INTRODUCTION
The VIP-201A SIP Paging Gateway is designed for use with virtually all IP based telephone systems. The unit provides SIP addressable groups and 1 analog output. The VIP-201A can control thousands of IP and/or analog speakers or provide 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

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

Features
- SIP-Addressable Groups
- 2 Analog Audio Output
- 2 Programmable Form C 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, Mutes During a Page
- Output Control Relay Closure Provided During Paging Output
- Barrel Jack for optional DC Power (non-POE)
- Status / Network Activity LEDs
- Programmable Feedback Elimination/Page Repeat
- Programmable Night Ring

Dimensions/Weight
- 1 Standard 19" Rack Unit
- 1.75" H x 16.6" W x 5.4" D
  (4.57 cm x 42.16 cm x 13.71 cm)
- Weight: 4.65 lbs. (2.10 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
<table>
<thead>
<tr>
<th>Qty</th>
<th>Item</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>VIP-201A</td>
</tr>
<tr>
<td>4</td>
<td>Rubber Pads</td>
</tr>
<tr>
<td>2</td>
<td>Mounting Brackets W/ Hardware</td>
</tr>
<tr>
<td>1</td>
<td>VSP Document</td>
</tr>
</tbody>
</table>
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-201A 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, then mount the unit to a 19” rack.

Shelf: Provided with the VIP-201A 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-201A SIP Paging Gateway to the wall.

Power Connections
The preferred method of powering a VIP-201A 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-201A has one RJ-45 network connector on the front panel.

Use a standard Ethernet patch cable to connect the VIP-201A to an Ethernet switch. If the Ethernet switch is 802.3af compliant the VIP-201A will draw power from it.

Signal Connections
The VIP-201A has signal connections on the rear panel:

- RCA jack for AUX audio input
- 2 audio outputs
- 4 Pin screw terminal (Audio/CC not used)
- 2 Form C relay connections

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 Audio Out whenever it is idle. This is typically used for background music.

Audio Out: Two audio output connections are provided. The terminals labeled “Page” provide a signal output compatible with Valcom self-amplified speakers. Up to 40 Valcom speakers can be connected to the Page output. The terminals labeled “AUX” provide a signal output compatible with most amplifiers and should be used where a transformer-coupled output is desired.

DIP Switch: The four-pole DIP switch controls a supervision signal on the “Page” audio output line. For systems where supervision is used, setting DIP switches 1 & 2 to ON enables supervision on the Page audio output connections. Where supervision is not used, set DIP switches 1 & 2 to OFF. Switches 3 & 4 are not used.

Relay Channels: Access to the two Form C relays is provided via a six-pin screw terminal block. The relays are labeled K1 and K2. Each relay is brought out on three terminals. The common contact (COM) is the middle terminal with the normally closed (N.C.) contact on the right and the normally open (N.O.) contact on the left. Relay contacts are rated for 1A @ 24VDC.
Rear View

Status Indicator Lights
The VIP-201A 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 the customer’s 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-201A using a computer. The PC used for programming should be connected to the same subnet as the VIP-201A. Setup will be done using the IP Solutions Setup Tool. Download the latest version of the free IP Solutions Setup Tool from the Valcom website 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

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).

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.

Disclaimer. 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

947820
Typical Connection to Valcom Self-amplified Speakers