



# Legacy Paging Interface (LPI) Cookbook

Today, organizations have the option of connecting their existing overhead paging systems to the IP network and providing more communication options. This can include things like sending pre-recorded audio messages, using phones for sending an overhead page, and networking different PA systems together to enable emergency communication and mass notification.

If you are looking to modernize an existing system or plan to build one from scratch, Singlewire has put together several design considerations to get you started.

Typically, organizations have one of the following objectives:

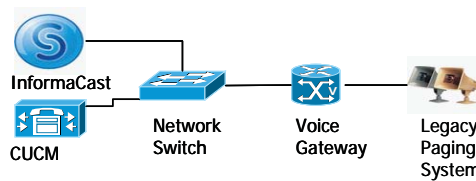
- Want to connect/modernize an existing public address system (via ATA, E&M, FXO or FXS port)
- Want to add a public address system to a building but don't know where to start
- Want to replace an existing system that is failing or has failed

You Have	You Need	Then Purchase
Scenario 1: Existing analog telephone connection with DTMF zones	Implement the Singlewire LPI	Licenses for the number of selectable zones
Scenario 2: Single amplifier with no connection to the PBX	InformaCast-compliant Zone Controller with line level audio out	AtlasSound, AND, Barix, CyberData or Valcom's compatible device
Scenario 3: Legacy public address system is failing, you want to start fresh	Contact the Singlewire Sales Team to discuss options and engage one of our IP speaker manufacturers	You have the option of using IP speakers or continuing with traditional analog systems. Singlewire can get you moving in the correct direction.

## Scenario 1: Modernize an Existing Public Address System

**Problem:** You have an existing paging system that is connected to your Cisco UCM through an ATA, FXO/FXS or E&M. You can pick up a phone and dial into the paging system and are prompted for DTMF.

**Solution:** Use the LPI and count the number of DTMF zones that you have to create the proper licensing. Typical uses are for All Call paging or certain areas of a building. In the illustration below, InformaCast and LPI connects to the legacy paging system via the voice gateway.



### Contact Us:

Contact your local Singlewire sales representative for more information.

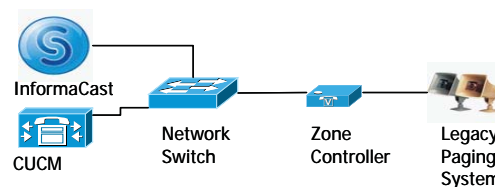
## Scenario 2 : Add a Public Address System to a Building or Facility

**Problem:** You'd like to add paging to a facility and have determined that adding IP speakers will be too expensive.

**Solution:** Depending on your environment, you have a number of options:

- If you email your floor plans to an audio vendor like AND or Valcom, they are able to design a system according to industry best practices.
- Alternatively, you may look to have a local audio vendor do a design and a local site assessment.

Be aware of the number of paging zones you'd like to have. In a traditional analog paging system, a single amplifier defines a zone, while newer amplifiers may be able to support more than one zone. Each zone will need to have some type of audio input device for InformaCast. This can be a Zone Controller (i.e. line level to the amplifier) or potentially a multizone controller that allows for DTMF to separate zones and amplifiers (LPI and analog output from the phone system to the multizone controller). In the illustration below, InformaCast and the LPI are connected to the legacy paging system via a zone controller.



## Scenario 3 : Our Systems are Extremely Old. What Should Your Next Steps Be?

**Problem:** You have old amplifiers that are failing and you're looking to replace them with newer devices.

**Solution:** Determine the type of device and the amount of watts the amplifier is putting out. Typically, existing speakers can be re-used with a newer amplifier. Match your wattage to one of the newer devices like the Atlas AA35 (35 Watt) or AA120 (120 Watt), or try a different manufacturer. To connect to the amplifier, a Zone Controller from AND, Atlas Sound, Barix, CyberData, or Valcom can be used via a 600-Ohm Line Level Audio input.

In this design, it's important to determine the number of zones that you'd like to support. A single amplifier may represent a single zone when connecting a zone controller device. With this scenario, the zones are logically separated by amplifiers and directly connected zone controllers. There are options for zone controller amplifiers from CyberData where the amplifier is built on-board and can power a number of analog speakers.

### About Singlewire

Singlewire Software develops and supports innovative voice applications centered around secure, fast, and reliable mass notification capabilities. Our main application offerings: InformaCast, PushToTalk, and RemotePhoneControl allow our customers unprecedented control in designing mass notifications, assigning them to specific recipients, and determining the medium for dissemination—IP phones, IP speakers, email, etc.—all with the peerless capacity for customization to our customers' specific environments. Singlewire is devoted to maintaining the agility and imagination needed to fulfill our customers' needs and fostering an environment for successful partnerships between our customers and our company.

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