

V-1030C and V-1036C PAGING HORN AMPLIFIER ASSEMBLIES

INTRODUCTION

This instruction contains the specifications and information necessary to install, operate, and maintain the V-1030C and the V-1036C Paging Horn Amplifier Assemblies.

This equipment has received FCC type KX registration, 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, BAFUSA-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. The local Telephone Company is to be notified of the FCC Registration Number when this Paging Unit is installed.

SPECIFICATIONS

Description

The V-1030C and V-1036C are Paging Horn/Amplifier Assemblies. The V-1030C is a self-contained 5 Watt paging system with a 5 Watt amplifier; the V-1036C is a self-contained 15 Watt paging system with a 15 Watt amplifier. Both units incorporate a high efficiency horn with a volume control.

Applications

- Use with Valcom page control
- Expanding the capability of telephone systems which contain limited paging capabilities
- Loud ringer application in systems where loud-speaker tone signaling is employed



V-1030C - Nominal Specifications

Input Impedance: 1000 Ohms nominal
Input level: -15dBm to +10dBm
Current at -24VDC: 250mA

V-1036C - Nominal Specifications

Input Impedance: 1000 Ohms nominal
Input level: -15dBm to +10dBm
Current at -24VDC: 750mA

Dimensions/Weights

- **V-1030C** - 7.38" H x 10.00" W x 10.40" D
(18.75cm H x 25.40cm W x 26.42cm D)
3.6 lbs. (1.63 kg)
- **V-1036C** - 7.38" H x 10.00" W x 10.40" D
(18.75cm H x 25.40cm W x 26.42cm D)
3.7 lbs. (1.68 kg)

Environment

- Temperature: -20 to +55 Degrees C
- Humidity: 0 - 95% non-precipitating

Horn Spacing

(Coverage shown in parenthesis)

Location	V-1030C 5 Watt	V-1036C 15 Watt
Quiet	110' (12,000 sq. ft.)	N/A
Moderate	80' (6,400 sq. ft.)	N/A
Noisy	50' (2,500 sq. ft.)	75' (5,600 sq. ft.)
Very Noisy	30' (900 sq. ft.)	45' (2,000 sq. ft.)

Example: In a quiet environment, V-1030C, 5 Watt Horns, would be spaced 110 feet apart side to side and would provide good quality sound 110 feet in front of each horn approximately 12,000 sq. ft. of coverage.

Definitions:

Quiet: 50-65db. This would include areas such as waiting rooms, doctor's examination rooms, stock areas, etc.

Moderate: 65-80db. This includes areas such as warehouses, shipping areas or light manufacturing.

Noisy: 80-90db. This includes machine shops or heavy manufacturing.

Very Noisy: Greater than 90db. This would include any areas where talking to another person is very difficult. Workers may be required to wear earplugs.

Audio Wire Runs

When a remote power unit is used, the audio pair run should be limited to 5,000 feet and a maximum of 4 horns when using 24 AWG wire. A V-1094A, Page Port Pre-Amp/Expander, may be added to increase the number of horns and/or distance. Twisted pair wire (standard telephone wire) should be used for connections.

Power Wire Run

For good quality sound, the distance recommended between the power supply and horns should be adhered to.

See the Valcom power run gauge guide for additional wire gauges and distances.

Number of Horns per Power Run		Wire Run Length (Feet)	
15 Watt	5 Watt		
V-1036C	V-1030C	24 AWG	22AWG
1	4	125	200
0	2	250	400
0	1	500	800

INSTALLATION

Wiring Connections

Twisted pair wire (standard telephone wire) should be used for connections.

Green	- Tip (Audio)
Red	- Ring (Audio)
Black	- Ground Power In
White	- (-24VDC)
Brown	- Not Used

Attaching Speaker to Base

NOTE: For ease of installation, the base can be attached to the speaker before or after the base is mounted.

- Loosen position adjustment knob
- Insert the ball of the base into the socket of the speaker
- Tighten the position adjustment knob

Mounting

These horns should be mounted 15 to 20 feet above the floor to allow for best sound distribution. The units can be mounted to a wall, a beam or an electrical box.

- Mount the base to a wall using the two holes provided. Knockout holes are provided for punch out should additional holes be desired.
- A "C" clamp is provided with the horns to allow mounting to a beam. Place the bolt through the hole in the bottom of the base to secure the "C" clamp to the beam (See Figure 1). It is suggested that the horn be mounted to the underside of the "I" beam to provide maximum positioning adjustments.

- Connection to an electrical backbox is accomplished by channeling wire through the ball of the base and making appropriate connections. The base has holes punched for a double-gang square box, but by punching out additional knockout holes, the base can be mounted to a single-gang or octagon box (See Figure 2).

The horns may be rotated or moved up and down to obtain the desired position by loosening the position adjustment knob (See Figures 1 and 2) at the bottom of the unit approximately one turn. Make required adjustments and re-tighten knob.

TECHNICAL ASSISTANCE

When trouble is reported, verify the unit is properly connected and there are no broken connections leading to this unit. Ascertain volume control is turned up.

Assistance in troubleshooting is available from the factory. When calling, you should have a VOM and a test set and call from the job site. Call (540) 563-2000 and ask 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 the nature of the problem. Send the unit to:

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

WARRANTY

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

TROUBLESHOOTING CHART	
PROBLEMS	PROBABLE CAUSES AND CORRECTIONS
No Sound	<ul style="list-style-type: none"> • Check that volume control is turned up (clockwise). • Check presence and polarity of -24VDC and GND. • Using a telephone test set, check for the proper audio level on the Tip and Ring leads, and if necessary also at the source. • Check that volume control is turned up (clockwise). • Check voltage at the horn when in use, -18 to -24VDC required. • Using a telephone test set, check for 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. • Lower volume of horn. • Aim horn in different direction. • Increase the distance between the telephone and horn. • Install a confidencer on the telephone in severe problem areas.
Low Volume	
Loud Squeal	

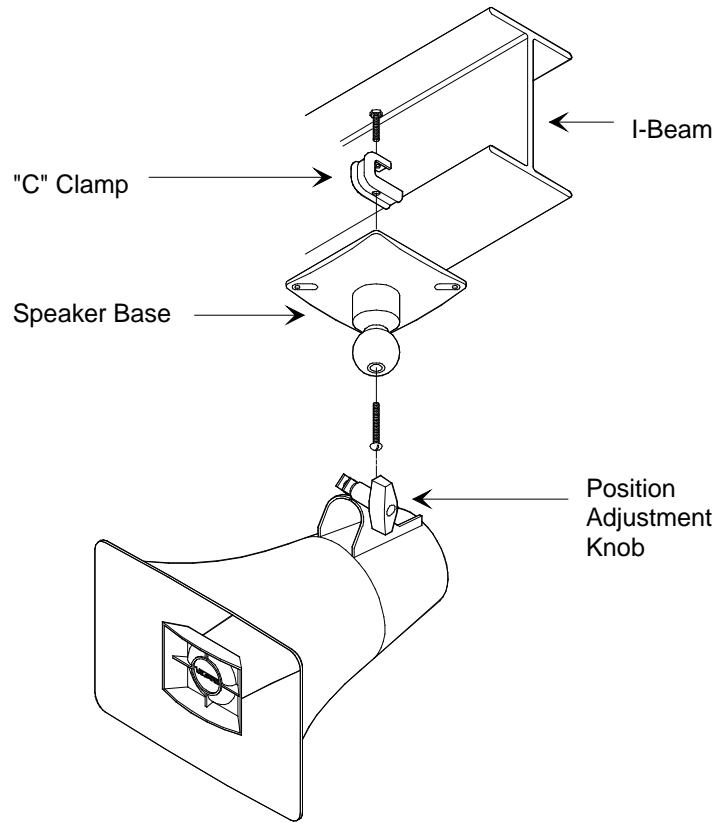


Figure 1 - Mounting to a Beam with a "C" Clamp

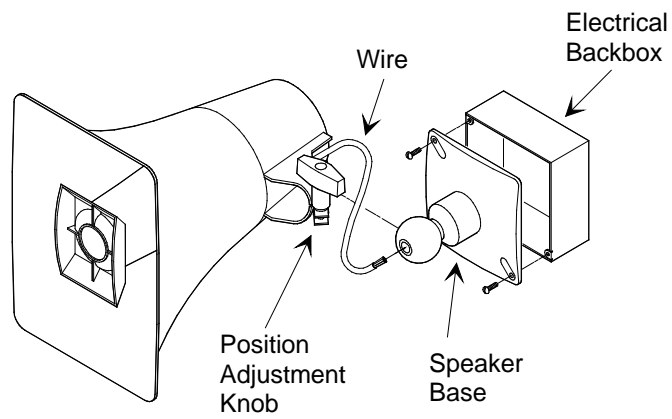


Figure 2 - Mounting to an Electrical Backbox