

## VIP-804B QUAD NETWORK AUDIO PORT

### INTRODUCTION

The VIP-804B Quad 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-804B 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 for background music
- Compatible with 25 or 70 Volt amplifiers
- 2.5mm jack for optional DC power
- Power over Ethernet (PoE) 802.3af compatible

#### Dimensions/Weight

- 1.72" H x 7.00" W x 11.88" D  
(4.36cm H x 17.78cm W x 30.18cm D)
- Weight: 2.5 lbs. (1.13 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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These products are intended for use with a UL Listed power source marked "Class 2" or "LPS" rated 24VDC, or 48VDC (PoE).

PoE and all interconnected ITE are intended for intra-building.

#### Environment

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


#### Precautionary Designations

- **WARNING-To Reduce The Risk Of Fire Or Electric Shock. Do Not Expose This Apparatus To Rain Or Moisture.**
- **AVERTISSEMENT - Afin de réduire les risques d'incendie ou de décharge électrique, évitez d'exposer le système à la pluie ou à l'humidité.**

- Apparatus shall not be exposed to dripping or splashing and no objects filled with liquids, such as vases, shall be placed on the apparatus.
- L'appareil ne doit pas être exposé à des égouttements et éclaboussures et aucun objet rempli de liquide, comme vase, ne doit être placé sur l'appareil.


**IMPORTANT SAFETY INFORMATION**  
**CONSIGNES DE SÉCURITÉ IMPORTANTES**

1. Read these instructions.  
Lisez ces instructions.
2. Keep these instructions.  
Conservez ces instructions.
3. Heed all warnings.  
Respectez tous les avertissements.
4. Follow all instructions.  
Suivez toutes les instructions.
5. Do not use this apparatus near water.  
Ne pas utiliser cet appareil près de l'eau.
6. Clean only with dry cloth.  
Nettoyer avec un chiffon sec.
7. Do not block any ventilation openings. Install in accordance with the manufacturer's instructions.  
Ne pas bloquer les ouvertures de ventilation. Installer conformément aux instructions du fabricant.
8. Do not install near any heat sources such as radiators, heat registers, stoves or other apparatus (including amplifiers) that produce heat.  
Ne pas installer à proximité de sources de chaleur telles que radiateurs, registres de chaleur, poêles ou autres appareils (y compris les amplificateurs) produisant de la chaleur.
9. Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades with one wider than the other. A grounding type plug has two blades and a third grounding prong. The wide blade and the third prong are provided for your safety. If the provided plug does not fit into your outlet consult an electrician for replacement of the obsolete outlet.  
Ne pas contourner le dispositif de sécurité de la fiche polarisée ou de mise à la terre. Une fiche polarisée possède deux lames dont une plus large que l'autre. Une fiche de terre à deux lames et une troisième broche de mise à la terre. La lame large et la troisième broche sont fournies pour votre sécurité. Si la fiche fournie ne rentre pas dans votre prise, veuillez consulter un électricien pour le remplacement de la prise obsolète.
10. Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles and the point where they exit from the apparatus.
11. Only use attachments/accessories specified by the manufacturer.  
N'utilisez que des fixations / accessoires spécifiés par le fabricant.
12. Use only with the cart, stand, tripod, bracket or table specified by the manufacturer or sold with the apparatus. When a cart is used, use caution when moving the cart/apparatus combination to avoid injury from tip-over.  
Utilisez uniquement avec le chariot, stand, trépied, support ou table spécifié par le fabricant ou vendu avec l'appareil. Quand un chariot est utilisé, soyez prudent lorsque vous déplacez l'ensemble chariot / appareil pour éviter des blessures dues au renversement.
13. Unplug this apparatus during lightning storms or when unused for a long period of time.  
Débranchez cet appareil pendant les orages ou lorsqu'il n'est pas utilisé pendant une longue période de temps.
14. Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way. Such as when the power supply cord or plug is damaged, liquid has been spilled, objects have fallen into the apparatus or the apparatus has been exposed to rain or moisture and does not operate normally or has been dropped.  
Confiez toute réparation à un personnel qualifié. Une réparation est nécessaire lorsque l'appareil a été endommagé de quelque façon. Par exemple lorsque le cordon d'alimentation ou la fiche est endommagée, du liquide a été renversé, si des objets sont tombés dans l'appareil ou si l'appareil a été exposé à la pluie ou à l'humidité et ne fonctionne pas normalement ou s'il est tombé.




## 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.




**CAUTION**  
RISK OF ELECTRIC SHOCK  
DO NOT OPEN



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CAUTION: To reduce the risk of electric shock, Do not remove cover.  
No user serviceable parts inside.  
Refer servicing to qualified service personnel.

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This symbol indicates that dangerous voltage constituting a risk of electric shock is present within this unit.

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This symbol indicates that there are important operating and maintenance instructions in the literature accompanying this unit.

## General Mounting Information

A) Elevated Operating Ambient - If installed in a closed or multi-unit rack assembly, the operating ambient temperature of the rack environment may be greater than room ambient. Therefore, consideration should be given to installing the equipment in an environment compatible with the maximum ambient temperature (T<sub>ma</sub>) specified by the manufacturer.

B) Reduced Air Flow - Installation of the equipment in a rack should be such that the amount of air flow required for safe operation of the equipment is not compromised.

C) Mechanical Loading - Mounting of the equipment in the rack should be such that a hazardous condition is not achieved due to uneven mechanical loading.

D) Circuit Overloading - Consideration should be given to the connection of the equipment to the supply circuit and the effect that overloading of the circuits might have on overcurrent protection and supply wiring. Appropriate consideration of equipment nameplate ratings should be used when addressing this concern.

E) Reliable Earthing - Reliable earthing of rack-mounted equipment should be maintained. Particular attention should be given to supply connections other than direct connections to the branch circuit (e.g. use of power strips).

## INSTALLATION

### Mounting

**Wall:** Using #8 screws (included), attach the wall mounting brackets to each side of the VIP-804B as shown in Figure 2. Use the included wood screws to attach the VIP-804B to the wall. For surfaces other than wood, use hardware appropriate for the surface (not provided).

**Rack:** Two VIP-804B units may be joined together and installed into a 1U rack slot. Using Figure 3 as a guide, attach the interlock brackets and end

mounting brackets to each of the VIP-804B units, then mount the combined units into an available rack slot.

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

## Power Connections

The preferred method of powering a VIP-804B 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-804B 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-804B via the barrel connector on the rear of the VIP-804B.

## Network Connection

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

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

## Status Indicator Lights

The VIP-804B 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.

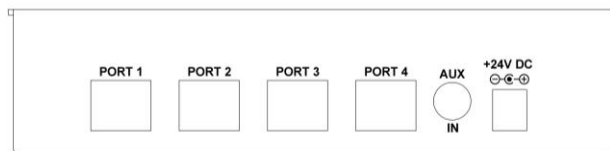
**Yellow LED:** (Activity) Indicator flashes to indicate network activity.

## Signal Connections

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

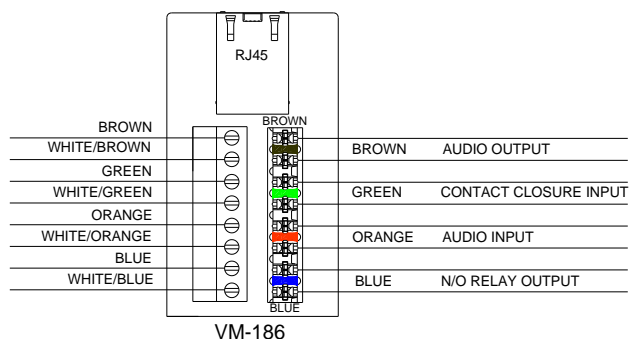
- 1 RCA jack for AUX audio input
- 4 RJ-45 connectors for signal connections for each networked channel

**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-804B 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-804B, 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 1). Signals are present on pairs of pins, as shown in the following chart:



**Figure 1. VM-186 RJ-45 Connector**

## Setup

Information specific to your application will need to be programmed into the VIP-804B using a computer. The PC used for programming should be connected to the same subnet as the VIP-804B. 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).

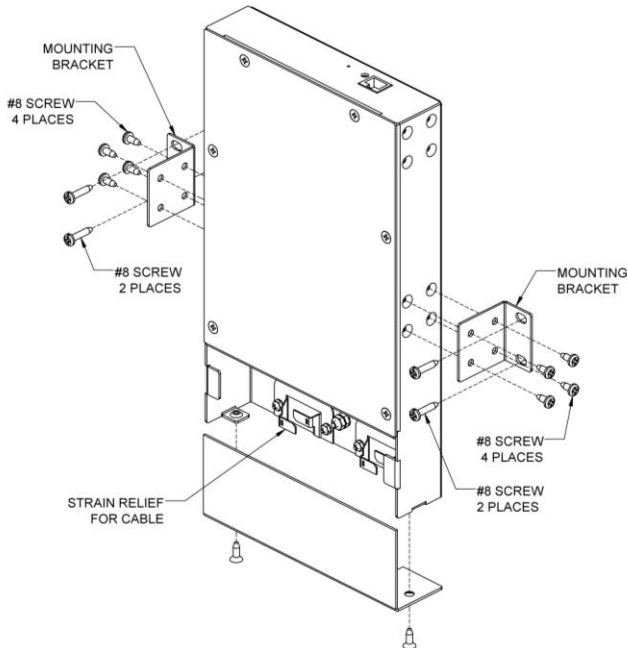
When requesting assistance, you should include all available information. General information and troubleshooting procedures are available on the Valcom website at [www.valcom.com](http://www.valcom.com).

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:

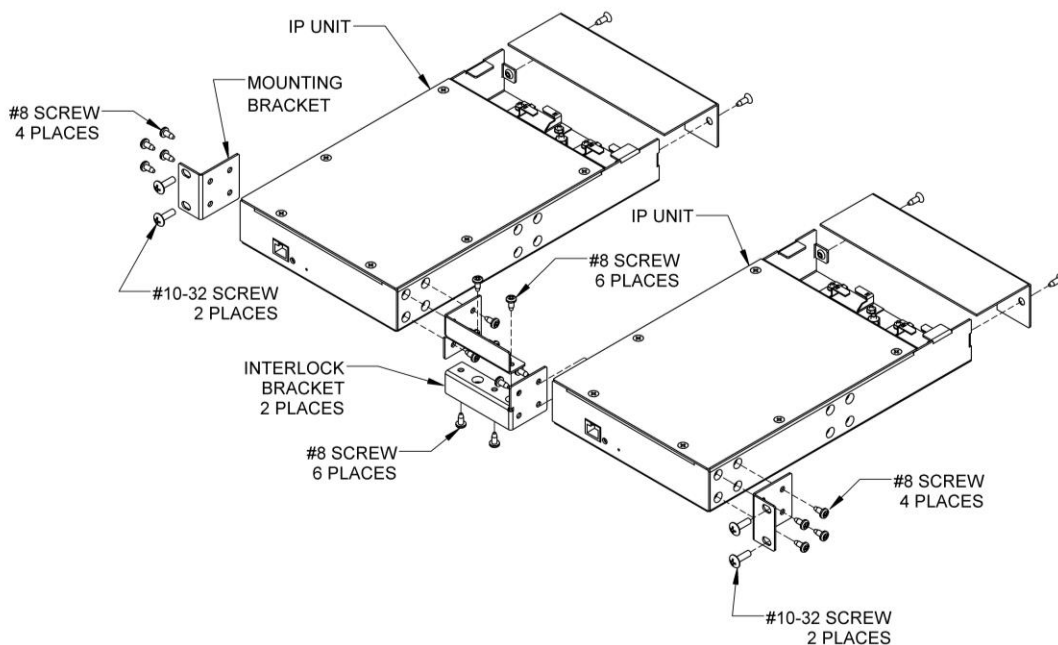
**Valcom, Inc.**  
**Repair & Return Dept.**  
**5614 Hollins Road**  
**Roanoke, Va. 24019-5056**

## WARRANTY

Warranty information may be found on our website at [www.valcom.com/warranty](http://www.valcom.com/warranty).



**Figure 2. Wall Mounting**



**Figure 3. Mounting Two joined Units**