

**LBI-38872**

## **Maintenance Manual**

**INTEGRATED MULTISITE  
& CONSOLE CONTROLLER  
AUX I/O CONCENTRATOR CARD  
19C852221P1**

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**DESCRIPTION**

**GENERAL**

Concentrator cards simplify connections to the Integrated Multisite & Console Controller (IMC). By installing the cards in the audio and data paths between the IMC and other pieces of equipment, interfacing between a site or console and the switch requires fewer kinds of cables. The cards, mounted on the rear of the cabinet, route many of the signals from the IMC. Most of the cards concentrate the signals from several backplane connectors into one or two large connectors that interface to the site, console, etc.

Most of the concentrator cards make it possible to make IMC connections at punch-blocks. With the exception of the card for the MOM PC, each converts the signal arrangement on the backplane connectors to the arrangement on the punch-blocks. The concentrators perform a conversion from two-row, 24-pin connectors to 50-pin Champ connectors. Cables with the same two-row, 24-pin connectors on both ends carry signals between the backplane and the concentrators. 25-pair cables carry the signals between the concentrators and punch-blocks or other signal break-out devices.

**CONTROLLER AUX I/O CONCENTRATOR CARD**

Specifications

Height: 5 inches  
 Width: 4.25 inches  
 Thickness: 0.093 inches

Description

This card carries the optocoupler and relay signals from controller boards.

There are four 24-pin, two-row connectors on the back of the concentrator card. This card can be connected to up to four controller boards.

Each of the two Champ connectors on the front of the board carries the relay and optocoupler signals from two boards. J3 has the signals from boards connected to J1 and J2. J6 carries the signals from boards connected to J4 and J5.

Note that the signal arrangement does not follow the convention of having the "high" signals on 1-25 and the "low" signals on 26-50. This is because pairs of optocouplers share common "low" signals.

In the tables below, the numbers one through four serve to distinguish between multiple devices on a single controller board at the given connector (J1, J2, J4, or J5).

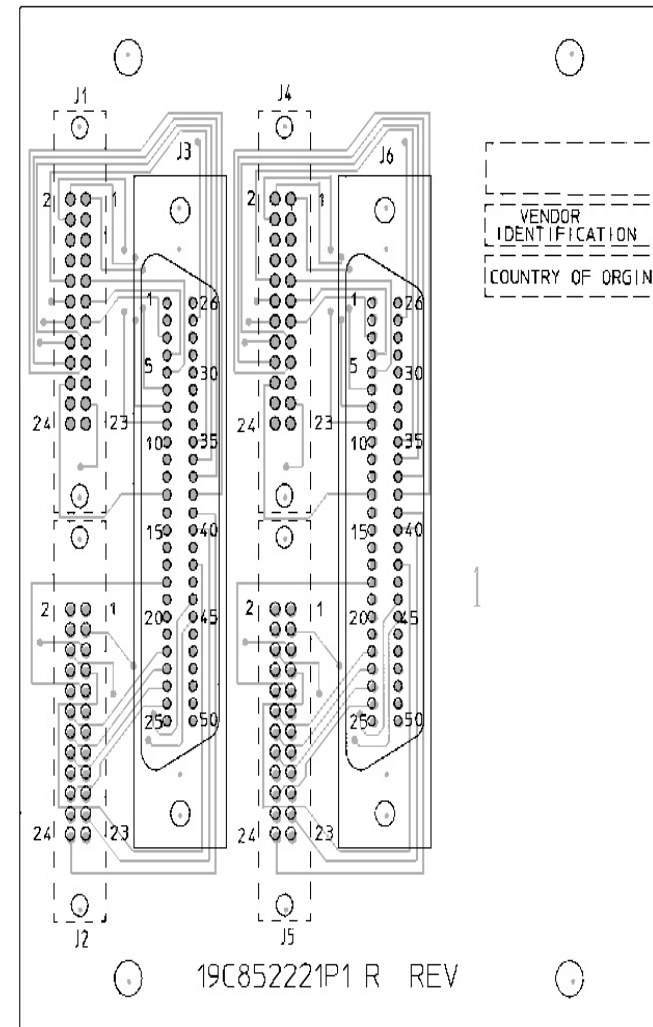
J3		
1	J1-22	Opt in A1
2	J1-19	Opt in B1
3	J1-13	Opt in com 2
4	J1-11	Opt in A3
5	J1-9	Opt in B3
6	J1-1	Opt in com 4
7	J1-2	Opt out A1
8	J1-4	Opt out B1
9	J1-12	Opt out com 2
10	J1-14	Opt out A3
11	J1-16	Opt out B3
12	J1-20	Opt out com 4
13	J2-22	Opt in A1
14	J2-19	Opt in B1
15	J2-13	Opt in com 2
16	J2-11	Opt in A3
17	J2-9	Opt in B3
18	J2-1	Opt in com 4
19	J2-2	Opt out A1
20	J2-4	Opt out B1
21	J2-12	Opt out com 2
22	J2-14	Opt out A3
23	J2-16	Opt out B3
24	J2-20	Opt out com 4

J3		
25		Unused
26	J1-24	Opt in com 1
27	J1-21	Opt in A2
28	J1-23	Opt in B2
29	J1-7	Opt in com 3
30	J1-5	Opt in A4
31	J1-3	Opt in B4!/Ext int
32	J1-6	Opt out com 1
33	J1-8	Opt out A2
34	J1-10	Opt out B2
35	J1-15	Opt out com 3
36	J1-18	Opt out A4
37	J1-17	Opt out B4
38	J2-24	Opt in com 1
39	J2-21	Opt in A2
40	J2-23	Opt in B2
41	J2-7	Opt in com 3
42	J2-5	Opt in A4
43	J2-3	Opt in B4!/Ext int
44	J2-6	Opt out com 1
45	J2-8	Opt out A2
46	J2-10	Opt out B2
47	J2-15	Opt out com 3
48	J2-18	Opt out A4
49	J2-17	Opt out B4
50		Unused

J6		
1	J4-22	Opt in A1
2	J4-19	Opt in B1
3	J4-13	Opt in com 2
4	J4-11	Opt in A3
5	J4-9	Opt in B3
6	J4-1	Opt in com 4
7	J4-2	Opt out A1
8	J4-4	Opt out B1
9	J4-12	Opt out com 2
10	J4-14	Opt out A3
11	J4-16	Opt out B3
12	J4-20	Opt out com 4
13	J5-22	Opt in A1
14	J5-19	Opt in B1
15	J5-13	Opt in com 2
16	J5-11	Opt in A3
17	J5-9	Opt in B3
18	J5-1	Opt in com 4
19	J5-2	Opt out A1
20	J5-4	Opt out B1
21	J5-12	Opt out com 2
22	J5-14	Opt out A3
23	J5-16	Opt out B3
24	J5-20	Opt out com 4
25		Unused

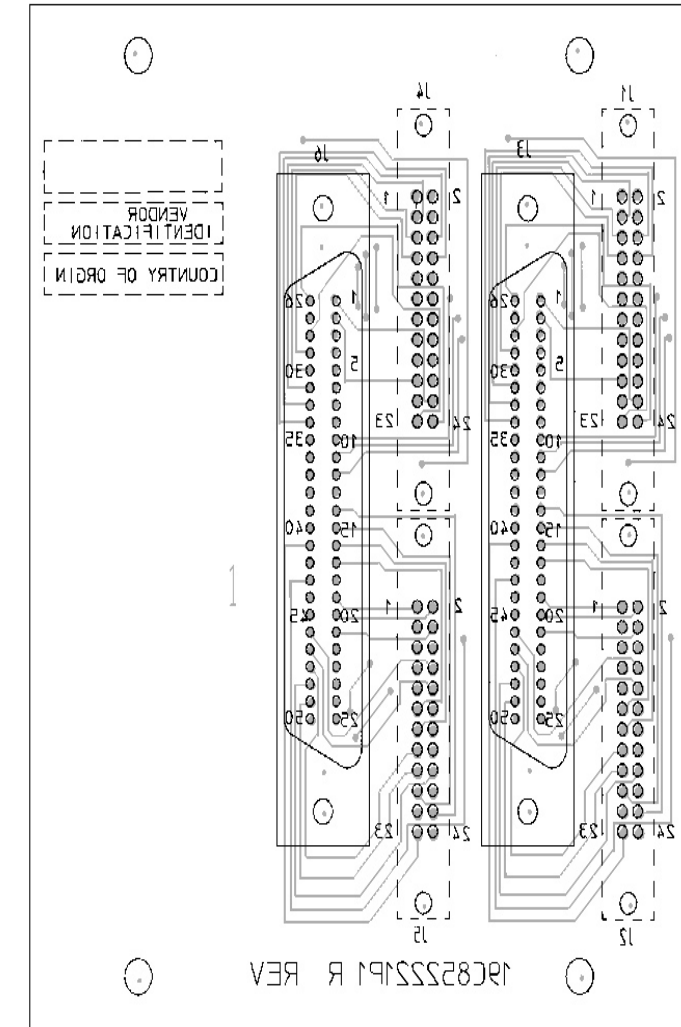
J6		
26	J4-24	Opt in com 1
27	J4-21	Opt in A2
28	J4-23	Opt in B2
29	J4-7	Opt in com 3
30	J4-5	Opt in A4
31	J4-3	Opt in B4!/Ext int
32	J4-6	Opt out com 1
33	J4-8	Opt out A2
34	J4-10	Opt out B2
35	J4-15	Opt out com 3
36	J4-18	Opt out A4
37	J4-17	Opt out B4
38	J5-24	Opt in com 1
39	J5-21	Opt in A2
40	J5-23	Opt in B2
41	J5-7	Opt in com 3
42	J5-5	Opt in A4
43	J5-3	Opt in B4!/Ext int
44	J5-6	Opt out com 1
45	J5-8	Opt out A2
46	J5-10	Opt out B2
47	J5-15	Opt out com 3
48	J5-18	Opt out A4
49	J5-17	Opt out B4
50		Unused

COMPONENT SIDE



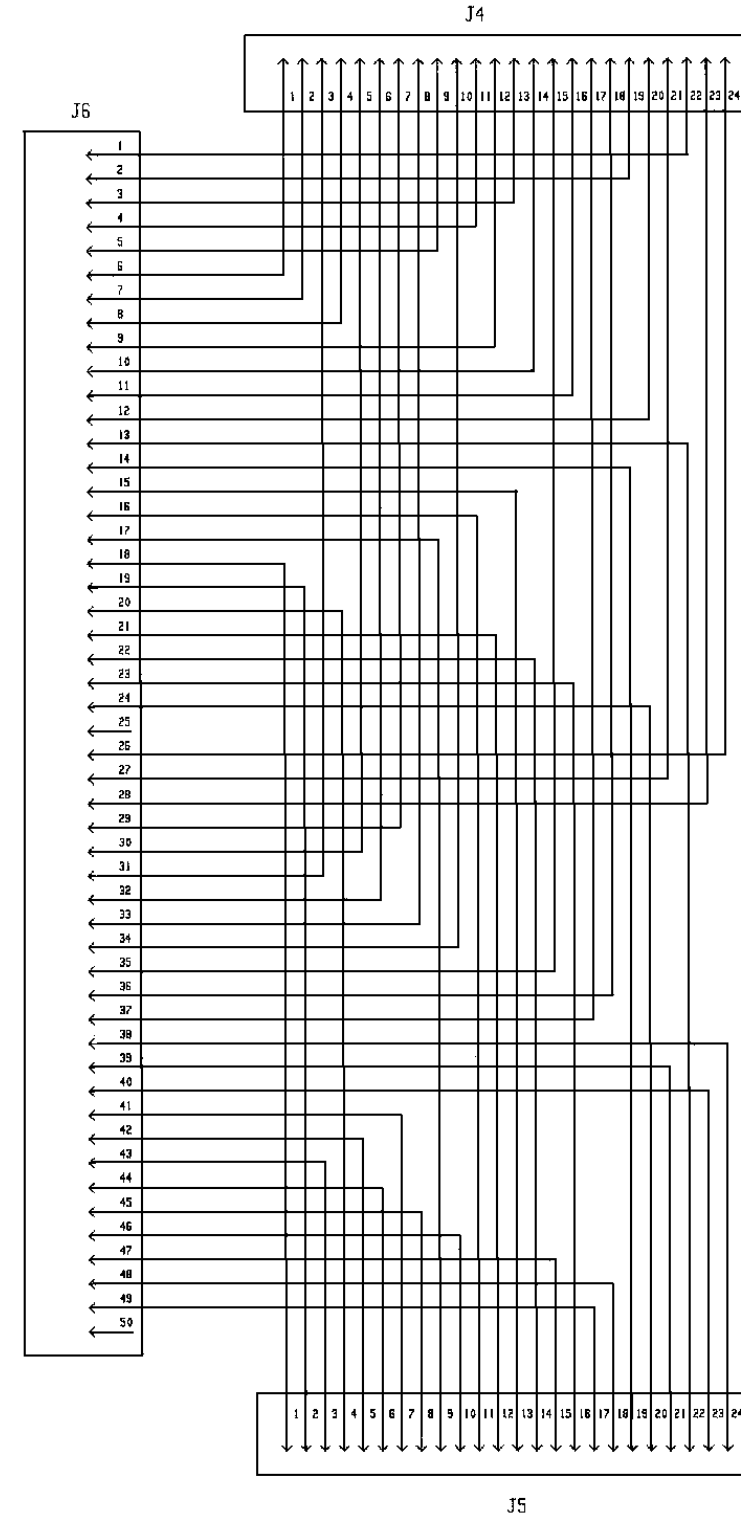
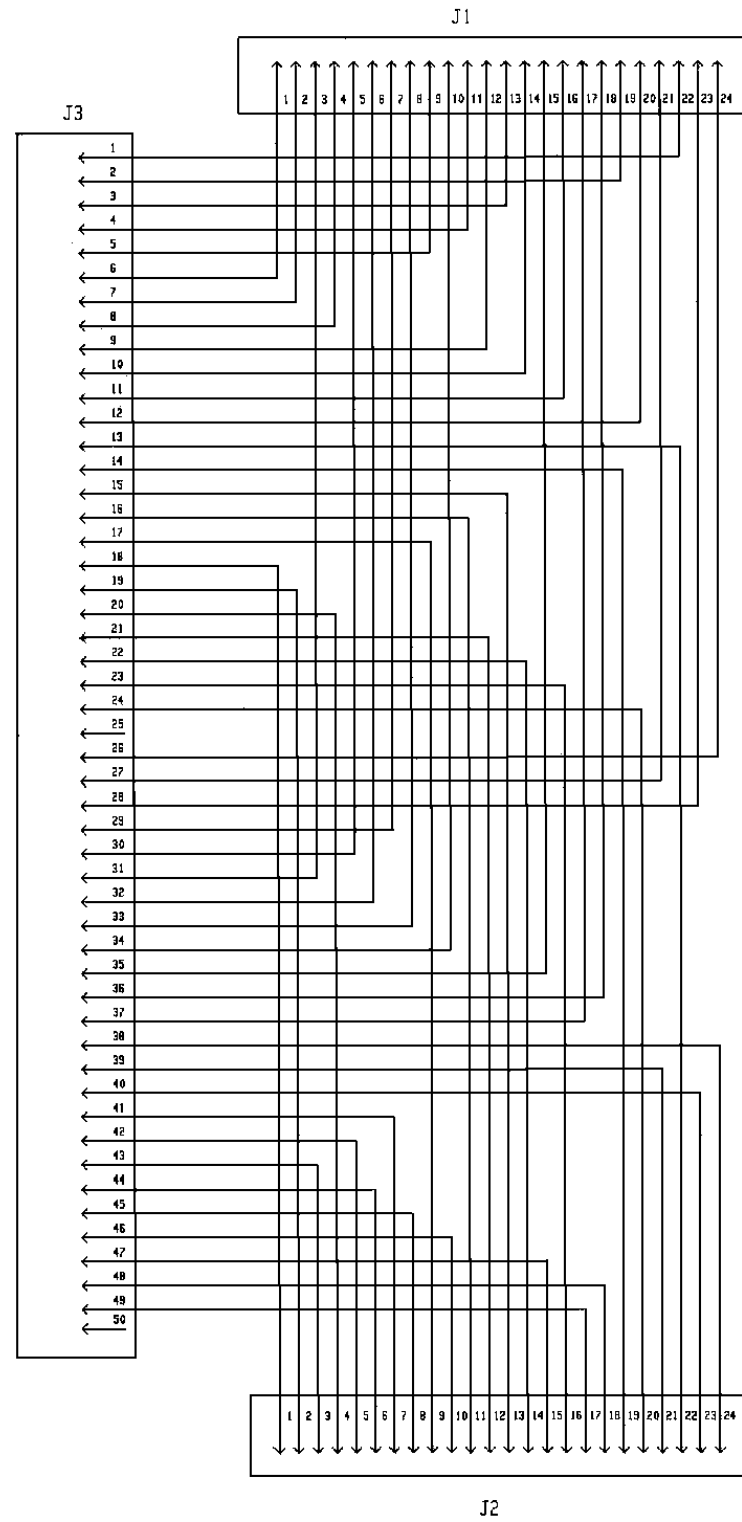
(19C852221, Rev. 2)  
(19C852222, Component side, Rev. 2)

SOLDER SIDE



(19C852221, Rev. 2)  
(19C852222, Solder Side, Rev. 2)

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(19D903913, Sh. 1, Rev. 0)