

# TALKBACK INTERCOM SYSTEM

## V-2925 - ADD ON EXPANSION UNIT FOR THE V-2924

The basic V-2924 Talkback Intercom System provides 24 stations with one-way, two-way, group call and all call pages. The V-2925 Expansion Unit is an add on unit for the V-2924. Each V-2925 Expansion Unit will expand the V-2924 by twenty-four (24) additional stations. Up to three (3) Expansion Units can be added to a system for a total of 48, 72, or 96 zones of paging.

**WARNING: Disconnect main power before servicing.**

### **Mounting**

- Plug the Expansion Unit into the Control Unit. For the first Expansion Unit, insert the P1 connector from the Expansion Unit into the P8 connector on the Control Unit (Refer to Figure 1 for location of connectors). (For each additional Expansion Unit, insert P2 into P1 – Refer to Figure 1 of the Control Unit document).
- Close latches attached to the top and bottom of the Expansion Unit over the keepers on the top and bottom of the Control Unit.
- Drill holes into backboard through mounting flanges on the Expansion Unit.
- Insert screws into holes and tighten screws firmly.

### **Connections**

Each Expansion Unit requires (2) 66B type punchdown blocks. Mount these on the backboard near the associated Expansion Unit. Make connections to the punchdown blocks as specified in Figure 2 – Punchdown Block Connections.

### **Setting Option Switches**

All options programmed for the Control Unit are available on the additional stations provided by the Expansion Units. The only switches on the Expansion Unit requiring attention are those for Background Music. Refer to Figure 1 for location and Table 1 for the default values of these switches. Make changes as desired for the various zones.

### **Dimensions/Weight**

- 17.5”H x 8.37”W x 3.06”D  
(44.45cm H x 21.26cm W x 7.77cm D)
- 11 lbs. (5.0 kg)

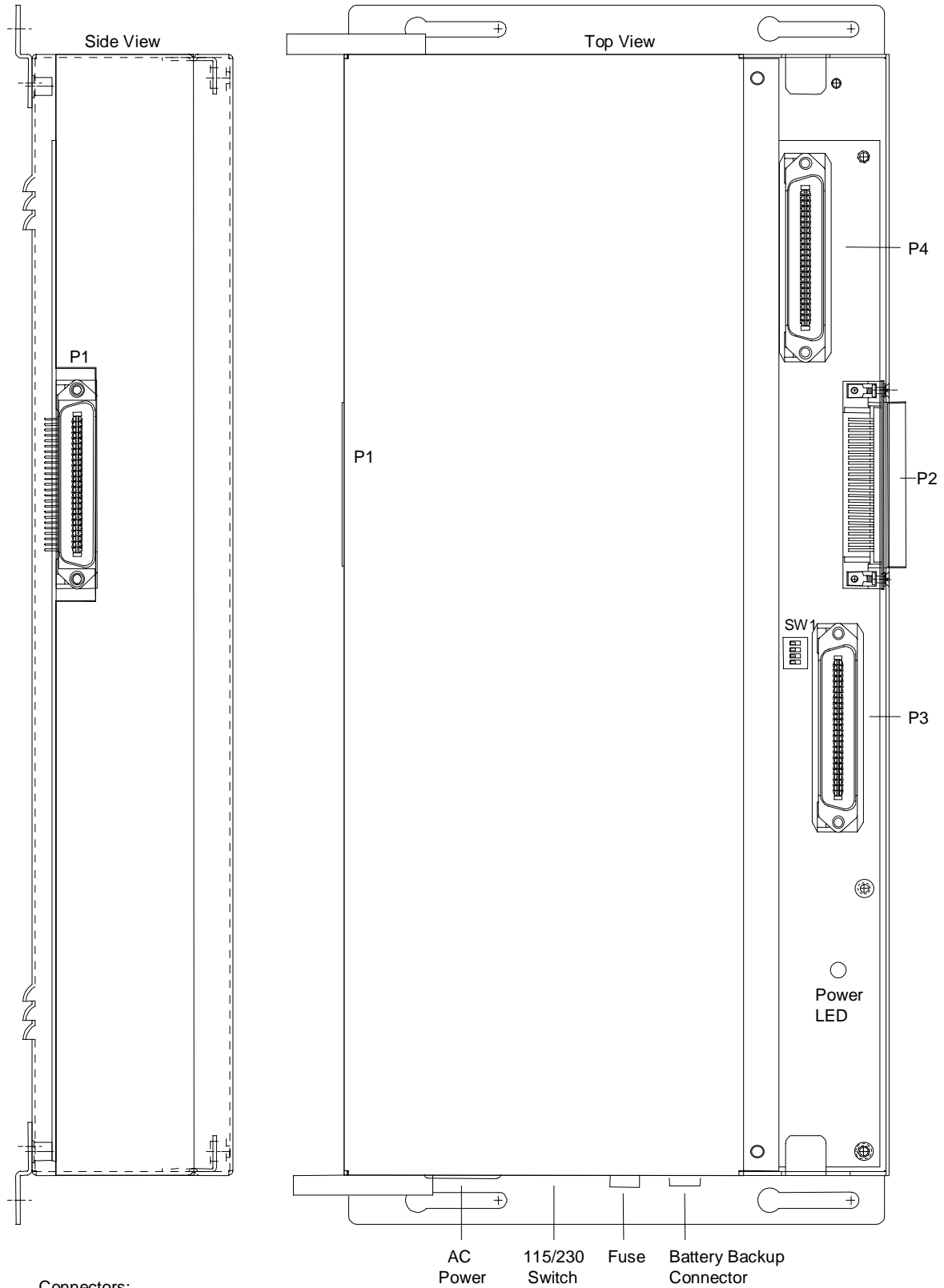
### **Operation**

Same as Control Unit.

**V-2924 with V-2925 Expansion Unit.**



**FIGURE 1 - V-2925 CONTROL AND CONNECTOR LOCATIONS**



**Connectors:**

- P1 - Connects to the V-2924 Control Unit
- P2 - Connects to an additional V-2925 Expansion Unit
- P3 - Switch Inputs
- P4 - Speaker Outputs

**Switches:**

- SW1 - BGM Group Select Dip Switch (See Table)

## FIGURE 2 - PUNCHDOWN BLOCK CONNECTIONS

Block P3 - Switch Inputs				
		Expansion Unit #1	*Expansion Unit #2	*Expansion Unit #3
26	W/BL	INA25	INA49	INA73
1	BL/W	INB25	INB49	INB73
27	W/O	INA26	INA50	INA74
2	O/W	INB26	INB50	INB74
28	W/GR	INA27	INA51	INA75
3	GR/W	INB27	INB51	INB75
29	W/BR	INA28	INA52	INA76
4	BR/W	INB28	INB52	INB76
30	W/S	INA29	INA53	INA77
5	S/W	INB29	INB53	INB77
31	R/BL	INA30	INA54	INA78
6	BL/R	INB30	INB54	INB78
32	R/O	INA31	INA55	INA79
7	O/R	INB31	INB55	INB79
33	R/G	INA32	INA56	INA80
8	G/R	INB32	INB56	INB80
34	R/BR	INA33	INA57	INA81
9	BR/R	INB33	INB57	INB81
35	R/S	INA34	INA58	INA82
10	S/R	INB34	INB58	INB82
36	BK/BL	INA35	INA59	INA83
11	BL/BK	INB35	INB59	INB83
37	BK/O	INA36	INA60	INA84
12	O/BK	INB36	INB60	INB84
38	BK/G	INA37	INA61	INA85
13	G/BK	INB37	INB61	INB85
39	BK/BR	INA38	INA62	INA86
14	BR/BK	INB38	INB62	INB86
40	BK/S	INA39	INA63	INA87
15	S/BK	INB39	INB63	INB87
41	Y/BL	INA40	INA64	INA88
16	BL/Y	INB40	INB64	INB88
42	Y/O	INA41	INA65	INA89
17	O/Y	INB41	INB65	INB89
43	Y/G	INA42	INA66	INA90
18	G/Y	INB42	INB66	INB90
44	Y/BR	INA43	INA67	INA91
19	BR/Y	INB43	INB67	INB91
45	Y/S	INA44	INA68	INA92
20	S/Y	INB44	INB68	INB92
46	V/BL	INA45	INA69	INA93
21	BL/V	INB45	INB69	INB93
47	V/O	INA46	INA70	INA94
22	O/V	INB46	INB70	INB94
48	V/G	INA47	INA71	INA95
23	G/V	INB47	INB71	INB95
49	V/BR	INA48	INA72	INA96
24	BR/V	INB48	INB72	INB96
50	V/S	N.C.	N.C.	N.C.
25	S/V	N.C.	N.C.	N.C.

Block P4 – Speaker Outputs				
		Expansion Unit #1	*Expansion Unit #2	*Expansion Unit #3
26	W/BL	T STA25	T STA49	T STA73
1	BL/W	R STA25	R STA49	R STA73
27	W/O	T STA26	T STA50	T STA74
2	O/W	R STA26	R STA50	R STA74
28	W/GR	T STA27	T STA51	T STA75
3	GR/W	R STA27	R STA51	R STA75
29	W/BR	T STA28	T STA52	T STA76
4	BR/W	R STA28	R STA52	R STA76
30	W/S	T STA29	T STA53	T STA77
5	S/W	R STA29	R STA53	R STA77
31	R/BL	T STA30	T STA54	T STA78
6	BL/R	R STA30	R STA54	R STA78
32	R/O	T STA31	T STA55	T STA79
7	O/R	R STA31	R STA55	R STA79
33	R/G	T STA32	T STA56	T STA80
8	G/R	R STA32	R STA56	R STA80
34	R/BR	T STA33	T STA57	T STA81
9	BR/R	R STA33	R STA57	R STA81
35	R/S	T STA34	T STA58	T STA82
10	S/R	R STA34	R STA58	R STA82
36	BK/BL	T STA35	T STA59	T STA83
11	BL/BK	R STA35	R STA59	R STA83
37	BK/O	T STA36	T STA60	T STA84
12	O/BK	R STA36	R STA60	R STA84
38	BK/G	T STA37	T STA61	T STA85
13	G/BK	R STA37	R STA61	R STA85
39	BK/BR	T STA38	T STA62	T STA86
14	BR/BK	R STA38	R STA62	R STA86
40	BK/S	T STA39	T STA63	T STA87
15	S/BK	R STA39	R STA63	R STA87
41	Y/BL	T STA40	T STA64	T STA88
16	BL/Y	R STA40	R STA64	R STA88
42	Y/O	T STA41	T STA65	T STA89
17	O/Y	R STA41	R STA65	R STA89
43	Y/G	T STA42	T STA66	T STA90
18	G/Y	R STA42	R STA66	R STA90
44	Y/BR	T STA43	T STA67	T STA91
19	BR/Y	R STA43	R STA67	R STA91
45	Y/S	T STA44	T STA68	T STA92
20	S/Y	R STA44	R STA68	R STA92
46	V/BL	T STA45	T STA69	T STA93
21	BL/V	R STA45	R STA69	R STA93
47	V/O	T STA46	T STA70	T STA94
22	O/V	R STA46	R STA70	R STA94
48	V/G	T STA47	T STA71	T STA95
23	G/V	R STA47	R STA71	R STA95
49	V/BR	T STA48	T STA72	T STA96
24	BR/V	R STA48	R STA72	T STA96
50	V/S	N.C.	N.C.	N.C.
25	S/V	N.C.	N.C.	N.C.

\* If Installed

**Table 1 - Background Music Options**

Background Music			
Stations	Main Board SW1	Switch OFF	Switch ON
1-6	SW1-1	No BGM group 1	BGM group 1
7-12	SW1-2	No BGM group 2	BGM group 2
13-18	SW1-3	No BGM group 3	BGM group 3
19-24	SW1-4	No BGM group 4	BGM group 4
Expansion Board 1:			
25-30	SW1-1	No BGM group 5	BGM group 5
31-36	SW1-2	No BGM group 6	BGM group 6
37-42	SW1-3	No BGM group 7	BGM group 7
43-48	SW1-4	No BGM group 8	BGM group 8
Expansion Board 2:			
49-54	SW1-1	No BGM group 9	BGM group 9
55-60	SW1-2	No BGM group 10	BGM group 10
61-66	SW1-3	No BGM group 11	BGM group 11
67-72	SW1-4	No BGM group 12	BGM group 12
Expansion Board 3:			
73-78	SW1-1	No BGM group 13	BGM group 13
79-84	SW1-2	No BGM group 14	BGM group 14
85-90	SW1-3	No BGM group 15	BGM group 15
91-96	SW1-4	No BGM group 16	BGM group 16

**Table 2 - Numbering Plan**

2 Digit Zone Access:

Dial Code	Function
10..33	Handsfree speakers - Main board
34..57	Handsfree speakers - Expansion board 1
58..81	Handsfree speakers - Expansion board 2
82..99 *	Handsfree speakers - Expansion board 3 (1st 18 sta.)
**** during hf to zone 30,31,32, or 33	Operate relay for longer of 2.5 seconds or duration of second press, or until attendant releases hf.

(Station 1 = code 10, station 2 = code 11, and so on)

3 Digit Zone Access:

Dial Code	Function
101..124	Handsfree speakers - Main board
125..148	Handsfree speakers - Expansion board 1
149..172	Handsfree speakers - Expansion board 2
173..196	Handsfree speakers - Expansion board 3
**** during hf to zone 121, 122, 123, or 124	Operate relay for longer of 2.5 seconds or duration of second press, or until attendant releases hf.

(Station 101 = code 101, station 102 = code 102, and so forth)

\*If the 2-digit dialing option is enabled in a system with 3 expansion units, the maximum number of zones is 90.

The 3-digit dialing option must be enabled to access 96 zones.

**Table 3 - Page Dial Codes:**

Dial Code	Groups															
	Main Board				Expansion 1				Expansion 2				Expansion 3			
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
#10 external all call																
#11 system all call																
#12																
#13																
#14																
#15																
#16																
#17																
#60	Example: #60 + 72 + 74 + ... + *      Serial Group Call - User may select any combination of group codes during dialing															
#61																
#62																
#63																
#64																
#65																
#66																
#67																
#68																
#70																
#71																
#72																
#73																
#74																
#75																
#76																
#77																
#78																
#79																
#80																
#81																
#82																
#83																
#84																
#85																

- Group 10 (External All Call) is not a valid group selection when using these dial codes

NOTE: For Group selection and Background Music Programming:

Group 1	Stations 1 – 6
Group 2	Stations 7 – 12
Group 3	Stations 13 – 18
Group 4	Stations 19 – 24
Group 5	Stations 25 – 30
Group 6	Stations 31 – 36
Group 7	Stations 37 – 42
Group 8	Stations 43 – 48
Group 9	Stations 49 – 54
Group 10	Stations 55 – 60
Group 11	Stations 61 – 66
Group 12	Stations 67 – 72
Group 13	Stations 73 – 78
Group 14	Stations 79 – 84
Group 15	Stations 85 – 90
Group 16	Stations 91 - 96

## TROUBLESHOOTING CHART

<b>Problem</b>	<b>Corrective Action</b>
No system operation.	<ul style="list-style-type: none"> <li>• Verify AC voltage is present at the receptacle.</li> <li>• Check the fuse located on the bottom of the unit. If blown, replace with a 1 amp, 250 VAC fuse.</li> <li>• Verify that 25 pair cable connectors are completely plugged into circuit board connectors.</li> <li>• Refer to Figure 1 and verify all connections.</li> </ul>
No paging at speaker.	<ul style="list-style-type: none"> <li>• Refer to Figure 1 and adjust volume.</li> </ul>
Paging at speaker but no reply from speaker.	<ul style="list-style-type: none"> <li>• Refer to Figure 1 and adjust volume.</li> </ul>
No system ringing when call button is pressed.	<ul style="list-style-type: none"> <li>• Verify all associated connections.</li> </ul>
Background music not heard at speakers.	<ul style="list-style-type: none"> <li>• Verify connection of speakers and background music input.</li> </ul>
No dial tone.	<ul style="list-style-type: none"> <li>• Refer to dip switch settings.</li> </ul>

### VALCOM LIMITED WARRANTY

Valcom, Inc. warrants its products to be free from defects in materials and workmanship under conditions of normal use and service for a period of one year from the date of shipment. The obligation under this warranty shall be limited to the replacement, repair or refund of any such defective device within the warranty period, provided that:

1. inspection by Valcom, Inc. indicates the validity of the claim,
2. the defect is not the result of damage, misuse, or negligence after the original shipment,
3. the product has not been altered in any way or repaired by others and that factory sealed units are unopened (A service charge plus parts and labor will be applied to units defaced or physically damaged),
4. freight charges for the return of products to Valcom are prepaid,
5. all units 'out of warranty' are subject to a service charge. The service charge will cover minor repairs (Major repairs will be subject to additional charges for parts and labor).

**This warranty is in lieu of and excludes all other warranties, expressed or implied, and in no event shall Valcom, Inc. be liable for any anticipated profits, consequential damages, loss of time or other losses incurred by the buyer in connection with the purchase, operation or use of the product.**

This warranty specifically excludes damage incurred in shipment. In the event a product is received in damaged condition, the carrier should be notified immediately. Claims for such damage should be filed with the carrier involved in accordance with the F.O.B. point.

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## TECHNICAL ASSISTANCE

When trouble is reported, verify there are no broken connections. Assistance in troubleshooting is available from the factory. Call (540) 427-3900 and ask for Technical Support, or call (540) 427-6000 for Valcom 24-hour Automated Support or visit our website at <http://www.valcom.com>.

Valcom equipment is not field repairable. Valcom, Inc. maintains service facilities in Roanoke, VA. Should repairs be necessary, attach a tag to the unit clearly stating company name, address, phone number, contact person, and nature of the problem. Send the unit to:

**Valcom, Inc.  
Repair & Return Dept.  
5614 Hollins Road  
Roanoke, VA 24019-5056**