

NOV-88 CONTROL SYSTEM INSTALLATION GUIDE & N8B "MS88 Bldg" Logic Tables



NOV88 "Student Building" Equipment List for Ivie Technologies Products

Chapel "A"	CC"A"	CC"B"	Chapel "B"
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Qty	Product	Description
1	NOV-88	Logic controller
2	884+	Matrix mixers with Standard ROM firmware (NOT LDS firmware)
2	626	DSP
2	CP-884	Chapel control
2	CS-884	Satellite control
2	CC-884	Cultural Center control (In addition to supplied 78C-6)
2	IM-10	Sacrament microphones
2	78C-6	Mix bus jumper cables
3	IR-I	Infrared door sensors

SPECIAL NOTE # 1
ANSW software "Switch Type"
settings (Edit, Switch Type) for ALL
switches on 884 mixers MUST be set
to "M" momentary. Other (A) setting
WILL NOT WORK

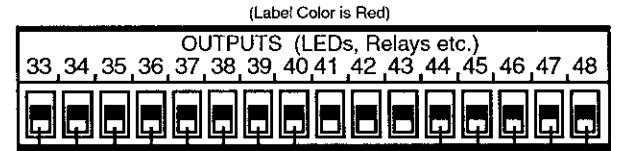
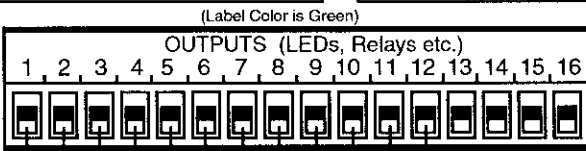
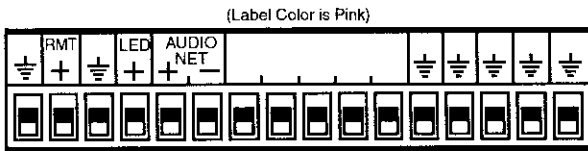
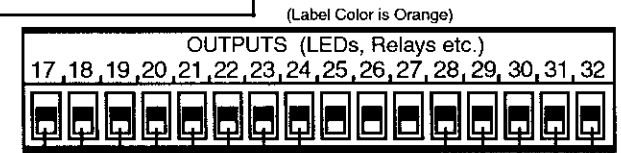
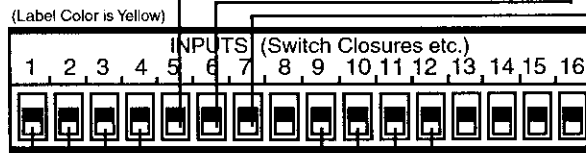
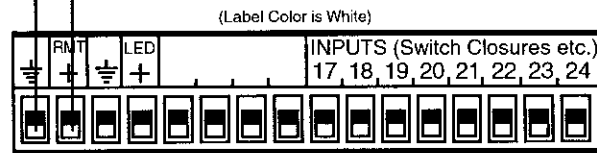
NOV88 "California MS-88" Equipment List for Ivie Technologies Products

Chapel "A"	CC "A"	CC "B"	CC "C"
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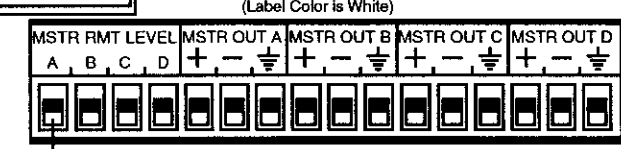
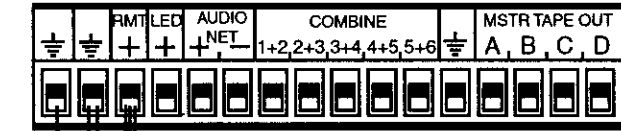
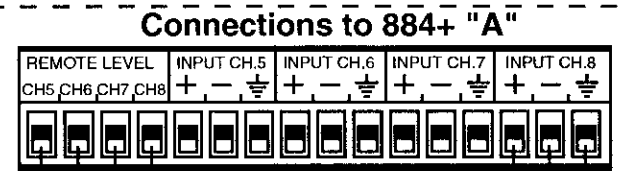
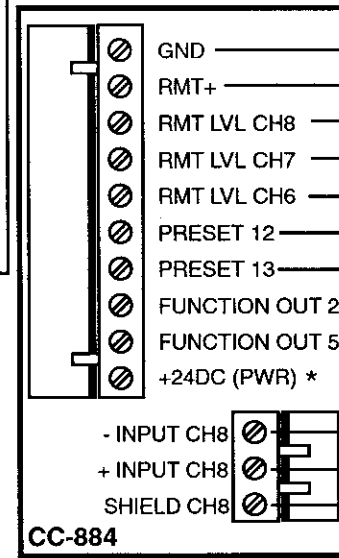
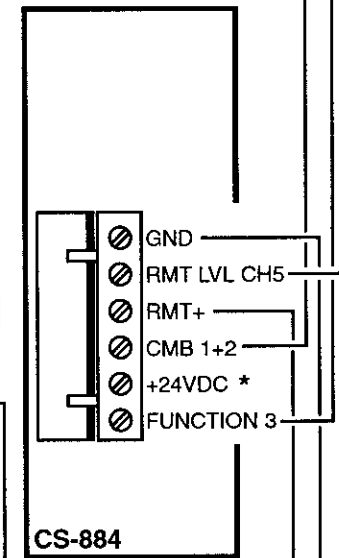
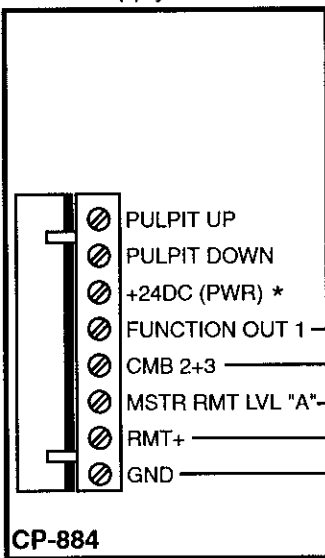
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1	CS-884	Satellite control
3	CC-884	Cultural Center control
1	IM-10	Sacrament microphones
2	78C-6	Mix bus jumper cables (In addition to supplied 78C-6)
3	IR-1	Infrared door sensors

SPECIAL NOTE # 2
On both 884+ mixers, preset # 13 should
be programmed for Auto / Manual
operation and preset # 14
should be programmed for
Satellite operation

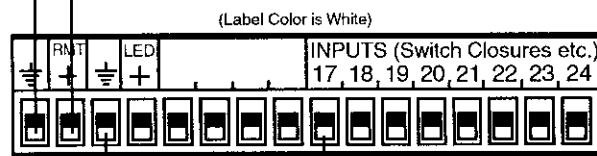
NOV-88 to Chapel and Cultural "A" Units



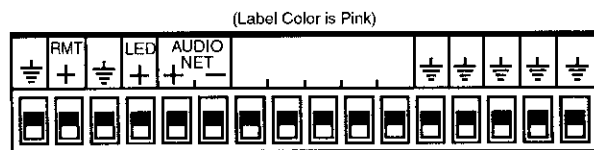
* NOTE: ALL +24VDC connections are made to the contractor supplied +24VDC power supply. Refer to the Ivie Drawing titled "Star Grounding and Power Supply."



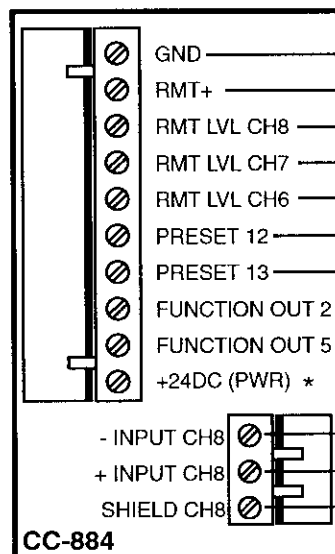
NOV-88 to Cultural "B" and "C" Units (MS-88 plan)



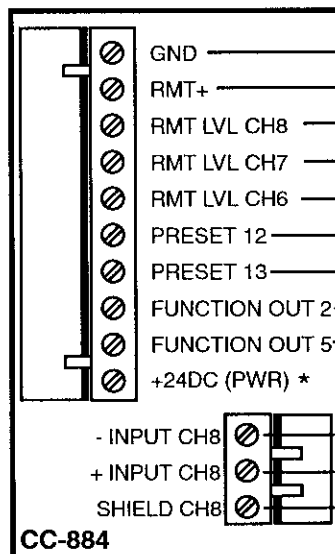
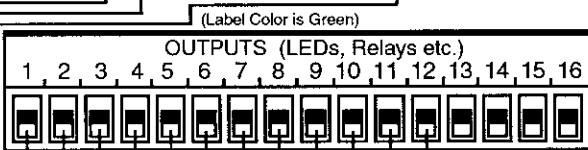
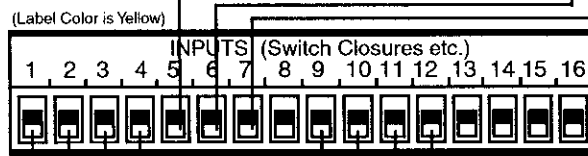
Note: This Jumper configures the NOV88 for the MS-88 Plan. Without this Jumper the NOV88 will be configured for the "Student Plan"



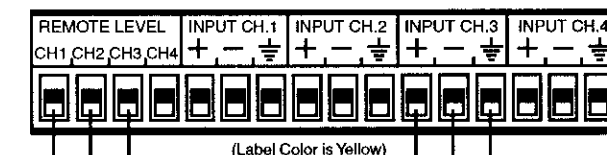
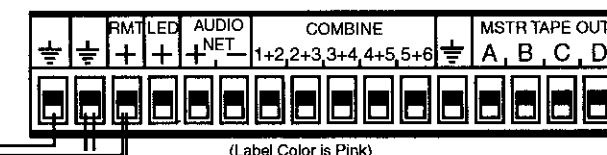
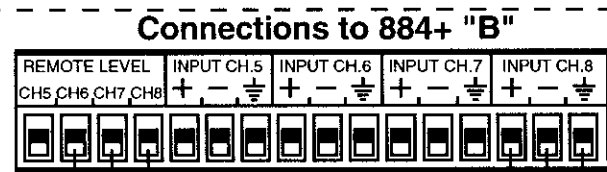
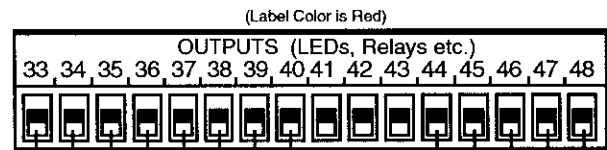
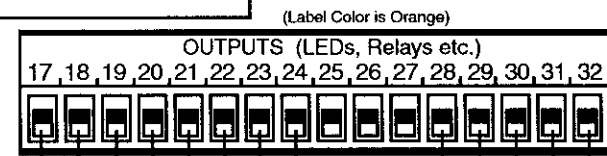
* NOTE: ALL +24VDC connections are made to the contractor supplied +24VDC power supply. Refer to the Ivie Drawing titled "Star Grounding and Power Supply." Connections



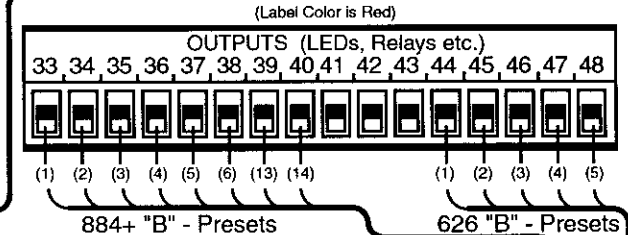
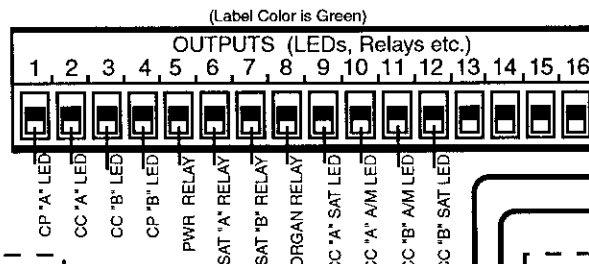
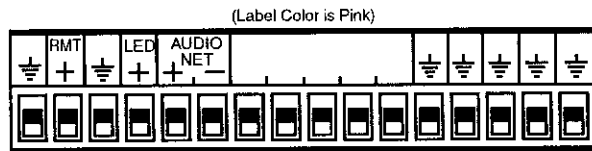
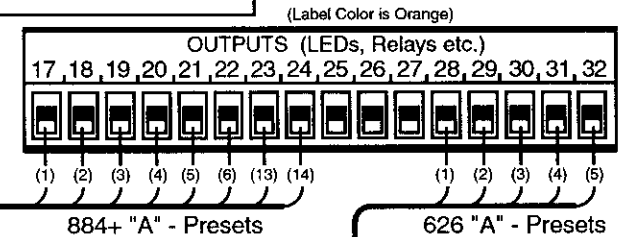
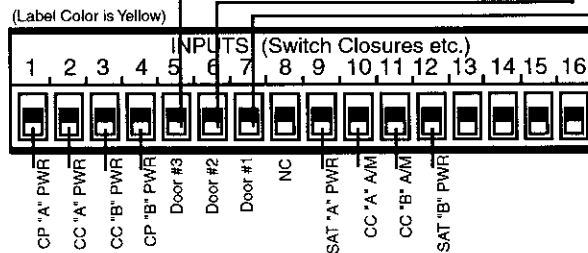
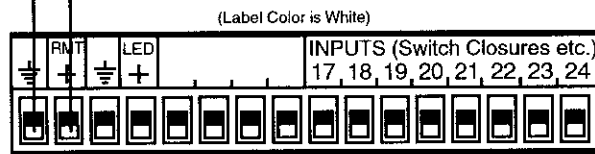
"B" Cultural Center



"C" Cultural Center

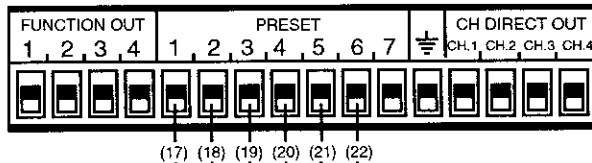


NOV-88 to "A" & "B" Preset Connections

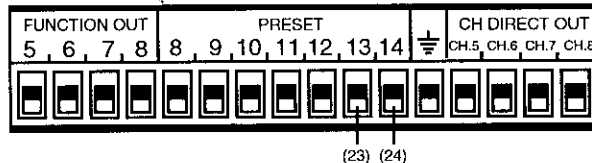


Connections to System "A"

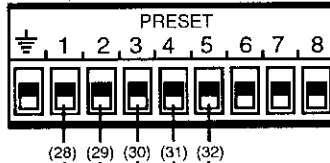
(884+ "A" Green Color Terminal Block)



(884+ "A" Red Color Terminal Block)

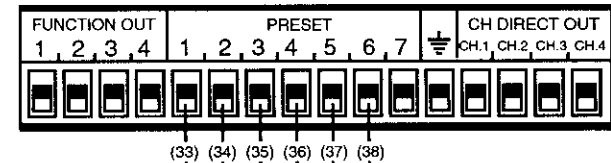


(626 "A" PRESET Terminal Block)

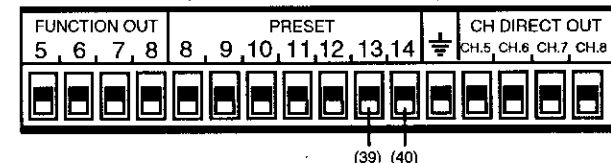


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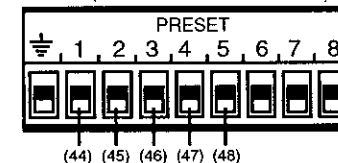
(884+ "B" Green Color Terminal Block)



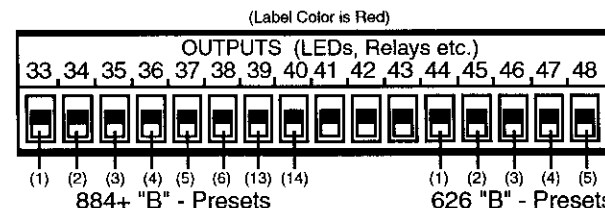
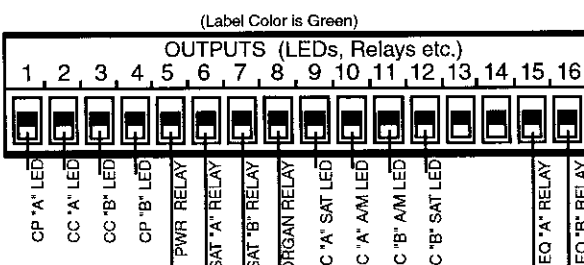
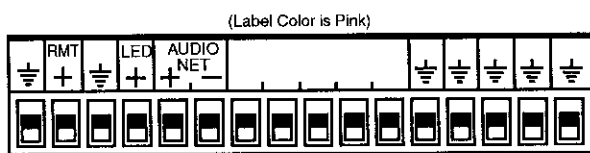
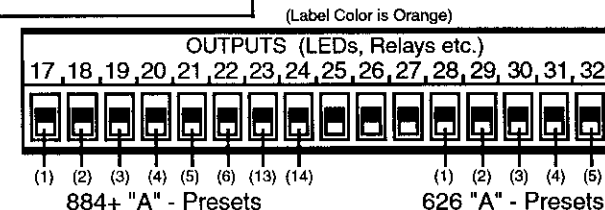
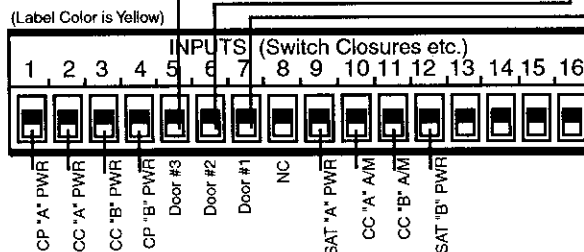
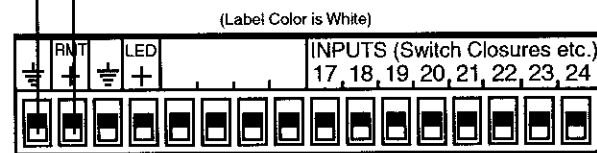
(884+ "B" Red Color Terminal Block)



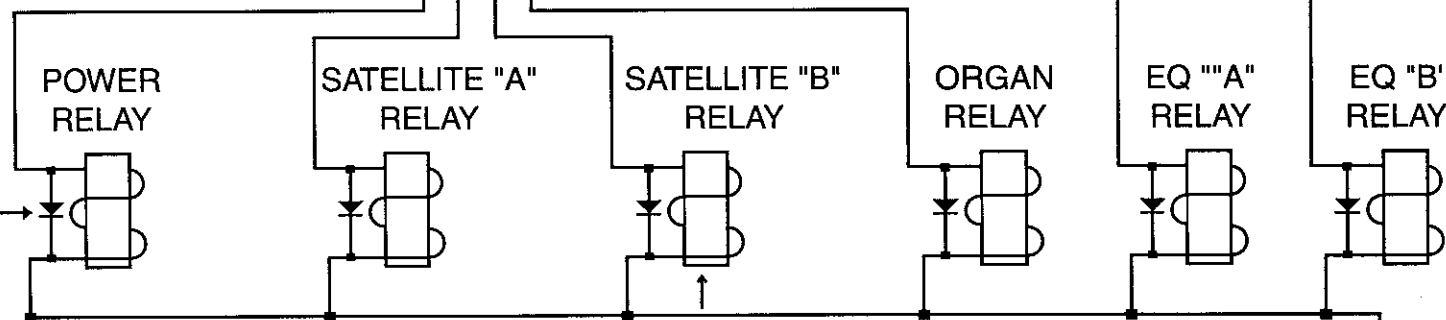
(626 "B" PRESET Terminal Block)



NOV-88 RELAY Connections



IMPORTANT NOTE: ALL RELAYS **must** have a "snubber" diode placed across the coil connections as shown. This diode must be a 1N4001 or any diode with a greater PIV and equal current rating. FAILURE TO USE THE PROPER DIODE WILL CAUSE DAMAGE TO THE NOV88 WHICH WILL REQUIRE NON-WARRANTY FACTORY SERVICE



Only required in the "Student" plan. Not used in the "MS-88" plan.

To +24 Vdc of power supply

Star Grounding
- a star grounding system **MUST** be employed for proper operation.

Ground Link In Place
(Connected)

NOV-88 Controller

78C-6 Jumper cables.
4 required

Ground Link
Removed

884+ Mixer

Must have Standard 884+ ROM
(NOT LDS ROM)

Ground Link
Removed

884+ Mixer

Must have Standard 884+ ROM
(NOT LDS ROM)

Ground Link
Removed

626 DSP

Ground Link
Removed

626 DSP

24Vdc power supply,
contractor supplied

To +24VDC CP-884 "A"
To +24VDC CS-884 "A"
To +24VDC CC-884 "A"
To +24VDC CP-884 "B"
To +24VDC CS-884 "B"
To +24VDC CC-884 "B"
To PWR Relay
To SAT "A" Relay
To SAT "B" Relay
To Organ Relay

The negative terminal of the 24 Vdc power supply **MUST** be connected to the Star Ground on the NOV88. Either the Audio Gnd or Chassis Gnd of the NOV88 may be used for this connection

**Star Grounding &
Power Supply**

Ivie Technologies

NOV88

AudioNet Controller

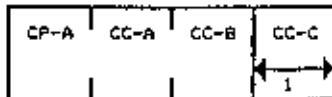
CP-CC-CC-CC Logic Tables

(“N8B” – Calif MS-88 Building)

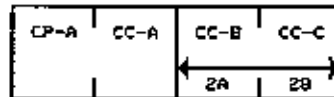
8/25/2000 – Rev 3



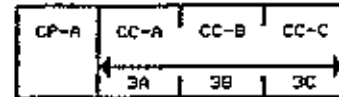
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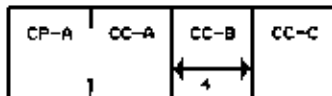
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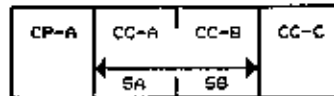
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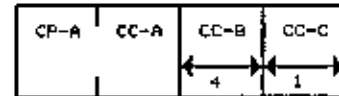
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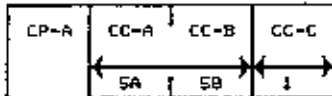
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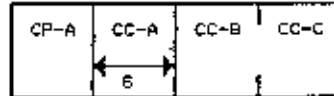
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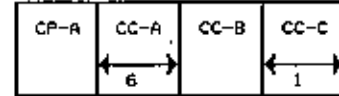
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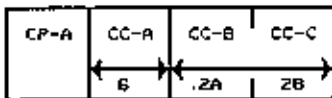
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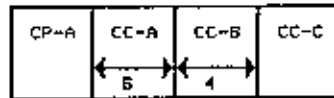
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Mode - 10



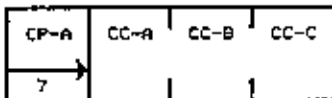
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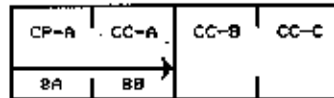
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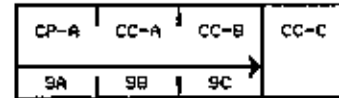
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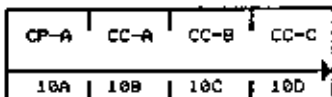
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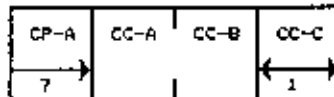
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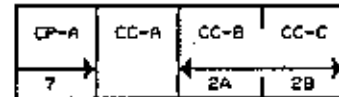
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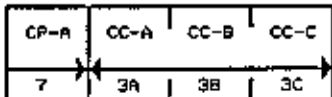
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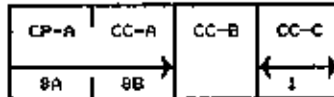
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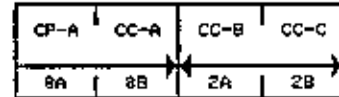
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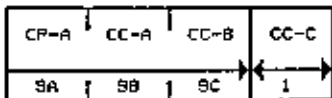
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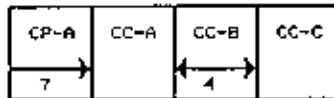
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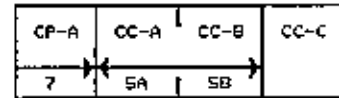
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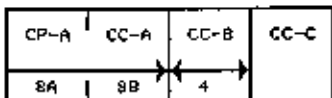
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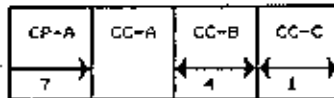
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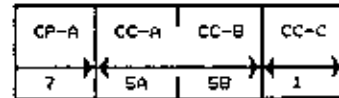
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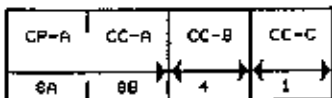
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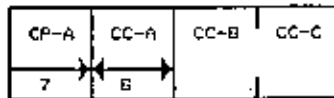
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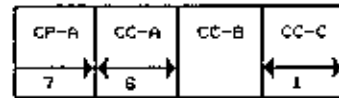
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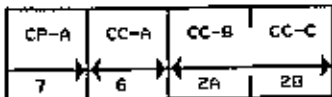
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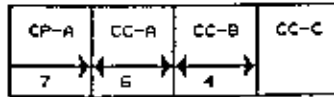
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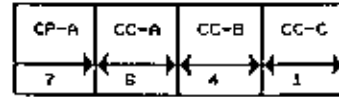
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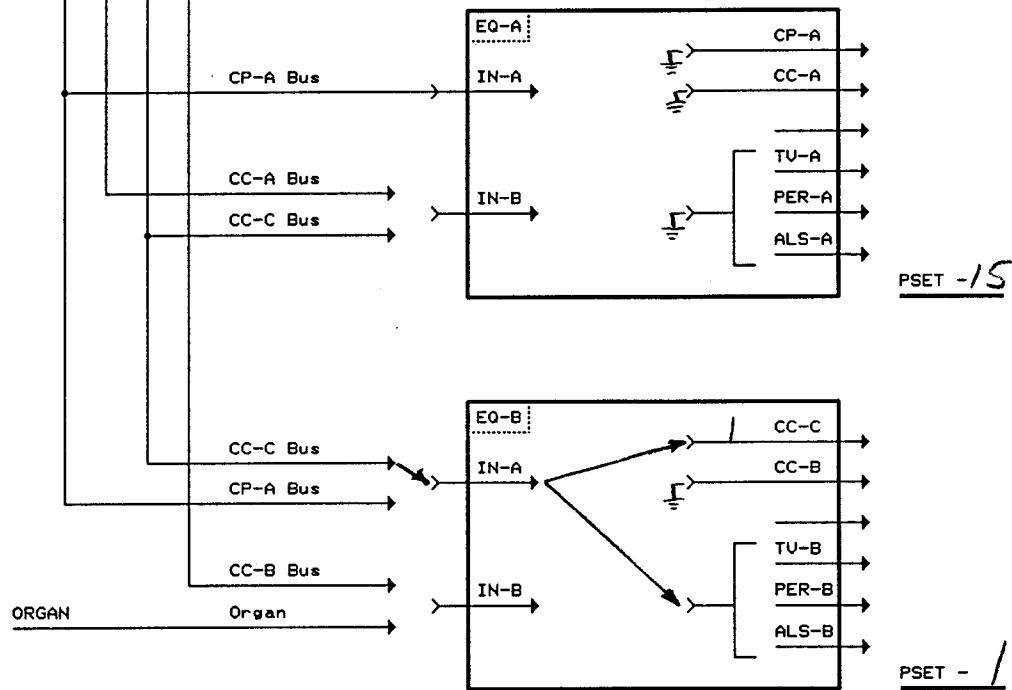
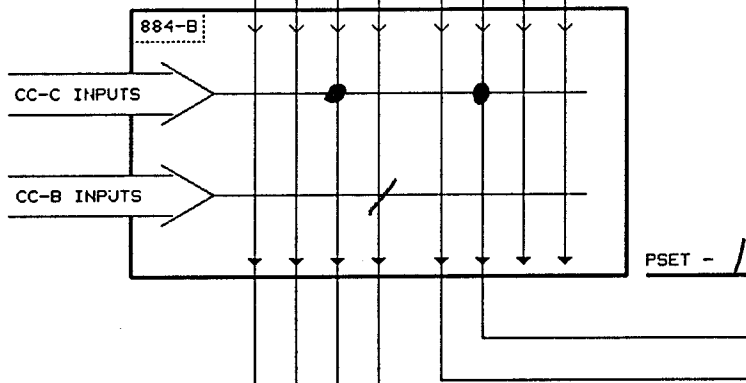
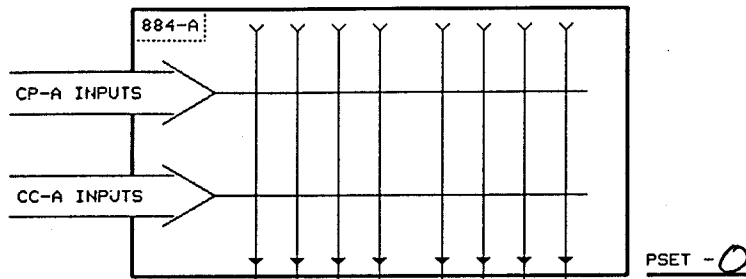
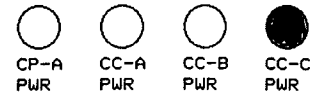
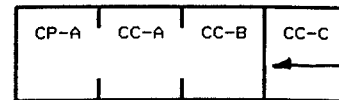


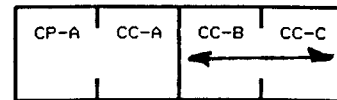
Mode - 32



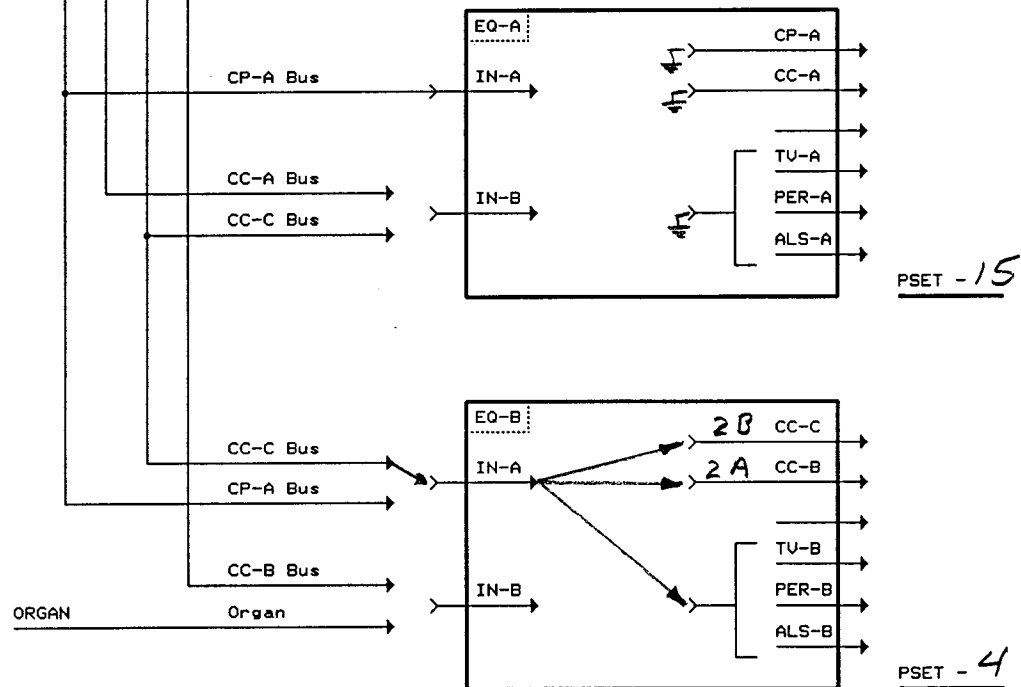
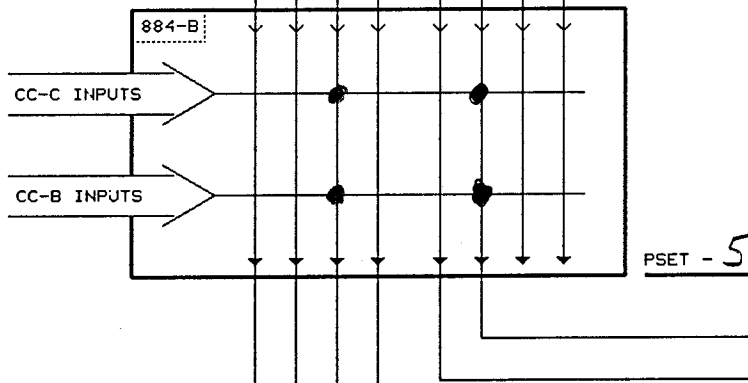
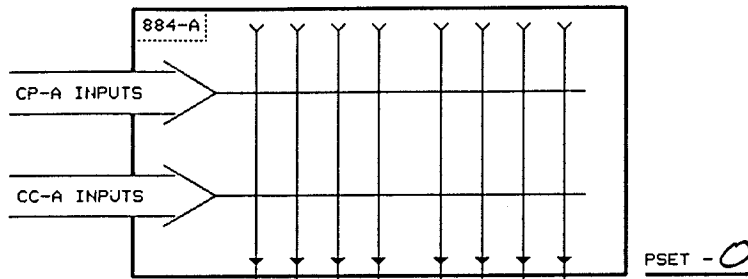
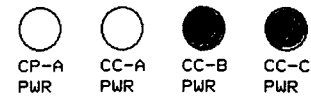
Mode - 33

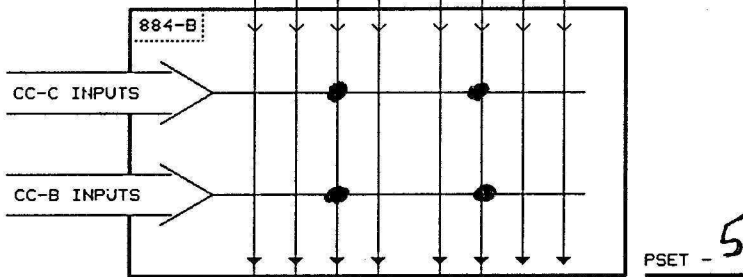
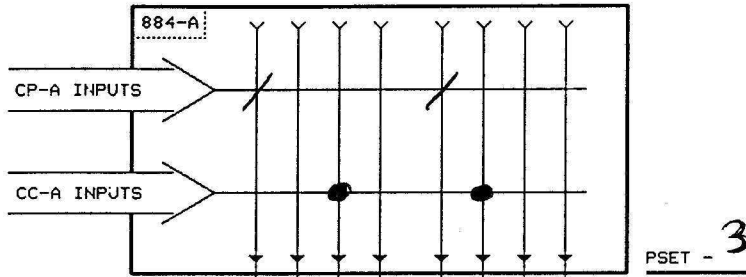
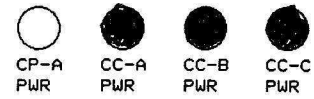
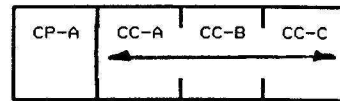






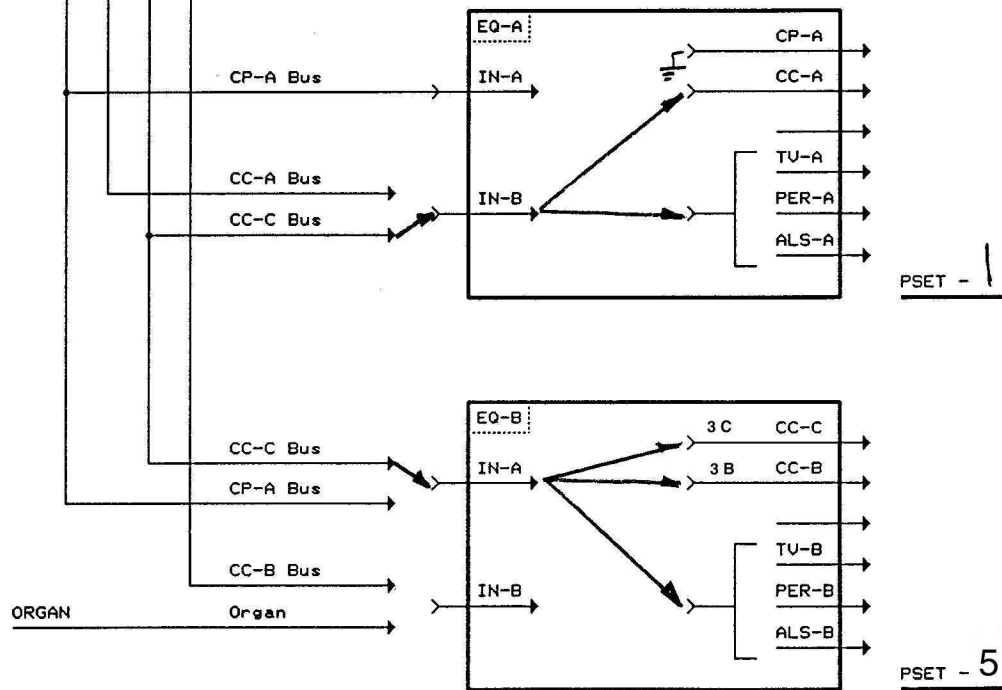
MODE - 2

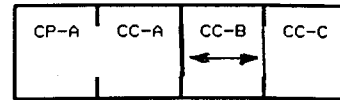




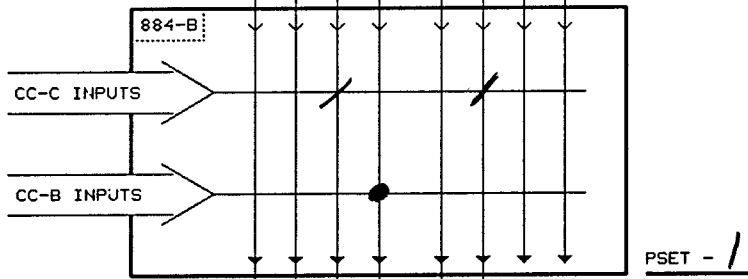
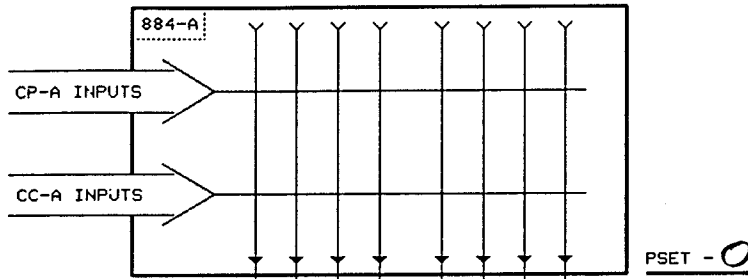
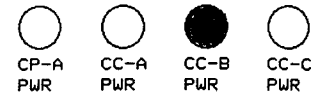
RECORD-B

RECORD-A



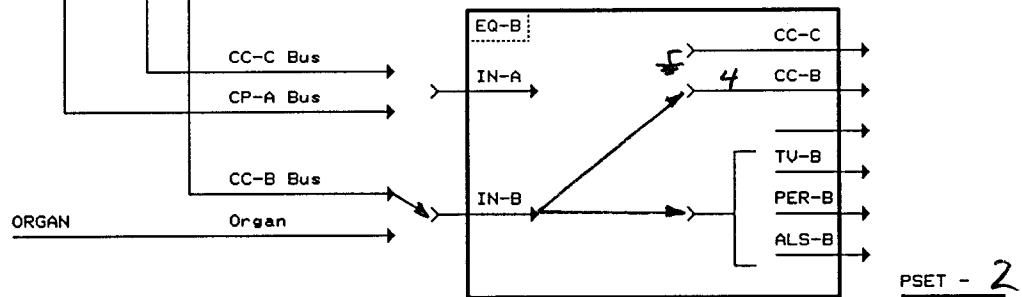
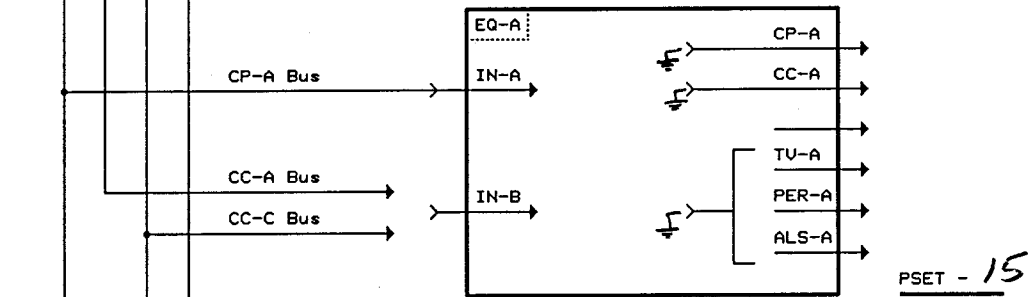


MODE - 4



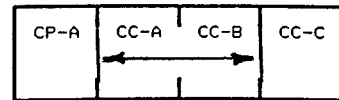
RECORD-B

RECORD-A

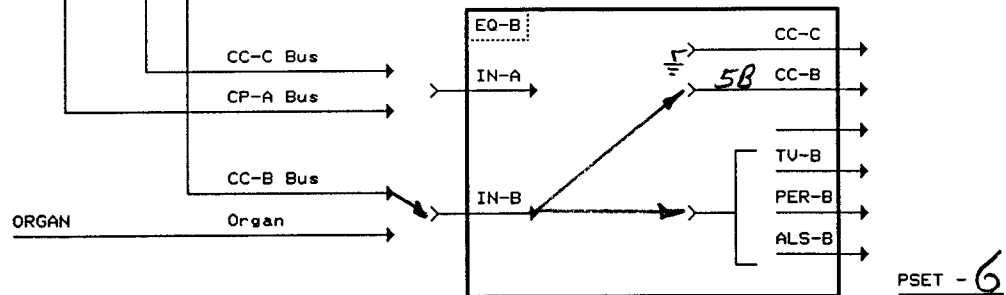
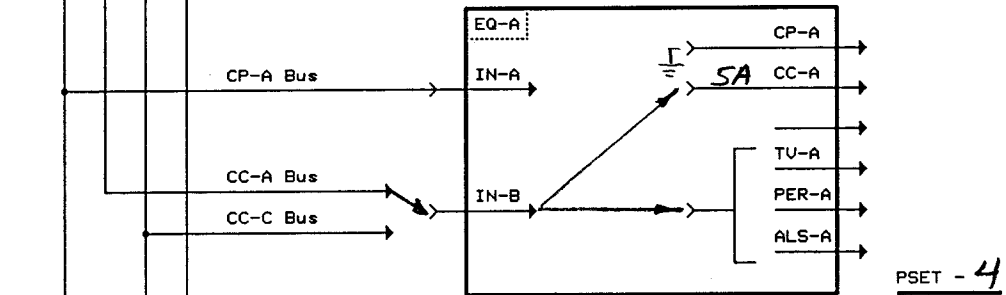
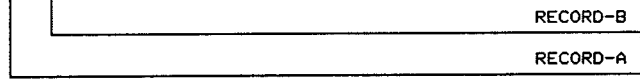
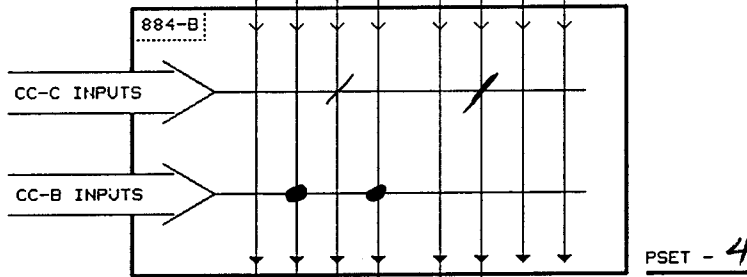
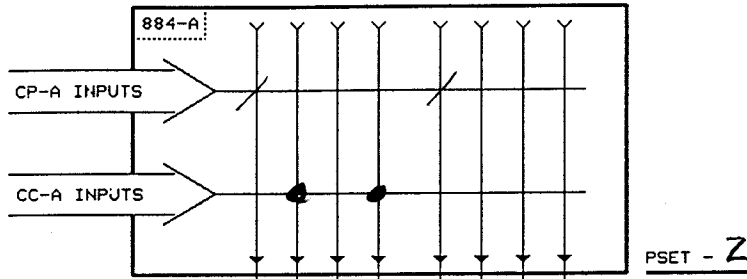
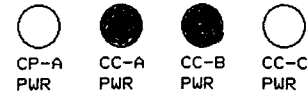


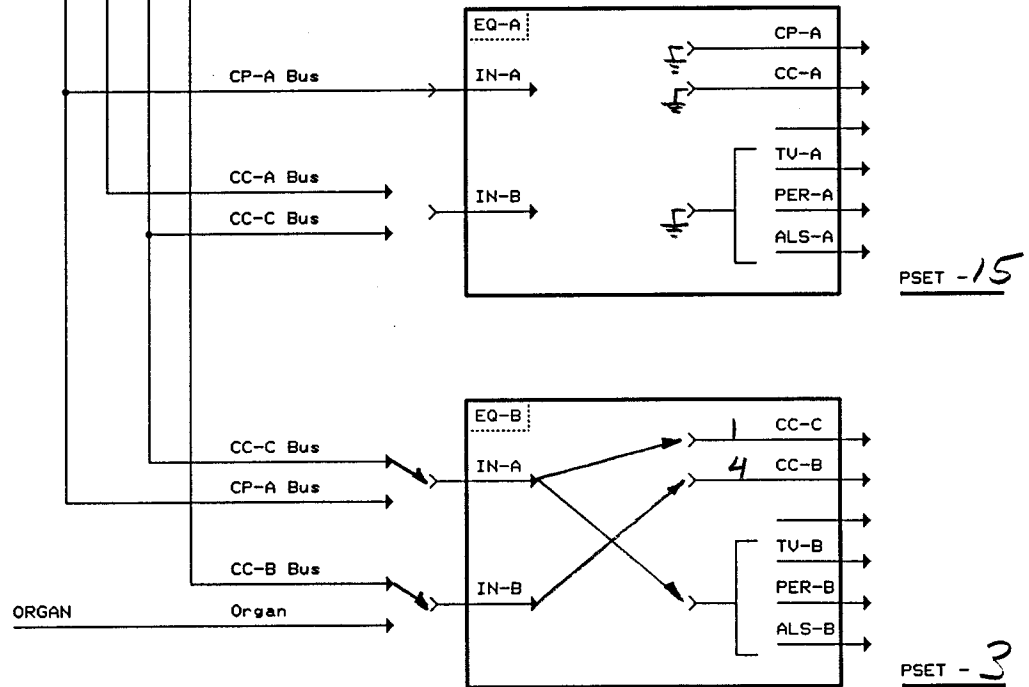
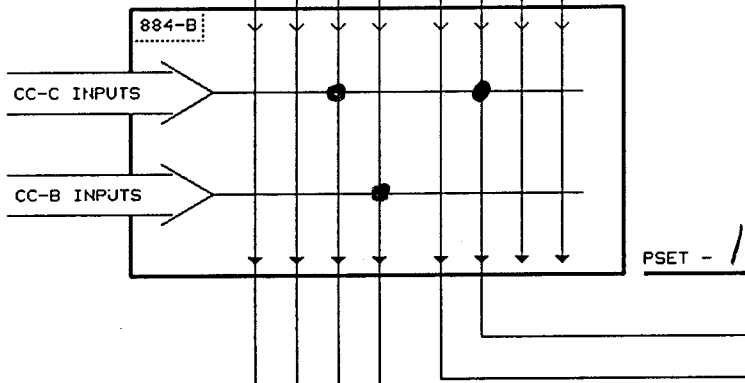
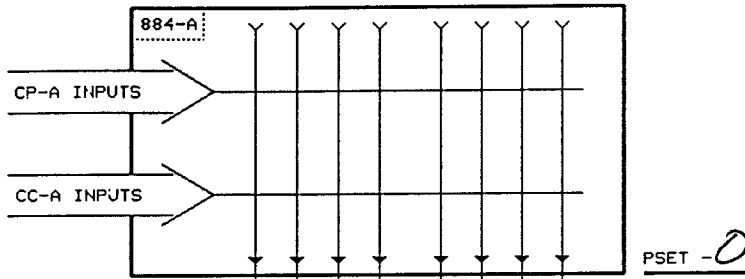
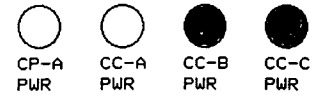
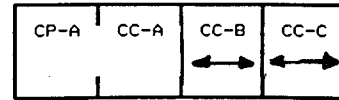
ORGAN

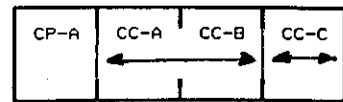
Organ



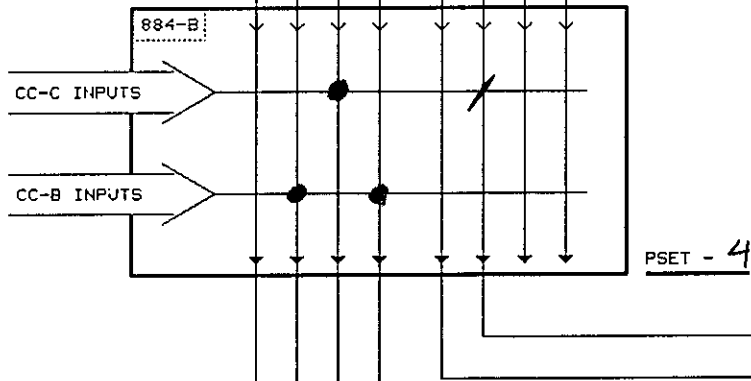
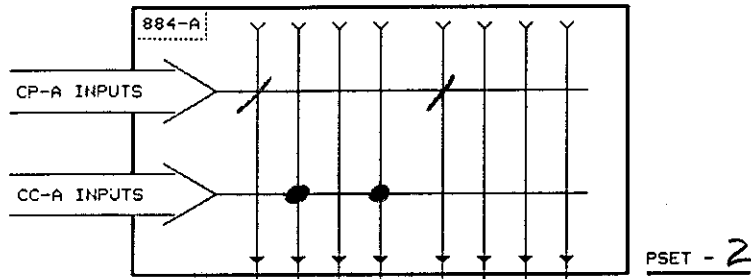
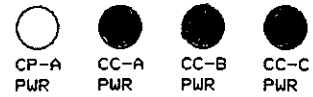
MODE - 5



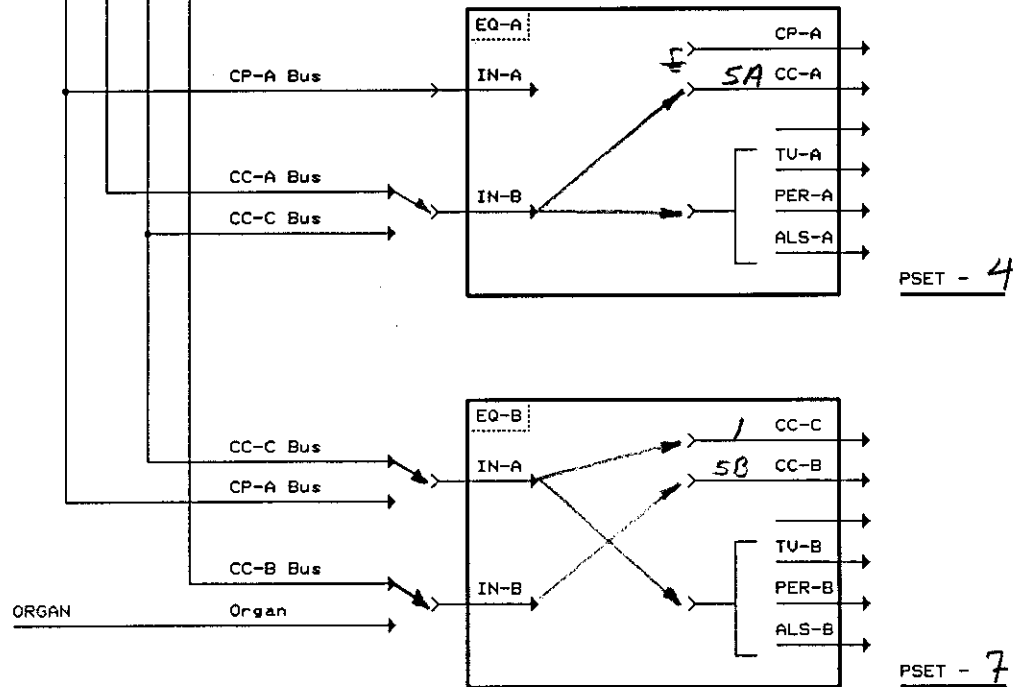


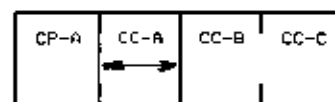


MODE - 7

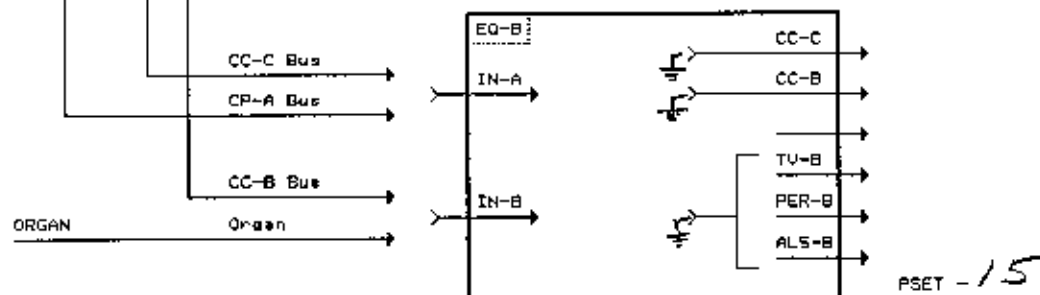
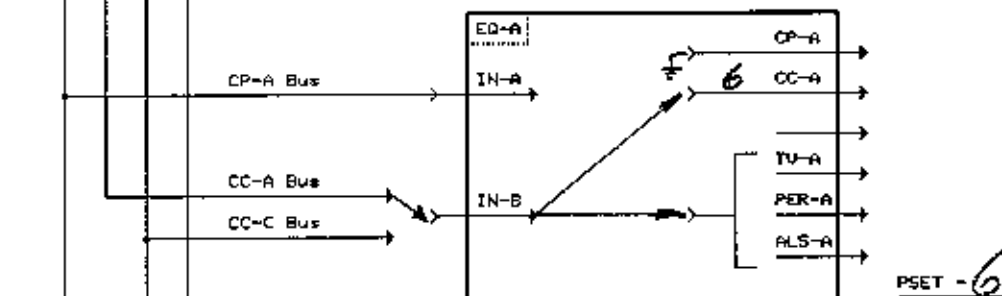
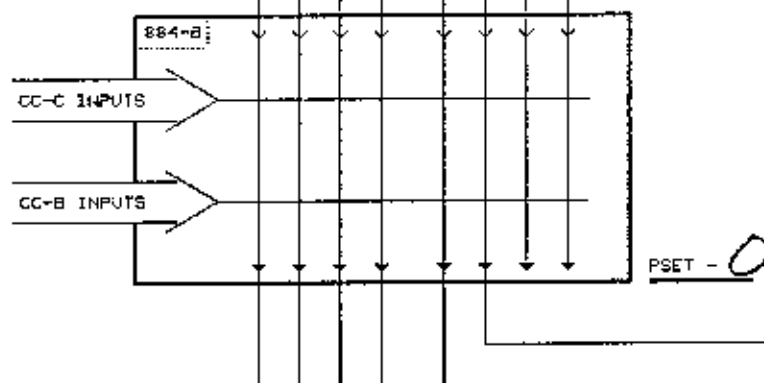
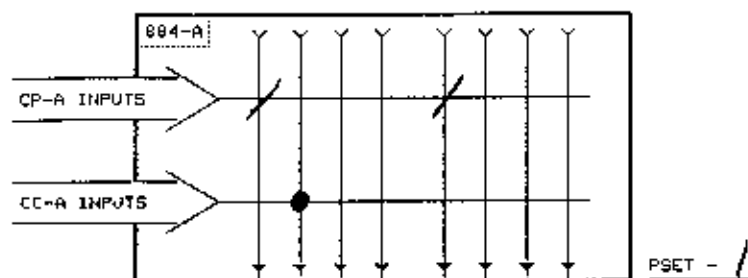
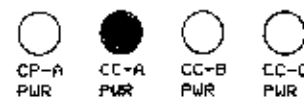


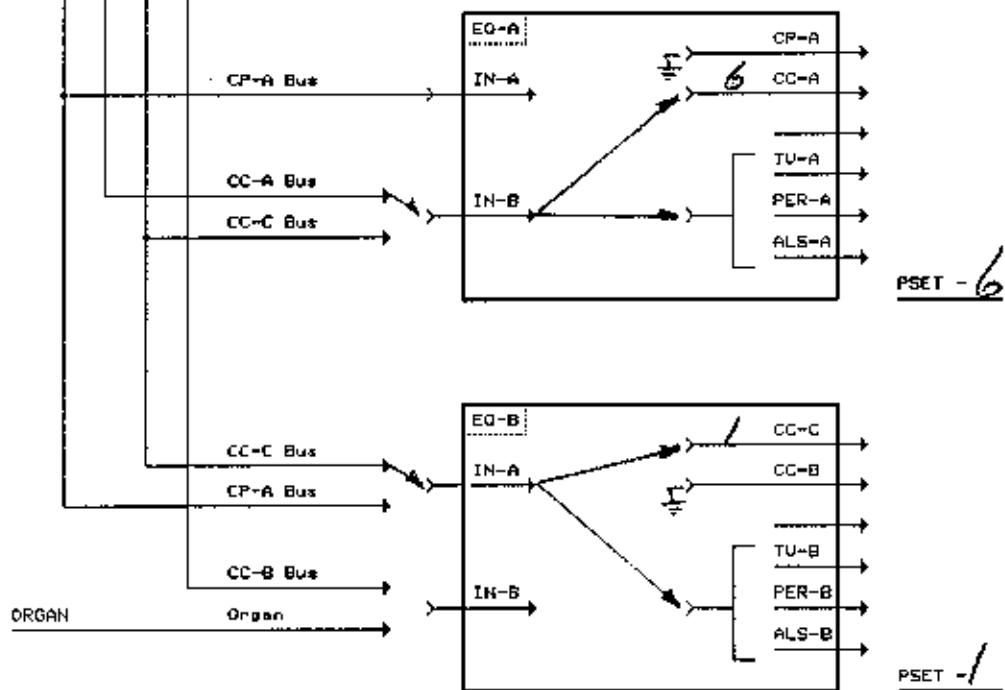
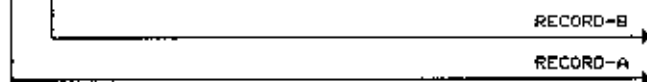
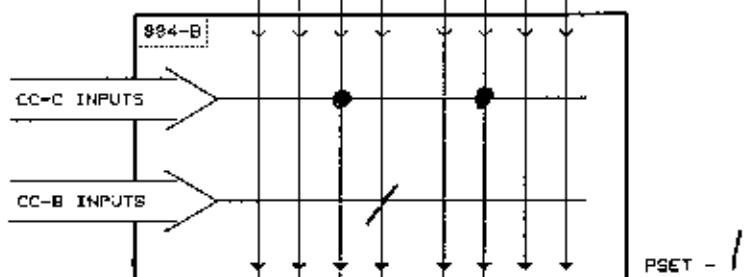
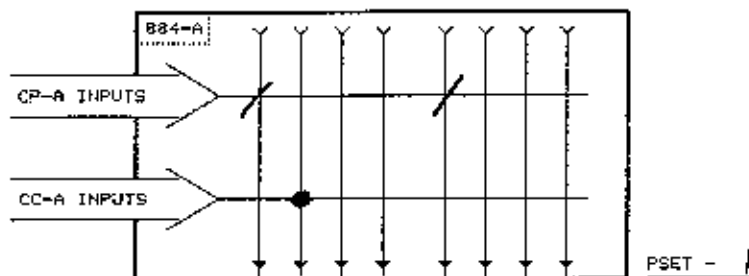
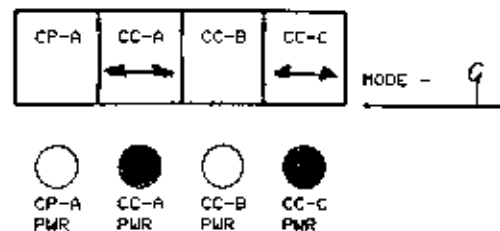
RECORD-B
RECORD-A

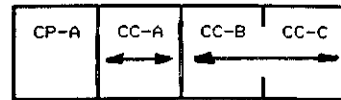




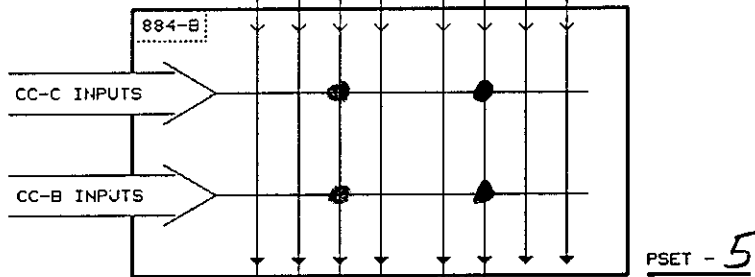
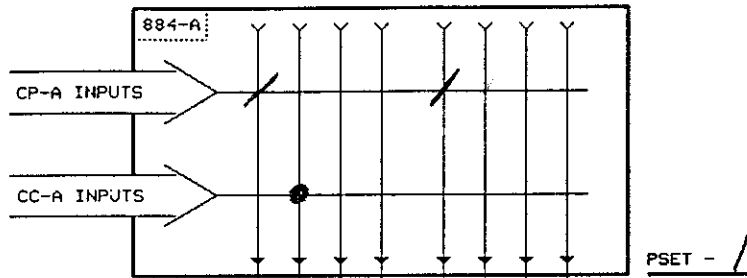
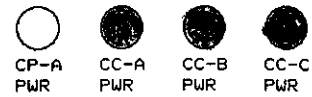
MODE - 8



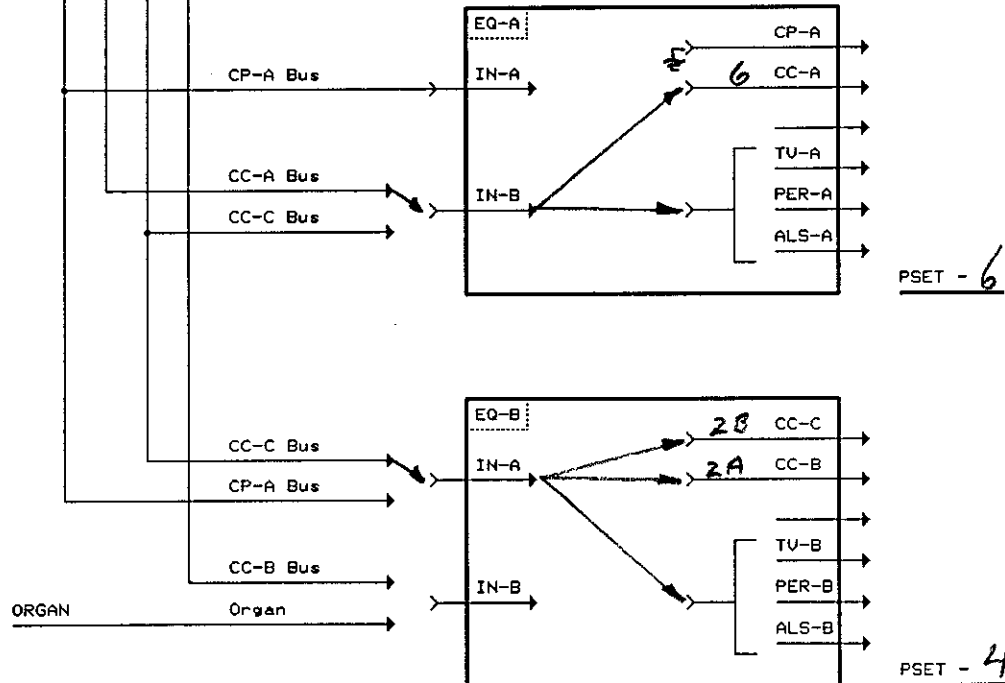


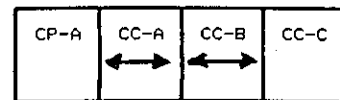


MODE - 10

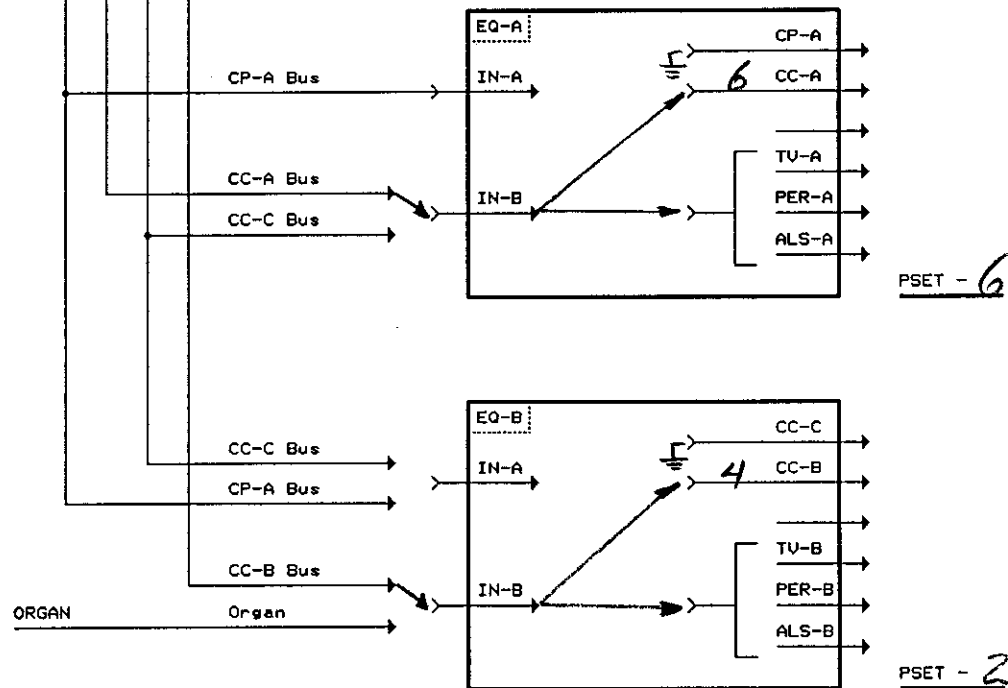
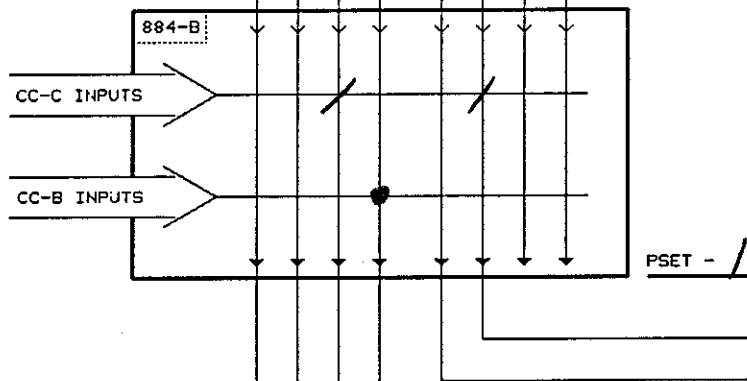
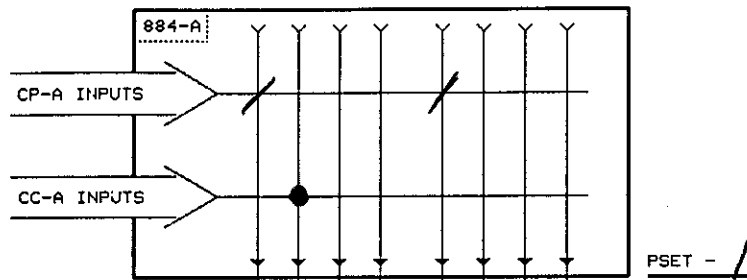
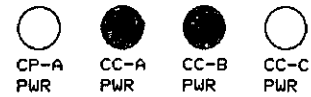


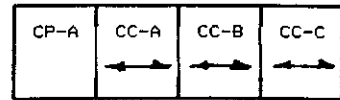
RECORD-B
RECORD-A



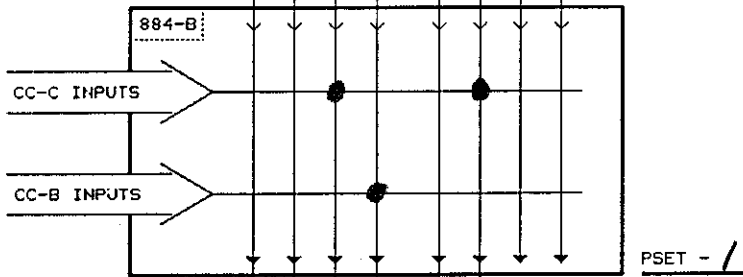
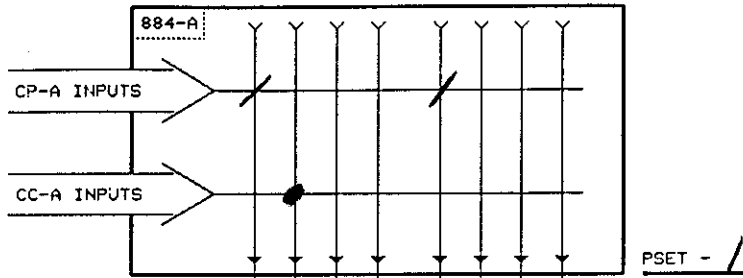
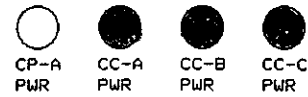


MODE - 11

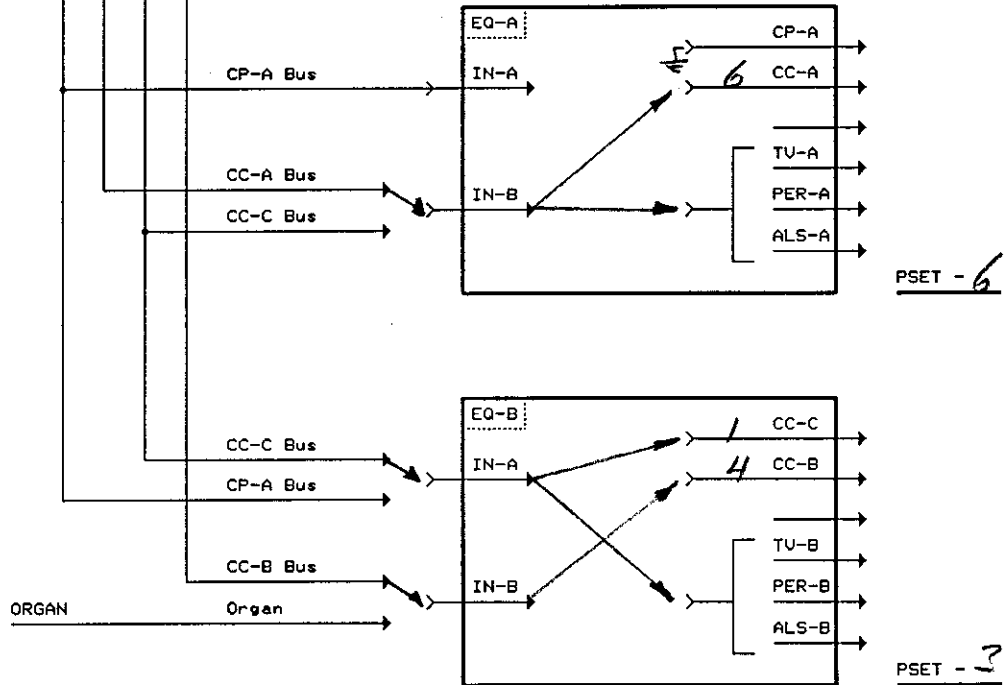




MODE - 12

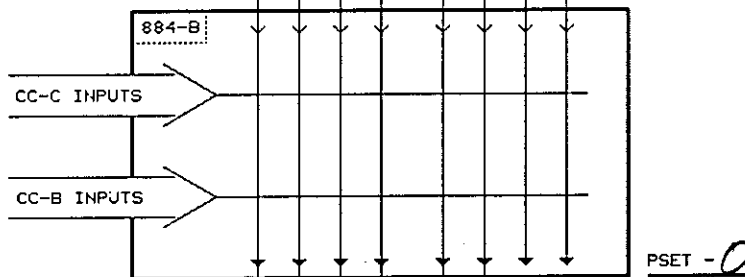
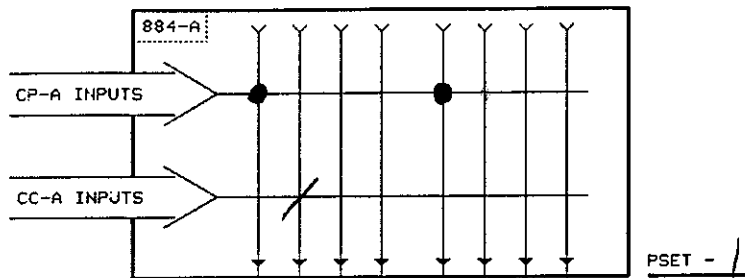
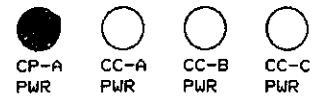


RECORD-B
RECORD-A



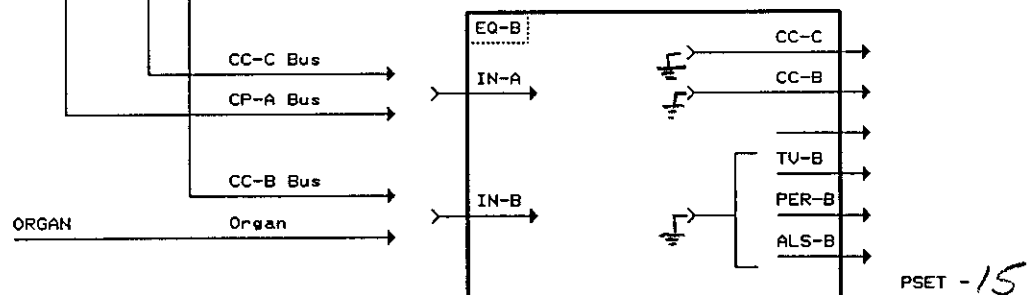
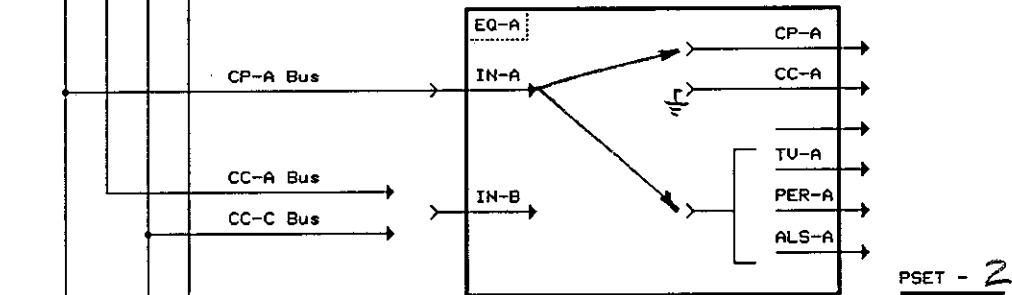


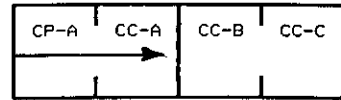
MODE - 13



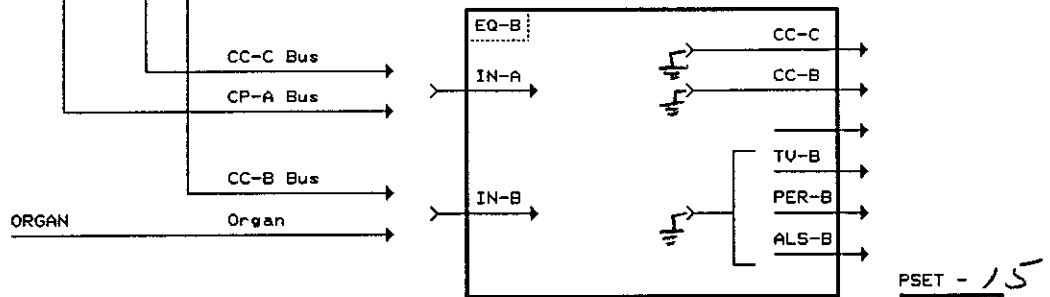
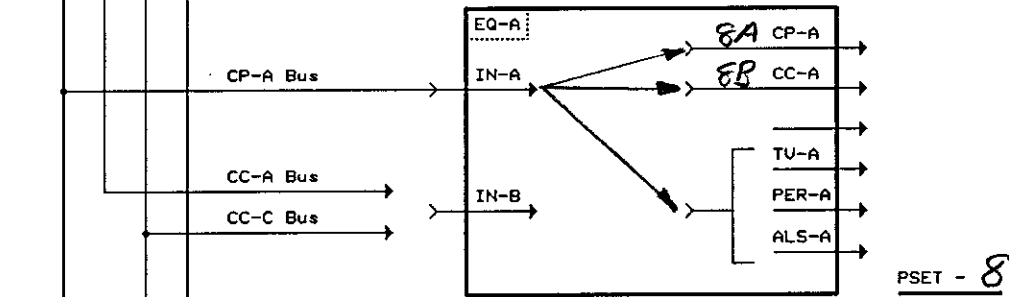
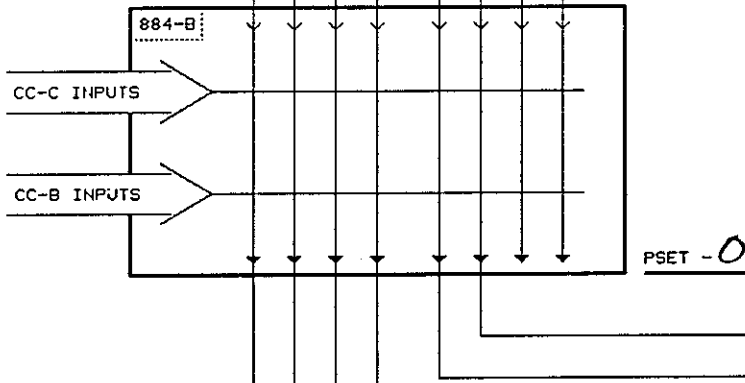
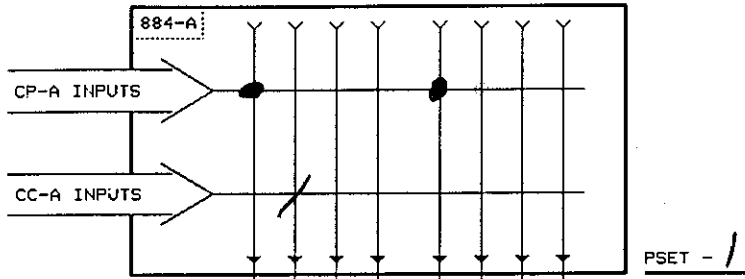
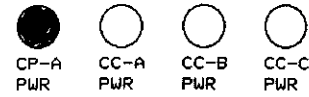
RECORD-B

RECORD-A



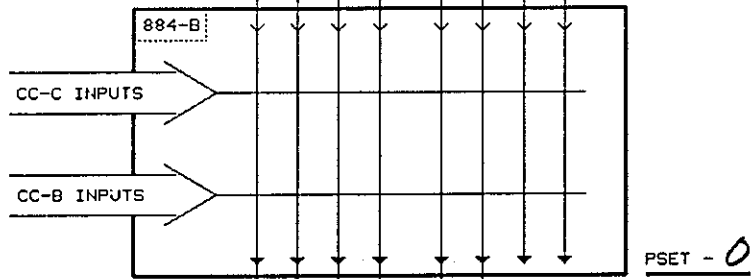
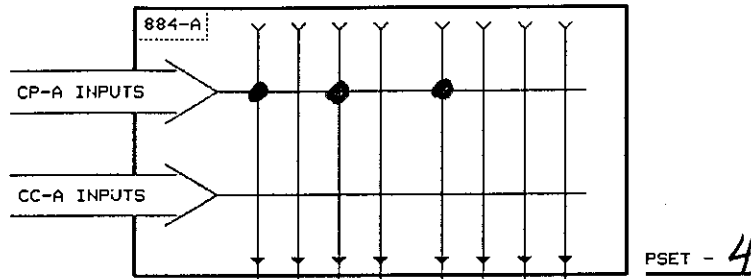
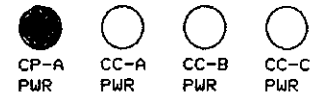


MODE - 14

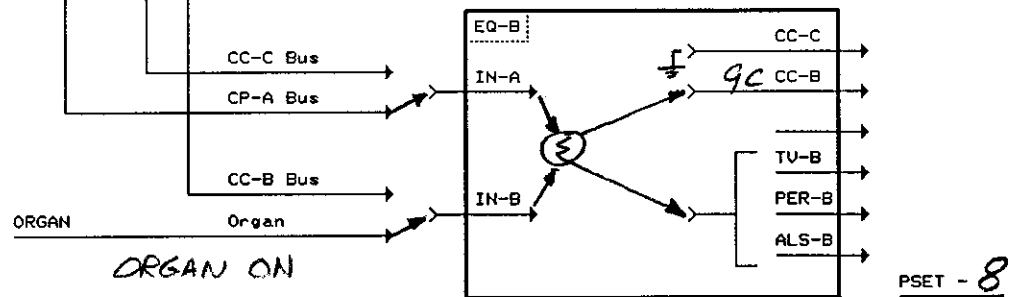
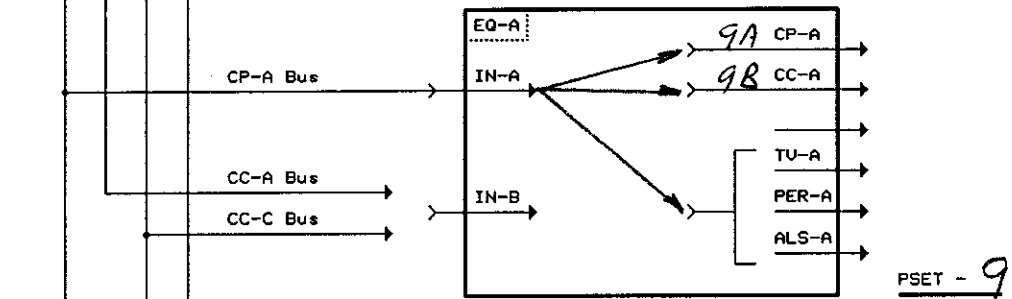


CP-A	CC-A	CC-B	CC-C

MODE - 15



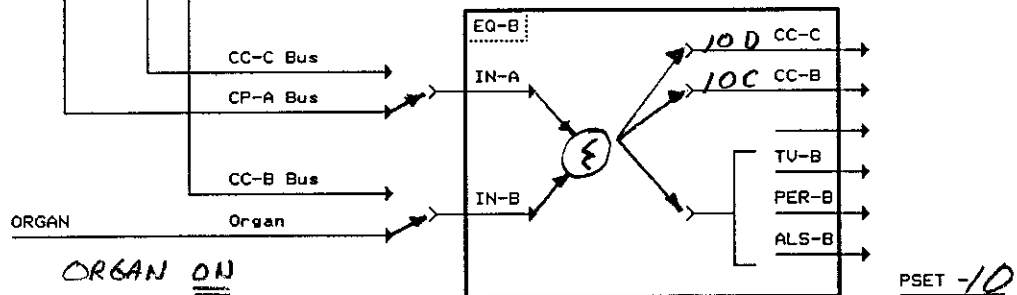
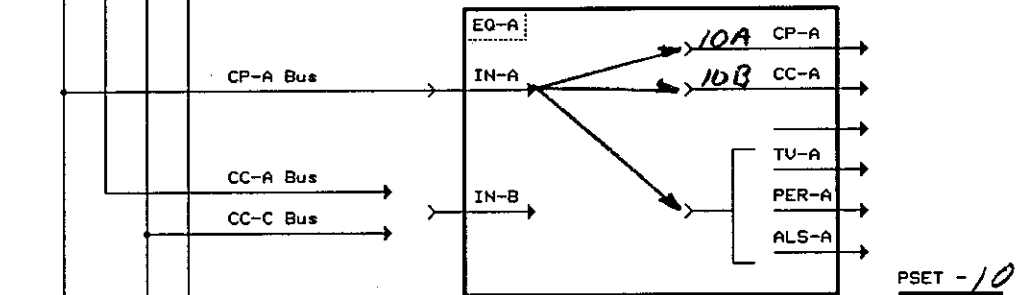
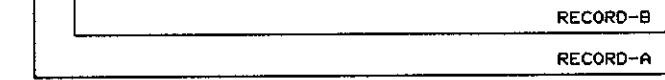
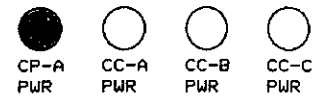
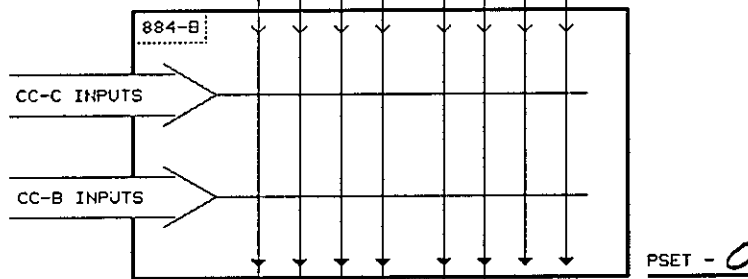
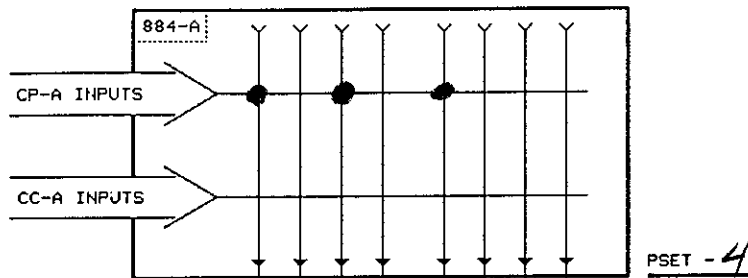
RECORD-B
RECORD-A



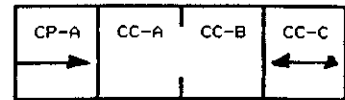
ORGAN ON

CP-A	CC-A	CC-B	CC-C

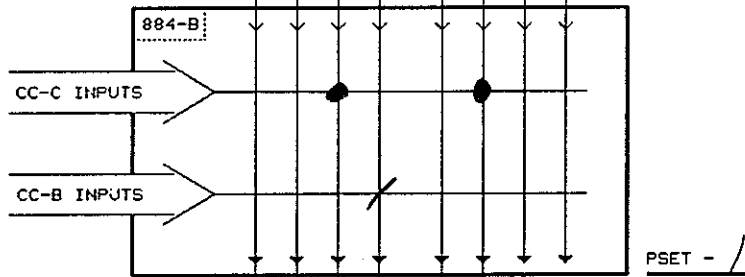
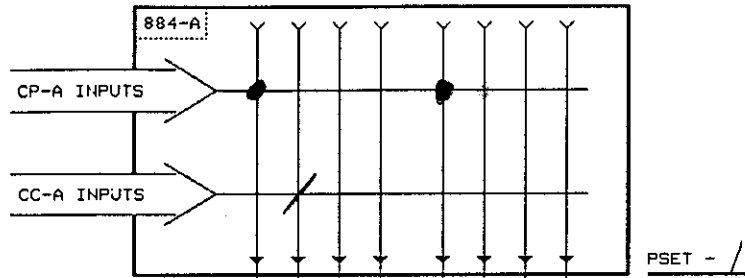
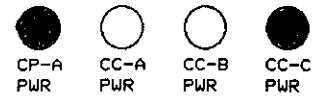
MODE - 16



ORGAN ON

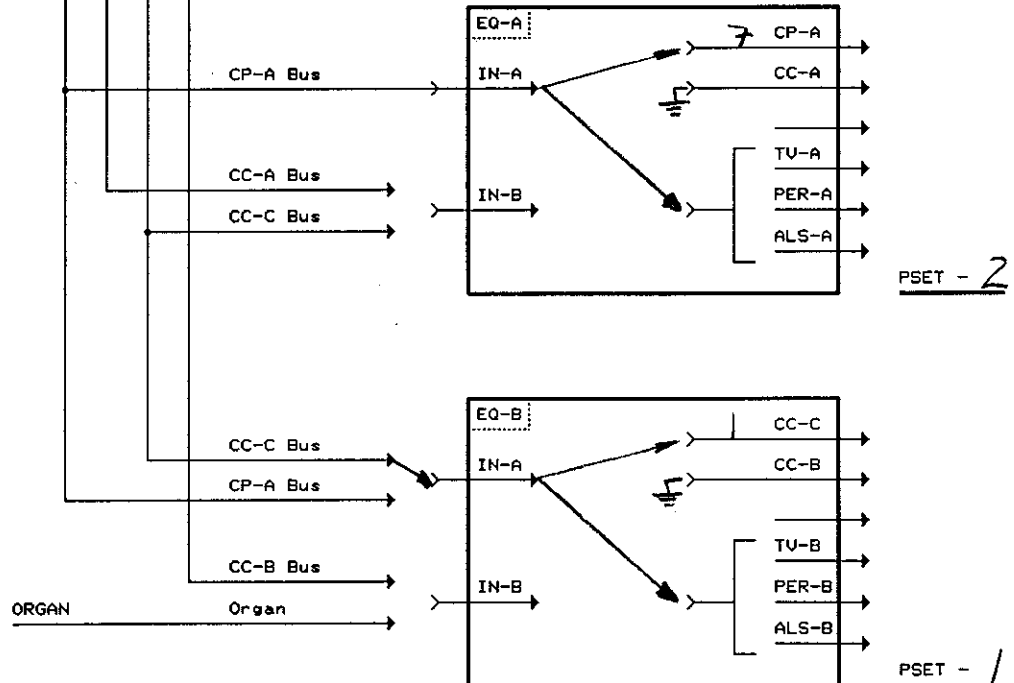


MODE - 17



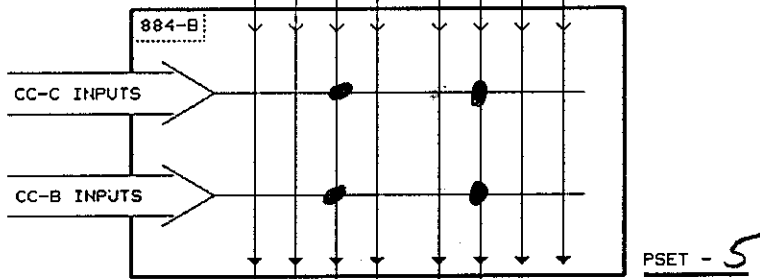
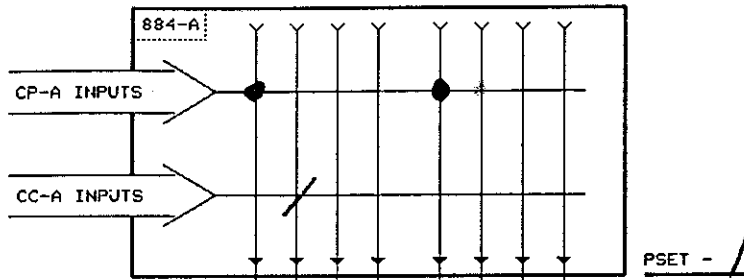
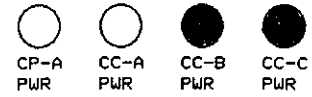
RECORD-B

RECORD-A



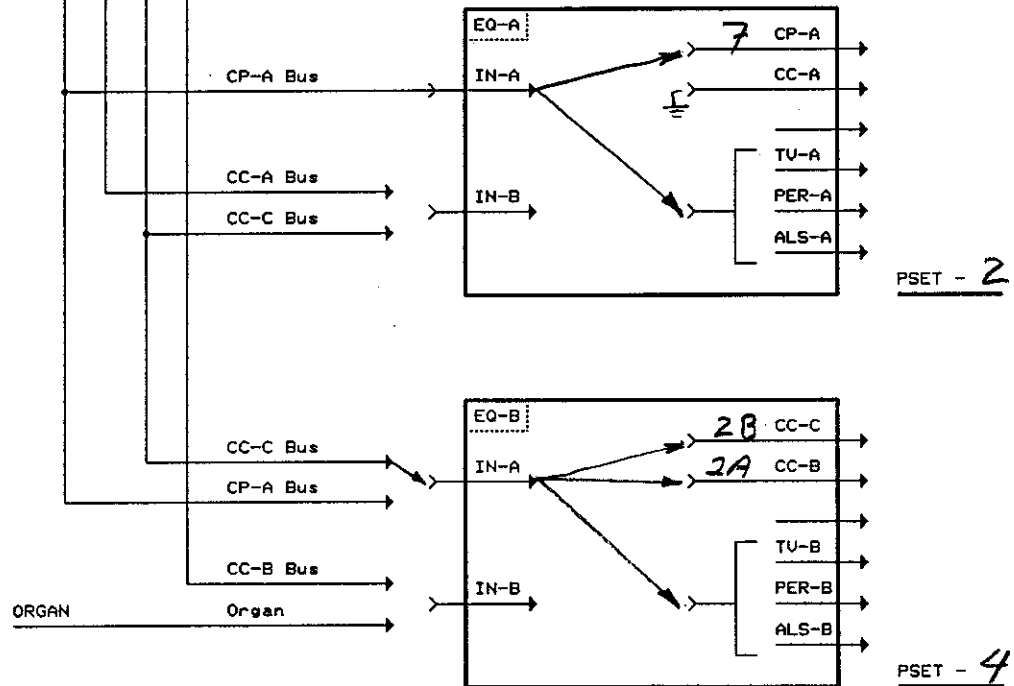


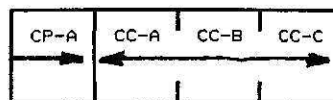
MODE - 18



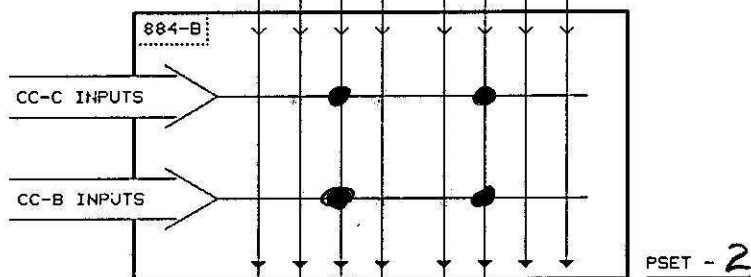
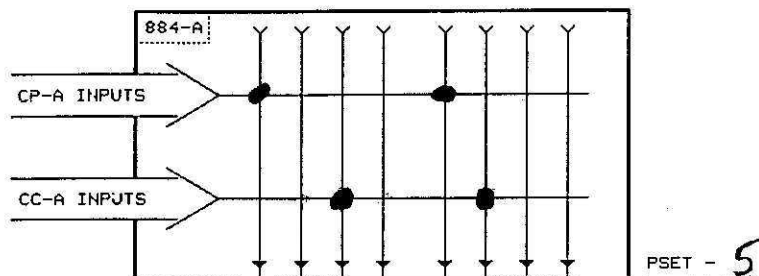
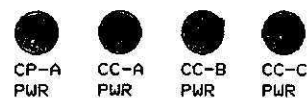
RECORD-B

RECORD-A

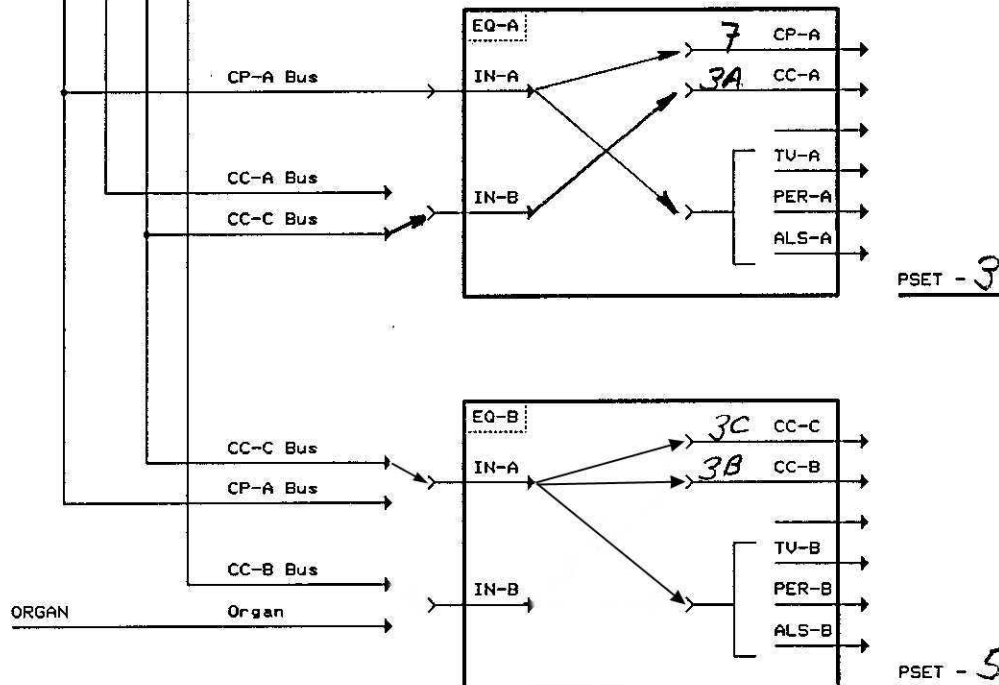


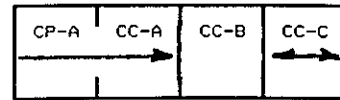


MODE - 19

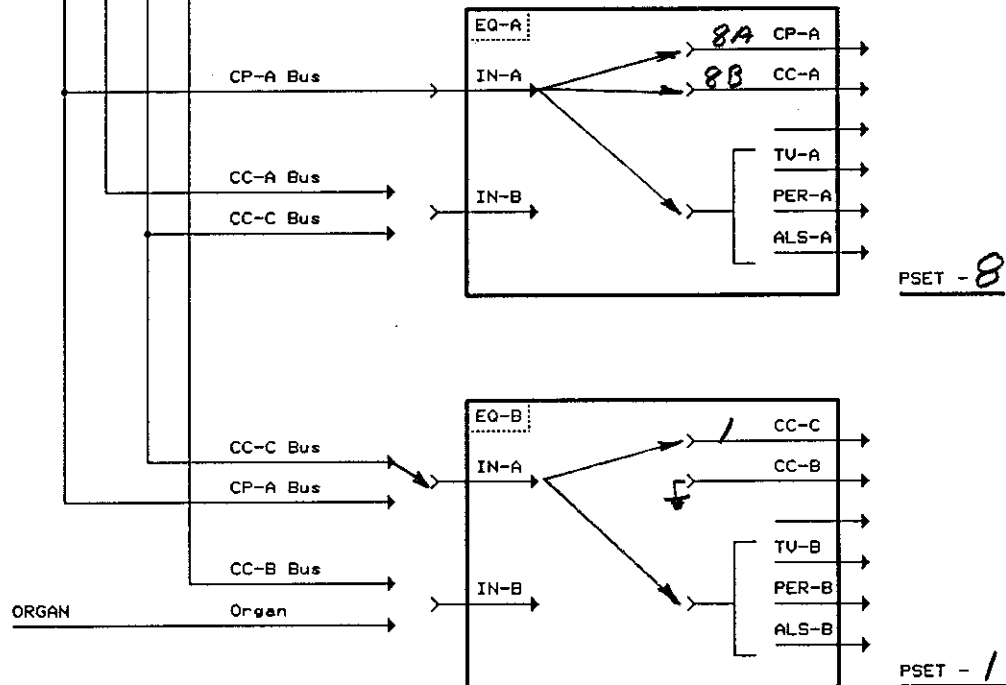
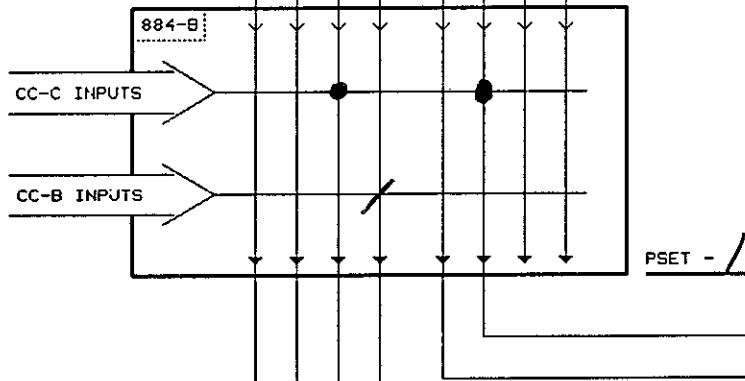
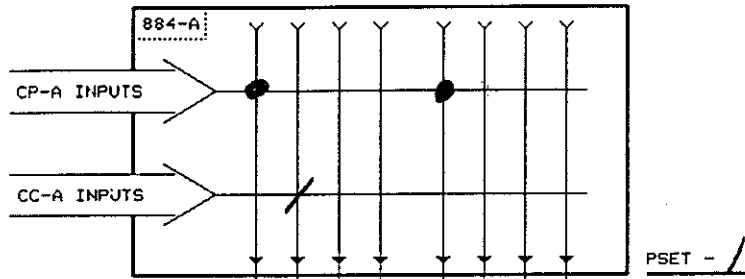
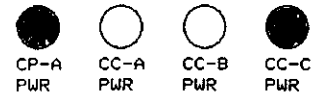


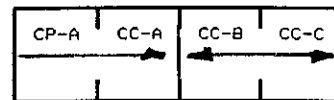
RECORD-B
RECORD-A



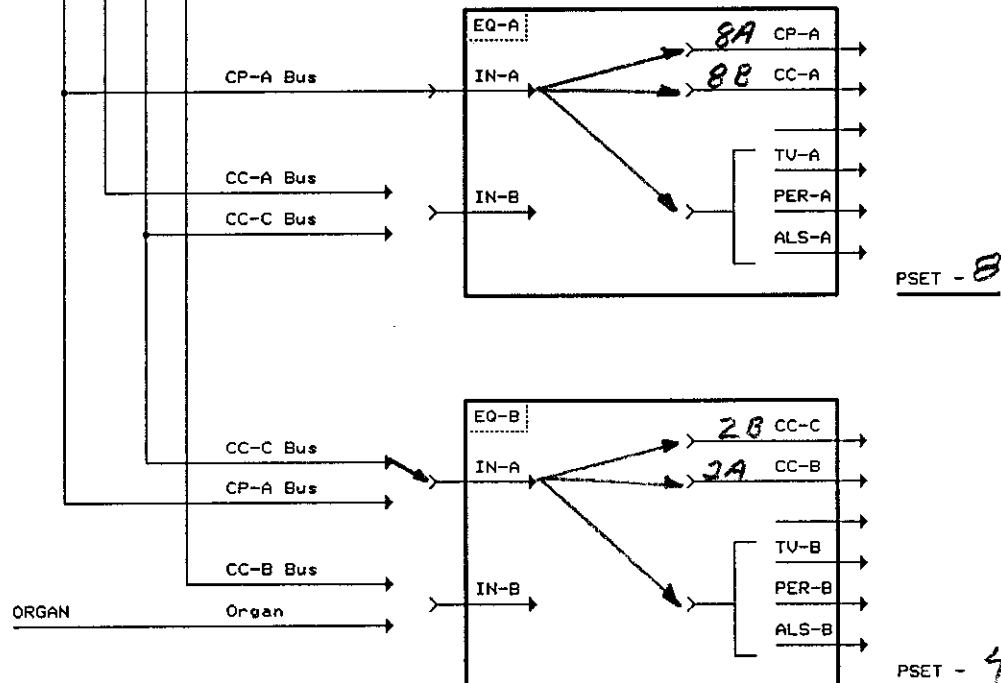
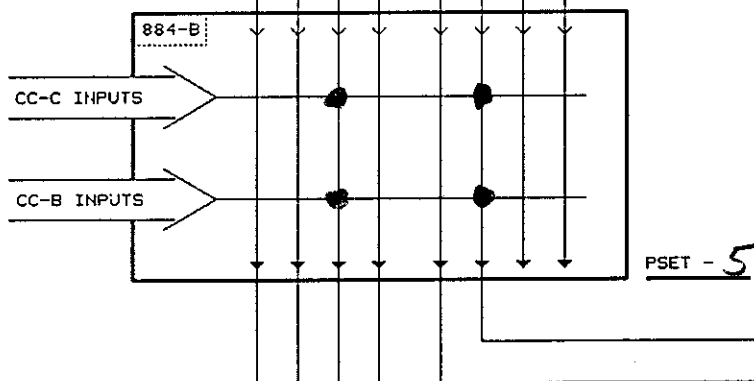
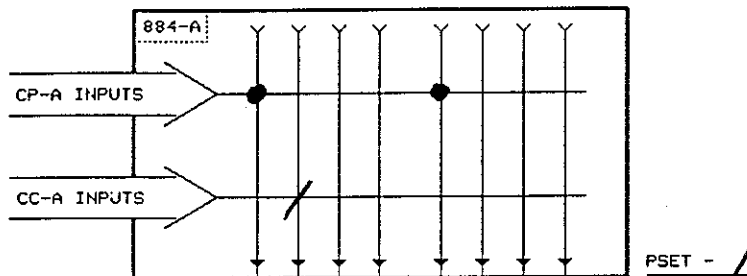
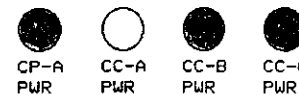


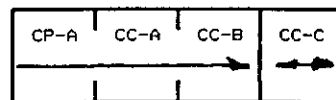
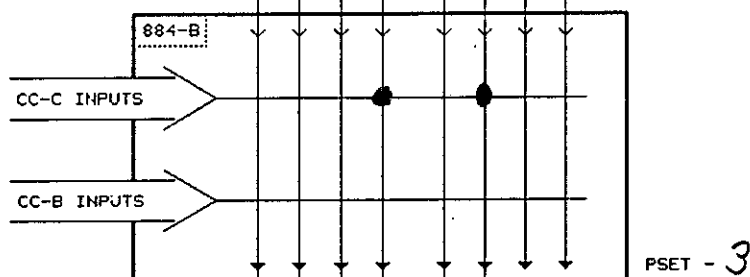
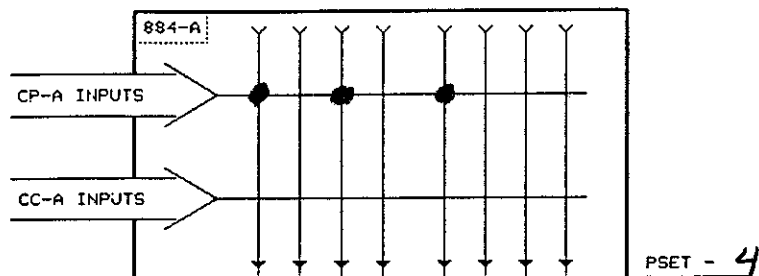
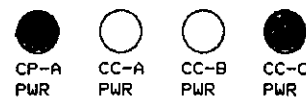
MODE - 20



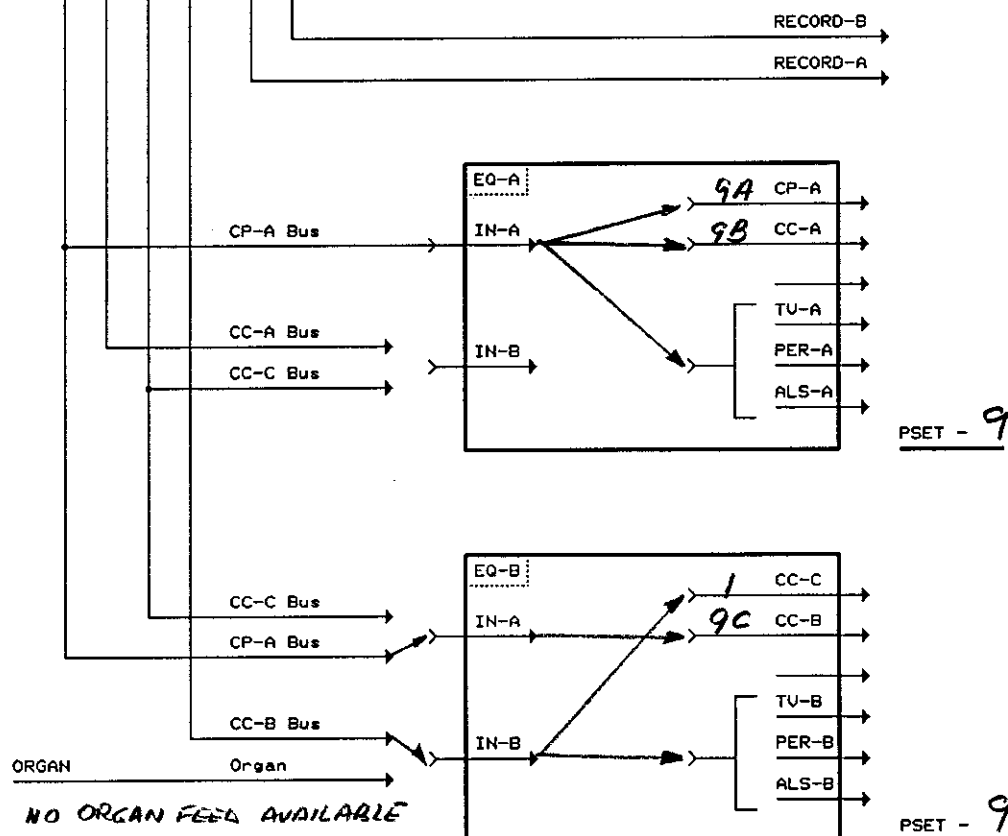


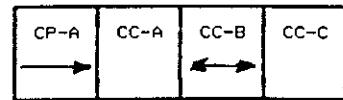
MODE - 21



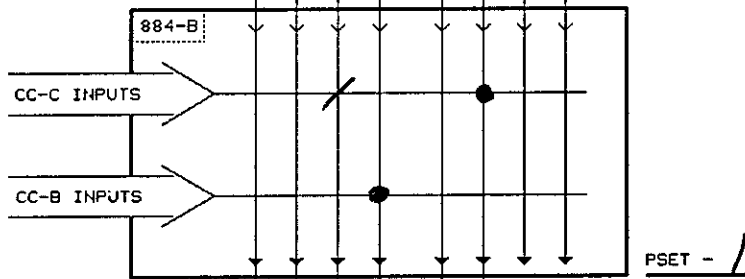
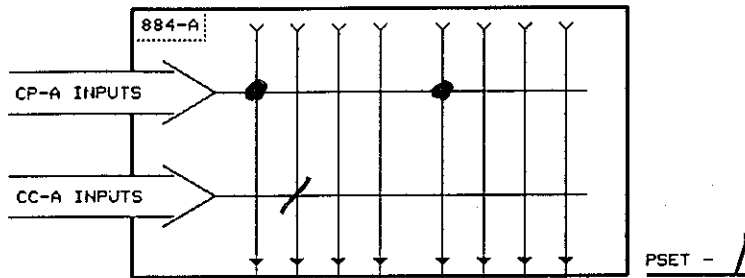
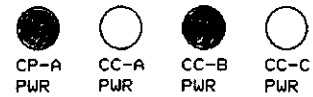
MODE - 22

NOTE: NO TRACKING LEVEL IN CC-B.
ADJUST AS DESIRED IN PRESET 3
(884-B).



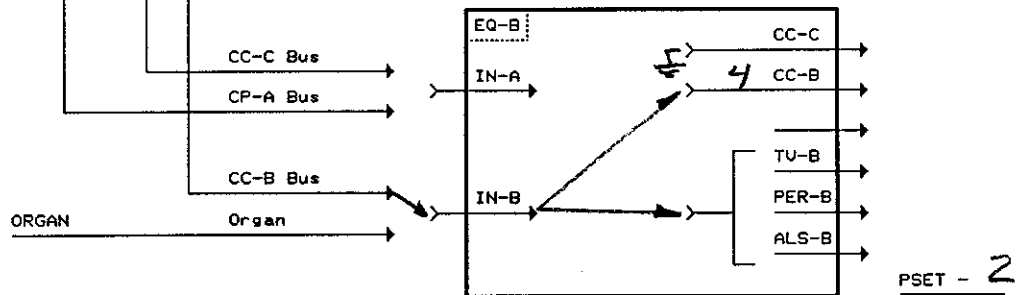
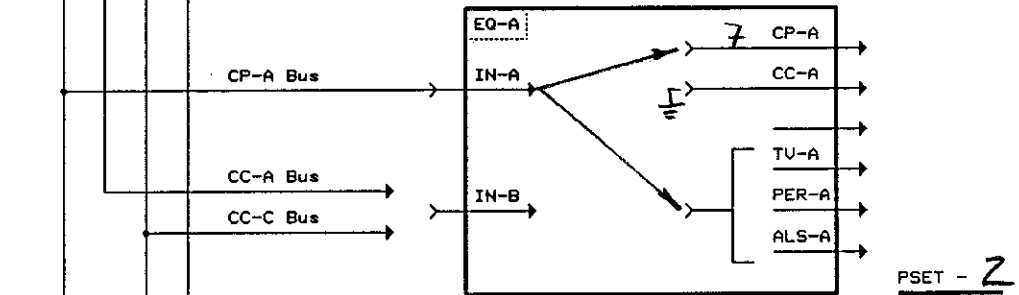


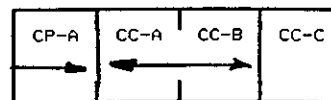
MODE - 23



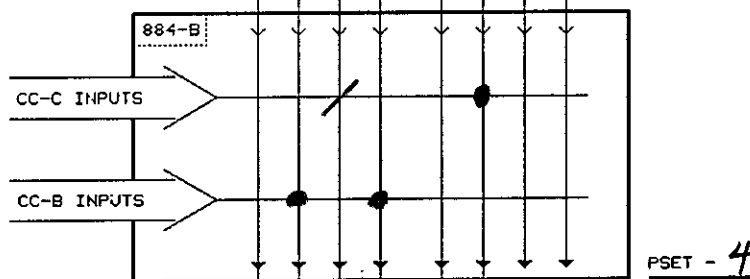
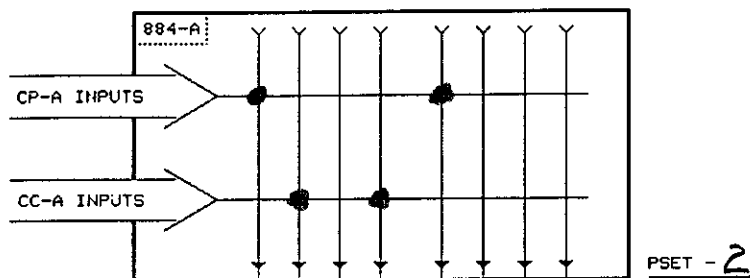
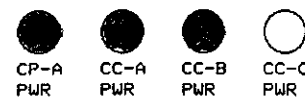
RECORD-B

RECORD-A



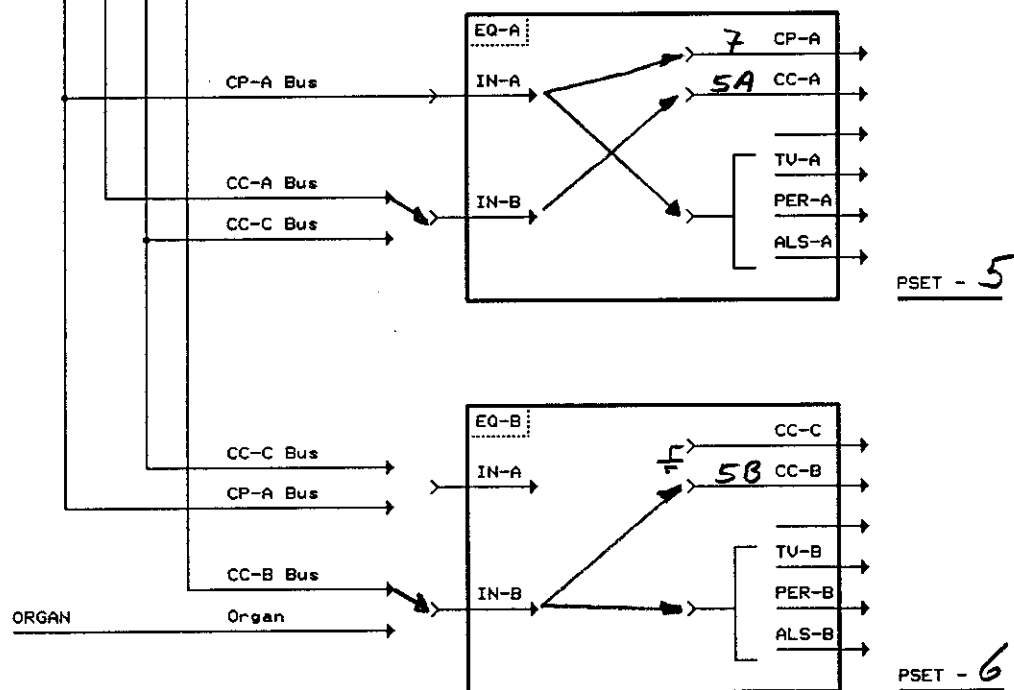


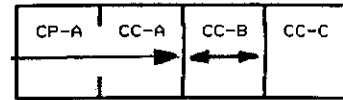
MODE - 24



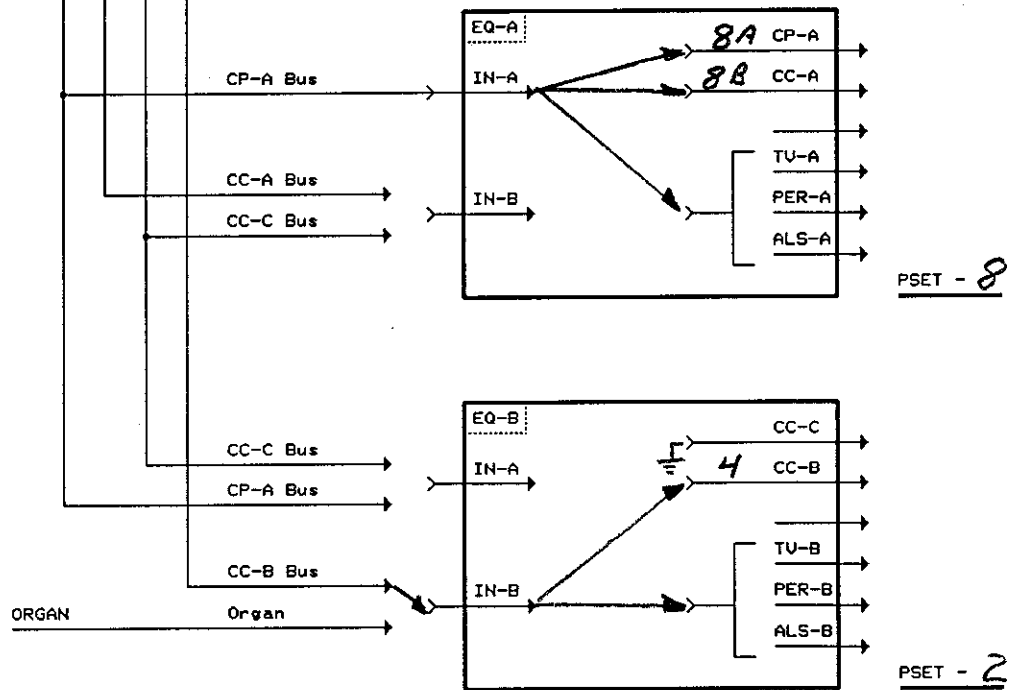
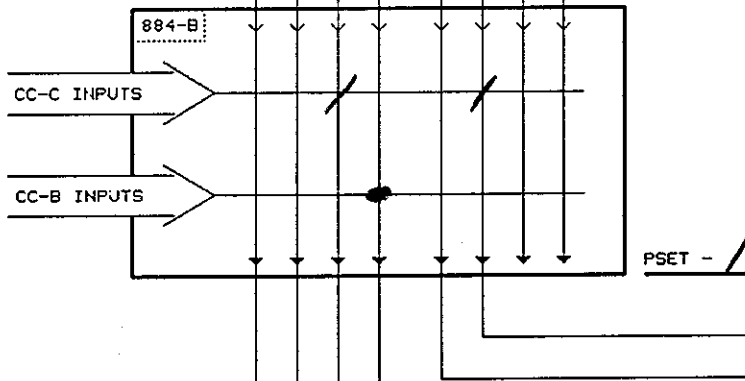
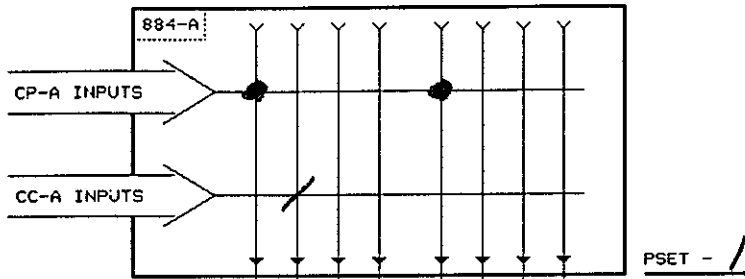
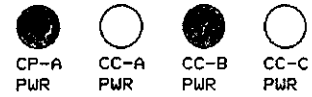
RECORD-B

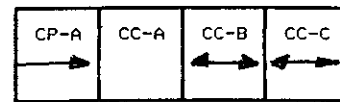
RECORD-A



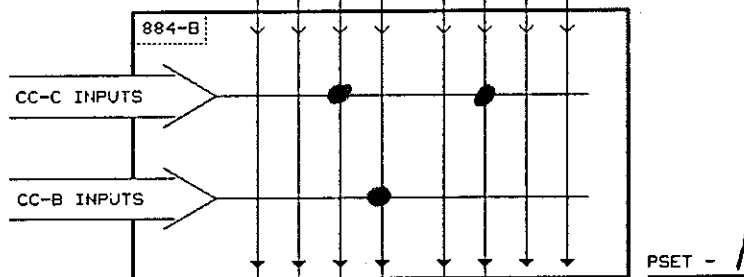
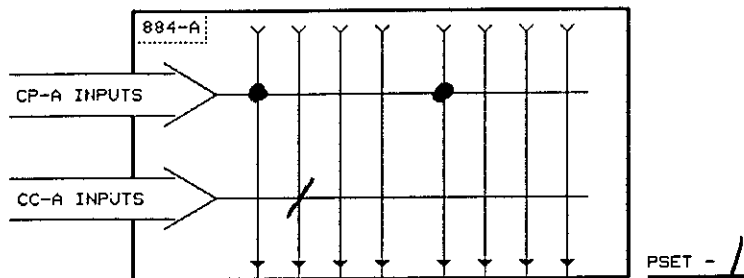
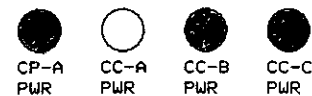


MODE - 25



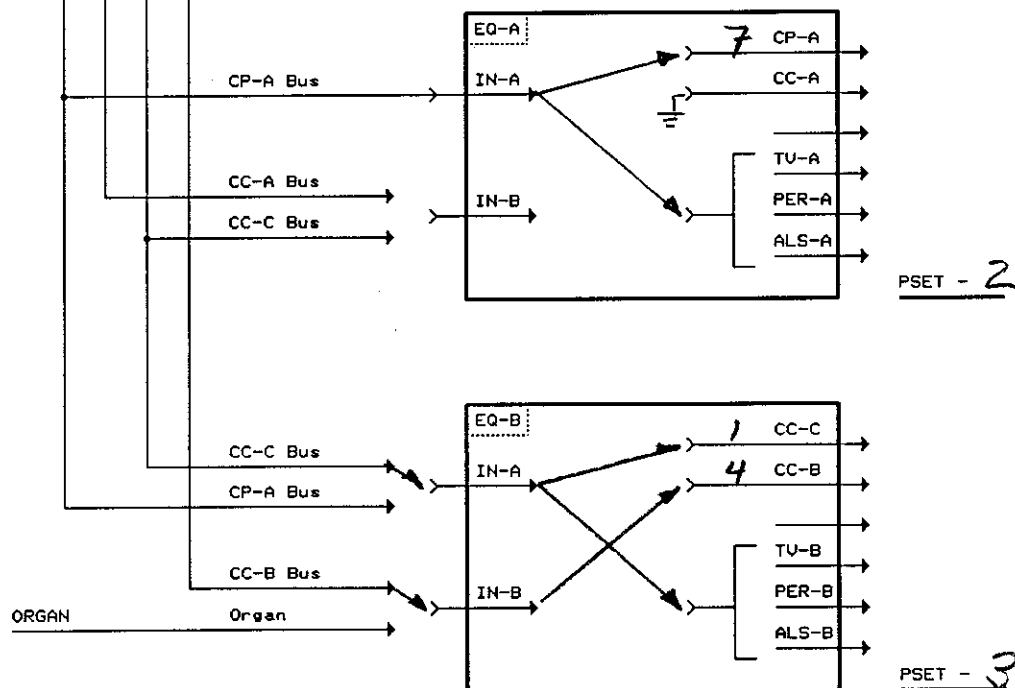


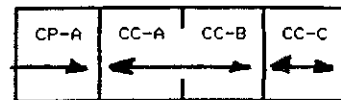
MODE - 26



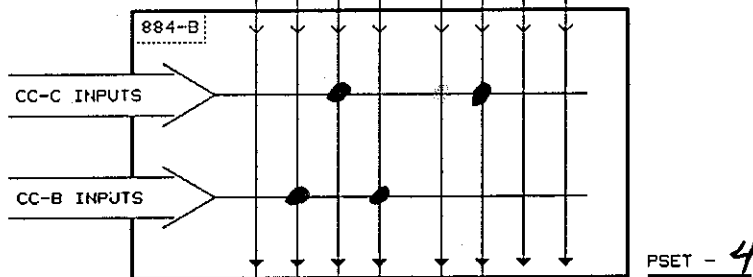
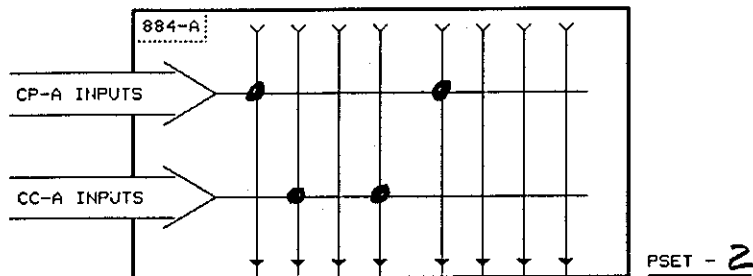
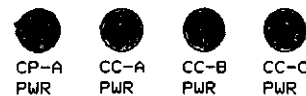
RECORD-B

RECORD-A

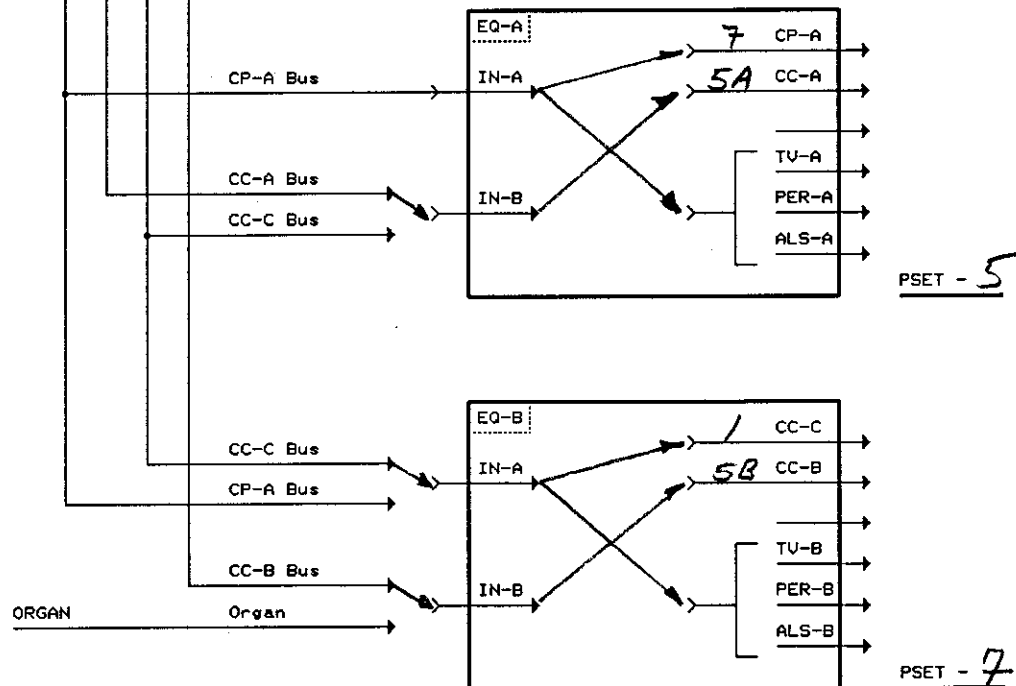


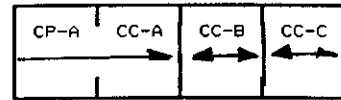


MODE - 27

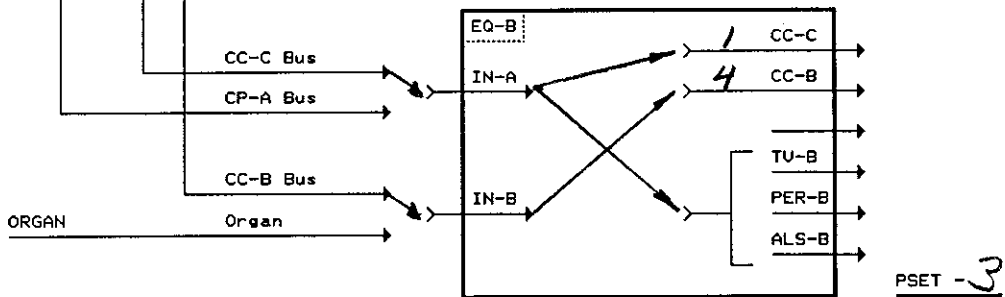
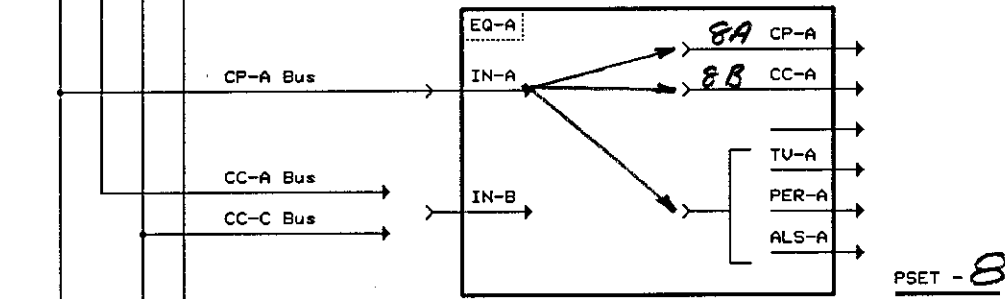
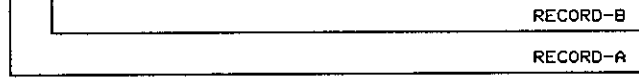
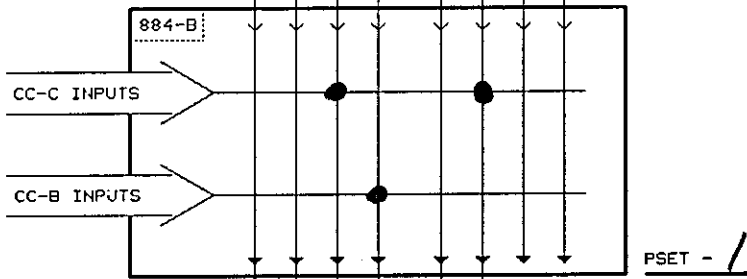
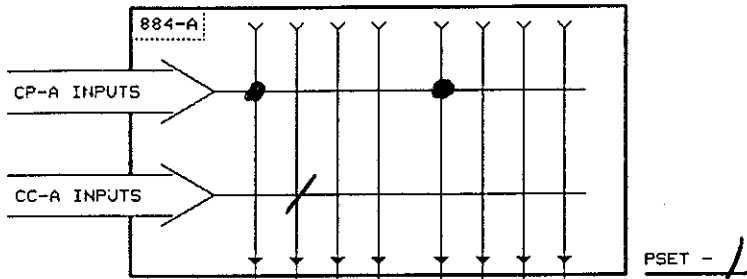


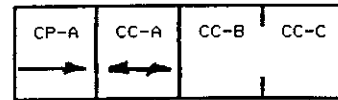
RECORD-B
RECORD-A



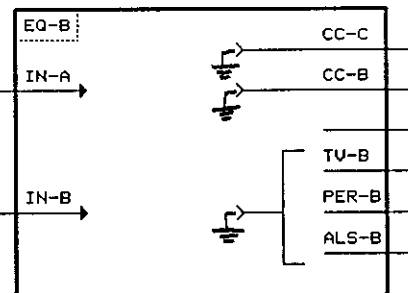
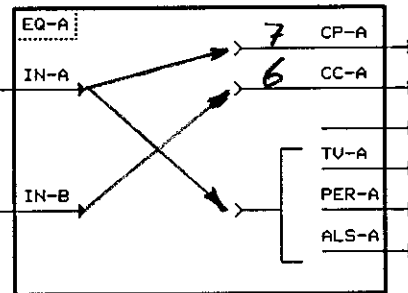
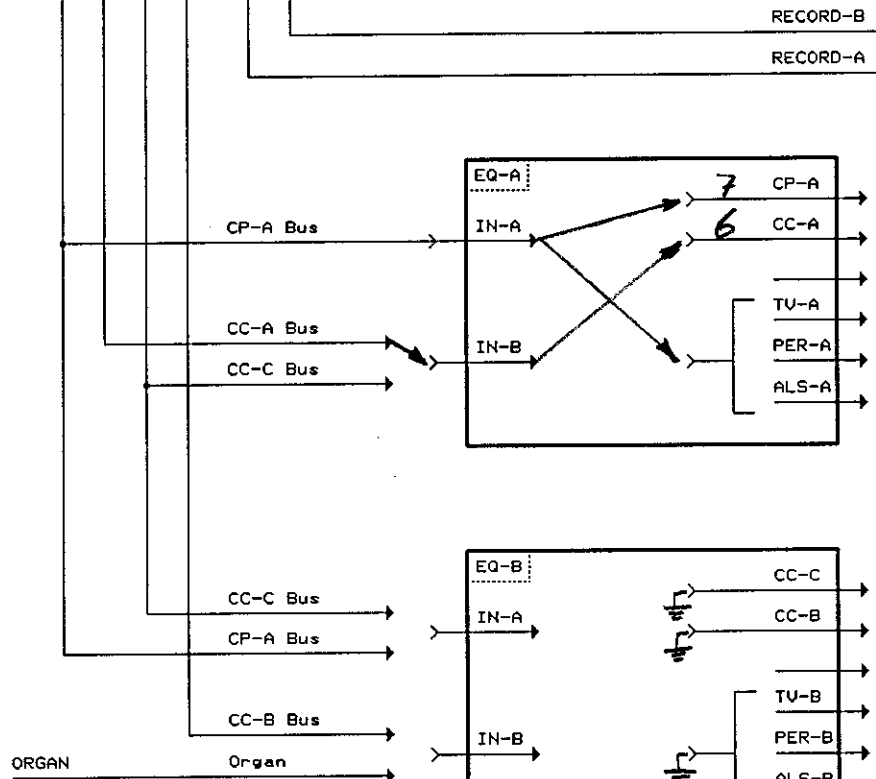
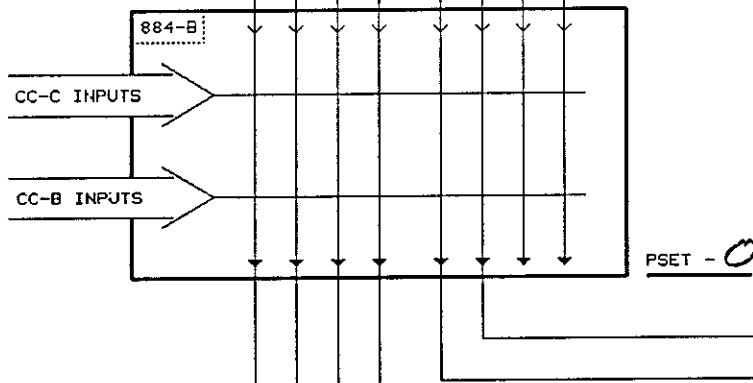
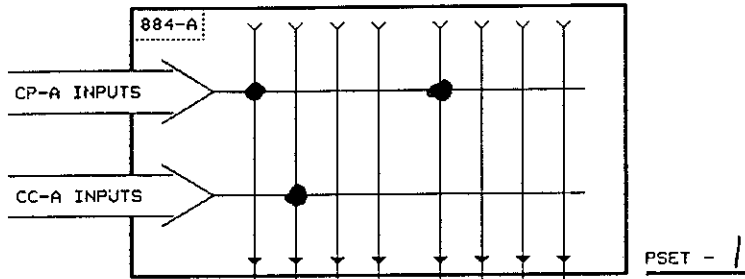
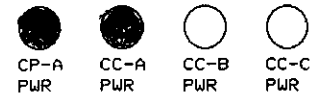


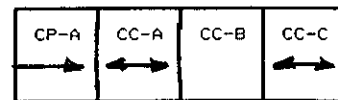
MODE - 28



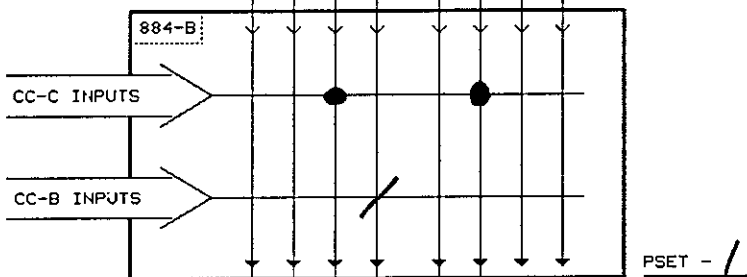
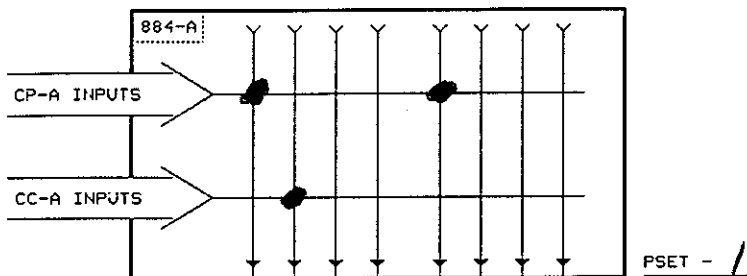
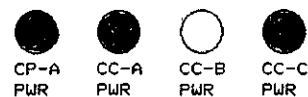


MODE - 29



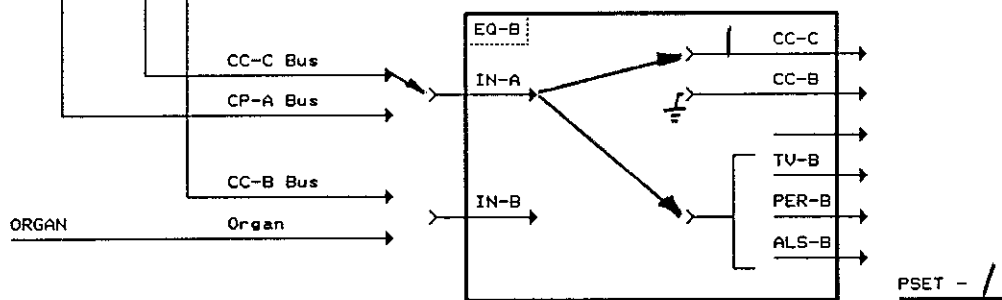
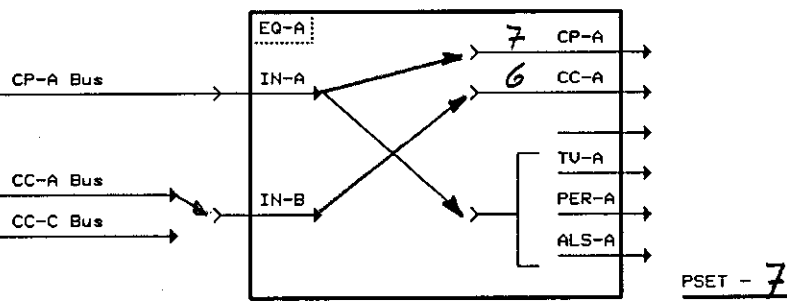


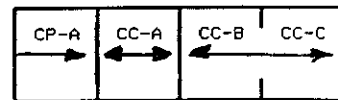
MODE - 30



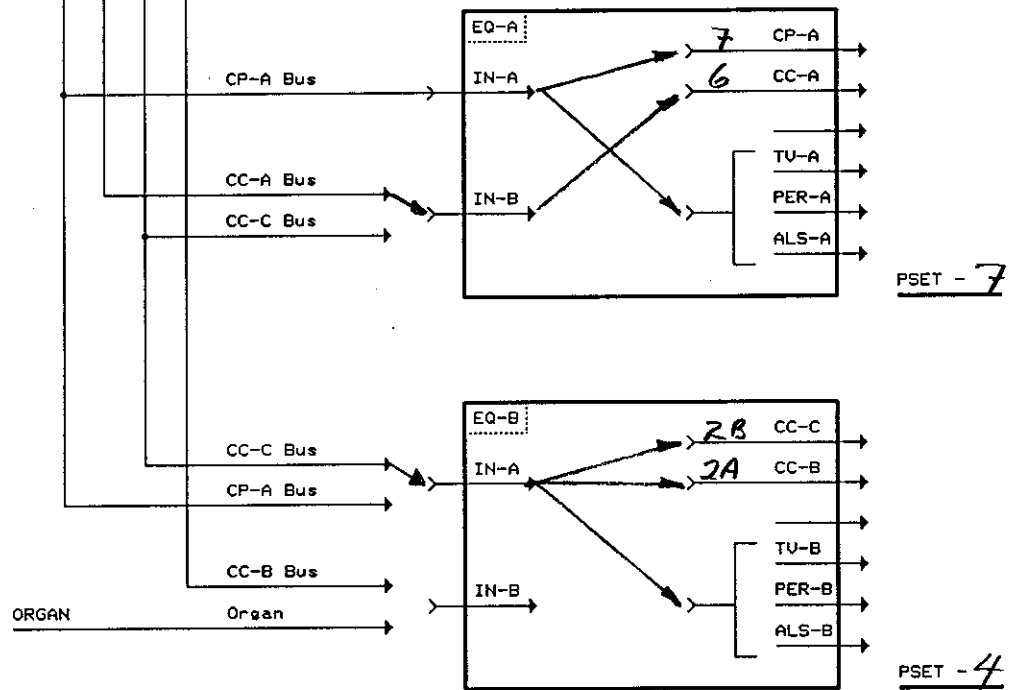
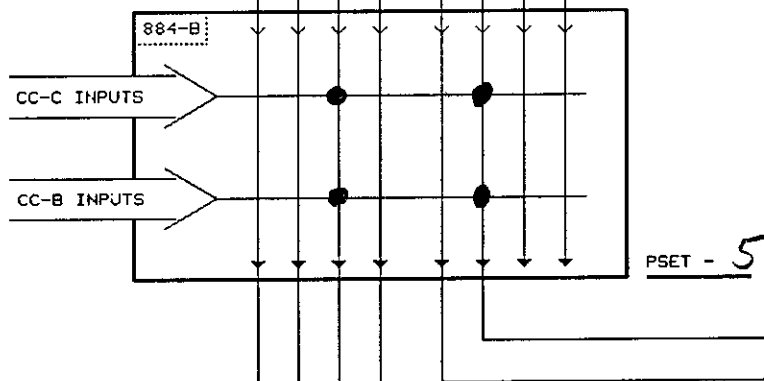
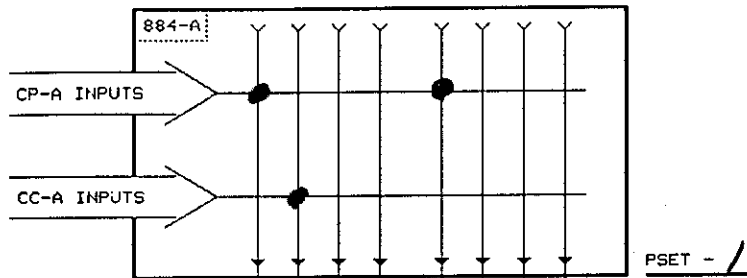
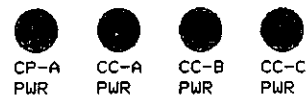
RECORD-B

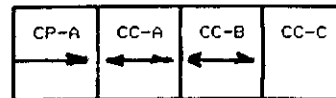
RECORD-A



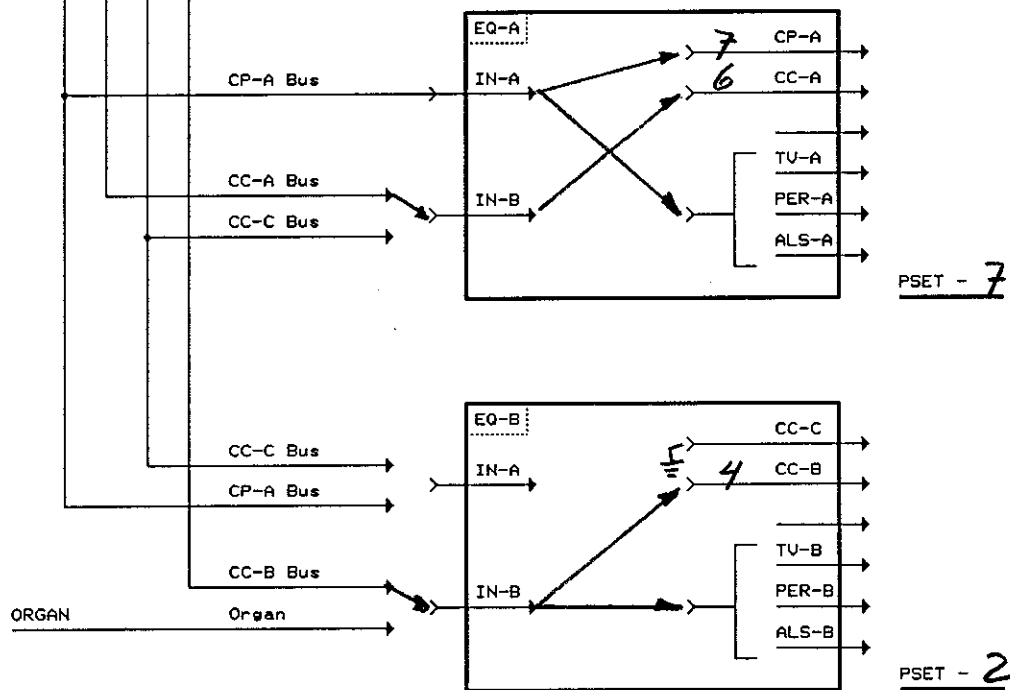
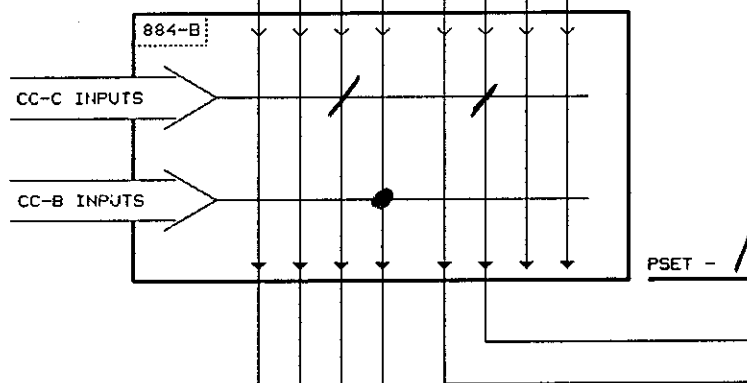
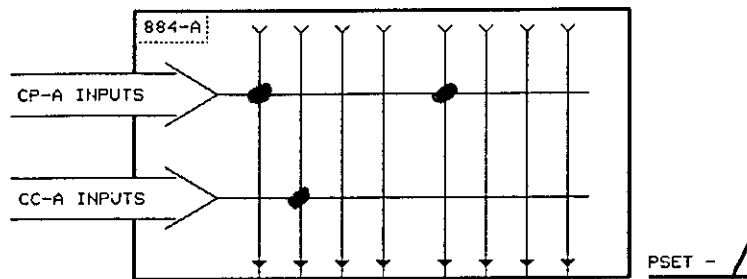
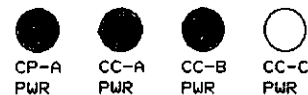


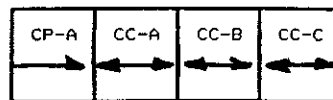
MODE - 31



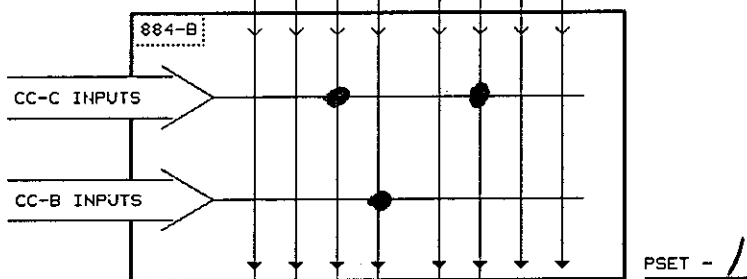
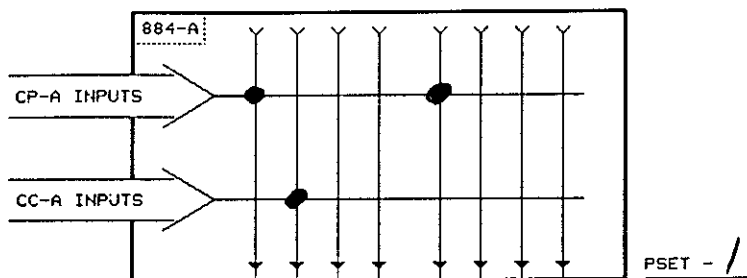
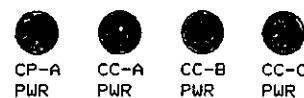


MODE - 32

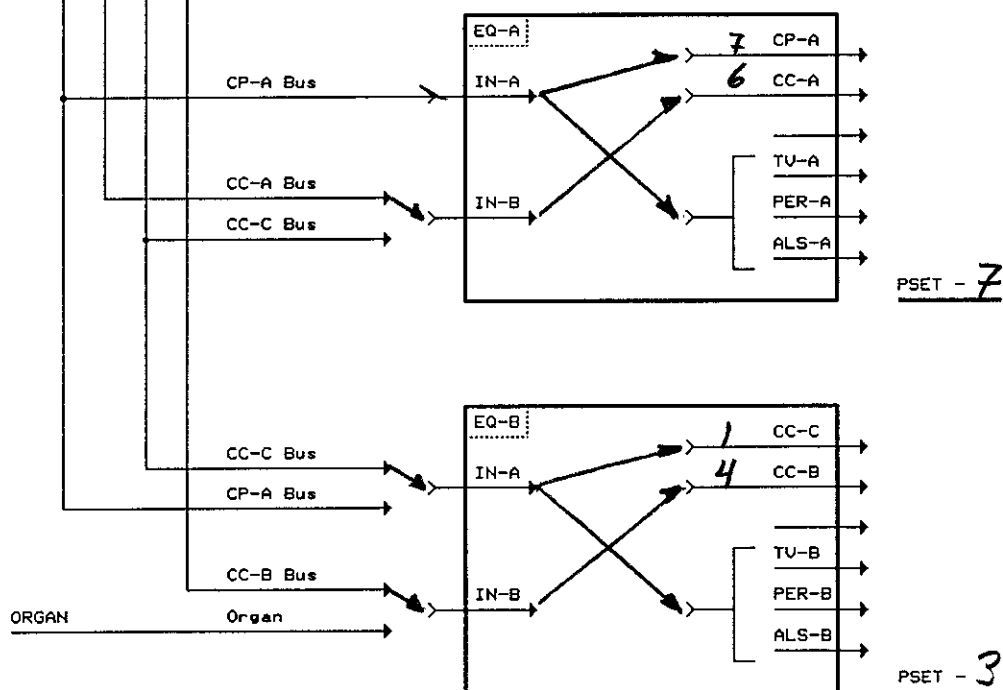


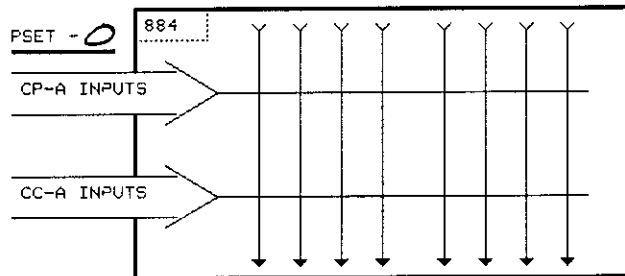


MODE - 33

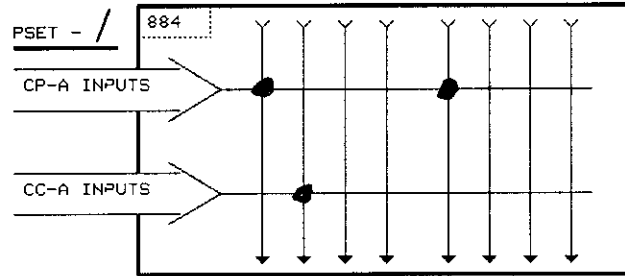
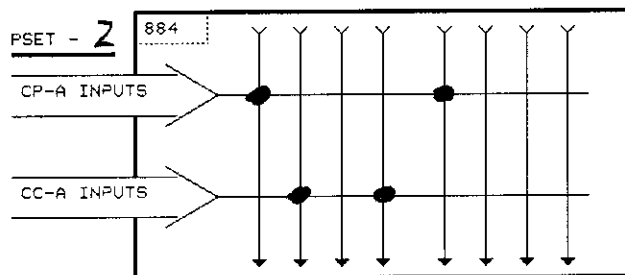


RECORD-B
RECORD-A

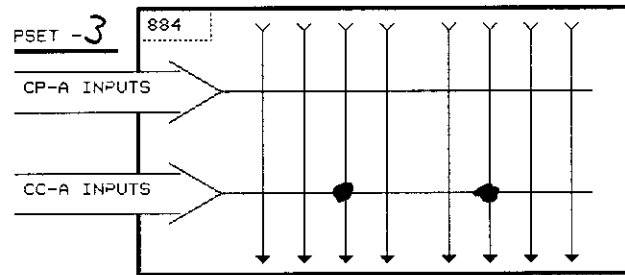


884-A PRESETS

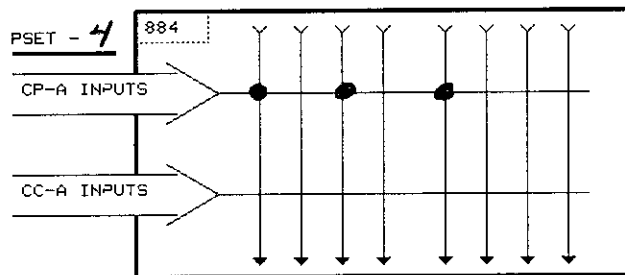
USED BY MODES: 1, 2, 4, 6

USED BY MODES: 8, 9, 10, 11, 12, 13, 14
17, 18, 20, 21, 23, 25, 26
28, 29, 30, 31, 32, 33

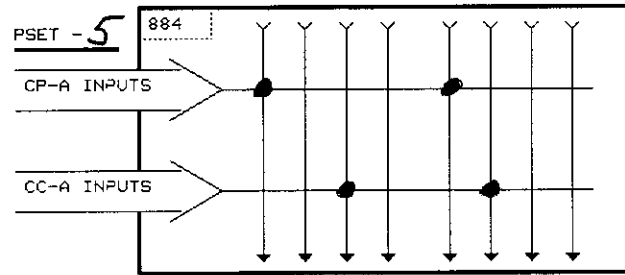
USED BY MODES: 5, 7, 24, 27



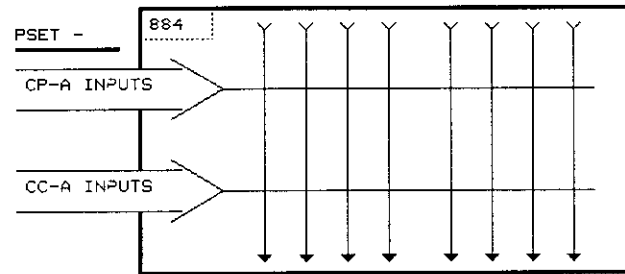
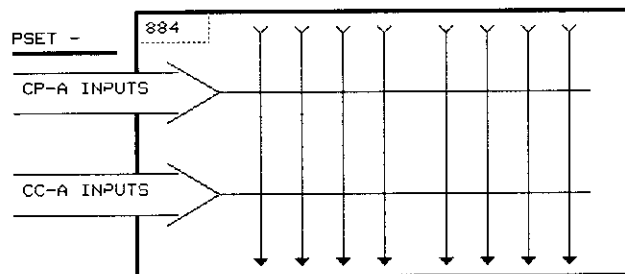
USED BY MODES: 3

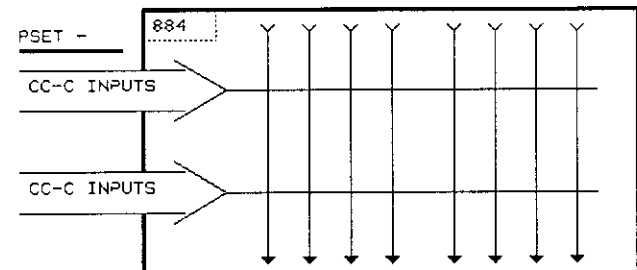
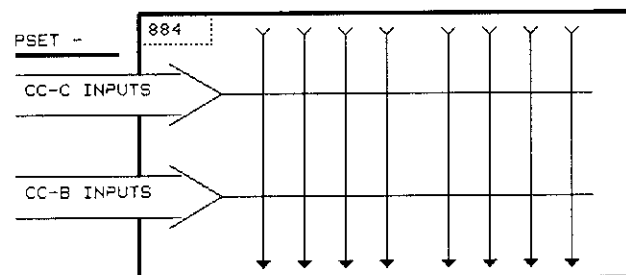
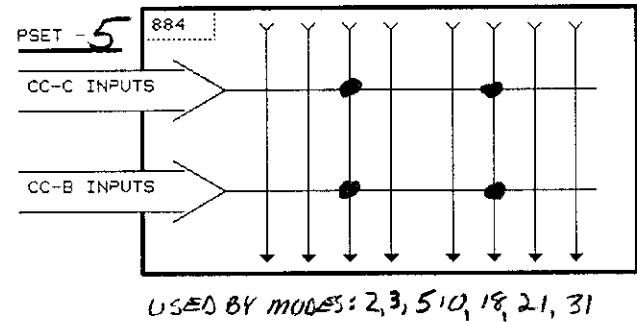
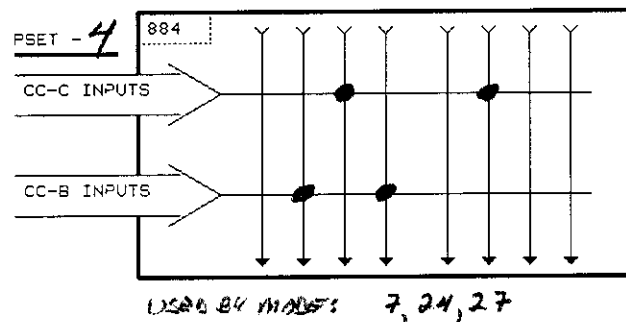
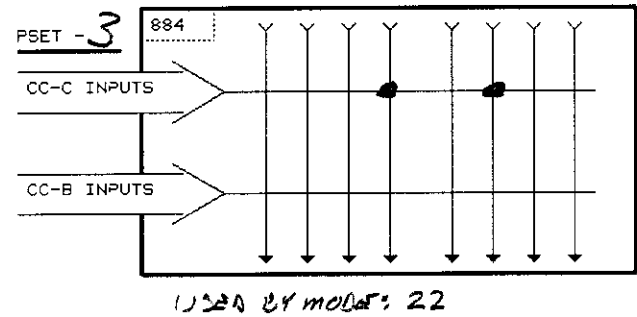
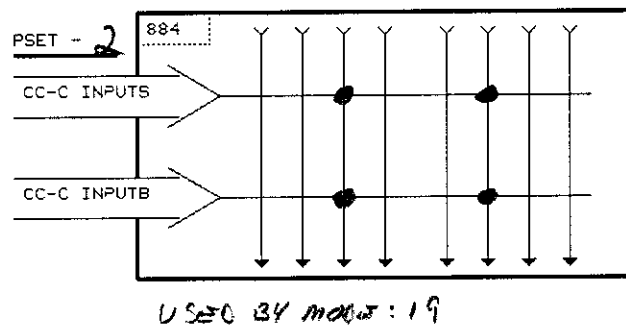
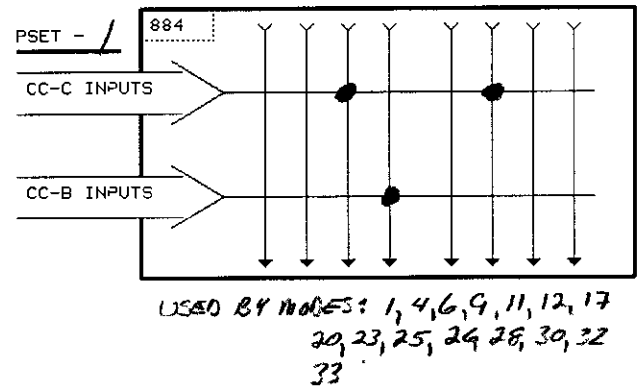
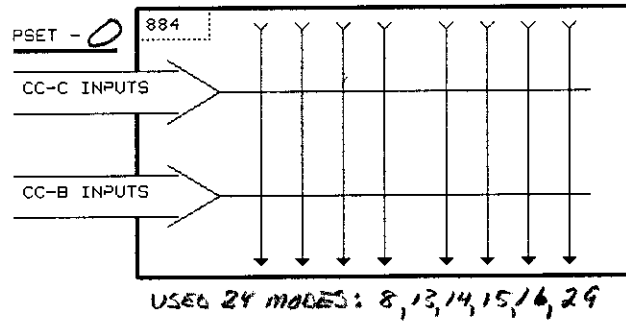


USED BY MODES: 15, 16, 22



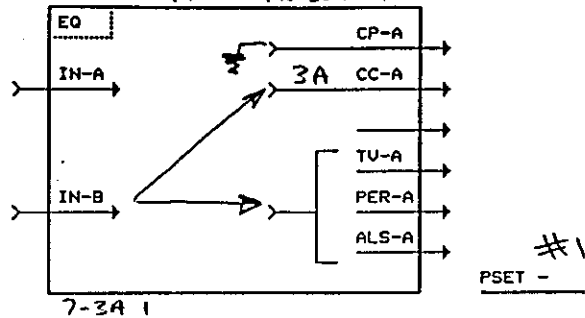
USED BY MODE: 19



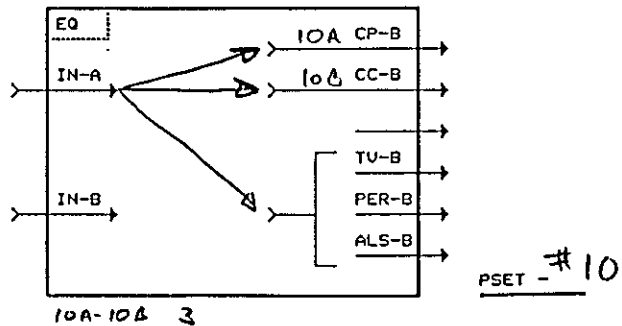
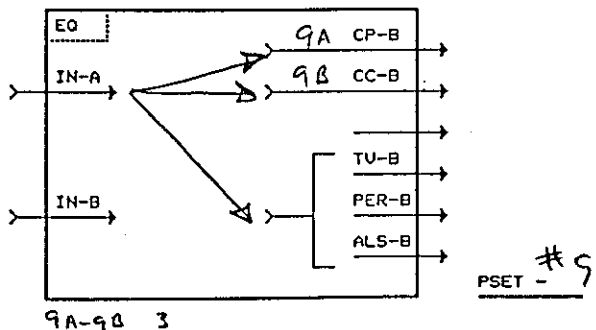
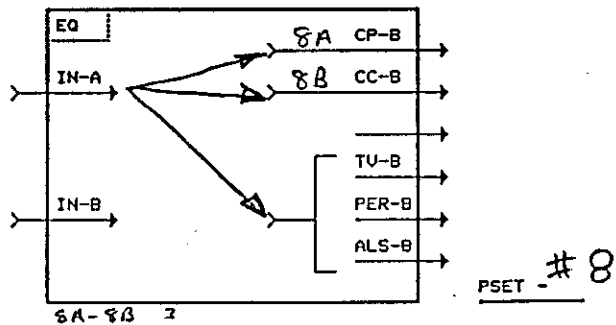
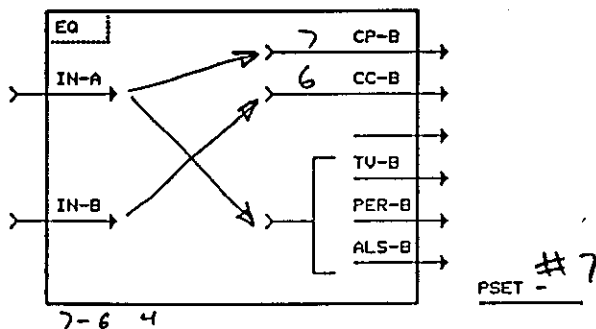
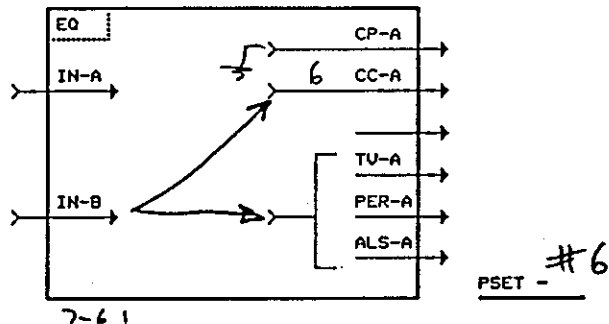
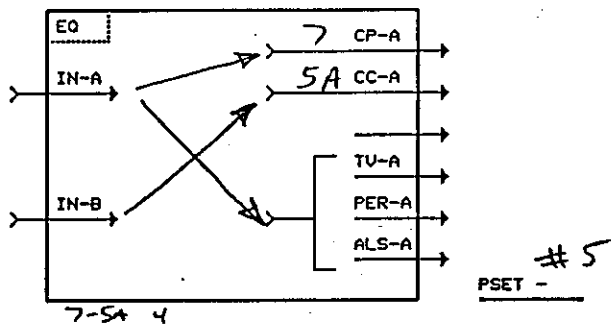
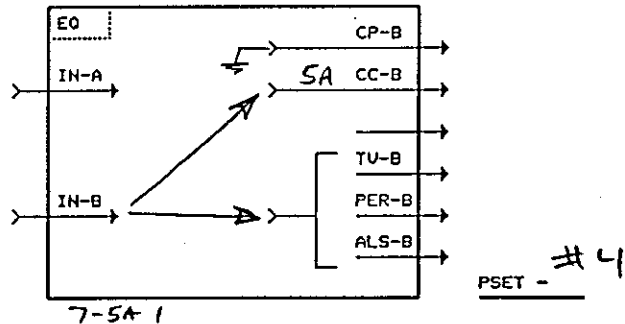
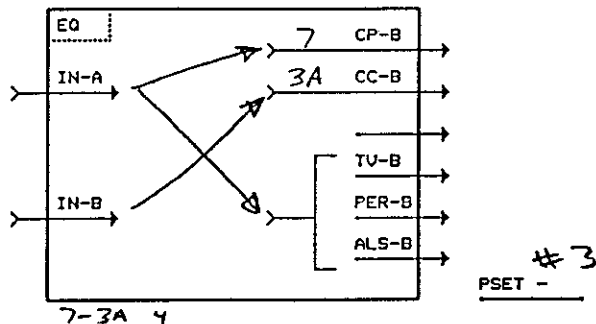
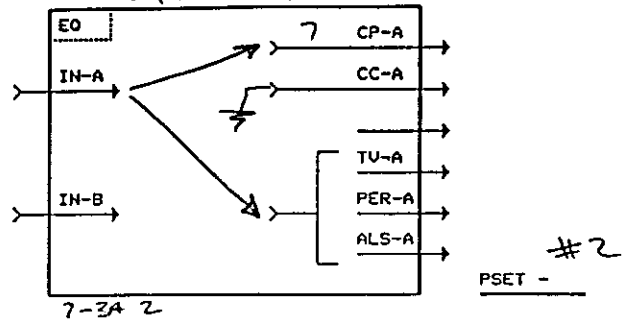
884-B PRESETS

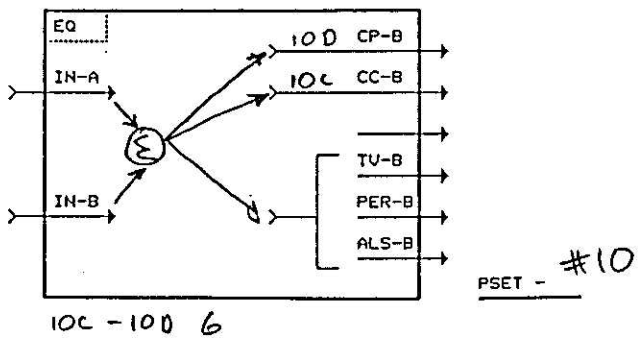
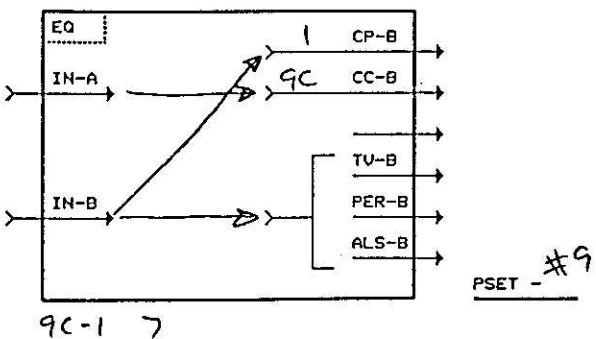
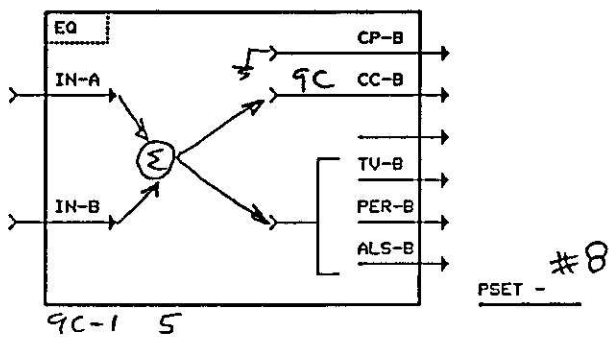
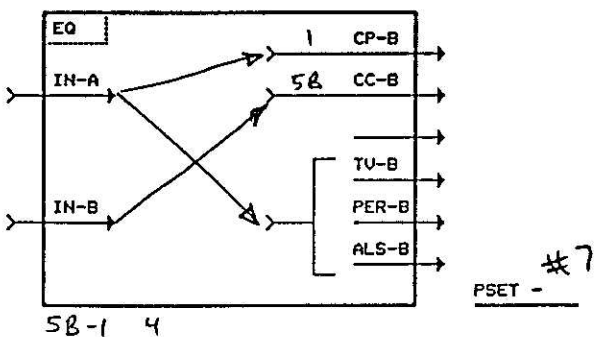
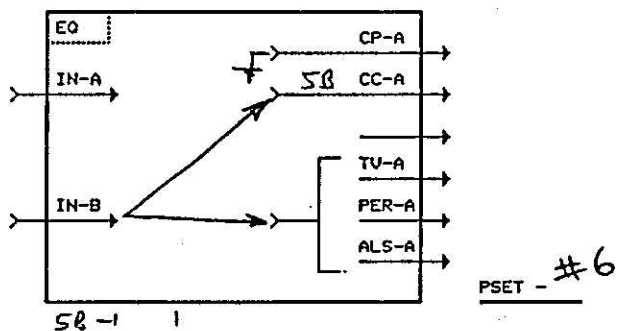
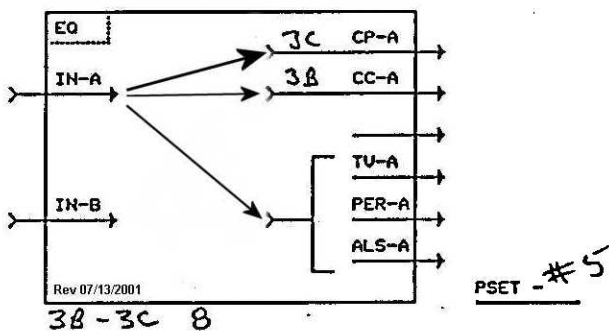
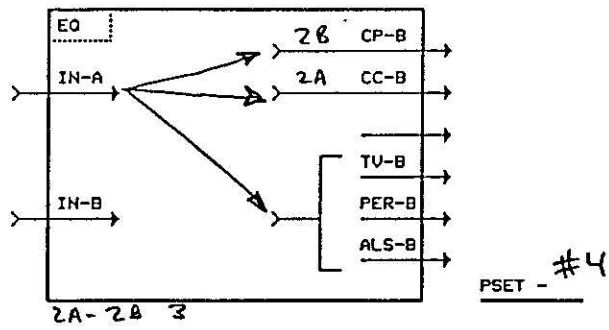
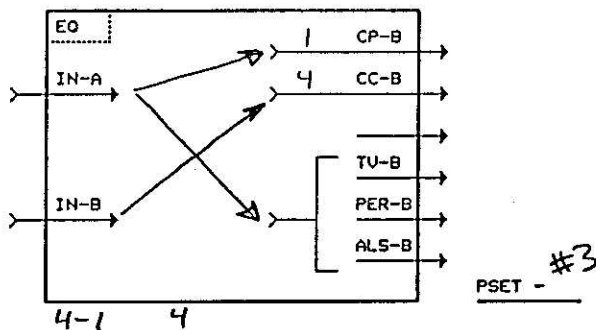
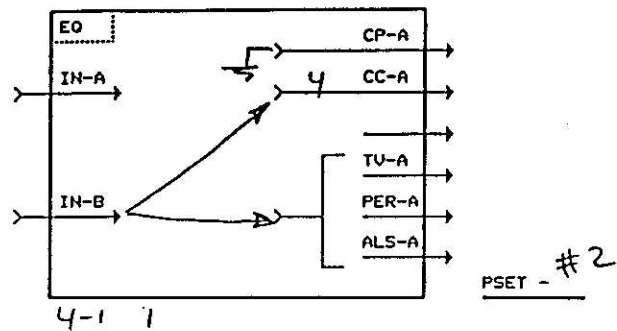
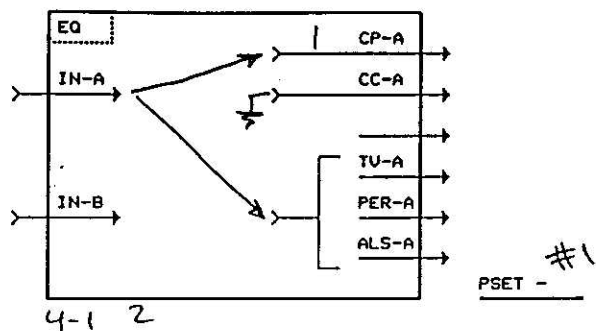
OVERALL EQ PRESET - EQ A

EQA - Preset #1



EQA - Preset #2





CP-CC-CC-CC

OVERALL PRESET Summary

8/25/00

<u>MODE</u>	<u>884-A</u>	<u>884-B</u>	<u>EQ-A</u>	<u>EQ-B</u>
0	0	0	15	15
1	0	1	15	1
2	0	5	15	4
3	2	2	1	5
4	0	1	15	2
5	2	4	4	6
6	0	1	15	3
7	2	4	4	7
8	1	0	6	15
9	1	1	6	1
10	1	5	6	4
11	1	1	6	2
12	1	1	6	3
13	1	0	2	15
14	1	0	8	15
15	4	0	9	8
16	4	0	10	10
17	1	1	2	1
18	1	5	2	4
19	5	2	3	5
20	1	1	8	1
21	1	5	8	4
22	4	3	9	9
23	1	1	2	2
24	2	4	5	6
25	1	1	8	2
26	1	1	2	3
27	2	4	5	7
28	1	1	8	3
29	1	0	7	15
30	1	1	7	1
31	1	5	7	4
32	1	1	7	2
33	1	1	7	3

EQ "A" Relay

EQ "B" Relay / Organ Relay

EQ "B" Relay / Organ Relay

EQ "A" Relay

EQ "B" Relay

884 PRESET Cb:

1 → 80_H
 2 → 40_H
 3 → 20_H
 4 → 10_H
 5 → 08_H
 6 → 04_H
 7 → 02_H
 8 → 01_H

```

;
;      NOV88_B - Mode to Preset Table
;
;      public  n8b_p
n8b_p:
;mode      884-A    884-B    EQ-A    EQ-B
;-----
bM000: db    00h,    00h,    15,    15    ;
bM001: db    00h,    80h,    15,    1    ;
bM002: db    00h,    08h,    15,    4    ;
bM003: db    40h,    40h,    1,    5    ;
bM004: db    00h,    80h,    15,    2    ;
bM005: db    40h,    10h,    4,    6    ;
bM006: db    00h,    80h,    15,    3    ;
bM007: db    40h,    10h,    4,    7    ;
bM008: db    80h,    00h,    6,    15    ;
bM009: db    80h,    80h,    6,    1    ;
bM010: db    80h,    08h,    6,    4    ;
bM011: db    80h,    80h,    6,    2    ;
bM012: db    80h,    80h,    6,    3    ;
bM013: db    80h,    00h,    2,    15    ;
bM014: db    80h,    00h,    8,    15    ;
bM015: db    10h,    00h,    9,    8    ;
bM016: db    10h,    00h,    10,    10    ;
bM017: db    80h,    80h,    2,    1    ;
bM018: db    80h,    08h,    2,    4    ;
bM019: db    08h,    40h,    3,    5    ;
bM020: db    80h,    80h,    8,    1    ;
bM021: db    80h,    08h,    8,    4    ;
bM022: db    10h,    20h,    9,    9    ;
bM023: db    80h,    80h,    2,    2    ;
bM024: db    40h,    10h,    5,    6    ;
bM025: db    80h,    80h,    8,    2    ;
bM026: db    80h,    80h,    2,    3    ;
bM027: db    40h,    10h,    5,    7    ;
bM028: db    80h,    80h,    8,    3    ;
bM029: db    80h,    00h,    7,    15    ;
bM030: db    80h,    80h,    7,    1    ;
bM031: db    80h,    08h,    7,    4    ;
bM032: db    80h,    80h,    7,    2    ;
bM033: db    80h,    80h,    7,    3    ;
;

```

8/2/01 884A was 40H (#2)
s/b 08H (#5)