V-1039A
7 WATT EXPLOSION PROOF
PAGING HORN/AMPLIFIER ASSEMBLY

INTRODUCTION

These instructions provide identification, installation and technical assistance information for the V-1039A, Explosion Proof One-Way Amplified Horn Assembly.

The V-1039A is a one-way explosion proof paging horn for use with Valcom single or multi-zone paging equipment.

The V-1039A is UL listed for use in the following atmospheres:
Class I, Division I, Groups C & D: Gas Atmospheres

This paging unit has received an FCC type KX registration and is designed to be used with FCC registered key telephone systems. In accordance with FCC rules with applicable tariffs, this Paging Unit may only be installed with the authorization of the host system. Installations may be made by Valcom, Inc., an authorized agent of the same, equipment manufacturers, telephone companies, registered telephone refurbishers, and those qualified for installation of FCC registered systems under FCC Rules Section 68.215. The FCC Registration Number, BAF9I7-69358-KX-N, will be listed in the affidavits filed with the telephone company; it will also be recorded in the system log kept by installation and maintenance personnel.

SPECIFICATIONS

The V-1039A consists of an explosion proof horn speaker with a built-in one-way 7 watt amplifier.

Features
- 7 watts
- Self-contained amplifier
- Includes V-1092 wall mount volume control
- Weatherproof
- Wide dispersion angle
- Metal and polycarbonate construction
- Omni-directional mounting bracket
- 1/2" conduit access

Dimensions/Weights
- V-1039A: 6.0"H x 14"W x 17.5"D
  (15.2cmH x 35.56cmW x 44.45cmD)
  19 lbs. (8.62kg)
- V-1092: 4.5"H x 2.75"W x 2.8"D
  11.43cm H x 6.99cm W x 7.11cm D)
  0.8 lbs. (.36kg)

Power Requirements
- 1.0 amp max unfiltered –24 Vdc
  ("B" Battery)

Environment
- Temperature: -4 to 130° F (-20 to 55° C)
- Humidity: 0-95% non-precipitating

DESIGN

The V-1039A may be used to provide one-way paging from any Valcom one-way or talkback page control unit. A standard Valcom paging system (see Figure 1) is made of three basic components:

1. A page control unit
2. Speakers (such as the V-1039A)
3. A power supply

Consult the Valcom VSP, One-Way Paging, for detailed information on selecting the control unit and power supply for one-way paging.
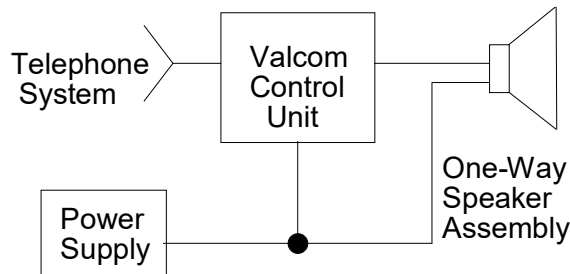

Figure 1

Special Applications

The V-1039A may be connected directly to the speaker in most electronic key telephones to amplify the level of the speaker and broadcast it to a large area. A power supply will also be required.

The V-1039A may be used to expand a 70 volt type paging system without placing an additional load on the amplifier by connecting the speaker directly to the 1/4 watt output of one of the existing 70 volt transformers. A power supply is also required.

Coverage

Refer to the table below for coverage of this horn assembly. The first figure given is the side to side distance to use when mounting the horns. It is also the distance in front of the horn that you can expect to hear a good quality page. The second figure is the total square footage the horn assembly will cover.

Horn Spacing

Location	Side/Side	Square Feet
Quiet	80'	6,400
Moderate	50'	2,500
Noisy	30'	900

INSTALLATION

Cautions

The V-1092 volume control is NOT designed for areas requiring explosion proof equipment. When installing this system, **do not mount the V-1092 volume control in the hazardous environment.**

To prevent ignition in a hazardous atmosphere, disconnect product from supply circuit before opening. Keep assembly tightly closed when in operation. Unit must be installed in accordance with the national Electrical Code requirements for hazardous atmospheres.

Should it be necessary to remove the back cover of the explosion proof driver enclosure, be certain to exercise special care to avoid damaging machined surfaces. Prior to reassembly, make certain that adjoining surfaces of enclosure are free from dirt. Tighten all bolts completely. To provide the specified protection in hazardous locations, please note that no compound of any type is to be applied to the machined flange. Care must be taken to ensure no wires are captured between these machined surfaces.

Connections

Four conductor wire is required for the V-1039A. Standard 22 or 24 gauge station wire is acceptable. Shielded wire is not required or recommended. Connections are as follows:

Brown	Tip/A
Red	Ring/B
Black	Ground
White	-24 VDC

Tip and Ring are connected to Tip Out and Ring Out of the V-1092 volume control. Tip In and Ring In of the volume control must be connected to the output of the page control unit. The –24 VDC and ground leads connect directly to the power supply. See Figure 2.

The Specifications in Tables 1 and 2 must be met when wiring this speaker assembly.

Table1 Maximum Number of Horns per Audio Run	
Wire Run in Feet (22 AWG)	# Horns
400	100
800	50
1600	25

Table 2	
Maximum Number of Horns per Power Run	
Wire Run in Feet (22 AWG)	# Horns
100	2
200	1
400	0

TECHNICAL ASSISTANCE

When trouble is reported, verify that power is being supplied to the unit and there are no broken connections. Check voltages for proper polarity on The cross connect block.

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 the nature of the problem. Send the unit to:

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

WARRANTY
Warranty information may be found on our website at www.valcom.com/warranty.

TROUBLESHOOTING CHART

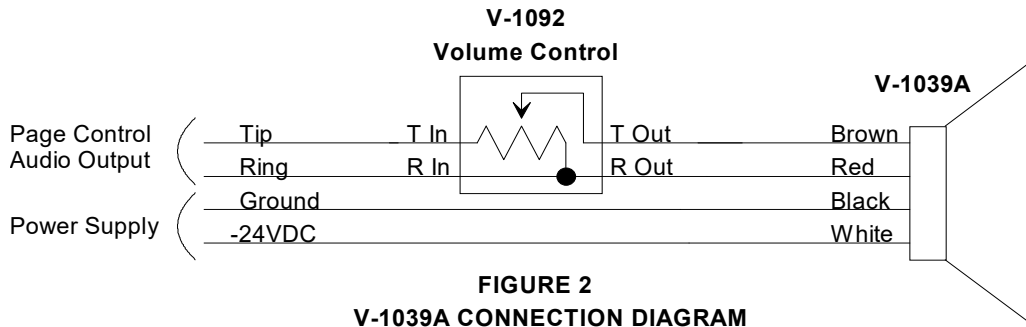| SYMPTOM	SOLUTION
No output	1. Verify –24 VDC on the white lead with ground (+) on the black. 2. Verify audio is present on the input and output of the V-1092 and at the speaker. 3. Verify volume control is turned up (clockwise).

FIGURE 2
V-1039A CONNECTION DIAGRAM

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