

## VIP-804A QUAD ENHANCED NETWORK AUDIO PORT

### INTRODUCTION

The VIP-804A Quad Enhanced Network Audio Port enables voice access to four zones of one-way paging over an IP network, allowing page zones to be extended anywhere network connectivity is available. The VIP-804A can be programmed as a SIP (Session Initiation Protocol) device with four identities (one per audio channel) for connectivity to virtually any Voice over IP (VoIP) telephone system.

### SPECIFICATIONS

#### Features

- 4 Audio Outputs or Inputs
- 4 Form A relay contacts
- 4 Contact Closure Inputs
- 4 SIP identities for registering to a SIP telephone system
- RJ-45 jack for network connection
- Front panel activity LED
- Provides audio for up to 40 Valcom one-way amplified speaker assemblies per zone
- Output control contact closure provided during paging output
- Contact closure or VOX operation of audio inputs
- VM-186 RJ-45 Connector provided for audio and relay interface
- Page with music output, music mutes during page
- AUX audio input via RCA jack
- Compatible with 25 or 70 Volt amplifiers
- 2.5mm jack for optional DC power
- Power over Ethernet (PoE) 802.3af compatible

#### Dimensions/Weight

- 1.75" H x 6.75" W x 9.5" D  
(4.45cm H x 17.15cm W x 24.13cm D)
- Weight: 1.75 lbs. (0.80 kg)



### Nominal Specifications

Input Impedance:	600 Ohms
Input Level:	-10dBm nominal
Voice Switch Sensitivity:	-21dBm
AUX Input Impedance:	8 to 600 Ohms
AUX Input Level:	-10dBm nominal
Output Impedance:	50 Ohms
Output Level:	- 10dBm nominal
Relay Current:	1 AMP @ 24VDC

### Nominal Power Requirements

#### Via back panel barrel connector:

Voltage:	24VDC
Current:	325mA

#### Via 802.3af PoE Ethernet Switch:

802.3af:	Class 3
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### Environment

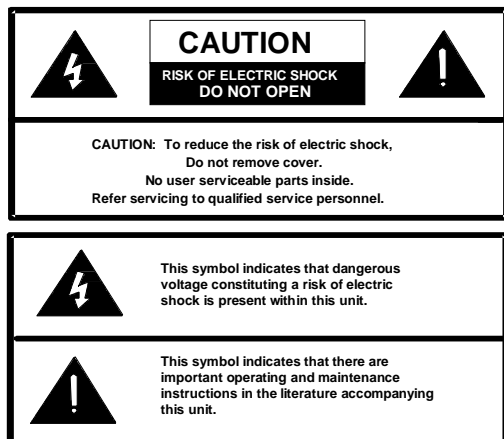
Temperature:	0 to +40° C
Humidity:	0 to 85% non-precipitating

### Packing List

Qty	Item
1	VIP-804A
1	VSP Document
2	Mounting Brackets W/ Hardware
4	RJ-45 Patch Cables
4	VM-186 RJ-45 Connectors

# INSTALLATION

## Precautionary Designations



## FCC Information

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses and can radiate radio frequency energy and if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area may cause harmful interference in which case the user will be required to correct the interference at his own expense.

## Mounting

The VIP-804A is designed for wall, table or rack mounting.

**Table:** Provided with the VIP-804A are four rubber pads. Peel the pads from their carrier backing and place at the four corners of the bottom of the unit.

**Wall:** Using the template on last page of this document, mark the location of the bracket screw holes on the wall. Drill 5/64" pilot holes, 3/4" deep, at each screw location and use the wood screws provided to attach the brackets to the wall. For surfaces other than wood, use hardware appropriate for the surface (not included). With the brackets securely attached to the wall, attach the VIP-804A to the brackets using the included hardware. Figure 2 illustrates the bracket assembly.

**Rack:** Following the assembly drawing, attach the two mounting brackets to the VIP-804A unit. Using

rack screws, mount the VIP-804A in an available 1U rack slot. See Figure 1.

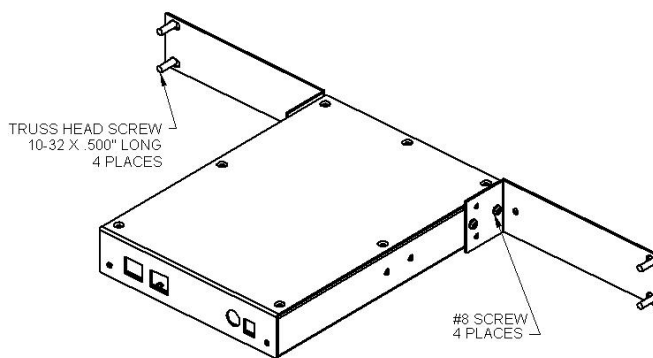


Figure 1. Rack Mount

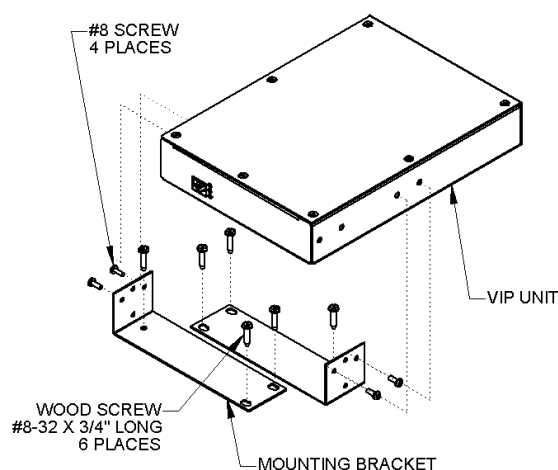


Figure 2. Wall Mount

## Power Connections

The preferred method of powering a VIP-804A is via a Power over Ethernet (PoE) switch meeting the 802.3af specification.

If the rear panel barrel connector is used for power, the preferred power supply is a Valcom VIP-324D.

Make all required signal connections before applying power to the unit. If powering via PoE, make sure all signal connections via the back panel are made then connect the VIP-804A to the Ethernet switch.

If power is supplied via the barrel connector, make sure all signal connections are secure. Attach the unit to the network via the front panel RJ-45 Ethernet connector. Apply power by connecting the power supply into the VIP-804A via the barrel connector on the rear of the VIP-804A.

## Network Connection

The VIP-804A has one RJ-45 Ethernet network connector on the front panel.

Use a standard Ethernet patch cable to connect the VIP-804A to an Ethernet switch.

## Status Indicator Lights

The VIP-804A has 3 status indication lights on the front panel:

**STATUS:** Illuminates at regular intervals during normal operation. On steady indicates unit is in reset mode.

The network jack provides two LED indicators:

**Green LED:** (Link) Indicates Ethernet connection when illuminated.

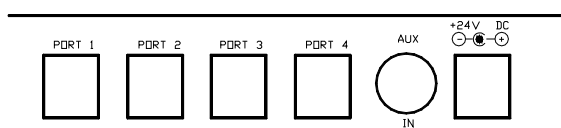
**Yellow LED:** (Activity) Indicator flashes to indicate network activity.

## Signal Connections

The VIP-804A has five signal connectors on the rear panel:

- 1 RCA jack for AUX audio input
- 4 RJ-45 connectors for signal connections for each networked channel

**AUX Input:** Local audio may be input via the rear panel RCA jack. Nominal input impedance is 600 Ohms. Connect any compatible audio source using an RCA patch cable. Audio supplied through the rear panel RCA jack is transformer coupled to all Audio Out channels when Audio Out is idle. This is typically used for background music and can be enabled or disabled for each channel.



Rear View

**Networked Channels:** Access to the networked audio output, audio input, contact closure input and relay closure output is provided via four rear panel RJ-45 connectors. Provided with the VIP-804A are four RJ-45 patch cables and four VM-186 RJ-45 Connectors. Signal connections are made by connecting one end of a patch cable to the VIP-804A, Port 1, 2, 3, 4, and the other end of the patch cable to the VM-186 connector. Access to the signals is via screw connections or 110-style punch down block connection on the VM-186 (see

Figure 3). Signals are present on pairs of pins, as shown in the following chart:

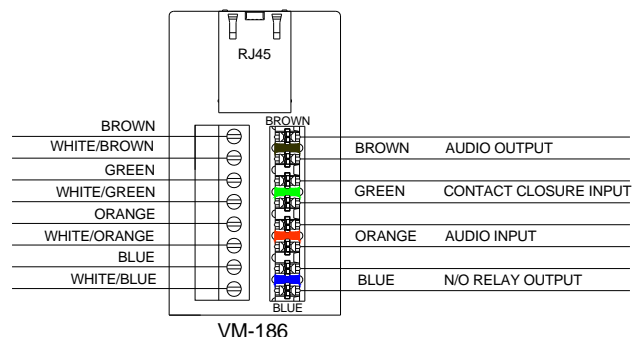


Figure 3. VM-186 RJ-45 Connector

## Setup

Information specific to your application will need to be programmed into the VIP-804A using a computer. The PC used for programming should be connected to the same subnet as the VIP-804A. Setup will be done using the IP Solutions Setup Tool. Download the latest version of the free IP Solutions Setup Tool from the Valcom web site at [www.valcom.com/vipsetuptool](http://www.valcom.com/vipsetuptool).

## TECHNICAL ASSISTANCE

When trouble is reported, verify power is being supplied to the unit and there are no broken connections. If a spare unit is available, substitute a spare unit for the suspected defective unit.

Assistance in troubleshooting is available from the factory. Call (540) 563-2000 and press 1 for Technical Support or via email at [support@valcom.com](mailto:support@valcom.com).

When requesting assistance, you should include all available information. General information and troubleshooting procedures are available on the Valcom website at [www.valcom.com](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 your company name, address, phone number, contact person and the nature of the problem. Send the unit to:

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

**VALCOM LIMITED WARRANTY**

Valcom, Inc. warrants its products only to the original purchaser, for its own use, 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. This Limited Warranty obligation 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).

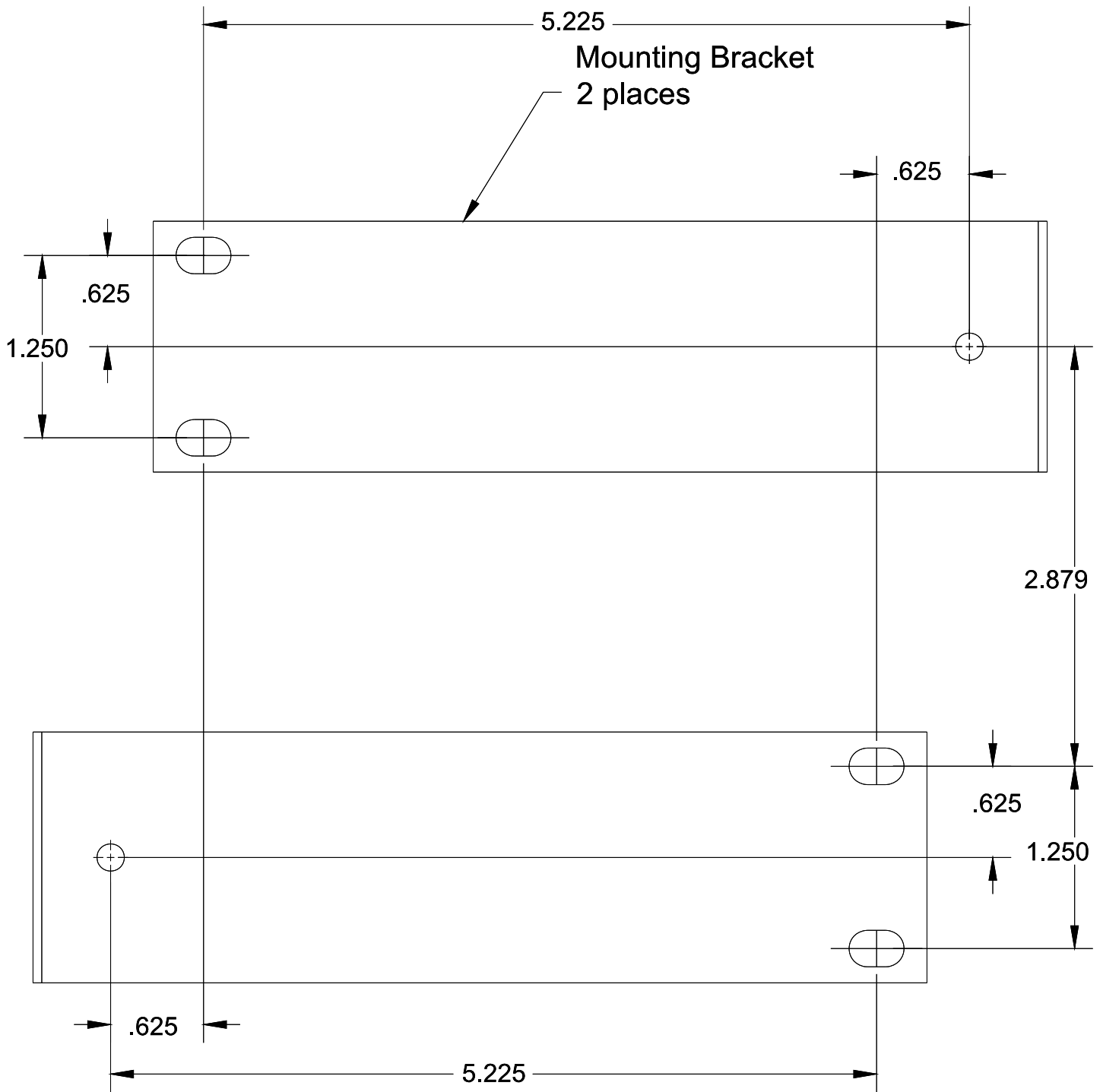
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This warranty specifically excludes damage incurred in shipment. In the event a product is received in damaged condition, the carrier should be notified immediately. Claims for such damage should be filed with the carrier involved in accordance with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

Headquarters:  
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Place template in area where unit is to be mounted and mark. Install 2 mounting brackets to wall using 6 #8 wood screw x 3/4 long at center mark as shown. Check fit of unit between mounting brackets. When okay, install unit to the mounting brackets using 4 of #8 x 3/8 screw.

### Mounting Unit to Wall Template