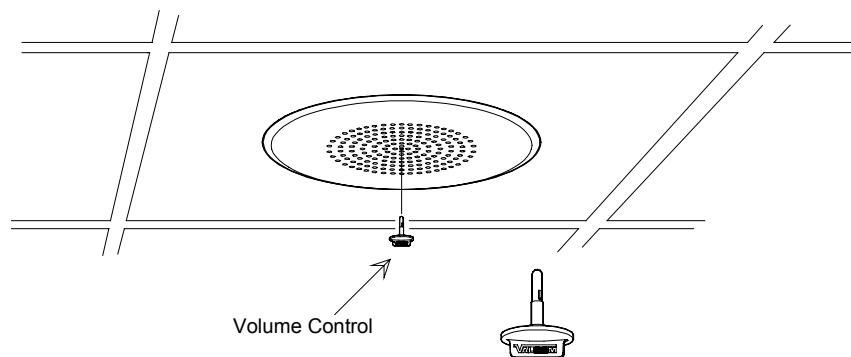


INSTALLATION INSTRUCTIONS FOR AMPLIFIED CEILING SPEAKERS

**V-1010C****V-1020C/V-1020KNOB****V-1021C**

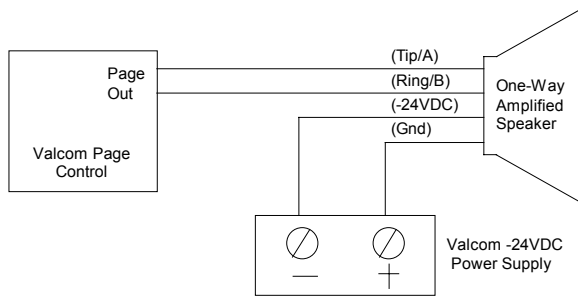
Valcom Ceiling Speakers, V-1010C, V-1020C, V-1020KNOB and V-1021C are self-amplified and are capable of reproducing voice paging as well as background music. The V-1020KNOB has a permanent knob for volume adjustments, the V-1010C and V-1020C feature a removable volume control knob and the V-1021C has an externally accessible volume control that can be adjusted by screwdriver through the center hole on the grille. The V-1010C is a 4-inch speaker and the others are 8-inch speakers. All speakers require -24VDC, 50mA (1-power unit) and are FCC Part 68 registered under BAFUSA-69358-KX-N.



(Knob included with V-1010C and V-1020C)

Dimensions/Weight

- | | | | |
|--------------------|---------------------|---------------------------|-------------------|
| • V-1010C | 7.65"Dia. x 2.90"D | (19.43cm Dia. x 7.37cm D) | 1.7 lbs. (0.77kg) |
| • V-1020C/1020KNOB | 13.00"Dia. x 3.00"D | (33.02cm Dia. x 7.62cm D) | 2.5 lbs. (1.13kg) |
| • V-1021C | 11.00"Dia. x 3.00"D | (27.94cm Dia x 7.62cm D) | 1.5 lbs. (0.68kg) |



NOTE: Do not connect this speaker directly to a 25/70/100 Volt amplifier as damage to both the amplifier and speaker may occur. A V-1095 may be used to allow the use of Valcom self-amplified speakers on 70V speaker lines.

FIGURE 1: TYPICAL CONNECTIONS

FIGURE 2: V-1010C INSTALLATION INSTRUCTIONS

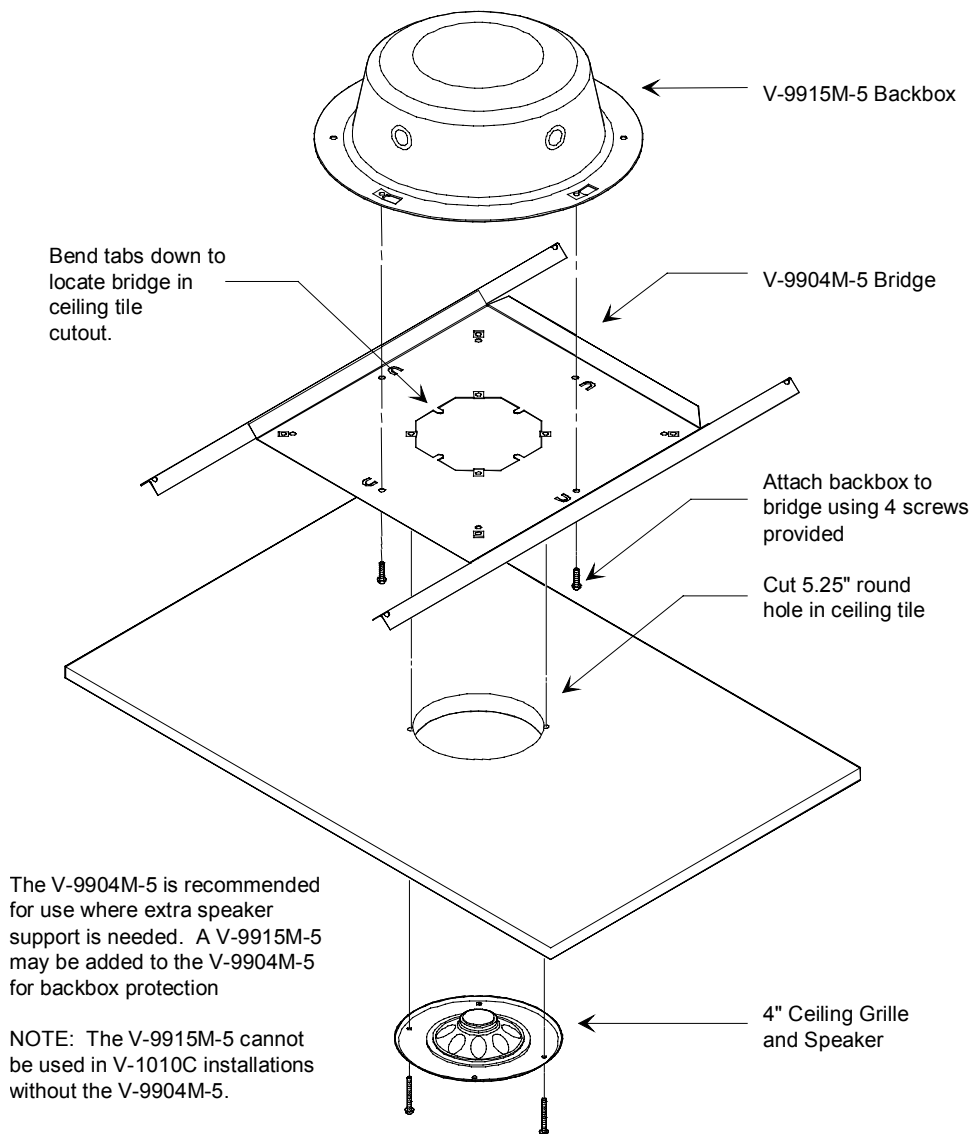
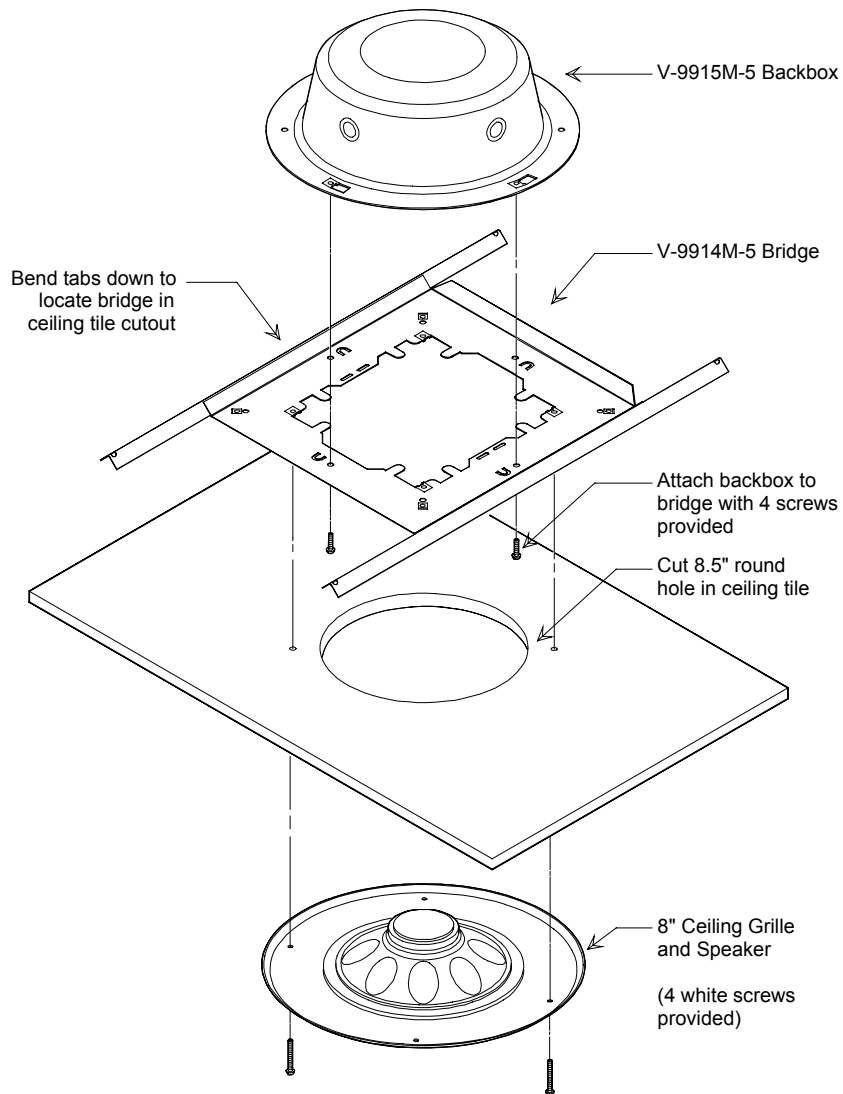


FIGURE 3: V-1020C AND V-1020KNOB INSTALLATION INSTRUCTIONS



NOTE:

FOR:	V-1020C	V-1020KNOB	V-1020C
BRIDGE	V-9914M-5	V-9914M-5	V-9914
BACKBOX	V-9915M-5	V-9915M-5	V-9915

COVERAGE

The area covered by a ceiling speaker is determined by the height of the ceiling. If ceiling height is eight feet, the speaker will cover 256 sq. ft. With a ceiling height of ten feet, the speaker will cover 400 sq. ft. If the ceiling is 20 feet high, the speaker will cover 1600 sq. ft.

TECHNICAL ASSISTANCE

When trouble is reported, verify there are no broken connections. Assistance in troubleshooting is available from the factory. Call (540) 563-2000 and press 1 for Technical 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

TROUBLESHOOTING CHART	
SYMPTOMS	ACTIONS
1. No audio from speaker	1a. Check that volume control is turned up (Clockwise). 1b. Using a lineman's test set, check for the proper audio level on the Tip and Ring leads and if necessary also at the source.
2. Low volume from speaker	2a. Check that volume control is turned up. 2b. Check voltage at the speaker assembly when in use, -18 to -24VDC required. 2c. Using a lineman's test set, check for the proper audio level on Tip and Ring leads. It is possible that some low-level audio will be heard with only one side of Tip and Ring connected.
3. Loud squeal (Feedback)	3a. Turn down (Counter-clockwise) volume of the speaker. 3b. Increase the distance between the telephone and speaker. 3c. Install a noise canceling handset on the telephone in severe problem areas. 3d. Add a V-9964, Digital Feedback Eliminator.

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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