SHEET INDEX

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EQUIPMENT NOTES:

201. JUMPER PLUGS KS-21781,L1 SHALL NOT BE INCLUDED WITH THE PRINTED WIRING BOARD ASSEMBLY BUT ARE TO BE INSERTED IN THE KS-21780 SOCKETS AS FOLLOWS AFTER COMPLETING CHANNEL UNIT ASSEMBLY TESTING: JUMPER PLUGS SHALL BE INSTALLED IN THE POSITIONS INDICATED BY FIG.1. USE OF KS-21858,L1 EXTRACTOR IS RECOMMENDED FOR INSERTION AND REMOVAL OF JUMPER PLUGS.

202. DESIGNATIONS SHOWN IN BRACKETS [ ] SHALL APPEAR ON EQUIPMENT.

203. ALL CONTACTS SHOWN WITH ARROW $\xrightarrow{50}$ ARE PART OF PRINTED WIRING BOARD FINGER CONTACTS. (FOR IDENTIFICATION ONLY, THESE ARE DESIGNATED AS PART OF P1).

204. DESIGNATION SHOWN THUS < > APPEAR ON COMPONENT APPARATUS.

INFORMATION NOTES:

301. UNLESS OTHERWISE SPECIFIED:
ALL RESISTANCE VALUES ARE IN OHMS
ALL CAPACITANCE VALUES ARE IN MICROFARADS
ALL VALUES PRECEDED BY + OR - ARE IN VOLTS

302. OFFICE WIRING LIST RECORDS NEED NOT BE MAINTAINED FOR JUMPER PLUG TYPE OPTIONS.

DWG. ISSUE	CD ISSUE	DATE ISSUED
1	1	2-27-76
2D	1 APP'D	5-9-77
3AR	1 APP'D	5-9-77

CIRCUIT REQUIREMENTS

APPARATUS DESIG	APPARATUS CODE	APPARATUS OPT	APPARATUS FIG.		MECH REQT BSP FIG.	MECH REQT CONT PRES	MECH REQT ARM TRVL	CIRCUIT PREPARATION BLOCK OR INSULATE	TEST CLIP DATA CONN BAT	TEST CLIP DATA CONN GRD	TEST SET PREP	SEE TEST NOTE	DIRECT CURRENT FLOW REQT TEST WDG	TEST FOR	AFTER SOAK MA	TEST MA	*PEADJ MA	REMARKS
RELAYS																		
R3(K2)	BF56		1		101				1U	1L	B/G			0		22	21	
LC(K1)	337A		1						4	1	B/G			0		7.5		SEE NOTE 108
														R		1.0		

CIRCUIT NOTES:

101. INSERT JUMPER PLUGS IN THE NBO (NET BUILD OUT) SOCKET OPTIONS ACCORDING TO CIRCUIT REQUIREMENTS.

102.

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 STD	A&M	MD	SPEC

103. UNLESS OTHERWISE SPECIFIED ALL RESISTORS ARE KS-20616,L1A.

104. C1A-K IS A 736B TYPE CAPACITOR.
C2A-C IS A 734C TYPE CAPACITOR

105. PROVIDE OPTIONS LX-1 AND LX-2 WHEN THE DC LOOP RESISTANCE OF THE CABLE BETWEEN THE SERVING CENTRAL OFFICE AND THE CHANNEL UNIT IS LONGER THAN 850 OHMS.

106. THE RPAM,RPAMG,TPAM & TPAMG LEADS SHALL BE KEPT SHORT AND RUN DIRECT TO THE GATES AND FILTERS. THE TPAM & TPAMG WIRING PATHS TO THE EDGEBOARD CONNECTOR SHALL BE 50 MIL PATHS.

107. FOR CONNECTING INFORMATION AND CURRENT DRAIN DATA SEE APPLICATION SCHEMATIC FOR THE D3 BANK (SD-3C104-01).

108. THE 337A RELAY IS NOT ADJUSTABLE. REPLACE WHEN THERE IS A MALFUNCTION.

109. THE FOLLOWING TABLE SHOWS THE T AND R ATTENUATOR SETTINGS FOR THE INDICATED RANGES OF VFX LOSS OR OFFICE WIRING AND EQUIPMENT LOSS, FOR THREE VALUES OF OVERALL LINE TRANSMISSION LOSS. OTHER VALUES ARE POSSIBLE. IT SHOULD BE NOTED THAT USE OF THE HIGHER VALUES OF VFX LOSS REQUIRES CAREFUL ENGINEERING TO PREVENT ECHO OR SINGING.

LINE TRANSMISSION LOSS(ICL),dB	OWN OFFICE VFX LOSS, dB	OWN OFFICE T dB	OWN OFFICE R dB
3.0	0-1.5	3.5-2.0	1.5-0
4.0	0-2.5	3.5-1.0	2.5-0
5.0	0-3.5	3.5-0	3.5-0

CIRCUIT NOTES (CONT):

110. CAPACITOR C12 MAY ALSO BE FABRICATED BY PARALLELING A 602C 20UF CAPACITOR WITH A 601B 10UF CAPACITOR PREVIOUSLY SPECIFIED FOR C12.

111. PROVIDE OPTIONS PER TABLE WHEN OPERATING WITH INDICATED CHANNEL BANKS. CHANNEL UNITS ARE SHIPPED WITH (V) OPTION WIRED.

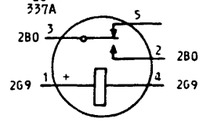
	CHANNEL BANK D1D	D2	D3*
OPTION	V	W	V

* THE FXS AND FXO SHALL HAVE THE SAME D1 OR D2 OPTION.

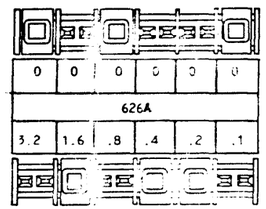
RELAY

DESIG	RG (K2)	
CODE	BF56	
OPTION		
	CONT ARR	LOC
6		
5	EBM	
4	EMB	2C0
3	EBM	2H3
2	EBM	2A0
1		
COIL		2H3

RELAY (K1) LC 337A



205. SELECTION OF ATTENUATOR OPTIONS:



THE PLACEMENT OF THE PLUGS IN THE ABOVE DIAGRAM IS AN EXAMPLE OF HOW TO SET AN ATTENUATOR FOR A LOSS OF 2.2dB. THE TOTAL ATTENUATION IS THE SUM OF THE VALUES ADJACENT TO EACH PLUG. EACH SECTION MUST HAVE A PLUG PLACED IN EITHER THE "0" OR NUMERICAL POSITION.

206. SOCKETS USED FOR ON-OFF SWITCHING FUNCTIONS CONTAIN WHITE STAMPING OVER ONE-HALF OF EACH SWITCH POSITION. THE SWITCH FUNCTION IS SELECTED AS FOLLOWS:
A. BLACK COLOR VISIBLE (PLUG COVERING WHITE POSITION)- CONNECTION IS OFF OR BROKEN.
B. WHITE COLOR VISIBLE (PLUG COVERING BLACK POSITION)- CONNECTION IS ON OR CLOSED.
IN SOME APPLICATIONS A SINGLE SWITCH SOCKET OR THE FIRST SWITCH POSITION OF A MULTI-PIN SOCKET IS USED TO OPEN ONE CIRCUIT WHILE CLOSING ANOTHER. IN SUCH CASE THE COLOR STAMPING HAS NO SIGNIFICANCE. IN THIS APPLICATION TEXT IS PROVIDED ADJACENT TO THE SWITCH TO INDICATE THE CIRCUIT OPTION FOR EACH POSITION.

HIGHEST COMPONENT USED IN FIG.1 OF THIS DRAWING					
C18	CR12	R49	RV8	Q14	IC5
NOT USED					
C4-C8, C13, C14.	CR5, CR7	R7-R10 R16-R23, R32	RV4	Q2,Q4, Q5	IC2, IC3

SUPPORTING INFORMATION

CATEGORY	NO.
EQUIPMENT DRAWING	J98718SE-( )
PRINTED WIRING BOARD ASSY	ED-3C588-30
PRINTED WIRING BOARD ASSY	ED-3C689-30
CHANNEL BANK GENERAL REQUIREMENTS	ED-3C410-10
CHANNEL OPTION AND PAD SELECTION	BSP 365-150-503
SELECTOR SWITCH INFO	ED-3C695-10
ATTENUATOR INFO	ED-3C697-10
X-SPEC	X-78655

ISSUE 3AR

SD-3C126-02 1N22

COMMON SYSTEMS
24 CHANNEL PCM BANK TYPE D3
FOREIGN EXCHANGE
CHANNEL UNIT CIRCUIT
SERVING OFFICE END

D3CX (FX-OFF)

AT&TCO STANDARD

SD-3C126-02-1
3 SHEETS

BELL TELEPHONE LABORATORIES INCORPORATED — DWG SIZE 6S

PRINTED IN U.S.A.

FIG. 1
FOREIGN EXCHANGE SERVING OFFICE
CHANNEL UNIT

FIG. 2
SD-3C125-02
ED-3C688-30

TRANSMIT ACTIVE FILTER

RECEIVE ACTIVE FILTER

TRANSMIT GATE DRIVER

RECEIVE GATE DRIVER

SIGNALING RECEIVER LOOP CLOSURE

RINGING DETECTOR

TIP GROUND DETECTOR

SIGNALING RECEIVER RING GROUND

CHANNEL UNIT FACEPLATE

TO TRANSMIT UNIT CKT

TO RECEIVE UNIT CKT

TO TRMSN MON UNIT CKT

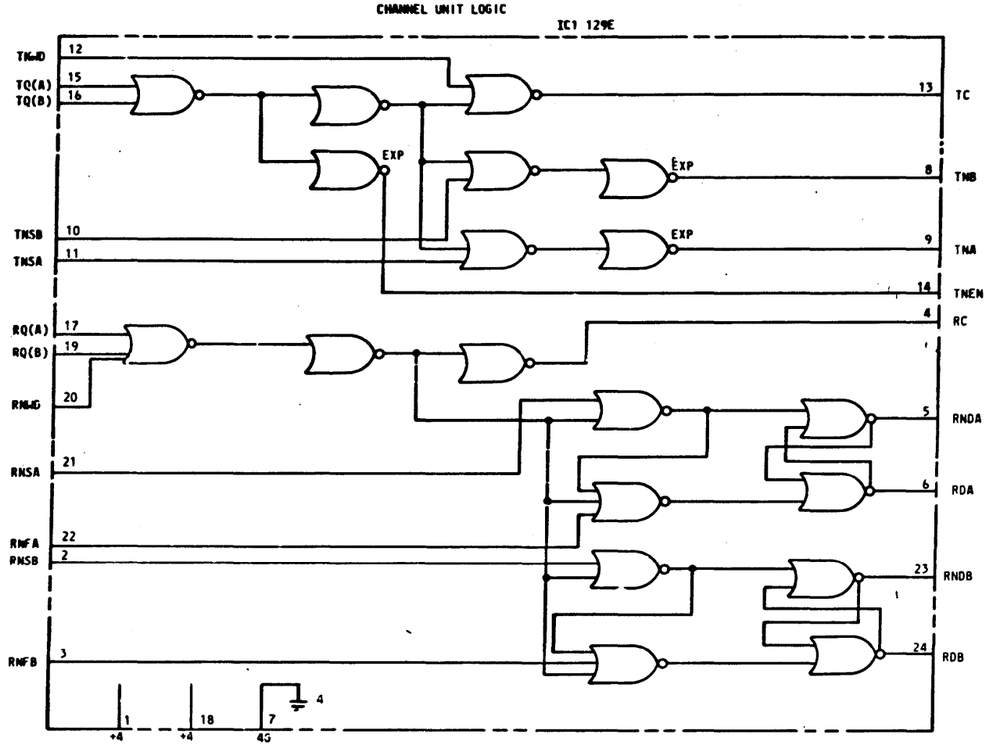
TO TPU CKT

TO FRAME GRD

TO POWER CONVERTER UNIT CKT

24 CHANNEL PCM BANK TYPE D3 FOREIGN EXCHANGE CHANNEL UNIT CIRCUIT SERVING OFFICE END	SD-3C126-02-2
BELL TELEPHONE LABORATORIES INCORPORATED	ISSUE 3AR

FIG. 101
CHANNEL UNIT LOGIC



SHEET 1

24 CHANNEL PCM BANK TYPE D3 FOREIGN EXCHANGE CHANNEL UNIT CIRCUIT SERVING OFFICE END (FX-OFF)	SD-3C126-02-3
BELL TELEPHONE LABORATORIES INCORPORATED	6S