Paging Technology for Telephone/Datacom

Valcom's Distributed Amplified Technology was designed specifically for the telephone/datacom world! Each one-way paging speaker provides a built-in amplifier and volume control. These speakers are essentially independent public address systems that can be networked together in a building block concept that allows easy system configuration and flexible modification as customer needs change.

Best of all, these speakers are networked together using standard telephone/datacom low voltage wiring (CAT 5/6). This technology allows customers to take advantage of in-place wiring and assures the value of new wiring which can be used for future generations of paging, telephone and datacom systems. Traditional 70 volt systems MUST use shielded wiring to prevent serious consequences from high voltage, high frequency signals radiating into datacom and telephone circuits.

Valcom offers significantly higher system efficiency and superior response by optimizing each amplifier/speaker combination. Utilizing high efficiency American made speaker components eliminates transformer power losses characteristic of 70 volt systems. The net result is a reduction in cost, power dissipation and a dramatic increase in system efficiency and reliability due to the inherent system redundancy.

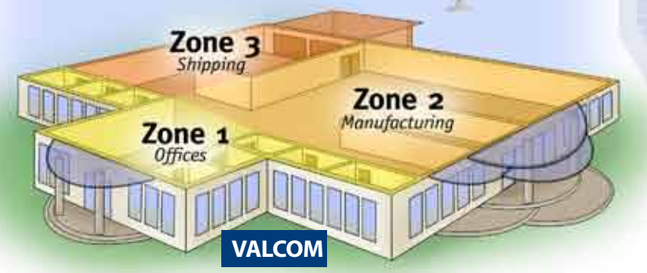
What is a Zone?

A zone can be any area, any size that you determine. It's usually an area where the same overhead pages would need to be heard.

Within a zone you can have as many different types of speakers as you want. From basic overhead round ceiling speakers, to high-fidelity sound, to horns for water-proof areas, to door entry speakers and many more.

One Zone — Multiple Rooms

Multiple Zones — Multiple Rooms



Designing a System
Is Easy As 1-2-3

VALCOM

Step 1 Select A Page Control

Page Controls are the "Brain" of the system, much like the CPU (Central Processing Unit) of a computer system and are specifically designed for telephone system integration. Systems are easily field expandable and/or upgradable to allow for future adds, moves and changes.

Easy Selection Considerations:

- **Number of Zones**
- **One-Way**
  Broadcast Only
  ***or* Talkback**
  Two-Way HandsFree (Includes One-Way)
- **Special Features**

Look for These Orange Symbols When Selecting Page Controls

		One-Way Page Controls						Talkback Page Controls			
	Model #	V-2000A	V-2001A	V-2003A	V-2006A	DualPath	MultiPath	V-2003AHF	V-2006AHF	DualPath	MultiPath
Features	Number of Zones	1	1	3	6	24+	24+	3	6	24+	24+
	Background Music	•	•	•	•	•	•	•	•	•	•
	All Call	•	•	•	•	•	•	•	•	•	•
	Group Call				•	•	•		•	•	•
	Emergency Page Override		•	•	•	•	•	•	•	•	•
	Night Ring/Time Clock Tones		•	•	•	•	•	•	•	•	•
	Valcom Power Units Provided	+ 12	+ 20	+ 20	+ 30	0	0	+ 10	+ 20	0	0
Telephone Access	PBX Loop Start Trunk Port Electronic Key Line Position Dedicated Single Line Phone Set	•	•	•	•	•	•	•	•	•	•
	PBX Ground Start Trunk Port			•	•			•	•		
	Page Port (Telephone System Dependant)	•	•	•	•			•	•		
	Centrex or C.O. Line PBX Analog Station Port (Loop Disconnect Required)	Use V-9970		Use V-9970		Ask Us!	Expand to 360 Zones! Ask Us!	Add V-9940		Ask Us!	Expand to 360 Zones! Ask Us!

Step 2 Select Speakers & Horns

Speakers are generally used for interior environments and provide high quality music and voice reproduction. It's easy to use hundreds of one-way speakers in a zone.

Horn Speakers offer high-efficiency, rugged construction and superb voice quality. They're typically used outdoors or in loud, industrial or harsh interior areas. It's easy to use hundreds of one-way speakers in a zone.

Custom Colors

Look for this symbol & call Valcom to get custom color speakers.

Easy Selection Considerations:

- **One-Way or Talkback**
- **Indoor, Outdoor or Industrial Environments**
- **Area to be Paged in Square Feet**
- **Determine Ceiling Heights & Type**
- **Noise Levels**
- **Style, Decor & Color**

Speaker /Horn Placement Guide

Speakers

Ceiling Height x 2 = Speaker Placement
Example:
8' Ceiling x 2 = Space Speakers 16' Apart

Wall Speaker Placement
Spaced 20' Apart (One Per 600 sq. ft.)

Horns — Shows SPACE Between Horns & Square Foot Coverage PER Horn

	Quiet 50-65dB	Moderate 65-80dB	Noisy 80-90dB	Very Noisy 90+dB
5-Watt	110' (12,000sq.ft.)	80' (6,400sq.ft.)	50' (2,500sq.ft.)	30' (900sq.ft.)
15-Watt	-	-	75' (5,600sq.ft.)	45' (2,000sq.ft.)
30-Watt	-	-	-	60' (3,600sq.ft.)

Power Pair Run

# of Speakers/Horns Per Power Run					Power Run Wire Length in Feet				
# Interior Speakers	Signature Series™	Flex Horns	5-Watt Horns	15/30-Watt Horns	24 AWG	22 AWG	20 AWG	18 AWG	16 AWG
4	1	-	-	-	1000'	1600'	2500'	4000'	6400'
7	2	1	1	-	500'	800'	1280'	2025'	3220'
15	4	2	2	-	250'	400'	640'	1010'	1610'
30	8	4	4	1	125'	200'	320'	500'	805'

Step 3 Select A Power Supply

Built-in power is often included in the Page Control, so an additional Power Supply may not be needed. The amount of power required for a paging system is based on the quantity and type of Page Control and Speakers/Horns selected.

Easy Selection Considerations:

- **Products Provide or Consume Power & are Assigned a Valcom Power Unit (VPU)**

Power Provided or **Power Consumed**

+ # – #

Valcom Power Units Make It Easy!

Simply Total All:	**Example:**						
a. Page Control VPU's	Page Control	1	x	+30	=	+ 30	VPU Provided
b. Speaker/Horn VPU's	Speakers	15	x	- 1	=	- 15	VPU Consumed
c. Subtract b. from a.					=	+ 15	VPU's LEFT OVER
						NO Power Supply Needed!	

- *Products that Neither Consume NOR Provide Power are a 0*
- *Note: One Valcom Power Unit = 50mA, -24 Vdc*
- *VPU Listings are on the Product Pages & Index Pg 30-34*
- *Have VPU's Left Over - You Can Add More Speakers!*
- *Need More - Simply Select a Power Supply Pg 16-17 with Enough VPU's to Make up the Difference!*

The Bigger the System . . .
The Greater the Savings . . .
with Valcom! ™

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