Page Overhead to Multiple Offices Simultaneously ...with *VOIP*

Bogen's overhead paging products and Multi-Tech Systems' VOIP products together enable businesses to provide company-wide overhead paging to locations within a facility or across a campus, without running new lines. Bogen's Telephone Access Modules and amplifiers integrate seamlessly with Multi-Tech's MultiVOIP Voice over IP gateways (VOIP) to provide overhead voice paging over IP networks. Now, a business can make a company-wide announcement or page employees across a campus of offices more efficiently. They can even page remote office locations located thousands of miles away.

"This powerful combination eliminates the need for new wiring required by traditional overhead paging systems," explains Dave Chambers, Senior Vice President of Sales, Bogen Communications. "In most cases, running new wire between office locations is expensive or impossible, considering it might be to many sites across the country, or even around the world. Leased lines and excessive long distance bills are becoming a thing of the past with VOIP".

Bogen's single-zone or multi-zone paging interfaces (TAMB, PCM2000, or ZPM3) and broad array of audio paging equipment connect to Multi-Tech's MultiVOIP gateways to enable voice pages directly through the IP data network. "Businesses with multiple buildings are already networked via Ethernet," said Chambers. "The MultiVOIP gateways allow us to use this connection to the wide area network as a conduit for our voice paging systems."

The MultiVOIP gateway connects directly to the Bogen zone paging systems or interface devices, which are compatible with virtually any telephone port type. This MultiVOIP gateway sends a voice page onto the IP network. It then utilizes another MultiVOIP gateway, at the remote end, to separate the voice page from the data network and send it to the amplifier.

To make a page, the user simply dials a particular paging zone number, and the page is ready to be sent to individual buildings, zones within them, or be heard throughout the entire system as an "all-call page" – however the user directs the call to be sent.

"Without this innovative joint solution, most multi-location businesses would simply give up on the idea of company-wide overhead paging at remote or difficult to reach locations because of the cost," said Chambers. "Now we can provide these businesses with a cost-effective means to render emergency alerts, make general broadcast announcements, and ultimately improve overall internal communications with a simultaneous paging solution – not to mention enhancing employee safety, a key concern today."

MultiVOIP and Telephone Paging

Solution Benefits:

- *Wire-free overhead paging across multiple buildings on campus, within facilities, or to remote offices located even thousands of miles away*
- *Utilizes existing Ethernet network*
- *Improves interoffice communication*
- *Provides a means for company-wide emergency alerts or general announcements*
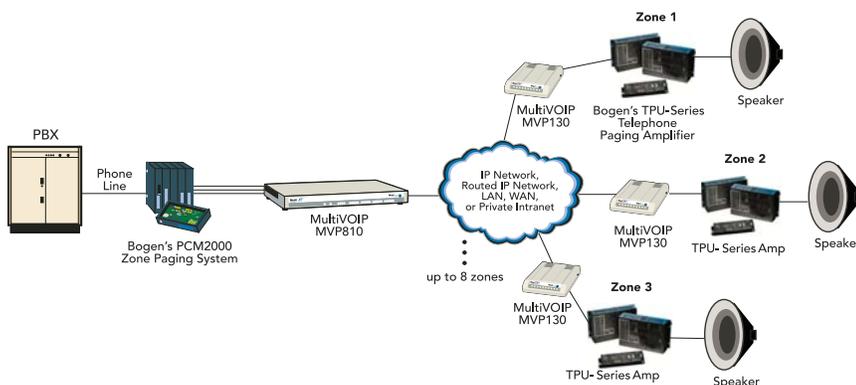
Solution Components:

- *Telephone Access Module (TAMB), PCM2000 Paging Control Module system, or ZPM3 Zone Paging Module*
- *Telephone Paging Amplifier(s) and speakers*
- *MultiVOIP Voice over IP gateways at each location*

> **"** Now we can provide businesses with multiple locations a cost-effective means to render emergency alerts, make general broadcast announcements, and ultimately improve overall internal communications with a simultaneous paging solution. **"**
>
> *Dave Chambers,*
> *Senior Vice President of Sales,*
> *Bogen Communications, Inc.*

Diagram

PBX

Phone Line

Bogen's PCM2000 Zone Paging System

MultiVOIP MVP810

IP Network, Routed IP Network, LAN, WAN, or Private Intranet

up to 8 zones

Zone 1
MultiVOIP MVP130
Bogen's TPU-Series Telephone Paging Amplifier
Speaker

Zone 2
MultiVOIP MVP130
TPU-Series Amp
Speaker

Zone 3
MultiVOIP MVP130
TPU-Series Amp
Speaker

BOGEN ®

Telephone Access Module (TAMB)

Bogen's Telephone Access Module is a unique, dual-purpose voice paging adapter designed as an interface between the telephone system and the paging system. The TAMB allows paging announcements to be made through any telephone.

- *Loop start, ground start, and station port compatibility*
- *Pre-announce and confirmation tones*
- *Calling-party-controlled disconnect*
- *Wall-mountable design*

PCM Zone Paging System (PCM2000)

Bogen's PCM2000 provides expandable zone paging for applications requiring 1 to 99 zones, and up to 32 paging zone groups. Its multi-function modules ensure flexibility and future system expansion. It allows a system to be designed to be specifically tailored for a facility's unique requirements.

- *One zone to 99 zones of simultaneous high-power and low-power paging*
- *Up to 32 zone paging groups*
- *Universal telephone port interface compatibility*
- *Modular expansion*
- *Emergency All-Zone Override Paging input*

Telephone Paging Amplifiers (TPU-Series)

Bogen's Telephone Paging Amplifiers are wall-mountable and come in five models, ranging in power from 15 to 250 watts. Each model provides VOX-activated automatic muting of background music during a page, variable mute that controls the level of music during a page, gradual return of music following a page, night ringer, and Aphex® Aural Exciter circuit which increases clarity and intelligibility.

- *15, 35, 60, 100, and 250 watt models*
- *600-Ohm balanced telephone paging input*
- *Low-impedance balanced microphone input*
- *Built-in automatic level control*
- *Music input that mutes with page*

Multi-Tech MultiVOIP

Multi-Tech's MultiVOIP Voice over IP gateways bridge voice communication to the IP data network. MultiVOIP operates alongside analog phone systems and Bogen's Telephone Paging Systems to extend voice communications to remote locations.

MultiVOIP Features:

- *Award-winning business quality voice connections*
- *Minimal bandwidth requirements (14K bps per call including IP overhead)*
- *Utilizes existing Ethernet network*
- *No disruption to existing voice equipment*
- *Transparent to the user (no training required)*
- *Web-based configuration and management*

Models:	
MVP130BG	1-port FXS/FXO VOIP gateway
MVP210BG	2-port VOIP gateway
MVP410BG	4-port VOIP gateway
MVP810BG	8-port VOIP gateway

About Bogen

Bogen Communications International, Inc., based in Ramsey, New Jersey, and Munich, Germany, develops, manufactures, and markets telecommunications peripherals, sound processing equipment, and Unified Messaging products and services. Bogen's products are sold to commercial, industrial, professional, and institutional customers worldwide.

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About Multi-Tech...

An ISO 9001 certified global manufacturer of award winning Internet, remote access, and telephony products, **Multi-Tech Systems** provides end-to-end solutions for small- to medium-sized businesses. Multi-Tech holds over 50 patents in voice and data technologies and has deployed thousands of MultiVOIP gateways since 1999.

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