



LBI-39111

Mobile Communications

MASTR III MULTIPLE RECEIVER SYSTEMS



Ericsson GE Mobile Communications Inc.
Mountain View Road • Lynchburg, Virginia 24502

Printed in U.S.A.

Installation Manual

TABLE OF CONTENTS

	<u>Page</u>
GENERAL	1
RELATED PUBLICATIONS	1
EDACS VOTER	2
EQUIPMENT LAYOUT IN CABINETS:	
86" Open Rack	2
83" Indoor Cabinet	2
69" Indoor Cabinet	3
INTERCONNECTION DIAGRAMS:	
EDACS Cabinet Power	4
EDACS Cabinet Monitor Panel & Control Channel Signal	5
EDACS Cabinet GETC Modem Data & Auxiliary Receiver Signal Out	6
EDACS Cabinet GETC RS-232 "TX CLK" & "REF CLK" Signal	7
CONVENTIONAL VOTER	
EQUIPMENT LAYOUT IN CABINETS:	
86" Open Rack	8
83" Indoor Cabinet	8
69" Indoor Cabinet	8
37" Indoor Cabinet	9
INTERCONNECTION DIAGRAMS:	
Conventional Cabinet Power	10
Conventional Cabinet Monitor Panel	11
Conventional Cabinet Auxiliary Receiver Signal Out	12

GENERAL

The intent of this instruction book is to guide field installation personnel through the installation of a MASTR III Multiple Receiver System. Instructions are provided for sites with up to 24 channels in various cabinets and configurations. EDACS and conventional sites are described and all necessary material is provided.

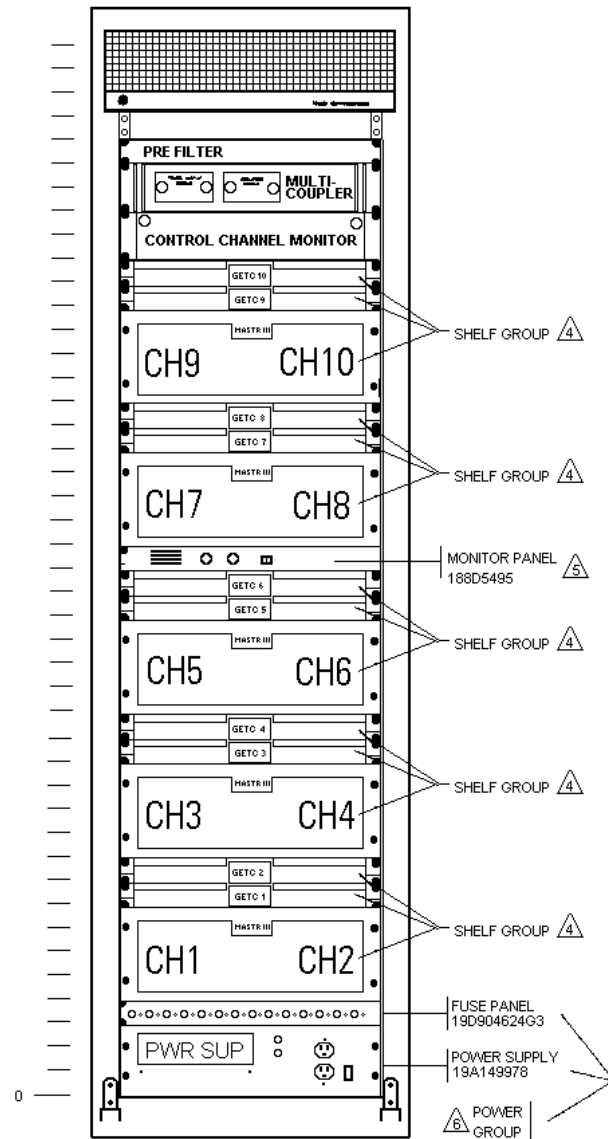
RELATED PUBLICATIONS

Title	<u>Publication Number</u>
MASTR III Multiple Receiver	LBI-39112
MASTR Station Blower Kits	LBI-4842
Power Supply	LBI-38551
Control Channel Monitor/Rangr	LBI-38343
EDACS Voter Equipment	LBI-38224
EDACS Interface Panel	LBI-38812
EDACS Interface Module 1	LBI38813
Buffer Board.	LBI-38236
Monitor Panel	19B803633 (Sheets 1-6) 19B803634 (Sheets 1-2)

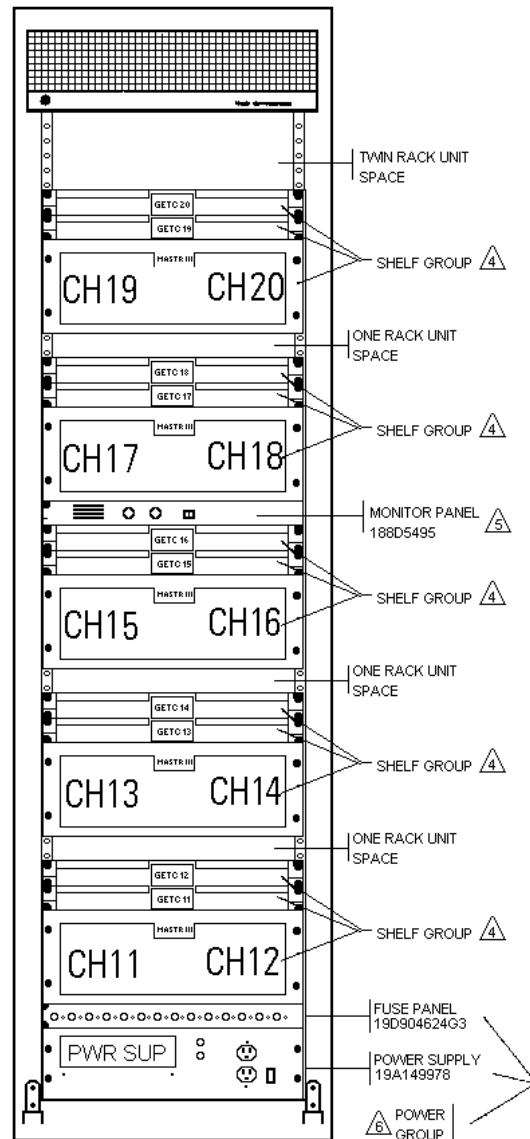
CABINET #1

CABINET #2

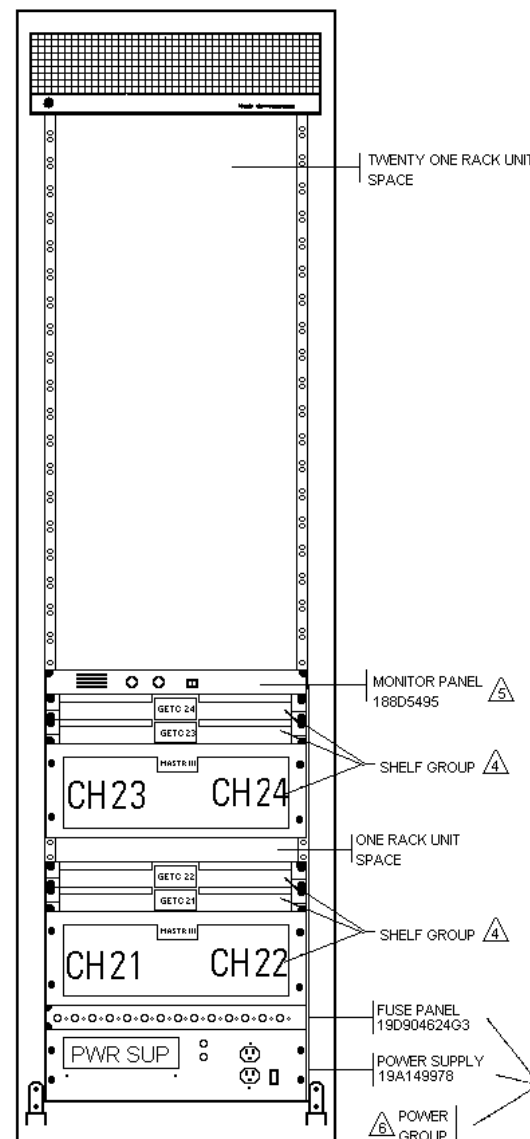
CABINET #3



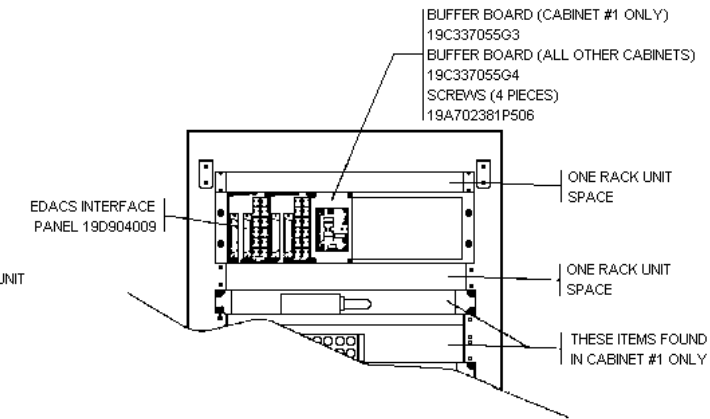
FRONT VIEW



FRONT VIEW



FRONT VIEW



REAR VIEW, TOP OF CABINET #1, #2 & #3

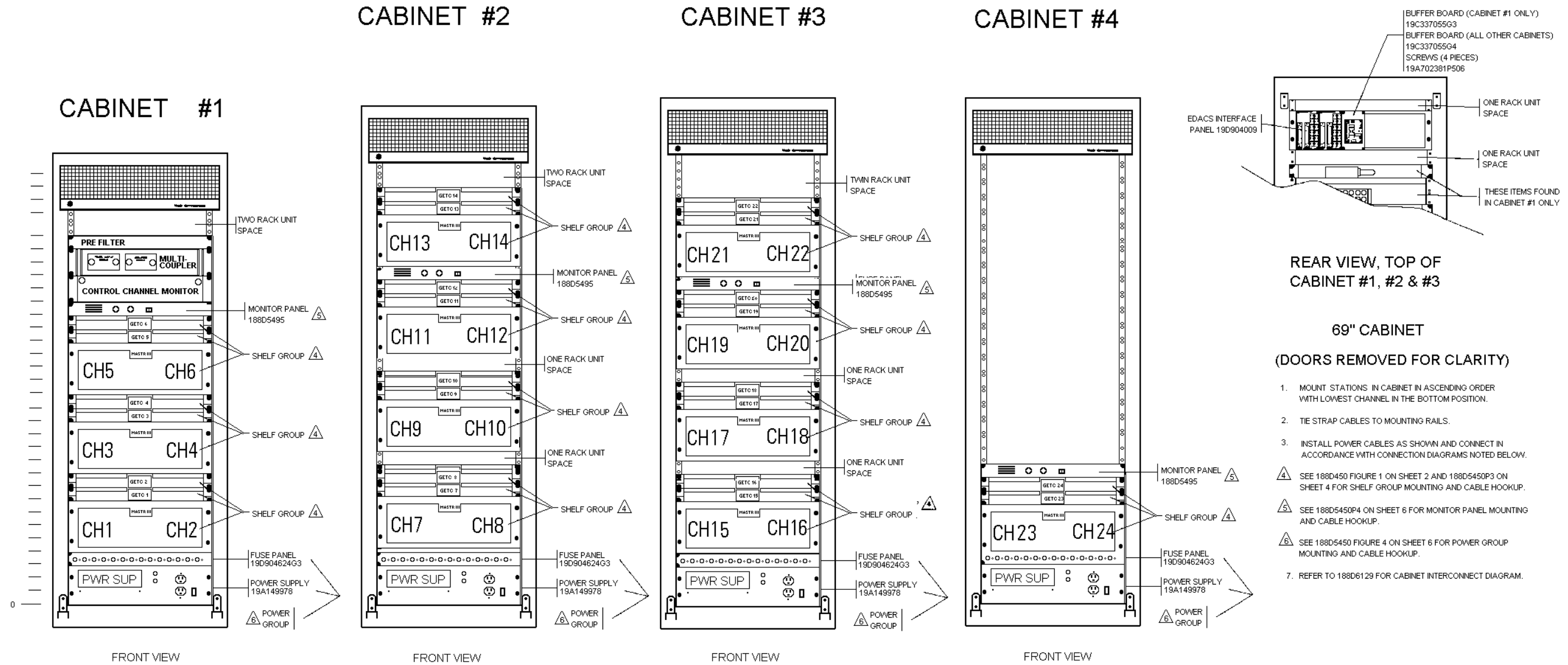
83" CABINET & 86" OPEN RACK
(DOORS REMOVED FOR CLARITY)

1. MOUNT SHELVES IN CABINET IN ASCENDING ORDER WITH LOWEST CHANNEL IN THE BOTTOM POSITION.
 2. TIE STRAP CABLES TO MOUNTING RAILS.
 3. AS VIEWED FROM THE REAR OF CABINET, RUN POWER CABLES ON RIGHT SIDE OF CABINETS AND SIGNAL CABLES ON THE LEFT SIDE OF CABINETS.
- ⚠ SEE 188D450 FIGURE 1 ON SHEET 2 AND 188D5450P3 ON SHEET 4 FOR SHELF GROUP MOUNTING AND CABLE HOOKUP.
- ⚠ SEE 188D5450P4 ON SHEET 6 FOR MONITOR PANEL MOUNTING AND CABLE HOOKUP.
- ⚠ SEE 188D5450 FIGURE 4 ON SHEET 6 FOR POWER GROUP MOUNTING AND CABLE HOOKUP.
7. REFER TO 188D6129 FOR CABINET INTERCONNECT DIAGRAM.

EDACS VOTER
83" INDOOR CABINET AND 86" OPEN RACK

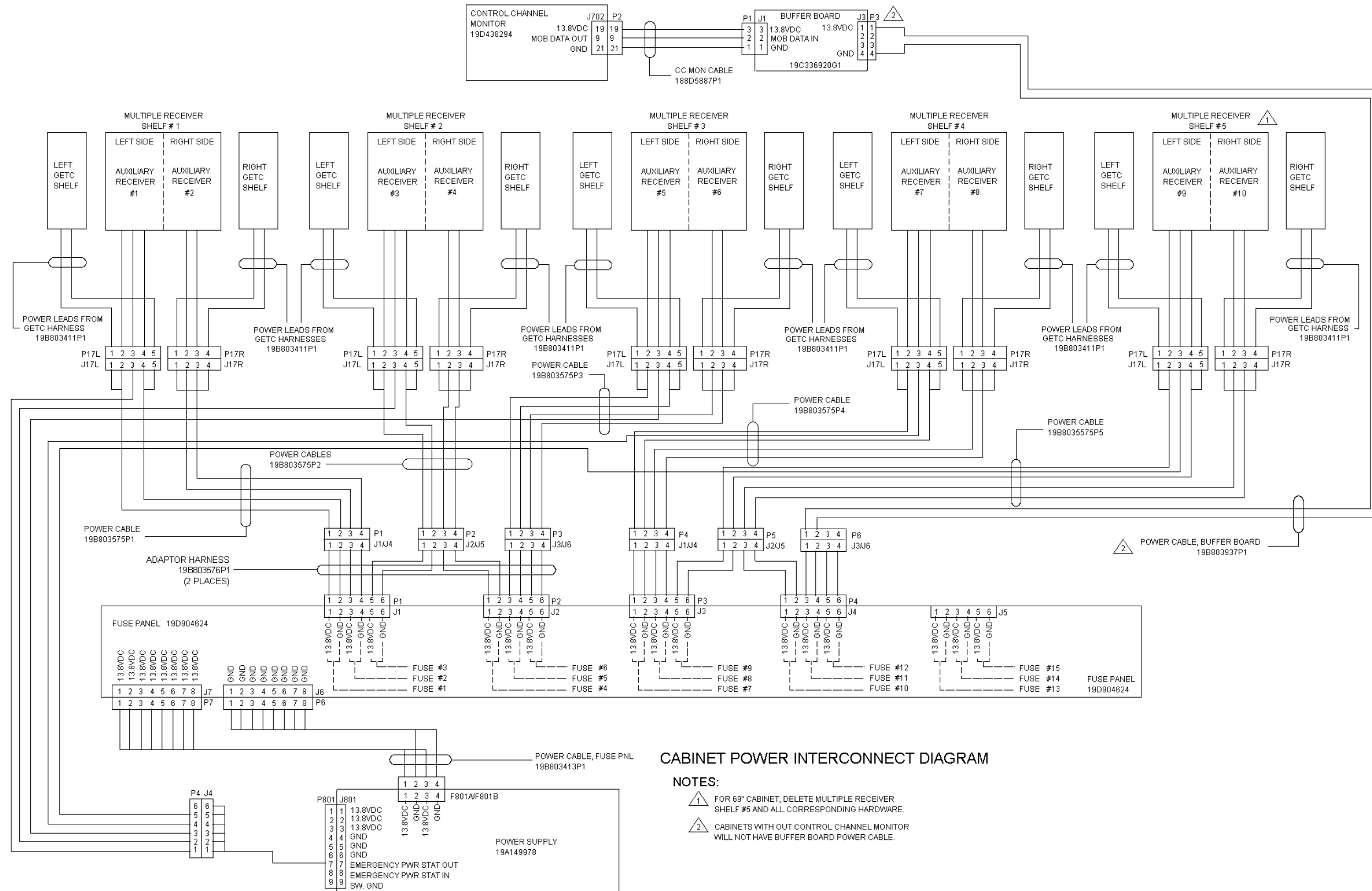
(188D5450, Sh. 7, Rev. 1)

(APPLICATION ASSEMBLY)



**EDACS VOTER
69" INDOOR CABINET**

(188D5450, Sh. 6, Rev. 1)

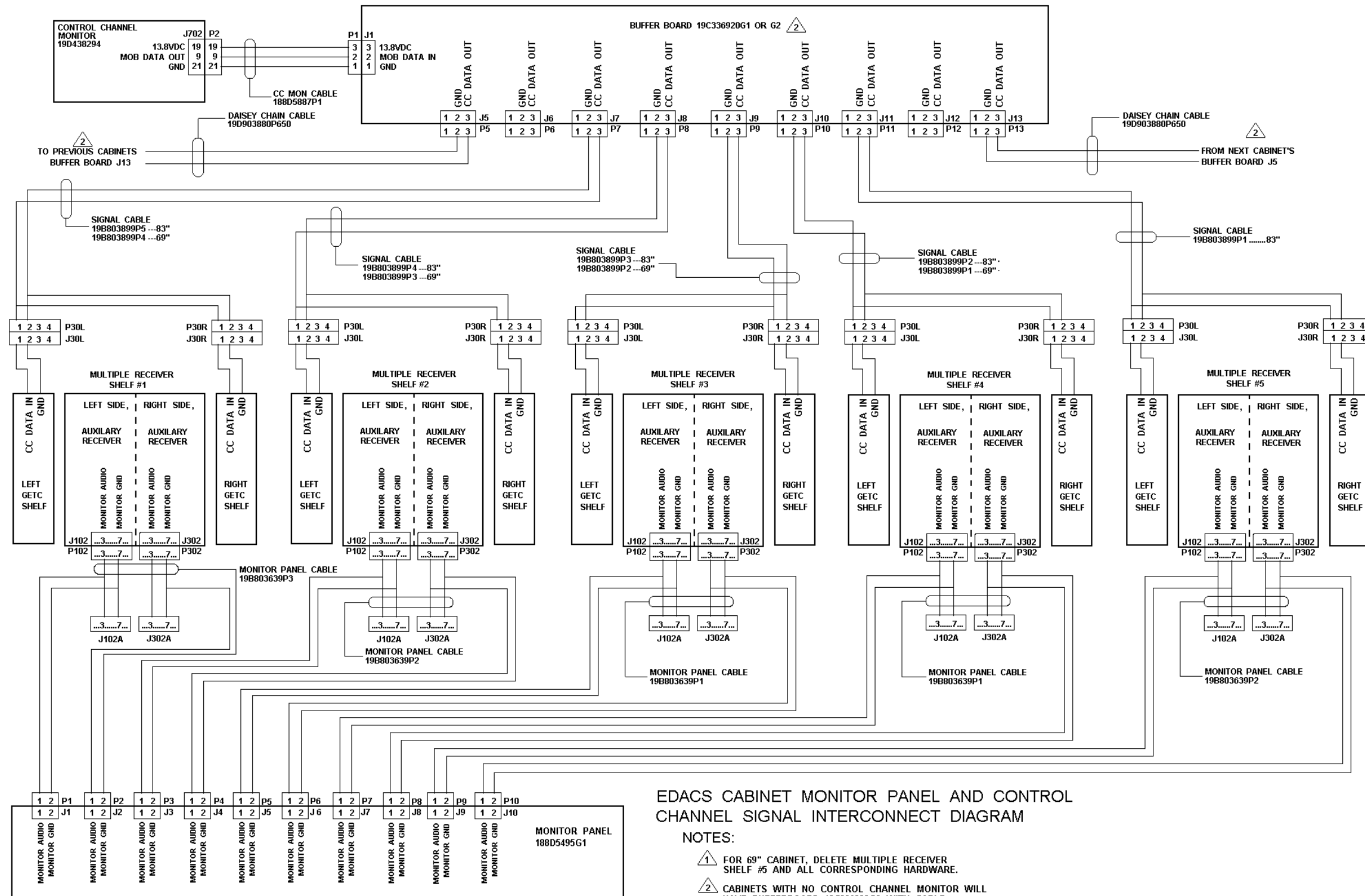


CABINET POWER INTERCONNECT DIAGRAM

NOTES:

- 1 FOR 69" CABINET, DELETE MULTIPLE RECEIVER SHELF #5 AND ALL CORRESPONDING HARDWARE.
- 2 CABINETS WITH OUT CONTROL CHANNEL MONITOR WILL NOT HAVE BUFFER BOARD POWER CABLE.

EDACS VOTER
CABINET POWER



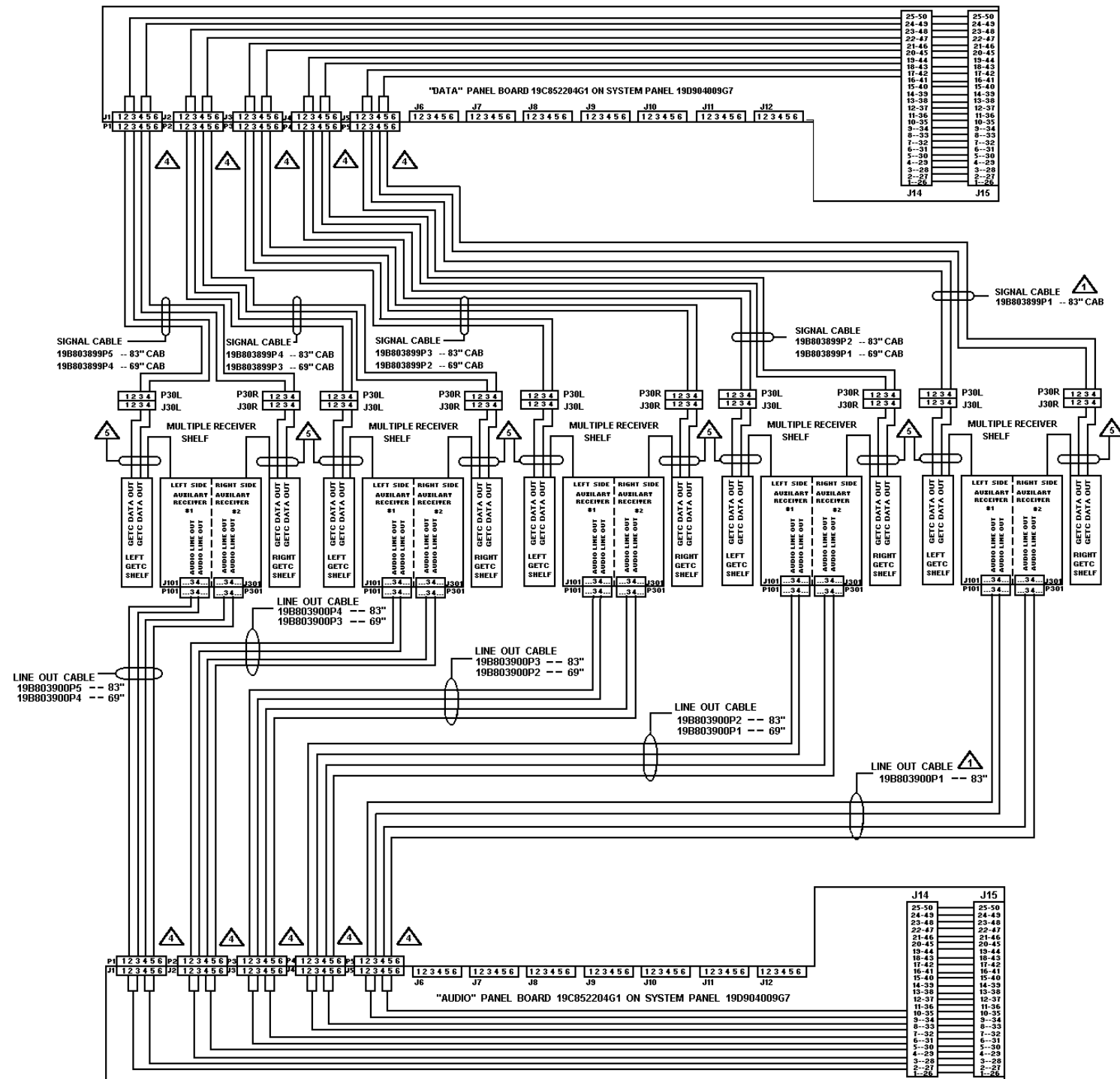
EDACS CABINET MONITOR PANEL AND CONTROL CHANNEL SIGNAL INTERCONNECT DIAGRAM

NOTES:

- ⚠ FOR 69" CABINET, DELETE MULTIPLE RECEIVER SHELF #5 AND ALL CORRESPONDING HARDWARE.
- ⚠ CABINETS WITH NO CONTROL CHANNEL MONITOR WILL HAVE BUFFERBOARD 19C336920G2 WITH CABLE 19D903880P650 CONNECTING TO PREVIOUS CABINET.

EDACS VOTER
MONITOR PANEL AND CONTROL CHANNEL SIGNAL

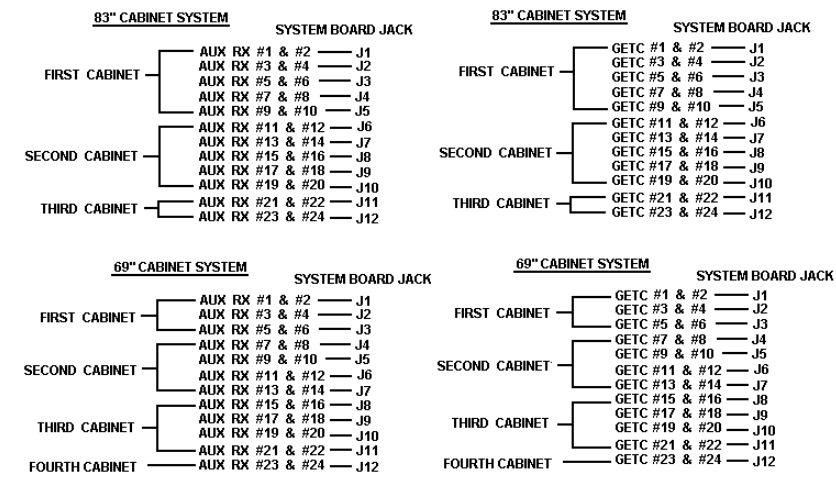
(188D6129, Sh. 2, Rev. 1)



EDACS CABINET GETC MODEM DATA AND AUX RECEIVER SIGNAL OUT INTERCONNECT DIAGRAM

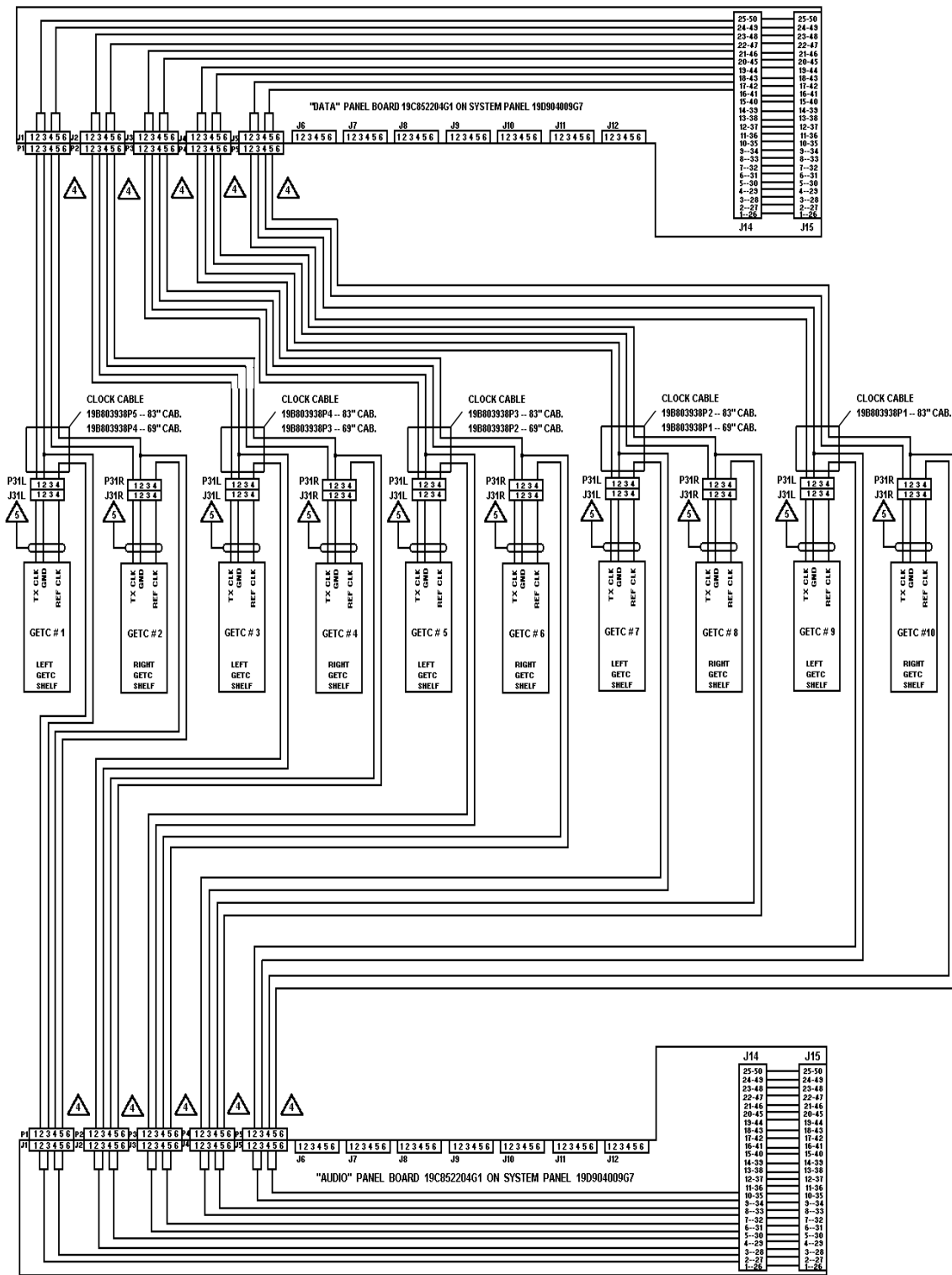
NOTES:

- ▲ FOR 69" CABINET, DELETE MULTIPLE RECEIVER SHELF #5 AND ALL CORRESPONDING HARDWARE.
- ▲ THIS INTERCONNECT DIAGRAM IS FOR THE FIRST CABINET IN AN AUX RECEIVER SYSTEM. FOLLOW ON CABINETS WILL CONNECT THE SAME CABLES INTO SYSTEM PANEL BOARD JACKS AS LISTED BELOW:
- ▲ GETC HARNESS 19B803411P1. SEE 188D5450 FIGURE 3 SHEET 5 FOR GETC/AUX RX INTERCONNECT DIAGRAM.



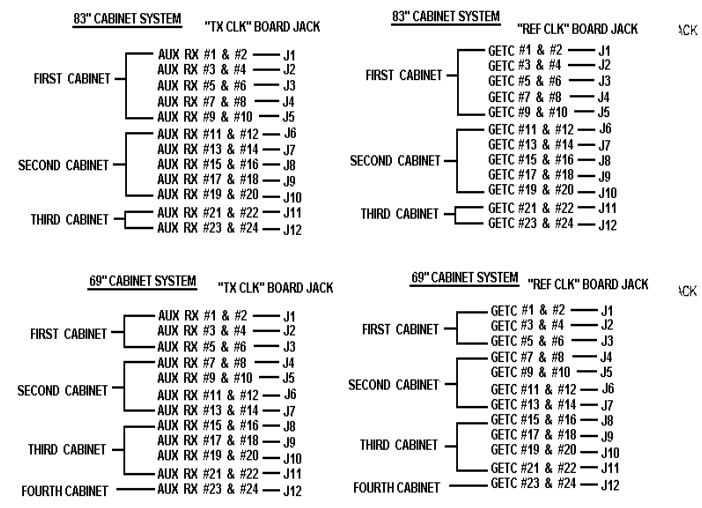
EDACS VOTER
GETC MODEM DATA AND AUXILIARY RECEIVER SIGNAL

(188D6129, Sh. 3, Rev. 1)



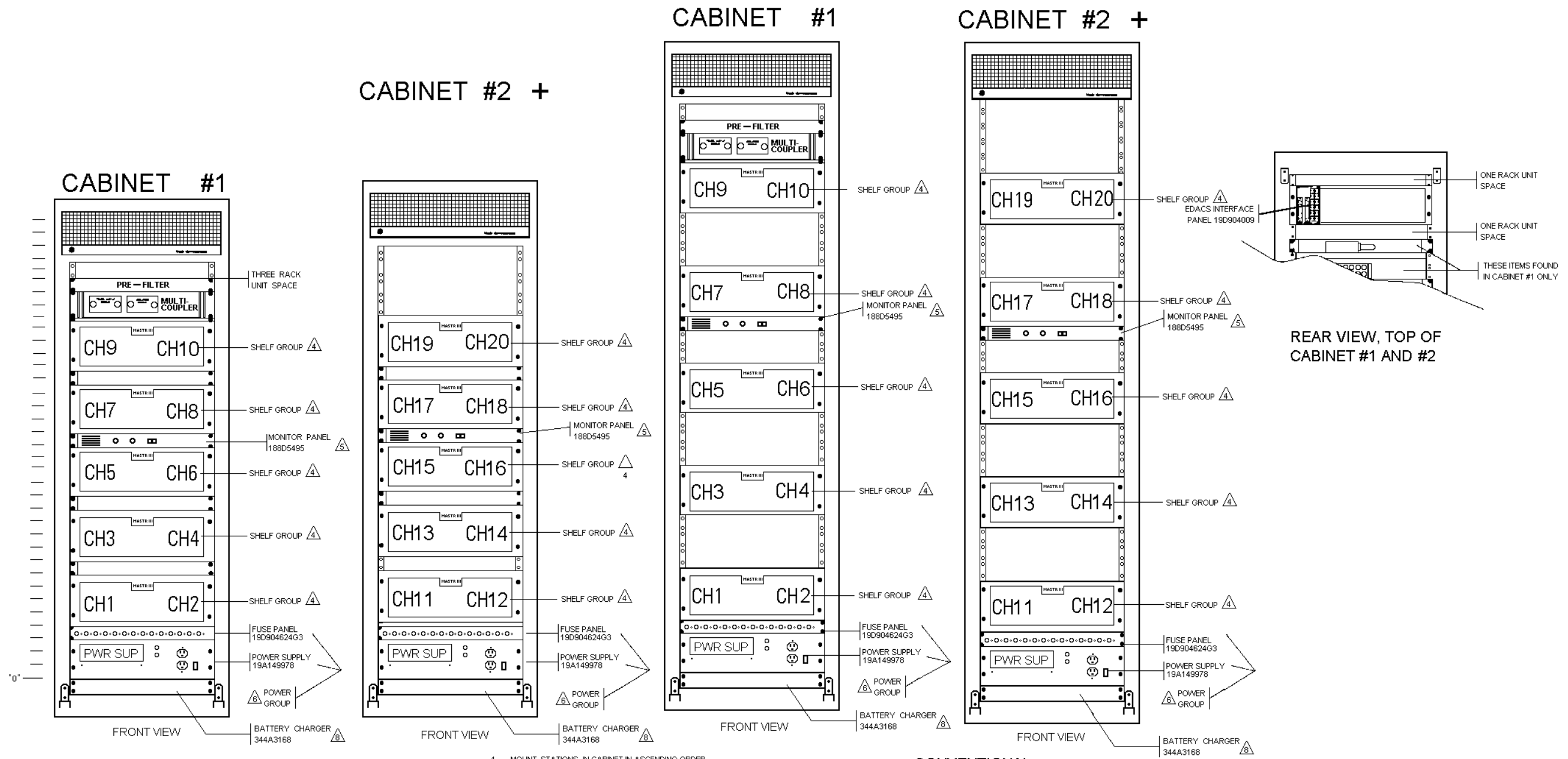
EDACS CABINET GETC RS-232/SIMULCAST
"TX CLK" & "REF CLK" SIGNAL INTERCONNECT
DIAGRAM

- NOTES:
- ⚠ FOR 60" CABINET, DELETE GETC #9 & #10, AND ALL CORRESPONDING HARDWARE.
 - ⚠ THIS INTERCONNECT DIAGRAM IS FOR THE FIRST CABINET IN AN AUX RECEIVER SYSTEM. FOLLOW ON CABINETS WILL CONNECT THE SAME CABLES INTO SYSTEM PANEL BOARD JACKS AS LISTED BELOW.
 - ⚠ GETC HARNESS 19B803411P2. SEE 188D5450 FIGURE 3 SHEET 5 FOR GETC/AUX RX INTERCONNECT DIAGRAM.



NOTE: EACH CABINET HAS SEPARATE SYSTEM BOARDS FOR THE AUX RX AND GETC DATA SIGNALS. PLUG CABLES INTO JACKS AS INDICATED ABOVE. SYSTEM BOARDS ARE DAISY CHAINED TOGETHER VIA J14 (OUT) AND J15 (IN) USING CABLE 19D903880P120 (AT FIELD SITE).

EDACS VOTER
GETC RS-232 "TX CLK" & "REF CLK" Signal

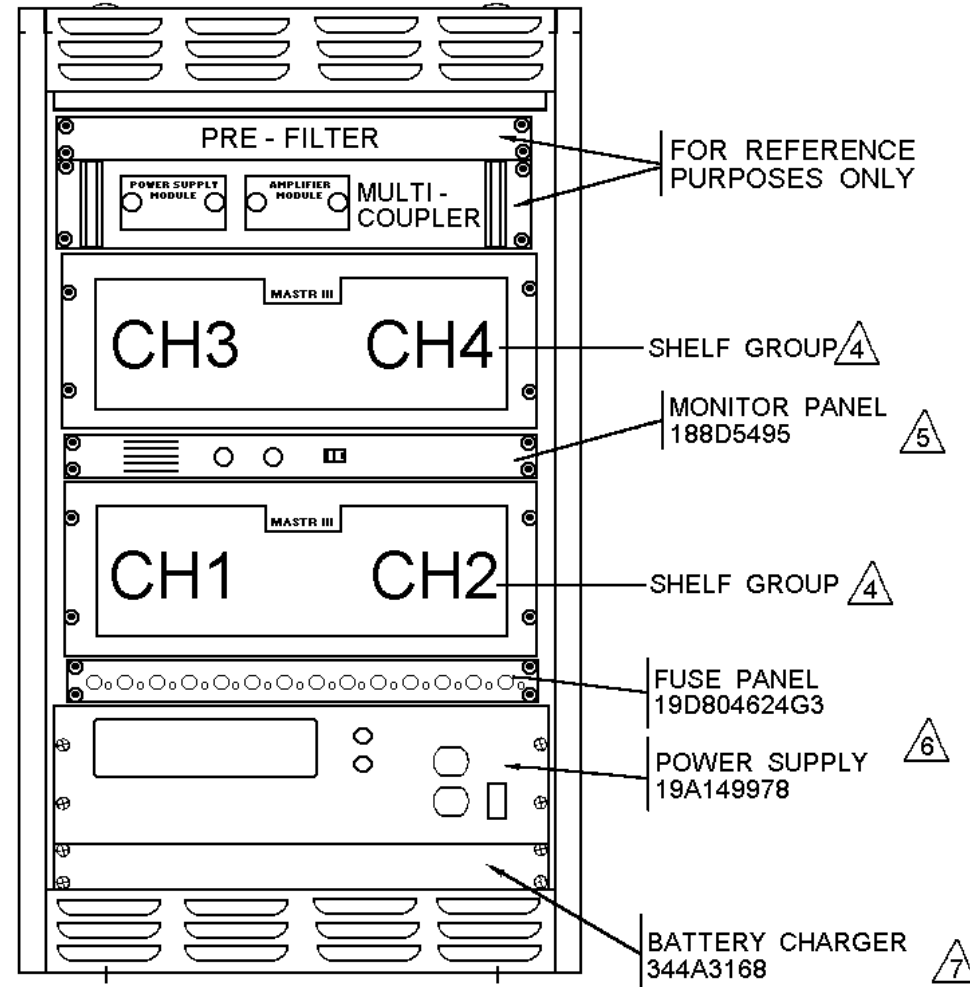


CONVENTIONAL 69" CABINET (DOORS REMOVED FOR CLARITY)

CONVENTIONAL 83" CABINET & 86" OPEN RACK (DOORS REMOVED FOR CLARITY)

1. MOUNT STATIONS IN CABINET IN ASCENDING ORDER WITH LOWEST CHANNEL IN THE BOTTOM POSITION.
 2. TIE STRAP CABLES TO MOUNTING RAILS.
 3. INSTALL POWER CABLES AS SHOWN AND CONNECT IN ACCORDANCE WITH CONNECTION DIAGRAMS NOTED BELOW.
- ⚠ SEE 188D450 FIGURE 1 ON SHEET 2 AND 188D5450P3 ON SHEET 4 FOR SHELF GROUP MOUNTING AND CABLE HOOKUP.
 - ⚠ SEE 188D5450P4 ON SHEET 6 FOR MONITOR PANEL MOUNTING AND CABLE HOOKUP.
 - ⚠ SEE 188D5450 FIGURE 4 ON SHEET 6 FOR POWER GROUP MOUNTING AND CABLE HOOKUP.
 - 7. REFER TO 188D6129 FOR CABINET INTERCONNECT DIAGRAM.
 - ⚠ SEE 188D5450 FIGURE 5 ON SHEET 11 FOR BATTERY BACKUP INTERCONNECT AND CABLING.

CONVENTIONAL VOTER
 86" OPEN RACK
 83" INDOOR CABINET
 69" INDOOR CABINET



FRONT VIEW

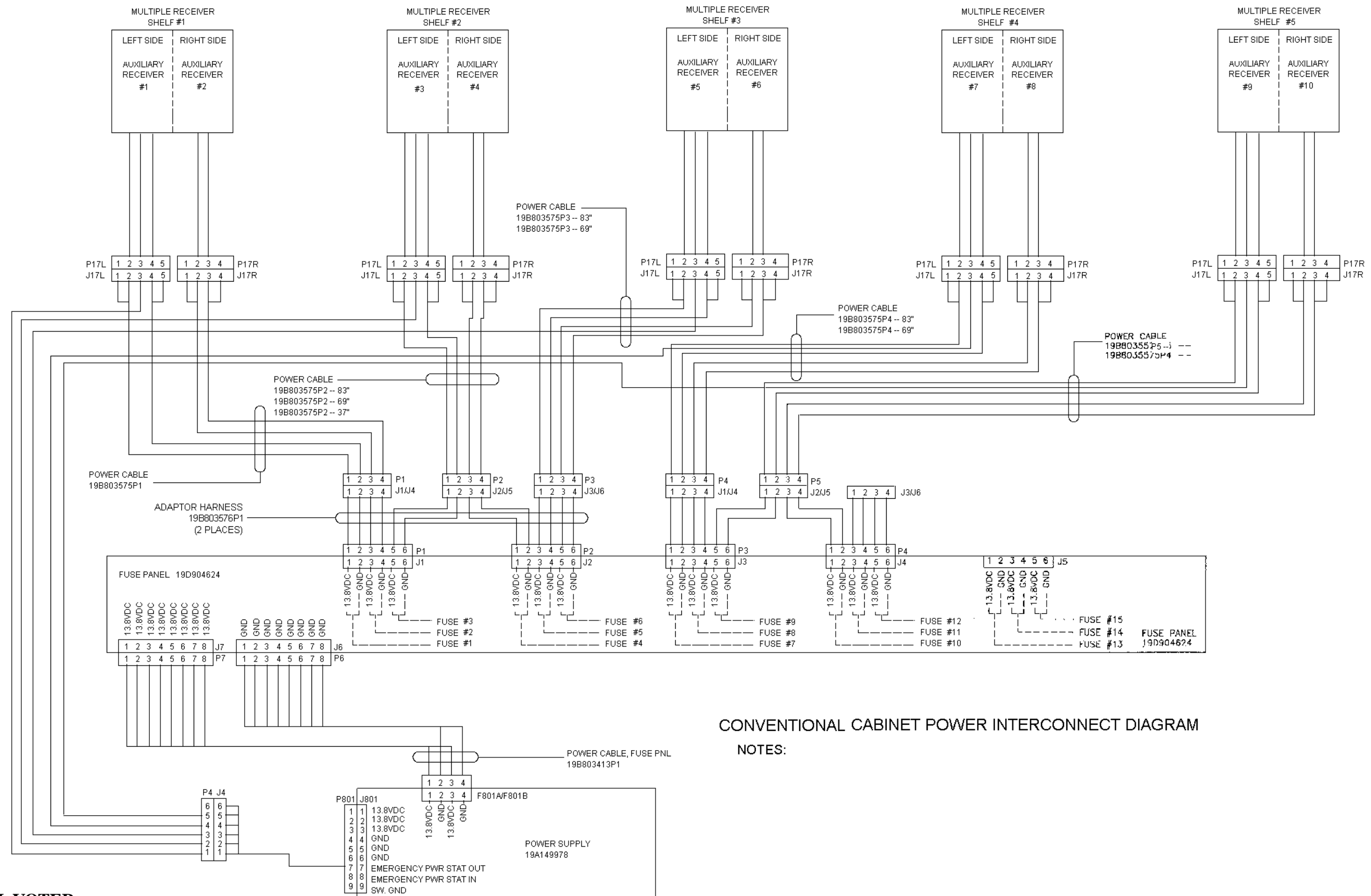
ASSEMBLY OF AUX RX SHELF FOR THE 37" MASTR III INDOOR CABINET APPLICATION.

SEE 188D5450 FIGURE 1 ON SHEET 2 AND 188D5450P3 ON SHEET 4 FOR SHELF GROUP MOUNTING AND CABLE HOOKUP (IGNORE GETC REFERENCES).

- 5. SEE 188D5450P4 ON SHEET 6 FOR MONITOR PANEL MOUNTING AND CABLE HOOKUP.
- 6. SEE 188D5450 FIGURE 4 ON SHEET 6 FOR POWER GROUP MOUNTING AND CABLE HOOKUP.
- 7. SEE 188D5450 FIGURE 5 ON SHEET 11 FOR BATTERY BACKUP INTERCONNECT AND CABLING.

CONVENTIONAL VOTER
37" INDOOR CABINET

(188D5450, Sh. 10, rev. 1)

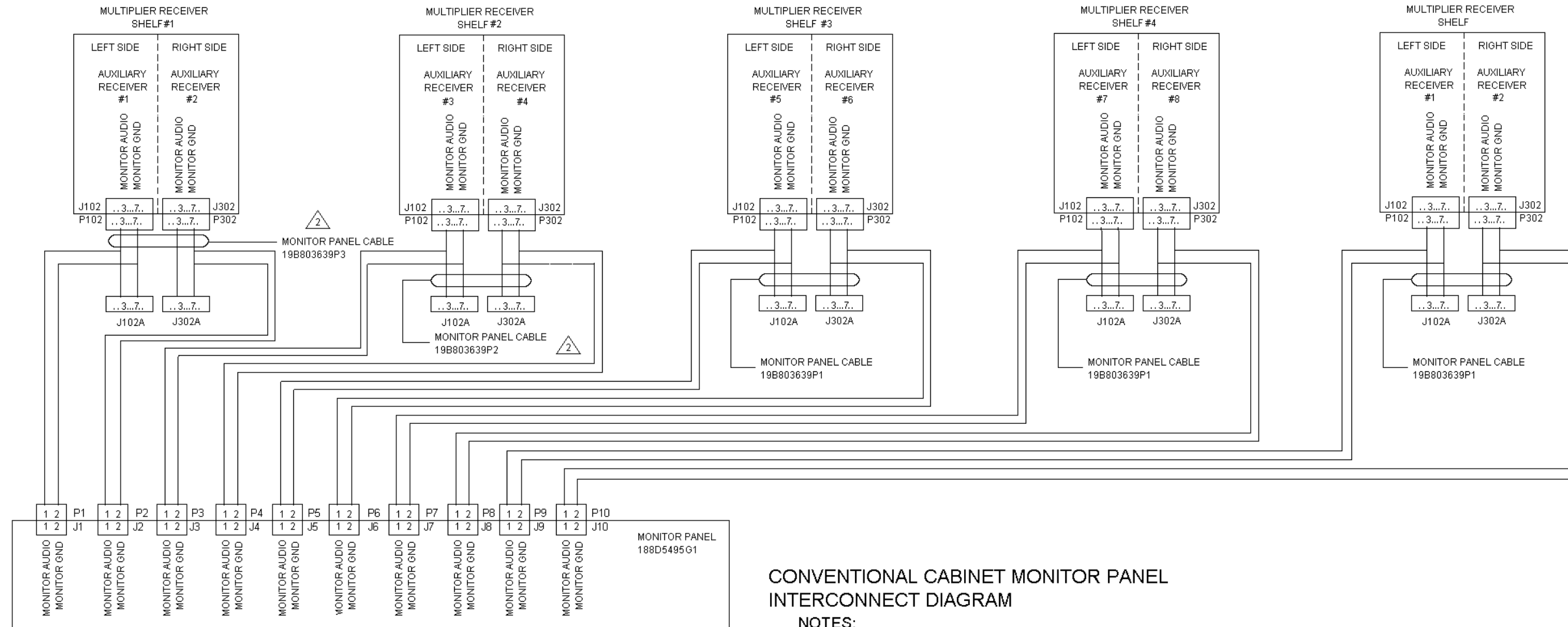


CONVENTIONAL CABINET POWER INTERCONNECT DIAGRAM

NOTES:

**CONVENTIONAL VOTER
CABINET POWER**

(188D6129, Sh. 5, Rev. 1)



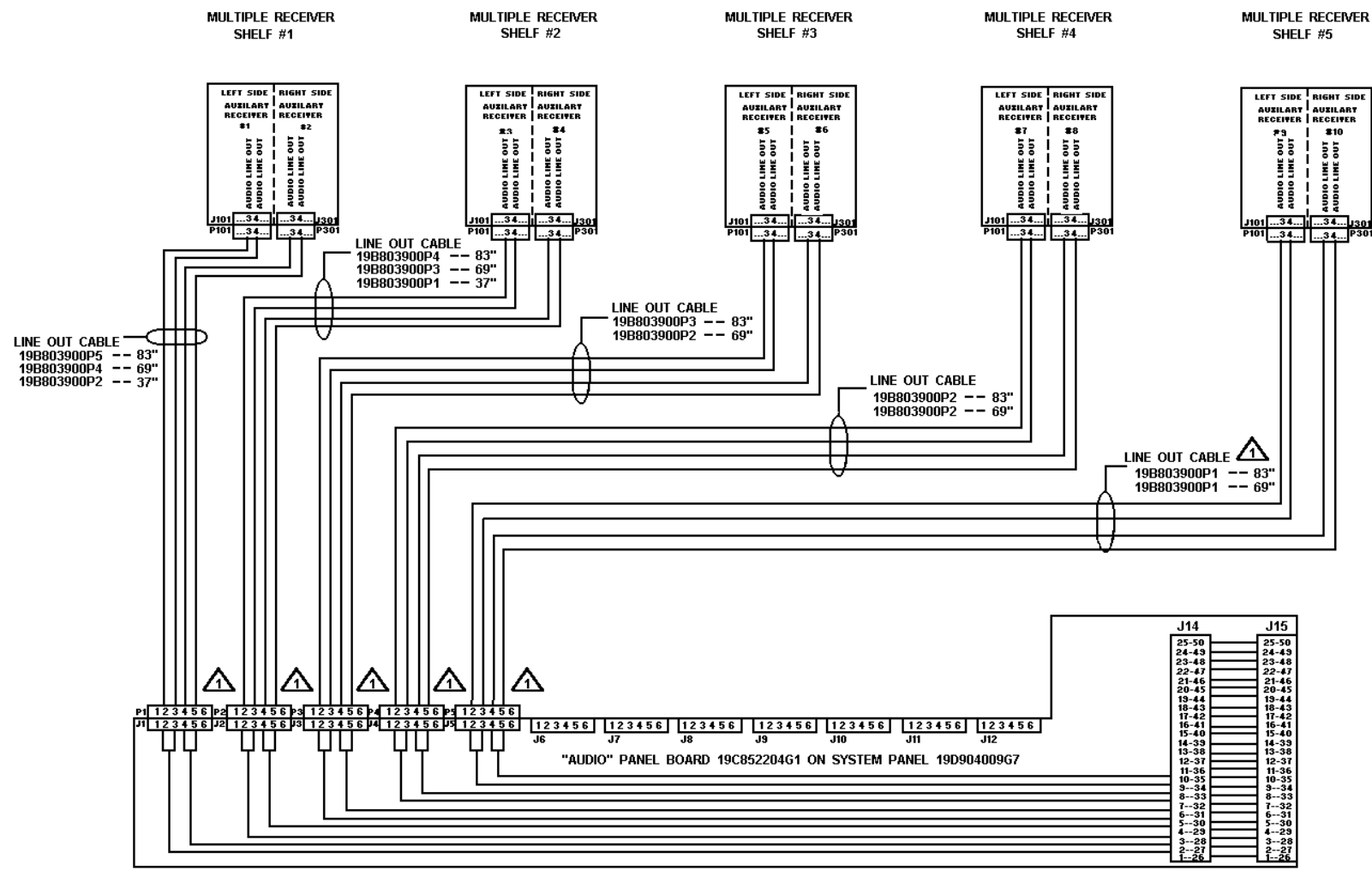
CONVENTIONAL CABINET MONITOR PANEL
INTERCONNECT DIAGRAM

NOTES:

1. CABLES LISTED ABOVE ARE FOR BOTH 83" AND 69" CABINETS.
2. 37" CABINETS WILL USE 19B803639P1 FOR BOTH MULTIPLE RECEIVER SHELVES.

CONVENTIONAL VOTER
CONVENTIONAL CABINET MONITOR PANEL

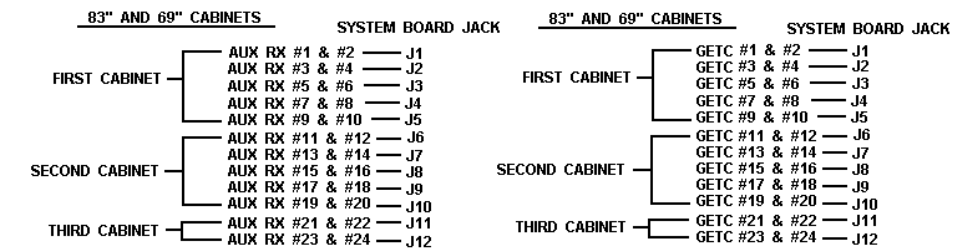
(188D6129, Sh. 6, Rev. 1)



CONVENTIONAL CABINET AUX RECEIVER SIGNAL OUT INTERCONNECT DIAGRAM

NOTES:

1. THIS INTERCONNECT DIAGRAM IS FOR THE FIRST CABINET IN AN AUX RECEIVER SYSTEM. FOLLOW ON CABINETS WILL CONNECT THE SAME CABLES INTO SYSTEM PANEL BOARD JACKS AS LISTED BELOW.
2. THERE IS NO SYSTEM PANEL FOR THE 37" CABINET (LINE OUT CABLES ARE PRESENT AS NOTED).



NOTE: EACH CABINET HAS SEPARATE SYSTEM BOARDS FOR THE AUX RX AND GETC DATA SIGNALS. PLUG CABLES INTO JACKS AS INDICATED ABOVE. SYSTEM BOARDS ARE DAISEY CHAINED TOGETHER VIA J14 (OUT) & J15 (IN) USING CABLE 19D903880P120 (AT FIELD SITE).

CONVENTIONAL VOTER
CONVENTIONAL CABINET AUXILIARY RECEIVER SIGNAL OUT

(188D6129, Sh. 7, Rev. 1)

This page intentionally left blank