

## PoE-Powered SIP Paging Endpoint Supporting up to 100 Independently Configurable Multicast Zones

The Viking **MPS-XP** Multicast Paging Server is a PoE-powered SIP paging endpoint supporting up to 100 independently configurable multicast zones. Page all zones from a single SIP extension, assign dedicated extensions to individual zones, or use SIP extensions and dry-contact triggers to play prerecorded audio files.

Its built-in calendar scheduler with exception-date support automates delivery of prerecorded messages to multicast zones and legacy analog paging systems all managed through a secure web interface. MQTT and HTTP webhook integrations enable third-party system connectivity.



Ideal for schools, universities, manufacturing facilities, and any environment that demands flexible multizone paging, event-triggered announcements, or automated message scheduling.

**⚠ Installation requires a Network Administrator / IT Technician**

### Features

- Up to 100 simultaneous SIP accounts with independent registration
- Up to 100 independent multicast zones with volume adjustment, zone priority, and QoS
- DTMF touch-tone zone selection - dial a code to page specific zones
- Store-and-forward recording: record, review and approve pages before broadcast for feedback-free delivery
- Line input for background music or external audio sources
- 2.5 GB audio storage: over 21 hours of recordings for bells, tones & announcements (WAV, MP3, OGG, FLAC)
- Programmable rules engine: 100 rules with events, conditions, and actions
- Full REST API for scripting, provisioning and third-party integration
- MQTT pub/sub with TLS: connect to IoT and building management systems
- HTTP webhooks and triggers: activate pages from any system with a URL
- Calendar scheduler with recurring patterns, time-triggered events, exception calendars, delays & skipped event support
- 4 trigger inputs with configurable debounce and active-state polarity
- 1 programmable relay output: timed activation, flash patterns, and conditional logic via automation rules
- Stream radio stations from a url for background music
- Bell scheduler

### Applications

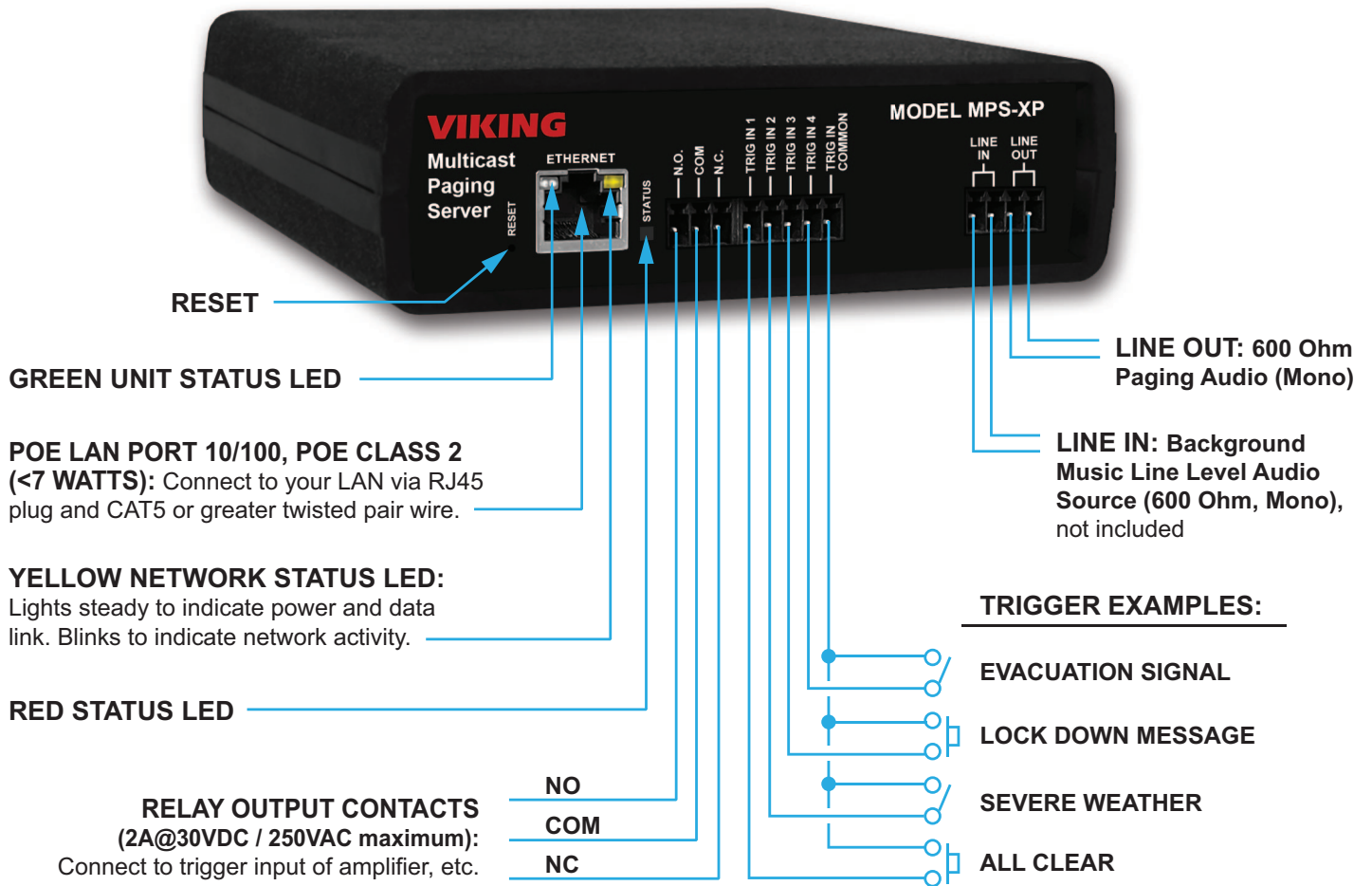
Provide flexible multizone paging, event-triggered announcements, or automated message scheduling for:

- Schools
- Universities
- Manufacturing facilities

### Specifications

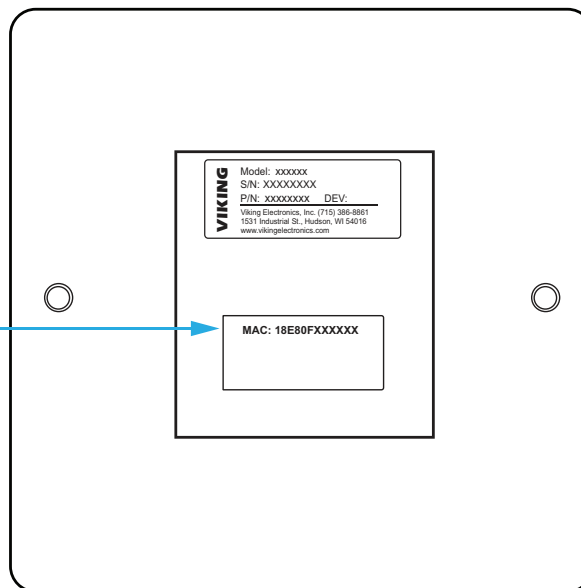
**Power:** PoE class 1 (< 4 Watts)  
**Dimensions:** 5" x 5.25" x 1.5" (127 mm x 133 mm x 38 mm)  
**Shipping Weight:** TBD  
**Operating Temperature:** 0° F to 140° F (-17° C to 60° C)  
**Humidity:** 5% to 95% non-condensing  
**SIP Audio Codecs:** Opus, Speex 32K/16K/8K, g711u, g711a, g722, GSM, iLBC, or L16  
**SIP Transports:** UDP, TCP, TLS  
**Multicast Audio Codecs:** g722, g711a, g711u, Opus, Speex 32K  
**Network Compliance:** IEEE 802.3 af PoE, SIP 2.0 RFC3261, 100BASE-TX with auto-crossover  
**I/O:** 600 Ohm Line Level Input, 600 Ohm Line Level Output, 4 Triggers, Relay Output  
**Connections:** (1) RJ45 10/100 Base-T, (1) 3 position terminal block, (1) 4 position terminal block, (1) 5 position terminal block

# Features Overview

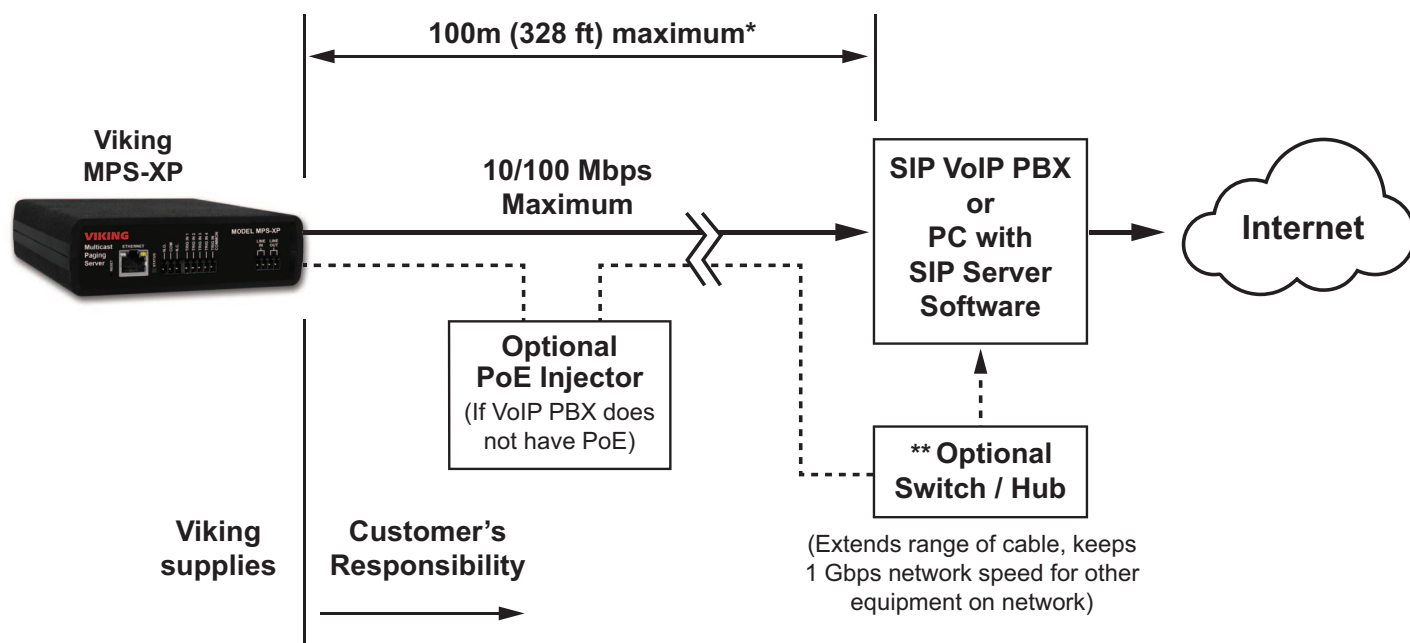


## BOTTOM VIEW

**MAC ADDRESS LABEL:**  
The MAC address is a unique 12 digit number used by network equipment to send data packets to the correct IP address.



## Typical Installation on SIP Based VoIP Phone System



**\* Note:** A PoE extender can be used for an additional 100 meters per extender. For longer runs (up to 2 km / 1.2 miles) an ethernet to fiber media converter can be used.

### \*\* Network Port Settings

- Make sure the port is not in trunk mode
- Make sure port is capable of 100Mbps full duplex
- Disable Spanning Tree Protocol (STP) or enable Portfast

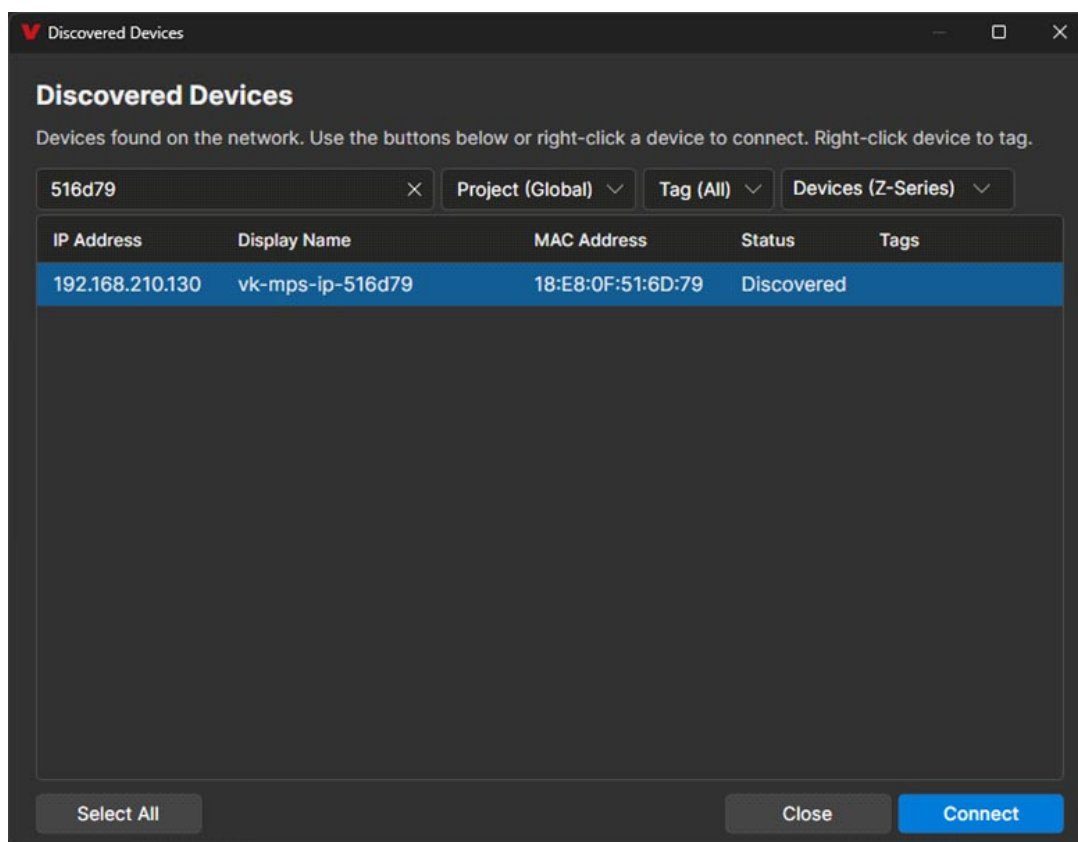
## Programming PC Requirements

- Windows 10/11, Linux, or MAC computer
- Available LAN with PoE (class 1 < 4 Watts)
- Ethernet cable (CAT5 minimum)
- 512 MB minimum free hard drive space for installation
- 128 MB of free physical RAM

## Discovery

### Download and Install the Discovery Software

|               |                                                                                                                                                                                                                                      |
|---------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Step 1</b> | From the programming PC, go to <a href="http://www.vikingelectronics.com/vdm">www.vikingelectronics.com/vdm</a>                                                                                                                      |
| <b>Step 2</b> | Install the <b>Viking Device Manager</b> software by saving or opening the file and then clicking on the Installer or Applmage (Linux).                                                                                              |
| <b>Step 3</b> | Follow the prompts on your screen to complete software installation.                                                                                                                                                                 |
| <b>Step 4</b> | To start the application, click the icon on your desktop. The main screen will appear, allowing the user to program any <b>MPS-XP</b> connected to that LAN. <b>Note:</b> <i>PC must be connected to the same LAN as the MPS-XP.</i> |

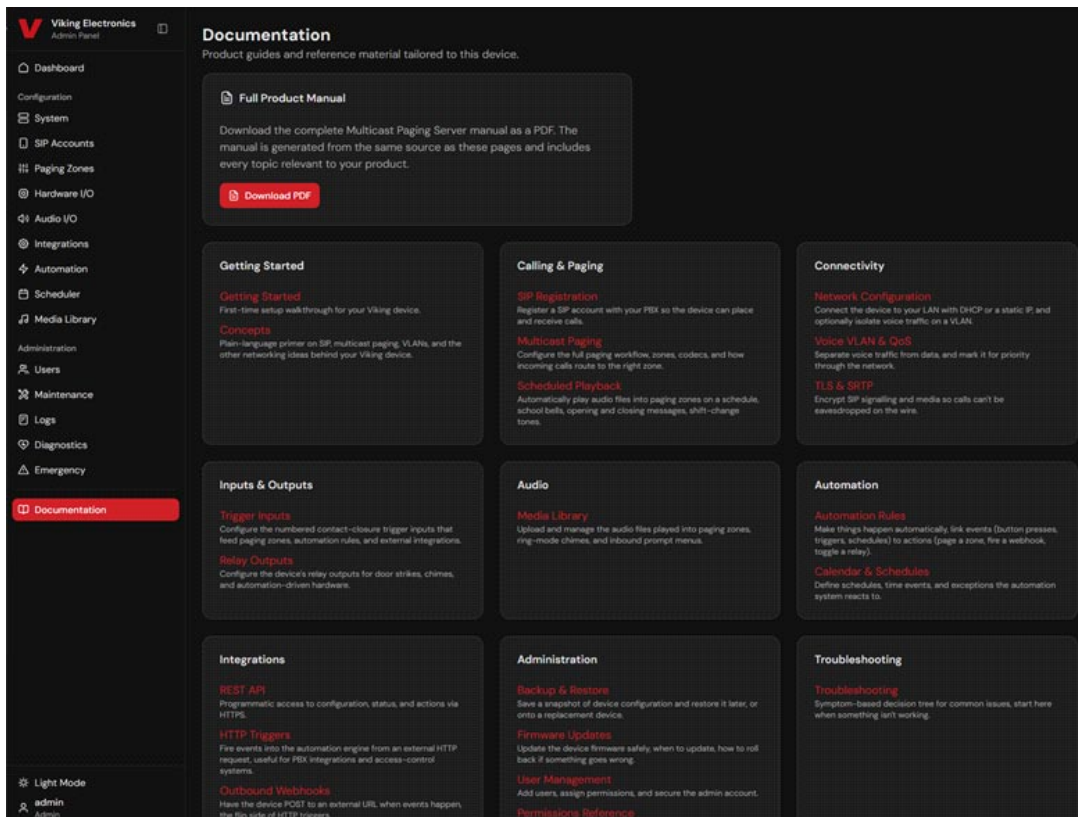


|               |                                                                                                                                                 |
|---------------|-------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Step 5</b> | Double-click the unit in the list or click Connect. You will be asked if you would like to open the Web UI in a browser, click Yes to continue. |
| <b>Step 6</b> | Login for the first time with the default Administrator account (admin, admin).                                                                 |
| <b>Step 7</b> | For security, change the password for the 'admin' user, and add new Users limited to required permissions.                                      |

## Full Software Documentation

Once logged into the Web UI you have access to the full software manual that matches the firmware on your device.

Click the 'Documentation' button on the left side of the UI. From there, a full PDF can be downloaded, or features/sections can be browsed using on screen links to find what you need directly.



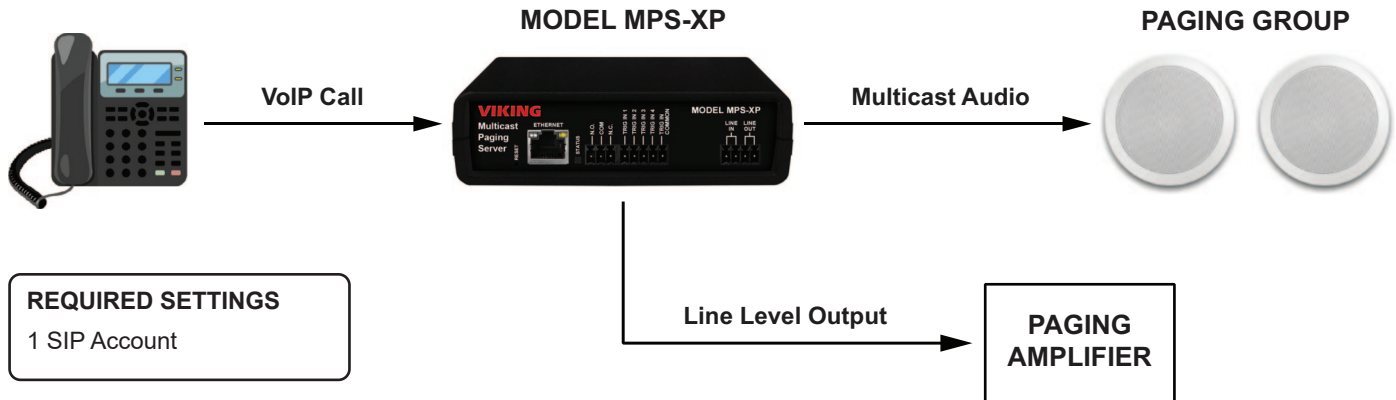
## Common Use Cases

### A. Basic SIP to Multicast Paging

(Single Account, Single Zone)

**Description:** Send audio from a VoIP call to speakers/endpoints via Multicast Paging.

**Example:** Single room or full facility paging.



#### Required Settings:

- Registered SIP Account (VoIP Provider, PBX Extension, or 'Peer to Peer' mode).
- 'Single Zone' set as the Mode in 'Paging Settings'.

#### Common Optional Settings:

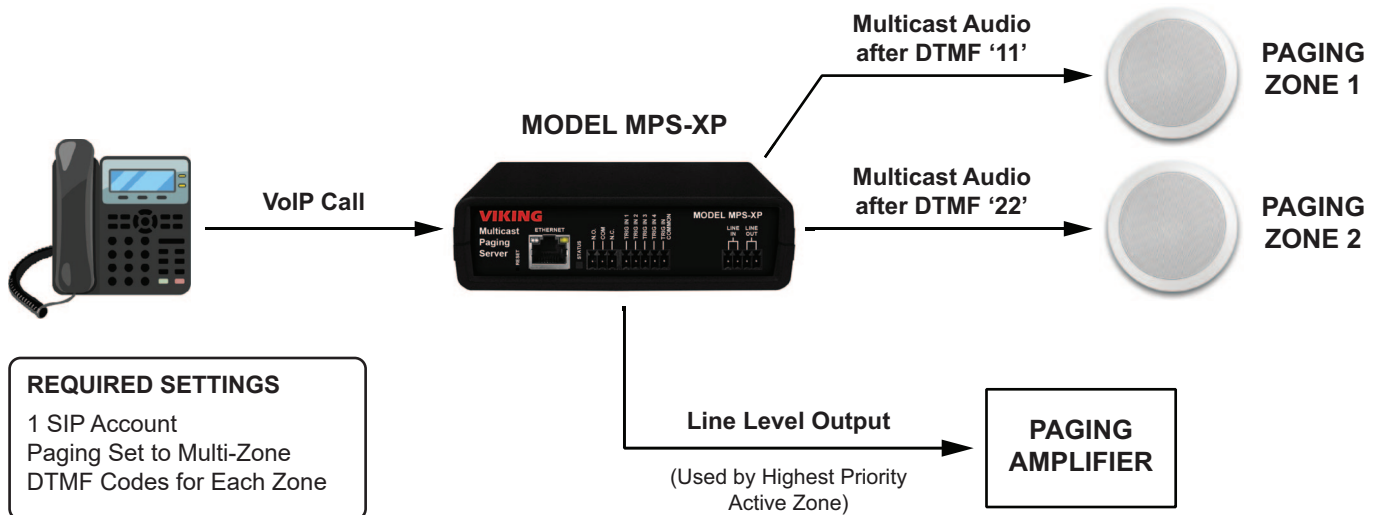
- Access code to restrict anonymous pages (DTMF code before paging).
- Network Audio Source (Stream from URL) or Line Input Enabled for Background Music.
- Relay Output programmed for 'Paging' mode to trigger an analog amplifier.

## B. DTMF Zone Paging

(Single or Multiple Account(s), Multiple Zones)

**Description:** Send audio from a VoIP call to multiple isolated 'Paging Zones' via Multicast Paging. Audio is routed to different Zones by entering DTMF digits/codes on a connected VoIP call.

**Example:** School with 4 buildings on campus, paging can be sent to each building individually.



### Required Settings:

- 1 or more registered SIP Account (VoIP Provider, PBX Extension, or 'Peer to Peer' mode).
- 'Multi-Zone' set as the Mode in 'Paging Settings' (Default Setting).
- DTMF strings for Zone Codes.

### Common Optional Settings:

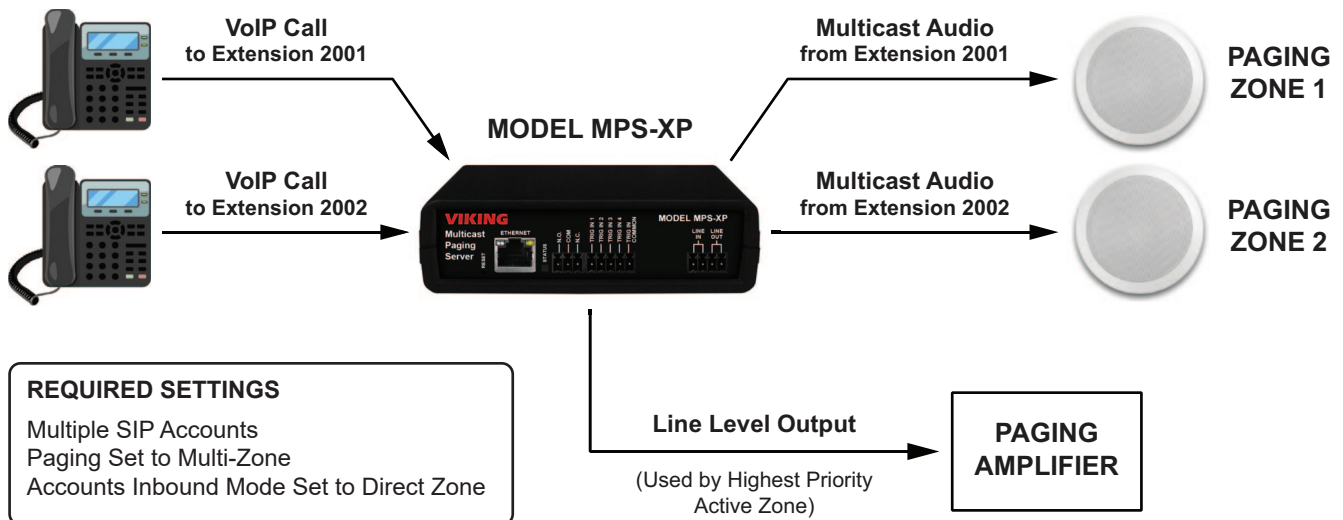
- Network Audio Source (Stream from URL) or Line Input Enabled for Background Music.
- Automation rules to trigger wave files to specific Zones.

## C. Multi-Account Zone Paging

(Multiple Account(s), Multiple Zones)

**Description:** Send audio from VoIP calls to multiple isolated 'Paging Zones' via Multicast Paging. Audio is routed to different Zones based on the VoIP account the call comes from.

**Example:** School with 4 buildings on campus, paging can be sent to each building individually. 4 PBX extensions allocated, one for each Zone.



### Required Settings:

- Multiple registered SIP Accounts (VoIP Provider, PBX Extension, or 'Peer to Peer' mode).
- 'Multi-Zone' set as the Mode in 'Paging Settings' (Default Setting).
- Inbound Mode for Account set to Target Paging Zone.

### Common Optional Settings:

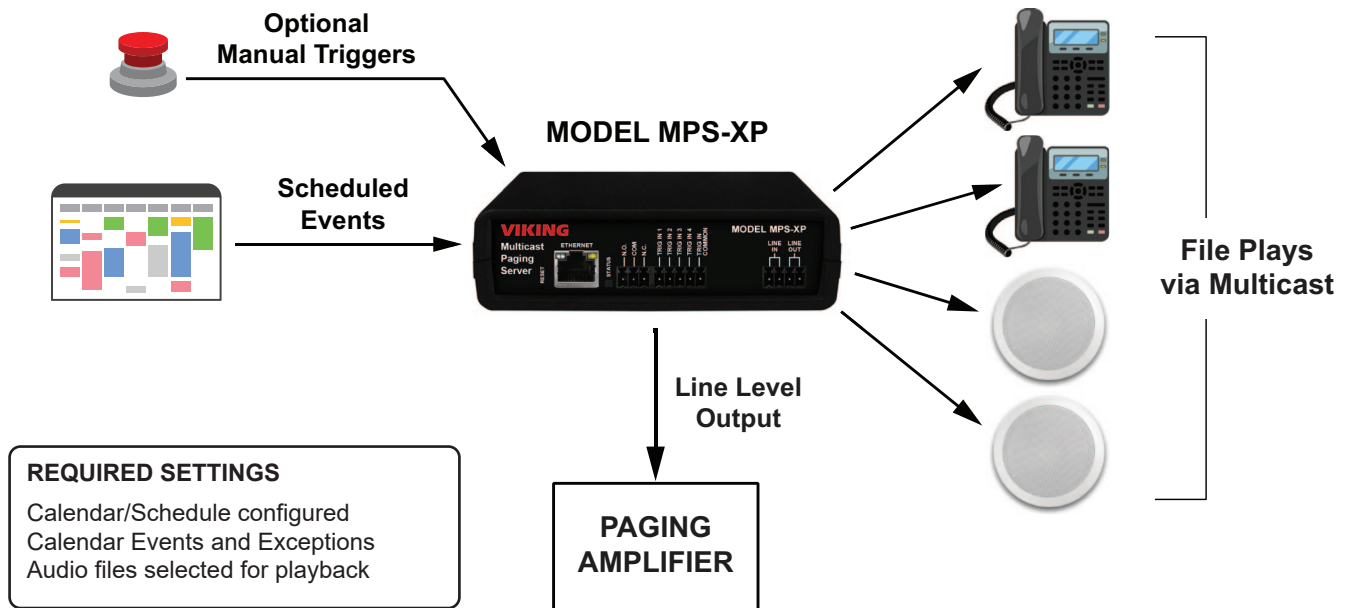
- Automation rules to trigger wave files to specific Zones.

## D. Bell Scheduler

(No account required)

**Description:** Play Tones, send webhooks, trigger Relay Output and more using recurring Scheduled Events. Events can be configured as triggers for multiple actions.

**Example:** Business that wants audio played at specific times every day (with programmable exceptions for holidays, late start, etc.).



### Required Settings:

- Schedule created with Events as triggers.
- Actions to be triggered (e.g. Wave File Play, Relay Closure, etc.).

### Common Optional Settings:

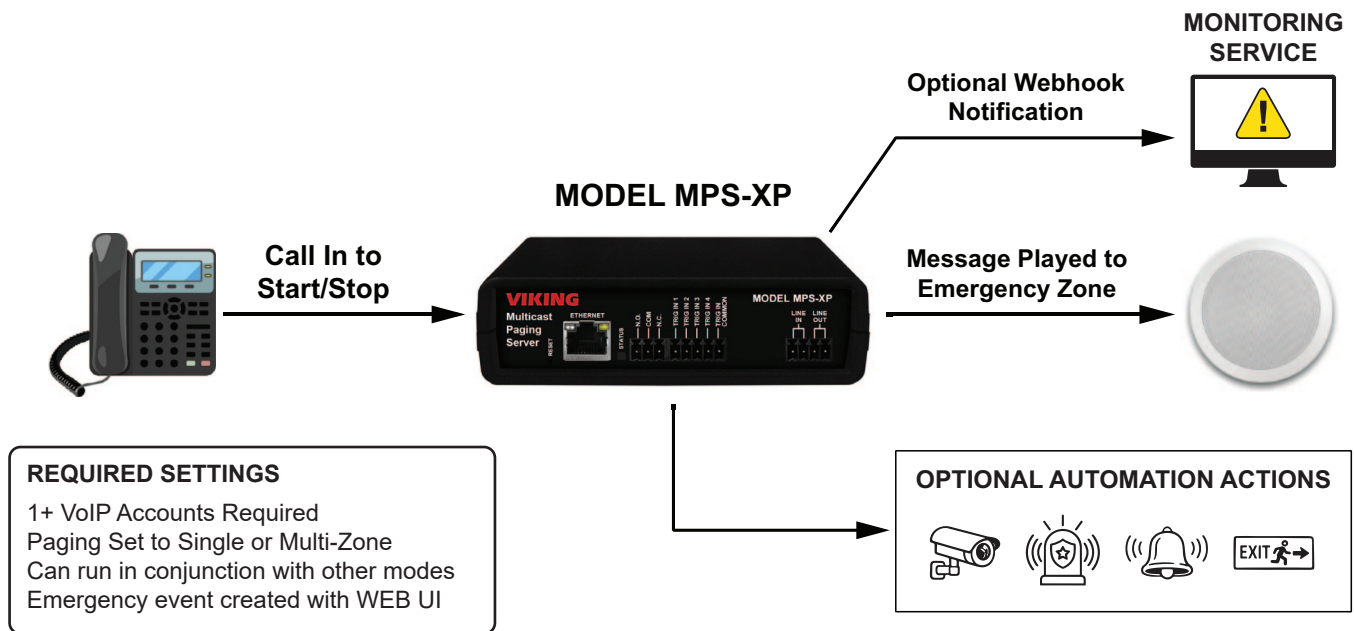
- Network Audio Source (Stream from URL) or Line Input Enabled for Background Music.
- Additional Automation Rules triggered by Schedule/Calendar events.
- Custom Wave files uploaded for playback.

## E. Emergency/Lockdown Manager

(1 or more VoIP Account, 1 or more Paging Zone)

**Description:** Start and stop an Emergency Event with a VoIP call. Audio is played to the Emergency Zone for the duration of the event.

**Example:** College Campus that wants to alert all students and faculty of the event, which must be started and stopped by authorized personnel (typically dialing a specific DTMF code).



### Required Settings:

- Registered SIP Accounts (VoIP Provider, PBX Extension, or 'Peer to Peer' mode).
- Emergency Event Configured with an account selected to start/stop (can be the same for both, or different accounts).

### Common Optional Settings:

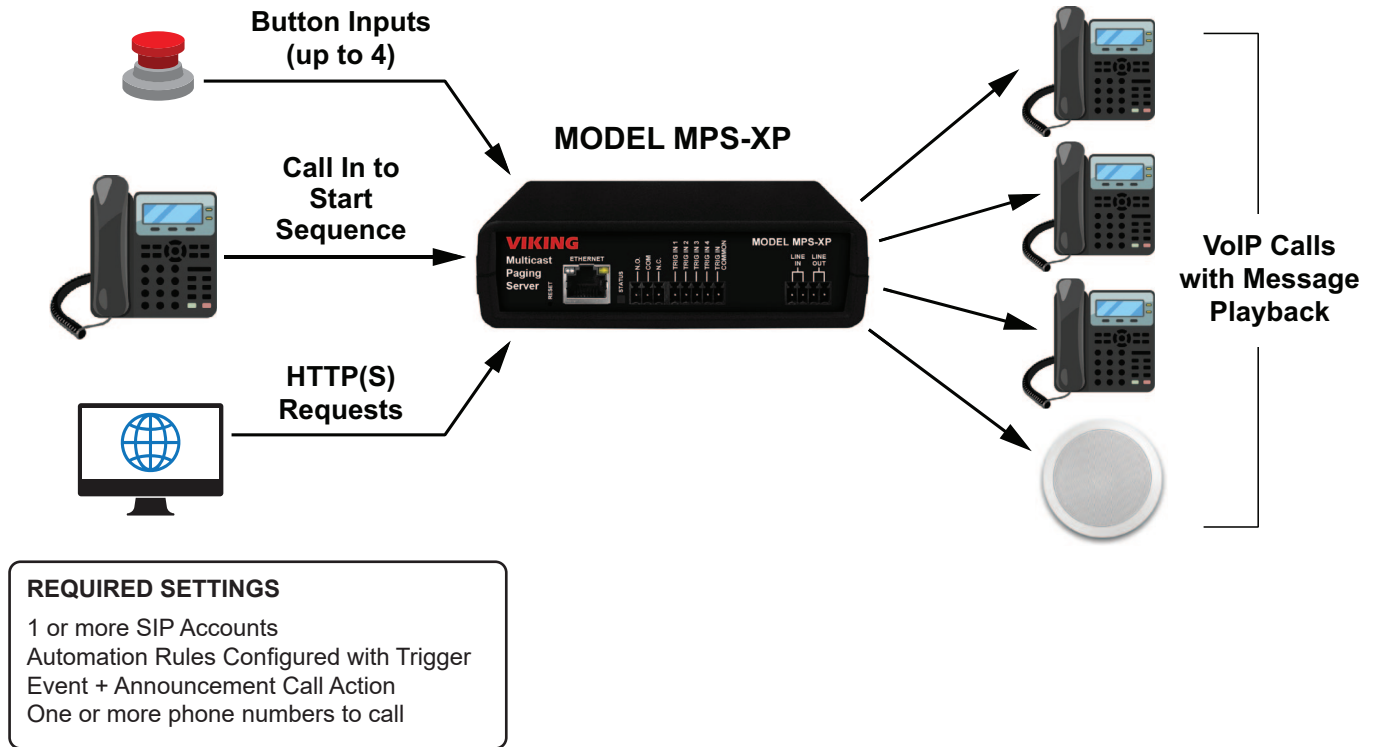
- Custom uploaded audio indicating the exact situation and any instructions.
- 'Activation Actions' to trigger Alarm panel with the Relay Output.
- Activation Actions' to send a Webhook (to notify a monitoring service).
- Access Code for each account (to ensure authorized personnel use only).

## F. IP Alarm Dialer

(1 or more VoIP Account, Paging Zones Optional)

**Description:** Trigger outbound SIP calls that will play audio to the phone answering the call.

**Example:** Amusement park notifying ride operators of severe weather to suspend activity.



### Required Settings:

- 1 or more registered SIP Account (VoIP Provider, PBX Extension, or 'Peer to Peer' mode).
- Automation rule to make an 'Announcement Call' when a trigger is pressed (or other configurable trigger event).
- 'Announcement Call' settings for 'Dialing Account' and a list of destinations.
- Audio file section for play back.

### Common Optional Settings:

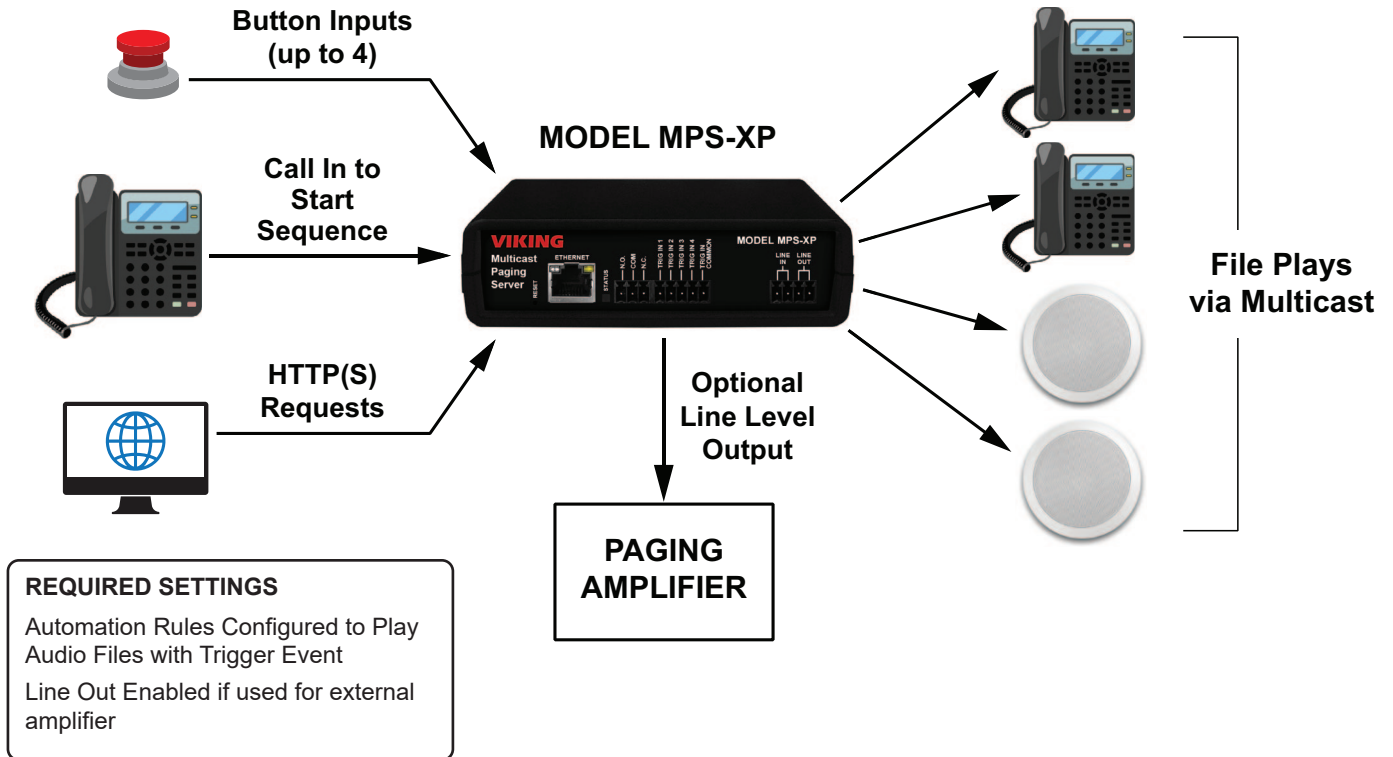
- Custom uploaded audio indicating the exact situation and any instructions.
- DTMF Acknowledgement Code.
- Timeout to stop calling to prevent endless loop.
- Access Code for each account (to ensure authorized personnel use only).

## G. Mass Notifications via Multicast

(VoIP Accounts optional, 1 or more Paging Zones)

**Description:** Trigger emergency notifications broadcasted via multicast, line level output, and even outbound SIP calls.

**Example:** Sever weather evacuation signaling, tornado sirens, etc. sent to an analog amplifier.



### Required Settings:

- Automation rules to play audio files when an event occurs (e.g. Contact Closure Input, HTTP request).

### Common Optional Settings:

- File Play Count.
- Automation event to stop playback.
- HTTP Webhook sent out to notify an external monitoring service.

## Warranty

### IF YOU HAVE A PROBLEM WITH A VIKING PRODUCT, CONTACT VIKING TECHNICAL SUPPORT: 715-386-8666

Our Technical Support Department is available for assistance Monday through Friday 8:00am to 5:00pm central time. So that we can give you better service, before you call please:

1. Know the model number, the serial number and what software version you have (see serial label).
2. Have the Product Manual in front of you.
3. It is best if you are on site.

### RETURNING PRODUCT FOR REPAIR

The following procedure is for equipment that needs repair:

1. Customer must contact Viking's Technical Support Department at 715-386-8666 to obtain a Return Authorization (RA) number. The customer MUST have a complete description of the problem, with all pertinent information regarding the defect, such as options set, conditions, symptoms, methods to duplicate problem, frequency of failure, etc.
2. Packing: Return equipment in original box or in proper packing so that damage will not occur while in transit. The original product boxes are not designed for shipping - an overpack box is required to prevent damage in transit. Static sensitive equipment such as a circuit board should be in an anti-static bag, sandwiched between foam and individually boxed. All equipment should be wrapped to avoid packing material lodging in or sticking to the equipment. Include ALL parts of the equipment. C.O.D. or freight collect shipments cannot be accepted. Ship cartons prepaid to:

**VIKING ELECTRONICS  
1531 INDUSTRIAL STREET  
HUDSON, WI 54016**

3. Return shipping address: Be sure to include your return shipping address inside the box. We cannot ship to a PO Box.
4. RA number on carton: In large printing, write the RA number on the outside of each carton being returned.

### RETURNING PRODUCT FOR EXCHANGE

The following procedure is for equipment that has failed out-of-box (**within 10 days of purchase**):

1. Customer must contact Viking's Technical Support at 715-386-8666 to determine possible causes for the problem. The customer MUST be able to step through recommended tests for diagnosis.
2. If the Technical Support Product Specialist determines that the equipment is defective based on the customer's input and troubleshooting, a Return Authorization (RA) number will be issued. This number is valid for fourteen (14) calendar days from the date of issue.
3. After obtaining the RA number, return the approved equipment to your distributor. Please reference the RA number on the paperwork being shipped back with the unit(s), and also the outside of the shipping box. The original product boxes are not designed for shipping - an overpack box is required to prevent damage in transit. Once your distributor receives the package, they will replace the product over the counter at no charge. The distributor will then return the product to Viking using the same RA number.
4. **The distributor will NOT exchange this product without first obtaining the RA number from you. If you haven't followed the steps listed in 1, 2 and 3, be aware that you will have to pay a restocking charge.**

### TWO YEAR LIMITED WARRANTY

Viking warrants its products to be free from defects in the workmanship or materials, under normal use and service, for a period of two years from the date of purchase from any authorized Viking distributor. If at any time during the warranty period, the product is deemed defective or malfunctions, return the product to Viking Electronics, Inc., 1531 Industrial Street, Hudson, WI., 54016. Customer must contact Viking's Technical Support Department at 715-386-8666 to obtain a Return Authorization (R.A.) number.

This warranty does not cover any damage to the product due to lightning, over voltage, under voltage, accident, misuse, abuse, negligence or any damage caused by use of the product by the purchaser or others. This warranty does not cover non-EWP products that have been exposed to wet or corrosive environments. This warranty does not cover stainless steel surfaces that have not been properly maintained.

**NO OTHER WARRANTIES.** VIKING MAKES NO WARRANTIES RELATING TO ITS PRODUCTS OTHER THAN AS DESCRIBED ABOVE AND DISCLAIMS ANY EXPRESS OR IMPLIED WARRANTIES OR MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE.

**EXCLUSION OF CONSEQUENTIAL DAMAGES.** VIKING SHALL NOT, UNDER ANY CIRCUMSTANCES, BE LIABLE TO PURCHASER, OR ANY OTHER PARTY, FOR CONSEQUENTIAL, INCIDENTAL, SPECIAL OR EXEMPLARY DAMAGES ARISING OUT OF OR RELATED TO THE SALE OR USE OF THE PRODUCT SOLD HEREUNDER.

**EXCLUSIVE REMEDY AND LIMITATION OF LIABILITY.** WHETHER IN AN ACTION BASED ON CONTRACT, TORT (INCLUDING NEGLIGENCE OR STRICT LIABILITY) OR ANY OTHER LEGAL THEORY, ANY LIABILITY OF VIKING SHALL BE LIMITED TO REPAIR OR REPLACEMENT OF THE PRODUCT, OR AT VIKING'S OPTION, REFUND OF THE PURCHASE PRICE AS THE EXCLUSIVE REMEDY AND ANY LIABILITY OF VIKING SHALL BE SO LIMITED.

IT IS EXPRESSLY UNDERSTOOD AND AGREED THAT EACH AND EVERY PROVISION OF THIS AGREEMENT WHICH PROVIDES FOR DISCLAIMER OF WARRANTIES, EXCLUSION OF CONSEQUENTIAL DAMAGES, AND EXCLUSIVE REMEDY AND LIMITATION OF LIABILITY, ARE SEVERABLE FROM ANY OTHER PROVISION AND EACH PROVISION IS A SEPARABLE AND INDEPENDENT ELEMENT OF RISK ALLOCATION AND IS INTENDED TO BE ENFORCED AS SUCH.

If trouble is experienced with the **PA-IP** page adapter, for repair or warranty information, please contact:

**Viking Electronics, Inc., 1531 Industrial Street, Hudson, WI 54016 715-386-8666**

### WHEN PROGRAMMING EMERGENCY NUMBERS AND (OR) MAKING TEST CALLS TO EMERGENCY NUMBERS:

Remain on the line and briefly explain to the dispatcher the reason for the call. Perform such tests in off-peak hours, such as early morning or late evenings.

### PART 15 LIMITATIONS

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 is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

### CANADA

This class A digital apparatus complies with Canadian ICES-003. Cet appareil numérique de la classe A est conforme à la norme NMB-003 du Canada.

**Product Support: 715-386-8666**

Due to the dynamic nature of the product design, the information contained in this document is subject to change without notice. Viking Electronics, and its affiliates and/or subsidiaries assume no responsibility for errors and omissions contained in this information. Revisions of this document or new editions of it may be issued to incorporate such changes.