NOV-88 CONTROL SYSTEM INSTALLATION GUIDE
&
N8A "Student Bldg" Logic Tables

EQ B Overall Presets - (pg 46) - Revised 07/13/2001

Rev. 1 December 2000

NOV88 "Student Building" Equipment List for Ivie Technologies Products

Chapel "A"	CC"A"	CC"B"	Chapel "B"

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 addtion to supplied 78C-6)
2	IM-10	Sacrament microphones
2	78C-6	Mix bus jumper cables
3	IR-I	lnfared 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

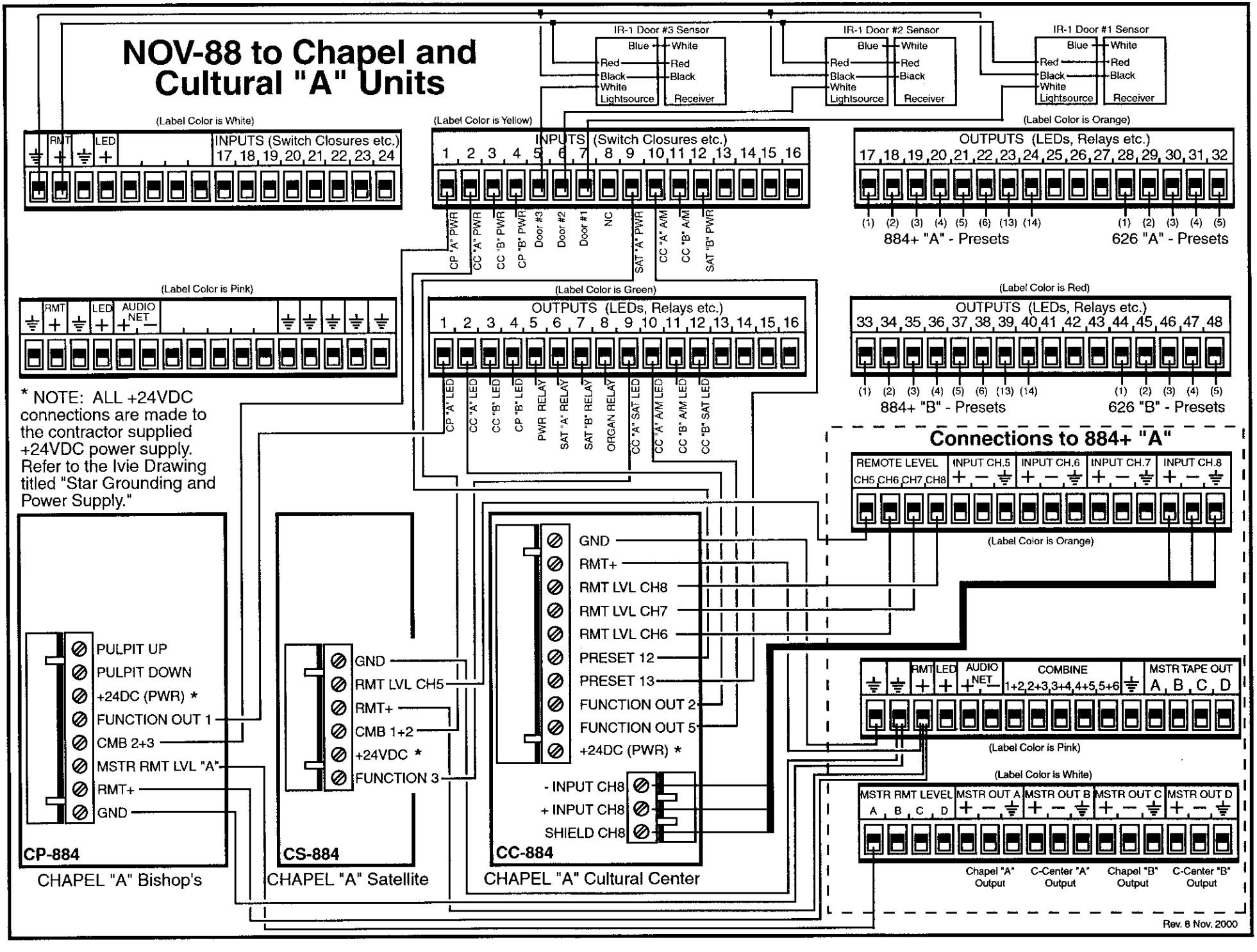
Chapel "A"	CC "A"	CC "B"	CC "C"

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

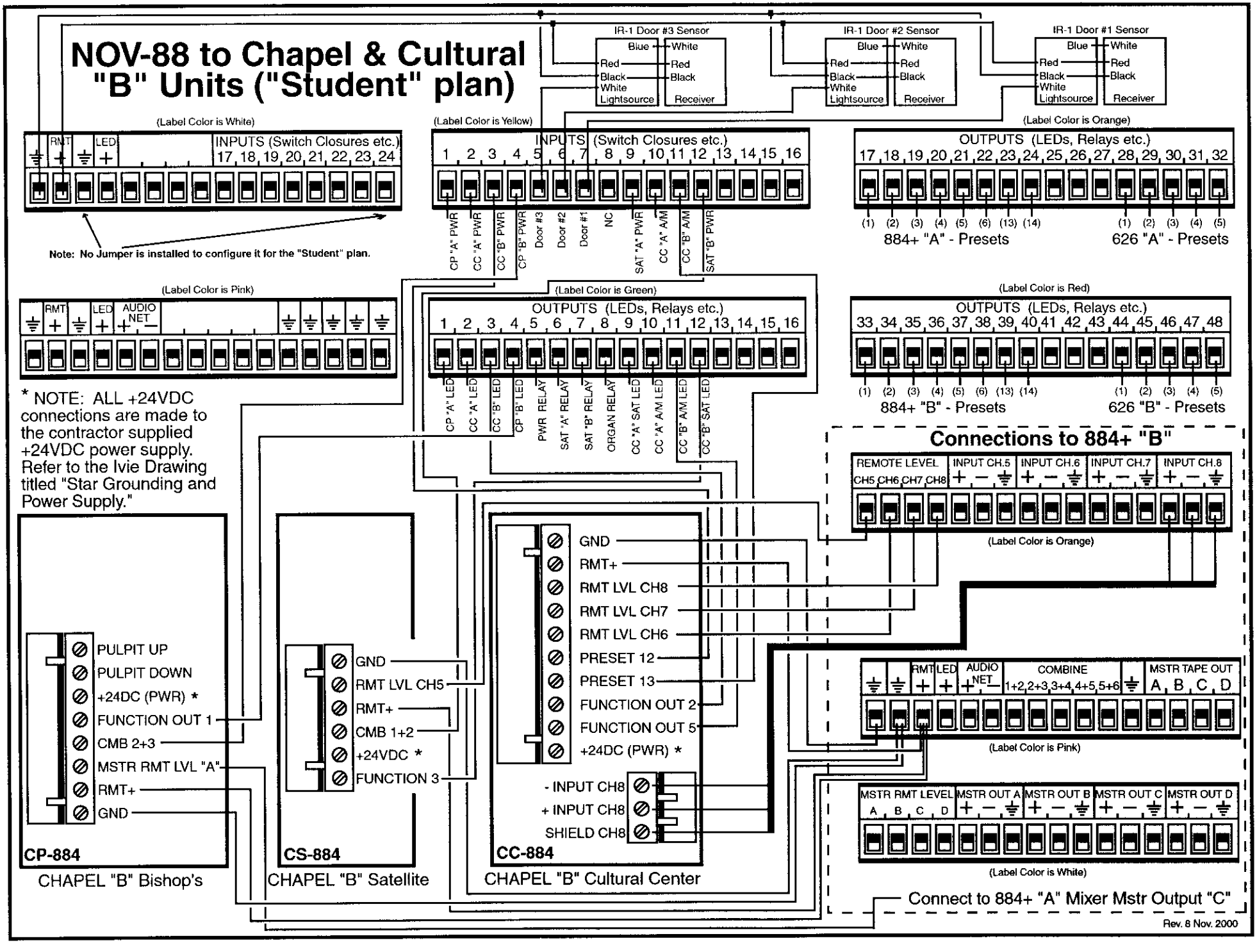
SPECIAL NOTE # 2
On both 884+ mixers, preset # 13 should be programmed for Auto / Manual operaiton and preset # 14 should be programmed for Satellite operation

Rev. 15 Aug 2000

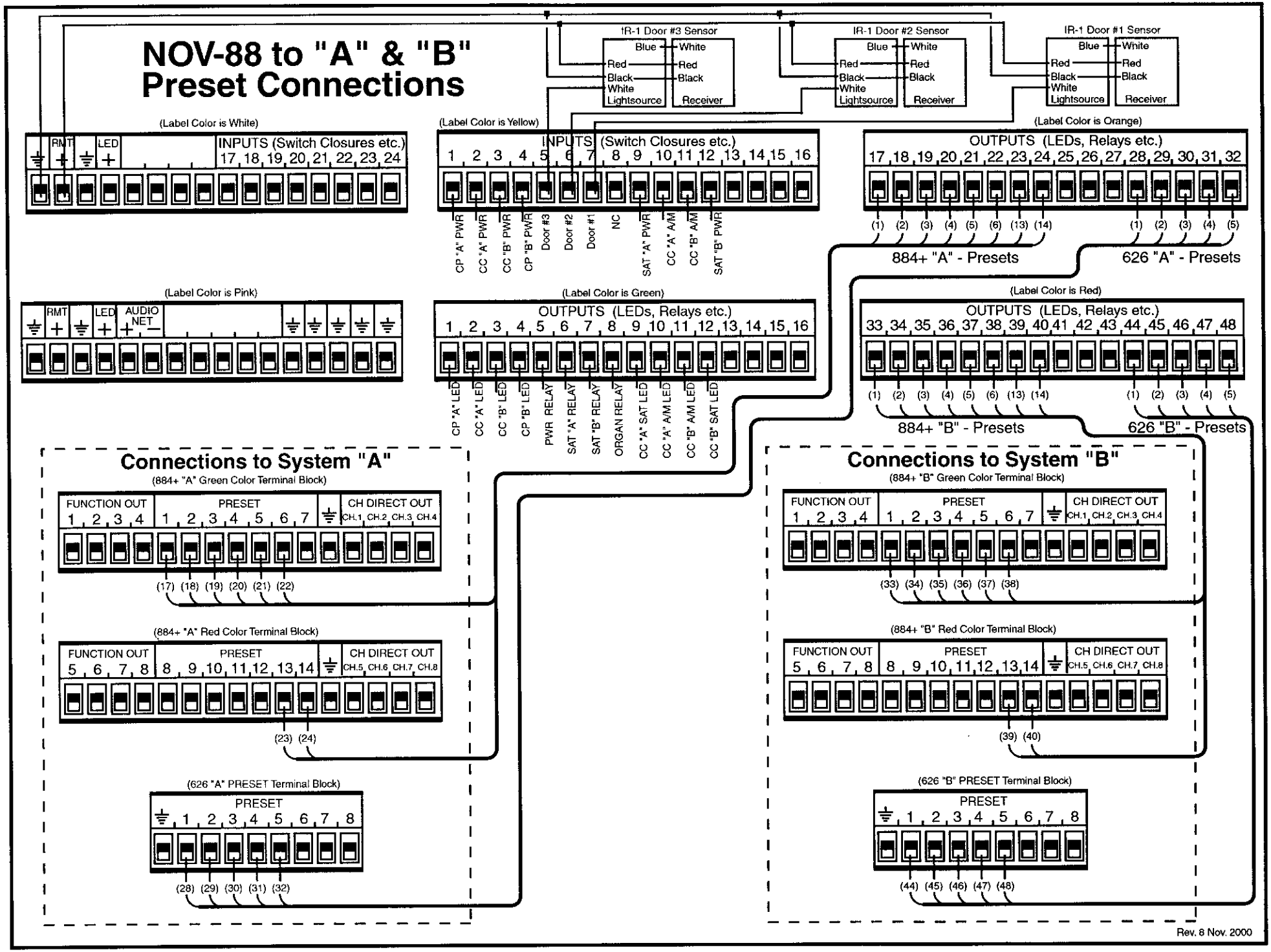
NOV-88 to Chapel and Cultural "A" Units



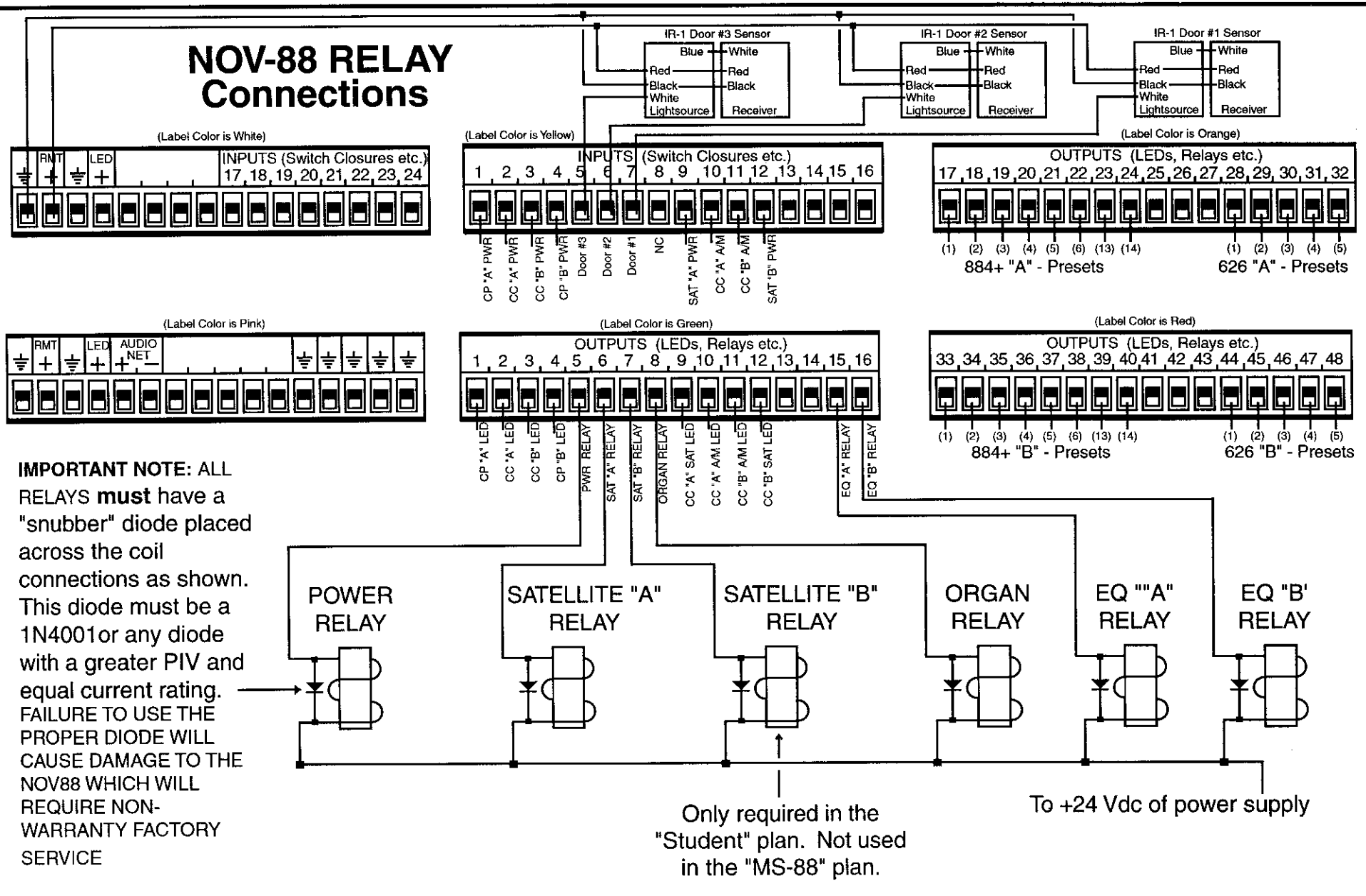
NOV-88 to Chapel & Cultural "B" Units ("Student" plan)



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



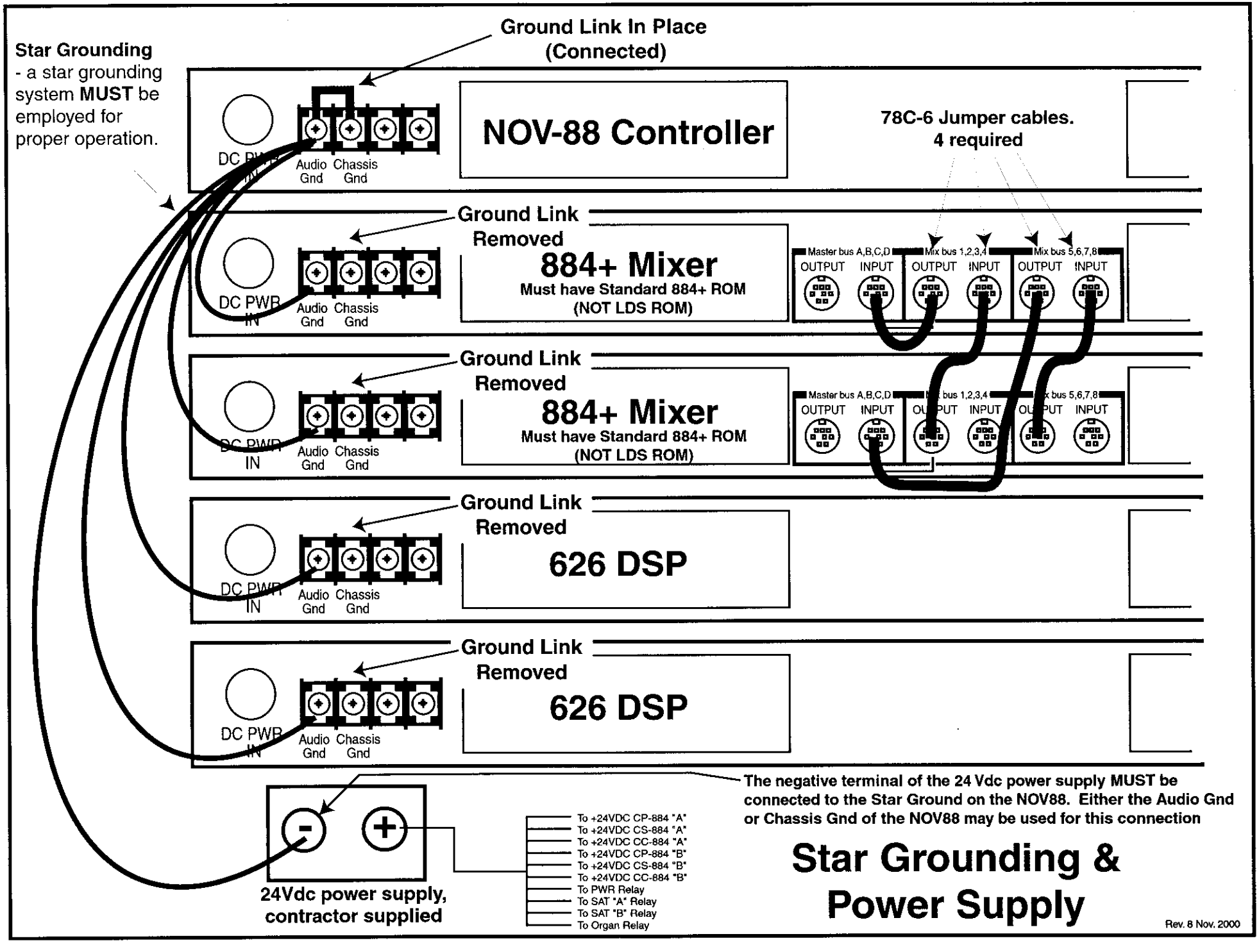
NOV-88 RELAY Connections



IMPORTANT NOTE: ALL RELAYS **must** have a "snubber" diode placed across the coil connections as shown. This diode must be a 1N4001or 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

Rev. 8 Nov 2000


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
DC PWR IN
Audio Gnd
Chassis Gnd
Ground Link
Removed
884+ Mixer
Must have Standard 884+ ROM
(NOT LDS ROM)
Master bus A,B,C,D
Mix bus 1,2,3,4
Mix bus 5,6,7,8
OUTPUT
INPUT
626 DSP
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
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
Star Grounding & Power Supply
Rev. 8 Nov. 2000

Ivie Technologies

NOV88

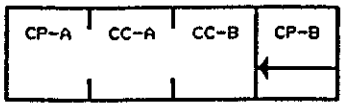
AudioNet Controller

CP-CC-CC-CP Logic Tables

("N8A" – Student Building)

8/24/2000 – Rev 3

Mode - 1



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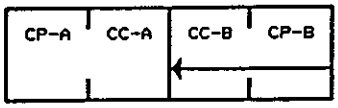

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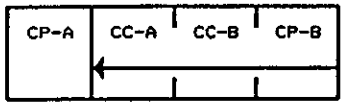

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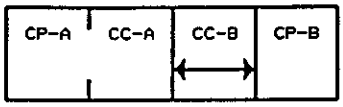

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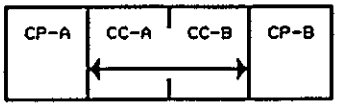

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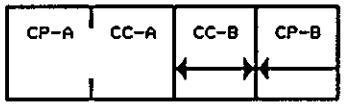

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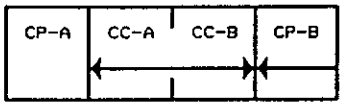

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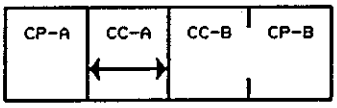

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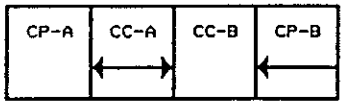

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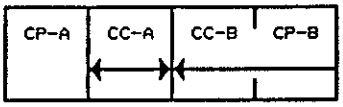

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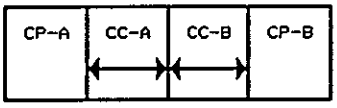

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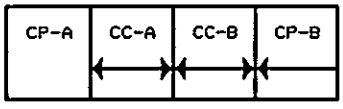

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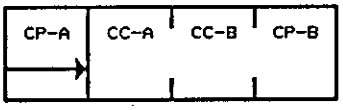

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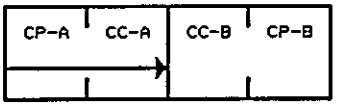

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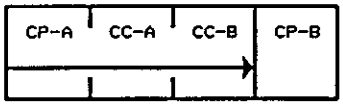

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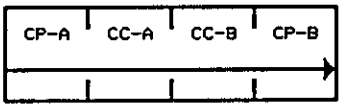

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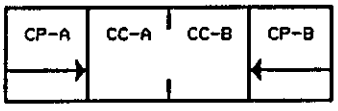

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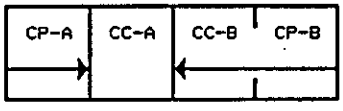

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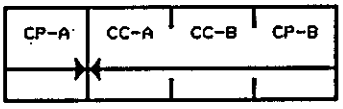

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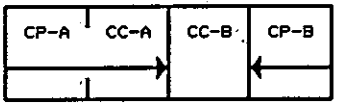

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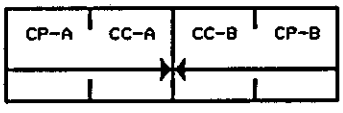

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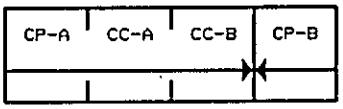

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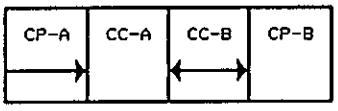

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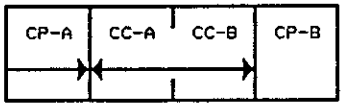

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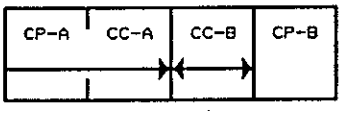

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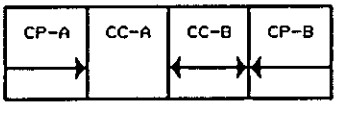

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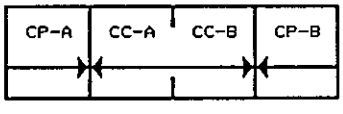

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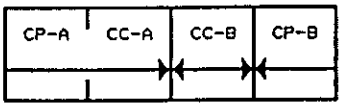

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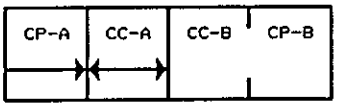

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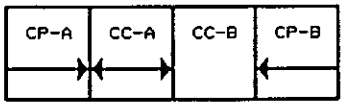

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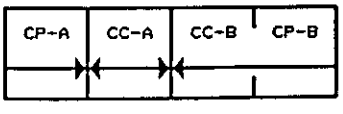

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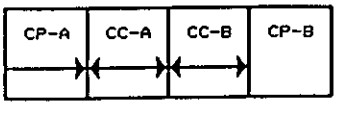

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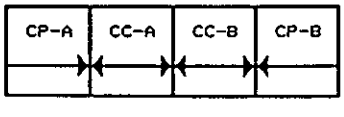
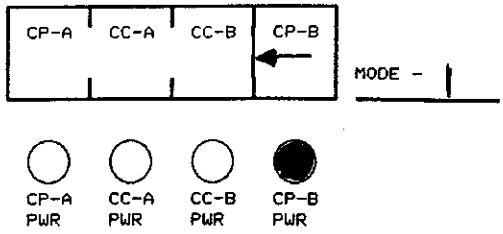
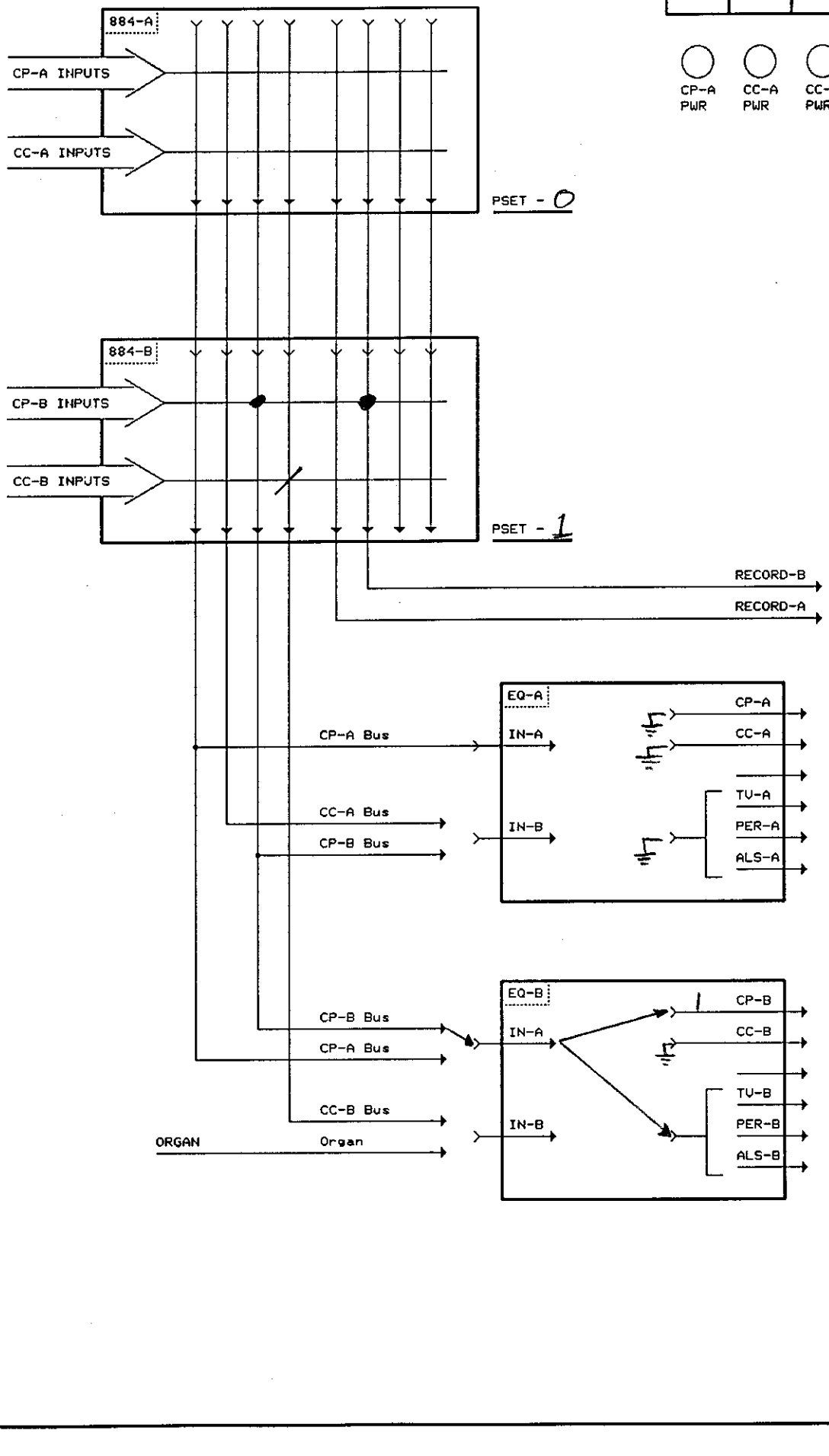


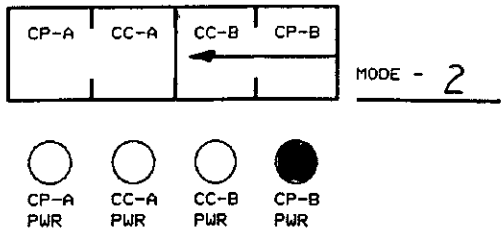
CP-CC-CC-CP





11/10/00 13:44:21

CP-CC-CC-CP



884-A

CP-A INPUTS

CC-A INPUTS

PSET - 0

884-B

CP-B INPUTS

CC-B INPUTS

PSET - 1

RECORD-B

RECORD-A

EQ-A

CP-A Bus

IN-A

CC-A Bus

IN-B

CP-B Bus

CP-A

CC-A

TV-A

PER-A

ALS-A

PSET - 15

EQ-B

CP-B Bus

IN-A

CP-A Bus

CC-B Bus

IN-B

ORGAN

Organ

2B CP-B

2A CC-B

TV-B

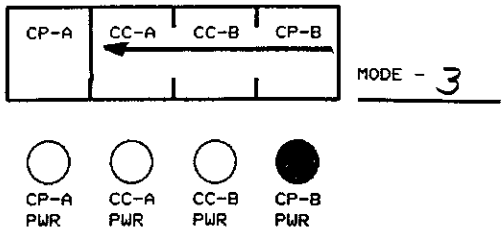
PER-B

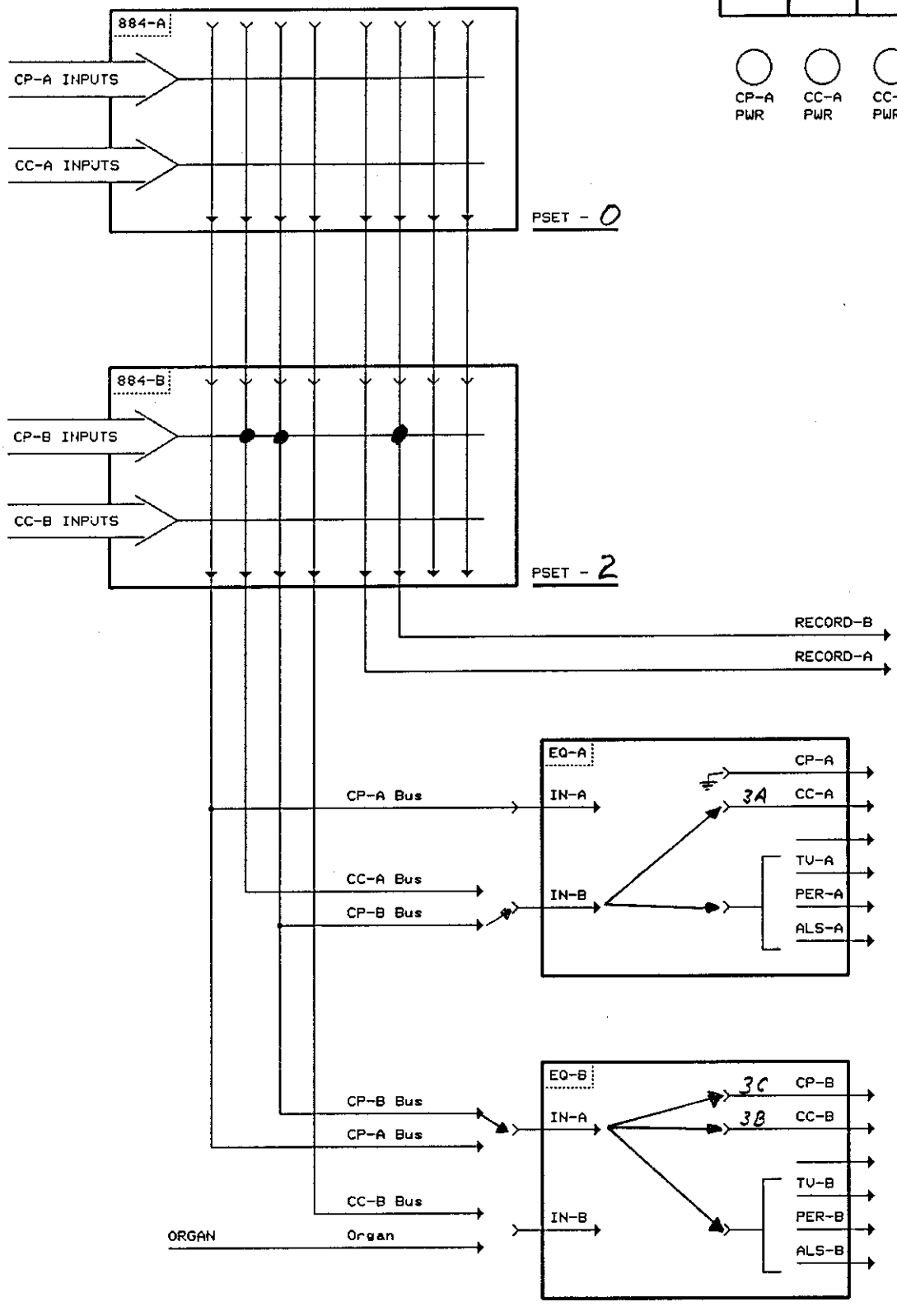
ALS-B

PSET - 4

11/10/00 13:44:21

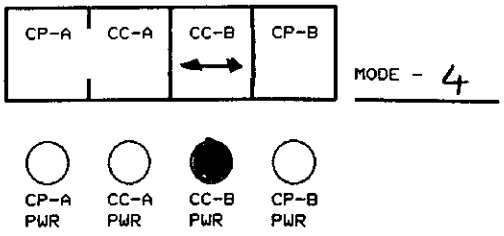
CP-CC-CC-CP

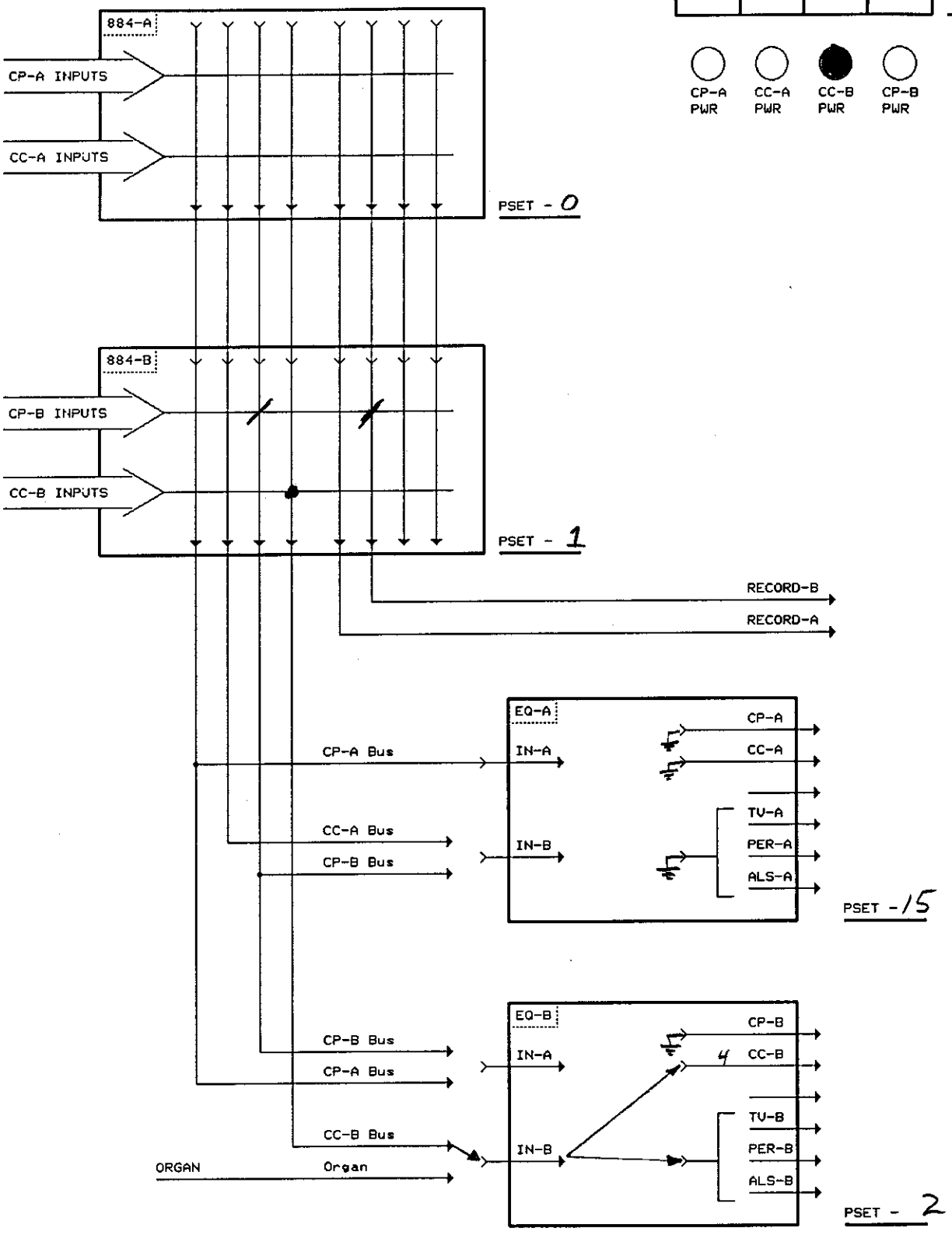




11/10/00 13:44:21

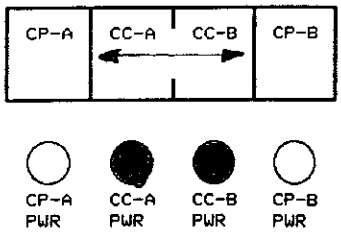
CP-CC-CC-CP





11/10/00 13:44:21

CP-CC-CC-CP



MODE - 5

884-A

CP-A INPUTS

CC-A INPUTS

PSET - 2

884-B

CP-B INPUTS

CC-B INPUTS

PSET - 4

RECORD-B

RECORD-A

EQ-A

CP-A Bus

IN-A

CC-A Bus

IN-B

CP-B Bus

CP-A

5A CC-A

TV-A

PER-A

ALS-A

PSET - 4

EQ-B

CP-B Bus

IN-A

CP-A Bus

CC-B Bus

IN-B

ORGAN

Organ

CP-B

5B CC-B

TV-B

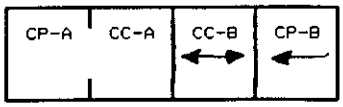
PER-B

ALS-B

PSET - 6

11/10/00 13:44:21

CP-CC-CC-CP



MODE - 6

CP-A PWR ○ CC-A PWR ○ CC-B PWR ● CP-B PWR ●

884-A

CP-A INPUTS

CC-A INPUTS

PSET - 0

884-B

CP-B INPUTS

CC-B INPUTS

PSET - 1

RECORD-B

RECORD-A

EQ-A

CP-A Bus

IN-A

CC-A Bus

CP-B Bus

IN-B

CP-A

CC-A

TV-A

PER-A

ALS-A

PSET - 15

EQ-B

CP-B Bus

CP-A Bus

IN-A

CC-B Bus

ORGAN

Organ

IN-B

1

4

CP-B

CC-B

TV-B

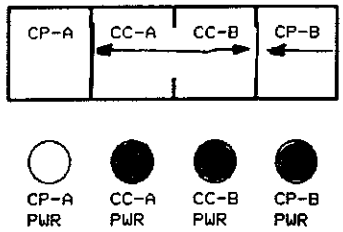
PER-B

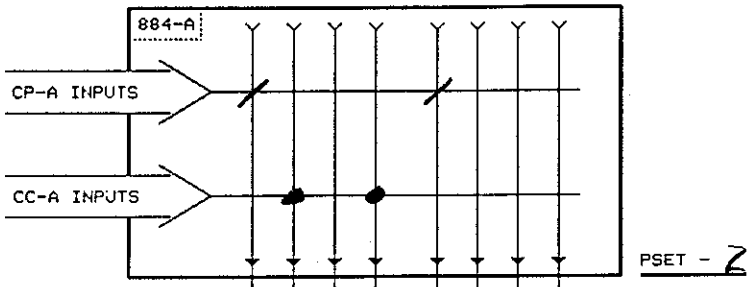
ALS-B

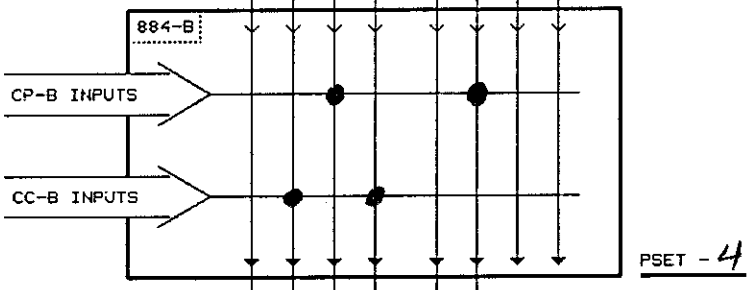
PSET - 3

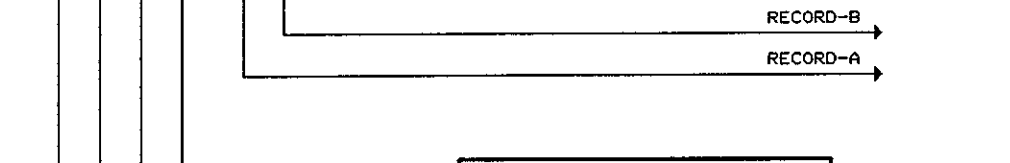
11/10/00 13:44:21

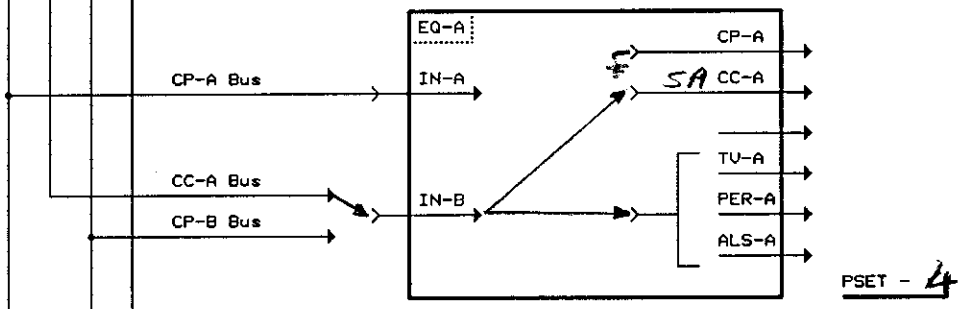
CP-CC-CC-CP

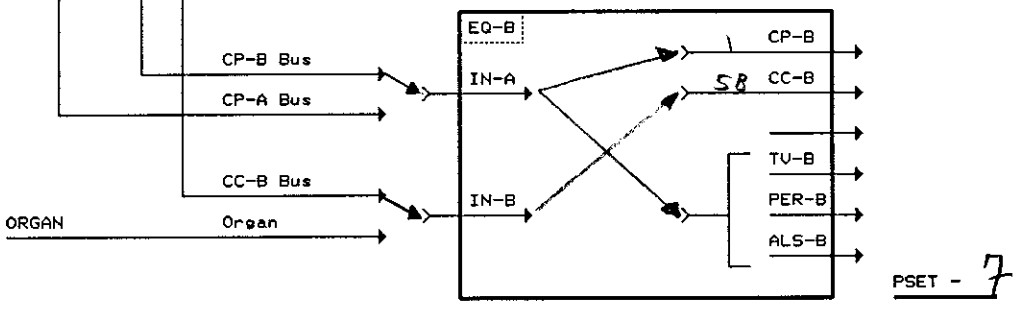






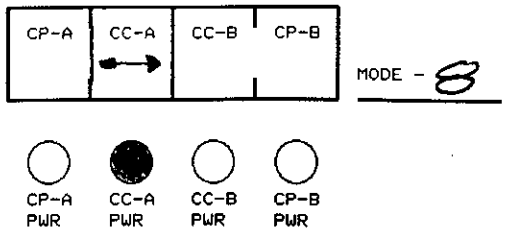






11/10/00 13:44:21

CP-CC-CC-CP



884-A

CP-A INPUTS

CC-A INPUTS

PSET - 1

884-B

CP-B INPUTS

CC-B INPUTS

PSET - 0

RECORD-B

RECORD-A

EQ-A

CP-A Bus

IN-A

CC-A Bus

IN-B

CP-B Bus

CP-A

6

CC-A

TV-A

PER-A

ALS-A

PSET - 6

EQ-B

CP-B Bus

IN-A

CP-A Bus

CC-B Bus

IN-B

ORGAN

Organ

CP-B

CC-B

TV-B

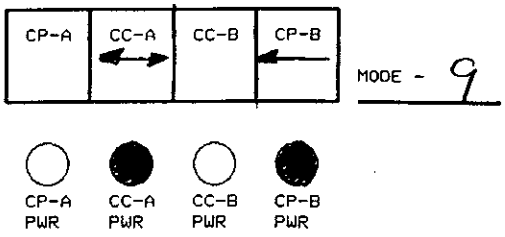
PER-B

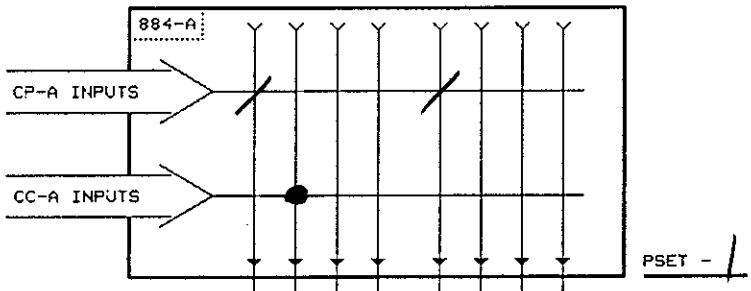
ALS-B

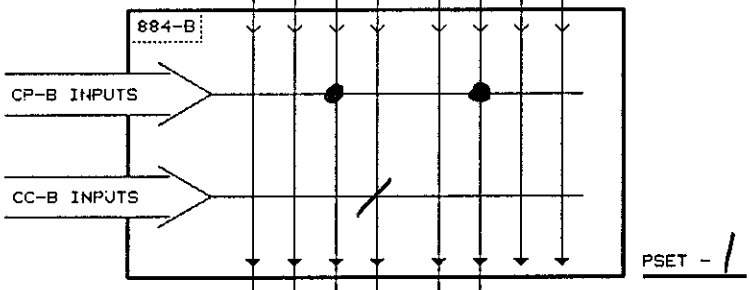
PSET - 15

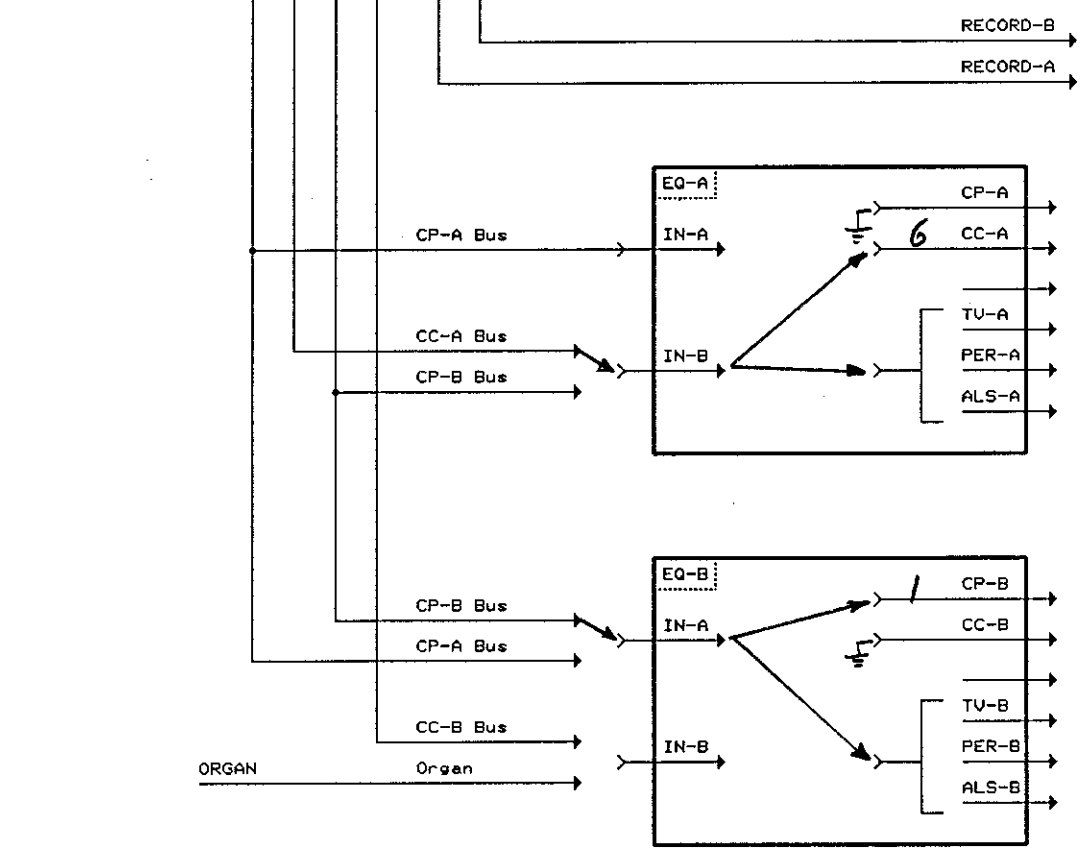
11/10/00 13:44:21

CP-CC-CC-CP



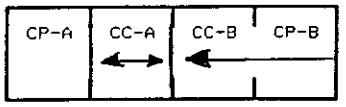






11/10/00 13:44:21

CP-CC-CC-CP



MODE - 10

CP-A PWR | CC-A PWR | CC-B PWR | CP-B PWR

884-A

CP-A INPUTS

CC-A INPUTS

PSET - 1

884-B

CP-B INPUTS

CC-B INPUTS

PSET - 1

RECORD-B

RECORD-A

EQ-A

IN-A

IN-B

CP-A Bus

CC-A Bus

CP-B Bus

CP-A

CC-A

TV-A

PER-A

ALS-A

PSET - 6

EQ-B

IN-A

IN-B

CP-B Bus

CP-A Bus

CC-B Bus

ORGAN

Organ

2B CP-B

2A CC-B

TV-B

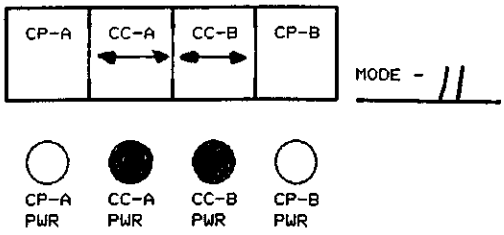
PER-B

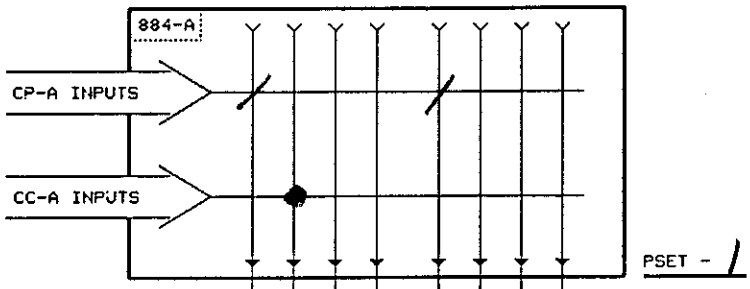
ALS-B

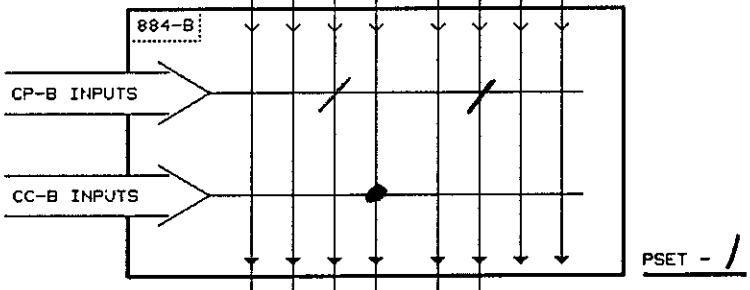
PSET - 4

11/10/00 13:44:21

CP-CC-CC-CP

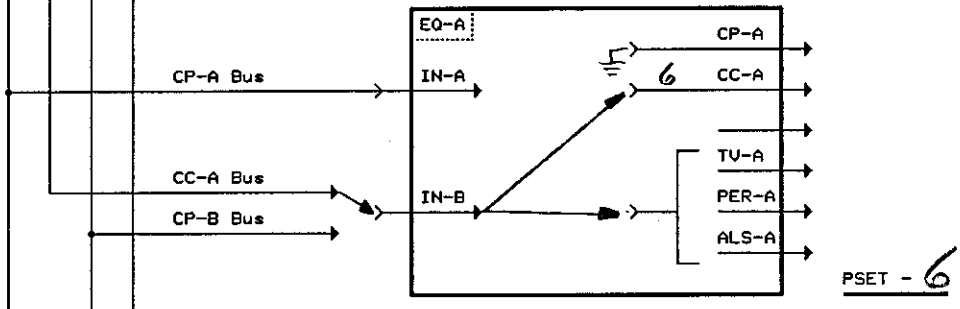


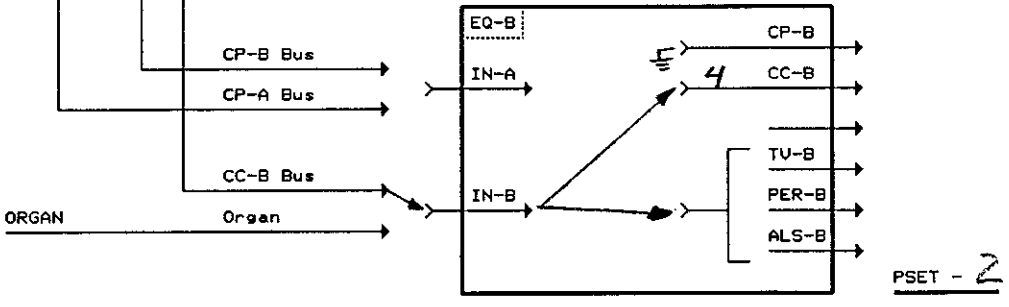




RECORD-B

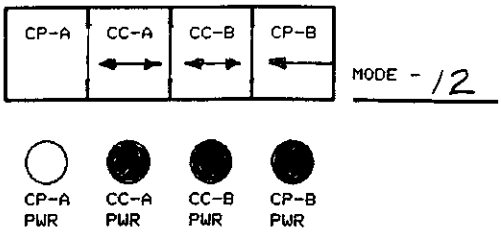
RECORD-A

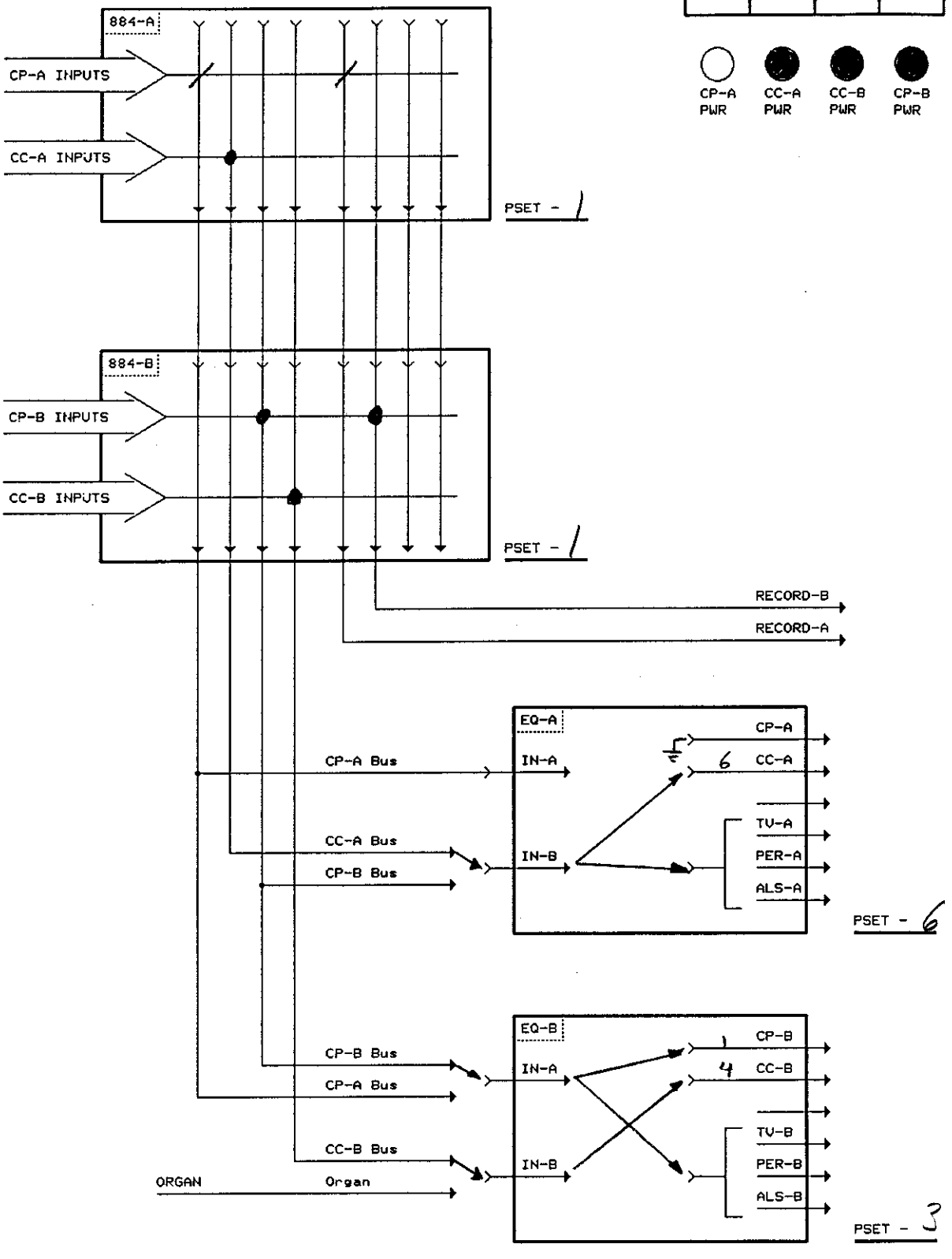




11/10/00 13:44:21

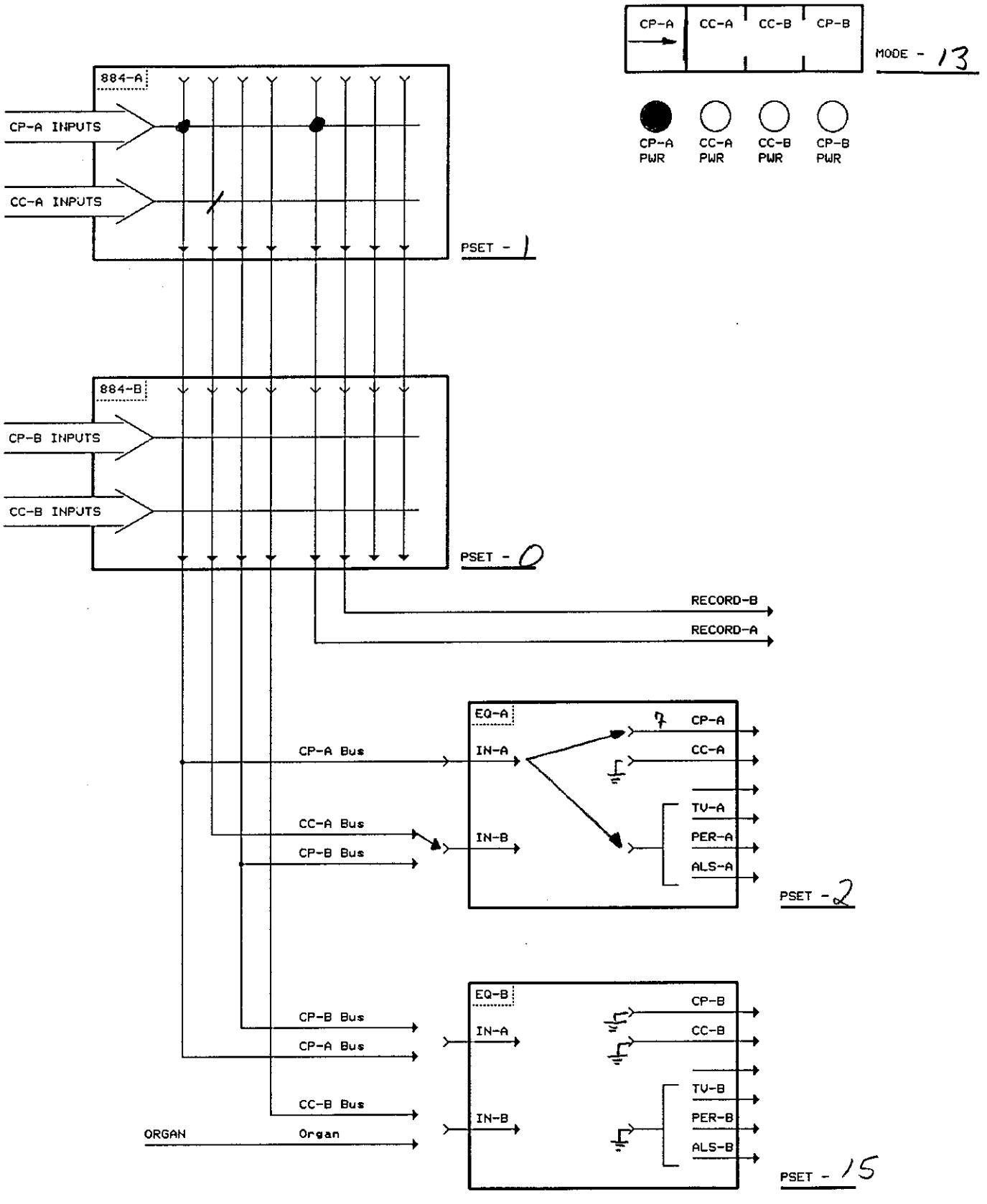
CP-CC-CC-CP





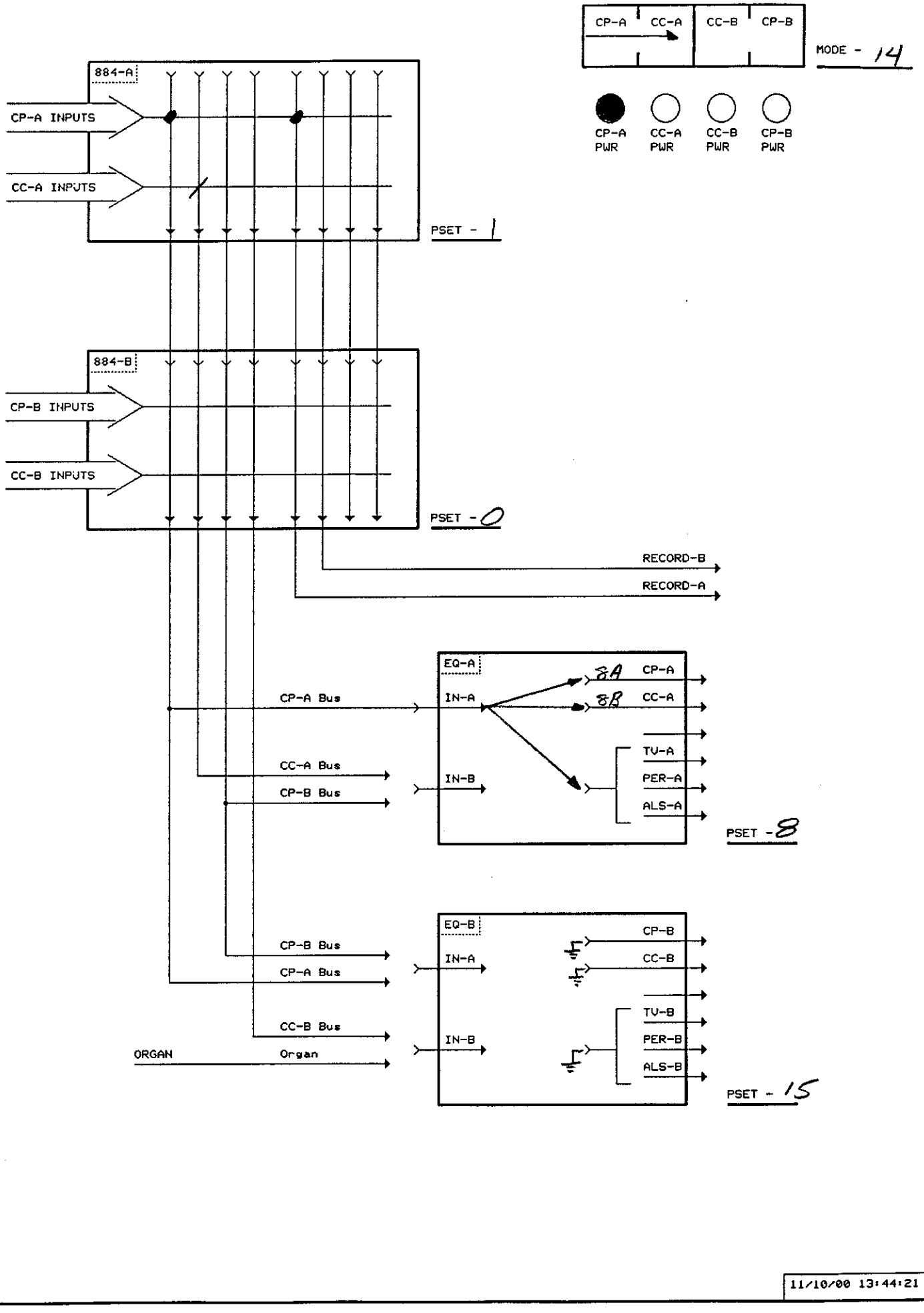
11/10/00 13:44:21

CP-CC-CC-CP



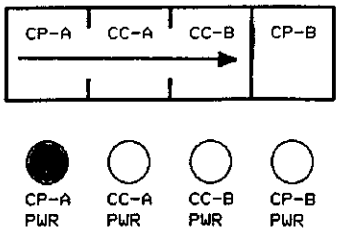
11/10/00 13:44:21

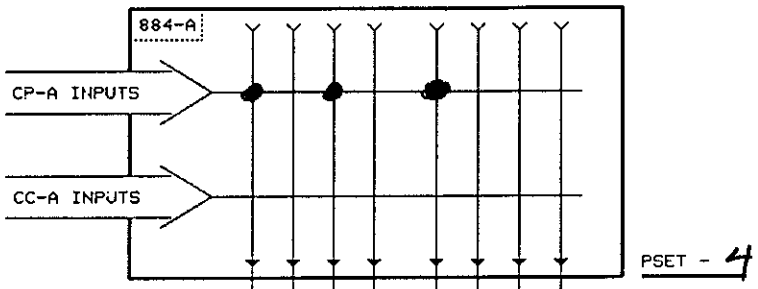
CP-CC-CC-CP

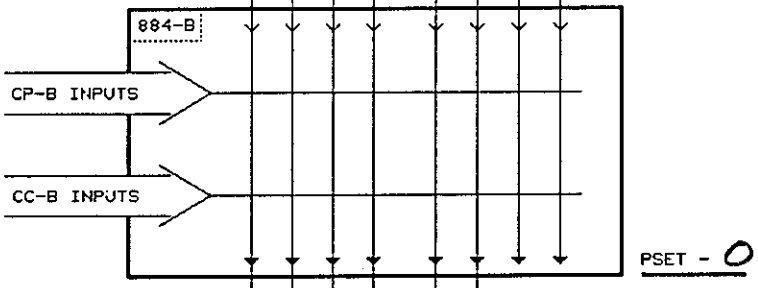


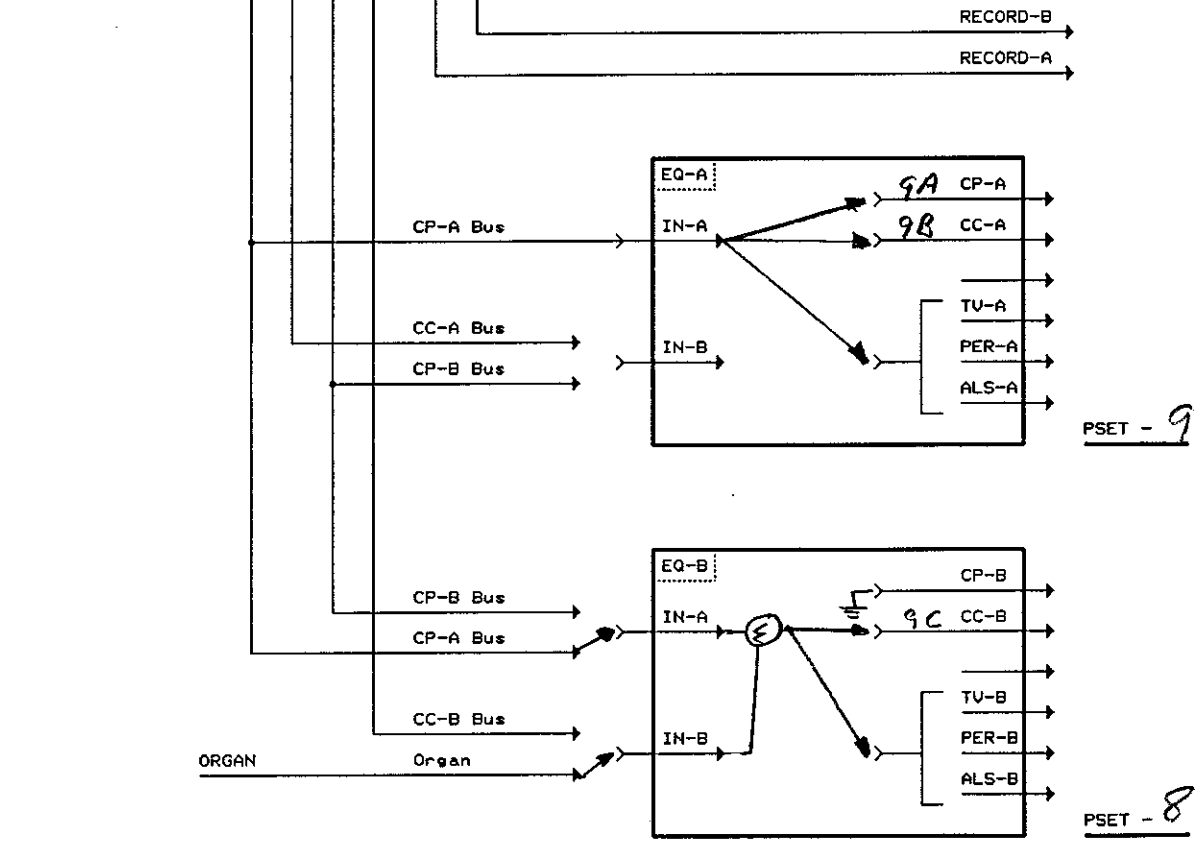
11/10/00 13:44:21

CP-CC-CC-CP



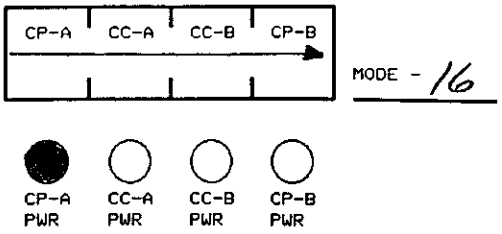


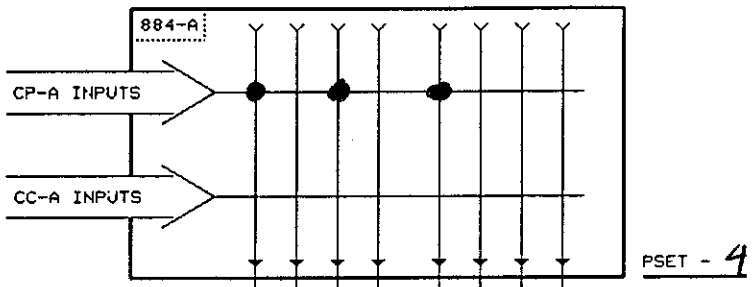


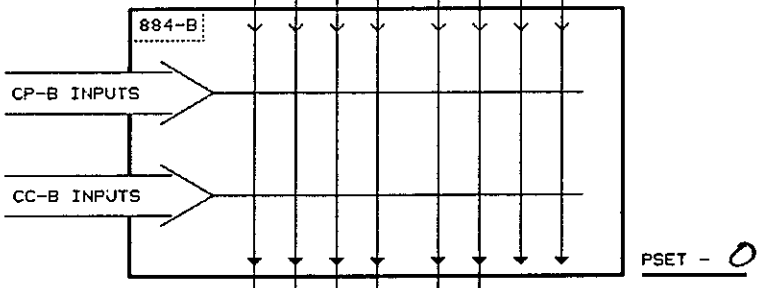


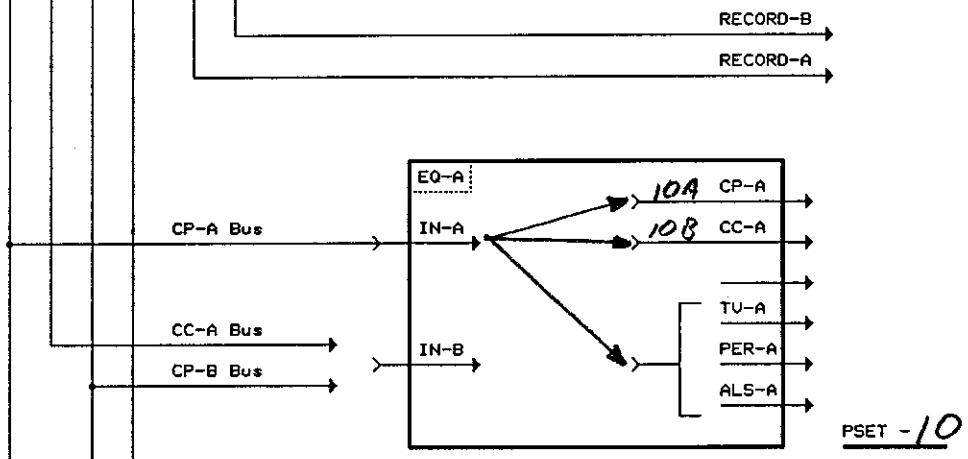
11/10/00 13:44:21

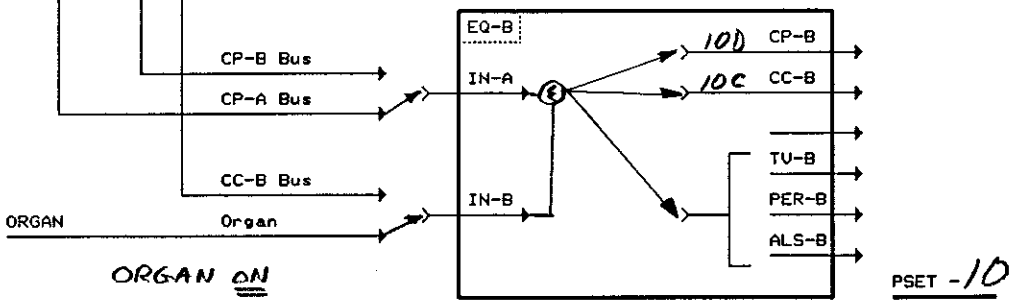
CP-CC-CC-CP





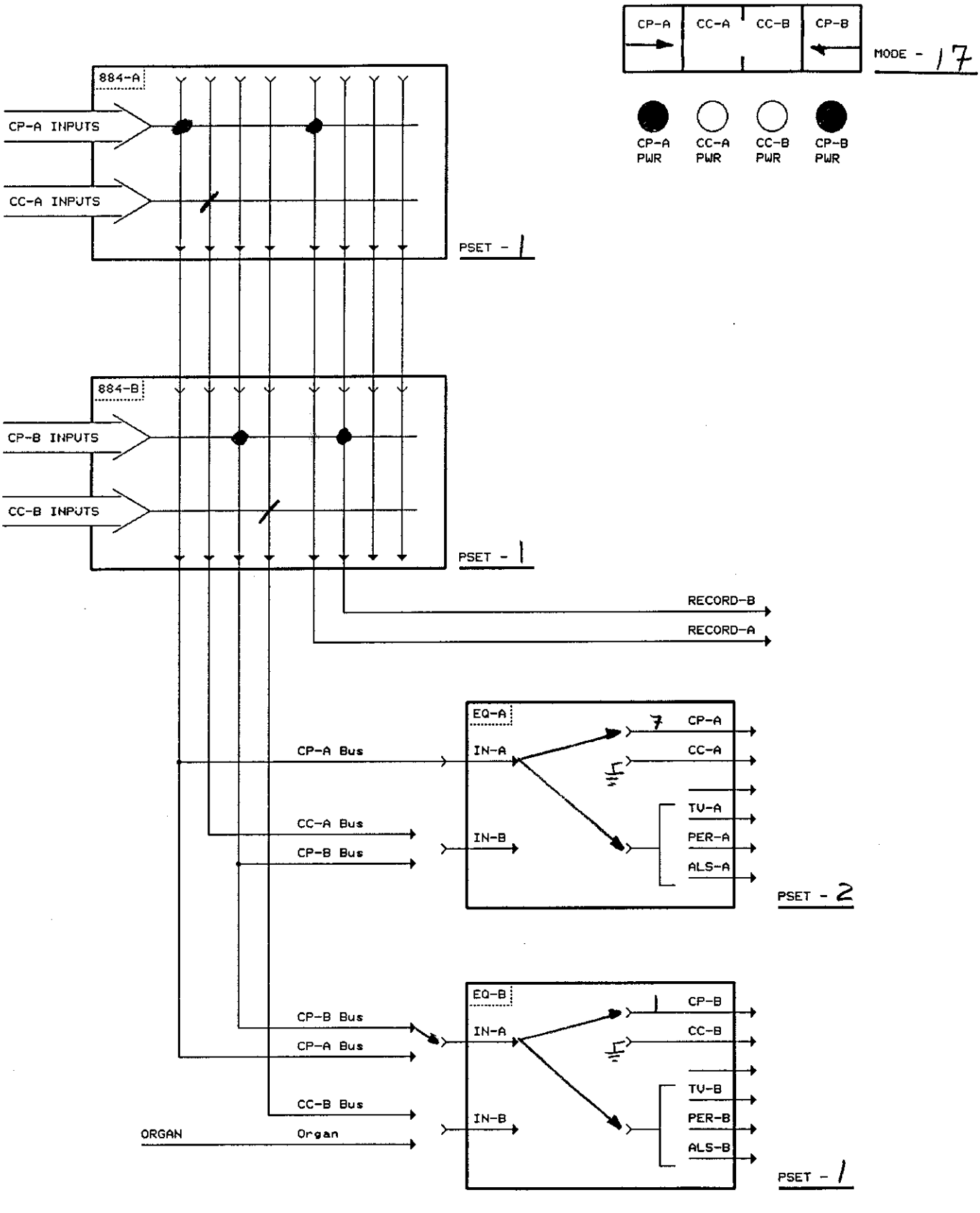






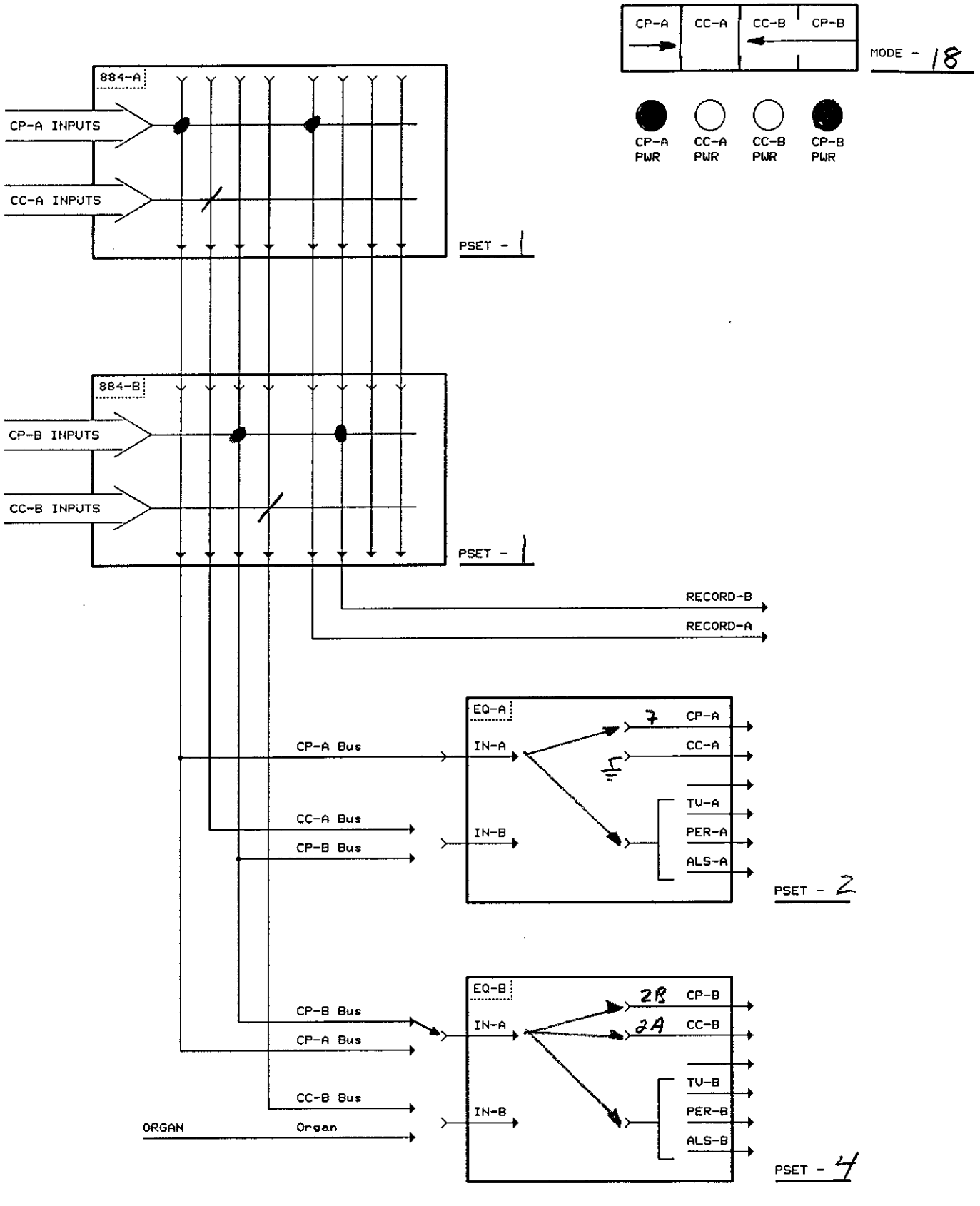
ORGAN ON

CP-CC-CC-CP



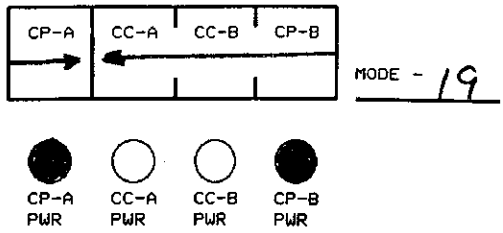
11/10/00 13:44:21

CP-CC-CC-CP



11/10/00 13:44:21

CP-CC-CC-CP



884-A

CP-A INPUTS

CC-A INPUTS

PSET - 3

884-B

CP-B INPUTS

CC-B INPUTS

PSET - 2

RECORD-B

RECORD-A

EQ-A

CP-A Bus

IN-A

CC-A Bus

CP-B Bus

IN-B

7 CP-A

3A CC-A

TV-A

PER-A

ALS-A

PSET - 3

EQ-B

CP-B Bus

IN-A

CP-A Bus

CC-B Bus

IN-B

ORGAN

Organ

3C CP-B

3B CC-B

TV-B

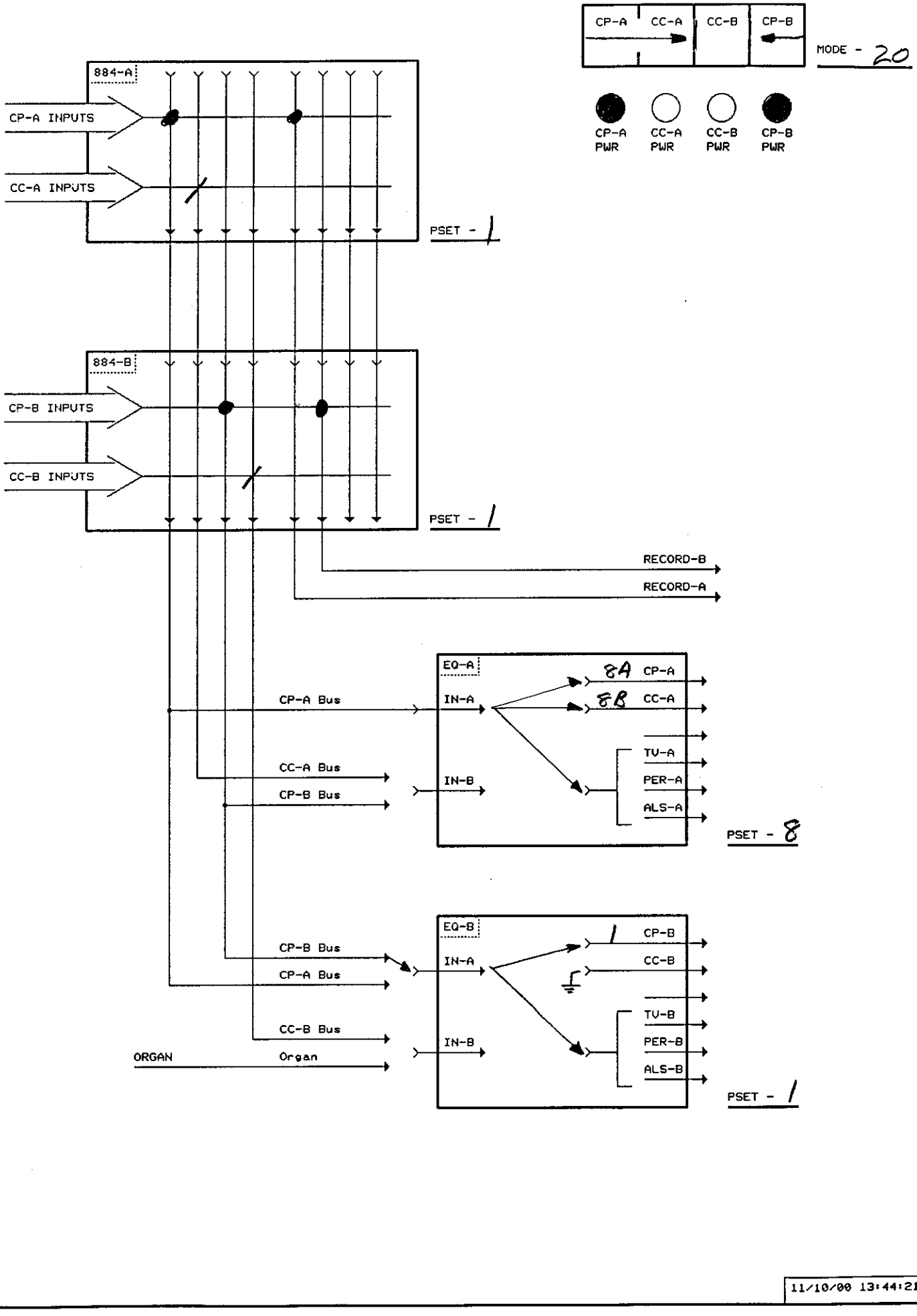
PER-B

ALS-B

PSET - 5

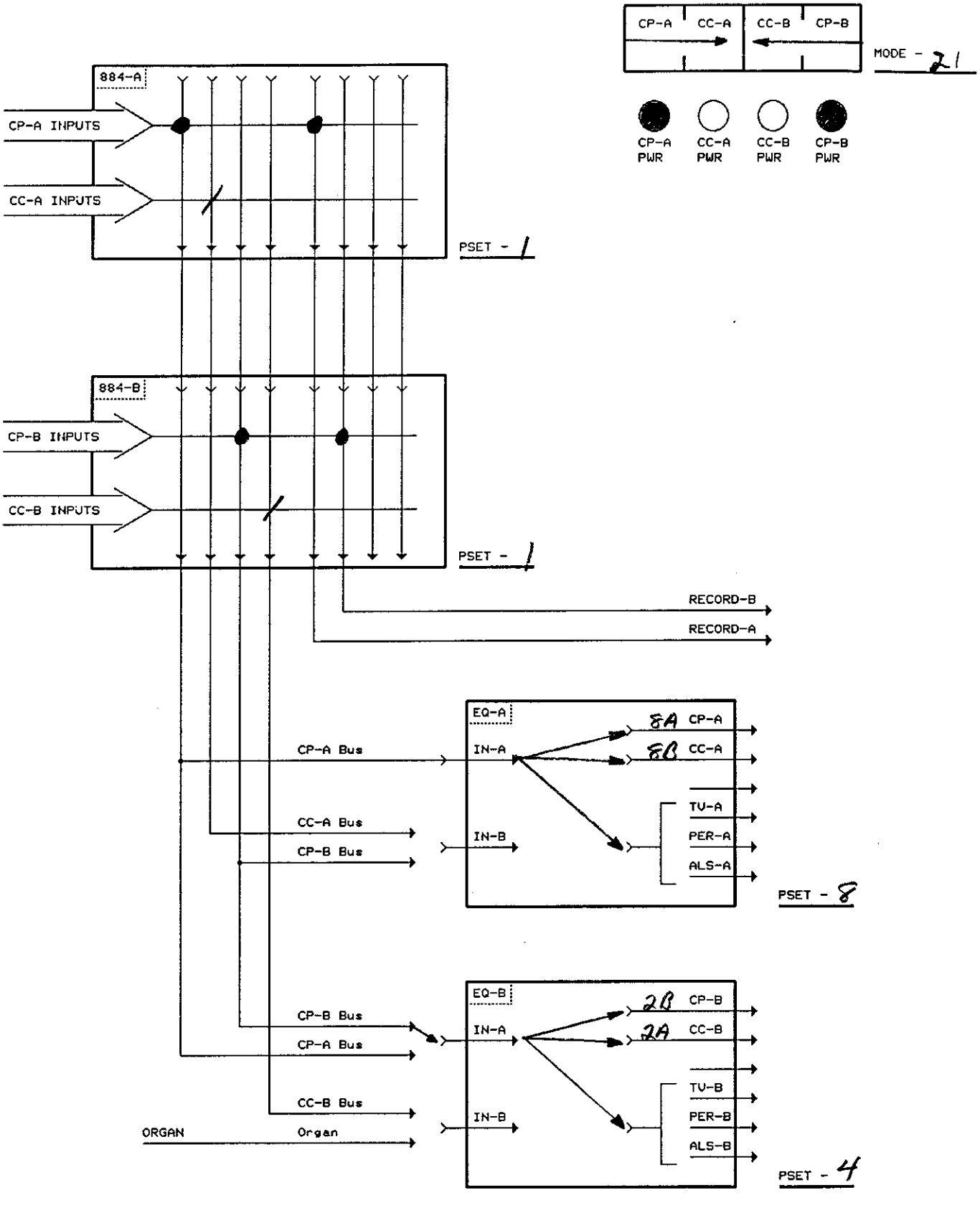
11/10/00 13:44:21

CP-CC-CC-CP



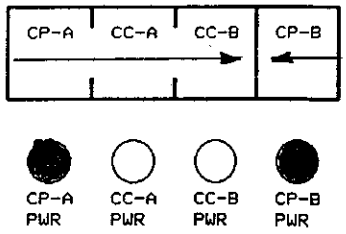
11/10/00 13:44:21

CP-CC-CC-CP



11/10/00 13:44:21

CP-CC-CC-CP



MODE - 22

884-A

CP-A INPUTS

CC-A INPUTS

PSET - 4

884-B

CP-B INPUTS

CC-B INPUTS

PSET - 3

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

RECORD-B

RECORD-A

EQ-A

IN-A

IN-B

CP-A Bus

CC-A Bus

CP-B Bus

9A CP-A

9B CC-A

TU-A

PER-A

ALS-A

PSET - 9

EQ-B

IN-A

IN-B

CP-B Bus

CP-A Bus

CC-B Bus

ORGAN Organ

NOTE: NO ORGAN!

1 CP-B

9C CC-B

TU-B

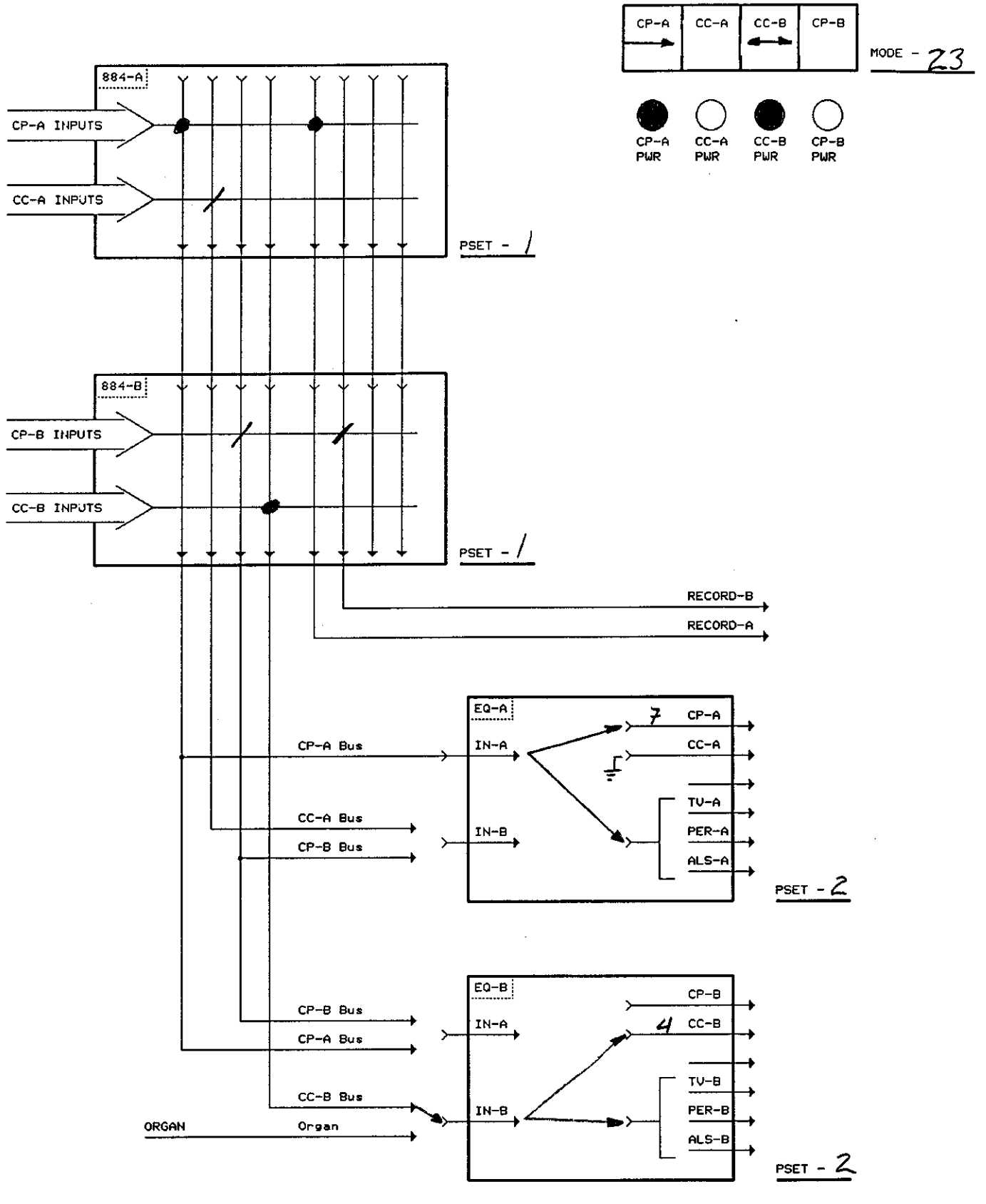
PER-B

ALS-B

PSET - 9

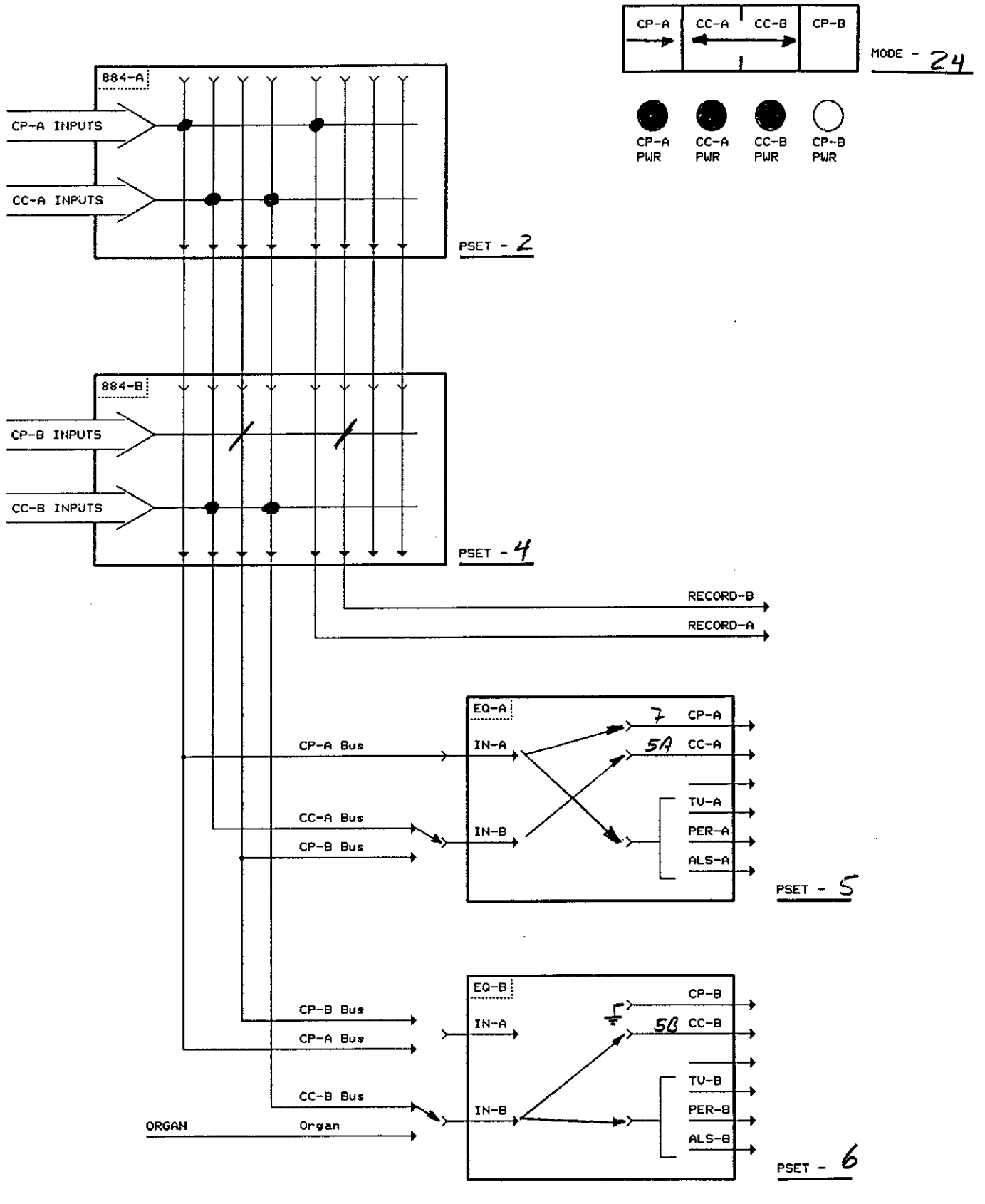
11/10/00 13:44:21

CP-CC-CC-CP



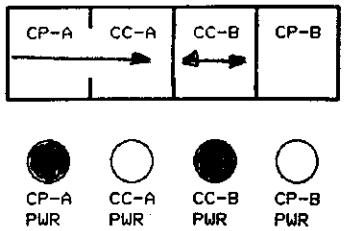
11/10/00 13:44:21

CP-CC-CC-CP



11/10/00 13:44:21

CP-CC-CC-CP



MODE - 25

884-A

CP-A INPUTS

CC-A INPUTS

PSET - 1

884-B

CP-B INPUTS

CC-B INPUTS

PSET - 1

RECORD-B

RECORD-A

EQ-A

CP-A Bus

IN-A

81 CP-A

8B CC-A

CC-A Bus

CP-B Bus

IN-B

TV-A

PER-A

ALS-A

PSET - 8

EQ-B

CP-B Bus

CP-A Bus

IN-A

CP-B

4 CC-B

CC-B Bus

IN-B

TV-B

PER-B

ALS-B

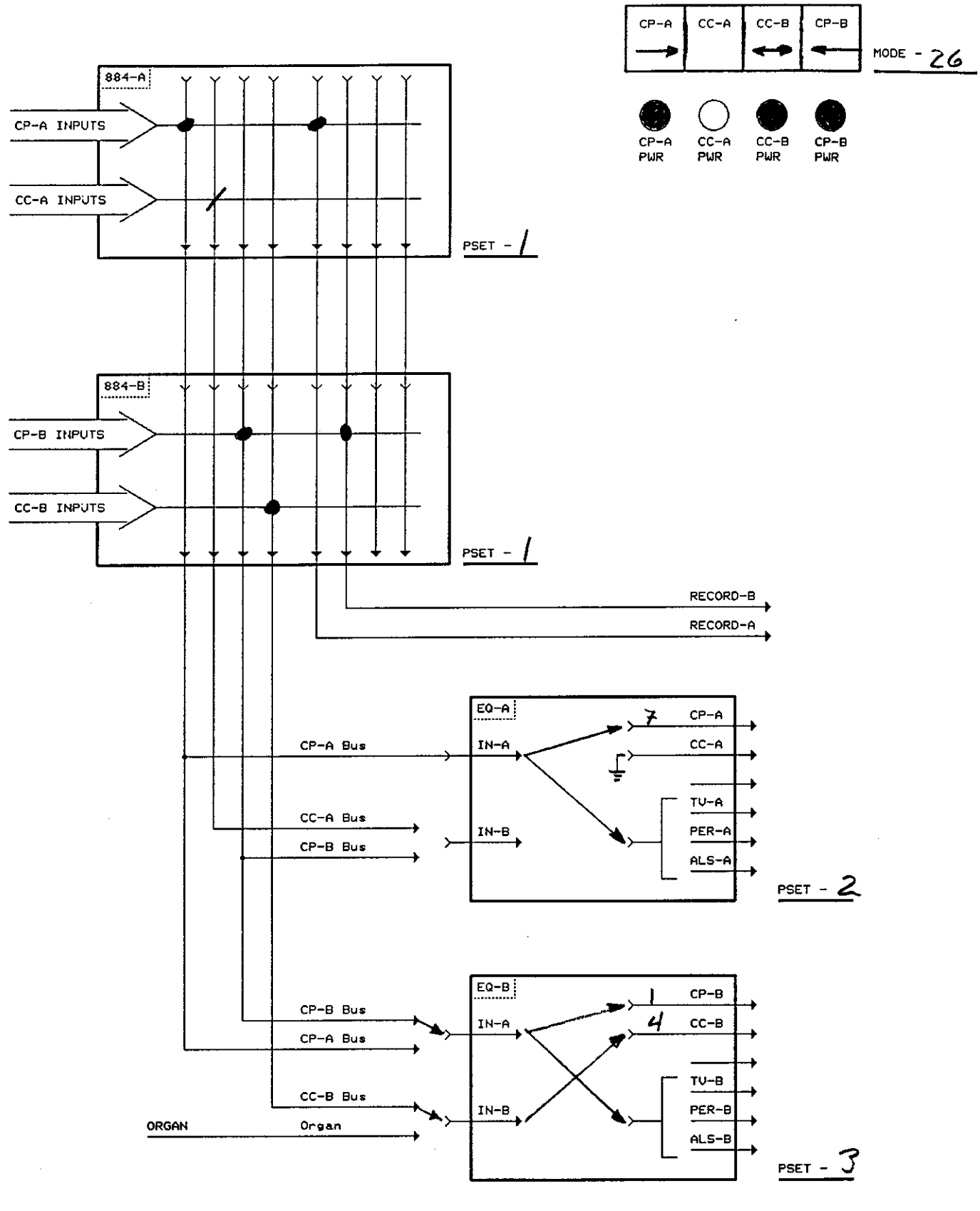
ORGAN

Organ

PSET - 2

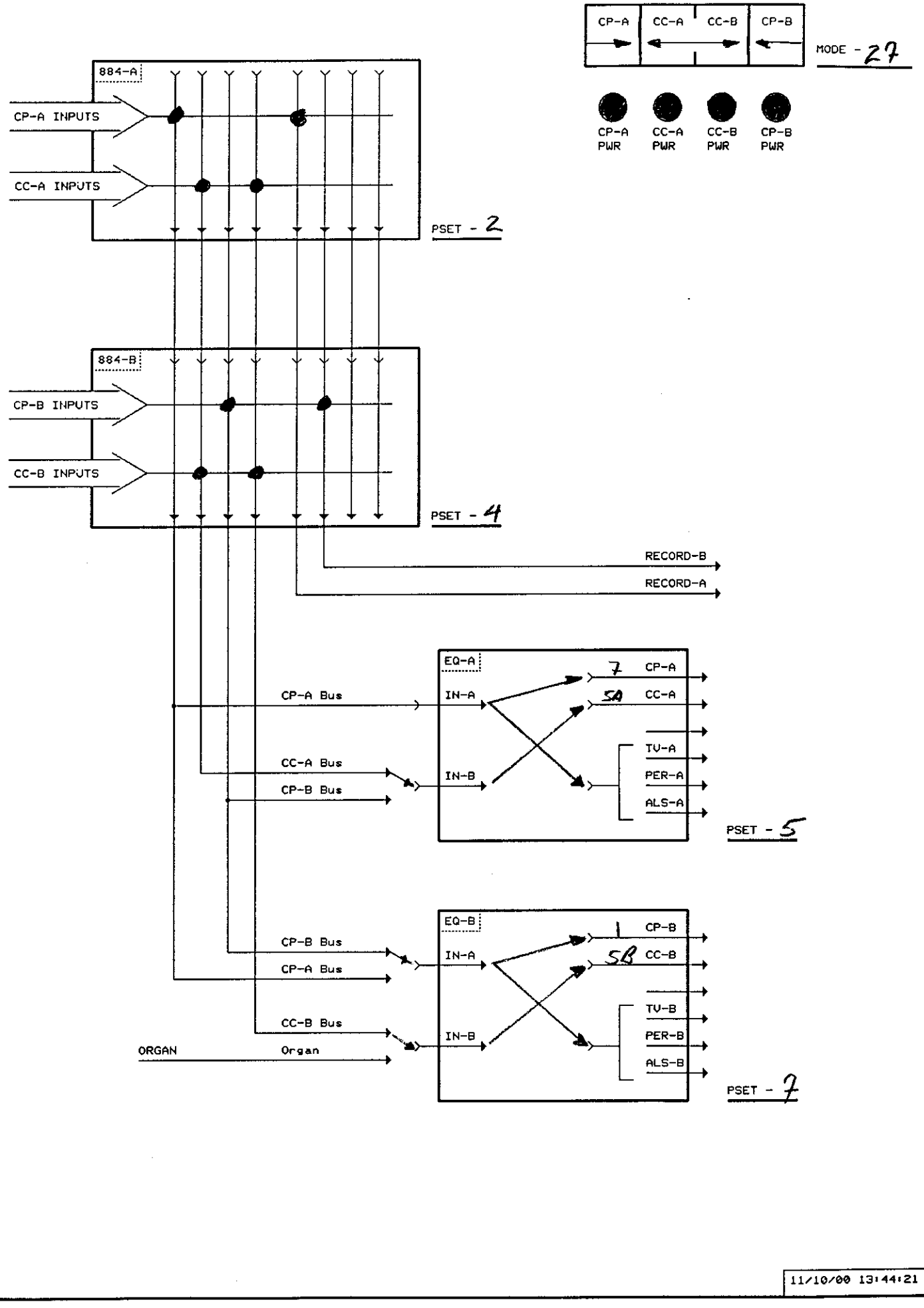
11/10/00 13:44:21

CP-CC-CC-CP



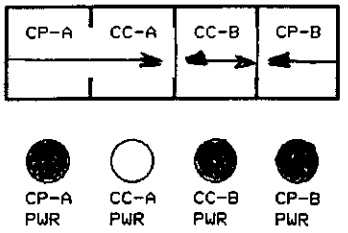
11/10/00 13:44:21

CP-CC-CC-CP



11/10/00 13:44:21

CP-CC-CC-CP



MODE - 28

884-A

CP-A INPUTS

CC-A INPUTS

PSET - 1

884-B

CP-B INPUTS

CC-B INPUTS

PSET - 1

RECORD-B

RECORD-A

EQ-A

CP-A Bus

IN-A

5A CP-A

5B CC-A

TV-A

PER-A

ALS-A

CC-A Bus

CP-B Bus

IN-B

PSET - 8

EQ-B

CP-B Bus

IN-A

1 CP-B

4 CC-B

TV-B

PER-B

ALS-B

CP-A Bus

CC-B Bus

IN-B

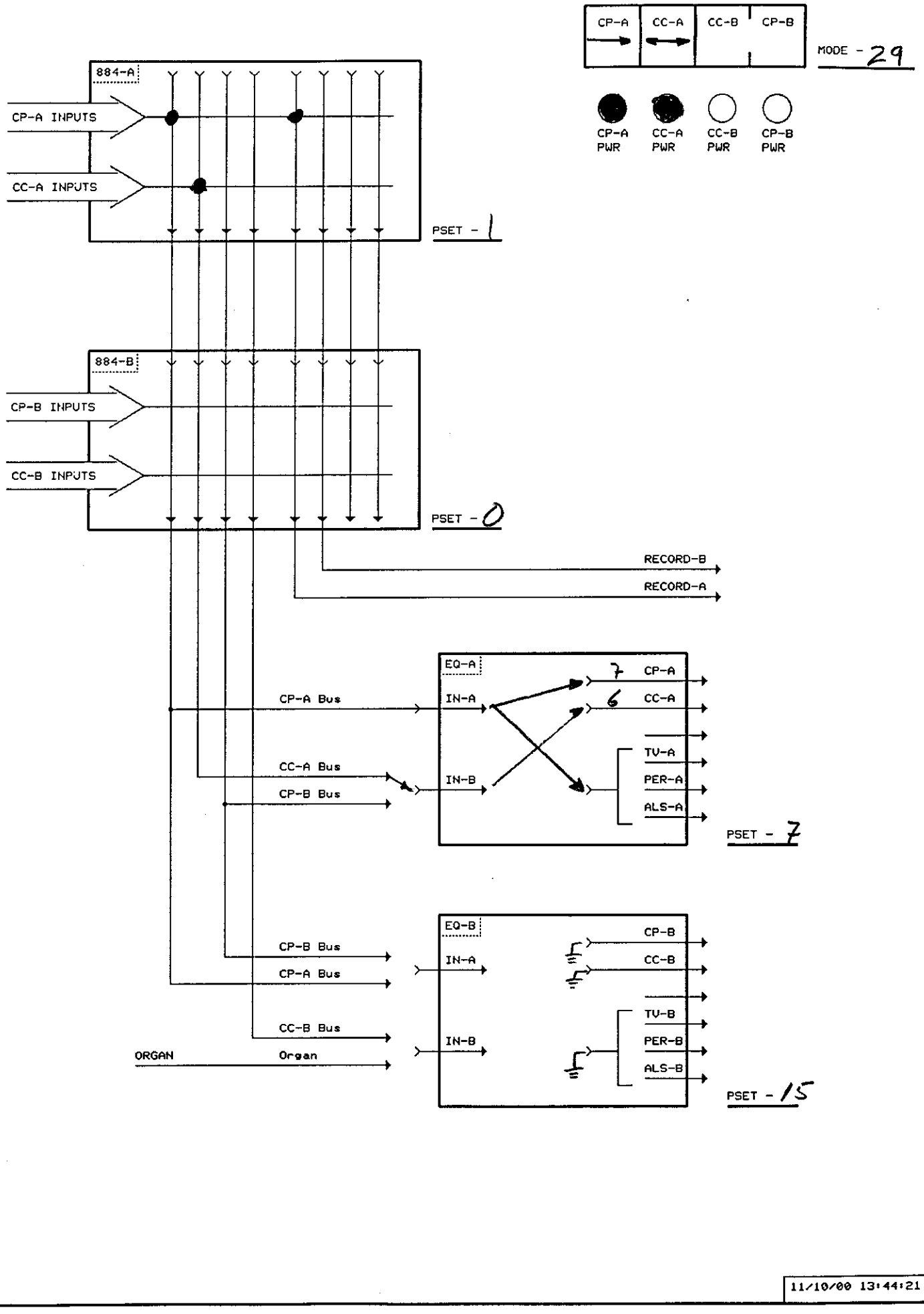
ORGAN

Organ

PSET - 3

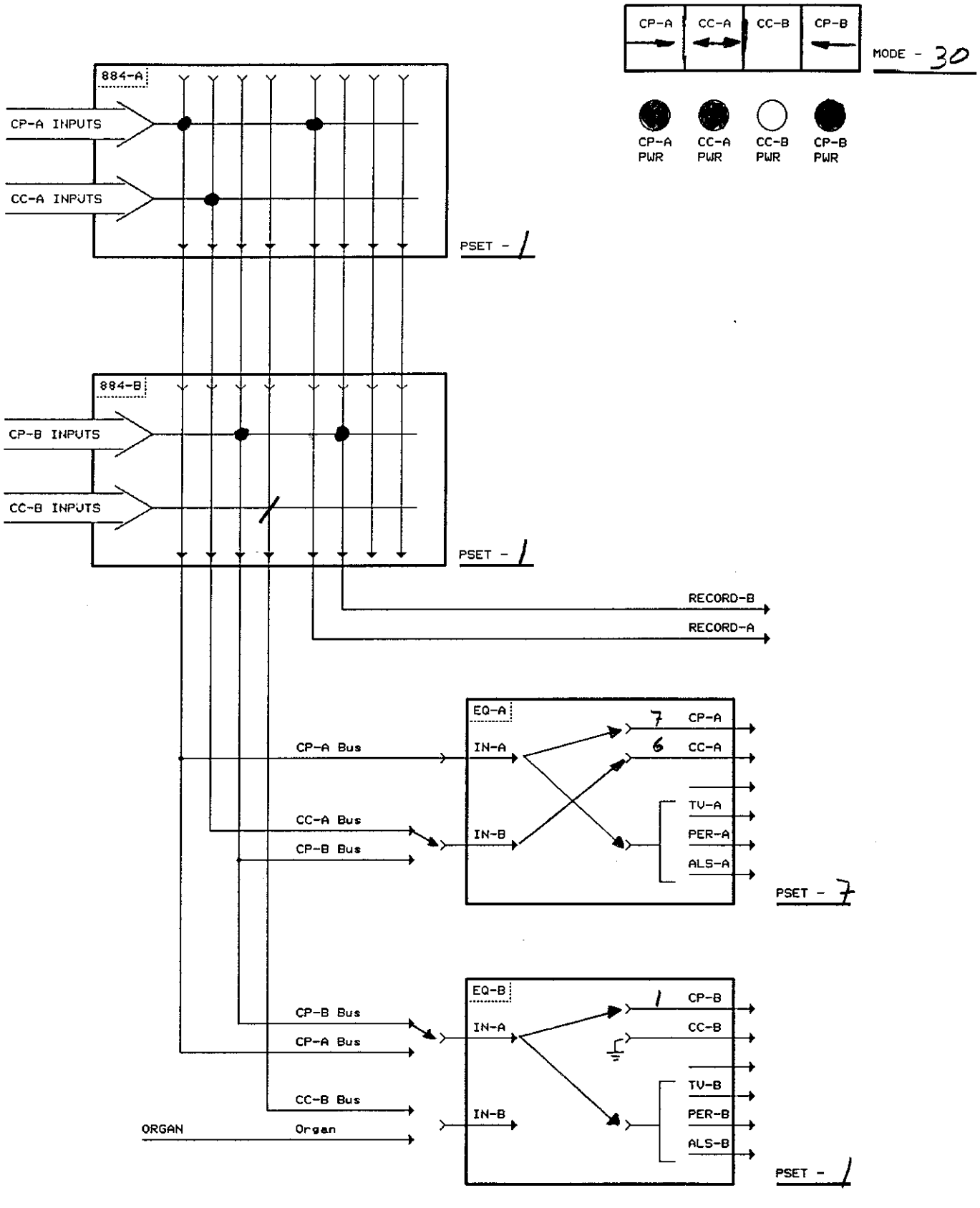
11/10/00 13:44:21

CP-CC-CC-CP



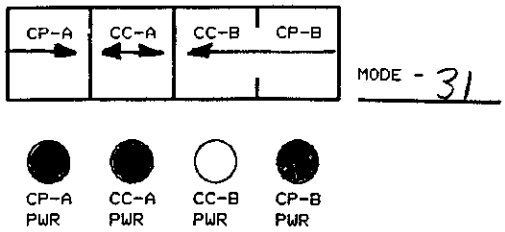
11/10/00 13:44:21

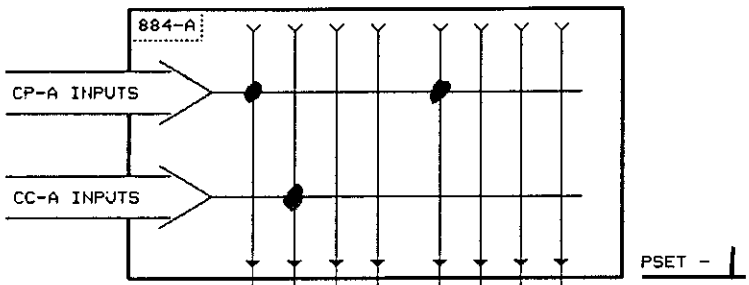
CP-CC-CC-CP

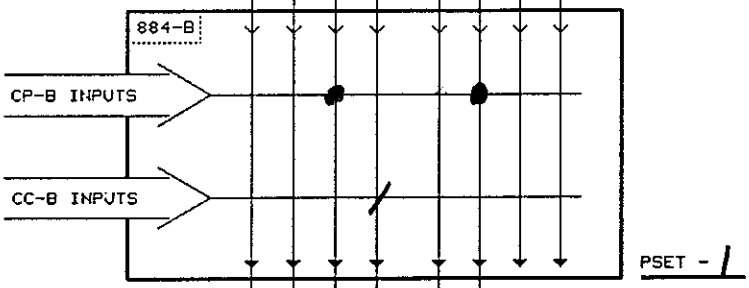


11/10/00 13:44:21

CP-CC-CC-CP

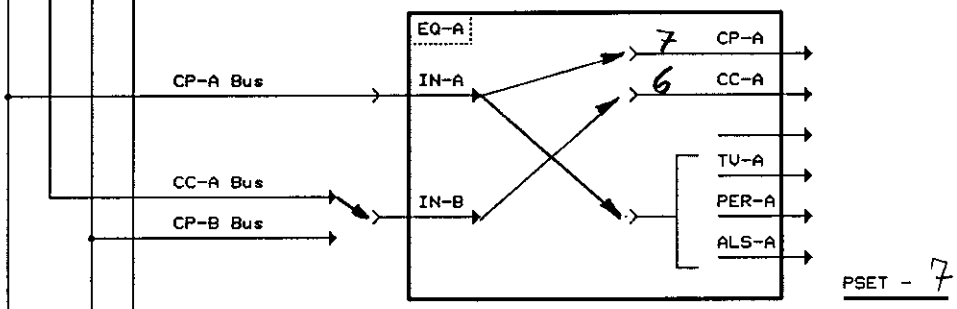


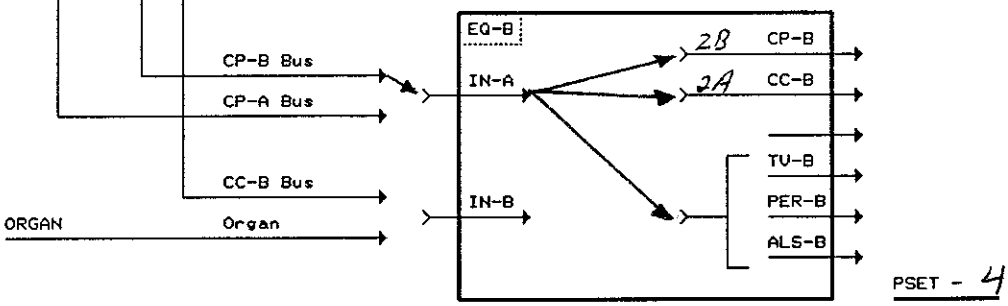




RECORD-B

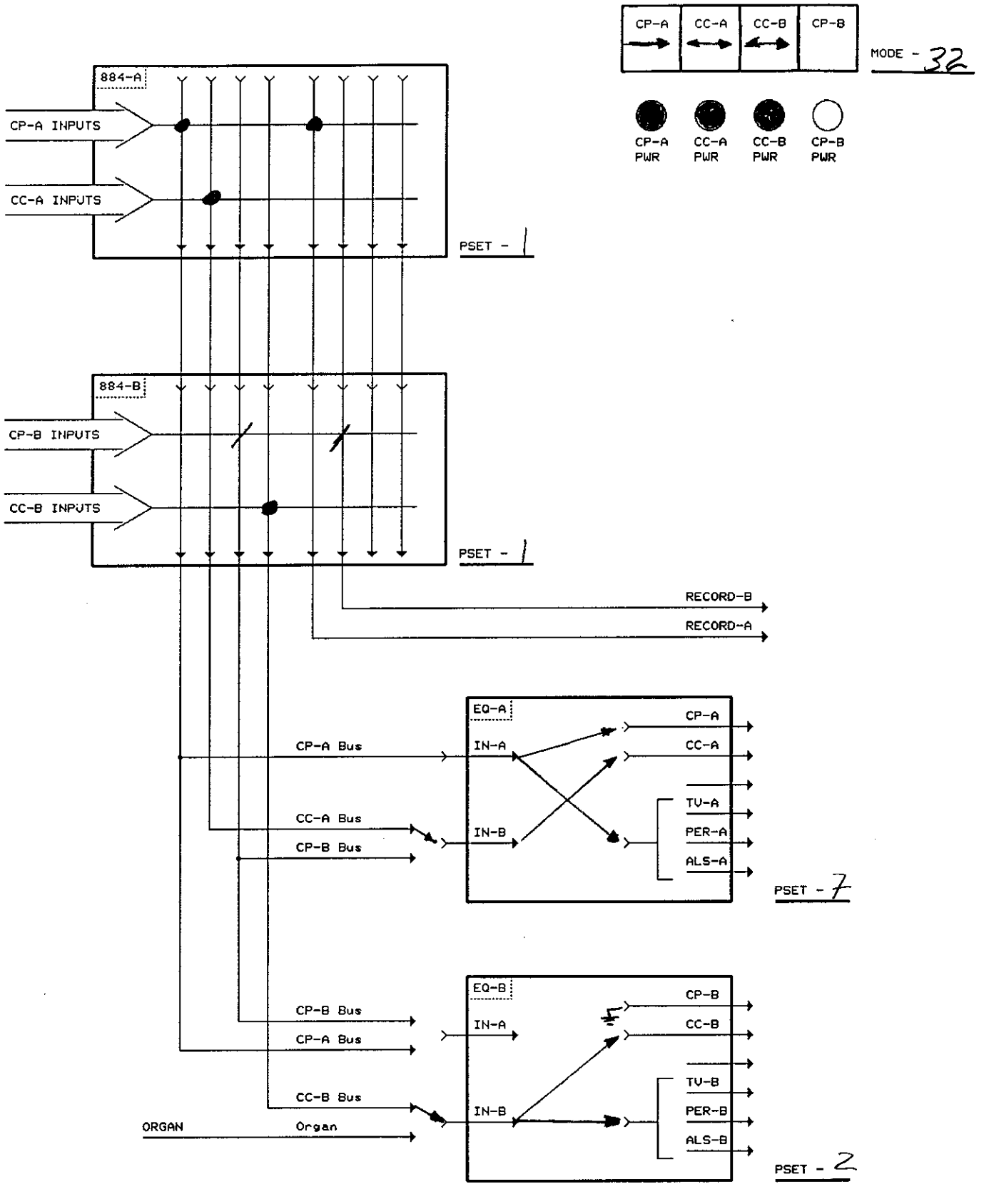
RECORD-A





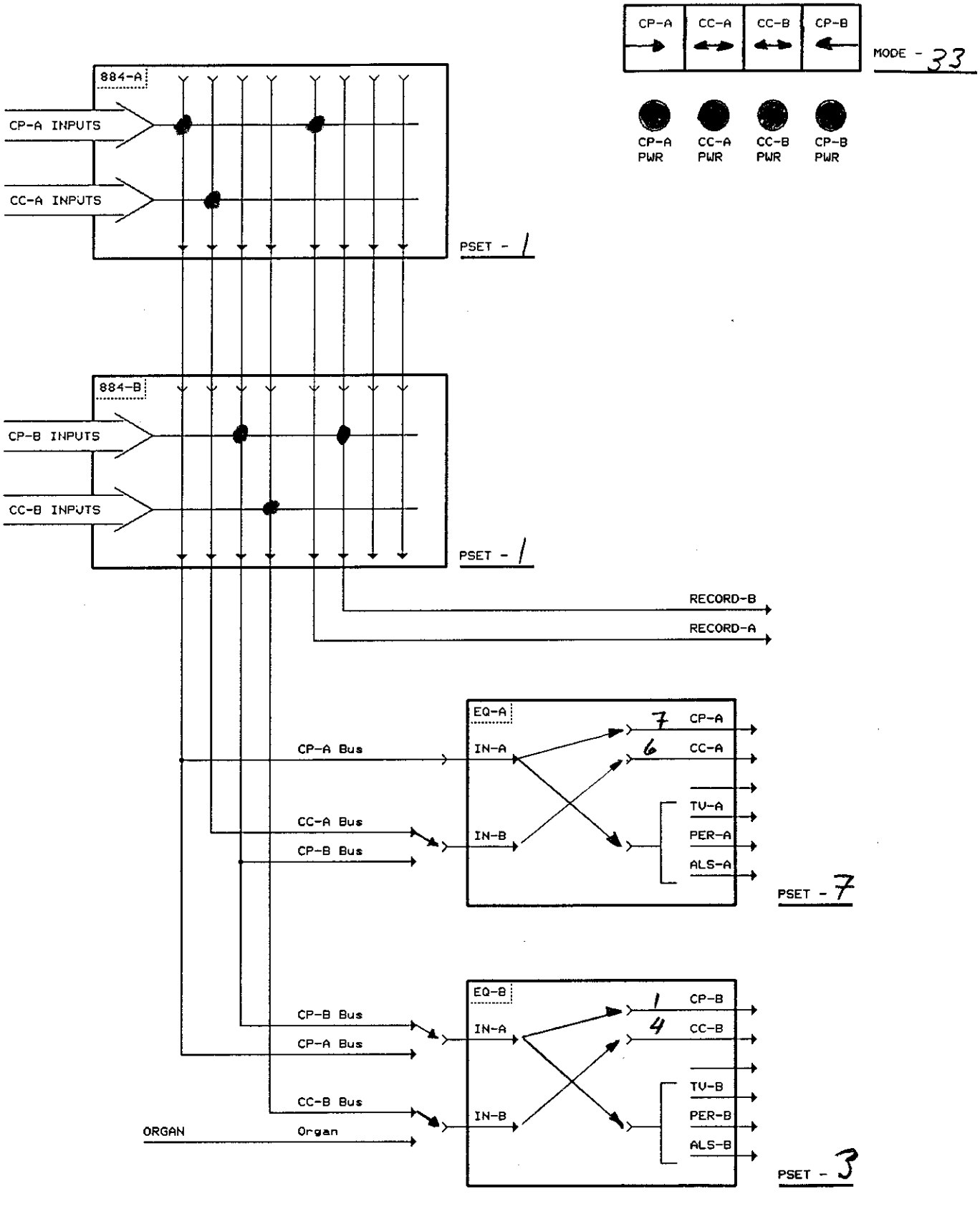
11/10/00 13:44:21

CP-CC-CC-CP



11/10/00 13:44:21

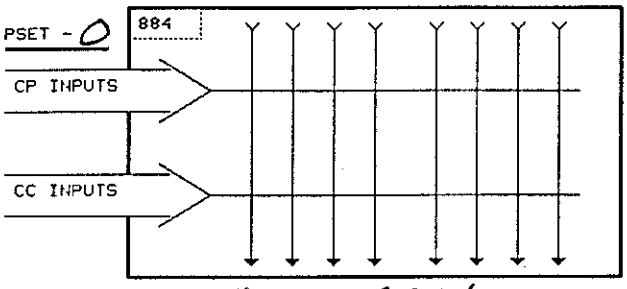
CP-CC-CC-CP



11/10/00 13:44:21

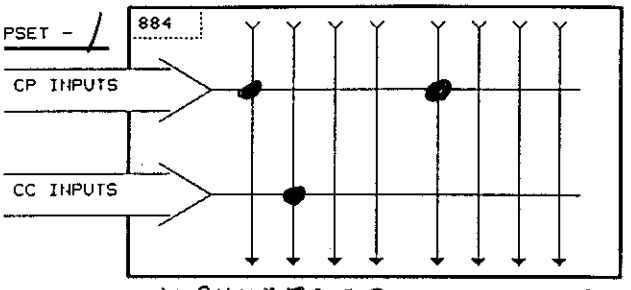
884-A PRESETS

PSET - 0



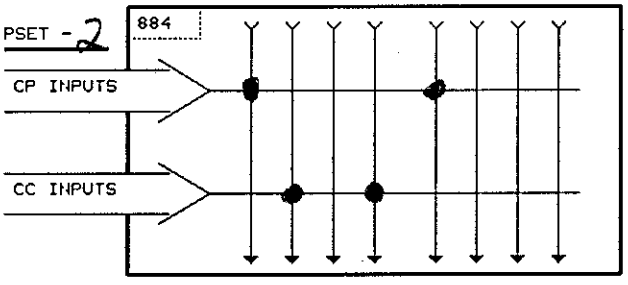
USED BY MODE: 1, 2, 3, 4, 6

PSET - 1



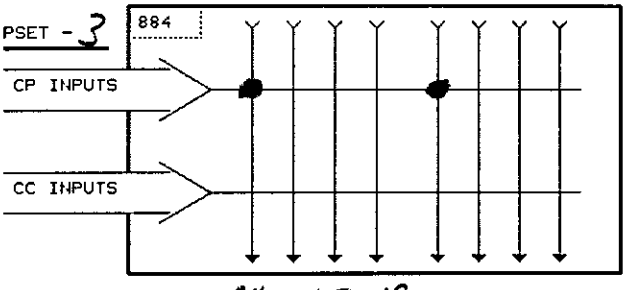
USED BY MODES: 8, 9, 10, 11, 12, 13, 14
17, 18, 20, 21, 23, 25, 26
28, 29, 30, 31, 32, 33

PSET - 2



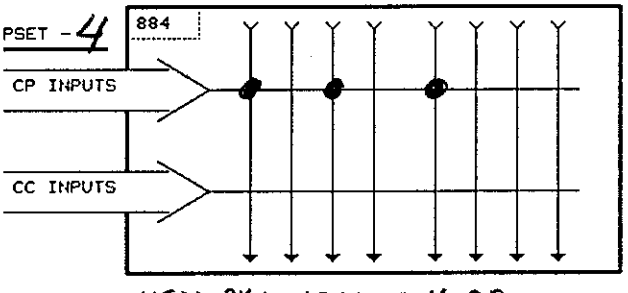
USED BY MODE: 5, 7, 24, 27

PSET - 3



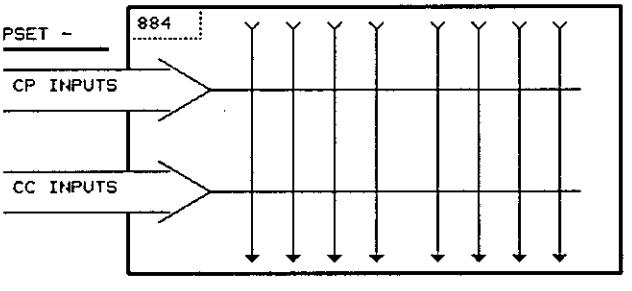
USED BY MODE: 19

PSET - 4

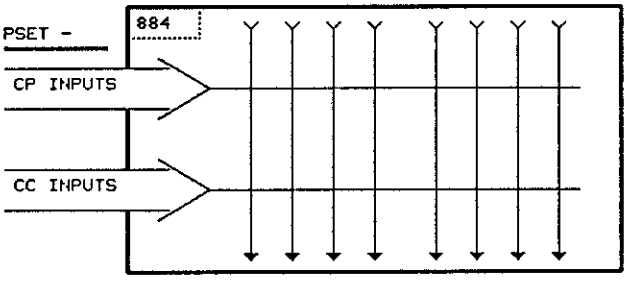


USED BY MODES: 15, 16, 22

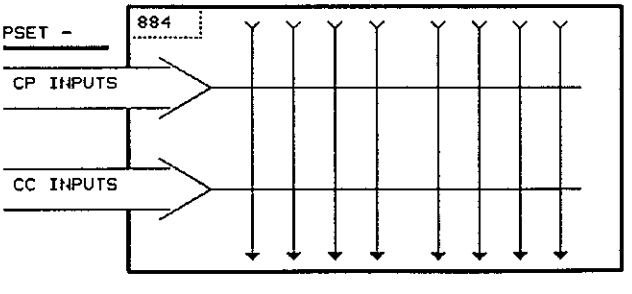
PSET -



PSET -



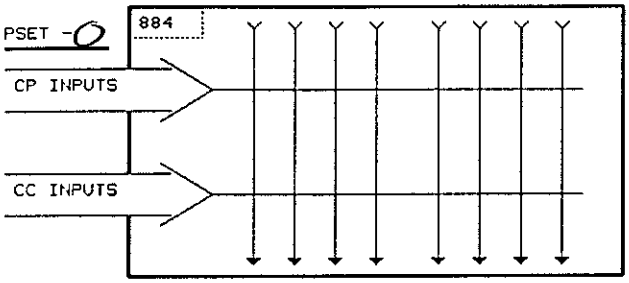
PSET -



CP-CC-CC-CP

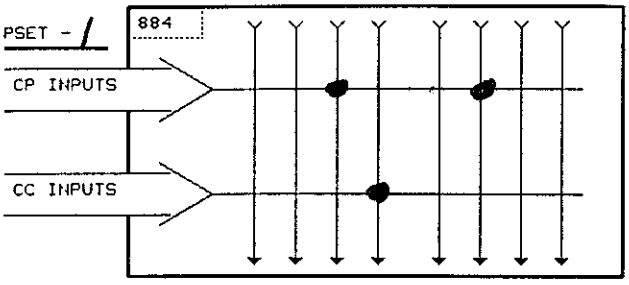
884-B PRESETS

PSET - 0



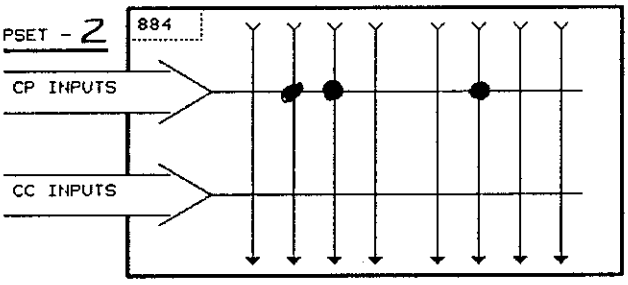
USED BY MODES: 8, 13, 14, 15, 16, 29

PSET - 1



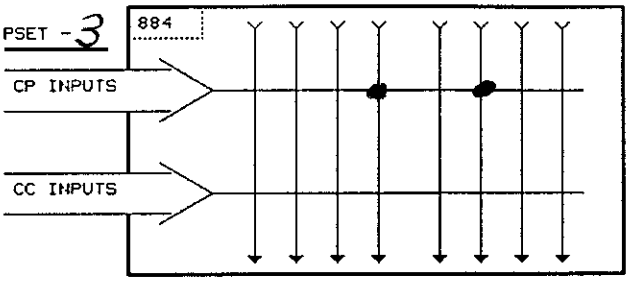
USED BY MODES: 1, 2, 4, 6, 9, 10, 11, 12
17, 18, 20, 21, 23, 25, 26
28, 30, 31, 32, 33,

PSET - 2



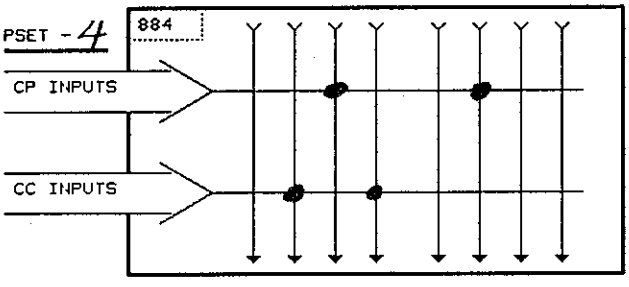
USED BY MODES: 3, 19

PSET - 3



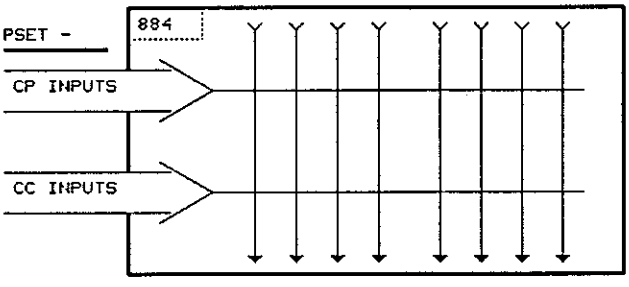
USED BY MODE: 22

PSET - 4

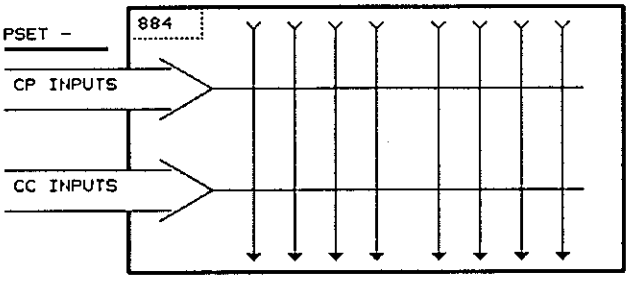


USED BY MODE: 5, 7, 24, 27

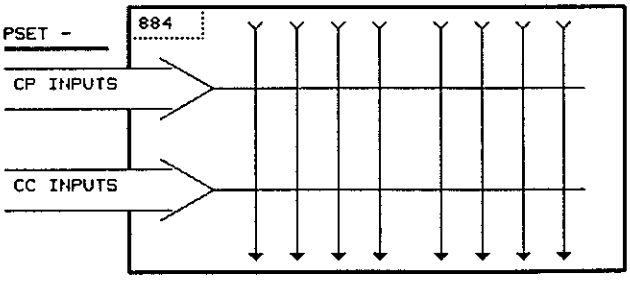
PSET -



PSET -



PSET -



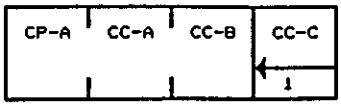
11/16/00 13:57:31

CP-CC-CC-CP

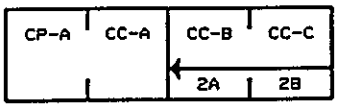
EQ CURVE ASSIGNMENT

08/25/00 08:37:08

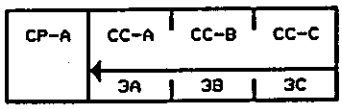
Mode - 1



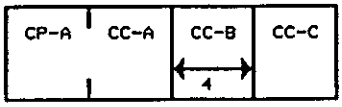
Mode - 2



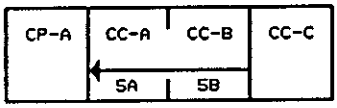
Mode - 3



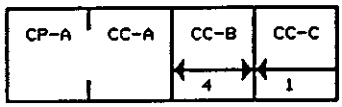
Mode - 4



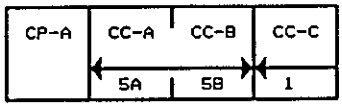
Mode - 5



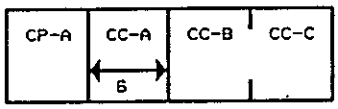
Mode - 6



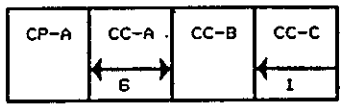
Mode - 7



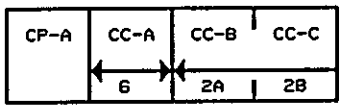
Mode - 8



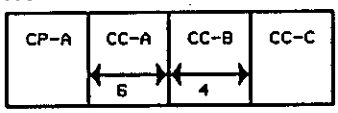
Mode - 9



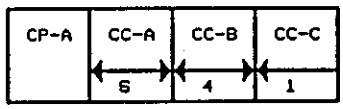
Mode - 10



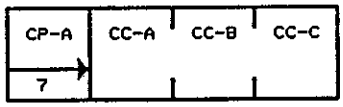
Mode - 11



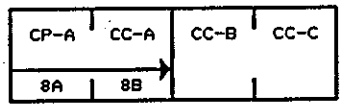
Mode - 12



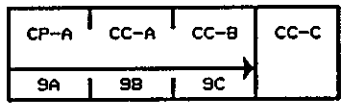
Mode - 13



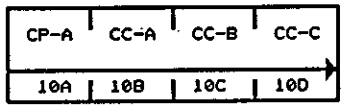
Mode - 14



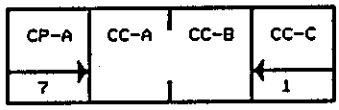
Mode - 15



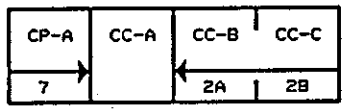
Mode - 16



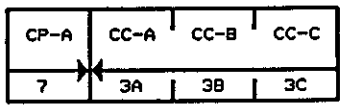
Mode - 17



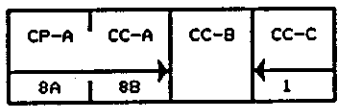
Mode - 18



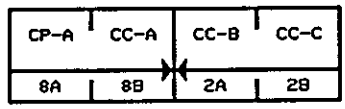
Mode - 19



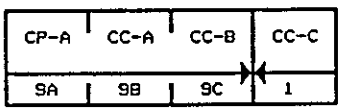
Mode - 20



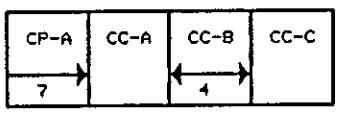
Mode - 21



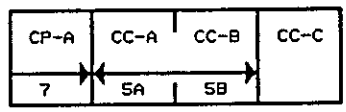
Mode - 22



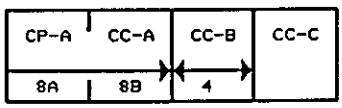
Mode - 23



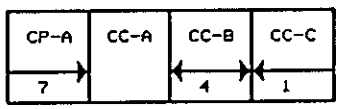
Mode - 24



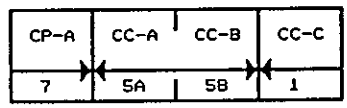
Mode - 25



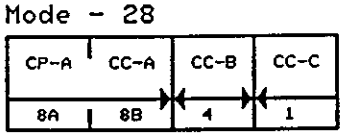
Mode - 26



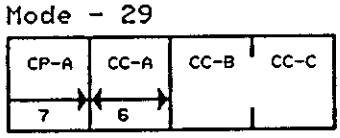
Mode - 27



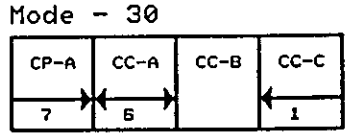
Mode - 28



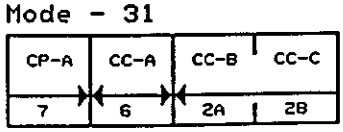
Mode - 29



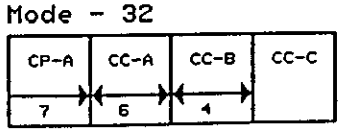
Mode - 30



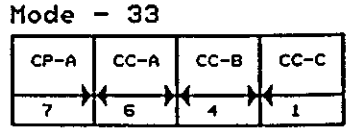
Mode - 31



Mode - 32



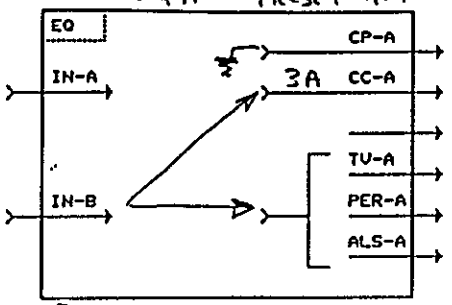
Mode - 33



CP-CC-CC-CP

OVERALL EQ PRESET - EQ A

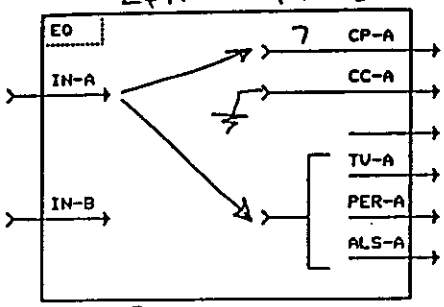
EQA - PRESET #1



7-3A 1

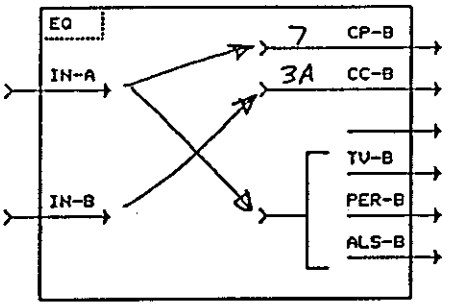
PSET - #1

EQA - PRESET #2



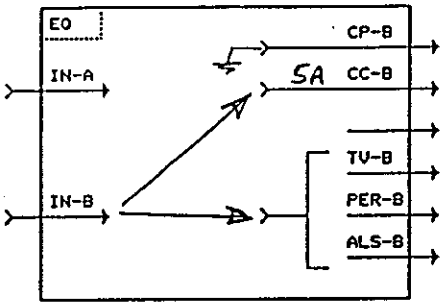
7-3A 2

PSET - #2



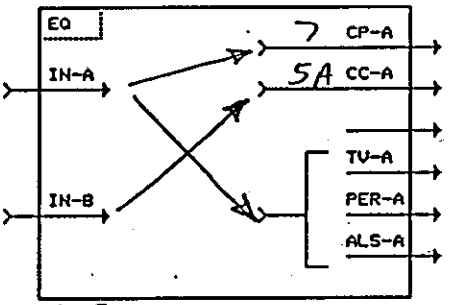
7-3A 4

PSET - #3



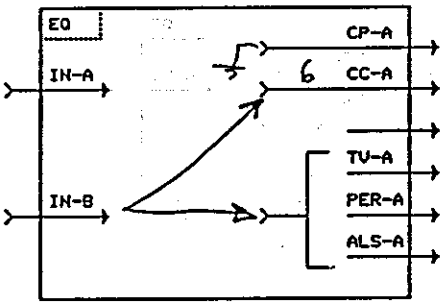
7-5A 1

PSET - #4



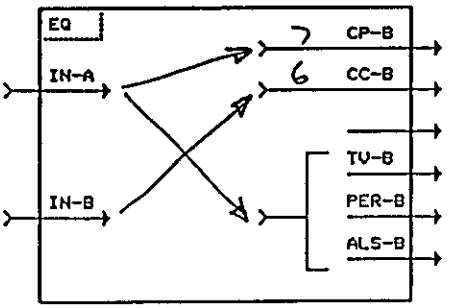
7-5A 4

PSET - #5



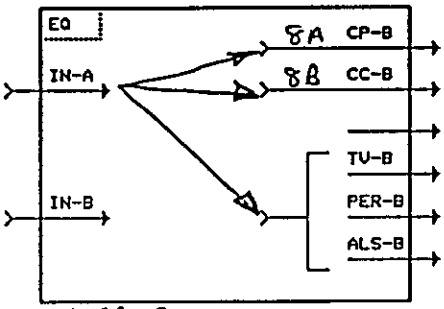
7-6 1

PSET - #6



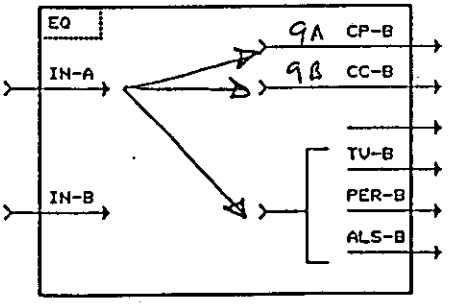
7-6 4

PSET - #7



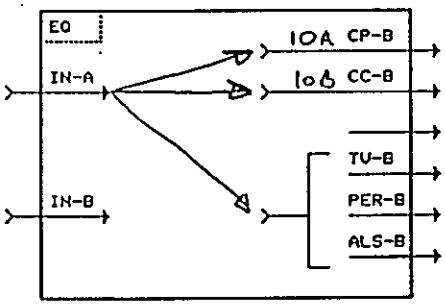
8A-8B 2

PSET - #8



9A-9B 3

PSET - #9



10A-10B 3

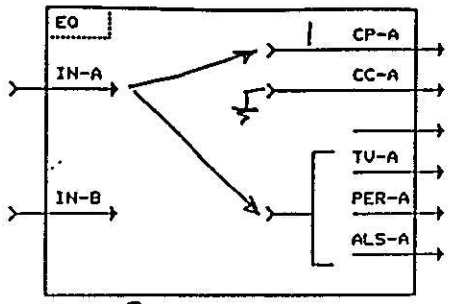
PSET - #10

08/24/00 16:08:45

CP-CC-CC-CP

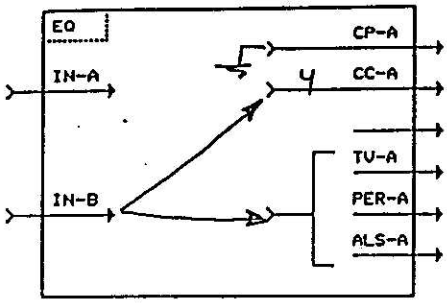
OVERALL EQ PRESET

EQB



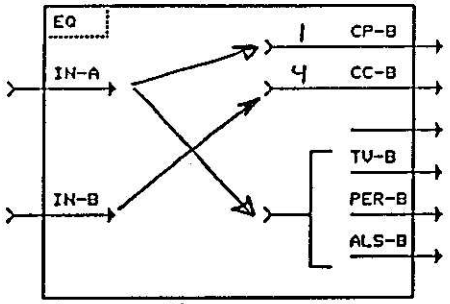
PSET - #1

4-1 2



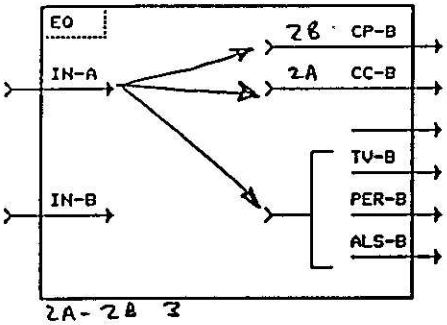
PSET - #2

4-1 1



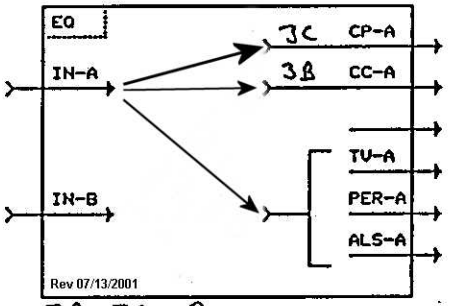
PSET - #3

4-1 4



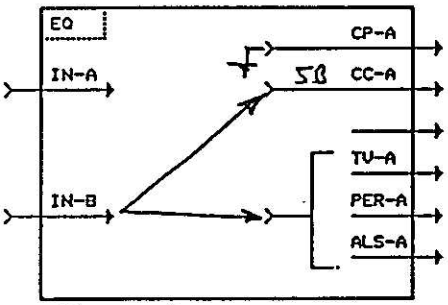
PSET - #4

2A-2B 3



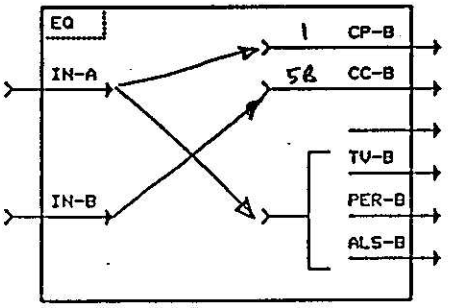
PSET - #5

3B-3C 8



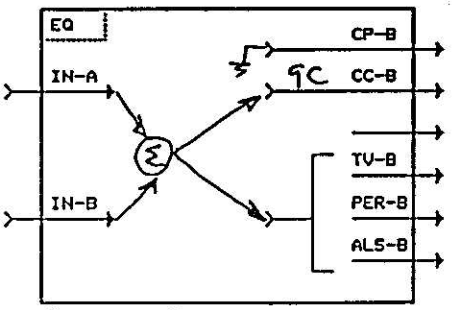
PSET - #6

5B-1 1



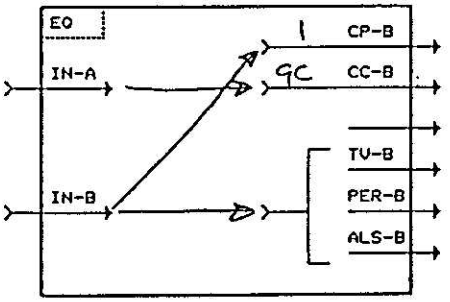
PSET - #7

5B-1 4



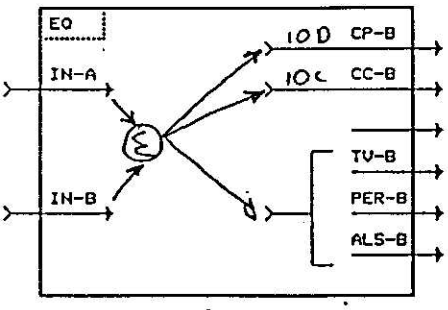
PSET - #8

9C-1 5



PSET - #9

9C-1 7



PSET - #10

10C-10D 6

Rev 07/13/2001

08/24/00 16:08:45

CP - CC - CC - CP OVERALL PRESET SUMMARY 8/25/00

MODE	884-A	884-B	EQ-A	EQ-B	
0	0	0	15	15	
1	0	1	15	1	
2	0	1	15	4	
3	0	2	1	5	EQ "A" Relay
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	1	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	EQ "B" Relay / Organ Relay
16	4	0	10	10	EQ "B" Relay / Organ Relay
17	1	1	2	1	
18	1	1	2	4	
19	3	2	3	5	EQ "A" Relay
20	1	1	8	1	
21	1	1	8	4	
22	4	3	9	9	EQ "B" Relay
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	1	7	4	
32	1	1	7	2	
33	1	1	7	3	

```
;       NOV88_A - Mode to Preset Table
        public  n8a_p
n8a_p:

;mode           884-A   884-B   EQ-A    EQ-B
;----           -----   -----   ----    ----
aM000:  db      00h,    00h,    15,     15      ;
aM001:  db      00h,    80h,    15,     1       ;
aM002:  db      00h,    80h,    15,     4       ;
aM003:  db      00h,    40h,    1,      5       ;
aM004:  db      00h,    80h,    15,     2       ;
aM005:  db      40h,    10h,    4,      6       ;
aM006:  db      00h,    80h,    15,     3       ;
aM007:  db      40h,    10h,    4,      7       ;
aM008:  db      80h,    00h,    6,      15      ;
aM009:  db      80h,    80h,    6,      1       ;
aM010:  db      80h,    80h,    6,      4       ;
aM011:  db      80h,    80h,    6,      2       ;
aM012:  db      80h,    80h,    6,      3       ;
aM013:  db      80h,    00h,    2,      15      ;
aM014:  db      80h,    00h,    8,      15      ;
aM015:  db      10h,    00h,    9,      8       ;
aM016:  db      10h,    00h,    10,     10      ;
aM017:  db      80h,    80h,    2,      1       ;
aM018:  db      80h,    80h,    2,      4       ;
aM019:  db      20h,    40h,    3,      5       ;
aM020:  db      80h,    80h,    8,      1       ;
aM021:  db      80h,    80h,    8,      4       ;
aM022:  db      10h,    20h,    9,      9       ;
aM023:  db      80h,    80h,    2,      2       ;
aM024:  db      40h,    10h,    5,      6       ;
aM025:  db      80h,    80h,    8,      2       ;
aM026:  db      80h,    80h,    2,      3       ;
aM027:  db      40h,    10h,    5,      7       ;
aM028:  db      80h,    80h,    8,      3       ;
aM029:  db      80h,    00h,    7,      15      ;
aM030:  db      80h,    80h,    7,      1       ;
aM031:  db      80h,    80h,    7,      4       ;
aM032:  db      80h,    80h,    7,      2       ;
aM033:  db      80h,    80h,    7,      3       ;
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