B
   - ISMAN TN1348 PACKS; FOR SG0 AND FOR SG1
   - THE AMI "U" INTERFACE WILL ONLY BE
     SUPPORTED FOR ISLU/RISLU.
4. THE NT1U AND THE 353A ARE FOR STANDALONE SERVICE
   THE NT1M IS THE RACK MOUNTING AND CAN BE EQUIPPED
   WITH UP TO A MAXIMUM OF 12 NT1P'S
   110V POWER FOR THE NT1M IS SUPPLIED BY THE 945
   TYPE POWER UNITS.

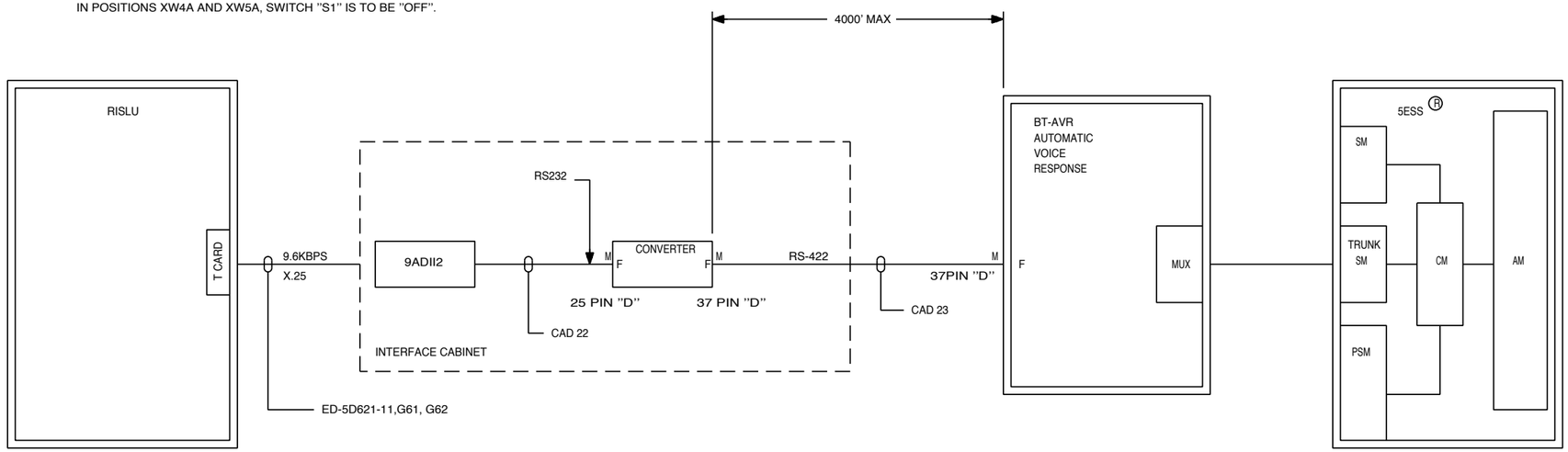
OSPS INTERNATIONAL
APPLICATION SCHEMATIC

DWG SIZE	ISSUE
C2	13B

Lucent Technologies	SD-5X214-01	SHEET D29

EQUIPMENT NOTES (CONT):

255. BRITISH TELCOM-DIRECTORY ASSISTANCE AUTOMATIC VOICE RESPONSE (AVR)
1. FOR ORDERING INFORMATION SEE ED-5X216-30.
2. THE INTERFACE CONVERTER IS TO BE CONFIGURED WITH THE RS422 SIDE AS "DCE" EQUIPMENT WITH DIP SHUNTS IN POSITIONS XW1B, XW2B AND XW3B, AND THE RS232 SIDE AS "DTE" EQUIPMENT, WITH DIP SHUNTS IN POSITIONS XW4A AND XW5A, SWITCH "S1" IS TO BE "OFF".



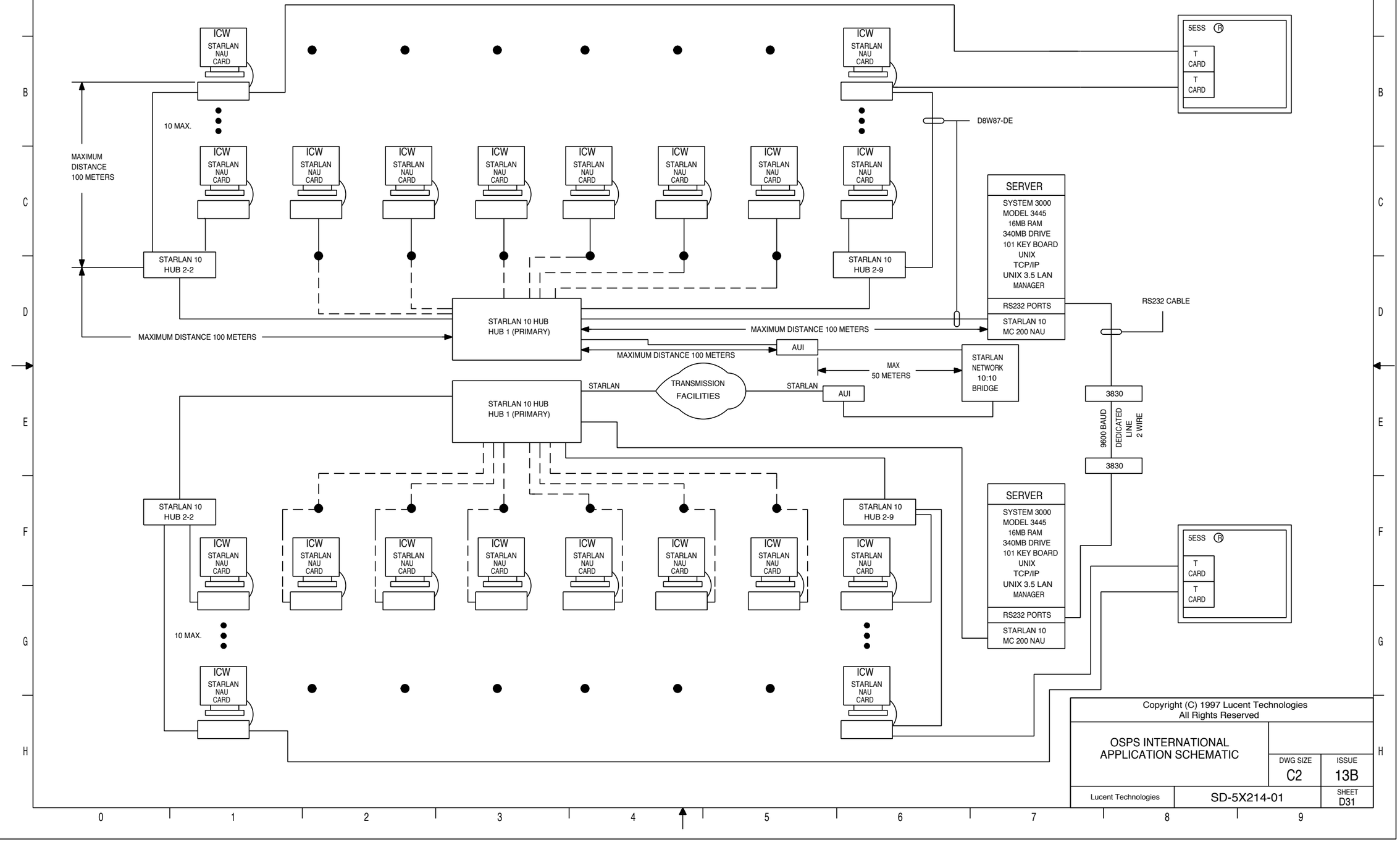
OSPS INTERNATIONAL
APPLICATION SCHEMATIC

DWG SIZE	ISSUE
C2	13B

Lucent Technologies	SD-5X214-01	SHEET
		D30

EQUIPMENT NOTES: (CONT.)

256. OSPS NETWORKING FACILITIES.



OSPS INTERNATIONAL
APPLICATION SCHEMATIC

DWG SIZE	ISSUE
C2	13B

Lucent Technologies | SD-5X214-01 | SHEET D31

EQUIPMENT NOTES: (CONT.)

256. OSPS NETWORKING FACILITIES. (CONT.)

1. FOR ORDERING INFORMATION SEE ED-5X231-30.

2. IT IS RECOMMENDED, THAT FOR THIS FEATURE THE ICW BE EQUIPPED WITH WINDOWS. (GROUP 34 OF ED-5X231-30)

3. THE PC NAU CARD IS INSTALLED IN THE ICW AS ANY FULL SIZE EXPANSION CARD. FOR REFERENCE SEE "STARLAN 10 NETWORK PC NAU INSTALLATION GUIDE" 999-120-720.
NOTE: BEFORE INSTALLATION CHECK THE OPTION SETTINGS ON THE PC NAU CARD: SETTINGS TO BE:

INTERRUUPT REQUEST (IRQ):	2	(DEFAULT SETTING)
I/O ADDRESS:	360	(DEFAULT SETTING)
RAM ADDRESS:	CC000	

IF THE DEVICE THAT WILL BE CONNECTED TO THE PC NAU SUPPORTS THE LINK INTEGRITY FUNCTION AND THE FUNCTION IS ENABLED, THE LINK INTEGRITY FUNCTION SWITCH ON THE PC NAU MUST BE SET TO THE ENABLE POSITION.

4. DO NOT STRING D8W87 TYPE CORDS TO COVER DISTANCES GREATER THAN 14' (4.3M) IF ADDITIONAL MODULAR CORDS ARE NEEDED TO CONNECT THE PC NAU TO THE STARLAN 10 NETWORK USE DW8A-DE SUITABLE FOR ROOM CONNECTIONS OR DP8B-DE FIRE-RESISTANT, LOW SMOKE PRODUCINT, PLENUM-TYPE CORD THAT CAN BE USED WHEN MAKING CONNECTIONS THROUGH CEILINGS, WALLLS AND PLENUMS. WHEN MAKING THESE TYPE OF CONNECTIONS WITH PLENUM CORD, CONSULT LOCAL ORDINANCES FOR PROPER USAGE. CORDS ARE AVAILABLE IN THE FOLLOWING LENGHS:

10'	(3.0M)	25'	(7.6M)	200'	(60.9M)
50'	(15.2M)	75'	(22.8M)		
100'	(30.4M)	150'	(45.7M)		

IF YOU NEED LONGER DISTANCES, CONNECT TWO CORDS TOGETHER USING A 451A ADAPTER.
IF YOU ARE CONNECTING YOUR PC NAU TO A NETWORK HUB UNIT THE AMOUNT OF THE CORD BETWEEN THE TWO DEVICES CANNOT EXCEED 328' (100M).

5. STARLAN 10 HUB REQUIREMENTS:
A) EVNIRONMENTAL SPECIFICATIONS:

TEMPERATURE:	0 TO 50 DEG. C 32 TO 122. F
HUMIDITY:	5% TO 95% NC.
ALTITUDE:	0 TO 10,000 FEET. 0 TO 3,017 METERS.

B) POWER REQUIREMENTS:

VOLTAGE:	85 TO 250 VAC.
FREQUENCY:	47 TO 63 HZ
POWER:	35 W.

* THE POWER RECEPTACLE MUST BE A NON-SWITCHED, 3-PRONGED, GROUNDED RECEPTACLE. THERE ARE NO VOLTAGE SWITCHES ON THE HUB. IT OPERATES CONTINUOUSLY FROM 85 TO 250 VAC.

* DO NOT USE A 3-TO-2-PRONGED ADAPTER AT THE RECEPTACLE; USE OF THIS TYPE OF ADAPTER MAY RESULT IN ELECTRICAL SHOCK AND/OR DAMAGE TO THE HUB.

* BE SURE THERE IS A COMMERCIAL POWER RECEPTACLE WITHIN A 7-FOOT (2.2 METER) CORD DISTANCE OF THE HUB. IF THERE IS NO CONVENIENT LOCATION WITHIN THE 7 FEET (2.2 METERS) OF A RECEPTACLE, USE A POWER STRIP OR GROUNDED EXTENCION CORD TO EXTEND THE RANGE OF YOU POWER CABLE.

EQUIPMENT NOTES: (CONT.)

256. OSPS NETWORKING FACILITIES. (CONT.)

5. STARLAN 10 HUB REQUIREMENTS:(CONT.)

C) HUB DIMENSIONS, INCLUDING MOUNTING BRACKET:
HEIGHT: 16.5 INCHES (42 CENTIMETERS)
WIDTH: 3 INCHES (8 CENTIMETERS)
DEPTH: 7 INCHES (18 CENTIMETERS)

D) AIR CIRCULATION:
* WHEN MOUNTING A HUB ON THE WALL, ALLOW 5 INCHES (12 CENTIMETERS) OF CLEARANCE BETWEEN THE TOP OF THE HUB AND ANY OTHER OBJECT.

* WHEN SETTING A HUB ON A LEVEL SURFACE, ALLOW 5 INCHES (12 CENTIMETES) OF CLEARANCE BETWEEN THE HUB AND ANY OBJECT POSITIONDE OVER THE HUB. NEVER PLACE PLACE AN OBJECT DIRECTLY ON TOP OF THE HUB

* DO NOT STACK HUBS ON TOP OF EACK OTHER. STACKTING WILL AFFECT THE HEAT DISSIPATION CAPABILITIES OF THE HUBS.

6. TO CONNECT A STARLAN 10 NETWORK NODE TO A HUB, FOLLOW THESE STEPSO

A) SELECT THE APPROPRIATE LENGTH OF DW8A-DE MODULAR CORD.

B) CONNECT ONE END OF THE MODULAR CORD TO THE OUT JACK ON THE PC NAU CARD OF THE ICW.

C) ROUTE THE FREE END OF THE MODULAR CORD TO THE HUB, CONNECT TO THE IN JACK OF THE HUB. RESERVE THE IN/OUT JACK ON THE HUB FOR CONNECTION TO THE PRIMARY HUB.

D) MAKE SURE THAT THE LINK INTEGRITY SETTING FOR THE MODULAR JACK AGREES WITH THAT OF THE NODE.

7. TO CONNECT HUB 1 TO HUB 2-2 THROUGH 2-9 FOLLOW THESE STEPS:

A) SET THE IN/OUT SWITCH ON HUB'S 2-X TO THE OUT POSITION.

B) THE LINK INTEGRITY SETTING OF DEVICES AT BOTH END OF THE CONNECTION MUST AGREE.

C) SELECT HTE APPROPRIATE LENGTH OF MODULAR CORD (DW8A-DE OR D8W) FOR THE HUB TO HUB CONNECTION.

D) CONNECT ONE END OF THE MODULAR CORD TO THE IN/OUT JACK OF HUB 2-X. ROUTE THE FREE END OF THE MODULAR CORD TO HUB 1.

E) CONNECT THE FREE END OF THE MODULAR CORD TO AN IN JACK ON HUB 1

EQUIPMENT NOTES: (CONT.)

256. OSPS NETWORKING FACILITIES. (CONT.)

8. REQUIREMENTS FOR THE ATTACHMENT UNIT INTERFACE (AUI):

A) ENVIRONMENTAL REQUIREMENTS:

TERMPERATURE:	0 TO 50 DEG. C 32 TO 120. F
HUMIDITY:	5% TO 95% NC.
ALTITUDE:	187 FEET (60 METERS) BELOW SEA LEVEL TO 10,007 FEET (3,050 METERS) ABOVE SEA LEVEL.

B) AUI DIMENSIONSL

HIEGHT:	0.9 INCHES (2 CENTIMETERS)
WIDTH:	2 INCHES (5 CENTIMETERS)
LENGTH:	3.8 INCHES (10 CENTIMETERS)

9. CONNECTIONG THE ATTACHEMENT UNIT INTERFACE (AUI).

A) CONNECTING THE AUI TO THE AUI PORT OF A BRIDGE, WHEN MAKING CONNECTIONS FROM THE AUI TO A BRIDGE MAKE SURE THE "SQE" TEST FUNTION SWITCH IS IN THE "ENABLE" POSITION. CONNECTION FGROM THE AUI TO THE AUI PORT ON THE BRIDGE CAN BE MADE DIRECTLY ON VIA A TRANSCEIVER CABLE.

B) CONNECTIONG THE AUI TO AN AUI PORT OF A HUB; WHEN MAKING A CONNECTION FROM THE AUI TO A HUB MAKE SURE TO USE A CROSSOVER CORD, THAT ENABLES YOU TO CONNECT THE AUI ADAPTER TO AN OUT JACK. THE SQE THEST FUNCTIONSWITCH IS TO BE IN THE "DISABLES" POSITION.

10. REQUIREMENTS FOR THE 3445 SERVER:

A) POWER REQUIREMENTS;

VOLTAGE RANTGES:	90 VAC TO 136 VAC 198 VAC TO 264 VAC
FREQUENCY RANGES:	47 HZ. TO 63 HZ.
CURRENT DRAIN:	8 AMPS (MAX)

B) PHYSICAL DIMENSIONS:

HEIGHT:	29.0 IN.	737MM
WIDTH:	7.5 IN.	191MM
DEPTH:	29.5 IN.	749MM
WIEGHT:	110 LBS.	49.9 KG.

OSPS INTERNATIONAL APPLICATION SCHEMATIC

DWG SIZE	ISSUE
C2	13B

Lucent Technologies | SD-5X214-01 | SHEET D32

INFORMATION NOTES:

301. UNLESS OTHERWISE SPECIFIED:
RESISTANCE VALUES ARE IN OHMS,
CAPACITANCE VALUES ARE IN MICROFARADS,
VALUES PRECEDED BY THE SYMBOL + (PLUS)
OR - (MINUS) ARE IN VOLTS.

302.

FEATURE OR OPTION		PROVIDE		
		APP FIG	APP OR WRG	QUANTITY
CABLE REQUIRED FROM LAU T/A TO MODEMS	ASYNCHRONOUS 9.6K BPS USED WITH GANDALF RM3120E & LDS120E MODEMS FOR OAP	1	Z	1 EACH
	SYNCHRONOUS 9.6K PBS USED FOR DAS/C LINKS	1	Y	1 EACH
	ASYNCHRONOUS 1200 BPS USED FOR PCDA	1	X	1 EACH
CABLES AND APPARATUS REQUIRED FROM DII TO MODEMS OR DTE	7A2 DII TO DTE	1	W	1
	7A2 DII TO SYNCHRONOUS DCE	1	V	1
	DII TO SYNCHRONOUS DTE	1	U	1
	DII TO SYNCHRONOUS DCE	1	T	1
DII TO DISTRI-BUTION FRAME	CABLE REQUIRED, WHEN DII LOCAL POWER SUPPLY IS USED	1	S	1
	CABLE REQUIRED, WHEN DII POWERED VIA DISTRIBUTION FRAME	1	R	1

303.

RECORD OF FIGURES, WIRING AND APPARATUS CHANGES					
CHANGED ON ISS	IF JOB RECORDS DO NOT SPECIFY	THIS OPTION WAS FURN	SEE NOTE	USE IN CIRCUIT	
				AVAIL	DA

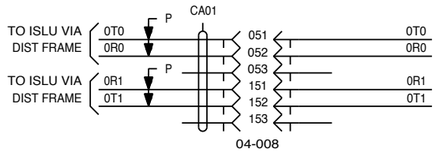
OSPS INTERNATIONAL
APPLICATION SCHEMATIC

DWG SIZE	ISSUE
C2	13B

Lucent Technologies	SD-5X214-01	SHEET D33

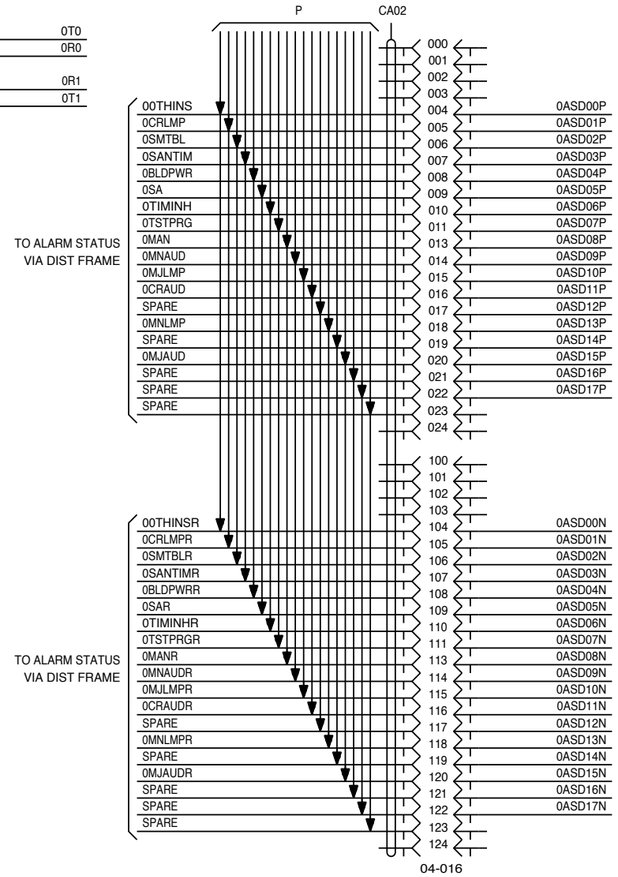
CAD 1

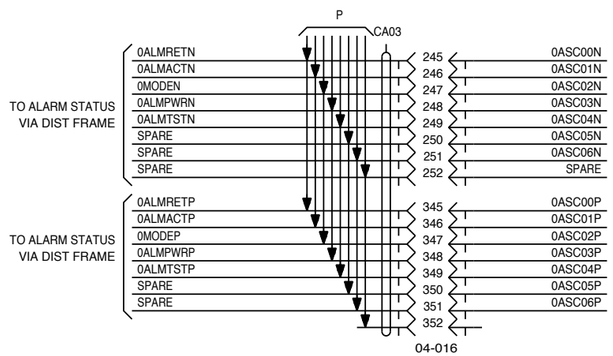
LAU TO DF



CAD 2

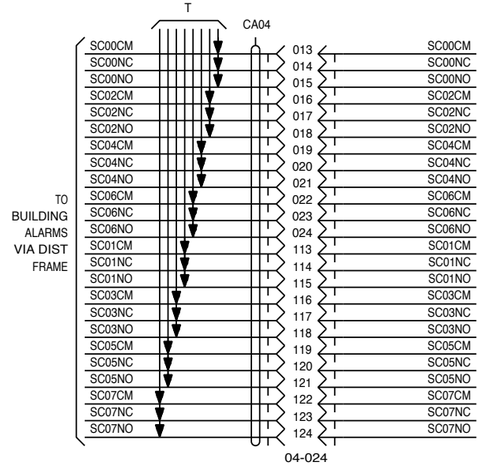
LAU TO DF

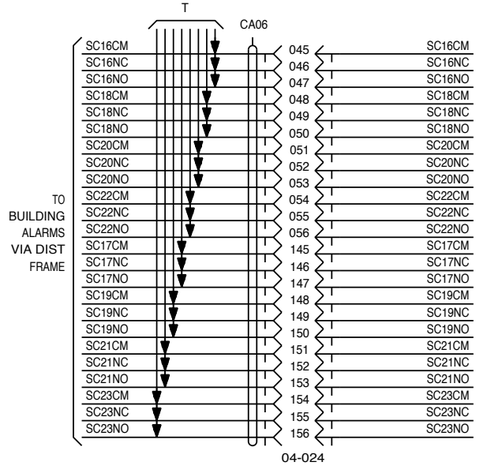


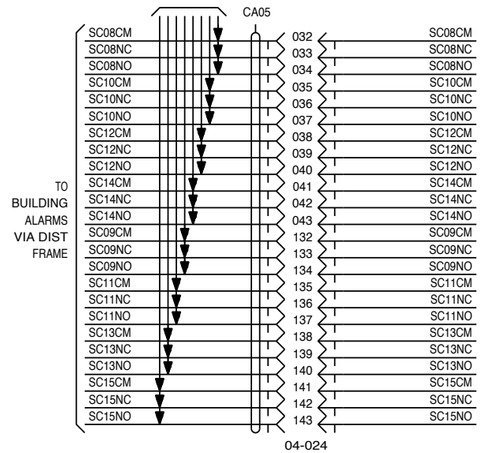


CAD 3

LAU TO DF







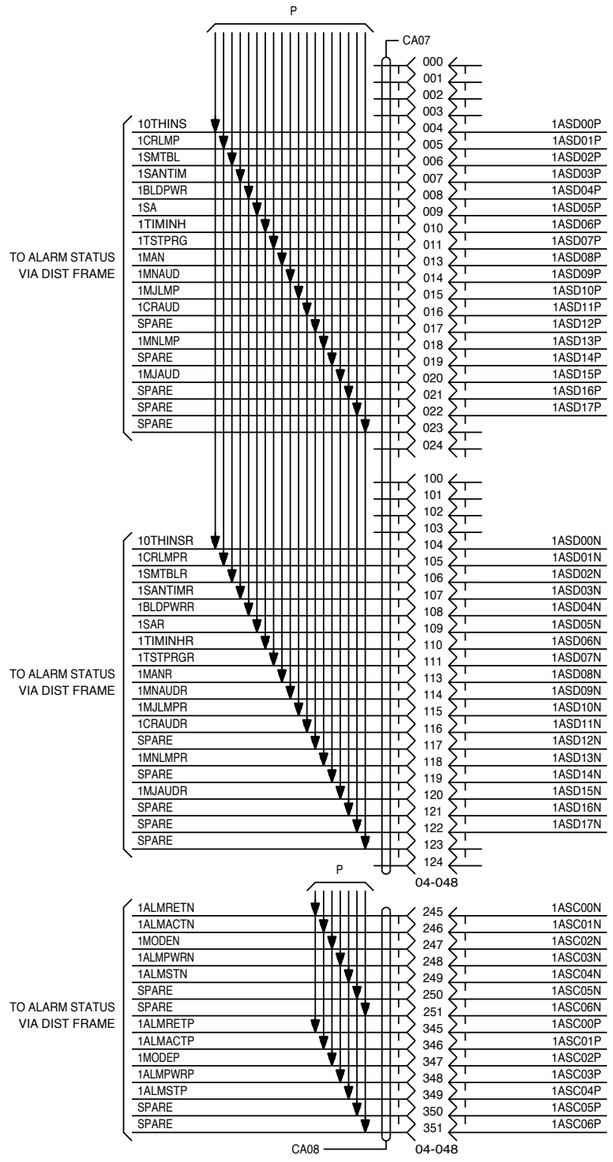
OSPS INTERNATIONAL
APPLICATION SCHEMATIC

DWG SIZE	ISSUE
C2	4M

Lucent Technologies	SD-5X214-01	SHEET
		G1

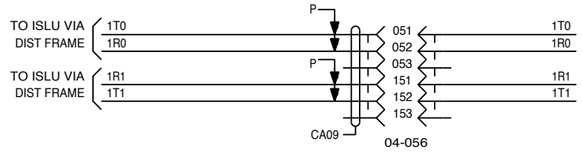
CAD 4

LAU TO DF



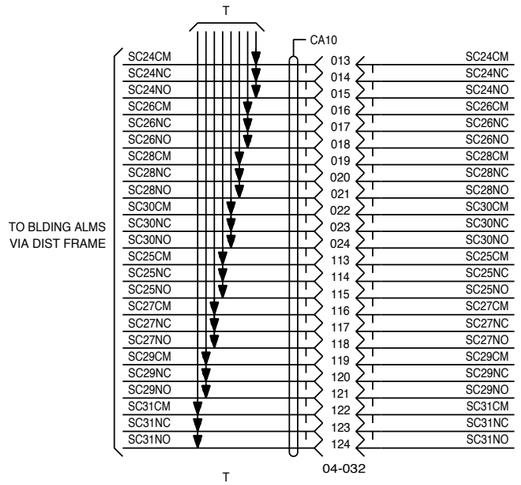
CAD 5

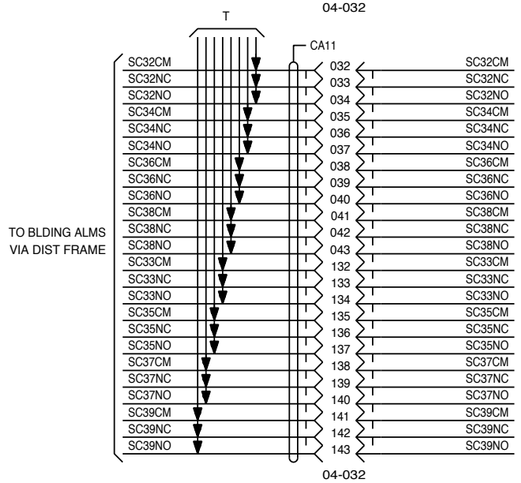
LAU TO DF



P/O CAD 6

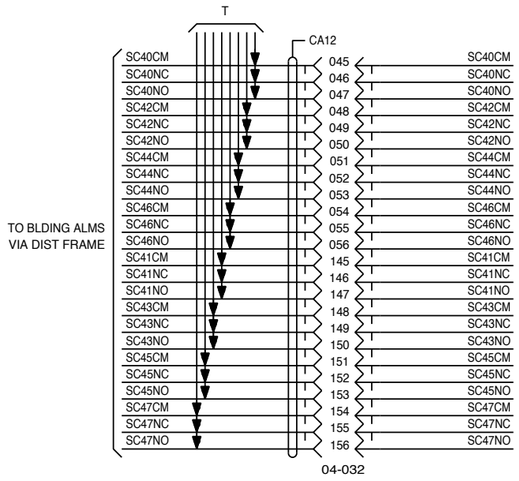
LAU TO DF





P/O CAD 6

LAU TO DF



OSPS INTERNATIONAL
APPLICATION SCHEMATIC

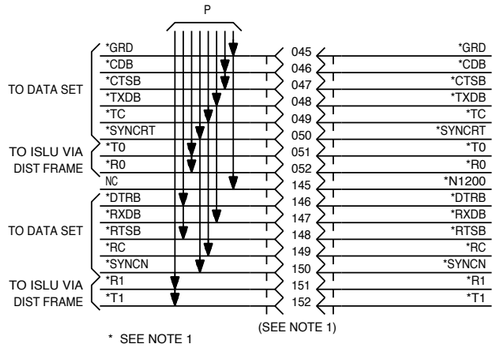
DWG SIZE	ISSUE
C2	4M

Lucent Technologies	SD-5X214-01	SHEET G2

CAD 7

LAU-T/A ASYNCHRONOUS 9.6K BPS OAP
(SEE NOTE 206)

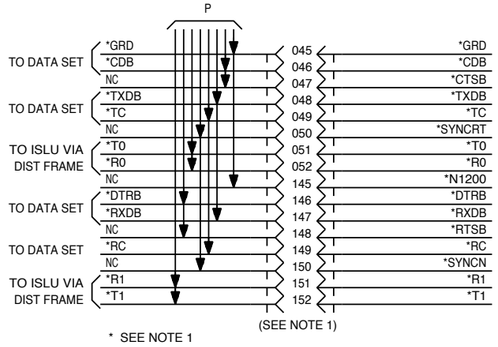
OPTION Z



CAD 7B

ATA MODEM INTERFACE FOR PCDA
(SEE NOTE 206)

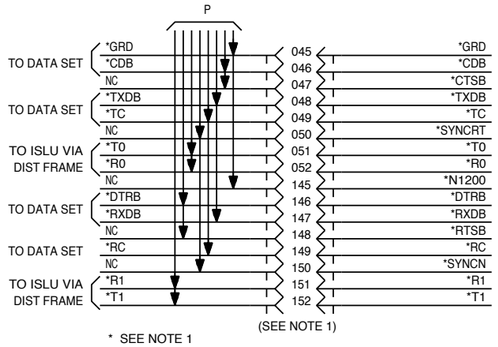
OPTION X



CAD 7A

LAU-T/A SYNCHRONOUS 9.6K BPS DAS/C LINKS
(SEE NOTE 206)

OPTION Y



NOTE:

1. TABLE REPRESENTS 14 CONNECTORS.

CA	*	CAD EQL	CA	*	CAD EQL
CA13	2	04-072	CA20	9	04-128
CA14	3	04-080	CA21	10	04-136
CA15	4	04-088	CA22	11	04-144
CA16	5	04-096	CA23	12	04-152
CA17	6	04-104	CA24	13	04-160
CA18	7	04-112	CA25	14	04-168
CA19	8	04-120	CA26	15	04-176

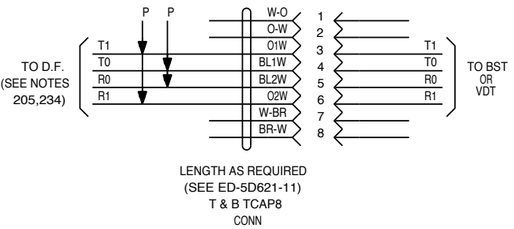
OSPS INTERNATIONAL
APPLICATION SCHEMATIC

DWG SIZE	ISSUE
C2	4M

Lucent Technologies | SD-5X214-01 | SHEET G3

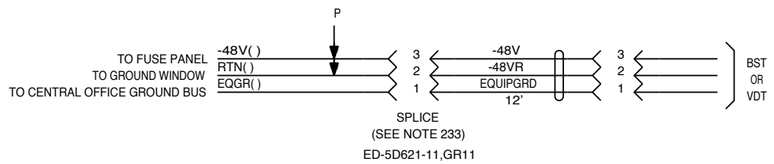
CAD 8

BST OR VDT DISTRIBUTING FRAME



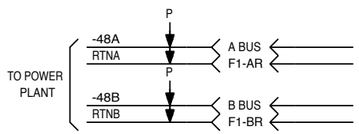
CAD 9

BST OR VDT POWER



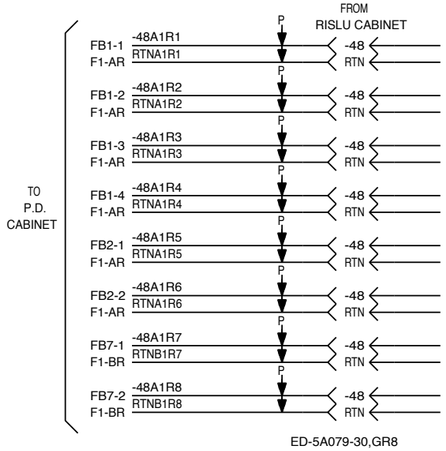
CAD 10

POWER DISTRIBUTION CABINET
TO POWER PLANT



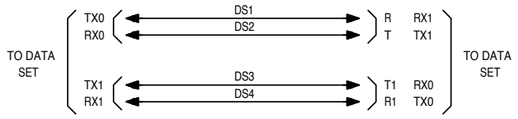
CAD 11

RISLU CABINET TO POWER DISTRIBUTION CABINET



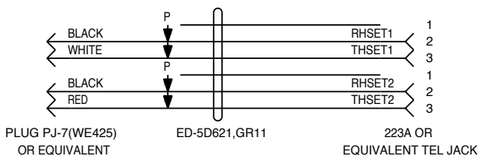
CAD 12

DATA SET TO DATA SET



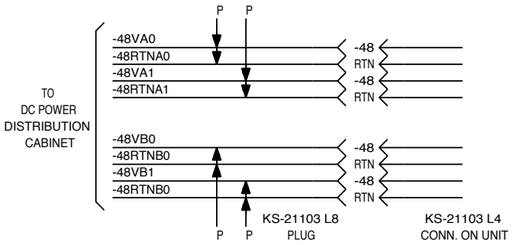
CAD 13

BST OR VDT TO OPERATOR HEADSET
(SEE NOTE 236)



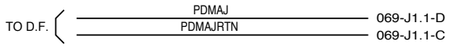
CAD 14

LTP CAB TO P.D. CAB



CAD 15

OSPS P.D. AIM TO D.F.



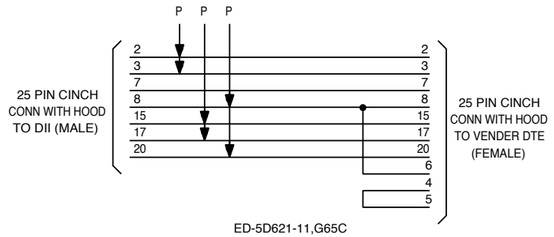
OSPS INTERNATIONAL
APPLICATION SCHEMATIC

DWG SIZE	ISSUE
C2	4M

Lucent Technologies	SD-5X214-01	SHEET
		G4

CAD 16

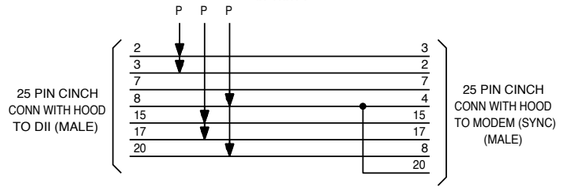
DII TO DTE
OPTION W



ED-5D621-11,G65C

CAD 17

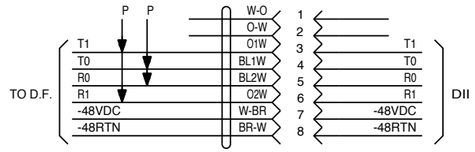
TO MODEM (SYNC)
OPTION V



ED-5D621-11,G65A

CAD 18

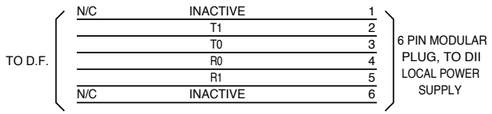
DII TO DISTRIBUTION FRAME
OPTION R



LENGTH AS REQUIRED
(SEE ED-5D621-11, G11D)

CAD 19

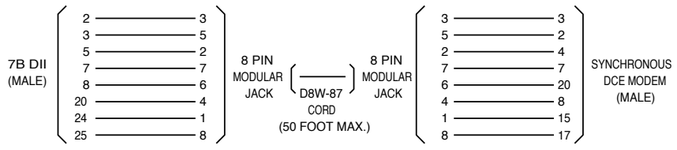
D.F. TO DII WHEN 353A
LOCAL POWER SUPPLY IS USED
OPTION S



LENGTH AS REQUIRED
(SEE ED-5D621-11, G61)

CAD 20

DII TO SYNCHRONOUS DCE
(NULL MODEM)
OPTION T

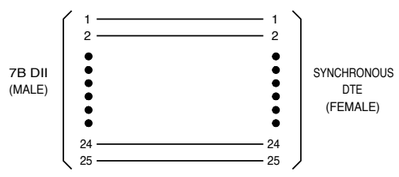


CINCH # 232-21-25-065

CINCH # 232-21-25-066

CAD 21

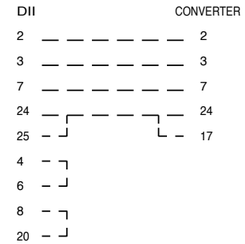
DII TO SYNCHRONOUS DTE
OPTION U



M25A-87

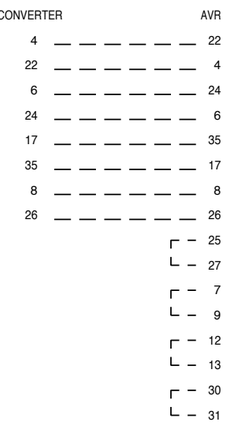
CAD 22

DII TO RS232/RS422 CONVERTER



CAD 23

RS232/RS422 TO AUTOMATIC VOICE RESPONSE



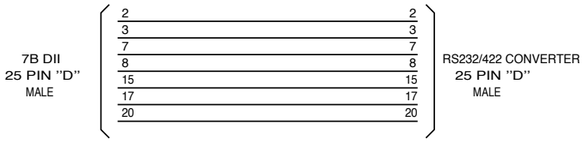
OSPS INTERNATIONAL
APPLICATION SCHEMATIC

DWG SIZE	ISSUE
C2	8B

Lucent Technologies	SD-5X214-01	SHEET G5

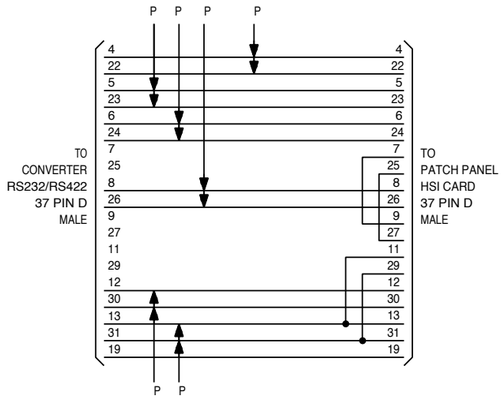
CAD 24

7B TO RS232/422 ADAPTER



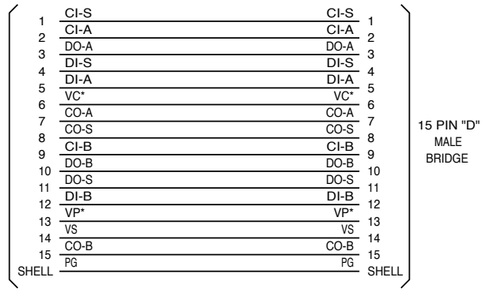
CAD 25

RS232/422 CONVERTER TO HSI CARD SPARCSTATION 2



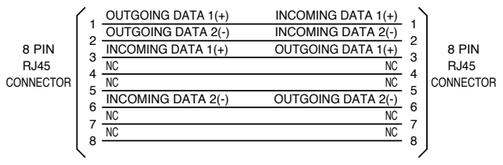
CAD 26

TRANSCEIVER CABLE



* VOLTAGE COMMON AND VOLTAGE PLUS USE A SINGLE TWISTED-PAIR IN THE AUI CABLE

CAD 27



OSPS INTERNATIONAL
APPLICATION SCHEMATIC

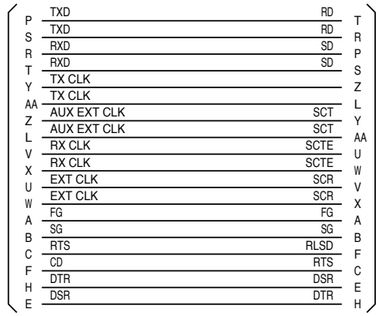
DWG SIZE	ISSUE
C2	10B

Lucent Technologies	SD-5X214-01	SHEET
		G6

CAD 28

7500B TO V.35/RS422

TO HIGH SPEED SYNCHRNOUS ENHANCEMENT BOARD 7500B V.35 34-PIN M



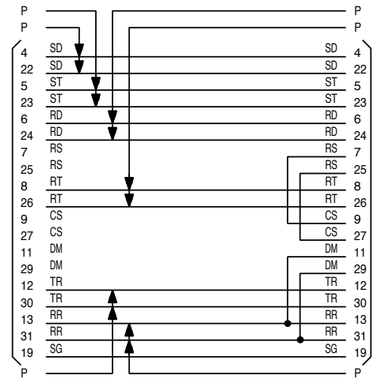
TWISTED-PAIR IN THE AUI CABLE

TO CONVERTER V.35/RS422 V.35 24-PIN M

CAD 29

V.35/RS422 ADAPTER TO HSI CARD

TO CONVERTER V.35/RS422 37-PIN "D" M

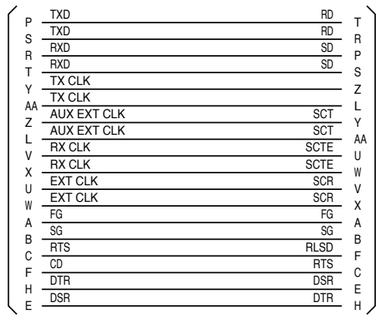


TO PATCH PANEL HSI CARD 37-PIN "D" M

CAD 30

7500B TO V.35 MODEM

TO HIGH SPEED SYNCHRNOUS ENHANCEMENT BOARD 7500B V.35 34-PIN M

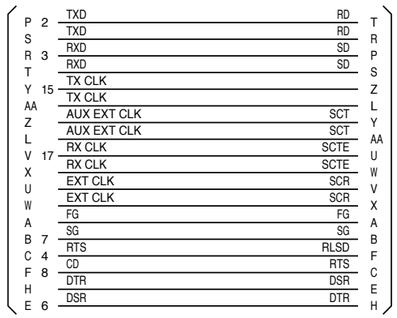


TO MODEM V.35 34-PIN M

CAD 31

7500B (RS232D) TO V.35 MODEM

TO HIGH SPEED SYNCHRONOUS ENHANCEMENT BOARD 7500B RS232D 25-PIN M



TO MODEM V.35 34-PIN M

OSPS INTERNATIONAL APPLICATION SCHEMATIC

DWG SIZE	ISSUE
C2	13B

Lucent Technologies | SD-5X214-01 | SHEET G7

CAD 32

ISDN PRI
8 PIN MODULAR

RECEIVE RING	1
RECEIVE TIP	2
NC	3
TRANSMIT RING	4
TRANSMIT TIP	5
NC	6
NC	7
NC	8

CAD 33

AUI OUT JACK
8 PIN MODULAR

TRANSMIT DATA1(+)	1
TRANSMIT DATA2(-)	2
RECEIVE DATA1(+)	3
NC	4
NC	5
RECEIVE DATA2(-)	6
NC	7
NC	8

CAD 33

AUI PORT
15 PIN "D" MALE

CS-I	CONTROL IN CIRCUIT SHIELD	1
CI-A	CONTROL IN CIRCUIT A	2
DO-A	DATA OUT CIRCUIT A	3
DI-S	DATA IN CIRCUIT SHIELD	4
DI-A	DATA IN CIRCUIT A	5
VC	VOLTAGE COMMON	6
CO-A	CONTROL OUT CIRCUIT A	7*
CO-S	CONTROL OUT CIRCUIT SHIELD	8*
CI-B	CONTROL IN CIRCUIT B	9
DO-B	DATA OUT CIRCUIT B	10
DO-S	DATA OUT CIRCUIT SHIELD	11
DI-B	DATA IN CIRCUIT B	12
VP	VOLTAGE PLUS	13
VS	VOLTAGE SHIELD	14
CO-B	CONTROL OUT CIRCUIT B	15*
PG	PROTECTIVE GROUND	SHELL (CONDUCTIVE)

* NOT USED ON THE AUI ADAPTER

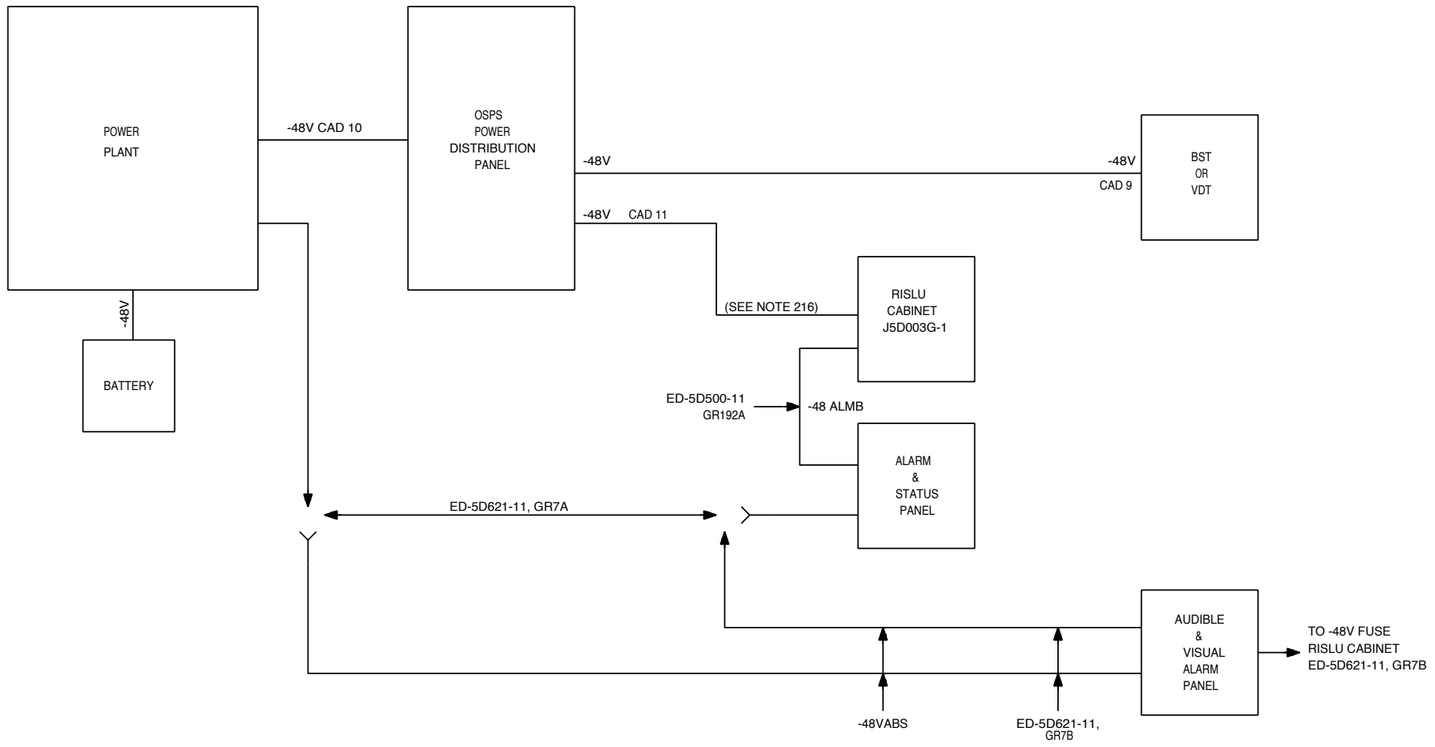
OSPS INTERNATIONAL
APPLICATION SCHEMATIC

DWG SIZE	ISSUE
C2	13B

Lucent Technologies	SD-5X214-01	SHEET
		G8

BD 1

TYPICAL BLOCK DIAGRAM OF OSPS EQUIPPED
WITH DEDICATED -48V POWER PLANT



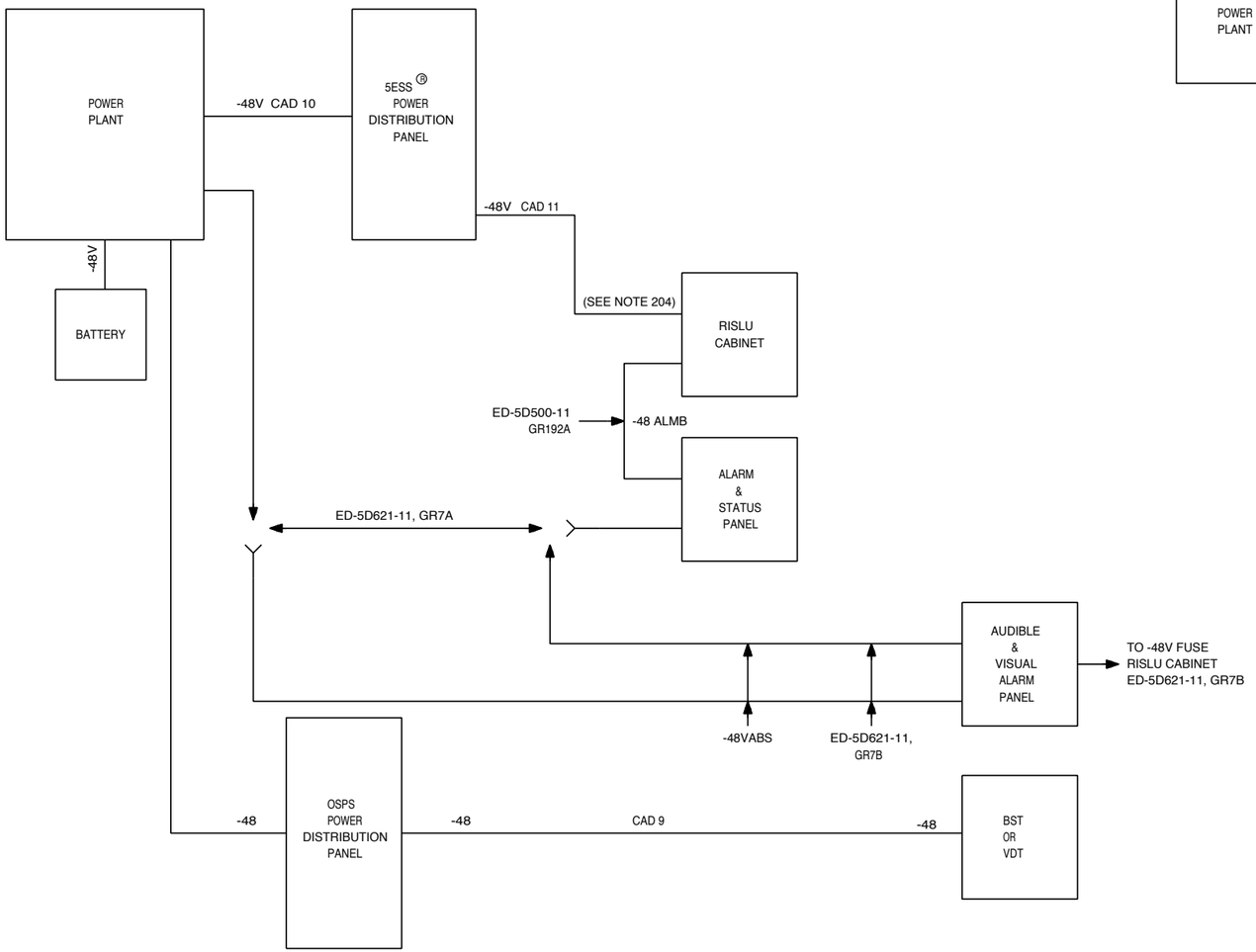
OSPS INTERNATIONAL
APPLICATION SCHEMATIC

DWG SIZE	ISSUE
C2	4M

Lucent Technologies	SD-5X214-01	SHEET
		H1

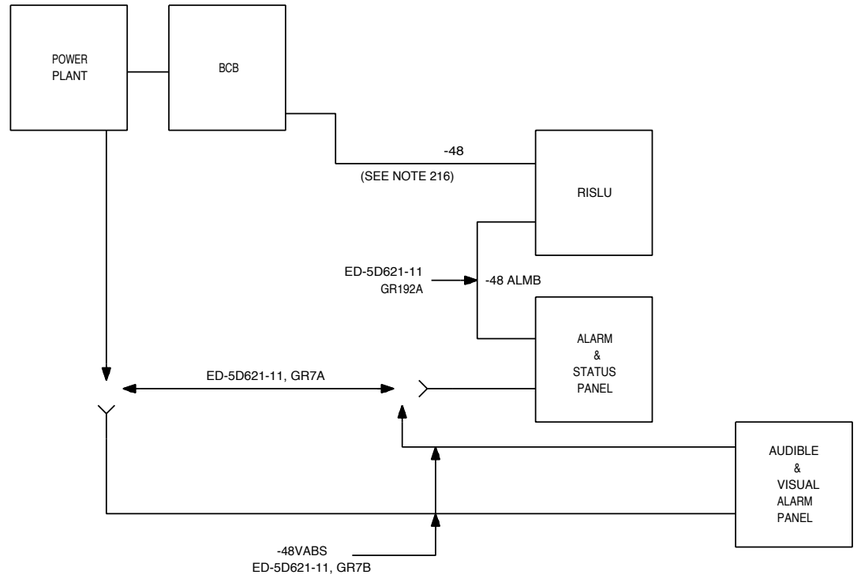
BD 2

TYPICAL BLOCK DIAGRAM OF OSPS
SHARING -48V POWER PLANT



BD 3

TYPICAL BLOCK DIAGRAM OF OSPS -48V
POWER WHEN BST'S OR VDT'S ARE 400' OR
LESS FROM POWER PLANT



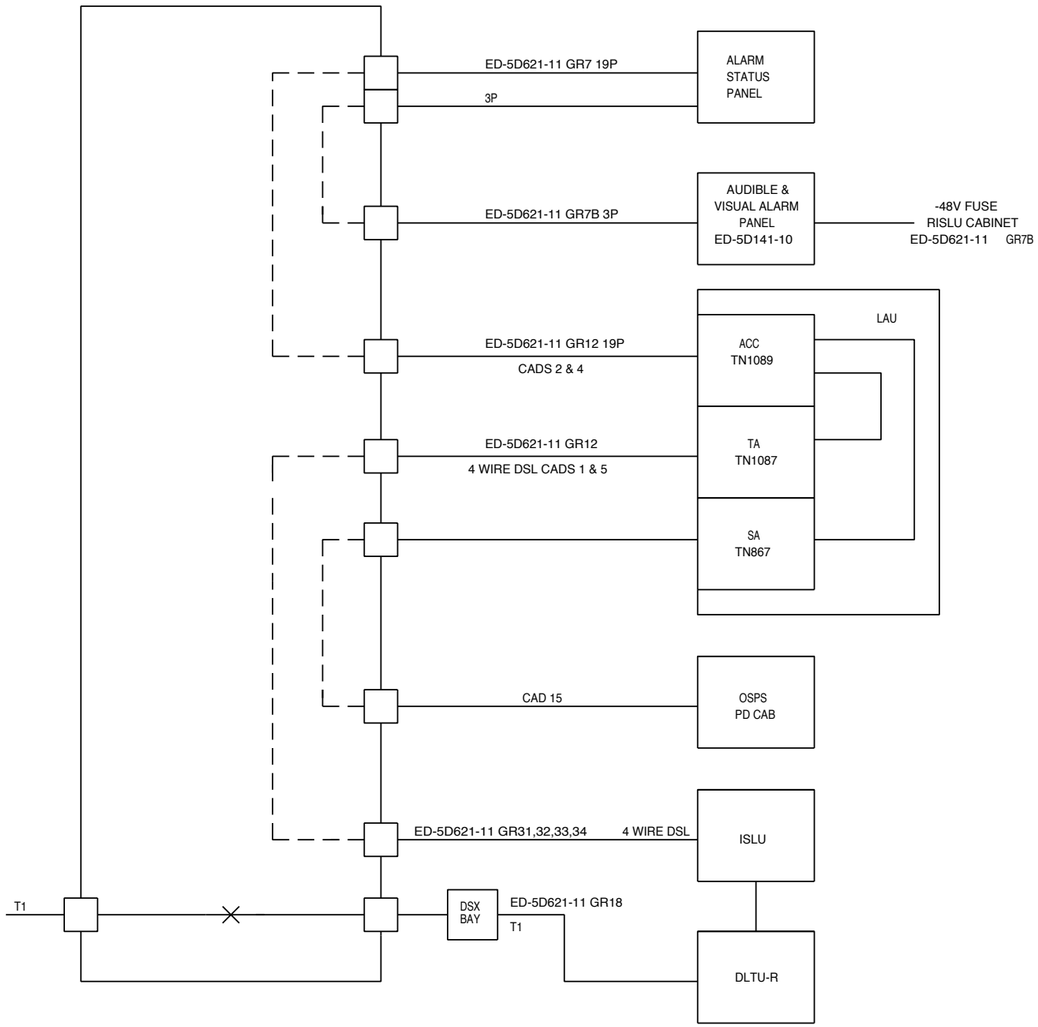
OSPS INTERNATIONAL
APPLICATION SCHEMATIC

DWG SIZE	ISSUE
C2	4M

Lucent Technologies	SD-5X214-01	SHEET
		H2

BD 4

BLOCK DIAGRAM OF REMOTE OSPS ALARMS



NOTES:

1. OSPS POWER DIST CABINET J5D003H SCAN POINT WILL BE SEEN AS 'NORMALLY OPEN'.
2. SEE CIRCUIT NOTE 102 FOR CONNECTION BETWEEN ALARM CIRCUIT AND THE ALARM SECTION OF THE LAU.

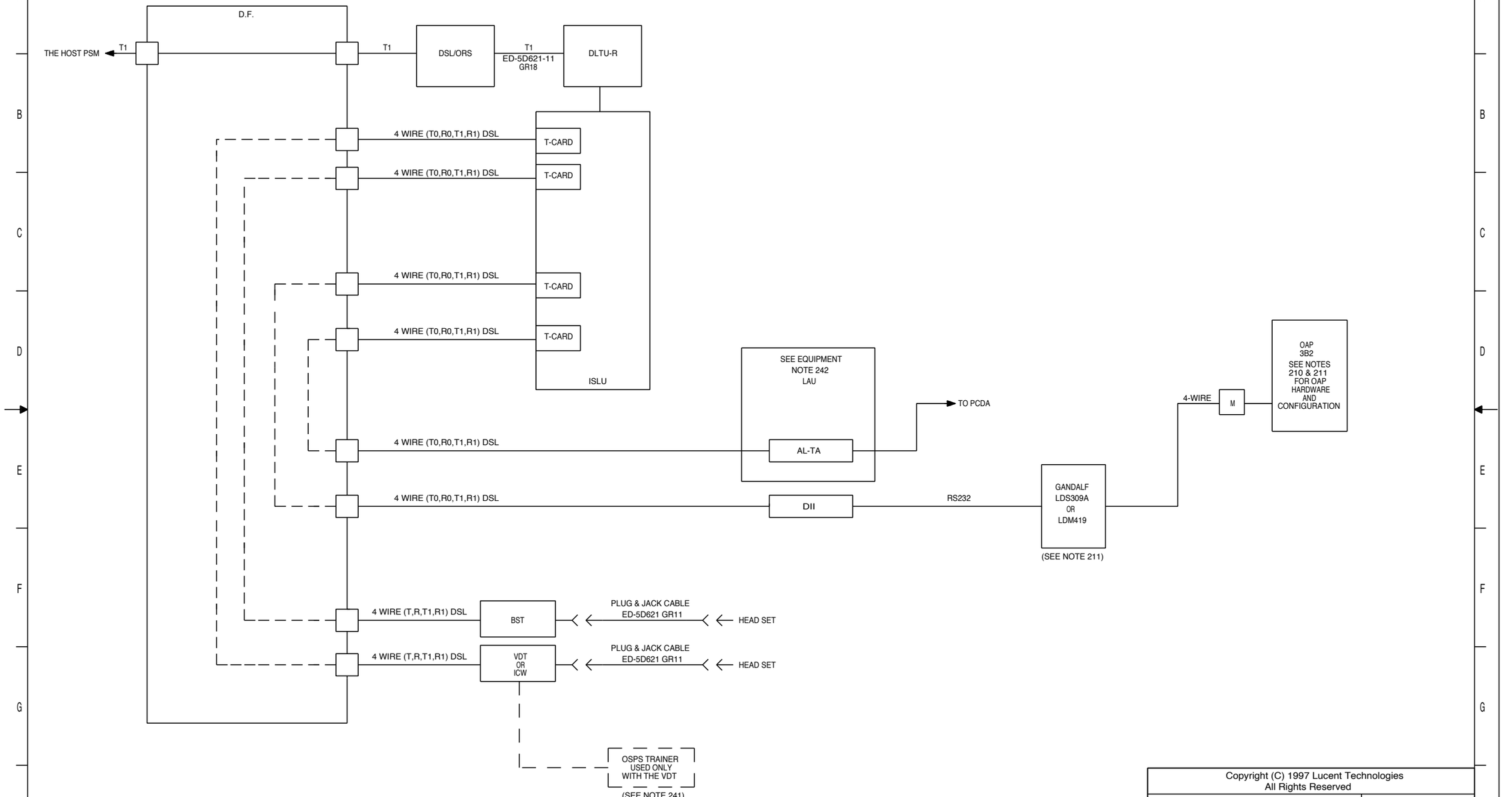
OSPS INTERNATIONAL APPLICATION SCHEMATIC

DWG SIZE	ISSUE
C2	4M

Lucent Technologies | SD-5X214-01 | SHEET H3

BD 5

TYPICAL BLOCK DIAGRAM OF OSPS T-INTERFACE



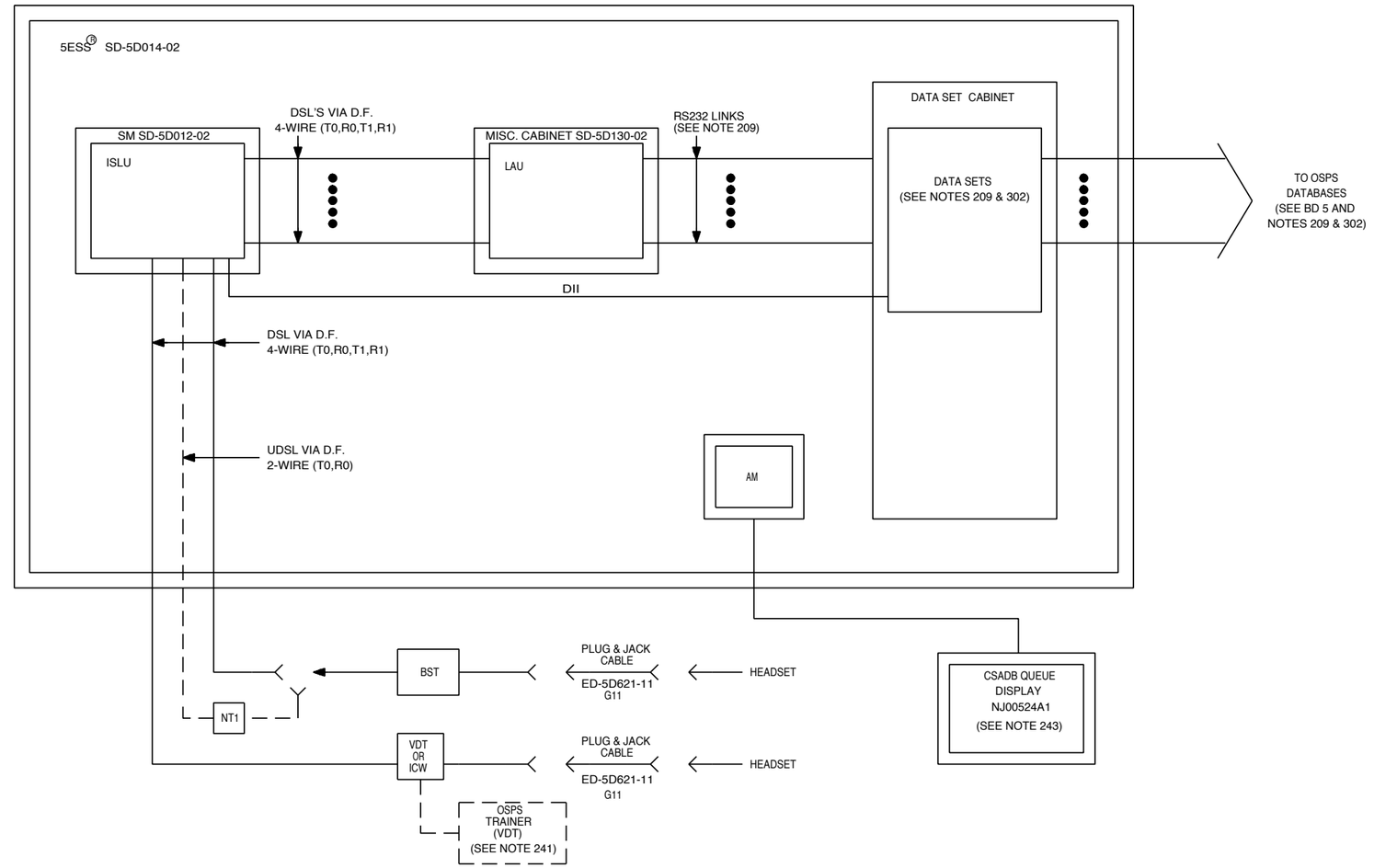
OSPS INTERNATIONAL
APPLICATION SCHEMATIC

DWG SIZE	ISSUE
C2	5B

Lucent Technologies	SD-5X214-01	SHEET
		H4

BD 6

TYPICAL BLOCK DIAGRAM OF OSPS ISLU INTERFACES



OSPS INTERNATIONAL
APPLICATION SCHEMATIC

DWG SIZE	ISSUE
C2	4M

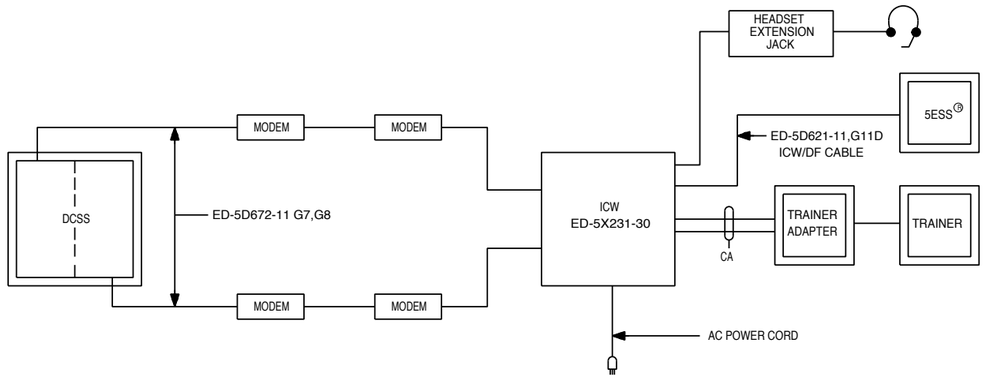
Lucent Technologies	SD-5X214-01	SHEET H5

BD 7

INTELLIGENT COMMUNICATION WORKSTATION
(ICW) SYSTEM CONFIGURATION

NOTES:

1. AC POWER CORD FOR 110V 60HZ APPLICATION IS PROVIDED WITH THE CPU. FOR 220V 50HZ APPLICATION IS TO BE ENGINEERED PER ED-5X231-30 GRP. 2.



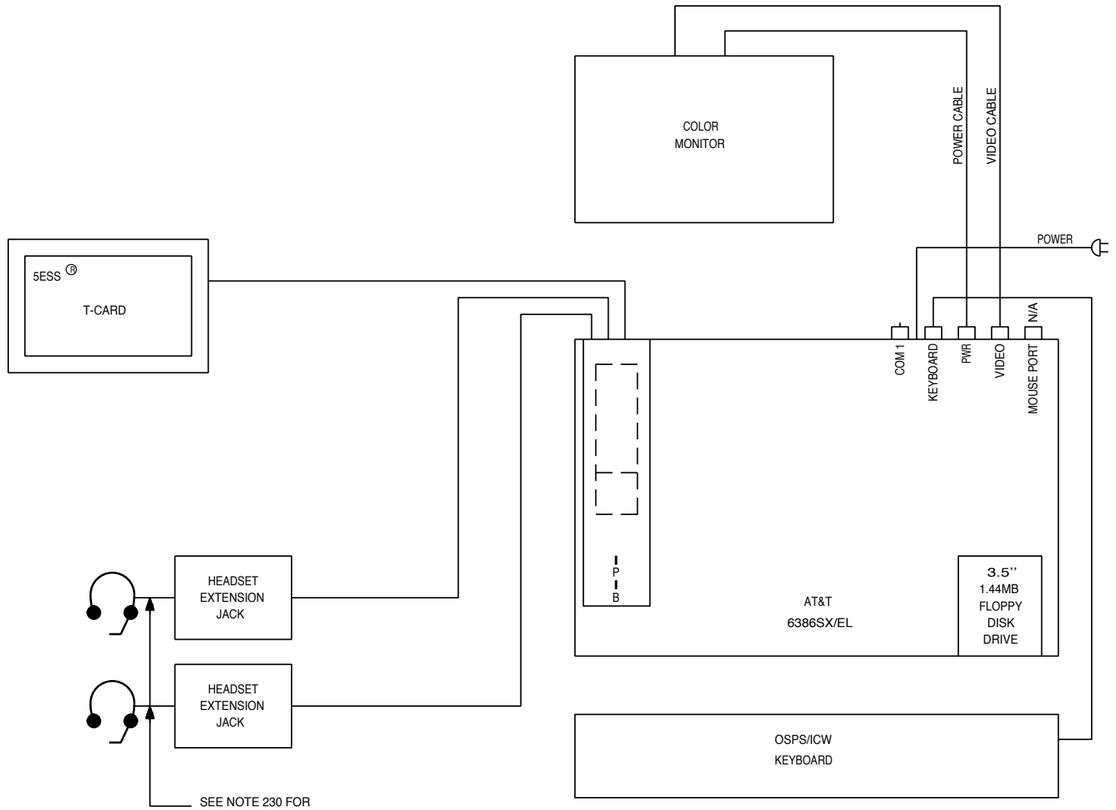
OSPS INTERNATIONAL
APPLICATION SCHEMATIC

DWG SIZE	ISSUE
C2	4M

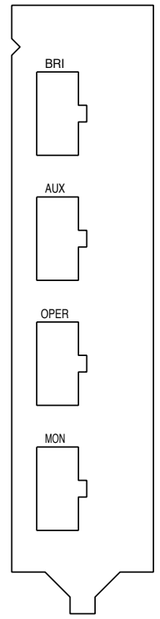
Lucent Technologies	SD-5X214-01	SHEET
		H6

BD 7A

OSPS ICW CONFIGURATION



IPIB BACKPLATE DETAIL



BRI: EQUIVALENT TO DSL

AUX: AUXILIARY AUDIO INPUT

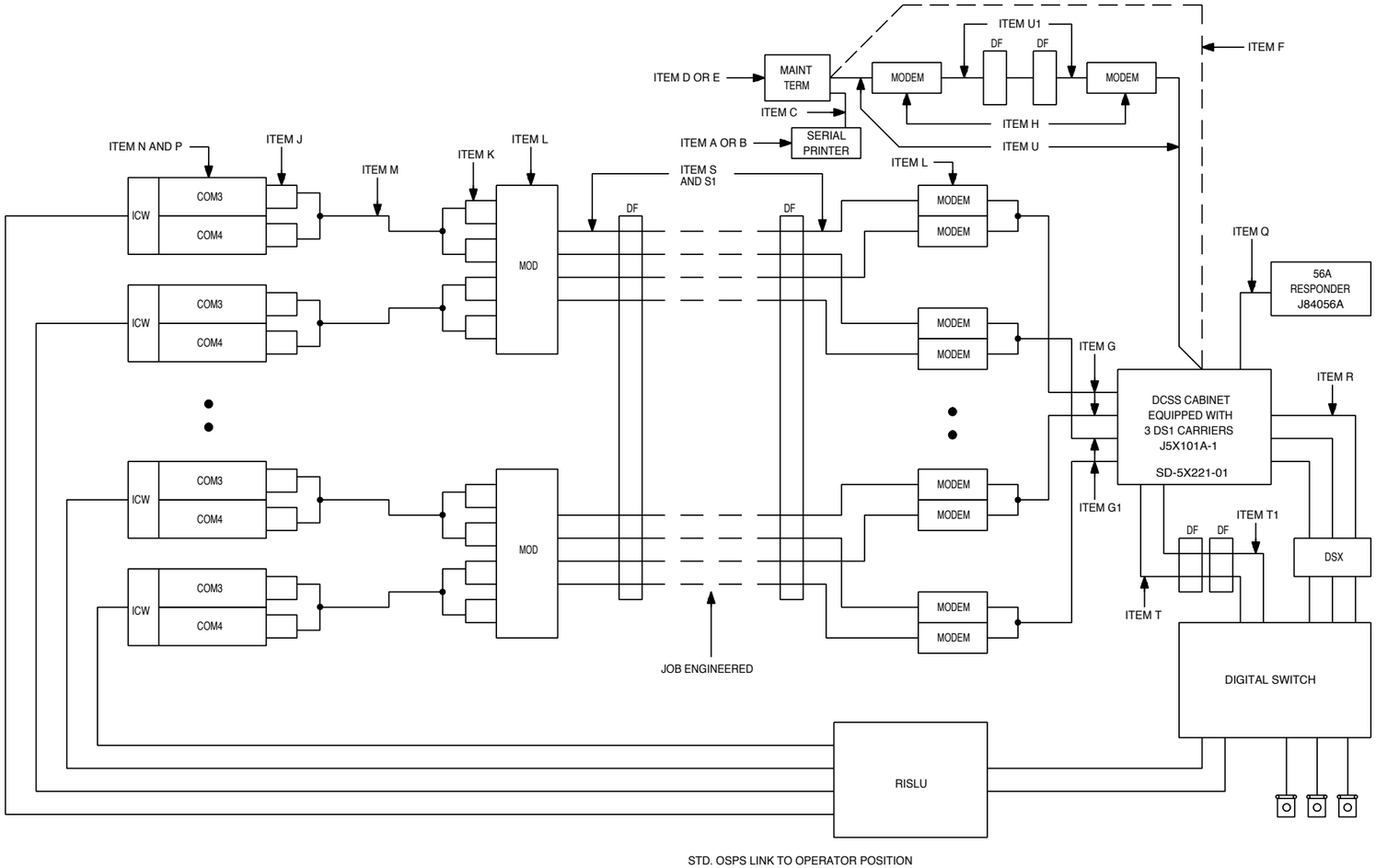
OPER: FOR OPERATORS HEADSET EXTENSION CABLE

MON: FOR SECOND OPERATORS HEADSET EXTENSION CABLE

OSPS INTERNATIONAL APPLICATION SCHEMATIC	DWG SIZE C2	ISSUE 5B
Lucent Technologies	SD-5X214-01	SHEET H6A

BD 8

ICW NOT CO-LOCATED WITH 5ESS SWITCH



STD. OSPS LINK TO OPERATOR POSITION

NOTES:

1. CABLE R1 CAN BE 450 FT. MAX. LENGTH.
2. ITEM L1 WILL PROVIDE FOR UP TO 14 MODEM PLUG-INS.
3. ONE LINK FROM THE DCSS TO THE ADMIN/MAINT TERMINAL IS EITHER ITEM F, OR ITEMS H,U, AND U1, NOT BOTH. THERE IS PROVISION TWO ADMIN/MAINT LINKS. ONLY ONE IS REQUIRED. IF TWO ARE PROVIDED, THEY MAY BE OF EITHER TYPE OR MIXED.
4. THE STANDARD ICW SOFTWARE INCLUDES THE SOFTWARE NEEDED FOR THE CONFERENCE FEATURE.
5. THE POWER CABLES FOR THE DCSS CABINET ARE THE SAME AS THOSE IN AN LTP CABINET EQUIPPED WITH (2) J5D003AU-2 UNITS.
6. CABLES R AND R1 ARE MUTUALLY EXCLUSIVE.
7. CABLES NOT IDENTIFIED ARE STANDARD OFFICE ENGINEERED CABLES.

ITEM NO.	QTY	ORDER NO.	MODEL/PART NO.	DESCRIPTION
A	1	501006084	AT&T 5310	PRINTER, SERIAL, 110VAC
A1	1	501006142	AT&T 5310	PRINTER, SERIAL, 220VAC
B	1	405705419	AT&T 572	PRINTER, SERIAL, 110VAC
B1	1	405152939	AT&T 572	PRINTER, SERIAL, 220VAC
C	1	524161742		CABLE,M TO M SERIAL PRINTER,7 FT
D	1	501007983		MNTR 14'' 605/615 CO119, 110VAC
D1	1	501006878	AT&T 615MT	CONTROLLER
D2	1	501004865		98 KEYBOARD
D3	1	524605524		4425 TERMINAL EMULATOR CARTRIDGE
E	1	N/AVAIL		MNTR 14'' 605/615 CO119, 110VAC
E1	1	501006878	AT&T 615MT	CONTROLLER
E2	1	501004865		98 KEYBOARD
E3	1	524605524		4425 TERMINAL EMULATOR CARTRIDGE
F	1	ED-5D672-11,G11		CABLE,M TO M NULL MODEM,50 FT
G	1	ED-5D672-11,G7		CABLE,(1ST 8 ICW POS) M TO M MODEM, MAX 50 FT
G1	A/R	ED-5D672-11,G8		CABLE,(2ND 8 ICW POS) M TO M MODEM, MAX 50 FT
H	2		AT&T 4024	BENCHTOP MODEM
J	2	3905Z4	MLDS123F	GANDALF MODEM (FEMALE)
K	2		MLDS123XM	GANDALF MODEM (MALE)
L	2	3747Z2	RM3034	MODEM, GANDALF RACK MOUNT
L1	1	300K,AD/PS3200	3000	MODEM RACK, GANDALF 23''
M	1	ED-5D672-11,G9	812A	CABLE, MODEM TO MODEM
N	1		AT&T 6312 WGS	ICW
P	2			SERIAL PORT CKT PK (COM 3 & 4)
Q	1(OPT)	ED-5D672-11,G12		CABLE, TRUNK TESTING
R	1-3	ED-5D672-11,G1,G2,G3		CABLE, DFI LINKS (24 CH)
R1	1-3	ED-5D672-11,G4,G5,G6		CABLE, DFI LINKS (30 CH)
S	1	ED-5D672-11,G9	812A	CABLE, (2 CKT) MODEM TO DF
S1	1	ED-5D672-11,G10	808A	CABLE, (14 CKT) MODEM TO DF
T	1	ED-5D672-11,G13		CABLE, DCSS ALARM
T1	1	ED-5D672-11,G14		CABLE, DELTA UNIT ALARM
U	2	102269677	M25B-87	CABLE, M TO M MODEM, 10 FT
U	2	102986643	M25B-87	CABLE, M TO M MODEM, 25 FT
U	2	103905543	M25B-87	CABLE, M TO M MODEM, 50 FT
U1	2		ED-5D621-11,G61	CABLE, 6 PIN MODULAR (ONE END) 50 FT

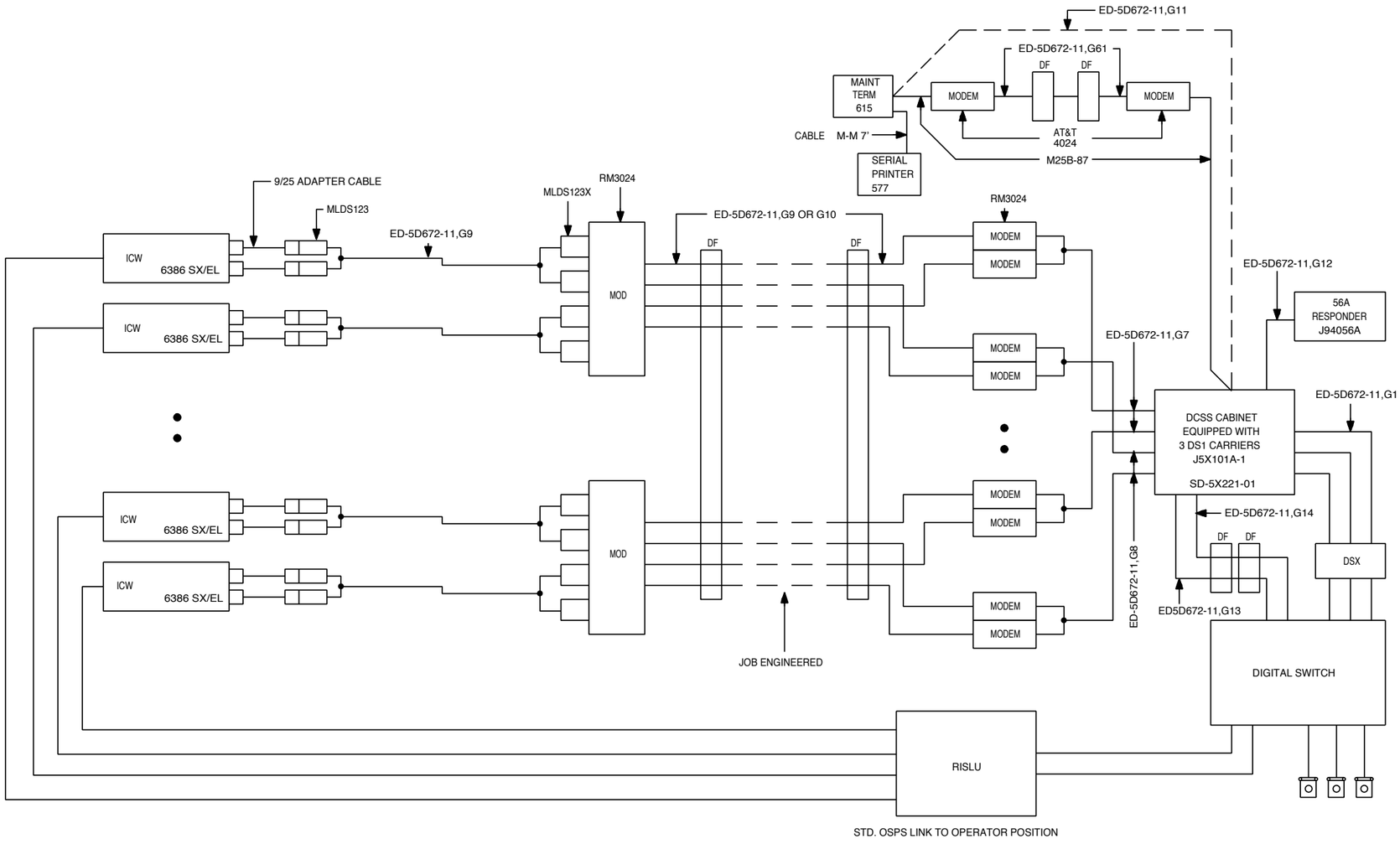
OSPS INTERNATIONAL APPLICATION SCHEMATIC

DWG SIZE	ISSUE
C2	10B

Lucent Technologies | SD-5X214-01 | SHEET H7

BD 8A

ICW NOT CO-LOCATED WITH 5ESS® SWITCH



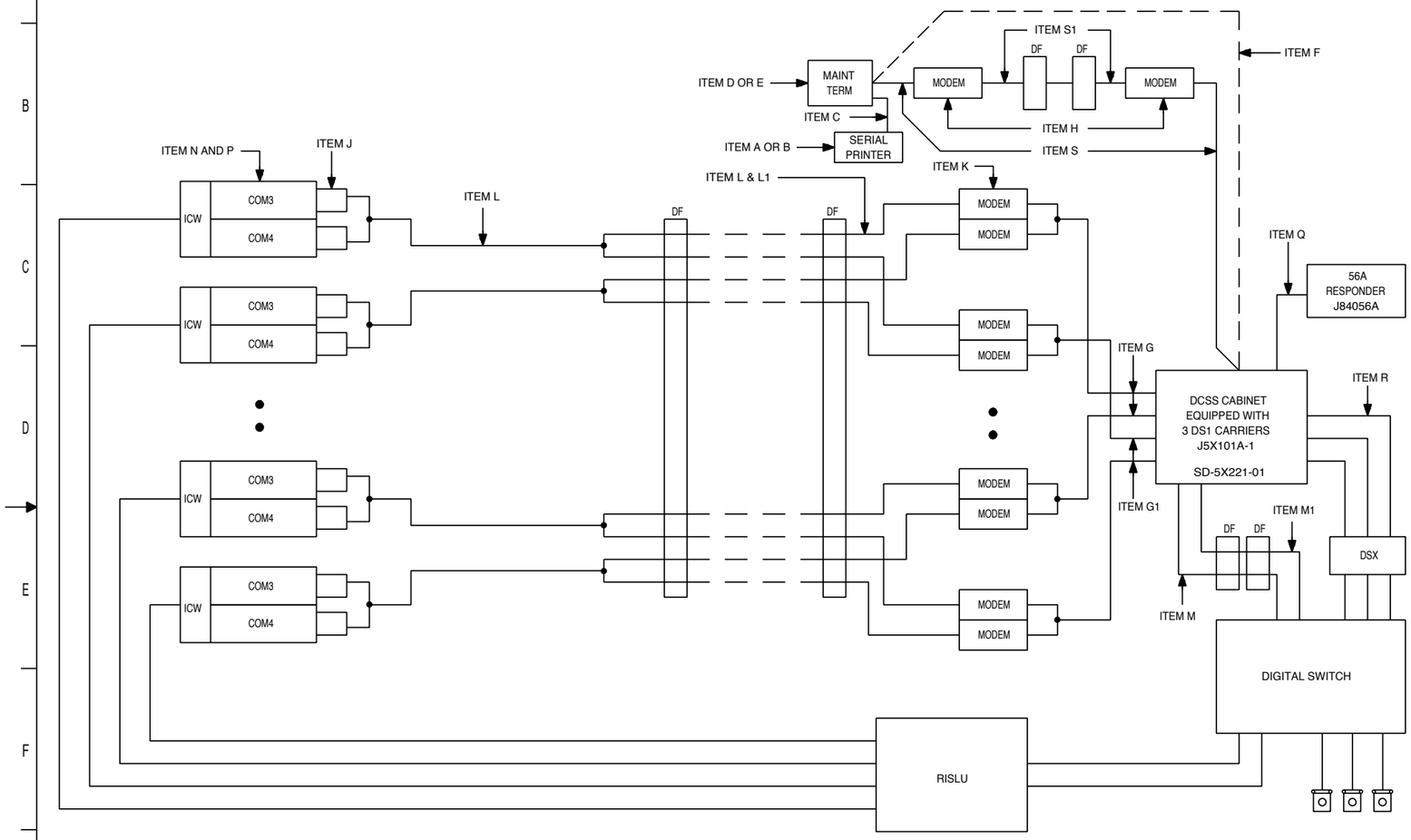
OSPS INTERNATIONAL APPLICATION SCHEMATIC

DWG SIZE	ISSUE
C2	8B

Lucent Technologies	SD-5X214-01	SHEET H8

BD 9

ICW CO-LOCATED WITH 5ESS SWITCH



NOTES:

1. CABLE R1 CAN BE 450 FT. MAX. LENGTH.
2. ITEM K1 WILL PROVIDE FOR UP TO 14 MODEM PLUG-INS.
3. THE LINK FROM THE DCSS IS EITHER ITEM F OR ITEMS H, S, AND S1, NOT BOTH. THERE IS PROVISION FOR TWO ADMIN/MAINT LINKS, ONLY ONE IS REQUIRED.
4. THE STANDARD ICW SOFTWARE INCLUDES THE SOFTWARE NEEDED FOR THE CONFERENCE FEATURE.
5. THE POWER CABLES FOR THE DCSS CABINET ARE THE SAME AS THOSE FOR AN LTP CABINET EQUIPPED WITH (2) J5D003AU-2 UNITS.
6. CABLES R AND R1 ARE MUTUALLY EXCLUSIVE.
7. CABLES NOT IDENTIFIED ARE STANDARD OFFICE ENGINEERED CABLES.

ITEM NO.	QTY	ORDER NO.	MODEL/PART NO.	DESCRIPTION
A	1	501006084	AT&T 5310	PRINTER, SERIAL, 110VAC
A1	1	501006142	AT&T 5310	PRINTER, SERIAL, 220VAC
B	1	405705419	AT&T 572	PRINTER, SERIAL, 110VAC
B1	1	405152939	AT&T 572	PRINTER, SERIAL, 220VAC
C	1	524161742		CABLE,M TO M SERIAL PRINTER,7 FT
D	1	501007983		MNTR 14'' 605/615 CO119, 110VAC
D1	1	501006878	AT&T 615MT	CONTROLLER
D2	1	501004865		98 KEYBOARD
D3	1	524605524		4425 TERMINAL EMULATOR CARTRIDGE
E	1	N/AVAIL		MNTR 14'' 605/615 CO119, 110VAC
E1	1	501006878	501006878	AT&T 615MT
E2	1	501004865		98 KEYBOARD
E3	1	PEC#33458		4425 TERMINAL EMULATOR CARTRIDGE
F	1	ED-5D672-11,G11		CABLE,M TO M NULL MODEM,50 FT
G	1	ED-5D672-11,G7		CABLE,(1ST 8 ICW POS) M TO M MODEM, MAX 50 FT
G1	A/R	ED-5D672-11,G8		CABLE,(2ND 8 ICW POS) M TO M MODEM, MAX 50 FT
H	2		AT&T 4024	BENCHTOP MODEM
J	2	3905Z4	MLDS123	GANDALF MODEM (FEMALE)
K	2		RM3120A	MODEM, GANDALF RACK MOUNT
K1	1	300K,AD/PS3200	3000	MODEM RACK, GANDALF 23''
L	1	ED-5D672-11,G9	812A	CABLE FOR 2 MODEMS
L1	1	ED-5D672-11,G10	808A	CABLE FOR 14 MODEMS
M	1	ED-5D672-11,G13		CABLE, DCSS ALARM
M1	1	ED-5D672-11,G14		CABLE, DELTS UNIT ALARM
N	1		AT&T 6312 WGS	ICW
P	2			SERIAL PORT CKT PK (COM 3 & 4)
Q	1(OPT)	ED-5D672-11,G12		CABLE, TRUNK TESTING
R	1-3	ED-5D672-11,G1,G2,G3		CABLE, DFI LINKS (24 CH)
R1	1-3	ED-5D672-11,G4,G5,G6		CABLE, DFI LINKS (30 CH)
S	2	102269677	M25B-87	CABLE, M TO M MODEM, 10 FT.
S	2	102986643	M25B-87	CABLE, M TO M MODEM, 25FT.
S	2	103905543	M25B-87	CABLE, M TO M MODEM, 50FT.
S1	2		ED-5D621-11,G61	CABLE, 6 PIN MODULAR (ONE END) 50 FT.

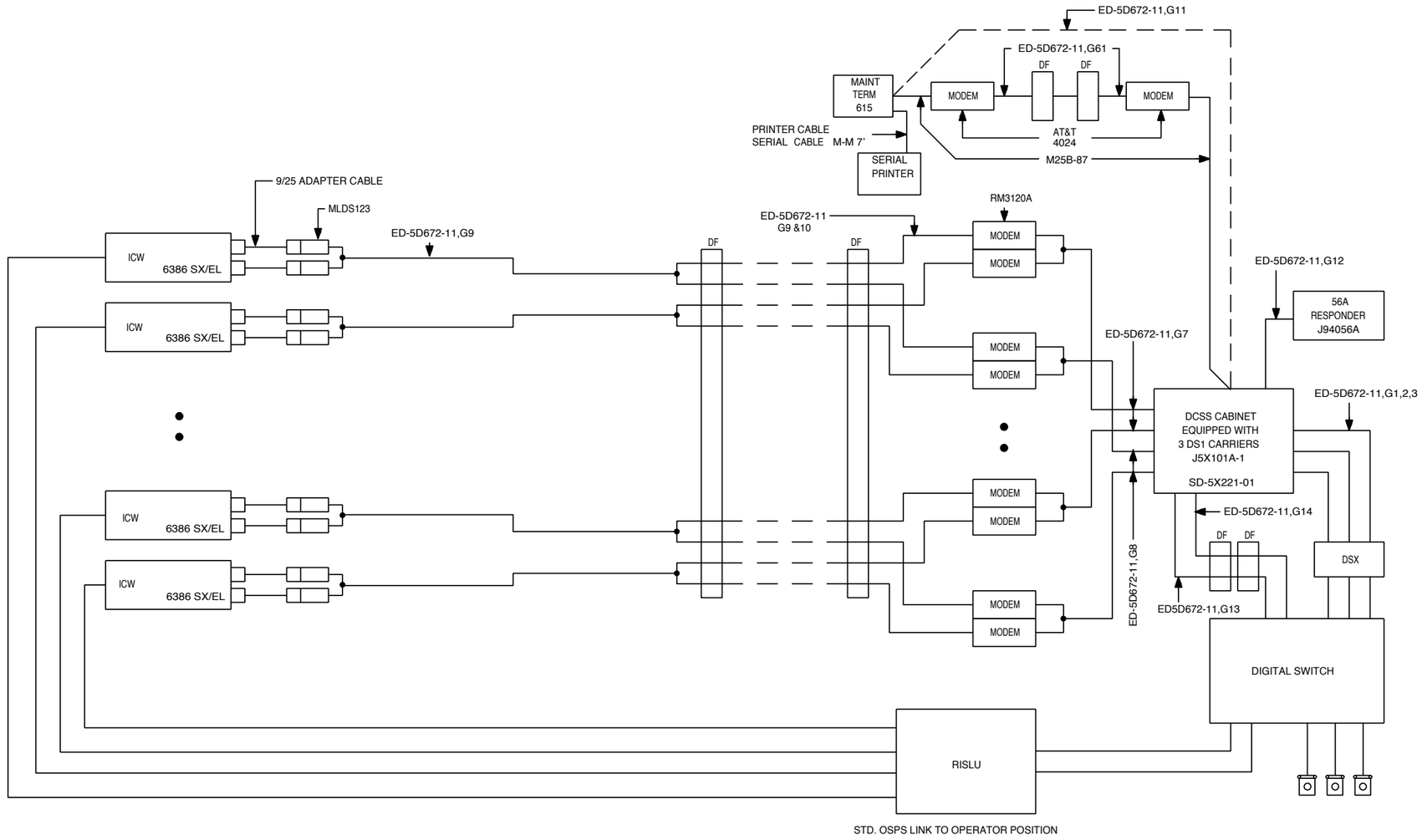
OSPS INTERNATIONAL APPLICATION SCHEMATIC

DWG SIZE	ISSUE
C2	8B

Lucent Technologies | SD-5X214-01 | SHEET H9

BD 9A

ICW CO-LOCATED WITH 5ESS® SWITCH



STD. OSPS LINK TO OPERATOR POSITION

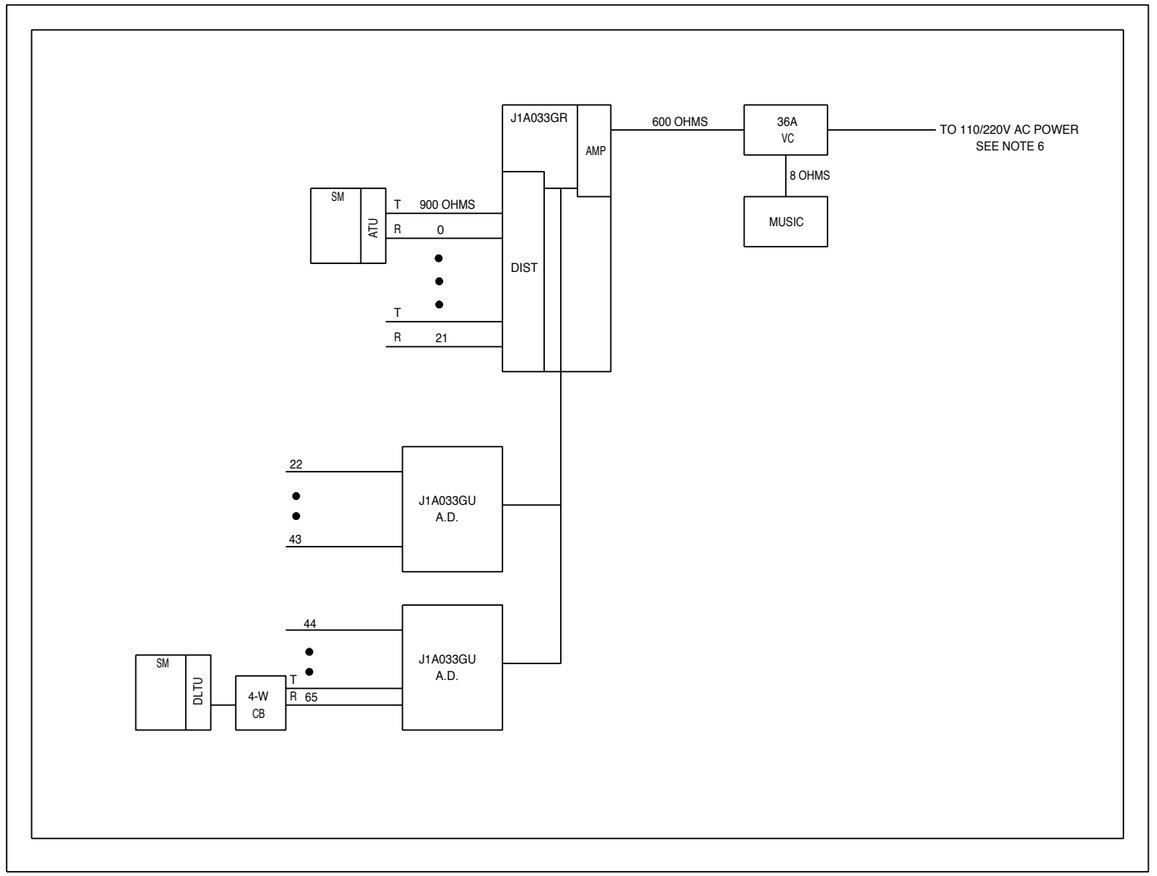
OSPS INTERNATIONAL APPLICATION SCHEMATIC

DWG SIZE	ISSUE
C2	8B

Lucent Technologies	SD-5X214-01	SHEET H10

BD 10

TYPICAL APPLICATION OF MUSIC ON QUEUE



NOTES:

1. MUSIC ON QUEUE CIRCUIT CONTROLLED BY SD-1A432-01-1.
2. A J1A033GR CIRCUIT CAN DISTRIBUTE THE MUSIC SOURCE TO 22 ANALOG TRUNKS.
3. ADDITIONAL J1A033AU EXPANSION UNITS CAN PROVIDE 22 MORE MUSIC TRUNKS, IF NEEDED. UP TO TWO J1A033GU UNITS CAN BE EQUIPPED IN THE SAME SWITCH. A FULLY CONFIGURED MUSIC CIRCUIT CAN PROVIDE 66 MUSIC TRUNKS TO THE SWITCH.
4. A 4 WIRE CHANNEL BANK IS USED TO CONVERT THE ANALOG INTERFACE TO DIGITAL INTERFACE TO CONNECT TO A DLTU IN THE SWITCH.
5. THE MUSIC ON QUEUE EQUIPMENT WILL BE HOUSED IN THE MISCELLANEOUS CABINET SD-5D130-01
6. FOR 220V APPLICATIONS, THE 2012D TRANSFORMER IS TO BE REPLACED BY DESK TOP TRANSFORMER COMCODE 406683441.

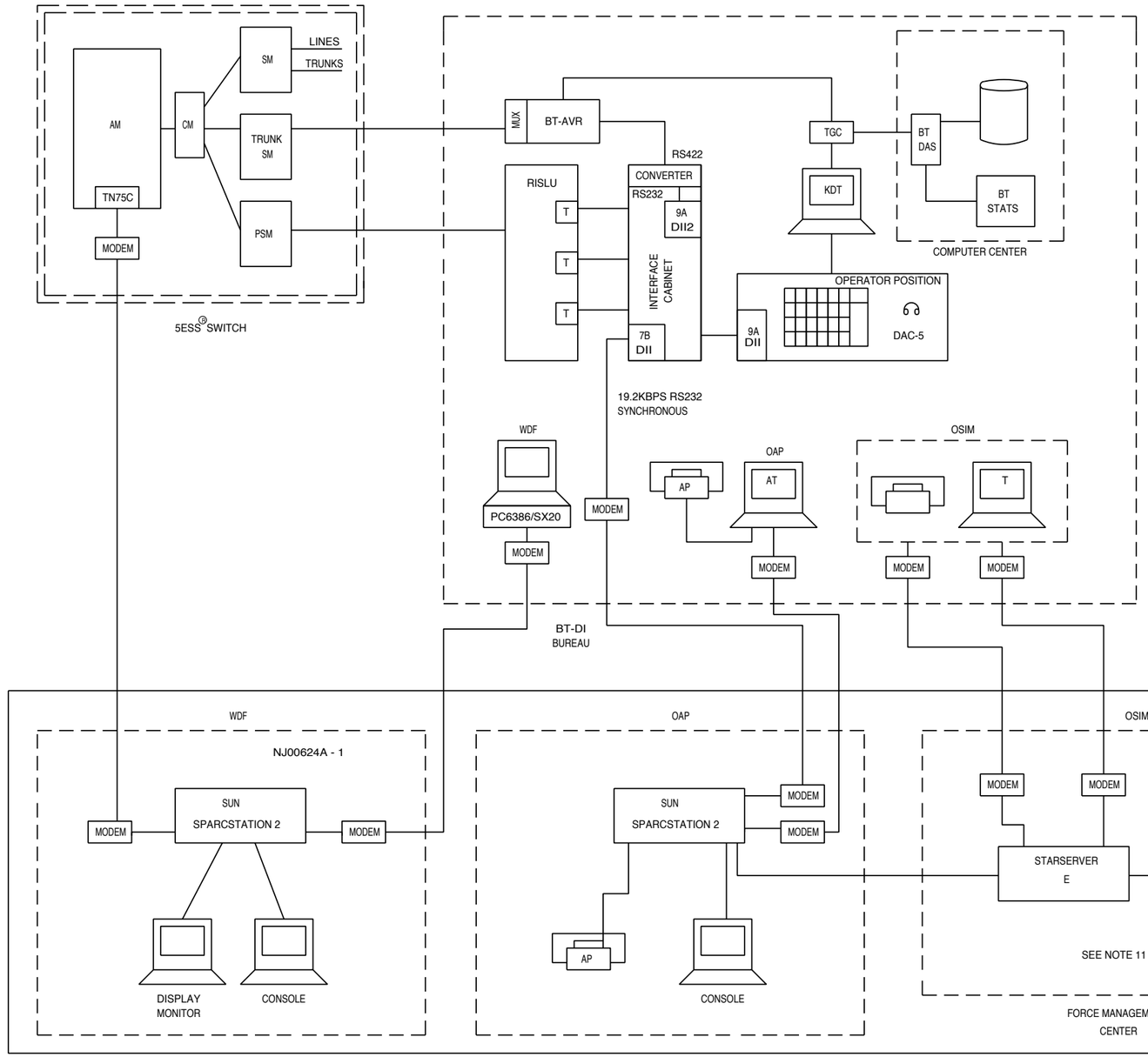
OSPS INTERNATIONAL
APPLICATION SCHEMATIC

DWG SIZE	ISSUE
C2	8B

Lucent Technologies	SD-5X214-01	SHEET
		H11

BD 11

OSPS-BTDI APPLICATION



NOTES:

1. THE MAXIMUM DISTANCE FROM THE RISLU TO THE DAC-5 IS 1000 METERS, AND THE DAC-5 CANNOT BE REMOTED OUTSIDE THE BUILDING THAT THE RISLU IS LOCATED.
2. THE MAXIMUM DISTANCE FROM THE DAC-5 TO THE INTERFACE CABINET IS 500 METERS.
3. A MAXIMUM OF 150 DI POSITIONS CAN BE TERMINATED ON A PSM AND UP TO 1000 POSITIONS ON A 5ESS®.
4. A COMBINATION OF DI OPERATOR POSITIONS AND DATA LINKS, CAN BE GREATER THAN 150 PER PSM.
5. A PSM CAN HOST UP TO 7 RISLU'S.
6. A MAXIMUM OF 8 DA BUREAU'S PER PSM.
7. A MAXIMUM OF 4 OAP'S PER PSM.
8. IF THE OAP IS CO-LOCATED WITH THE RISLU (WITHIN 1000 METERS AND THE SAME BUILDING) THE 7B DII, IS RECOMMENDED TO BE CO-LOCATED WITH THE OAP (WITHIN 15 METERS (50')) AND THEREFORE, MODEMS ARE NOT REQUIRED. IF THE OAP IS REMOTED FROM THE RISLU, A PAIR OF SYNCHRONOUS (19.2KBPS) MODEMS ARE REQUIRED. IN THIS CASE THE 7B DII WILL BE LOCATED IN THE INTERFACE CABINET.
9. OAP IS CAPABLE OF SUPPORTING UP TO 18 PRINTERS AND 18 AT'S AT EACH OAP.
10. IT IS RECOMMENDED THAT THE OAP, THE DII AND THE SYNCHRONOUS MODEMS BE PROVIDED WITH A PROTECTED POWER SUPPLY.
11. TO ORDER OSIM HARDWARE OR CRW SOFTWARE CONTACT THE CONSUMER COMMUNICATION SERVICE ORGANIZATION (CCS) AT 908 - 204 - 2808.

OSPS INTERNATIONAL APPLICATION SCHEMATIC

DWG SIZE	ISSUE
C2	11B

Lucent Technologies | SD-5X214-01 | SHEET H12