

IP2 TESTS AND MAINTENANCE

518-800-505

650A KEY SERVICE UNIT
CARRIERS 1 AND 2
EQUIPPED FOR 2 CO LINES AND ADD-ON CONF

J1A	J2A	J3	J4	J5	J6	J7
KS-15900, LI INTERRUPTER		600A KTU <i>Hold Pickup</i>		607A KTU <i>CONTROL</i>		606A KTU <i>COMMON</i>
J1B 417A KTU <i>ADD ON CONF</i>	J2B 601A KTU <i>VIDEO Switch</i>					

650A KEY SERVICE UNIT
CARRIERS 1 AND 2
EQUIPPED FOR 1 CO LINE AND 6 STA INTERCOM

J1A	J2A	J3	J4	J5	J6	J7
KS-15900-LI INTERRUPTER		600A KTU <i>Pickup Hold</i>	407B KTU <i>100000 Dial</i>	607A KTU <i>CONTROL EQ</i>	604A KTU <i>STATION LOA & OUT</i>	606A KTU <i>COMMON EQ</i>
J1B	J2B 601A KTU (NOTE 1)					

J1	J2	J3	J4	J5	J6	J7
		<i>Hold Pickup</i> 600A KTU		<i>CONTROL</i> 607A KTU		<i>COMMON</i> 606A KTU

J1	J2	J3	J4	J5	J6	J7
<i>1st</i> 605A KTU (1-3 STA)	<i>2nd</i> 605A KTU (4-6 STA)		422B KTU <i>STATION Busy</i> J4B 423A KTU	426A KTU	425B KTU	* 427C KTU

650A KEY SERVICE UNIT
CARRIERS 1 AND 2
EQUIPPED FOR 10 STA INTERCOM

J1A	J2A	J3	J4	J5	J6	J7
KS-15900, LI INTERRUPTER			407B KTU <i>100000 Dial</i>	605A KTU (7-9 STA)	604A KTU <i>STATION LOA & OUT</i>	605A KTU (10-12 STA)
J1B	J2B					

NOTE:

1. SECOND HALF OF THIS 601A VIDEO SWITCH CANNOT BE USED. IF A PRIORITY ARRANGEMENT IS REQUIRED, ADDITIONAL 601A KTUS MUST BE INSTALLED EXTERNAL TO THE 650A KSU USING 69-TYPE APPARATUS MOUNTINGS, 99A BRACKETS AND 16-TYPE APPARATUS MOUNTINGS.

* 427C KTU IS EQUIVALENT TO A 427B SERIES 4 KTU.

J1	J2	J3	J4A	J5	J6	J7
<i>1st</i> 605A KTU (1-3 STA)	<i>2nd</i> 605A KTU (4-6 STA)		422B KTU <i>STATION Busy</i> J4B <i>100000 Dial</i> 423A KTU <i>STATION LOA & OUT</i> 423A KTU <i>STATION LOA & OUT</i>	<i>AMP. BAND SPT + LINE</i> 426A KTU	<i>FLASHING LAMPS</i> 425B KTU	<i>FREED RECHARGE TRAC</i> * 427C KTU

100000 Dial → *Touch Tone Adapter*

Fig. 7—Key Telephone Equipment Locations in Carrier Positions of the 650A Key Service Unit

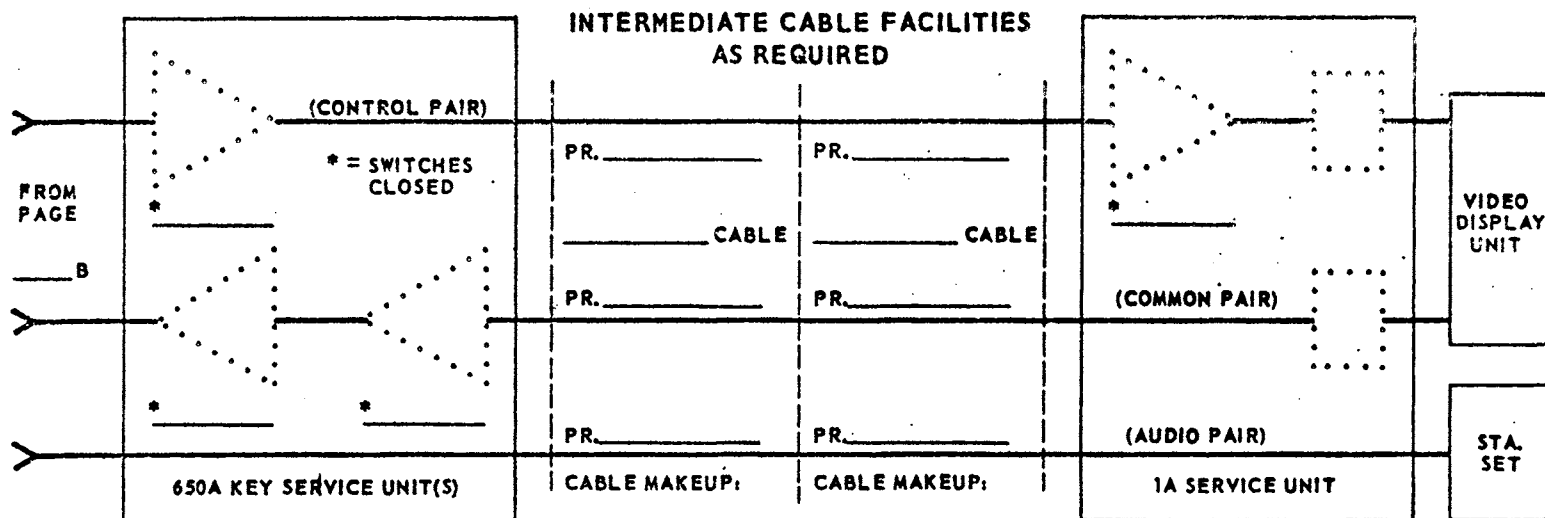
85 Ft MAY

1A Service unit And Display unit

FORM 2316-1

CIRCUIT NO. _____ PP _____ - _____ KSD NO. _____ STATION LOCATION _____

TELEPHONE NO. OR SERVICE ORDER NO. _____ SERVING ARRANGEMENT _____ PAGE _____ C



1030
2300
4000
900,000

RS Repair
ServiceOrd. No. _____
Tel. No. _____

PICTUREPHONE SERVICE

Video Ofc. Equip. Assignment _____ Page _____

WBL or R.S.U. _____ Office _____
Frame _____ Group _____
Number _____ Vertical _____Equalizer and Build-Out Assignment
Control Pair (T&R) _____ Type _____ Switches Closed _____

Build-Out Net. _____

Equalizer _____

Common Pair (T1&R1) _____

Build-Out Net. _____

Equalizer _____

Long Net. _____

Equipment Location _____

Aisle _____ Bay _____ Shelf _____ Equalizer _____

Cable No. _____ Terminal Location _____

U _____

C _____

D _____

S _____

H _____

E _____

S _____

UG. _____ Dist. _____ Rec. _____

Control Pr. _____

Common Pr. _____

Audio Pr. _____

Audio Trunk
Cable & Pair _____ Pr. _____

Ofc. Equip. _____

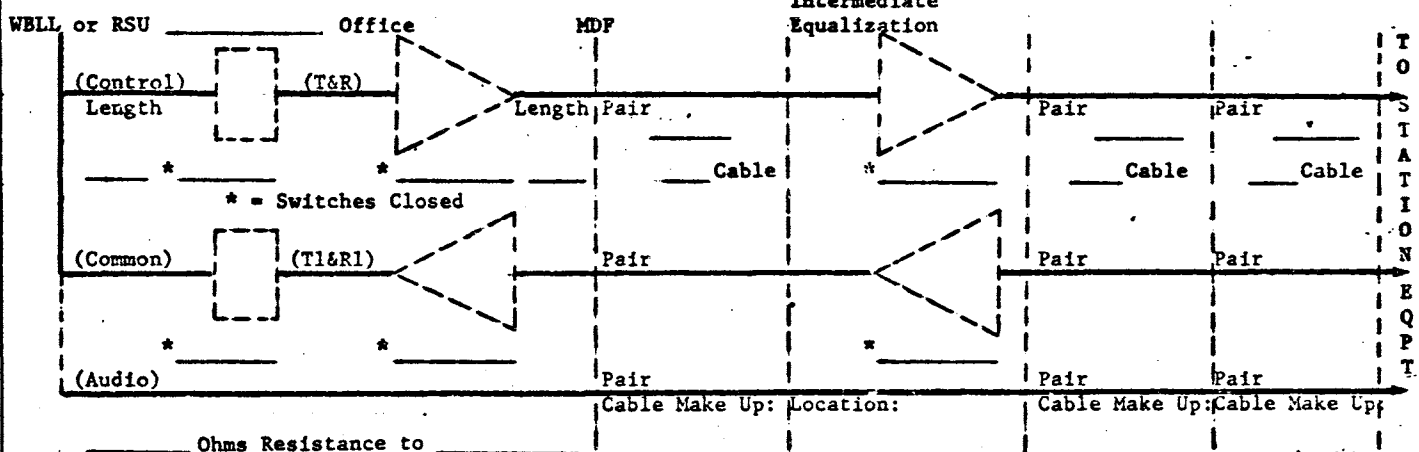
Assign. _____

Aux. Equip. _____

TBA _____ A _____

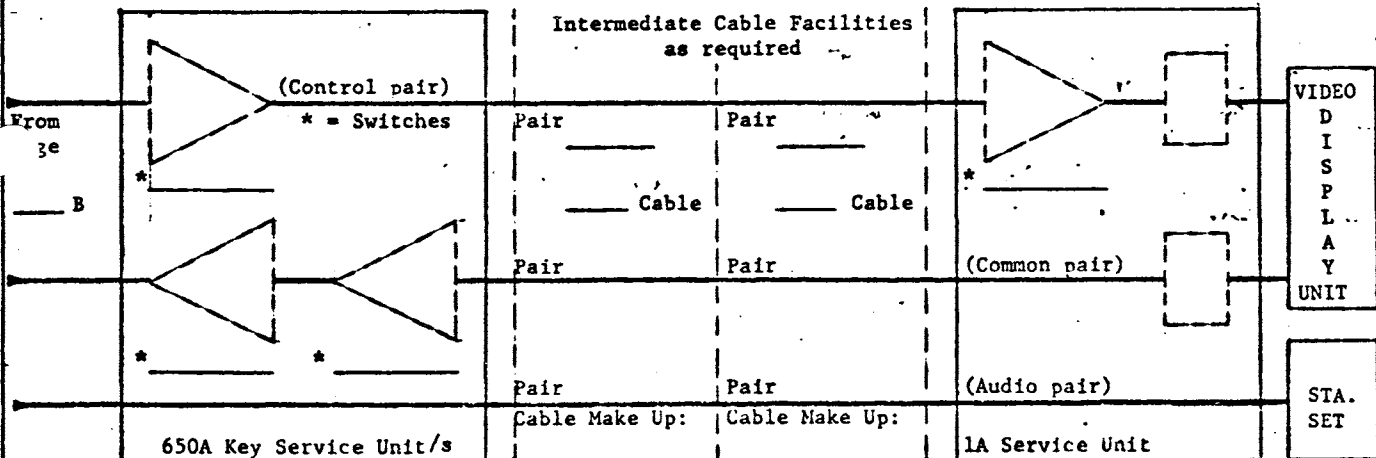
Circuit Number _____ PP _____ Customer Address _____

PICTUREPHONE Tel. No. _____ Originator _____ Tel. No. _____ Page _____ B



Circuit No. _____ PP _____ KSD No. _____ Station Location _____

Telephone Number or Service Order No. _____ Serving Arrangement _____ Page _____ C



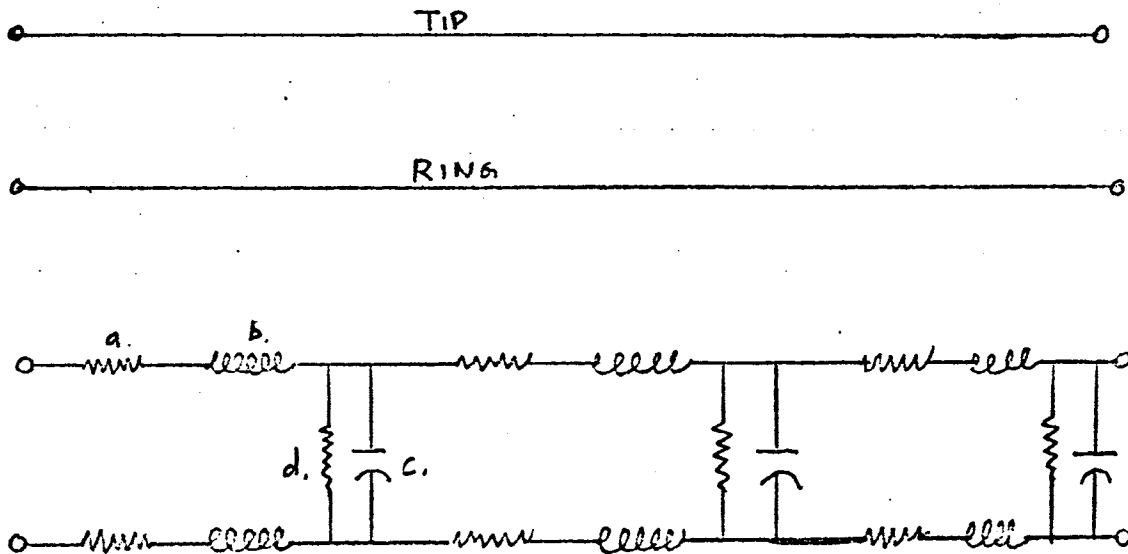
PICTUREPHONE TRANSMISSION NOTES

OBJECTIVE: To obtain and then maintain high quality audio and video circuits for the transmission of the baseband analog signal on standard telephone pairs.

To meet this objective requires special conditioning of pairs to conform to the stringent requirements on noise, interference and loss.

THE TRANSMISSION LINE

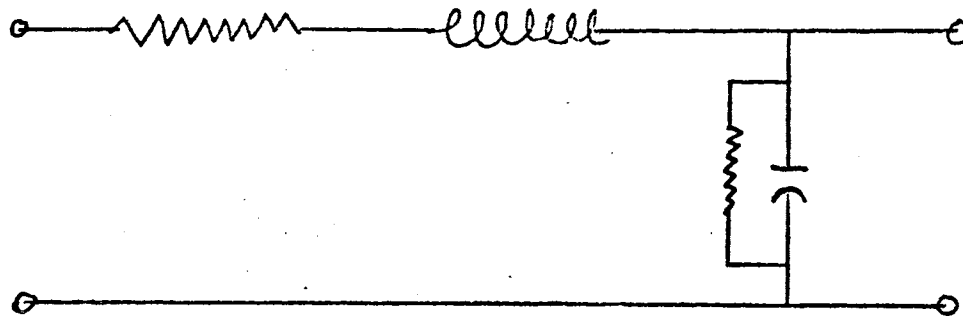
A. What it looks like



1. Concept of uniformly distributed parameters.

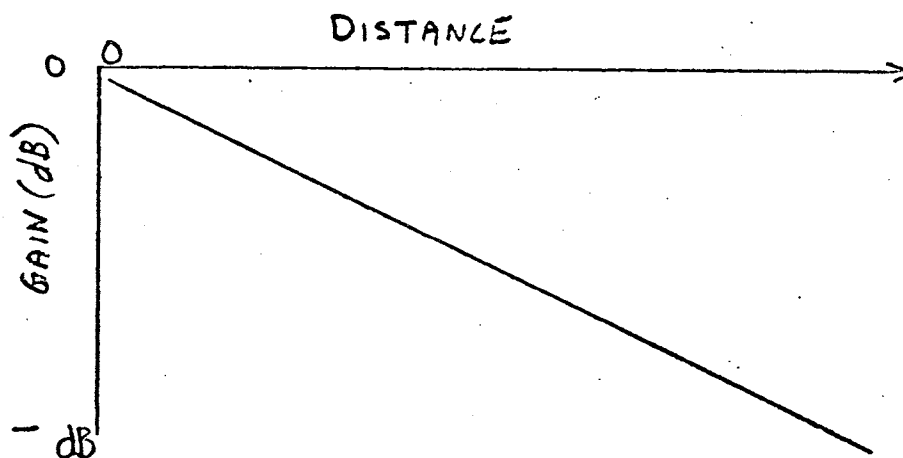
- a. Series Resistance
- b. Series Inductance (coil)
- c. Shunt Capacitance
- d. Shunt Resistance

2. Lumped Parameters.



B. Loss of signal power when transmitted over a transmission line. (Attenuation)

1. Loss due to distance is directly proportional



2. Loss of signal roughly proportional to square of frequency.
(See Fig 1)

C. Result of attenuation of signal on the T-Line is loss of resolution.

EQUALIZATION CONCEPT

- A. Making the signal flat across the band. (See Fig 2)

1. Passive equalization (shaped loss) (See Fig 3)

2. Active equalization (shaped gain).

(See FIG 4)

B. Resulting effect. (See FIG 5)

BUILD OUT EFFECT

A. Make T-Line look longer than it actually is.

B. Method of building out line.

HOW WE ACTUALLY EQUALIZE A LINE

A. Basic Equalizer (See FIG 6)

1. Input Network

- a. Balanced termination for line.
- b. Flat gain. -6db to +12db

2. Output Network

- a. Balanced termination for line
- b. Unity gain

3. Static equalizer provides shaped gain.

- a. Six parallel paths
- b. Greater impedance to lower frequencies
- c. Small, medium, and large Amps.
- d. Total gains possible
 - 12db at low end
 - 56db at high end
- e. Equalizes 6 KFT of 26 gage pulp

B. Types of Equalizers Used

937A Fixed Gain - C.O.

937B & 937C Variable Gain - C.O. & I.C.E.

606A Fixed Gain KTU on C.O. Line

607A Variable Gain KTU on Both C.O. Line and Long Loop

939B Station Set - Variable Gain (KTU)

939A Station Set - Variable Gain (Single Line)

HOW WE BUILD OUT LOOP

A. 877 Networks at Station Set

B. 874 Networks at C.O.

OTHER RESTRICTIONS

A. Pair must be conditioned

1. Load coils removed

2. Build out capacitors removed

3. Splices soldered

4. Binder group integrity

B. Removal of all bridge tap (See Fig 7)

FREQUENCY RESPONSE

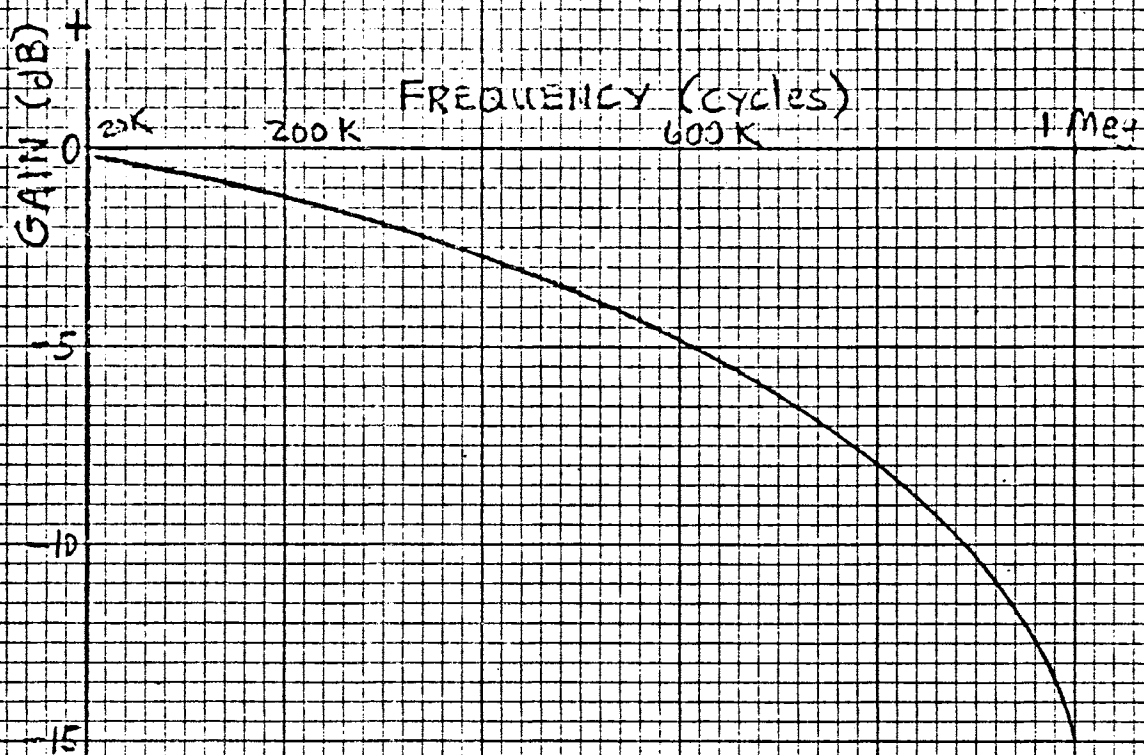


FIG 1 : T-LINE LOSS

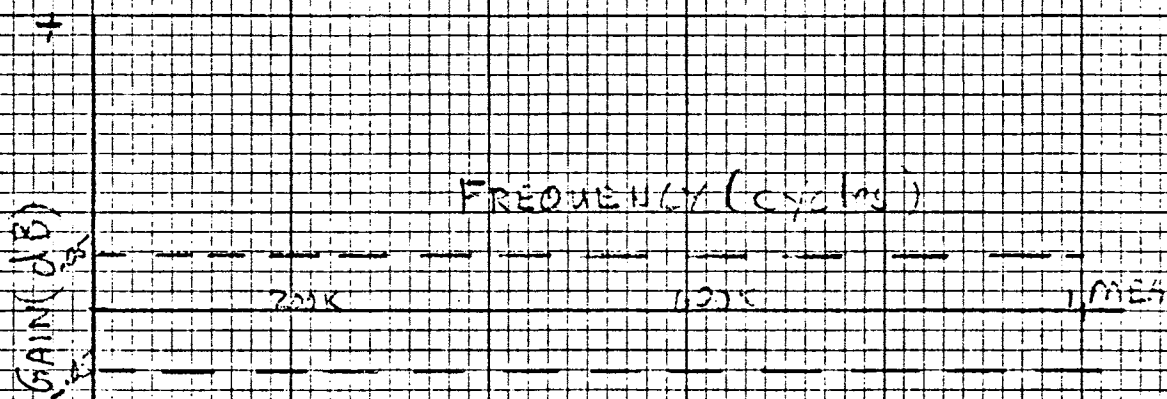


FIG 2 : DESIGN LIMIT ON EQUALIZATION

FREQUENCY RESPONSE

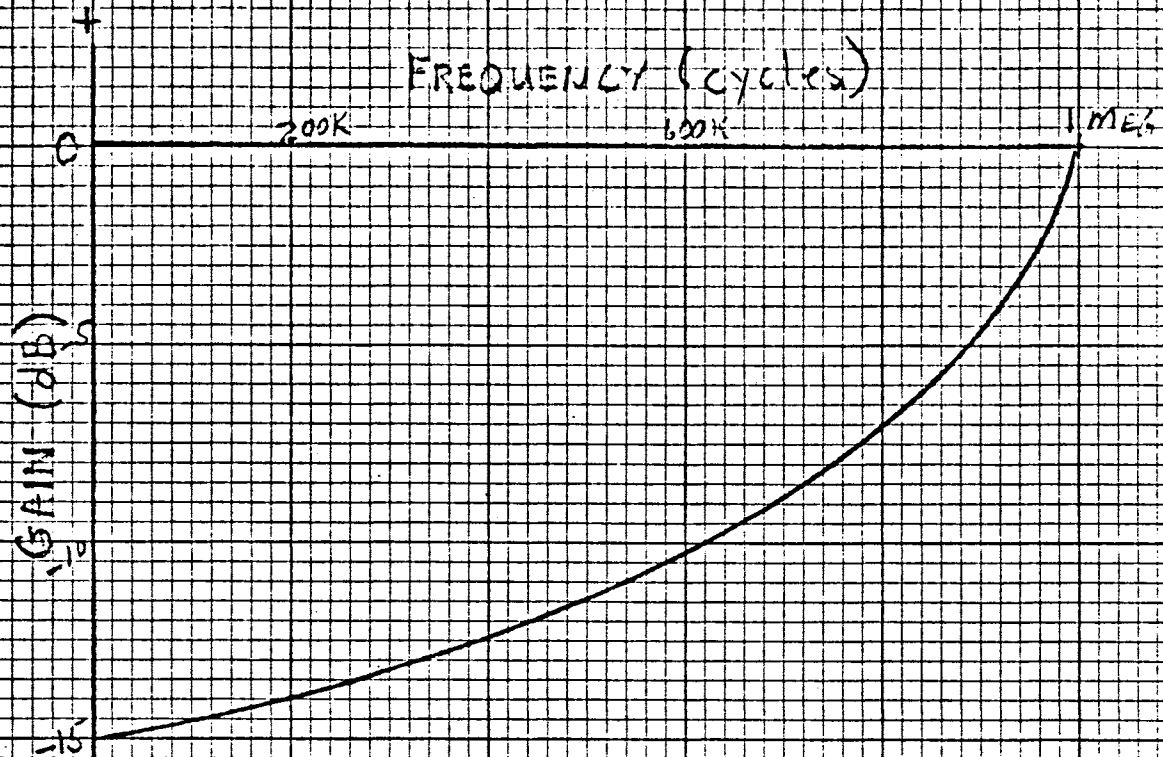


FIG 3 : PASSIVE EQUALIZATION

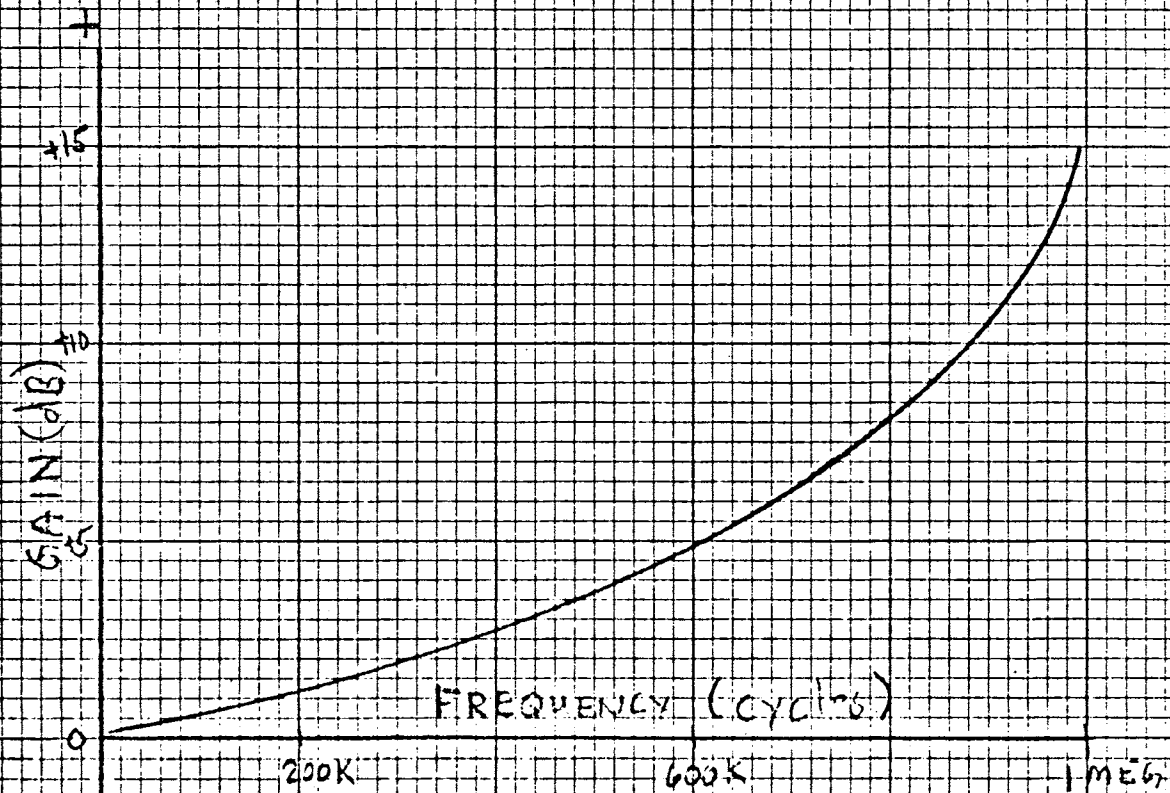


FIG 4 : ACTIVE EQUALIZATION

FREQUENCY RESPONSE

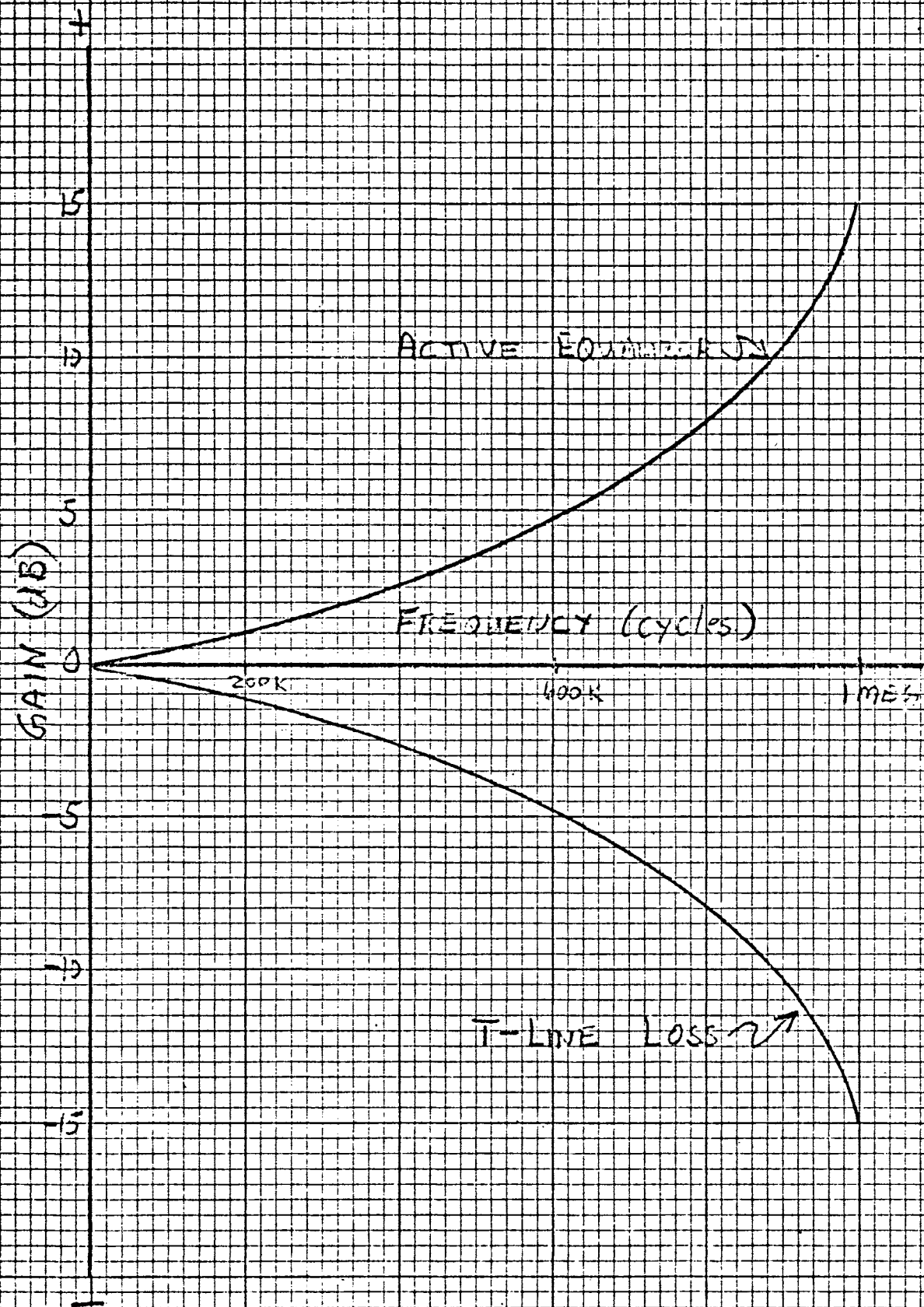
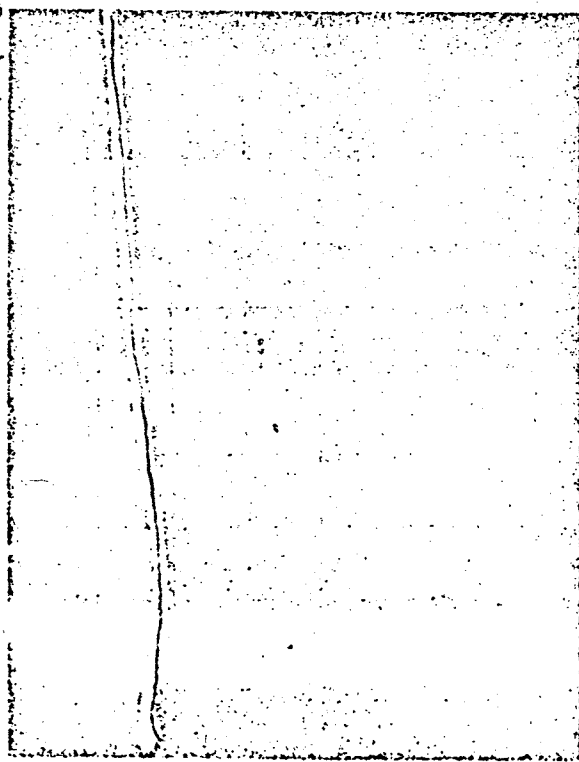


FIG 5: EFFECT of EQUALIZATION

FREQUENCY RESPONSE

2 db/cm

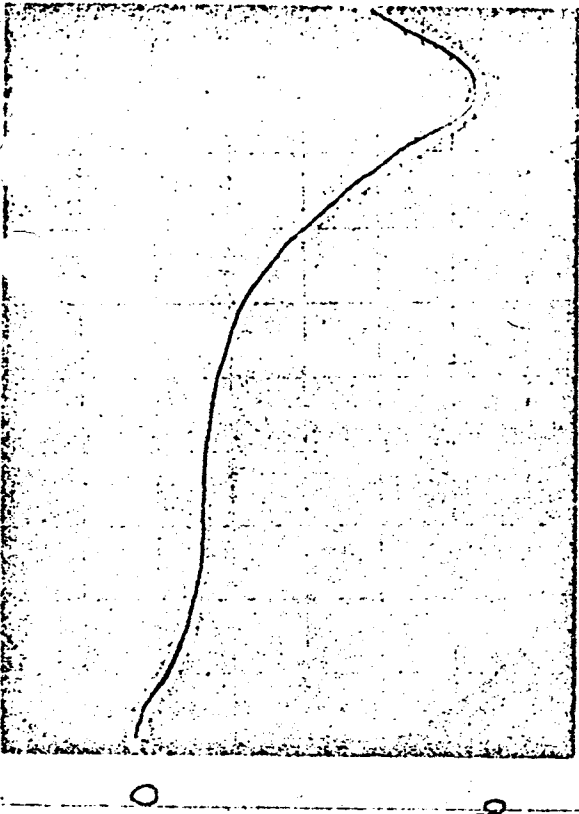
6000' LINE



NO. B.T.

10K

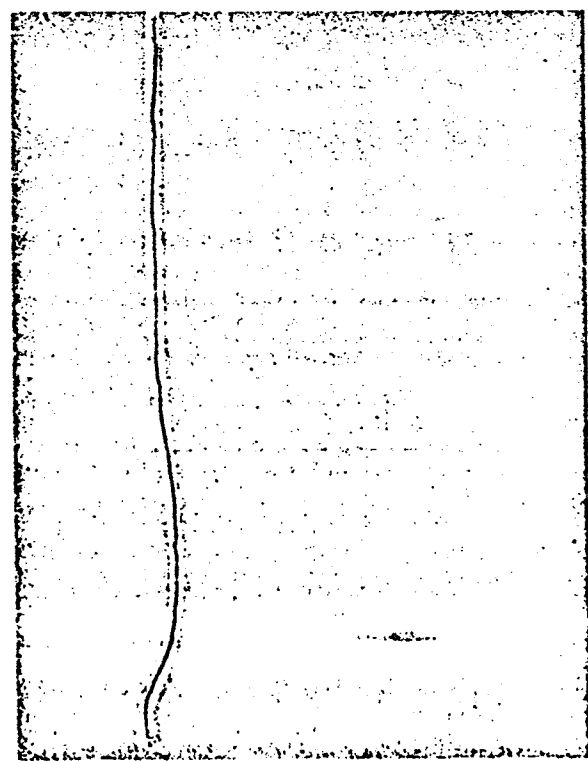
1meg



10K

1meg

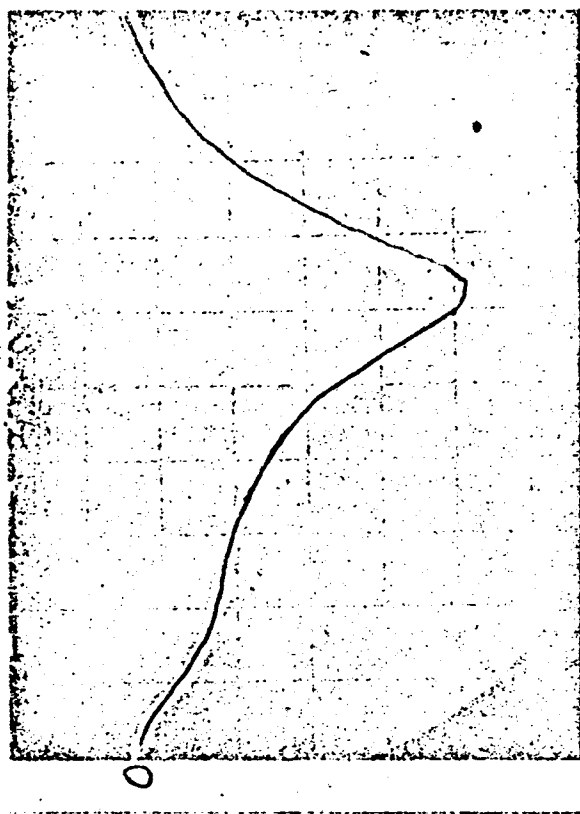
80' BT.



10K

1meg

40' BT.



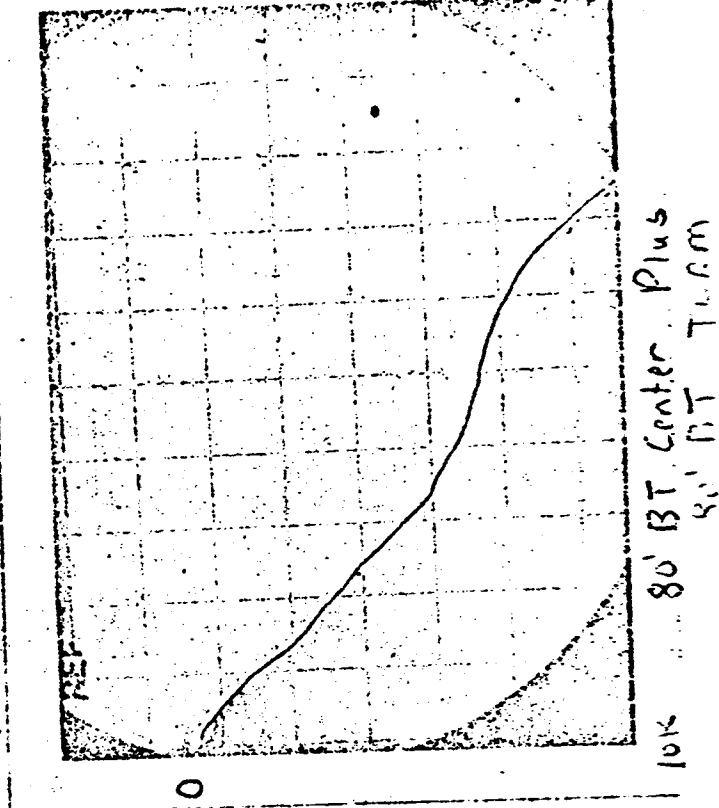
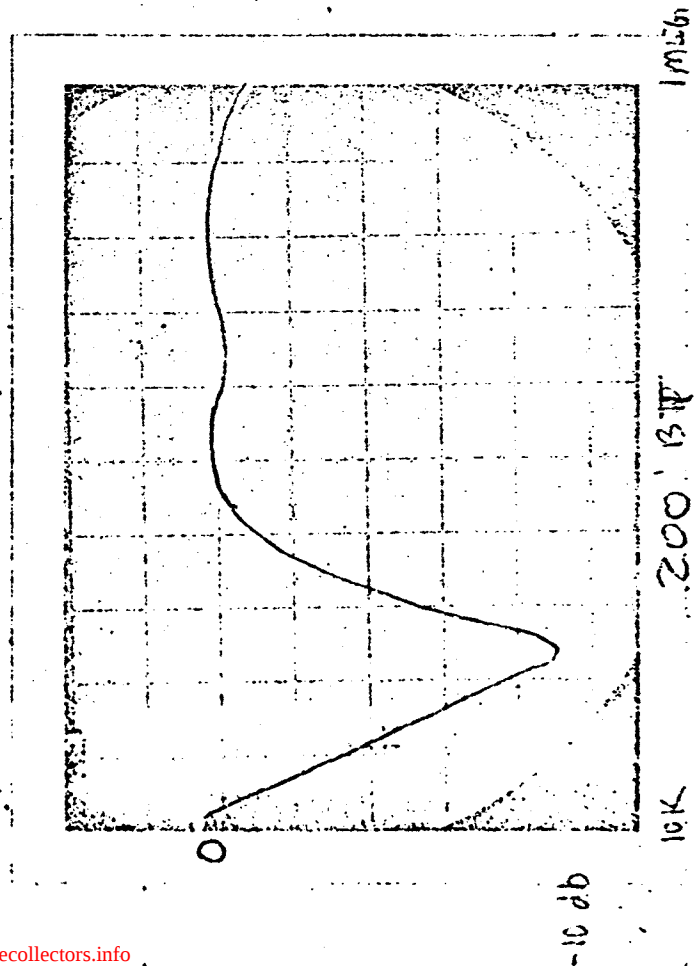
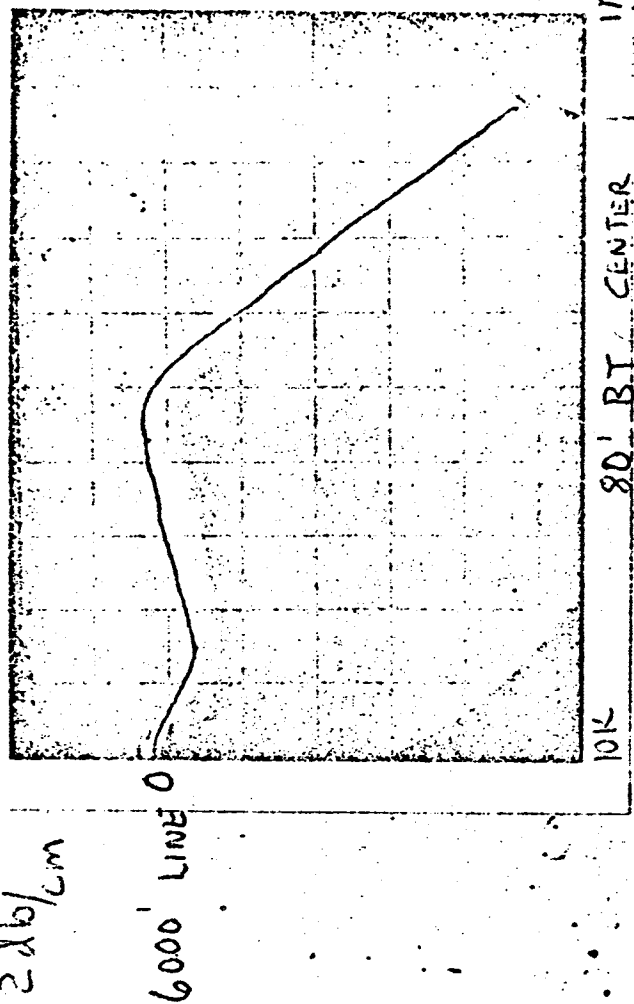
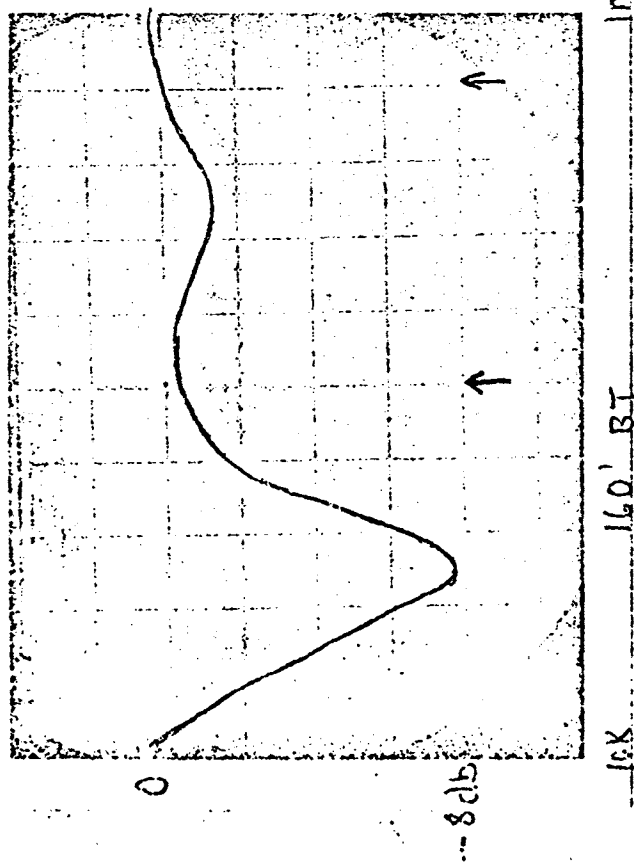
10K

1meg

120' BT.

FREQUENCY RESPONSE

2db/cm



BASIC CABLE EQUALIZER

ISS. DATE APP.

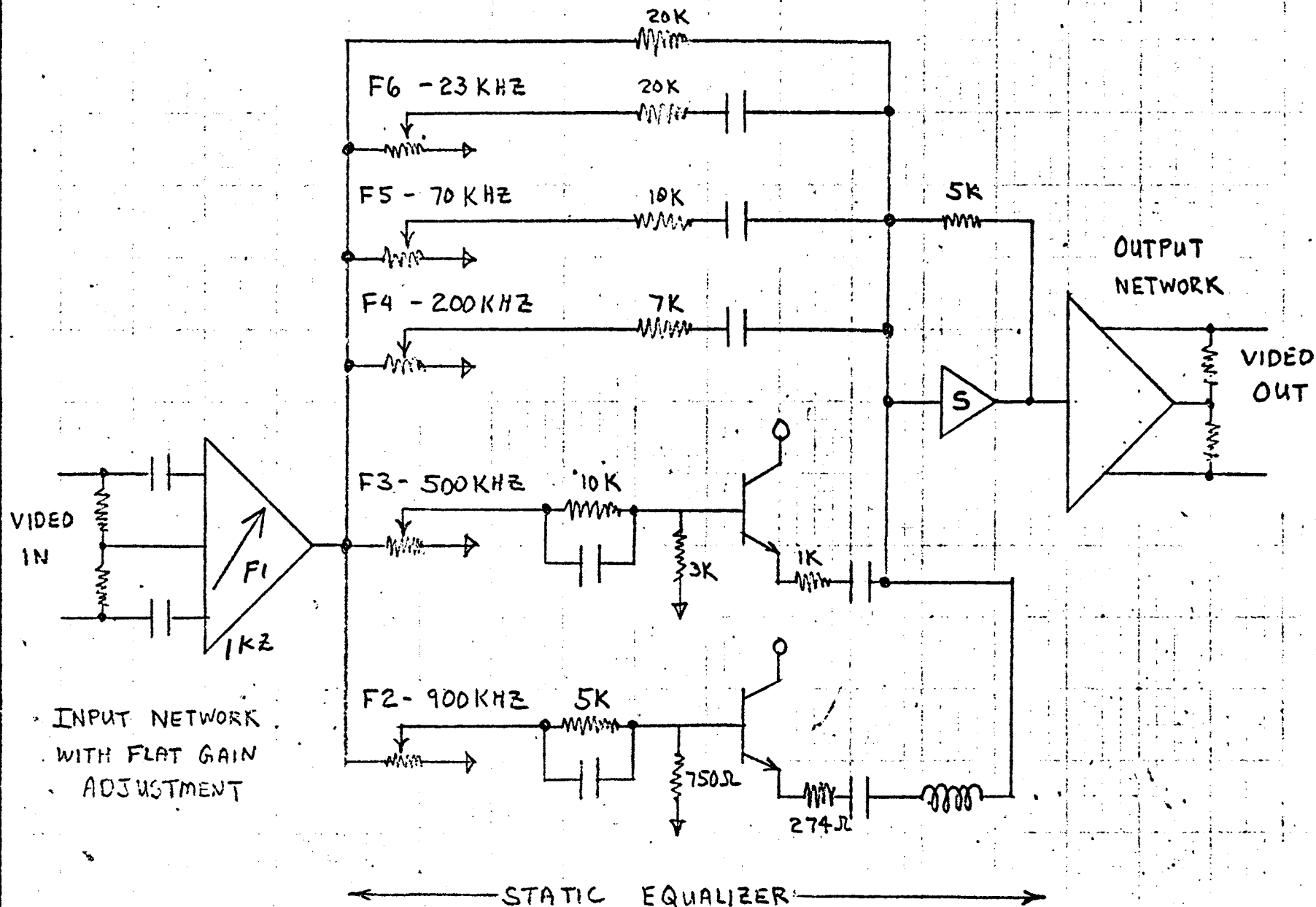
SCALE

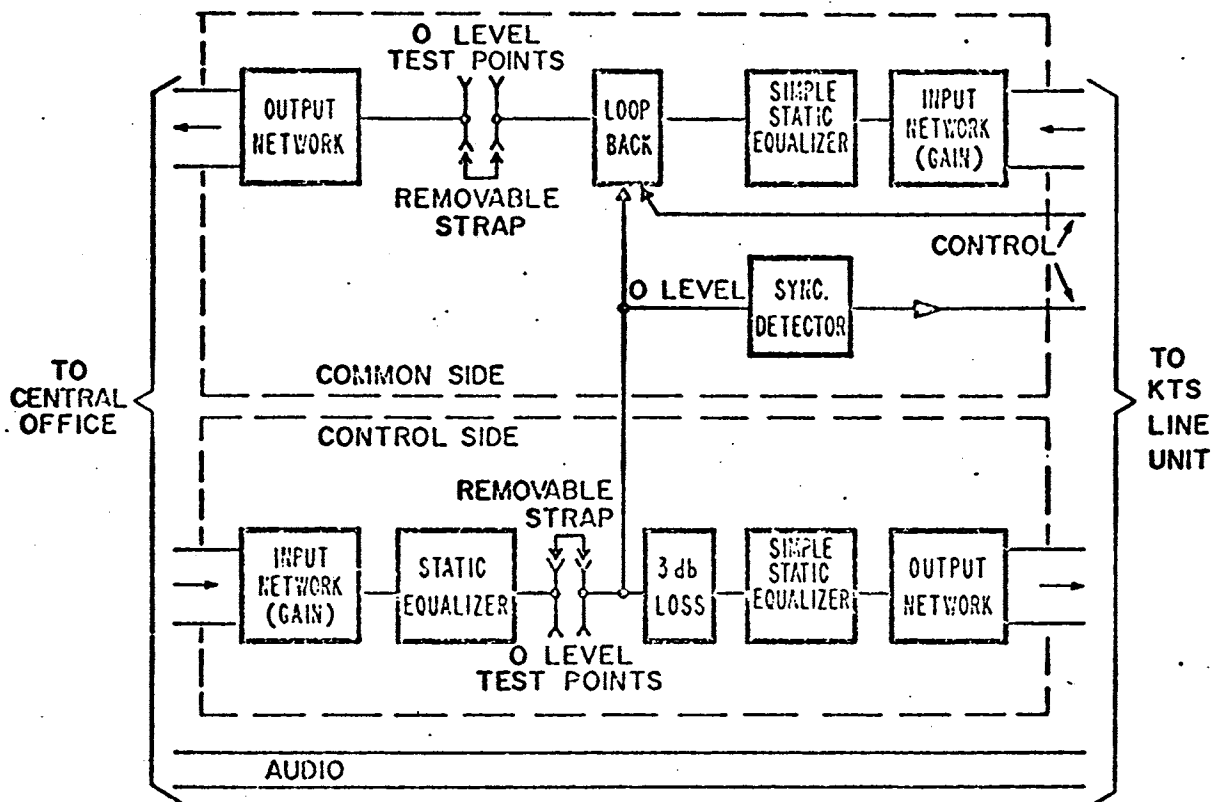
DATE

APP.

SHEET OF

ILLINOIS BELL TELEPHONE COMPANY
SUBURBAN AREA





KEY TELEPHONE SYSTEM CABLE EQUALIZER
(KTSCE)

FIG. 5-4

C.O. TRUNK

Connections For Single Line Video Stations

Audio Connections

From	Lead Designations & Cable Color Code	To
Cable Pr.	T R	1A Service Unit T R
1A Service Unit	T R LK	44A Conn. Blk. 1 2 3
" " "	AG W-Or *	55D Cont. Unit 11
" " "	A1 Or-W *	" " " 19
" " "	M1 W-Gn *	" " " 7
" " "	M2 Gn-W *	" " " 16
" " "	SP1 W-Br *	" " " 20
" " "	SP2 Br-W *	" " " 29
" " "	F1 W-Sl *	" " " 17
" " "	P1 Sl-W *	" " " 8
" " "	AC1 R-B1 *	" " " 27
" " "	AC2 Bl-R *	" " " 36
" " "	S W-B1 *	" " " 18
" " "	Spare Bl-W *	" " " Spare
55D Control Unit 11	AG W-Or **	44A Conn. Blk. 4
" " " 26	A1 Or-W **	" " " 5
" " " 1	T1 W-Gn **	" " " 6
" " " 10	R1 Gn-W **	" " " 7
" " " 15	1T W-Br **	" " " 9
" " " 6	1R Br-W **	" " " 10
" " "	Spare W-Sl **	" " " Spare
" " "	" Sl-W **	" " " "
" " "	" R-B1 **	" " " "
" " "	" Bl-R **	" " " "
" " "	" W-B1 **	" " " "
" " "	" Bl-W **	" " " "

* - ** Use 6 pr. IW Cable

Telephone set leads correspond to color code of IW cable.

Video Connections

From	Lead Designations	To
Cable Pr.	Control Pair T	1A Service Unit VIT
" " "	" " R	" " " VIR
" " "	Common Pair T	" " " VOT
" " "	" " R	" " " VOR

HCK

Connections For LP2 Key Telephone Stations

Audio Connections Speakerphone

From 1A Service Unit Designation	Cable Color Code	To 55D Control Unit Terminal
S	W-B1 *	18
LK	B1-W *	Spare Terminal or spliced to B1-W from Tel. Set Conn. Blk.
AG	W-Or *	11
A1	Or-W *	19-21
M1	W-Gn *	7
M2	Gn-W *	16
SP1	W-Br *	20
SP2	Br-W *	29
F1	W-S1 *	17
P1	S1-W *	8
AC1	R-B1 *	27
AC2	B1-R *	36

From 55D Control Unit Terminal	Cable Color Code & Lead Designations	To Key Tel. Set 66E3 Blk. Color & Terminal
Spare	W-B1 *	Spare
Spare Terminal or spliced to B1-W from 1A Service Unit.	B1-W * LK	S1-V 50
11	W-Or * AG	V-S1 49
26	Or-W * A1	Or-W 4
1	W-Gn * T1	V-Gn 45
10	Gn-W * R1	Gn-V 46
15	W-Br * 1T	V-Br 47
6	Br-W * 1R	Br-V 48

* Use 6 pr. IW cable.

Video Connections

All Video leads shall be run from the connecting blocks associated with the 650A KSU to the 1A service unit using either jumpers or IW cable.

NOTE: SB1, SB2, SB3 designations on connecting blocks correspond to PF leads in the 1A service unit.

INTER COM ONLY

Connections For 1P2 Non-Key Telephone Stations

Audio Connections Speakerphone

From 1A Service Unit Designation	Cable Color Code	To 55D Control Unit Terminal
S	W-B1 *	18
LK	Bl-W *	Spare Terminal or spliced to Bl-W from Tel. Set Conn. Blk.
AG	W-Or *	11
A1	Or-W *	19-21
M1	W-Gn *	7
M2	Gn-W *	16
SP1	W-Br *	20
SP2	Br-W *	29
F1	W-Sl *	17
P1	Sl-W *	8
AC1	R-B1 *	27
AC2	Bl-R *	36

From 55D Control Unit Terminal	Cable Color Code & Lead Designations	To 44A Connecting Block Terminal
Spare	W-B1 *	Spare
Spare Terminal or spliced to Bl-W from 1A Service Unit	Bl-W * LK	8
11	W-Or * AG	4
26	Or-W * A1	5
1	W-Gn * T1	6
10	Gn-W * R1	7
15	W-Br * 1T	9
6	Br-W * 1R	10

* Use 6 pr. IW cable.

From 650A KSU Conn. Blk. Terminal	To 44A Connecting Block Terminal
T	1
R	1
A	2
A1	3
	5

Video Connections

All Video leads shall be run from the connecting blocks associated with the 650A KSU to the 1A service unit using either jumpers or IW cable.

NOTE: SB1, SB2, SB3 designations on connecting blocks correspond to PF leads in the 1A service unit.

2 C. O. Lines Single Group Service
Basic Service Option Straps
In 650 KSU

Straps

SD-69621-01

A Block

AA Block

G,W,X, Wiring

1-3	23-24
36-37	27-28
39-40	31-33
43-44	35-36
46-47	39-40
50-----	49
	43-44
	47-48

B Block

W,X Wiring

24-25-26
39-40

600A KTU

601A

1-10

1-2 5-6 7-8 9-10

1 C. O. Line - 6 Station Single Link Intercom
Basic Service Option Straps
In 650 KSU

Straps

SD-69621-01

A Block

AA Block

G,W Wiring

1-3
36-37
39-40
43-44
46-47
50-----

31-33
35-36
43-44
47-48

49

AB Leads

Codes

LK Leads

T Wiring

4-26
5-27
6-28
7-29
8-30
9-31

1
2
3
4
5
6

1-11
2-12
3-13
4-14
5-15
6-16

B Block

B Block

BL Leads

Codes

Ringer Leads

T Wiring

1-13
2-14
3-15
4-16
5-17
6-18

1
2
3
4
5
6

27-27-41
28-42
29-43
30-44
31-45
32-46

25-26
39-40

W Wiring

422B KTU Straps

1-2 3-4 5-6

600A KTU

1-10

423A KTU Straps

1-2 4-6

601A KTU

7-8 9-10

10 Station Single Link Intercom
Basic Service Option Straps
In 650 KSU

SD-69621-01

Straps

A Block

AA Block

V Wiring

3-----	50
36-38	43-44
39-41	47-48
43-45	
45-46	
50-----	50

AB Leads

Codes

LK Leads

T Wiring

4-26	1	1-11
5-27	2	2-12
6-28	3	3-13
7-29	4	4-14
8-30	5	5-15
9-31	6	6-16
10-32	7	7-17
11-33	8	8-18
12-34	9	9-19
13-35	0	10-20

B Block

B Block

BL Leads

Codes

Ringer Leads

T Wiring

1-13	1	27-41
2-14	2	28-42
3-15	3	29-43
4-16	4	30-44
5-17	5	31-45
6-18	6	32-46
7-19	7	33-47
8-20	8	34-48
9-21	9	35-49
10-22	0	36-50

39-40

V Wiring

422B KTU Straps

423A KTU Straps

1-2 3-4 5-6

1-2 4-6

WIRING LIST FOR C.O. OR PBX LINES
SINGLE GROUP SERVICE
CONNECTING BLOCK A

Reference
SD 69621-01
CD & SD 69605-01

FROM	LEAD #	COLOR	LEAD DESIGNATION	TO
600A or 417A KTU	26	W-BL	T	Tel. set assoc. with
600A or 417A KTU	1	BL-W	R	Picturephone line 1.
601A	27	W-Or	A	
Option Blk. BB	2	Or-W	→ A1	
Option Blk. BB	28	W-Gn	LG	
600A	3	Gn-W	L	
Option Blk. AA	29	W-Br	T	Tel. set assoc. with
Option Blk. AA	4	Br-W	R	Picturephone line 2.
601A	30	W-Sl	A	
Multiple w/line 1	5	Sl-W	→ A1	
Option Blk. BB	31	R-BL	LG	
600A	6	BL-R	L	
417A	32	R-Or	BL	Conf. key tel. set
417A	7	Or-R	Sl	assoc. with Picture-
Option Blk. BB	33	R-Gn	LG	phone line 1.
417A	8	Gn-R	L	
600A	34	R-Br	BL	
600A	9	Br-R	RL	
600A	35	R-Sl	BL	
600A	10	Sl-R	RL	Tel. set assoc. with
600A	36	Bk-BL	RC	Picturephone line 2.
600A	11	BL-Bk	RC	Com. Aud. line 1.
600A	37	Bk-Or	A SECONDARY	Com. Aud. line 2.
Multiple w/line 1	12	Or-Bk	→ A1 STATION #1	Aud. tel. set line 1.
601A & Option Blk. AA	38	Bk-Gn	A SECONDARY	Aud. tel. set line 2.
Multiple w/line 1	13	Gn-Bk	→ A1 STATION #2	
601A	39	Bk-Br	VIT	To 1A service unit
601A	14	Br-Bk	VIR	conn. blk. assoc. with
601A	40	Bk-Sl	VOT	line 1.
601A	15	Sl-Bk	VOR	
601A	41	Y-BL	TOS	
600A	16	BL-Y	PF	
Option Blk. BB	42	Y-Or	PB	
600A	17	Or-Y	PR	
601A	43	Y-Gn	VIT	To 1A service unit
601A	18	Gn-Y	VIR	conn. blk. assoc. with
601A	44	Y-Br	VOT	line 2..
601A	19	Br-Y	VOR	
601A	45	Y-Sl	TOS	
600A	20	Sl-Y	PF	
Option Blk. BB	46	V-BL	PB	
600A	21	BL-V	PR	
Option Blk. AA	47	V-Or	T	To C.O. or PBX
Option Blk. AA	22	Or-V	R	line 1.
Option Blk. A	48	V-Gn	VOT	
Option Blk. A	23	Gn-V	VOR	
600A	49	V-Br	T	To C.O. or PBX
600A	24	Br-V	R	line 2.
606A & Option Blk. A	50	V-Sl	VOT	
606A & Option Blk. A	25	Sl-V	VOR	

WIRING LIST FOR C.O. OR PBX LINES
SINGLE GROUP SERVICE
CONNECTING BLOCK B

Reference
SD 69621-01
SD 69605-01

FROM	LEAD #	COLOR	LEAD DESIGNATION	TO
Option Blk. A	26	W-BL	VIT	To C.O. or PBX line 1.
Option Blk. A	1	BL-W	VIR	
	27	W-Or		
	2	Or-W		
607A	28	W-Gn	VIT	To C.O. or PBX line 2.
607A	3	Gn-W	VIR	
	29	W-Br		
	4	Br-W		
	30	W-Sl		
	5	Sl-W		
	31	R-BL		
	6	BL-R		
601A	32	R-Or	VIT	To 1st secondary
601A	7	Or-R	VIR	Picturephone switch
601A	33	R-Gn	VOT	assoc. with line 1.
601A	8	Gn-R	VOR	
	34	R-Br		
601A	9	Br-R	P TO 601A KTU (VIDEO switch)	
601A	35	R-Sl	VIT	To 1st secondary
601A	10	Sl-R	VIR	Picturephone switch
601A	36	Bk-BL	VOT	assoc. with line 2.
601A	11	BL-Bk	VOR	
	37	Bk-Or		
601A	12	Or-Bk	P TO 601A KTU (VIDEO switch)	
417A & Option Blk. AA	38	Bk-Gn	T (x)	To tel. set of Picture-
417A & Option Blk. AA	13	Gn-Bk	R (x)	phone sta. assoc. with
417A & Option Blk. AA	39	Bk-Br	A (LC)	line 1.
417A & Option Blk. AA	14	Br-Bk	A (x)	To external line to be
417A & Option Blk. AA	40	Bk-Sl	T (LC)	assoc. with add-on
417A & Option Blk. AA	15	Sl-Bk	R (LC)	conference.
	41	Y-BL		
	16	BL-Y		
600A & 601A	42	Y-Or	P 7 VIDEO switch	To sta. assoc. w/line 1
600A & 601A	17	Or-Y	P	To sta. assoc. w/line 2
	43	Y-Gn		
	18	Gn-Y		
	44	Y-Br		
	19	Br-Y		
	45	Y-Sl		
	20	Sl-Y		
606A & Power Supply	46	V-BL	Grd A (2)	To external KTU's as
Fuse 17 Power Supply	21	BL-V	Bat A (2)	required for 2 C.O. or
407B & Power Supply	47	V-Or	Grd B (3)	PBX lines.
Fuse 20 Power Supply	22	Or-V	Bat B (3)	(500ma Maximum)
	48	V-Gn		
Fuse 13 Power Supply	23	Gn-V	+10V	
	49	V-Br		
Fuse 15 Power Supply	24	Br-V	-10V	
Option Blk. BB	50	V-Sl	RG	
Fuse 21 Power Supply	25	Sl-V	+105V	

**WIRING LIST FOR SINGLE GROUP INTERCOM SERVICE
CONNECTING BLOCK C**

Reference

SD 69621-01

SD 69606-01

FROM	LEAD #	COLOR	LEAD DESIGNATION	TO
605A (1-3)	26	W-BL	T	Tel. set of pri. or sec.
605A (1-3)	1	BL-W	R	sta. assoc. w/1st ckt.
Option Blk. A	27	W-Or	A	in 1st 605A, & tel. set
Option Blk. BB	2	Or-W	Al	pri. sta. code 1 & tel.
Option Blk. BB	28	W-Gn	LG	set of pri. or sec. sta.
425B KTU	3	Gn-W	L	code 1.
605A (1-3)	29	W-Br	T	Tel. set of pri. or sec.
605A (1-3)	4	Br-W	R	sta. assoc. w/2nd ckt.
Option Blk. A	30	W-Sl	A	in 1st 605A, & tel. set
	5	Sl-W		pri. sta. code 2 & tel.
Option Blk. BB	31	R-BL	LG	set of pri. or sec. sta.
425B KTU	6	BL-R	L	code 2.
605A (1-3)	32	R-Or	T	Tel. set of pri. or sec.
605A (1-3)	7	Or-R	R	sta. assoc. w/3rd ckt.
Option Blk. A	33	R-Gn	A	in 1st 605A, & tel. set
	8	Gn-R		pri. sta. code 3 & tel.
Option Blk. BB	34	R-Br	LG	set pri. or sec. sta.
425B KTU	9	Br-R	L	code 3.
605A (4-6)	35	R-Sl	T	Tel. set of pri. or sec.
605A (4-6)	10	Sl-R	R	sta. assoc. w/1st ckt.
Option Blk. A	36	Bk-BL	A	in 2nd 605A, & tel. set
	11	BL-Bk		pri. sta. code 4 & tel.
Option Blk. BB	37	Bk-Or	LG	set pri. or sec. sta.
425B KTU	12	Or-Bk	L	code 4.
605A (4-6)	38	Bk-Gn	T	Tel. set of pri. or sec.
605A (4-6)	13	Gn-Bk	R	sta. assoc. w/2nd ckt.
Option Blk. A	39	Bk-Br	A	in 2nd 605A, & tel. set
	14	Br-Bk		pri. sta. code 5 & tel.
Option Blk. BB	40	Bk-Sl	LG	set of pri. or sec. sta.
425B KTU	15	Sl-Bk	L	code 5.
605A (4-6)	41	Y-BL	T	Tel. set of pri. or sec.
605A (4-6)	16	BL-Y	R	sta. assoc. w/2nd ckt.
Option Blk. A	42	Y-Or	A	of 2nd 605A, & tel. set
	17	Or-Y		of pri. sta. code 6 &
Option Blk. BB	43	Y-Gn	LG	tel. set of pri. or sec.
425B KTU	18	Gn-Y	L	sta. code 6.
Option Blk. A	44	Y-Br	A	Tel. sets of sec. sta.
Option Blk. A	19	Br-Y	A	codes 1-6.
Option Blk. A	45	Y-Sl	A	
Option Blk. A	20	Sl-Y	A	
Option Blk. A	46	V-BL	A	
Option Blk. A	21	BL-V	A	
Option Blk. BB	47	V-Or	BL	Tel. sets assoc. w/1st
605A (1-3)	22	Or-V	RL	ckt. of 1st 605A.
Option Blk. BB	48	V-Gn	BL	Tel. sets assoc. w/2nd
605A (1-3)	23	Gn-V	RL	ckt. of 1st 605A.
Option Blk. BB	49	V-Br	BL	Tel. sets assoc. w/3rd
605A (1-3)	24	Br-V	RL	ckt. of 1st 605A.
Option Blk. BB	50	V-Sl	BL	Tel. sets assoc. w/1st
605A (4-6)	25	Sl-V	RL	ckt. of 2nd 605A.

FROM	LEAD #	COLOR	LEAD DESIGNATION	TO
Option Blk. BB	26	W-BL	BL	5 (Tel. sets assoc. w/2nd ckt. of 2nd 605A & tel. sets assoc. w/3rd ckt. of 2nd 605A.
605A (4-6)	1	BL-W	RL	
Option Blk. BB	27	W-Or	BL	
605A (4-6)	2	Or-W	RL	
605A (1-3)	28	W-Gn	VIT	To 1A service unit of sta. assoc. w/1st ckt. of 1st 605A.
605A (1-3)	3	Gn-W	VIR	
605A (1-3)	29	W-Br	VOT	
605A (1-3)	4	Br-W	VOR	
605A (1-3)	30	W-SL	TOS	To 1A service unit of sta. assoc. w/2nd ckt. of 1st 605A.
605A (1-3)	5	SL-W	SBL	
Option Blk. BB	31	R-BL	PB	
605A (1-3)	6	BL-R	PR	
605A (1-3)	32	R-Or	VIT	To 1A service unit of sta. assoc. w/2nd ckt. of 1st 605A.
605A (1-3)	7	Or-R	VIR	
605A (1-3)	33	R-Gn	VOT	
605A (1-3)	8	Gn-R	VOR	
605A (1-3)	34	R-Br	TOS	To 1A service unit of sta. assoc. w/3rd ckt. of 1st 605A.
605A (1-3)	9	Br-R	SB2	
Option Blk. BB	35	R-SL	PB	
605A (1-3)	10	SL-R	PR	
605A (1-3)	36	Bk-BL	VIT	To 1A service unit of sta. assoc. w/3rd ckt. of 1st 605A.
605A (1-3)	11	BL-Bk	VIR	
605A (1-3)	37	Bk-Or	VOT	
605A (1-3)	12	Or-Bk	VOR	
605A (1-3)	38	Bk-Gn	TOS	To 1A service unit of sta. assoc. w/1st ckt. of 2nd 605A.
605A (1-3)	13	Gn-Bk	SB3	
Option Blk. BB	39	Bk-Br	PB	
605A (1-3)	14	Br-Bk	PR	
605A (4-6)	40	Bk-SL	VIT	To 1A service unit of sta. assoc. w/1st ckt. of 2nd 605A.
605A (4-6)	15	SL-Bk	VIR	
605A (4-6)	41	Y-BL	VOT	
605A (4-6)	16	BL-Y	VOR	
605A (4-6)	42	Y-Or	TOS	To 1A service unit of sta. assoc. w/2nd ckt. of 2nd 605A.
605A (4-6)	17	Or-Y	SBL	
Option Blk. BB	43	Y-Gn	PB	
605A (4-6)	18	Gn-Y	PR	
605A (4-6)	44	Y-Br	VIT	To 1A service unit of sta. assoc. w/2nd ckt. of 2nd 605A.
605A (4-6)	19	Br-Y	VIR	
605A (4-6)	45	Y-SL	VOT	
605A (4-6)	20	SL-Y	VOR	
605A (4-6)	46	V-BL	TOS	To 1A service unit of sta. assoc. w/2nd ckt. of 2nd 605A.
605A (4-6)	21	BL-V	SB2	
Option Blk. BB	47	V-Or	PB	
605A (4-6)	22	Or-V	PR	
	48	V-Gn		
	23	Gn-V		
	49	V-Br		
	24	Br-V		
	50	V-SL		
	25	SL-V		

WIRING LIST FOR SINGLE GROUP INTERCOM SERVICE
CONNECTING BLOCK E

Reference
SD 69621-01
SD 69606-01

FROM	LEAD #	COLOR	LEAD DESIGNATION	TO
605A (4-6)	26	W-BL	VIT	To 1A service unit of sta. assoc. w/3rd ckt. of 2nd 605A.
605A (4-6)	1	BL-W	VIR	
605A (4-6)	27	W-Or	VOT	
605A (4-6)	2	Or-W	VOR	
605A (4-6)	28	W-Gn	TOS	
605A (4-6)	3	Gn-W	SB3	
Option Blk. BB	29	W-Br	PB	
605A (4-6)	4	Br-W	PR	
	30	W-SL		
	5	SL-W		
	31	R-BL		
	6	BL-R		
407B KTU	32	R-Or	Grd A (2)	To external KTU reg'd. for 10 sta. intercom (350 MA DC Max.)
Fuse 17 Power Supply	7	Or-R	Bat A (2)	
Interrupter	33	R-Gn	Grd B (3)	
605A (10-12)	8	Gn-R	Bat B (3)	
Fuse 15 Power Supply	34	R-Br		
Fuse 13 Power Supply	9	Br-R	+10V	
	35	R-SL		
Fuse 15 Power Supply	10	SL-R	-10V	
Option Blk. BB	36	Bk-BL	RG	
600A	11	BL-Bk	+105V	
	37	Bk-Or		
	12	Or-Bk		
	38	Bk-Gn		
	13	Gn-Bk		
Option Blk. AA	39	Bk-Br	LK2	To external optional equipment.
Option Blk. AA	14	Br-Bk	LK1	
Option Blk. AA	40	Bk-SL	LK4	To external optional equipment.
Option Blk. AA	15	SL-Bk	LK3	
Option Blk. AA	41	Y-BL	LK6	
Option Blk. AA	16	BL-Y	LK5	
Option Blk. AA	42	Y-Or	LK8	
Option Blk. AA	17	Or-Y	LK7	
Option Blk. AA	43	Y-Gn	LK0	
Option Blk. AA	18	Gn-Y	LK9	
423A KTU	44	Y-Br	J	To external optional equipment.
	19	Br-Y		
Option Blk. B	45	Y-SL	CG	
Option Blk. B	20	SL-Y	CG	
427C KTU	46	V-BL	RH	
425B KTU	21	BL-V	BR	
Option Blk. AA	47	V-Or	GV	
604A KTU	22	Or-V	BL	
422B KTU	48	V-Gn	Y1	
Option Blk. AA	23	Gn-V	GV	
427C KTU	49	V-Br	Y3	
422B KTU	24	Br-V	Y2	
422B KTU	50	V-SL	Y5	
422B KTU	25	SL-V	Y4	

WIRING LIST FOR SINGLE GROUP INTERCOM SERVICE
CONNECTING BLOCK F

Reference
SD 69621-01
SD 69606-01

FROM	LEAD #	COLOR	LEAD DESIGNATION	TO
Option Blk. BB	26	W-B1	RB1	To external optional equipment.
Option Blk. B	1	B1-W	R1	
Option Blk. BB	27	W-Or	RB2	
Option Blk. B	2	Or-W	R2	
Option Blk. BB	28	W-Gn	RB3	
Option Blk. B	3	Gn-W	R3	
Option Blk. BB	29	W-Br	RB4	
Option Blk. B	4	Br-W	R4	
Option Blk. BB	30	W-S1	RB5	
Option Blk. B	5	S1-W	R5	
Option Blk. BB	31	R-B1	RB6	
Option Blk. B	6	B1-R	R6	
Option Blk. BB	32	R-Or	RB7	
Option Blk. B	7	Or-R	R7	
Option Blk. BB	33	R-Gn	RB8	
Option Blk. B	8	Gn-R	R8	
Option Blk. BB	34	R-Br	RB9	
Option Blk. B	9	Br-R	R9	
Option Blk. BB	35	R-S1	RB0	
Option Blk. B	10	S1-R	R0	
Option Blk. BB	36	Bk-B1	RB1	
Option Blk. B	11	B1-Bk	RC1	
Option Blk. BB	37	Bk-Or	RB2	
Option Blk. B	12	Or-Bk	RC2	
Option Blk. BB	38	Bk-Gn	RB3	
Option Blk. B	13	Gn-Bk	RC3	
Option Blk. BB	39	Bk-Br	RB1	
Option Blk. B	14	Br-Bk	RC1	
Option Blk. BB	40	Bk-S1	RB2	
Option Blk. B	15	S1-Bk	RC2	
Option Blk. BB	41	Y-B1	RB3	
Option Blk. B	16	B1-Y	RC3	
Option Blk. BB	42	Y-Or	RB1	
Option Blk. B	17	Or-Y	RC1	
Option Blk. BB	43	Y-Gn	RB2	
Option Blk. B	18	Gn-Y	RC2	
Option Blk. BB	44	Y-Br	RB3	
Option Blk. B	19	Br-Y	RC3	
Option Blk. BB	45	Y-S1	RB1	
Option Blk. B	20	S1-Y	RC1	
Option Blk. BB	46	V-B1	RB2	
Option Blk. B	21	B1-V	RC2	
Option Blk. BB	47	V-Or	RB3	
Option Blk. B	22	Or-V	RC3	
	48	V-Gn		
	23	Gn-V		
	49	V-Br		
	24	Br-V		
	50	V-S1		
	25	S1-V		

WIRING LIST FOR SINGLE GROUP INTERCOM SERVICE
CONNECTING BLOCK G

Reference
SD 69621-01
SD 69606-01

FROM	LEAD #	COLOR	LEAD DESIGNATION	TO
605A (7-9)	26	W-BL	T	Tel. set of pri. or sec.
605A (7-9)	1	BL-W	R	sta. assoc. w/1st ckt.
Option Blk. A	27	W-Or	A 1	of 3rd 605A, & tel. set
	2	Or-W		of pri. code 7 & tel.
Option Blk. BB	28	W-Gn	LG	set of pri. or sec. sta.
425B KTU	3	Gn-W	L	code 7.
605A (7-9)	29	W-Br	T	Tel. set of pri. or sec.
605A (7-9)	4	Br-W	R	sta. assoc. w/2nd ckt.
Option Blk. A	30	W-Sl	A 8	of 3rd 605A, & tel. set
	5	Sl-W		of pri. code 8 & tel.
Option Blk. BB	31	R-BL	LG	set of pri. or sec. sta.
425B KTU	6	BL-R	L	code 8.
605A (7-9)	32	R-Or	T	Tel. set of pri. or sec.
605A (7-9)	7	Or-R	R	sta. assoc. w/3rd ckt.
Option Blk. A	33	R-Gn	A 9	of 3rd 605A, & tel. set
	8	Gn-R		of pri. code 9 & tel.
Option Blk. BB	34	R-Br	LG	set of pri. or sec. sta.
425B KTU	9	Br-R	L	code 9.
605A (10-12)	35	R-Sl	T	Tel. set of pri. or sec.
605A (10-12)	10	Sl-R	R	sta. assoc. w/1st ckt.
Option Blk. A	36	Bk-BL	A 0	of 4th 605A, & tel. set
	11	BL-Bk		of pri. code 0 & tel.
Option Blk. BB	37	Bk-Or	LG	set of pri. or sec. sta.
425B KTU	12	Or-Bk	L	code 0.
605A (10-12)	38	Bk-Gn	T 11 ext.	Tel. set of pri. or sec.
605A (10-12)	13	Gn-Bk	R	sta. assoc. w/2nd ckt.
605A (10-12)	39	Bk-Br	T 12 ext.	Tel. set of pri. or sec.
605A (10-12)	14	Br-Bk	R	sta. assoc. w/3rd ckt.
Option Blk. A	40	Bk-Sl	A	of 4th 605A.
Option Blk. A	15	Sl-Bk	A	To tel. set sec. sta.
Option Blk. A	41	Y-BL	A	codes 7-0.
Option Blk. A	16	BL-Y	A	
Option Blk. BB	42	Y-Or	BL 5	Tel. set assoc. w/1st
605A (7-9)	17	Or-Y	RL	ckt. of 3rd 605A.
Option Blk. BB	43	Y-Gn	BL 6	Tel. set assoc. w/2nd
605A (7-9)	18	Gn-Y	RL	ckt. of 3rd 605A.
Option Blk. BB	44	Y-Br	BL 7	Tel. set assoc. w/3rd
605A (7-9)	19	Br-Y	RL	ckt. of 3rd 605A.
Option Blk. BB	45	Y-Sl	BL 8	Tel. set assoc. w/1st
605A (10-12)	20	Sl-Y	RL	ckt. of 4th 605A.
Option Blk. BB	46	V-BL	BL 9	Tel. set assoc. w/2nd
605A (10-12)	21	BL-V	RL	ckt. of 4th 605A.
Option Blk. BB	47	V-Cr	BL 0	Tel. set assoc. w/3rd
605A (10-12)	22	Or-V	RL	ckt. of 4th 605A.
	48	V-Gn		
	23	Gn-V		
	49	V-Br		
	24	Br-V		
	50	V-Sl		
	25	Sl-V		

**WIRING LIST FOR SINGLE GROUP INTERCOM SERVICE
CONNECTING BLOCK H**

Reference
SD-69621-01
SD-69606-01
TO

FROM	LEAD #	COLOR	LEAD DESIGNATION	
605A (7-9)	26	W-B1	VIT	7
605A (7-9)	1	B1-W	VIR	
605A (7-9)	27	W-Or	VOT	
605A (7-9)	2	Or-W	VOR	
605A (7-9)	28	W-Gn	TOS	
605A (7-9)	3	Gn-W	SB1	
OPTION BLK. BB	29	W-Br	PB	
605A (7-9)	4	Br-W	PR	8
605A (7-9)	30	W-S1	VIT	
605A (7-9)	5	S1-W	VIR	
605A (7-9)	31	R-B1	VOT	
605A (7-9)	6	B1-R	VOR	
605A (7-9)	32	R-Or	TOS	
605A (7-9)	7	Or-R	SB2	
OPTION BLK. BB	33	R-Gn	PB	9
605A (7-9)	8	Gn-R	PR	
605A (7-9)	34	R-Br	VIT	
605A (7-9)	9	Br-R	VIR	
605A (7-9)	35	R-S1	VOT	
605A (7-9)	10	S1-R	VOR	
605A (7-9)	36	Bk-B1	TOS	
605A (7-9)	11	B1-Bk	SB3	6
OPTION BLK. BB	37	Bk-Or	PB	
605A (7-9)	12	Or-Bk	PR	
605A (10-12)	38	Bk-Gn	VIT	
605A (10-12)	13	Gn-Bk	VIR	
605A (10-12)	39	Bk-Br	VOT	
605A (10-12)	14	Br-Bk	VOR	
605A (10-12)	40	Bk-S1	TOS	11 EXT.
605A (10-12)	15	S1-Bk	SB1	
OPTION BLK. BB	41	Y-B1	PB	
605A (10-12)	16	B1-Y	PR	
605A (10-12)	42	Y-Or	VIT	
605A (10-12)	17	Or-Y	VIR	
605A (10-12)	43	Y-Gn	VOT	
605A (10-12)	18	Gn-Y	VOR	12 EXT.
605A (10-12)	44	Y-Br	TOS	
605A (10-12)	19	Br-Y	SB2	
OPTION BLK. BB	45	Y-S1	PB	
605A (10-12)	20	S1-Y	PR	
605A (10-12)	46	V-B1	VIT	
605A (10-12)	21	B1-V	VIR	
605A (10-12)	47	V-Or	VOT	
605A (10-12)	22	Or-V	VOR	
605A (10-12)	48	V-Gn	TOS	
605A (10-12)	23	Gn-V	SB3	
OPTION BLK. BB	49	V-Br	PB	
605A (10-12)	24	Br-V	PR	
	50	V-S1		
	25	S1-V		

To 1A service unit
of sta. assoc. w/1st
ckt. of 3rd 605A.

To 1A service unit
of sta. assoc. w/2nd
ckt. of 3rd 605A.

To 1A service unit
of sta. assoc. w/3rd
ckt. of 3rd 605A.

To 1A service unit
of sta. assoc. w/1st
ckt. of 4th 605A.

To 1A service unit
of sta. assoc. w/2nd
ckt. of 4th 605A.

To 1A service unit
of sta. assoc. w/3rd
ckt. of 4th 605A.

2C Video Telephone Station Tests and Maintenance
Using 136A Test Set

1. GENERAL

1.001 This addendum supplements Section 518-800-501, Issue 1.

1.002 This addendum is issued:

(a) To clarify Engineering requirements to agree with changes in test procedures.

1.003 The above changes are in accordance with SD-

The following shall be changed to read:

2.01 (K) SPEAKERPHONE SWITCH - Test position switches Speakerphone controls from 72A Control Unit to the test set to allow checking of Speakerphone operation without display or control unit connected or operating. The MODE key must be held operated in the SU TEST position.

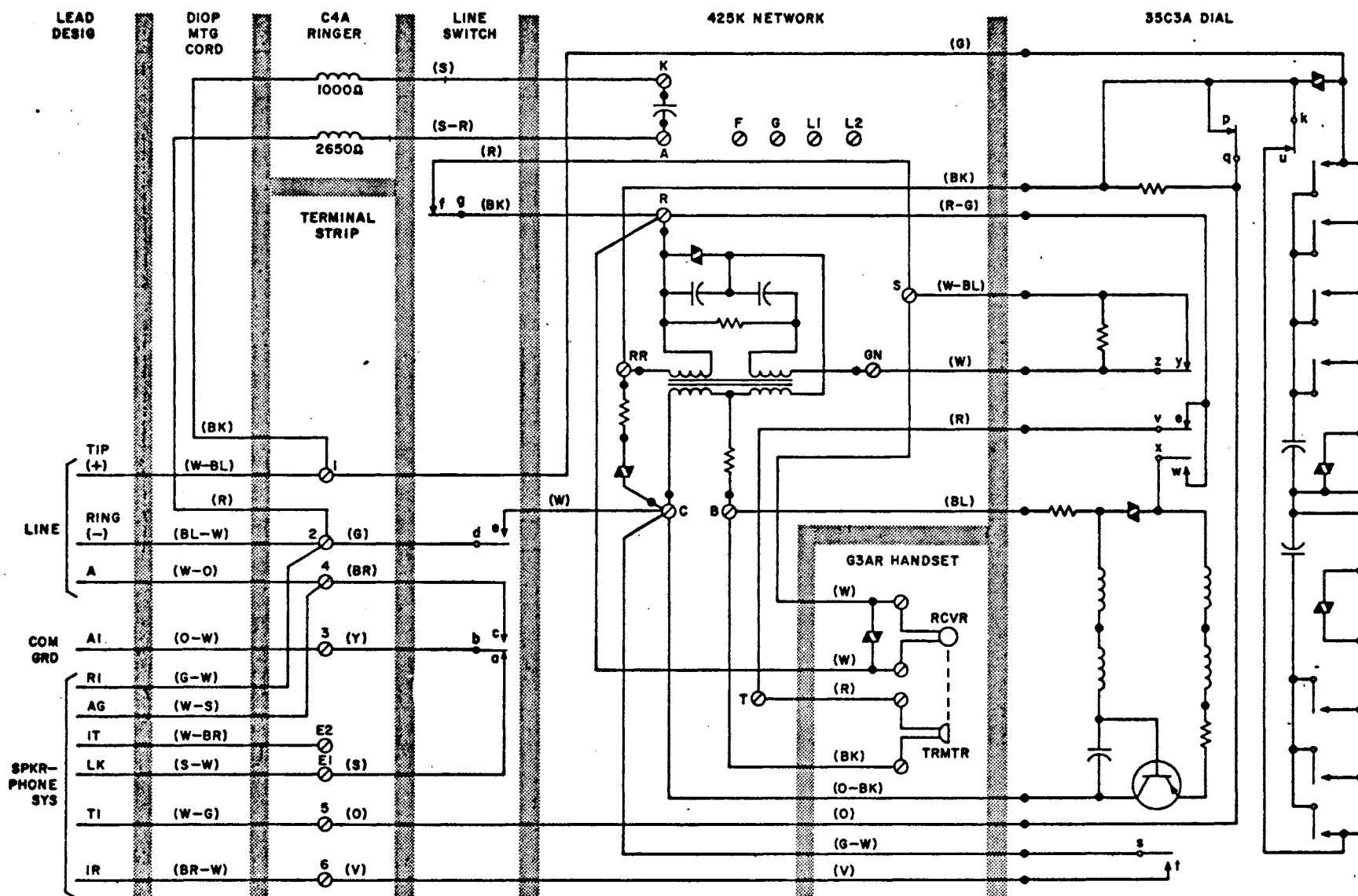
4. 1A SERVICE UNIT VOLTAGE TESTS - Operate MODE key to SU TEST position.

4.03 (4) Repeat steps (2) and (3) until tests are made at all VOLTAGE TEST switch positions. Position 11 will indicate zero unless the SPEAKERPHONE is ON.

4.05 (2) Rotate VOLTAGE TEST switch to position 2 through 10 and 12 through 16 making certain that measurements fall within limits of the green scale. For position 11 the indication will be zero unless the SPEAKERPHONE is ON.

7.01 (2) Set MODE key to DU button on the 72A Control Unit. The image on the display unit due to loopback at the equalizer or Key Telephone System shall remain the same except for a momentary change during switching.

CAUTION: Do not hold SU TEST operated except for tests specified and not more than 3 min. at a time.



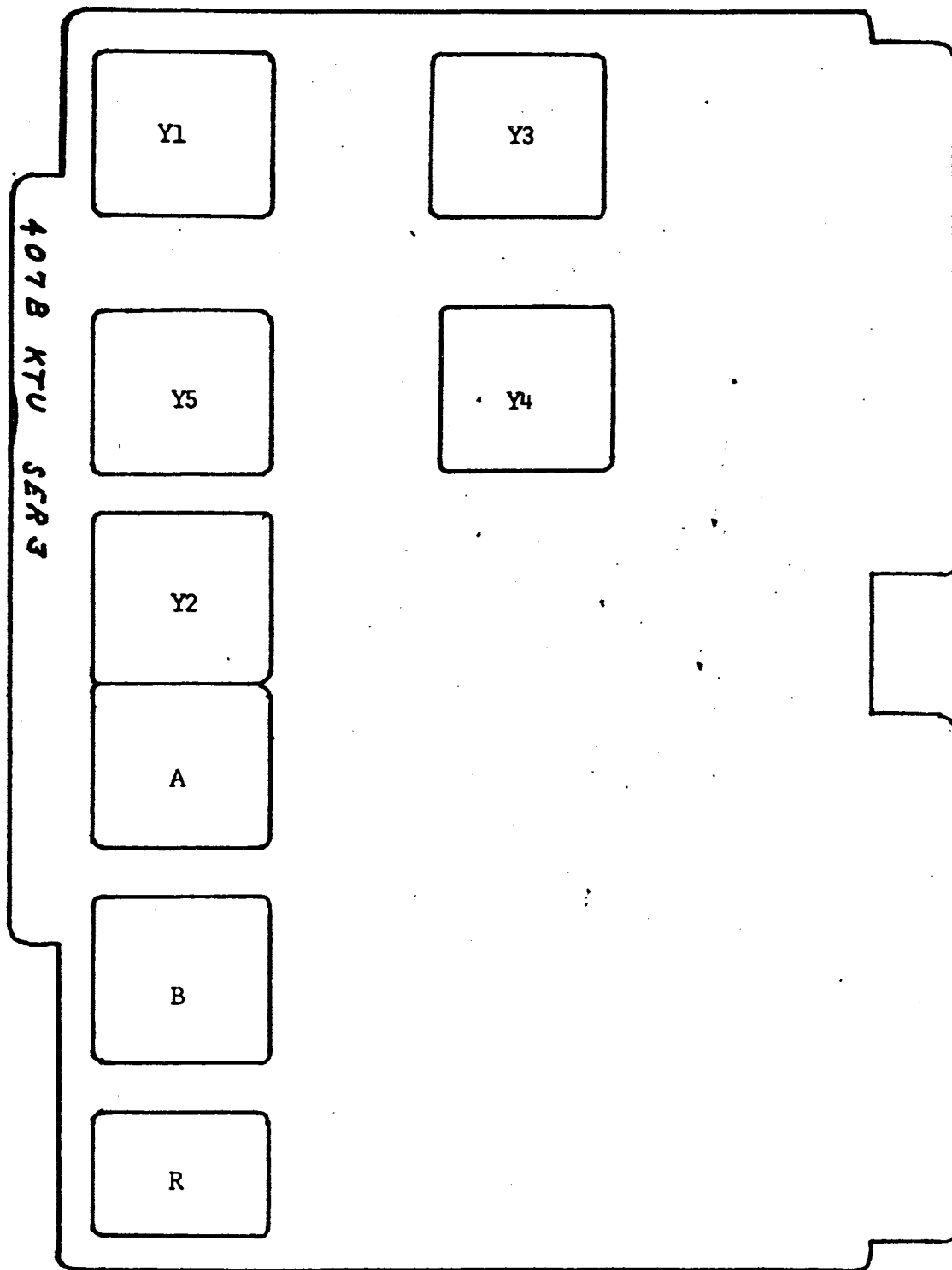
NOTES:

1. FURNISHED WITH RINGER CONNECTED FOR BRIDGED SERVICE. FOR RING PARTY MOVE RINGER (BK) LEAD FROM TERM. 1 TO TERM. 3 FOR TIP PARTY MOVE RINGER (R) LEAD FROM TERM. 2 TO TERM. 3.
2. TO PERMANENTLY SILENCE RINGER REMOVE (S-R) FROM TERM. A AND STORE ON TERM. 6.

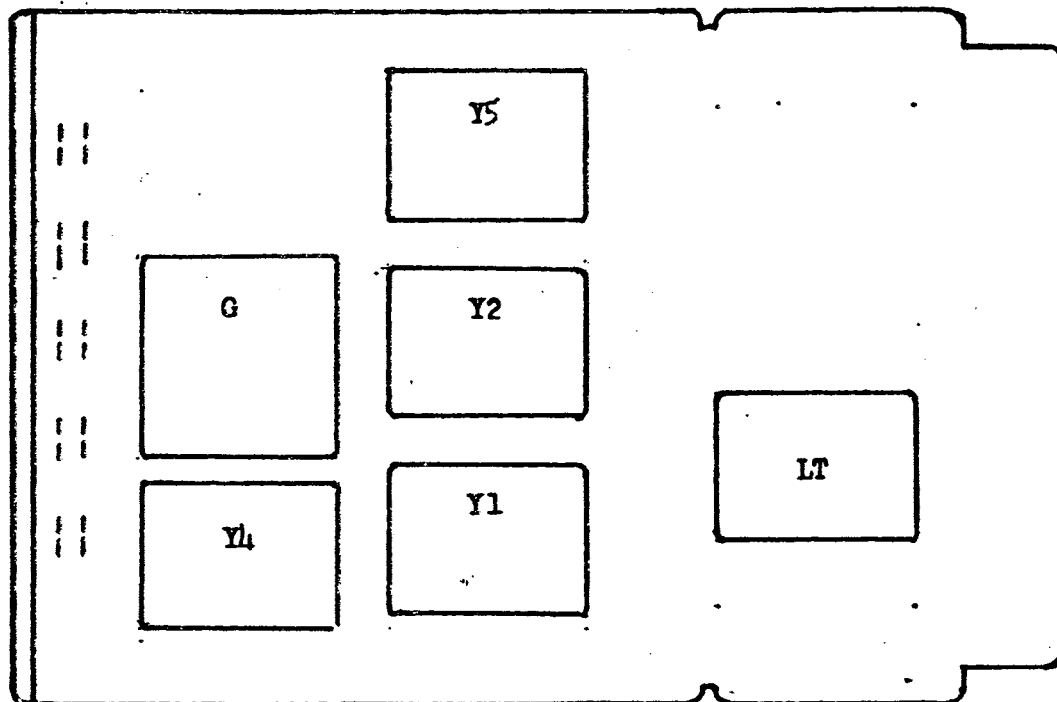
3. LINE SWITCH OFF HOOK SEQUENCE:
bc CLOSSES ab OPENS
de CLOSSES fg OPENS
4. REFER TO TABLE E FOR STATION BUSY LAMP MODIFICATION.

Fig. 2—2500S Telephone Set, Connections

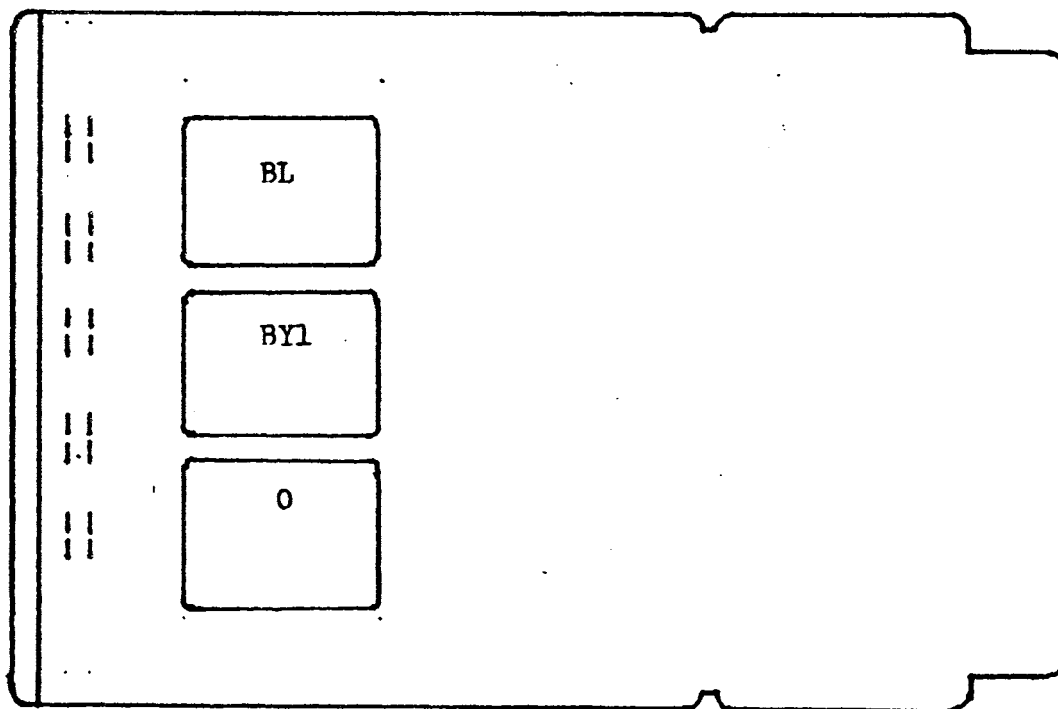
407B KTU



422B KTU



423A KTU



425B KTU

425B KTU SER 1

LT1

L

LT2

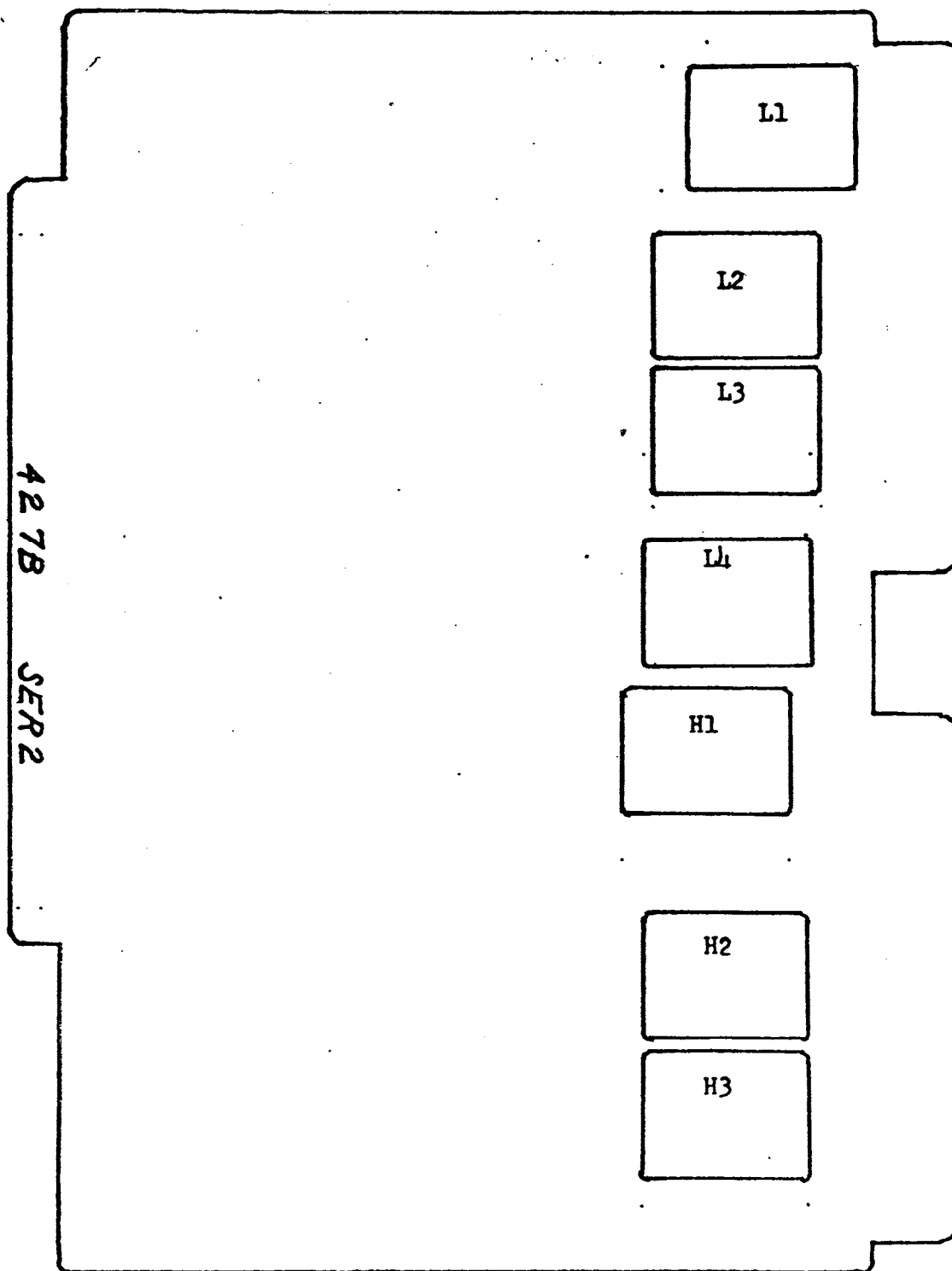
YL1

LT3

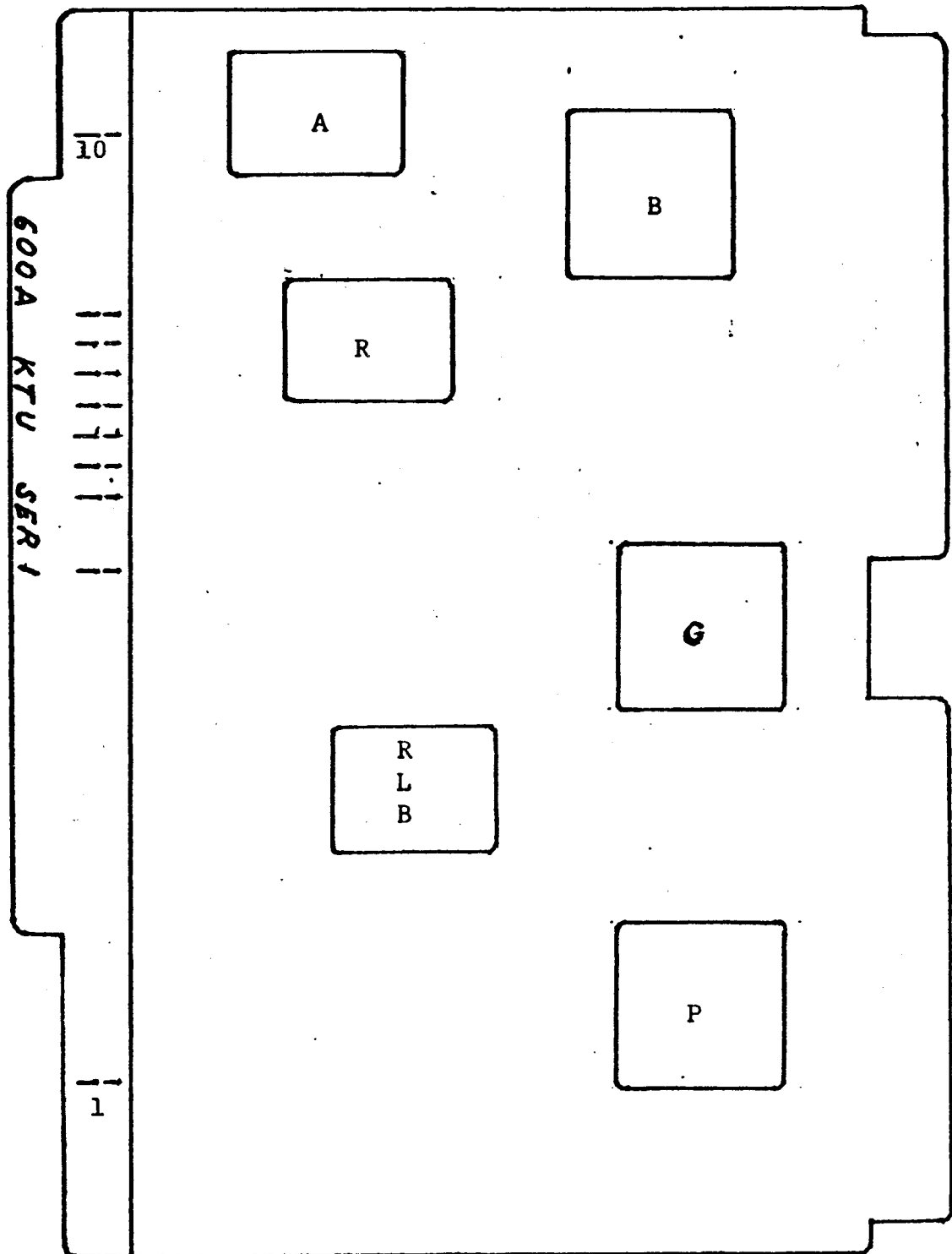
BY1

LT4

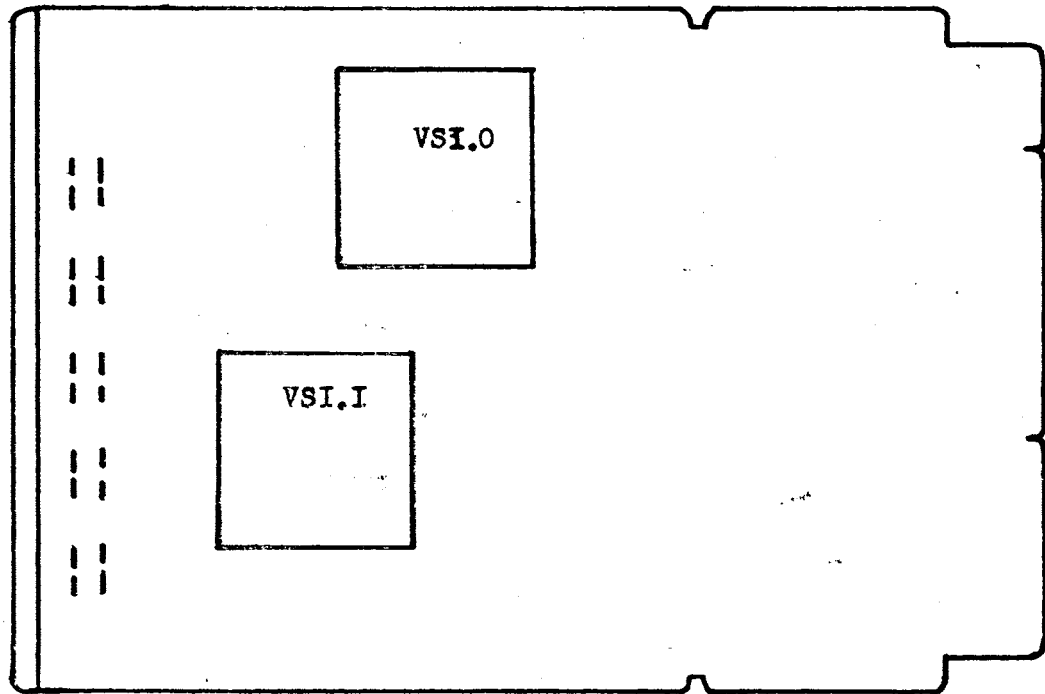
427B KTU



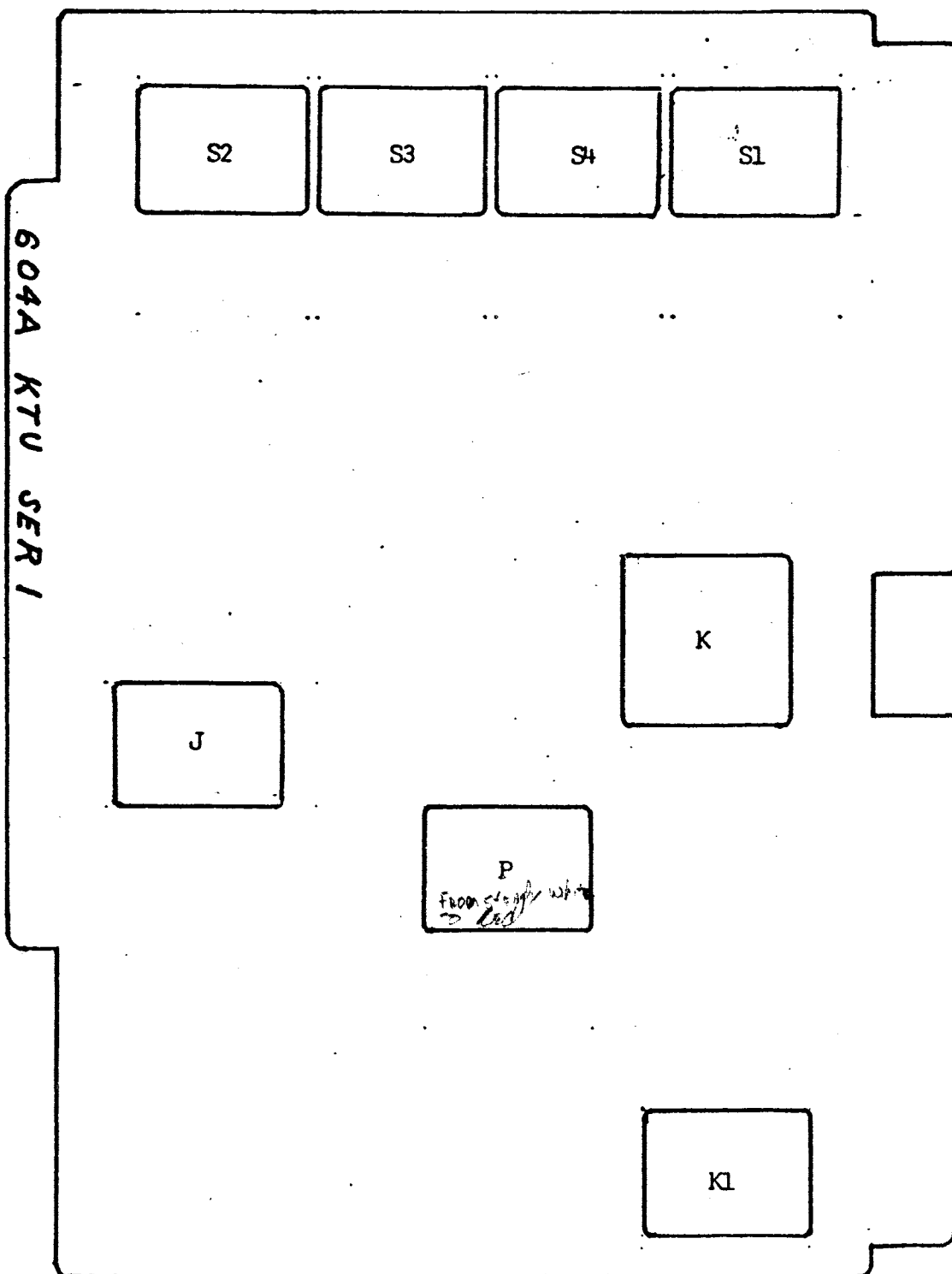
600A KTU



601 A KTU



604A KTU



605A KTU

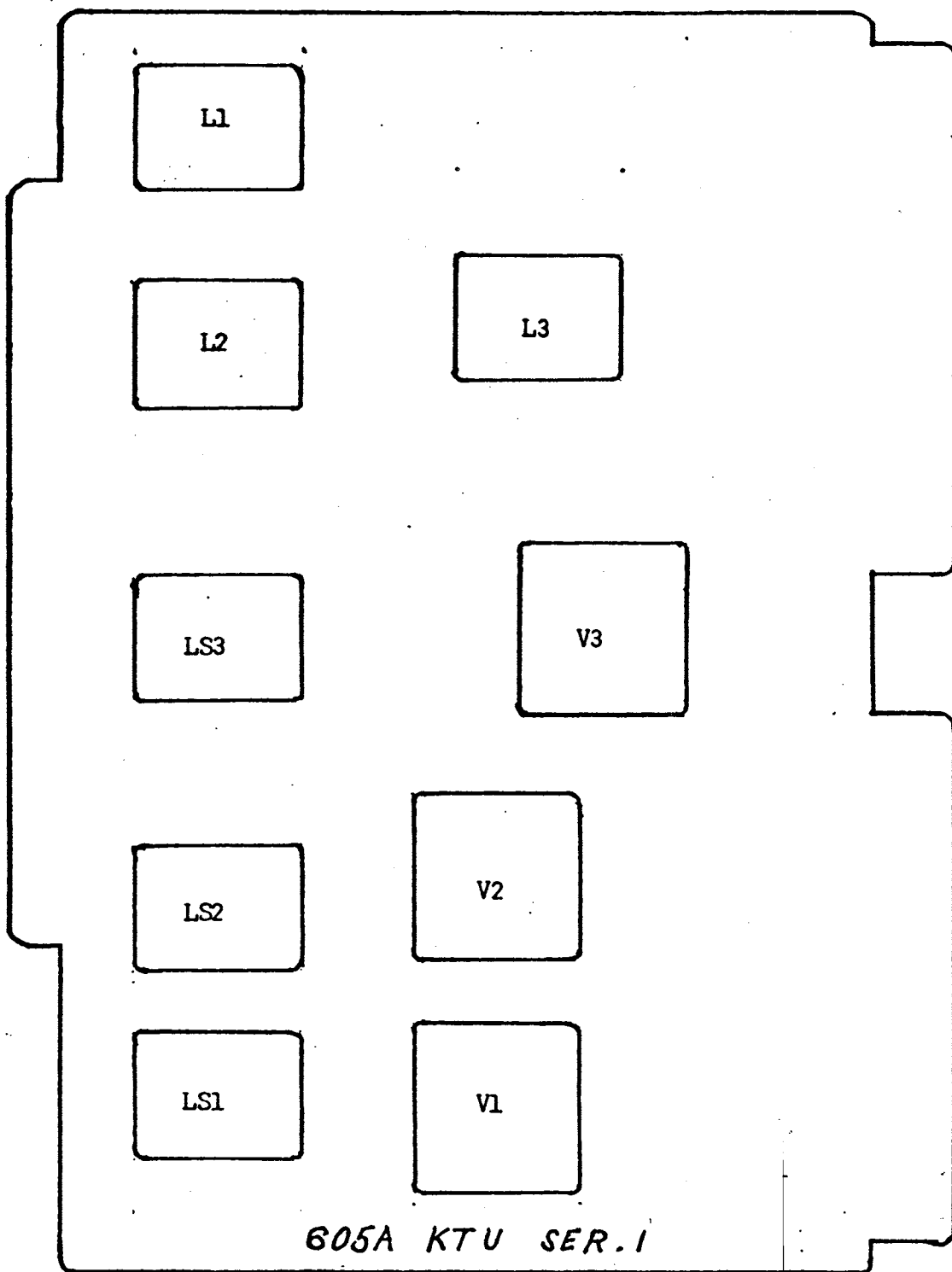


TABLE B

COMPONENT SELECTION FOR 1A SERVICE UNIT

SECTION 518-800-100

TYPE OF INSTALLATION	CIRCUIT PACKS	NETWORK		CABLE LENGTH BETWEEN SERVICE UNIT AND NEXT CABLE EQUALIZER			
				D TYPE I.W. 22 GAUGE	D TYPE WIRE 24 GAUGE	252A SWITCH- BOARD CABLE 24 GAUGE	
STATION ASSOCIATED WITH 1P2 KEY TELEPHONE SYSTEM	FW1 <						

Note 1: Screw switch option; C = closed, O = open.

Note 2: Used only when distance from 1P2 Key Telephone System exceeds limits of 877B network used in D position.

Preliminary
Chart 7A

Alignment of Long Video Loop (Containing Equalizers) between Key Telephone System and a Station Set - with No Line from KTS to Central Office or PBX

The alignment of an equalized video loop between a KTS and a station set when there is no line to a central office or PBX results in slightly different signal levels than when alignment is done per chart 7 of 340-200-501. In chart 7, the 606A and 607A equalizers on the central office side of the KTS are used in the alignment of KTS-station loops. The lack of these equalizers when there is no line to a central office or PBX necessitates the use of chart 7A. When this chart (chart 7A) is used, the KTS-station lines are sufficiently equalized for internal calls; but, when a central office or PBX line is added to the KTS, each equalized station line should be realigned per chart 7 to be compatible with the exchange network transmission plan. The transmission paths for equalized KTS video loops are illustrated in Figure A1.

Procedure

At KTS and station set equalizer locations:

1. Establish communications between KTS equipment and station set location.
2. Make connections at the station set, KTS, and from the KTS service unit or bay to the 69 type apparatus mounting according to the 518-800-XXX sections applicable to the equipment arrangements involved.
3. Set screw switches of the 607A and 939B equalizers according to the facility layout record card (information obtained from 860-200-200). Also close switch SW1 on the 607A.
4. Plug the equalizers into the proper mounting position.

At KTS location:

5. Prepare the CETS at the KTS location

<u>Switch</u>	<u>Position</u>
Mode	F1
Equalizer Align	Aux
Impedance	Low 100 Ω

6. Using locally prepared clip leads* and/or test connectors, connect a cord between the CETS balanced output and the video pairs (VIR/VIT) transmitting to the station. This connection should be made at the 66A terminal block appearance closest to the KTS and should be made without disconnecting the transmission pairs. See Figure A-2.

*Note: There are two options in making these clip leads:

1. Make cords similar to those provided with the CETS, but with clip leads instead of pin plugs. Such cords should be no longer than the standard test cords and should be made from the same type of wire and same type plug at the test set end.

Parts Required:#

<u>Quantity</u>	<u>Description</u>
1	H. B. Jones #S-302-CCT, 2 contact, plug, with cable clamp.
1	H. B. Jones #S-304-CCT, 4 contact, plug, with cable clamp.
10 ft.	Black, test lead wire, #20, stranded, rubber covered.
10 ft.	Red, test lead wire, #20, stranded, rubber covered.
4	Any suitable alligator clips.

#All available from an electrical supply house.

2. Make double ended clip leads out of copper wire, preferably insulated. These clip leads should be as short as practicable, but no longer than 10 inches, with alligator clips at both ends. The clip at one end is connected to the 66A terminal block and the clip at the other end is connected to the pin plug of the standard CETS test lead.

At station set cable equalizer (SSCE) location:

7. Prepare the CETS, as follows:

<u>Switch</u>	<u>Position</u>
Mode	F1
Equalizer Align	Aux
Impedance	Normal

8. Connect a cord between the CETS INPUT connector and the SSCE pin jacks TP1 and TP2. See Figure A-2.
9. Adjust potentiometer F1 on the SSCE to obtain a reading in the green region on the CETS meter.
10. Set screw switches S2R and S2T, located on the connector board of the 1A service unit, to the open position.
11. Connect a cord between the CETS BALANCED OUTPUT connector and pin jacks R0 and T0 on the connector board of the 1A service unit.
12. Set the EQUALIZER ALIGN switch on the CETS to the REMOTE position.

At KTS Location

13. Using locally prepared clip leads* and/or test connectors, connect a cord between the CETS input and the video leads VOT/VOR from the output of the 607A equalizer. This connection should be made at the 66A terminal block appearance closest to the KTS and should be done without disconnecting the transmission pairs. See Figure A-2.
14. Prepare the CETS, as follows:

<u>Switch</u>	<u>Position</u>
Mode	F1
Equalizer Align	Local
Impedance	Low 100 Ω

*See Note in Step 6.

15. Adjust potentiometer F1 on the 607A cable equalizer to obtain a reading in the green region on the CETS meter.
16. Set the MODE switch on the CETS to the F2-F6 position.
17. Set the SELECTOR switch on the CETS to the F2 position.
18. Adjust potentiometer F2 on the 607A cable equalizer to obtain a reading in the green region on the CETS meter.
19. Repeat Steps 17 and 18 for SELECTOR switch positions F3, F4, F5, and F6 to adjust potentiometers F3, F4, F5, and F6, respectively.
20. Repeat Steps 17 through 19 until the CETS meter indicates in the green region for all positions of the SELECTOR switch.

Note 1: A center line reading may not be obtainable during the first few repetitions of the procedure.

Note 2: If an indication within the green region can not be obtained for all SELECTOR switch positions after repeating the procedure approximately five to seven times, proceed to Chart 12 to isolate the trouble.

21. Set the EQUALIZER ALIGN switch on the CETS to the REMOTE position.

At SSCE location:

22. Prepare the CETS, as follows:

<u>Switch</u>	<u>Position</u>
Mode	F1
Equalizer Align	Local
Impedance	Normal

23. Adjust potentiometer F1 on the SSCE to obtain a reading in the green region on the CETS meter.

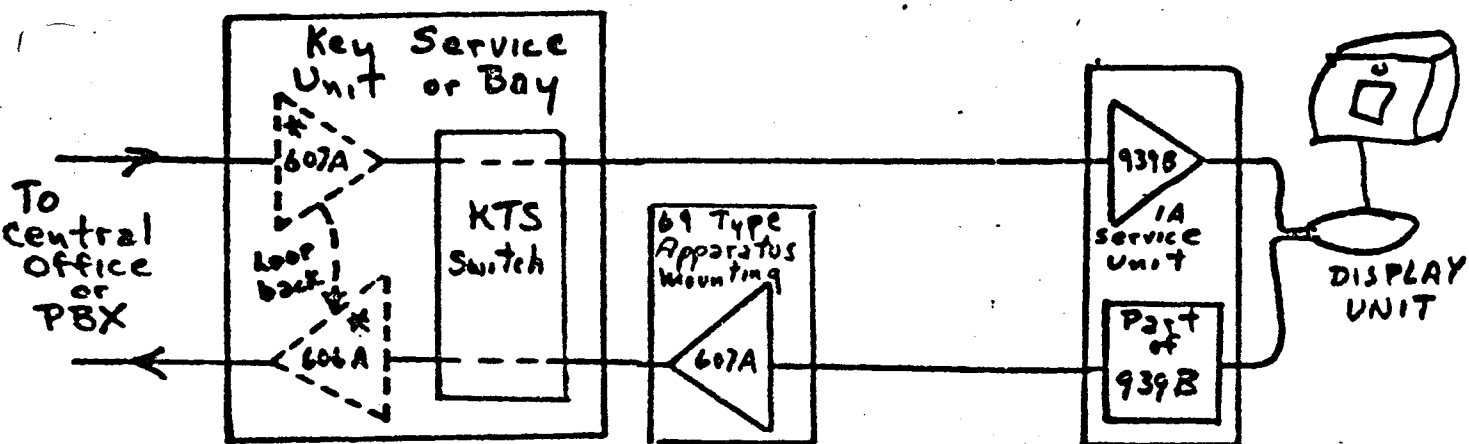
24. Set the MODE switch on the CETS to the F2-F6 position.
25. Set the SELECTOR switch on the CETS to the F2 position.
26. Adjust potentiometer F2 on the SSCE to obtain a reading in the green region on the CETS meter.
27. Repeat Steps 25 and 26 for SELECTOR switch positions F3, F4, F5, and F6 to adjust potentiometers F3, F4, F5, and F6, respectively.
28. Repeat Steps 25 through 27 until the CETS meter indicates within the green region for all positions of the SELECTOR switch.

Note: See Notes in Step 20.

29. Remove the CETS cords.
30. Operate the CETS power switch to OFF.
31. Set screw switches S2R and S2T, located on the connector board of the 1A service unit, to the closed position.

At KTS Location

32. Remove the CETS cord connections.
33. Operate the CETS power switch to OFF.
34. Perform transmission acceptance tests per 341-200-101/518-800-~~514~~ ⁵¹⁴.



* Not provided unless there is a line to a central office or PBX

Note: Each line on this sketch represents a pair of wires.

FIGURE A1 EQUALIZED KTS VIDEO LOOP

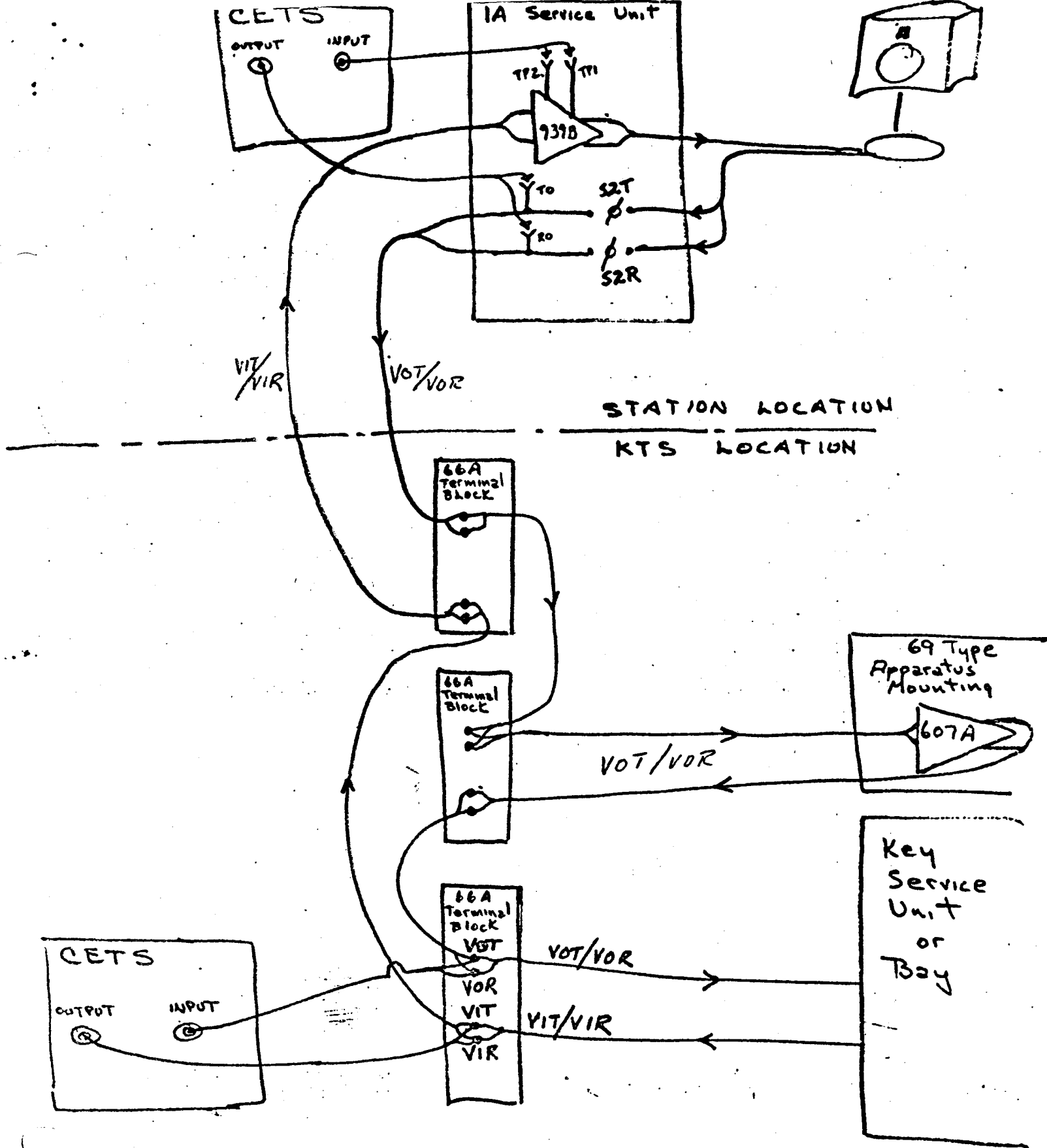


FIGURE A-2 - Cable Equalizer Test Set (CETS) - connections

The following step should be added to:

Chart 4, as step 82A

Chart 6, as step 62A

Chart 10, as step 62A

If there is no station (service unit and display unit) connected to the KTS, connect a temporary strap between pins B28 and A17 on the 600A KTU connector. This provides a loopback required for the following portion of the procedure.

Caution: Pin A17 is the -24 volt supply and should not be connected to any other point.

The following step should be added to:

Chart 4, as step 101

Chart 6, as step 74

Chart 10, as step 74

At KTS location:

If a temporary strap was placed between pins B28 and A17 of the 600A KTU to provide a loopback in the absence of a station set connection, remove the strap.