**VALCOM IP Solutions**

# VIP-800
# NETWORKED PAGING ZONE EXTENDER

## INTRODUCTION

The VIP-800 enables voice access to a single zone of one-way paging over an IP-based LAN/WAN. This will allow page zone expansion anywhere on the network.

## SPECIFICATIONS

### Access Methods

- PABX (VIP-820 connected to a analog station port)
- VIP-810 plus POTS phone set
- 600 Ohm Supervised Page Port
- Any of Valcom's distributed amplified one-way Page Controls (V-2003A, V-2006A, V-2924A)

### Features

- RJ45 for network connection
- Front panel activity LED
- Network activity LED's on RJ-45
- Provides audio for up to 150 Valcom one-way amplified speaker assemblies
- Background music input
- Contact closure or VOX operation of input
- Removable screw terminal connectors provided for both inputs and outputs
- Page with music output, music mutes during page
- Output control contact closure provided during paging output
- May be used with 25 or 70 Volt amplifiers
- 2.5mm jack for DC power (115VAC TO 24VDC adapter provided)
- NOTE:  Even after assigning a static ID address the unit will not respond to a "Ping" test.

### Dimensions/Weight

- 1.88" H x 5.50" W x 4.15" D
  (4.78cm H x 13.97cm W x 10.54cm D)
- Weight:   0.55 lbs.  (0.25 kg)

### Nominal Specifications

| | |
|---|---|
| Input Impedance: | 600 Ohms |
| Input Level: | -10dBm nominal |
| Voice Switch Sensitivity: | -21dBm |
| Music Source Input Impedance: | 8 to 600 Ohms |
| Music Input Level: | -10dBm nominal |
| Output Impedance: | 8 Ohms |
| Output Level: | -10dBm nominal |

### Nominal Power Requirements

| | |
|---|---|
| Voltage: | 24VDC |
| Current: | 325mA |

### Environment

| | |
|---|---|
| Temperature: | 0 to +30 Degrees C |
| Humidity: | 0 to 85% non-precipitating |

# INSTALLATION

*NOTE: The telephone system referred to in this manual is the customer premise equipment such as an electronic key system, a PBX or a dedicated single line telephone sets. The VIP-800 is not intended for direct or indirect connection to the public telephone network. When used with a customer premise telephone system such as a key system or PBX system, these units are interfaced to the system via a fully protected page port or system central office port, which is a fully protected interface device. Also, the host system must be configured to disallow central office trunk conferencing in order to prevent indirect connection to the public network.*

## Precautionary Designations

| ⚡ | **CAUTION** | ⚠ |
|---|---|---|
| | **RISK OF ELECTRIC SHOCK**<br>**DO NOT OPEN** | |

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

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

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

## Mounting

The VIP-800 was designed for wall or table mounting. Secure unit to wall studs or a suitable brace away from heat sources or strong magnetic fields (motors, fans, power supplies, etc.) with the control and terminal strip accessible. One wood screw is included for mounting.
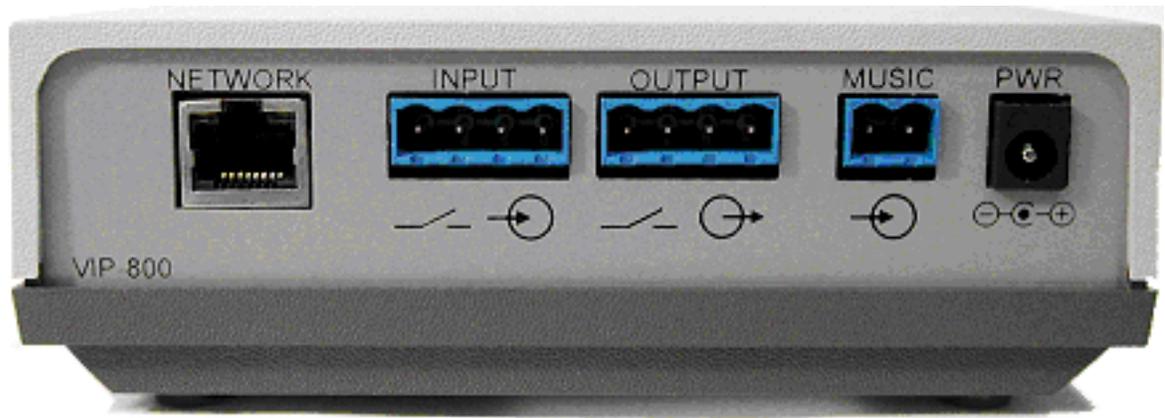
## Power Connections

*NOTE: This equipment must be installed near an AC power outlet due to the power cord being used as a disconnect device.*

- The VIP-800 is provided with a VP-324 for North American use.

*After all required connections have been made, plug the VP-324 into appropriate AC wall outlet.*

# CONNECTIONS



## PBX Access

When using the VIP-800 with an electronic key system C. O . line position or PBX Loop Start Trunk Port, a VIP-810 must be used to interface the telephone system with the network.

When using the VIP-800 with a PBX Analog Station Port, a VIP-820 must be used to interface the telephone system with the network.

## Operation

Press line key (electronic key system) or dial trunk access code (PBX) to connect to the paging speakers. Make announcement. The VIP-800 automatically disconnects from page when you hang up. When initiating page from a VIP-820, an open loop disconnect signal is required from the PBX station port.

## Page Port Access

When accessing the VIP-800 from a telephone system page port, either VOX or contact closure may be used to activate the unit.

## Operation

Follow the telephone system manufacturer's instructions for access to external paging. Make the announcement and hang up. The VIP-800 automatically disconnects from page.

The VIP-800 voice switching circuit is activated when the person making the page begins to speak. When the page is completed or the person stops speaking for more than two seconds, the paging circuit turns off. Other functions of the unit remain the same.

## Background Music

Background music may be connected locally to the VIP-800 when using either access method. Background music mutes when a page is made. A line level background music source must be connected locally to each unit.

Connect the output of a low level music source to the screw terminals marked "Music" on the input terminal strip on the VIP-800. Adjust music volume control on the music source to the desired level. Do not connect the BGM input to a 25/70 Volt or 8 Ohms amplified output.

## Volume Adjustments

The page volume is set by the speakers. Adjust speakers 1/3 - 1/2 volume initially, test and reset if necessary for correct page volume.

## *Application Examples*

When using the VIP-800 with an electronic key system C. O. line position or PBX Loop Start Trunk Port, a VIP-810 must be used to interface the telephone system with the network.  When the electronic key system C. O. line position or PBX Loop Start Trunk Port is accessed, the VIP-810 will activate the VIP-800.
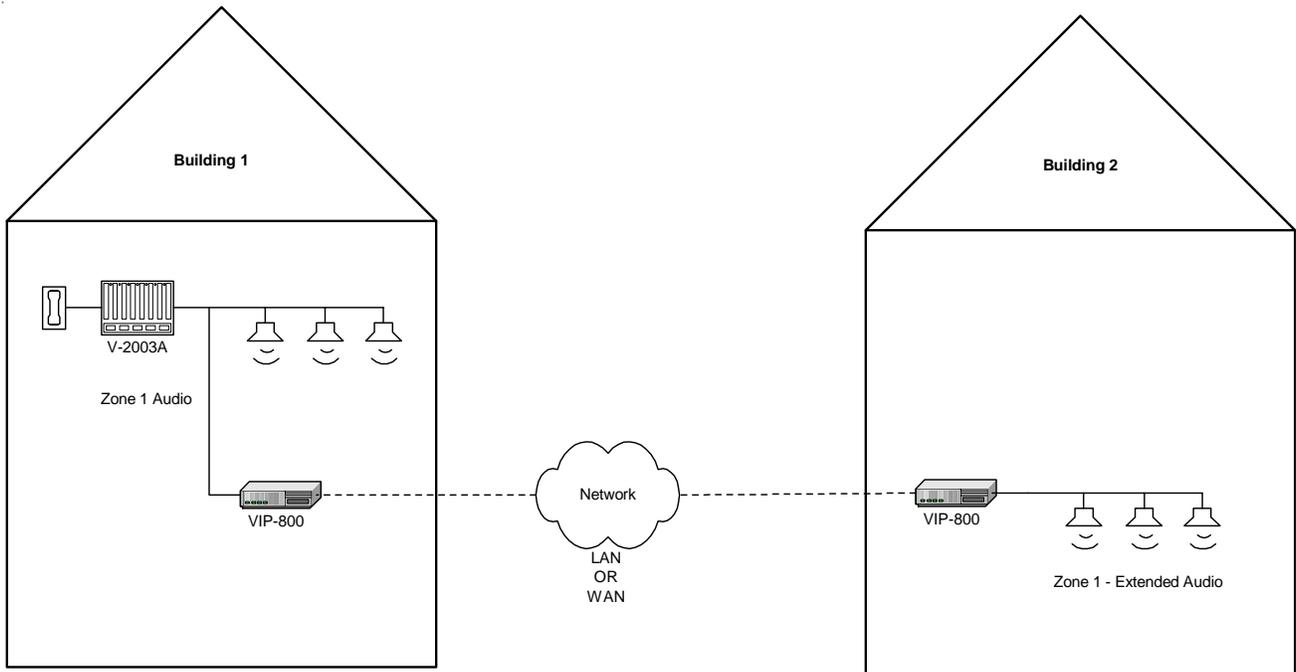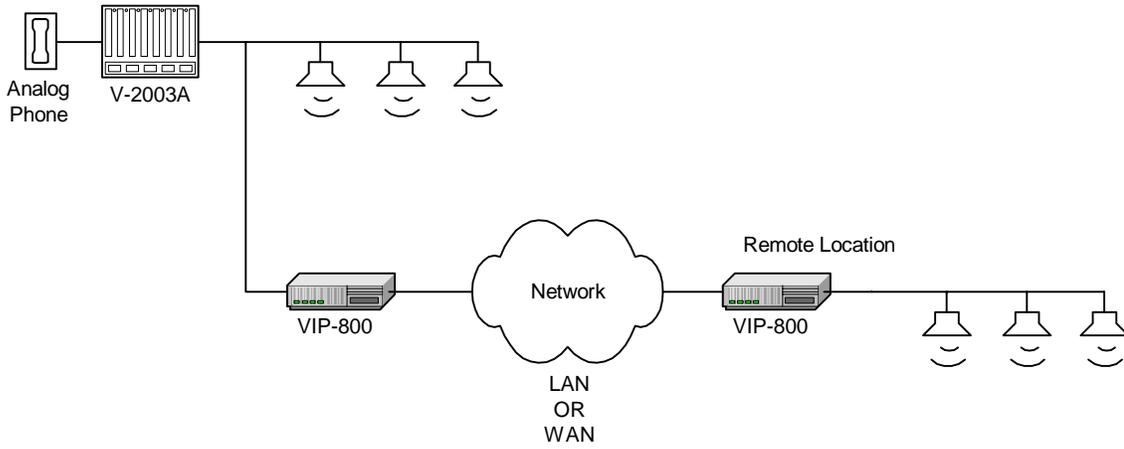
Loop Start Trunk Port

PBX
OR
KEY
SYSTEM

VIP-810

Network

LAN
OR
WAN
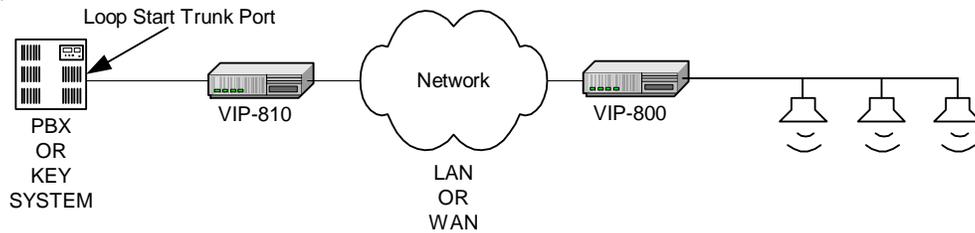
VIP-800

When using the VIP-800 with a PBX station port, a VIP-820 must be used to interface the telephone system with the network.  When the PBX station port is accessed, the VIP-820 will activate the VIP-800. When the VIP-820 sees an open loop disconnect signal from the PBX Station Port, the VIP-820 will release.

Analog Station Port

PBX
OR
KEY SYSTEM

VIP-820

Network

LAN
OR
WAN
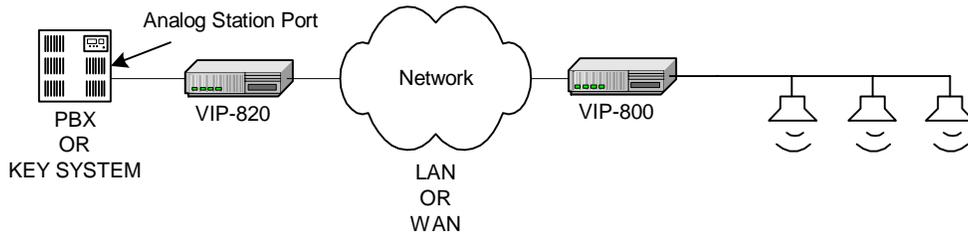
VIP-800

In this example, the VIP-810 and VIP-800 are connected to the data network as a stand alone paging system. This could be installed where network access is available, but telephone access is not.

VIP-810

Network

LAN
OR
WAN
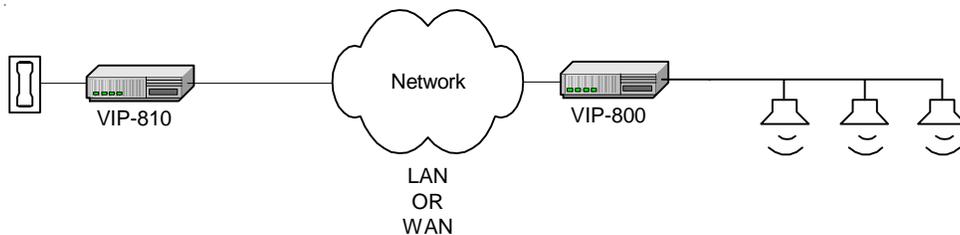
VIP-800

In these examples, two VIP-800's are connected to the data network to extend a paging zone to a remote location.

Analog
Phone　　V-2003A

Network

VIP-800　　Remote Location

VIP-800

LAN
OR
WAN

**Building 1**

V-2003A

Zone 1 Audio

VIP-800

Network

LAN
OR
WAN

**Building 2**

VIP-800

Zone 1 - Extended Audio

In this example, the VIP-810 is connected to the data network jack already installed and now the network connected telephone can reach into the existing Valcom V-2924A to access all call priority paging. This configuration could be used at a guard shack where network access is available, but telephone system access is not.
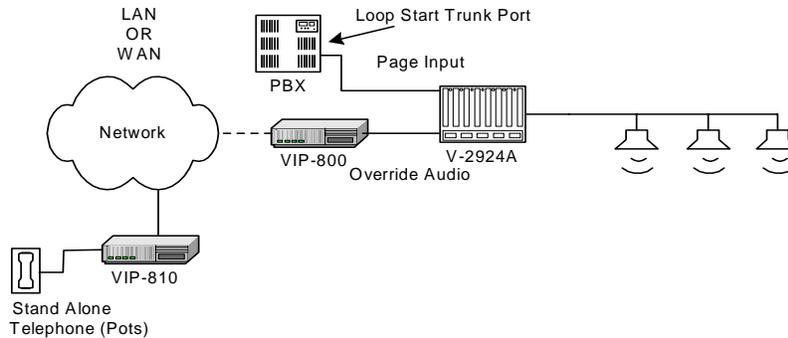


There are many buildings or areas with existing 70 Volt paging speakers and amplifiers installed.  These systems are often not operational or do not provide adequate coverage. The VIP-800 is ideally suited for integration with conventional paging products. They can be used to interconnect buildings for paging without the need of additional wire runs. Once connected through the LAN or WAN, the VIP-800 provides line level outputs and auxiliary contact closures that can be interfaced with conventional amplifiers. The illustration shown below depicts how integration is accomplished. From a central location, paging can be accomplished either by specific zone or all call mode.
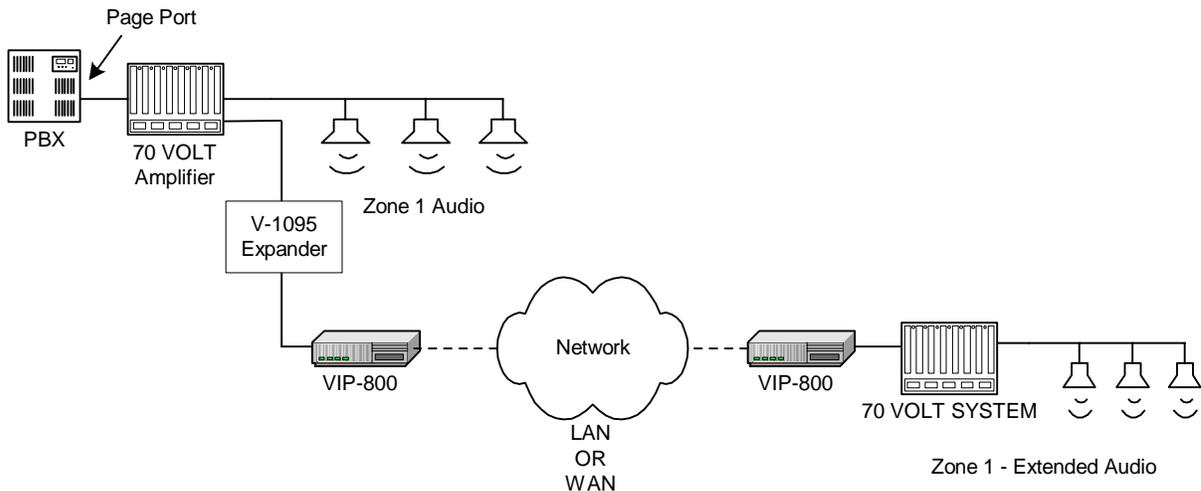


**NOTE:**  During initial SETUP, the "Sub-Net Address" and the "Gateway MAC Number (address) of    the Sub-Net Power" **must** be programmed into the software of each unit **locally - on the SubNet on which the unit resides.**

# TECHNICAL ASSISTANCE

When trouble is reported, verify power is being supplied to the unit and there are no broken connections. Check voltages for proper polarity to the one-way amplified speakers. Table 1 identifies symptoms of some possible problems with solutions. 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 for Technical Support or via email at support@valcom.com.

When requesting assistance, you should include all available information. It is strongly suggested that you go to the web site and follow the trouble resolution procedure at http://voip.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**

| TABLE 1: TROUBLESHOOTING CHART | |
|---|---|
| *SYMPTOM* | *PROBABLE CAUSE AND SOLUTION* |
| 1. No output to speakers | A. Check for the presence of audio on the page outputs of the VIP-800 during a page using a test set. Refer to installation section for connection information. |
| | B. Check the DC voltage at the output of the VP-324. It should be 20 to 28VDC. |
| 2. No music output | A. Using a test set, check for music on the music input terminals. |
| | B. Check that speakers are connected to page outputs. |