

ISSUE 1

PagePro VIP-204A SIP Paging Gateway

INTRODUCTION

The VIP-204A 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-204A 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
- 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 16.6" W x 9.5" D
 (4.57 cm x 42.16 cm x 24.13 cm)
- Weight: 7.25 lbs. (3.28 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

Environment

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

Packing List

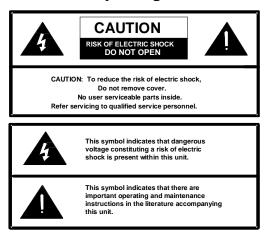
Qty	Item
1	VIP-204A
4	RJ-45 Patch Cables
4	VM-186 RJ-45 Connectors
4	Rubber Pads
2	Mounting Brackets W/
	Hardware
1	VSP Document

INSTALLATION

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.

Precautionary Designations



Mounting

The VIP-204A SIP Paging Gateway is designed for rack, shelf, or wall 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.

Shelf: Provided with the VIP-204A SIP Paging Gateway are four rubber stick-on pads. Peel the pads from their carrier backing and place at the four corners of the bottom of the unit.

Wall: Using the brackets and wood screws provided, secure the VIP-204A SIP Paging Gateway to the wall.

Power Connections

The preferred method of powering a VIP-204A 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-204A has one RJ-45 network connector on the front panel.

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

Signal Connections

The VIP-204A 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.

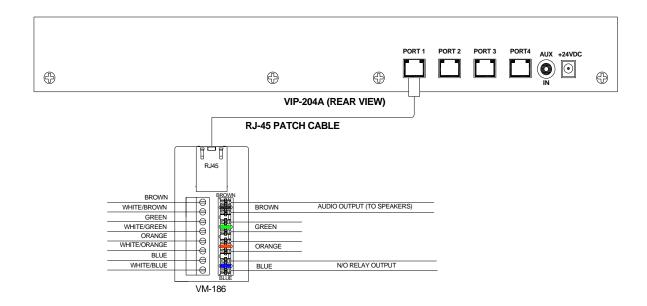
AUX Input: Local audio may be input via the rear panel RCA jack. Nominal input impedance is 600 Ohms. Connect any compatible audio source using an RCA patch cable. Audio supplied through the rear panel RCA jack broadcasts to all Audio Outs whenever they are idle. This is typically used for background music.

Input / 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-204A. 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.

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-204A 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.



VIP-204A Audio/Relay Connections (one per channel)

Status Indicator Lights

The VIP-204A 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.

Setup

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

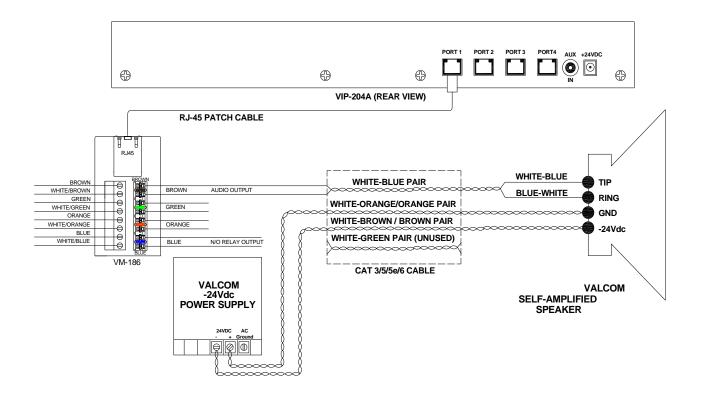
Setup will be done using the IP Solutions Setup Tool. Download the latest version of the free IP Solutions Setup Tool from the web site at www.valcom.com/vipsetuptool.

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



Typical Connection to Valcom Self-amplified Speakers

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;
- 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);
- freight charges for the return of products to Valcom are prepaid;
- 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 Limited 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, maintenance, installation, removal or use of the product. The maximum liability of Valcom under this warranty is limited to the purchase price of the specific Product covered by the warranty.

<u>Disclaimer.</u> Except for the Limited Warranty provided herein, the product is provided "as-is" without any warranty of any kind whatsoever including, without limitation, any WARRANTY OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE OR NON-INFRINGEMENT.

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: Valcom, Inc.

5614 Hollins Road Roanoke, VA 24019-5056 Phone: (540) 563-2000 FAX: (540) 362-9800