

MARINE HORNS
V-1030M - 5 WATT PAGING HORN AMPLIFIER ASSEMBLY
V-1036M - 15 WATT PAGING HORN AMPLIFIER ASSEMBLY
V-1048M - 45 OHM TALKBACK HORN

INTRODUCTION

This instruction contains the specifications and information necessary to install, operate and maintain the V-1030M and V-1036M Paging Horn Assemblies and the V-1048M 45 Ohm Talkback Horn.

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 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. The local telephone company is to be notified of the FCC Registration Number when this Paging Unit is installed.

DESIGN

These horns are designed for marine use and can be used for interior or exterior paging applications. They are enclosed in a white, no fade, high impact, sealed plastic housing. They are fully adjustable 360 degrees horizontal and 90 degrees vertical. They are supplied with stainless steel hardware and a beam mount clamp.



Environment

- Temperature: -20 to +55°C
- Humidity: 0 - 95% (non-precipitating)

Dimensions/Weight

- V-1030M/V-1036M
7.38"H x 10.00"W x 10.40"D
(18.75cm x 25.40cm x 26.42cm)
3.7 lbs. (1.68kg)
- V-1048M
7.38"H x 10.00"W x 10.40"D
(18.75cm x 25.40cm x 26.42cm)
3.5 lbs. (1.59kg)

SPECIFICATIONS/ CONNECTIONS FOR THE V-1030M/V-1036M

The V-1030M and V-1036M are Paging Horn/Amplifier Assemblies. The V-1030M is a self-contained 5 Watt paging system with a 5 Watt amplifier; the V-1036M 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 of the V-1030M and V-1036M

- 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-1030M - Nominal Specifications

Input Impedance: 600 Ohm nominal
 Input level: -15dBm to +10dBm
 Current at -24VDC: 300mA

V-1036M - Nominal Specifications

Input Impedance: 600 Ohm nominal
 Input level: -15dBm to +10dBm
 Current at -24VDC: 900mA

Horn Spacing for the V-1030M/V-1036M

(coverage shown in parenthesis)

Location	V-1030M 5 Watt	V-1036M 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-1030M 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 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 (V-1030M/V-1036M)

When a remote power unit is used, the audio pair run should be limited to 5000 feet and a maximum of 4 horns when using 24AWG wire. A V-1094A 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 (V-1030M/V-1036M)

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

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

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

Wiring Connections (V-1030M/V-1036M)

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

Audio In

Green - Tip
 Red - Ring

Power In

Black - Ground
 White - (-24VDC)
 Brown - Not Used

SPECIFICATIONS/ CONNECTIONS FOR THE V-1048M

Application

The V-1048M talkback horn is designed to be used with "handsfree" talkback control units. In combination with these units, the speaker provides both loudspeaker and talkback functions.

A standard talkback paging system is comprised of three basic components:

1. Talkback page control unit
2. Speakers
3. Power Supply

Consult your Valcom distributor for assistance in selecting a control unit and power supply.

Nominal Specifications for the V-1048M

- Input Impedance: 45 Ohm

Limitations of the V-1048M

- Two talkback speakers maximum per zone.
- 800 feet maximum cable length to speaker
- NOTE: Do not split pairs to speakers.
- Do not use talkback in noisy areas (80dB or greater).

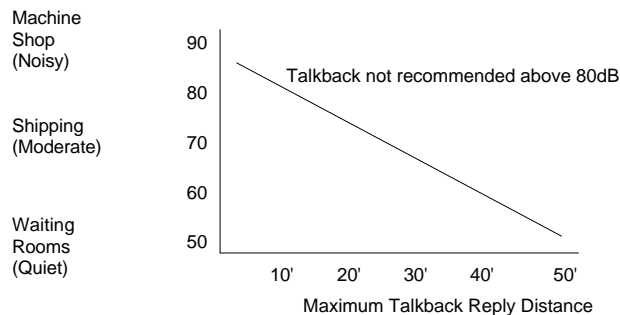
Coverage of the V-1048M

The distance you can be away from a speaker and still have good talkback depends on the type of speaker and ambient noise level.

The speaker should be as close as possible to the area where talkback is desired. It should not be mounted close to, or pointed at, noise producing equipment such as fans, air conditioners, machinery, or compressors.

The chart to the right shows maximum talkback distances relative to the noise level of the surroundings.

TYPICAL REPLY DISTANCE CHART



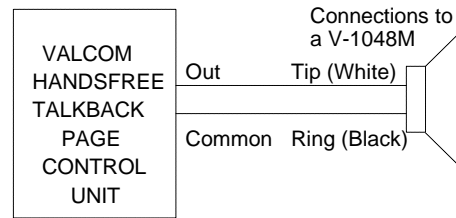
Remember: The speaker is no better than your ears. If you can not carry on a conversation at normal voice levels over the required talkback distance, then talkback page equipment will not function satisfactorily.

Cabling for the V-1048M

Connections should be accomplished using regular twisted pair wiring. Do not split pairs.

Connections for the V-1048M

Connect station or other suitable wire to leads as follows:



MOUNTING OF HORN

(All Models)

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

Mount the horn to a suitable surface using the hardware provided. These 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 knob at the bottom of the unit (see both figures) approximately 1 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 for Technical Support or (540) 767-1555 for Valcom 24-hour Faxback System 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:

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

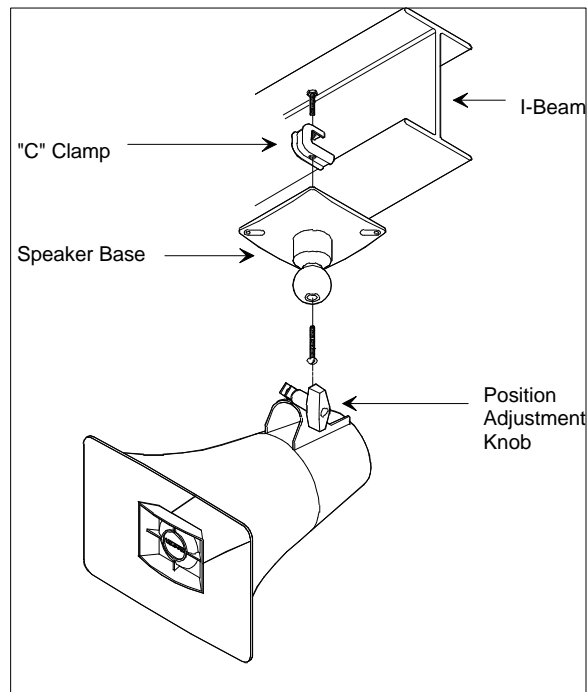


Figure 1 - Mounting to a Beam with a "C" Clamp

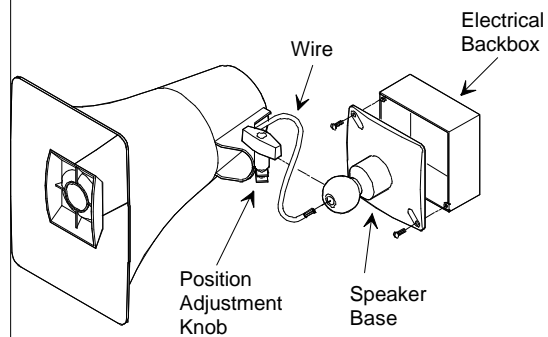


Figure 2 - Mounting to an Electrical Backbox

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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