

PagePro VIP-204B SIP Paging Gateway

INTRODUCTION

The VIP-204B SIP Paging Gateway is designed for use with virtually all IP based telephone systems. The unit provides SIP addressable groups and 4 analog outputs that may be included as part of the SIP addressable groups. The VIP-204B can control thousands of IP speakers and/or analog speakers or provide an interface to legacy paging systems.

Connection to a SIP server can be as individual SIP Stations (extensions) or as a SIP trunk. Station mode provides up to 8 SIP-addressable groups. Trunk mode accepts up to 100 SIP phone numbers for flexible grouping.

SPECIFICATIONS

Access Methods

- SIP
- Valcom Multicast Page Group

Features

- SIP – Addressable Groups (phone numbers)
- 4 Analog Audio Outputs
- 4 Programmable Form A Relay Closures
- RJ-45 for Network Connection
- Provides Audio for Valcom Analog One-Way Self Amplified Speaker Assemblies or 25/70 Volt central amplifiers
- AUX Audio Input via RCA Jack for Background Music Input, Music Mutes During a Page
- Output Control Relay Closure Provided During Paging Output
- 2.5mm Jack for optional DC Power (non-PoE)
- LED Status Indicator
- Network Activity LEDs
- Programmable Feedback Elimination/Page Repeat
- Programmable Night Ring



Power Options

- Power over Ethernet (PoE) 802.3af, Class 3 Compatible
- Optional External Power Supply (VIP-324D)

Dimensions/Weight

1 Standard 19" Rack Unit:

- 1.75" H x 16.5" W x 11.88" D
(4.45 cm x 41.9 cm x 30.18 cm)
- Weight: 4.0 lbs. (1.8 kg)

Nominal Specifications

AUX Input Impedance:	8 to 600 Ohms
AUX Input Level:	-10dBm nominal
Output Impedance:	50 Ohms
Output Level:	- 10dBm nominal
Relay Current Rating:	1 Amp @ 24VDC

Nominal Power Requirements

Via rear panel barrel connector:

Voltage:	24VDC
Current:	325mA

Via 802.3af PoE Ethernet Switch:	Class 3
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Environment

Temperature:	0 to +40° C
Humidity:	0 to 85% Non-Precipitating

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.

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 a 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 endommagé, du liquide a été renversé, si des objets sont tombés dans l'appareil ou que 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 their own expense.

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_{ma}) 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).
- F) Equipment only suitable for mounting at heights less than or equal to 2m (6.56').

	CAUTION RISK OF ELECTRIC SHOCK DO NOT OPEN	
<p>CAUTION: To reduce the risk of electric shock, Do not remove cover (or back). No user serviceable parts inside. Refer servicing to qualified service personnel.</p>		

	<p>This symbol indicates that dangerous voltage constituting a risk of electric shock is present within this unit.</p>
	<p>This symbol indicates that there are important operating and maintenance instructions in the literature accompanying this unit.</p>

INSTALLATION

Mounting

The VIP-204B SIP Paging Gateway is designed for rack mounting.

Rack: Attach the brackets to the four holes closest to the front on each side, and then mount the unit to a 19" rack. (See Figure 1).

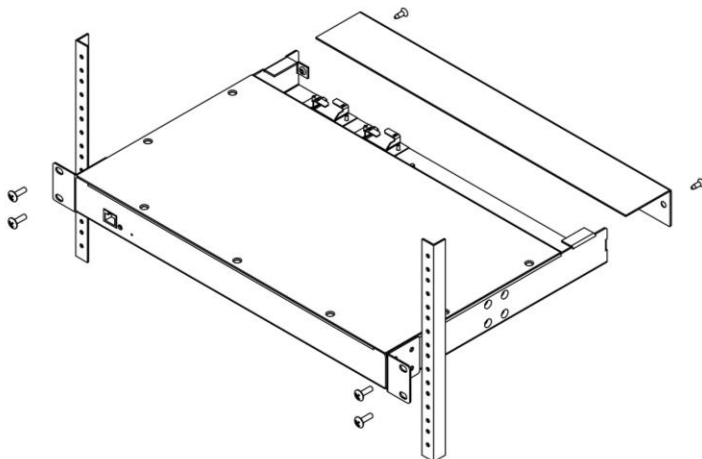


Figure 1

CONNECTIONS

All wiring connections (except Network) are located behind the cover plate at the rear of the VIP-204B. Remove two screws holding the cover plate to access the connections. Replace the cover plate when all connections have been made. (See Figure 1)

Power Connections

The preferred method of powering a VIP-204B is via a Power over Ethernet 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.

Network Connection

The VIP-204B has one RJ-45 network connector on the front panel.

Use a standard Ethernet patch cable to connect the VIP-204B to an Ethernet switch. If the Ethernet switch is 802.3af compliant, it will power the VIP-204B.

Signal Connections

The VIP-204B has 5 signal connectors on the rear panel:

- 1 RCA jack for AUX audio input
- 4 RJ-45 connectors for audio and relay 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 can be programmed to broadcast to any of the Audio Outs when they are idle. This is typically used for background music

Output Connections: Access to the audio output and relay output for each of the four channels is provided through the four RJ-45 jacks on the rear panel of the VIP-204B. Four patch cables and four VM-186 terminal block connectors are included for ease of installation. The following chart shows the pin assignments for the four input/output connections. (See Figure 2)

VM-186 Connector Wire Color	Signal
Blue & Blue/White	N.O. Relay Closure Output
Brown & Brown/White	Audio Output

N.O. Relay Closure Output: The Normally Open Relay Closure Output connection can be programmed on the VIP-204B to close the contacts in response to paging events. The relay will return to the open state when the event ends.

Audio Output: Typically connects to Self Amplified Speakers or into an amplifier. Audio feeds connected to the AUX Input mute on any active Audio Output.

Status Indicator Lights

The VIP-204B has 3 status indication lights on the front panel:

STATUS: Flashes during normal operation and solid during system startup.

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

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

Operation

Provides paging from SIP connection or from another Valcom VIP unit. Interface to customer telephone system can be via SIP registration, FXO port (with VIP-811), or FXS port (with VIP-821). Unit can also be accessed from a VIP-801 connected to a page port or a Valcom page control. Typical speaker wiring connections are shown in Figure 3.

Setup

Information specific to your application will need to be programmed into the VIP-204B. The PC used for programming should be connected to the same subnet as the VIP-204B.

The VIP-204B will use DHCP to acquire an IP address. If a DHCP server is not available, the VIP-204B will default to 192.168.6.207 after 3 minutes.

Setup will be done using the IP Solutions Setup Tool. Download the latest version of the free IP Solutions Setup Tool from the web site at www.valcom.com/vipsetuptool

TECHNICAL ASSISTANCE

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.

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.

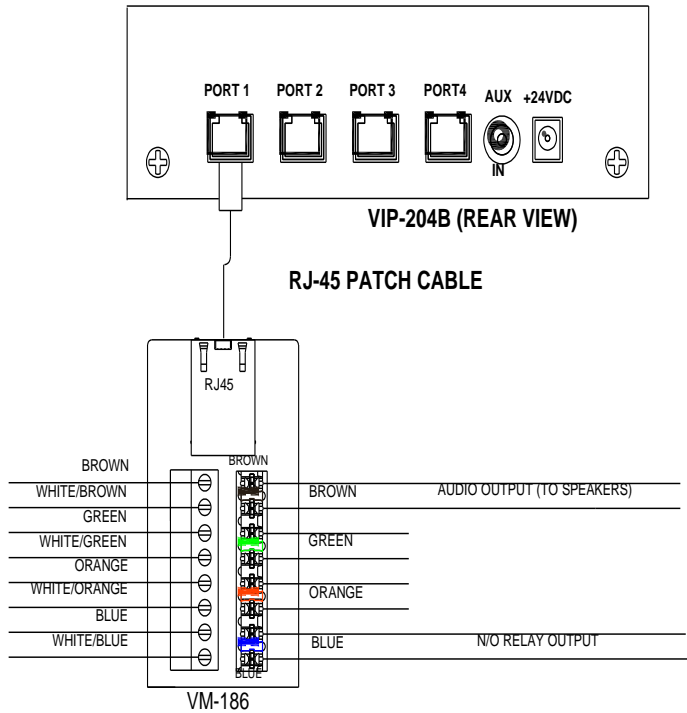


Figure 2. VIP-204B Audio/Relay Connections (one per channel)

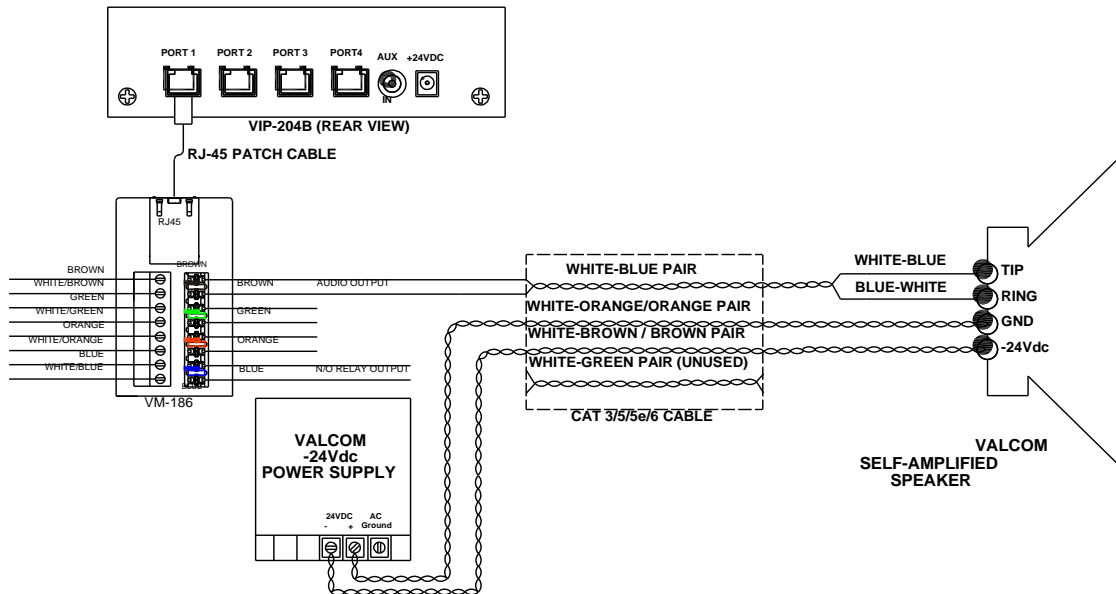


Figure 3. Typical Connection to Valcom Self-amplified Speakers