

SHEET INDEX

SHEET NO.	CONTENTS
1	SHEET INDEX CIRCUIT NOTES INFORMATION NOTES SUPPORTING INFORMATION OPTION INDEX
2	FS1 AMPLIFIER CIRCUIT
3	APP FIG. 1

CIRCUIT NOTES:

101.

DESIG	FUSE AMP	POTENTIAL	ONE PER
	1-1/3	-48V TALK	CKT

CIRCUIT NOTES: (CONT)

105. SHIELD OF INPUT LEADS SHALL BE TERMINATED AS SHOWN IN CONNECTING CIRCUIT.

102.

FEATURE OR OPTION	PROVIDE		QUANTITY
	APP FIG.	APP OR WRG	
KS-19220, L1 AMPLIFIER	1	U	ONE PER CKT
KS-19220, L2 AMPLIFIER	1	V	ONE PER CKT
REMOTE VOLUME CONTROL	REQUIRED	Z	
	NOT REQUIRED	Y	
REDUCED GAIN	REQUIRED	W	
	NOT REQUIRED	X	

103.

NETWORK VALUES		
NETWORK NO.	RESISTANCE IN OHMS	CAPACITANCE IN UF

104.

RECORD OF APP FIGURES, WRING & APPARATUS CHANGES						
CHANGED ON ISS	IF JOB RECORDS DO NOT SPECIFY	THIS OPTION WAS FURN	SEE NOTE	USE IN CIRCUIT		
				STD	A&M	MD

SUPPORTING INFORMATION

CATEGORY	NO.

OPTION INDEX

APP OR WRG	LOCATION
Z	2E0, 2F0
Y	2E0
X	2D9
W	2D9
V	.1, 2E2
U	2E1, 2E2

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. THE VOLTAGES SHOWN REPRESENT TYPICAL DC VALUES FOR A QUIESCENT CONDITION WITH AVERAGE TRANSISTORS AND NOMINAL SUPPLY VOLTAGE. THE VOLTAGES ARE MEASURED FROM POINTS SHOWN TO TERMINAL S USING A VOLTMETER HAVING A RESISTANCE OF 10 MEGOHMS (MINIMUM).

DWG ISSUE	EE OR CD ISSUE	DATE ISSUED	BY	APP
1	1	12-3-62	M. K. WYN	WAB
2D	APP 1D	5-18-64	CWC	WAB
3D	APP 2D	6-12-64	CWC	WAB
4D	APP 3D	4-11-66	J. RA	EPK
5D	2D	5-28-73	GM	JLL
6D	2D	1-24-79	WF	AB
	APP 1D		CAT	JTR

NOTICE
NOT FOR USE OR DISCLOSURE OUTSIDE THE BELL SYSTEM EXCEPT UNDER WRITTEN AGREEMENT

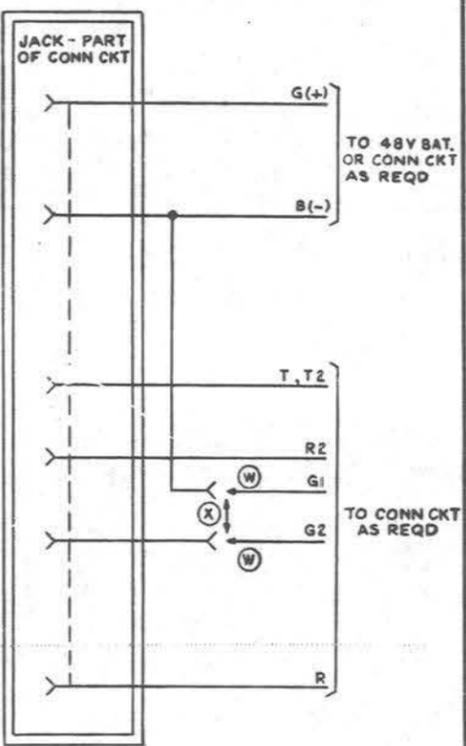
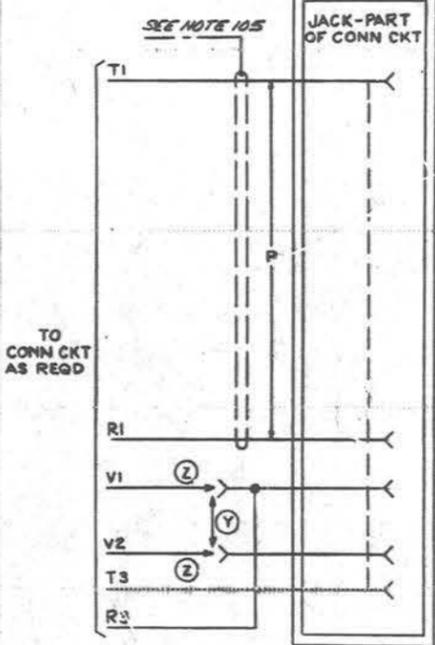
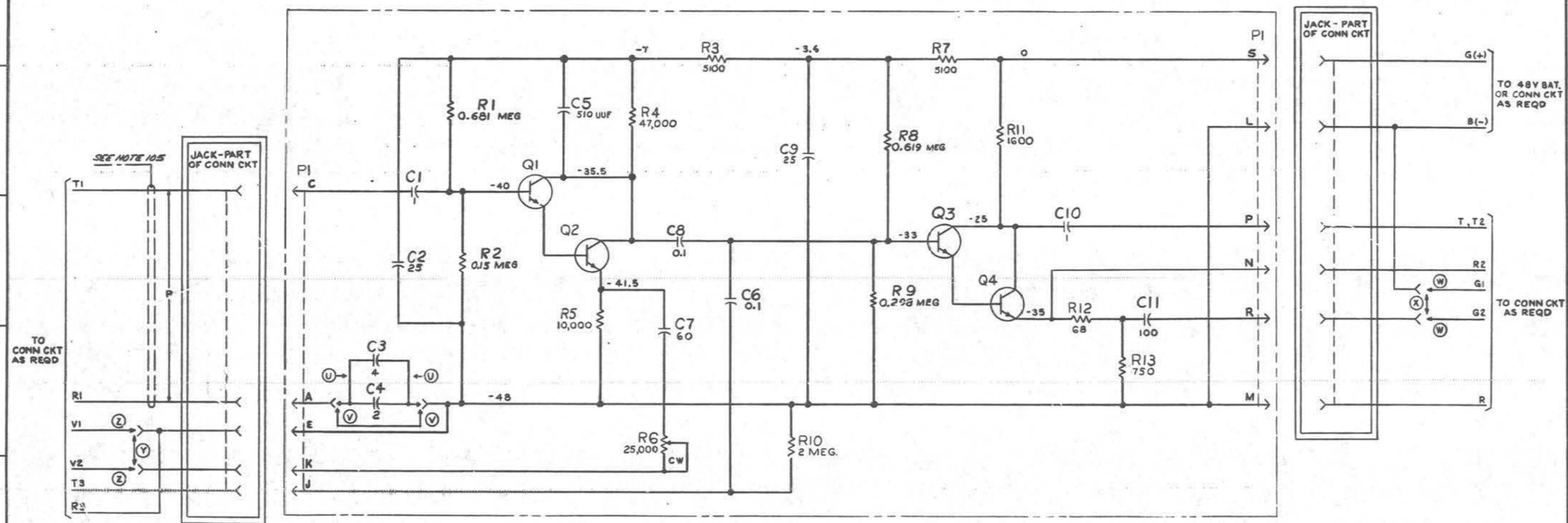
ISSUE
6D

SD-99724-01	2N06	A&M ONLY
COMMON SYSTEMS KS-19220, L1 & L2 AMPLIFIER CIRCUIT		
BELL TELEPHONE LABORATORIES INCORPORATED		SD-99724-01-1 3 SHEETS

FS I
AMPLIFIER CIRCUIT

DRAWING	ISSUE
1	MM
2D	DLF
3D	DLF
4D	DLF

A
B
C
D
E
F
G
H



SD-99724-01-2

ISSUE
6D

COMMON SYSTEMS
KS-19220, L1 & L2 AMPLIFIER CIRCUIT

BELL TELEPHONE LABORATORIES
INCORPORATED

SD-99724-01-2

65

PRINTED IN U.S.A.

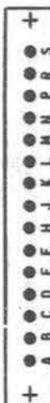
APP FIG.1
PRINTED WIRING BOARD ASSEMBLY

DRAWING
ISSUE
1
20
30
40

CAPACITOR

DESIG	LOC	CODE
C1	2C2	1UF, 542D
C2	2D2	25UF, KS-16390, L1
C3	2E2	4UF, 542G
C4	2E2	2UF, 542F
C5	2C3	5100UF, KS-14056, L1
C6	2D4	0.1UF, 535AB
C7	2D4	60UF, KS-16390, L5
C8	2D4	0.1UF, 535AB
C9	2C4	25UF, KS-16390, L1
C10	2D6	1UF, 542D
C11	2D7	100UF, KS-16390, L6

CONNECTOR
KS-16345, L1



DESIG	PLUG
CONN	
OPTION	
	NO. LOC
	S 2B7
	R 2D7
	P 2D7
	N 2D7
	M 2E7
	L 2F1
	K 2F1
	J 2F1
	H -
	F -
	E 2E1
	D -
	C 2C1
	B -
	A 2E1

POTENTIOMETER

DESIG	LOC
R6	2E3

25,000Ω TYPE 65,
WITH A CCM "C"
TAPER, 1/4 INC.
BUSHING AND A SCREW-
DRIVER SLOTTED SHAFT
3/8 INCH F.M.S.
A FLAT AT END OF
SHAFT 1/32 X 1/32
SHALL BE ON SIDE
ADJACENT TO AND
INDICATING WIPER
CONTACT POSITION. IT
SHALL BE LOCATED
AT 90° TO SLOT IN
SHAFT.
CHICAGO TELEPHONE
SUPPLY CO. OR
APPROVED EQUIVALENT.

RESISTOR

DESIG	LOC	CODE
R1	2C2	.681 MEG. } 221A
R2	2D2	.15 MEG. }
R3	2B4	5100Ω. }
R4	2C4	47,000Ω }
R5	2E3	10,000Ω KS-19150, L1
R7	2B5	5100Ω. }
R8	2C5	.619 MEG. } 221A
R9	2D5	.298 MEG. }
R10	2E2	2 MEG. KS-19150, L1
R11	2C6	1600Ω. KS-19151, L1
R12	2D6	68Ω. } KS-19150, L1
R13	2E2	750Ω. }

TRANSISTOR

DESIG	LOC	CODE
Q1	2C3	
Q2	2D3	29A
Q3	2D5	
Q4	2D6	

SD-99724-01-3

COMMON SYSTEMS
KS-19220, L1 & L2 AMPLIFIER CIRCUIT
SD-99724-01-3

BELL TELEPHONE LABORATORIES
INCORPORATED

ISSUE
6D

6S