



US DIGITAL DESIGNS

[stationalerting.com](http://stationalerting.com)

# *Shave Seconds, Even Minutes*

*with the Phoenix G2 Fire Station Alerting System*

*Helping you save  
lives and property  
with faster  
response times  
and healthier, more  
situationally aware  
first responders and  
dispatchers.*

As a public safety leader, you strive to provide the best and most cost-effective service to your community. And you know that when it comes to saving lives and property, seconds count. That's why communities of every size trust and rely on the Phoenix G2 Fire Station Alerting System to help shave seconds—and sometimes minutes—off of emergency response times.

Powered by US Digital Designs (USDD), the Phoenix G2 Fire Station Alerting System can help reduce dispatch call-processing times by instantaneously alerting the right units, in the right places, so they respond more efficiently and with better information.



## Table of Contents

System Architecture .....	4
System Benefits .....	5
Basic Station Design .....	6
Standard Station Design .....	7
Advanced Station Design .....	8-9

### For Dispatch Centers

Communications Gateway .....	10-11
Communications Gateway Dashboard .....	11
VoiceAlert .....	12
Gateway Audio Radio Interface .....	13

### For Fire Stations

ATX Station Controller .....	14-15
Station Controller Interface .....	14-15
FSA Mobile App .....	16
G2 Peripherals .....	17
Room Remote 2 .....	18
Message Signs .....	19
Message Remote 2 .....	19
Color Indicator Remote .....	20
OmniAlert Strobe Speaker .....	20
HDTV Remote .....	21
Illuminated Speaker .....	21
I/O Network .....	22
I/O Remote .....	22
Warranty and Service .....	23
About US Digital Designs .....	23



## Why Choose US Digital Designs

Two decades ago, our team of experienced mechanical, electrical and software engineers conceived, designed and manufactured the most effective, network-based, fire station alerting system in the industry for our own community. It was important to us that we made our system impeccable—to get it right every time.

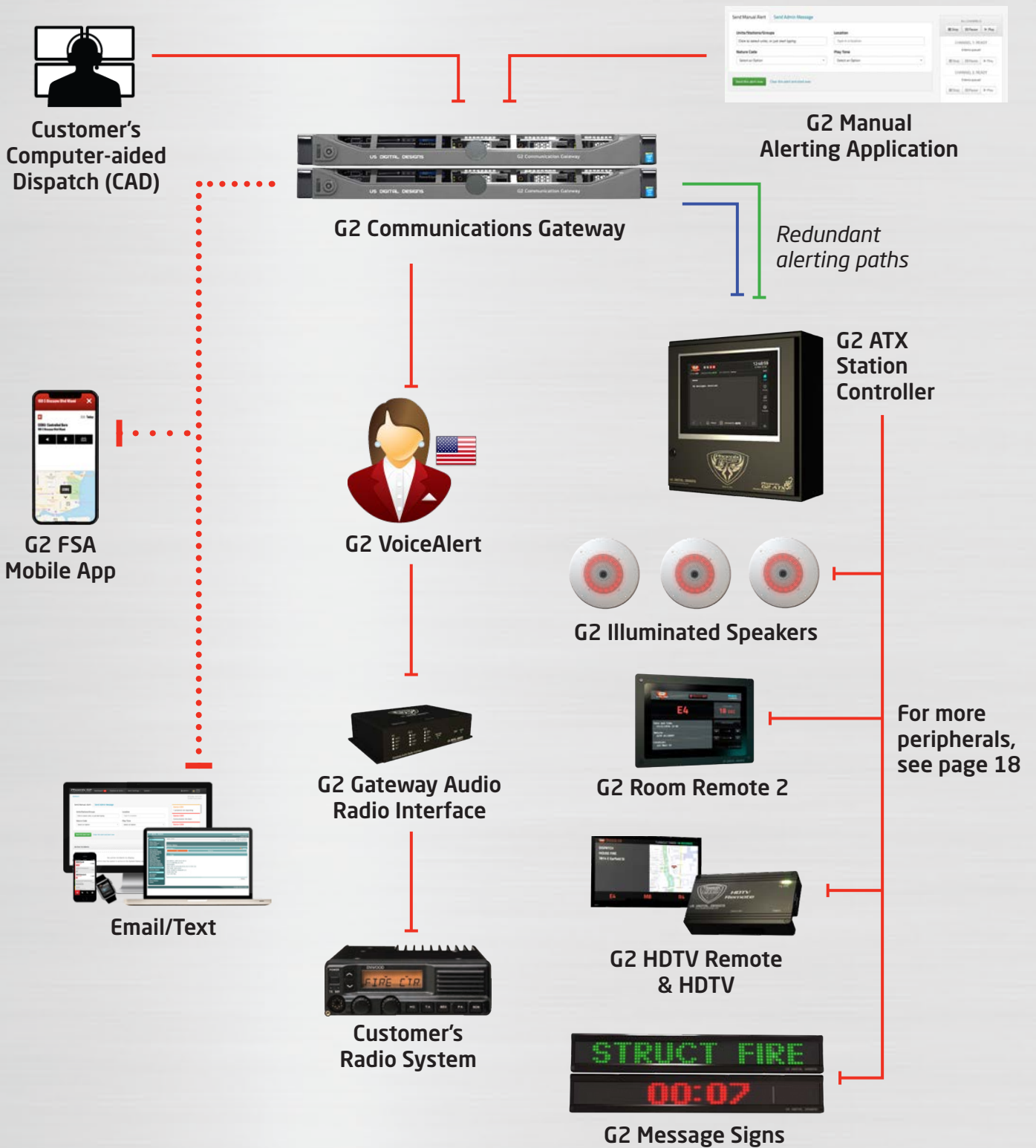
As you evaluate the best fire station alerting system for your community, we are happy to provide USDD's customer and competitor lists to assist you in your due-diligence process. We stake our reputation on delivering innovative, continuously upgraded, made-in-the-USA<sup>1</sup> technology, as well as friendly, personalized customer service.

Please give us a call at 1-877-551-USDD (8733) (USA), or +1-602-687-1730 (Intl.), or visit [stationalerting.com](http://stationalerting.com).

<sup>1</sup>'All' or 'virtually all' significant parts and processing are of U.S. origin.



# Phoenix G2 Fire Station Alerting System Architecture



# Automated Alerting Benefits

## For the community:

- **Peace of mind.** Ensures that emergency personnel will arrive more quickly and better informed, for a more optimized response.
- **Savings.** Offers higher-quality area fire protection, which can contribute to a lower community ISO Public Protection Class rating<sup>2</sup>, thereby helping decrease insurance rates.

## For dispatchers:

- **Speed.** Delivers automatic dispatch alerts simultaneously to one or multiple stations in less than a second, helping to reduce or eliminate dispatcher 'on-hold' time.
- **Wellness.** Dispatches alerts automatically, reducing dispatcher stress and workload, which frees them up to communicate with callers and manage the dispatch process more successfully.
- **High reliability.** Offers dispatchers a redundant system to communicate alerts if the CAD system fails.
- **Situational awareness.** Reviews the success of alerts as they are sent, and monitors the status of the system in real time.

## For public safety administrators and city officials:

- **Compliance.** Helps stations shave valuable seconds—even minutes—off of response times, helping meet or exceed NFPA 1710<sup>3</sup> recommendations.
- **Safety and redundancy.** Reduces the chance of missing emergency calls during grid or power failures, thanks to multiple pathway options and a backup power supply.
- **Communication.** Keeps personnel advised of ongoing incidents via USDD's industry-leading fire station alerting smartphone app, SMS text, pager and email alerts.

- **Value.** Reduces customer maintenance and management costs by integrating a reliable, proven system.

## For fire and medical personnel:

- **Situational awareness.** Increase mental preparedness with clear, consistent vocalization of the alert, which helps units respond more quickly and efficiently.
- **Wellness.** Reduces cardiac stress, anxiety, optical shock and sleep deprivation with ramped tones and zoned alerting, thereby notifying only required stations and/or individual units.

## For public safety IT professionals:

- **Reliability and compliance.** Maximizes system uptime through multiple NFPA 1221-compliant<sup>4</sup> redundant alerting pathways and manual alerting options, which can keep the system running during communication failures.
- **Network friendly.** Distributes quick, low-bandwidth alerting messages that are non-disruptive, enabling the continuous operation of legacy networks and other applications.
- **Remote configuration.** Enables IT support teams to remotely configure and deploy software upgrades from any web-enabled device, thereby reducing time and travel costs.
- **Control.** Offers agency-wide monitoring of all station peripheral equipment, and reports any failures to the host monitoring system and authorized system administrators via a smartphone app, email, text, etc.

<sup>2</sup> Insurance Services Office Public Protection Class rating.

<sup>3</sup> National Firefighter Protection Association 1710-Standard for the Organization and Deployment of Fire Suppression Operations, Emergency Medical Operations, and Special Operations to the Public by Career Fire Departments.

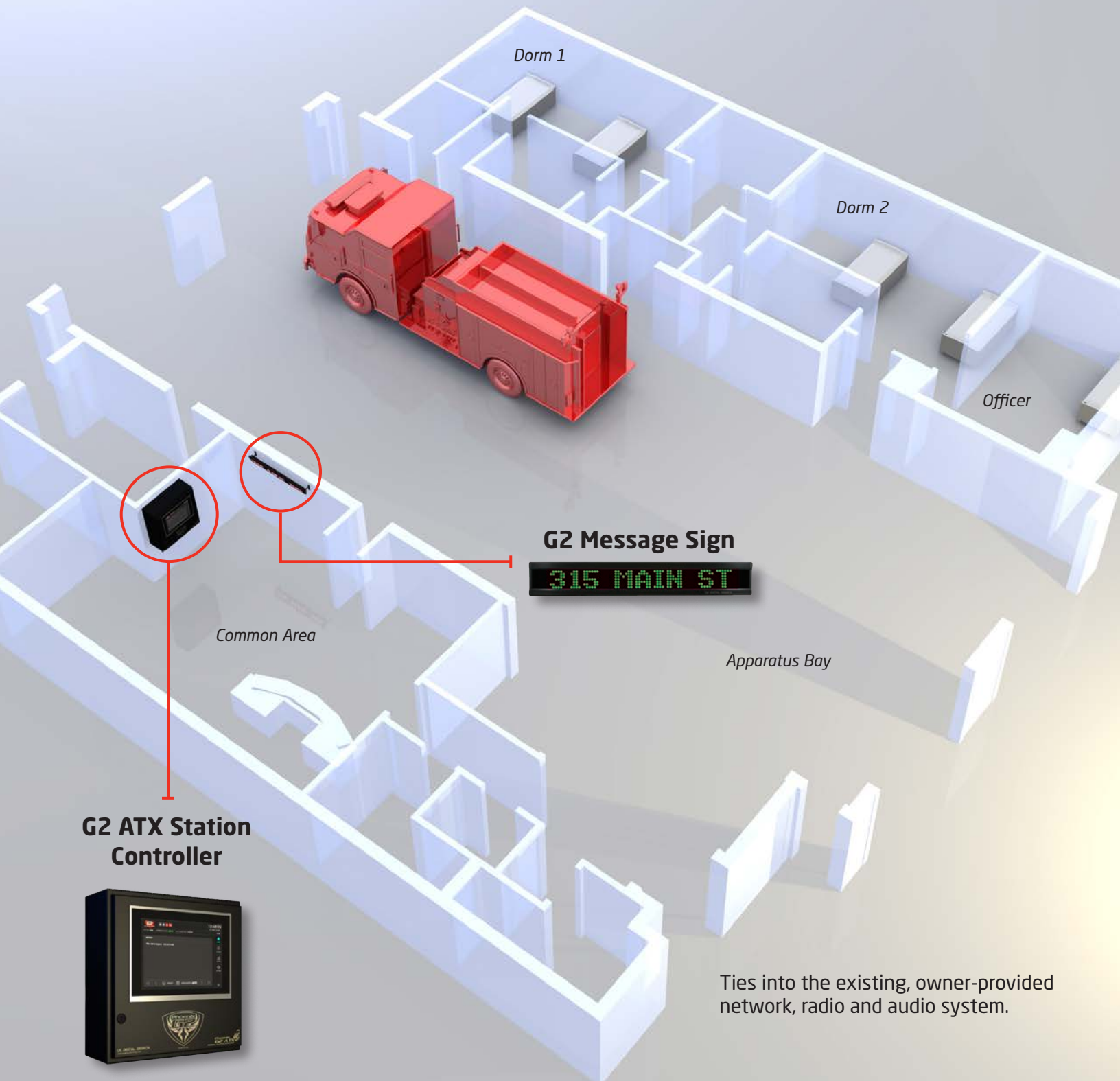
<sup>4</sup> NFPA Standard for the Installation, Maintenance, and Use of Emergency Services Communications Systems.



[stationalerting.com/benefits](https://stationalerting.com/benefits)

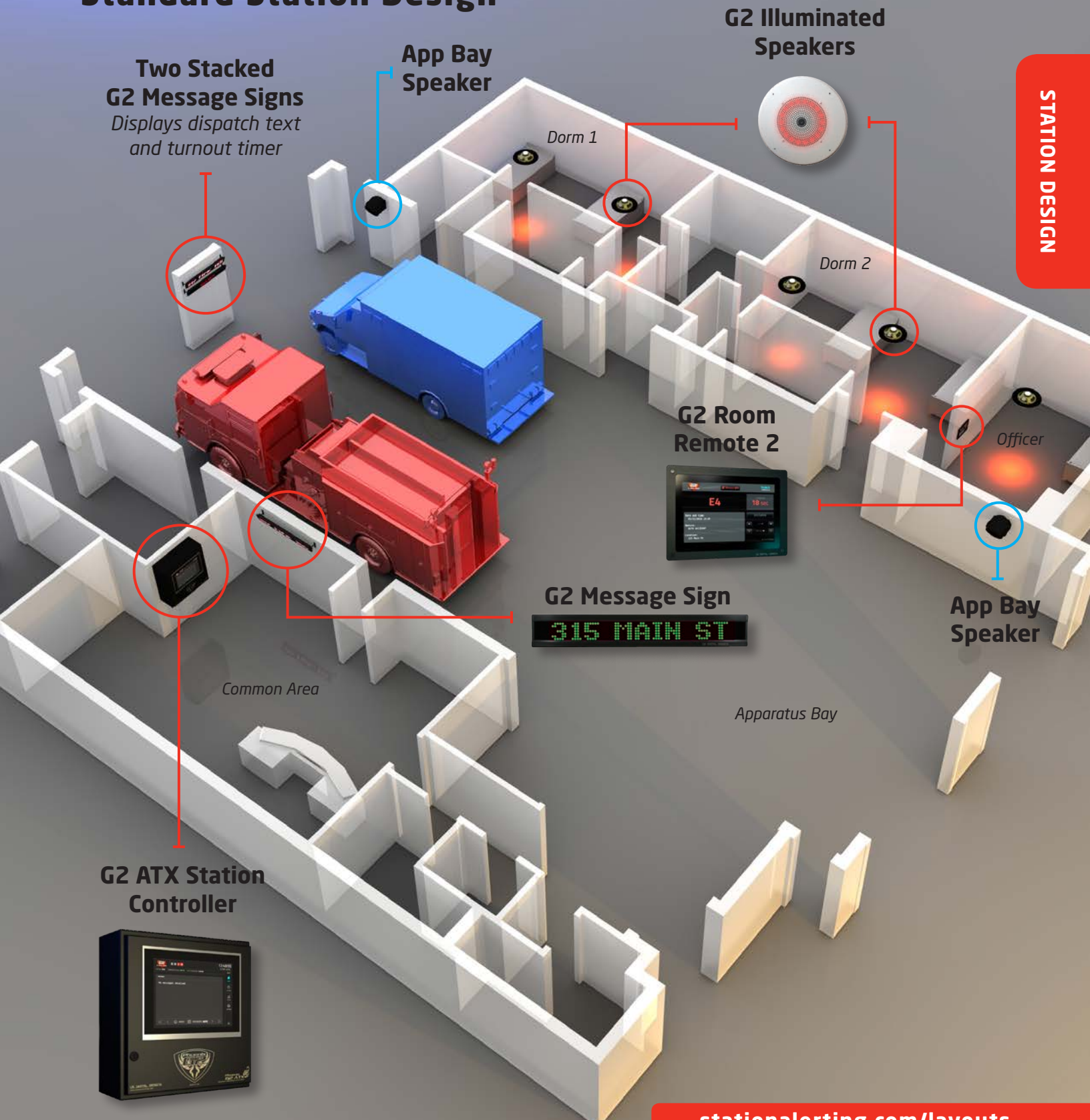


# Basic Station Design



Ties into the existing, owner-provided network, radio and audio system.

## Standard Station Design



[stationalerting.com/layouts](http://stationalerting.com/layouts)



# Advanced Station Design

G2 ATX Station Controller

G2 Message Sign

315 MAIN ST

G2 HDTV Remote and HDTV

Day Room

Kitchen

Gym

Lobby

Offices

Turnout

G2 Illuminated Speaker

Bathrooms

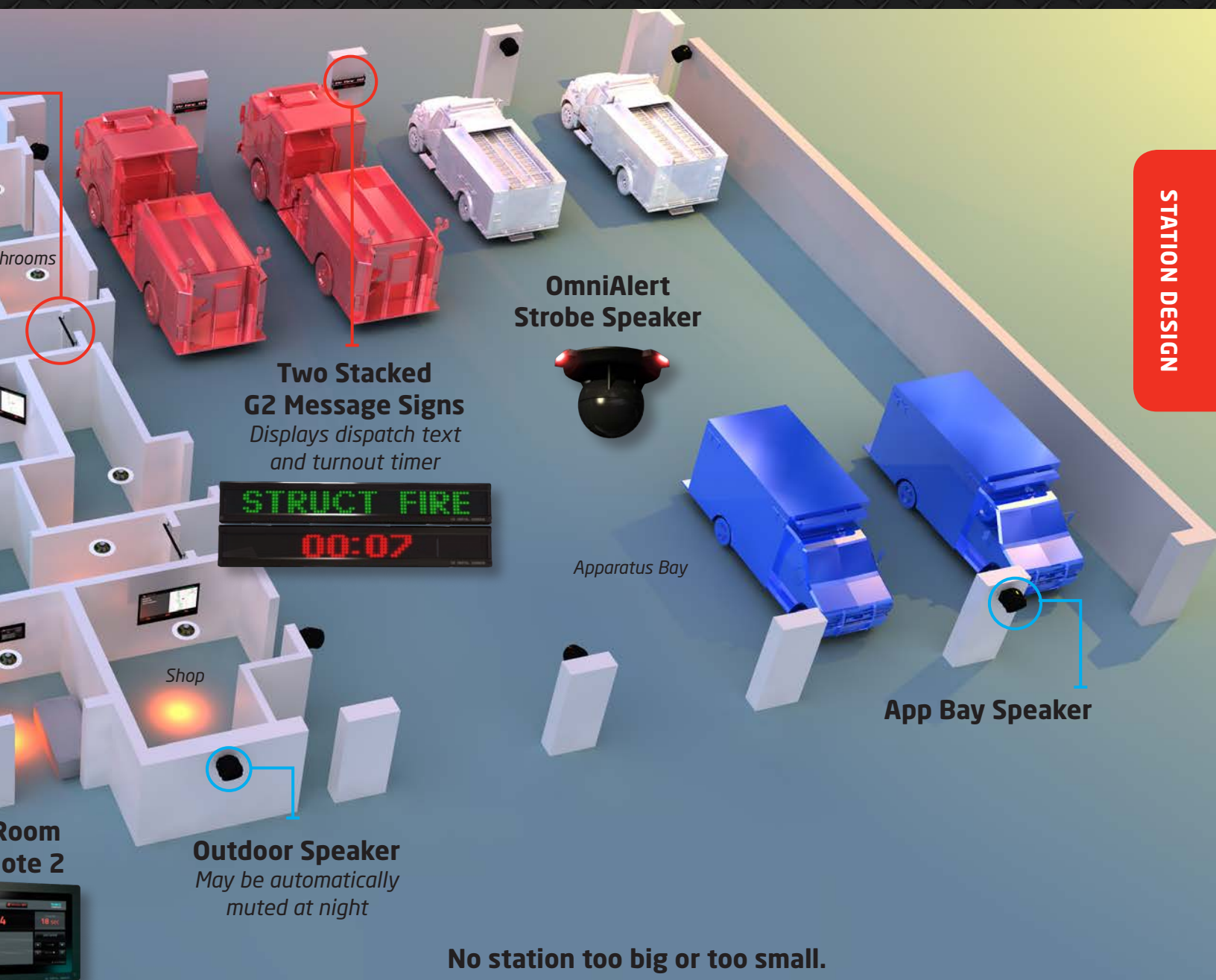
Dorms

Dorms

Dorms

G2 Remote





### No station too big or too small.

The Phoenix G2 system integrates crystal-clear text-to-speech technology and high-contrast message signs to help emergency personnel react promptly and efficiently to every call.

Fully automated dispatching awakens only on-call units with ramped tones and lighting, so non-dispatched crews remain undisturbed to receive necessary rest. Unquestionably, well-rested crews operate at peak effectiveness.

[stationalerting.com/layouts](https://stationalerting.com/layouts)

# G2 Communications Gateway

Serves as an interface between the Station Alerting System and the customer's CAD host, radio and communications systems.



The G2 Communications Gateway is the link between the CAD system at the dispatch center and the G2 ATX Station Controller hosted at each fire station.

The Gateway's design is efficient in every way, from simple network requirements and software updates to the "trainable" self-service pronunciation editor integrated into our G2 VoiceAlert software.

## Benefits

- **Connects with new** or existing voice and data systems.
- **Dispatches units** over the agency's radio system—without additional dispatcher action—using clear, automated VoiceAlert text-to-speech software.
- **Maintains** communications during path failures with redundant pathways.
- **Serves as an optional** disaster recovery system with replication.
- **Advises personnel** of ongoing incidents through smartphone, text, email and paging alerts.
- **Monitors the health** of every ATX Station Controller and G2 peripheral device within the department's network, and reports any failures to personnel via audible and visual alarms, per NFPA 1221 monitoring requirements.
- **Alerts stations** as well as reserve or volunteer personnel with two-tone or DTMF paging.
- **Eases IT support tasks** via remote or local browser-based configuration and automated backups.



## SPECIFICATIONS

- » Embedded secure Linux operating system
- » Redundant mirrored disk drives (RAID 1) and power supplies
- » Dual 19" 1U rack mount servers



## Communication links supported:

### IP Network



Commercial wireless, private wireless, wireline networks



Cradlepoint/  
LTE/FirstNet



VOIP/SIP



Data Radio



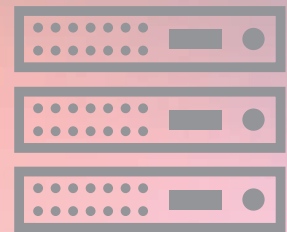
Two-tone/  
DTMF Paging/  
Trunk Call Alert



Email (SMTP)  
Paging

**At US Digital Designs,** we work with leading technology partners to provide our fire station customers with the right turn-key solutions to meet their needs.

Visit our current CAD partners at: [stationalerting.com/cad-](http://stationalerting.com/cad-)

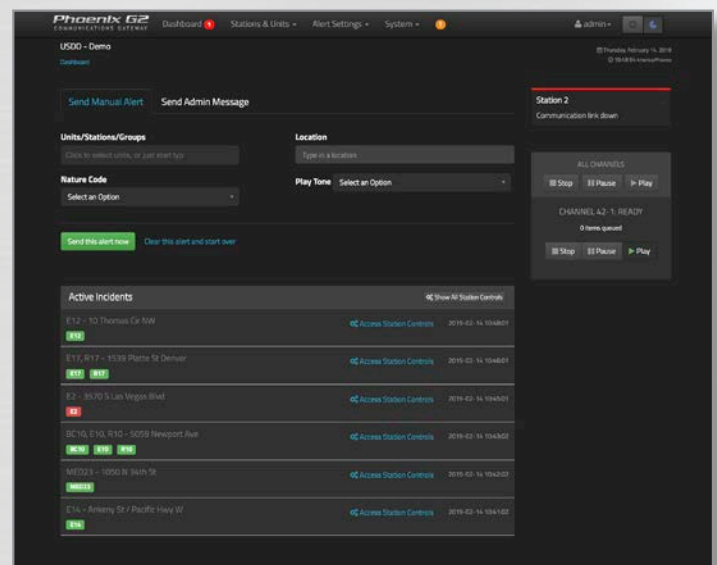


FOR DISPATCH  
CENTERS

## Communications Gateway Dashboard

Alerts dispatchers to communication failures and keeps them aware of system alert progress, helping departments meet NFPA 1221.

- **Manual alerting** for CAD backup and Administrative alerts.
- **Visual and audible alarms.**
- **Automated announcement** status and control.
- **Recent alert** and system status.



[stationalerting.com/gateway](http://stationalerting.com/gateway)

# G2 VoiceAlert

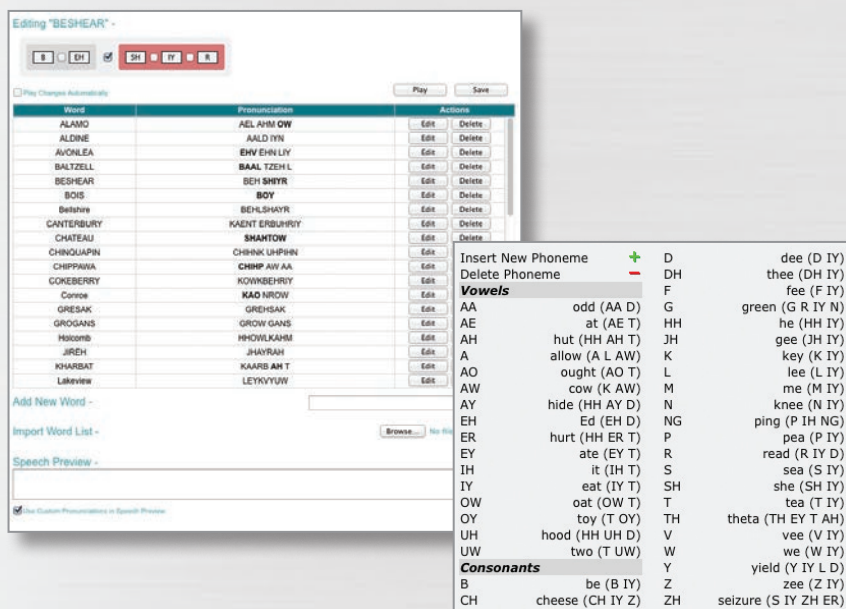
**Makes automated dispatch announcements, enabling dispatchers to focus on resource management and situational awareness.**

G2 VoiceAlert provides automated text-to-speech voice dispatching alerts using a calm, clear voice to the fire stations and through the voice radio system. The speech is sent to multiple stations simultaneously, relieving dispatchers of the time-consuming task of speaking the dispatch announcement. This reduces dispatcher workload and stress during busy periods, enabling them to perform other time-critical tasks, such as handling tactical traffic or processing the next call for service.

Included with VoiceAlert is a user-friendly editing tool, VoiceEditor, that lets you update pronunciations (e.g., street names and other words) for all system alerts.

## Benefits

- **Reduces human error** and automatically dispatches crews with a clear, accent-neutral voice.
- **Adjusts to dispatch workload** by truncating the dispatch announcement during busy periods to speed up radio alerting.
- **Enables end-users** to easily edit and customize street names and other terms to match local pronunciations.



Listen to VoiceAlert samples at [stationalerting.com/voicealert](http://stationalerting.com/voicealert)



## Gateway Audio Radio Interface

**Automatically transmits VoiceAlert announcements across radio systems.**

The Gateway Audio Radio Interface can play alert tones, VoiceAlert speech, and tone paging over the radio system. It supports two, simultaneous, independent radio channels, each with different announcement formats and queueing. It also links the Communications Gateways to radio channels or talkgroups for automated dispatch announcements. Additional Gateway Radio Interfaces can be used for adding more channels.



Gateway Audio Radio Interface



Console Radio



Mobile Radio



Radio System

FOR DISPATCH  
CENTERS

# G2 ATX Station Controller

Powers and controls in-station visual, audio and lighting alerts.



## Station Controller Interface

Securely monitor, configure or update any station from a web-based browser.

The Station Controller Interface is a web-based application that helps you configure and manage fire station alerting from any location, at any time. It enables approved personnel to connect to the ATX Station Controller via a local or wide-area network.



The G2 ATX Station Controller processes incoming alerts for any combination of room zones with individual lighting, messaging, and volume control in each zone.

The ATX computer features a secure, embedded operating system for superior reliability, and a touchscreen display provides basic configuration and optional unit zone assignments.

Phoenix G2 peripheral devices in the station provide enhanced lighting, visual messaging, and mapping information to personnel. Devices can be integrated easily via a simple change to the web configuration.

### Alerting Mode

- **Provides ramped, heart-saver** alert tones.
- **12" touchscreen** allows users to confirm proper operation of the system and review dispatches for tracking and reporting purposes.

- **Permits approved personnel** to optionally control or reassign zoned alerts to units via an on-screen touch selection.
- **Has built-in single-tone**, two-tone and DTMF paging decoding
- **Offers local and remote system** monitoring and logging.
- **Offers remote configuration** and software updates.

### Network and Peripherals

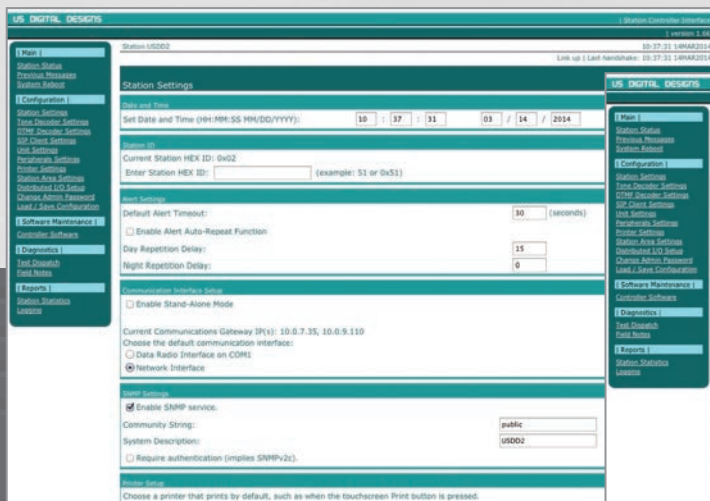
- **Reduces alerting times** with IP-based alerts over a high-speed network, and notifies multiple stations in less than a second.
- **Enables doorbells** and other device inputs and outputs to control lighting, appliances, doors and gates via the G2 I/O Network.
- **Offers local- and remote-system** monitoring and logging, making it easy to troubleshoot and reconfigure settings, such as volume and unit-to-zone assignments.
- **Connects to rip-and-run** printers.

## SPECIFICATIONS

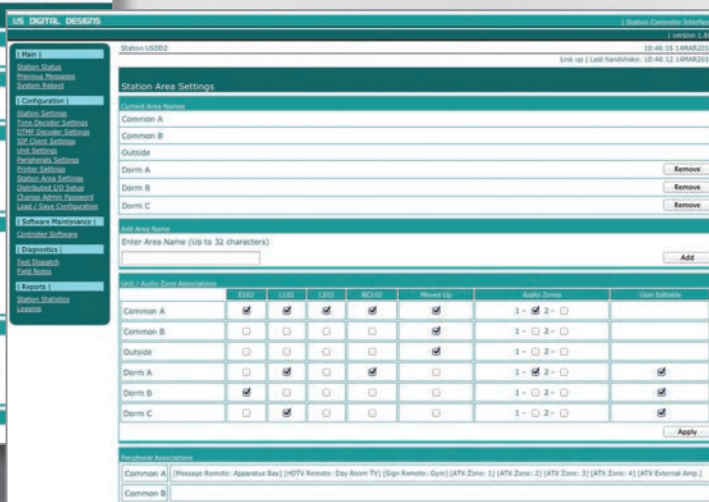
- » Eight Power over Ethernet (PoE) ports for G2 peripherals
- » Audio inputs for dispatch radio, telephone intercom and auxiliary
- » SIP VoIP-ready
- » Three dry-contact inputs
- » Four relay outputs
- » Four 20-watt amplifier zones with Illuminated Speaker support
- » External amplifier connection to existing audio systems

### Remote Display

- **Locate Station Controller** remotely and still have full control.



Main Settings



ATX Station Controller Area Settings

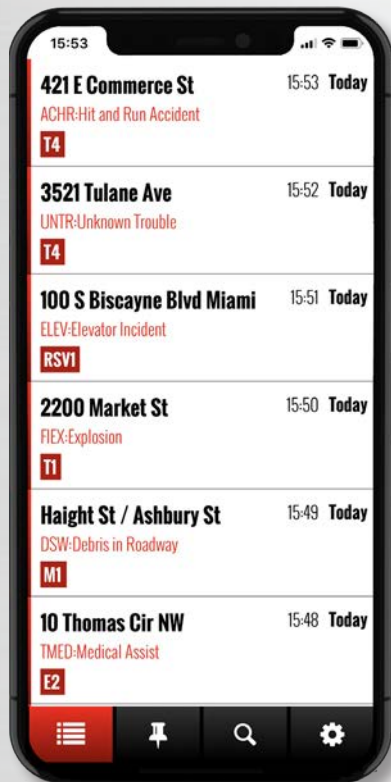
# FSA Mobile App

## Receive station alerts via your smart device.

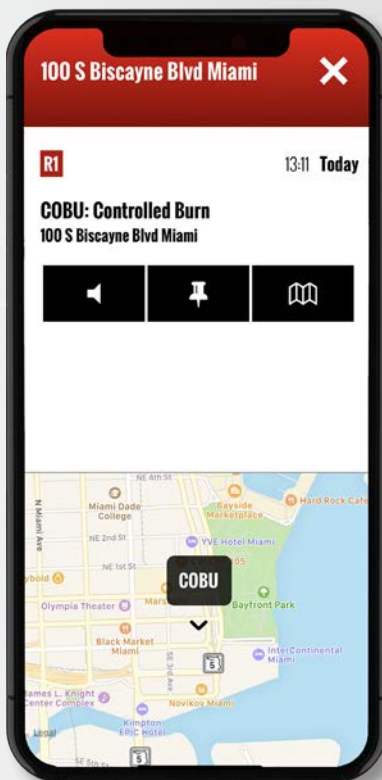
- **Push notifications** to Dispatchers, Admin Messages and Support Notifications
- **Receive notifications** by Unit, Station, or Nature Code.
- **Control monitor alerts** individually.
- **View incident location** using USDD's mapping data or your smart-phone's built-in mapping application.
- **Generate travel route** using smart-phone's built-in mapping application.
- **Add customer GIS layers** to USDD mapping data.
- **Save notifications** for future reference and search for previous notifications.



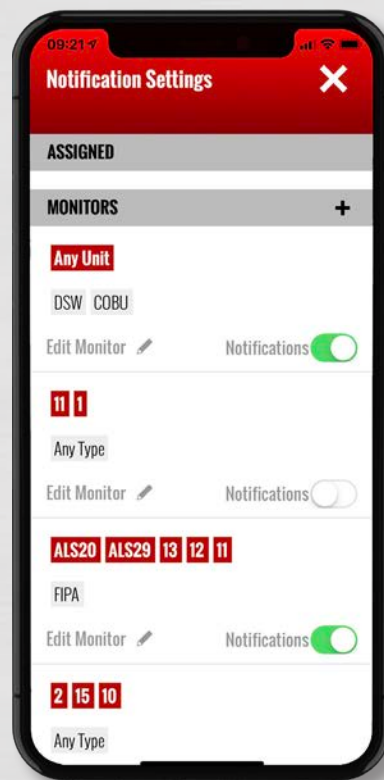
Click on an alert to view more information.



View the location using mapping software.



Configure your smart device for proper notifications.



[stationalerting.com/app](http://stationalerting.com/app)



# G2 Peripherals



**Tailor your Phoenix G2 system to meet the needs of each station with optional signage, speakers and amplifier zones.**

The Phoenix G2 Fire Station Alerting System is comprised of a central ATX Station Controller and a network of alerting peripherals that alert first responders throughout a fire station via audio, display, lighting and auxiliary input/output (I/O) components.

Message signs can display CAD information, including the location and type of the incident, the upper and lower cross streets to the incident, map page and assigned radio channel. They can also display a turnout timer.

## **Each G2 Peripheral:**

- **Connects to the centralized** ATX Station Controller via a single CAT-5/6 cable for audio and Power over Ethernet (PoE).
- **Requires battery backup** and AC power at only one location.
- **Responds to many combinations** of alert conditions and station layouts, and is individually configurable by the ATX Station Controller.
- **Is enclosed with black anodized** aluminum, which increases corrosion- and wear-resistance.
- **Enables each station** to phase in alerting system upgrades and additions at any time with easy 'plug and play' installation.

## **G2 Peripherals Include:**

- Message Sign
- Message Remote 2
- Room Remote 2
- HDTV Remote
- Illuminated Speaker
- Color Indicator Remote
- OmniAlert Strobe Speaker
- Strobe Light
- I/O Remote

## G2 Room Remote 2

**Target specific units or rooms with zoned alerting.**

The G2 Room Remote 2 is the all-in-one peripheral that simultaneously shows dispatched units, incident information and turnout time. It features a 10.1-inch, full-color, high-resolution LCD multi-touch display for easily adjusting settings, such as units to be alerted, radio monitoring, and speaker volume. Automatic backlight control dims the display when an alert is not active.

### SPECIFICATIONS

- » One 15-watt audio amplifier
- » One Illuminated Speaker output
- » One dry-contact input
- » One relay output
- » Surface or flush mount



## Improving Health and Wellness

***Did you know? Heart attacks account for half of firefighter deaths.***

*When a traditional station alarm sounds, a firefighter's heart rate can soar to dangerous levels for up to an hour. Studies show that a heart rate increases an astonishing 60 to 70 beats per minute within 15 seconds after an alarm sounds, thereby doubling the resting heart rate.*

*Over the course of a firefighter's career, the cumulative effects of stress produced by traditional station-alerting systems have been proven to cause permanent cardiac damage, and have been linked to multiple line-of-duty firefighter deaths, permanent hearing loss and physical disability.*

*Studies have shown ramped tones and lighting reduce stress on fire fighters.*



## G2 Message Sign

**Displays a single-line scrolling alert message.**

The G2 Message Sign is the quickest way for responders to understand an alert. It's easy to install: just plug in the PoE cable and mount it over doorways or in hallways, kitchens, offices and app bays. Additionally, the Message Sign can be configured to display alerted units, dispatch information, turnout timer, or unit status (with a capable CAD system). Available in three sizes: Mini, Standard and Extended.



Mini Message Sign with turnout timer.



Standard Message Sign shows incident information and a turnout timer or unit number.



Extended Message Sign show a turnout timer along with alerted units and incident information.

## G2 Message Remote 2

**Powers two zones of audio amplifiers and LED lighting control.**

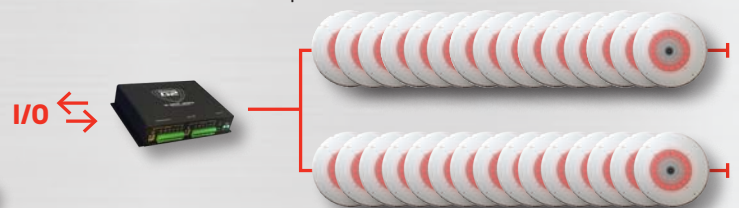
The most flexible peripheral available, the G2 Message Remote 2 contains two independent audio amplifiers with LED lighting control, and can be used to add additional speaker zones to a station.

### SPECIFICATIONS

- » Two 15-watt audio amplifiers
- » Channels with speaker outputs
- » Two dry-contact inputs
- » Two relay outputs



Two zones of G2 Illuminated Speakers



One zone with the G2 OmniAlert Strobe Speaker



PERIPHERALS

[stationalerting.com/peripherals](http://stationalerting.com/peripherals)

## G2 Color Indicator Remote

**Offers an alternative alerting method, featuring high-intensity LED lights.**

The G2 Color Indicator Remote is instantly recognizable by station personnel, providing immediate dispatch information to the observer. Easily visible in sunlit rooms, this LED light is fully programmable by the ATX Station Controller.

### SPECIFICATIONS

- » One dry-contact input
- » One relay output
- » 10,000+-hours LED lifespan
- » Surface mount



## G2 OmniAlert Speaker Strobe

**Alerts staff in open areas with high ambient noise levels.**

The G2 OmniAlert Strobe Speaker is a dual-purpose, visual and audible fire station alerting device. It's particularly effective in large, open areas with high ambient noise, as well as in acoustically challenging environments (e.g., apparatus bays and shops). Optimized for the spoken word, it broadcasts high-powered and clear voice announcements. Its 360-degree horizontal dispersion allows for greater coverage and installation flexibility.

Three built-in, high-intensity LED strobe lights simultaneously provide rotating bursts of light to visually alert your personnel, even if the local ambient noise conditions prohibit audible alerts.



### SPECIFICATIONS

- » 48vdc Strobe Light Input
- » Surface mount



*The G2 Strobe is also available.*



## G2 HDTV Remote

**Displays dispatch information, turnout timer and incident location map on a HDTV display.**

The G2 HDTV Remote displays alerted units, dispatch information, turnout timer, and (optional) incident location map on a high-definition television (HDTV), providing another means of visual alerting.

In Dispatch Centers and administrative areas, the HDTV Remote can be used to display a list of recent alerts with individual station success indicators, (optional) incident map locations, system and radio channel status, and Station Controller alarms.



## G2 Illuminated Speaker

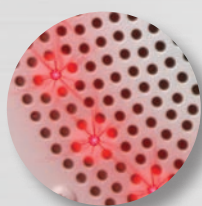
**Awakens first responders with soft-start LED lighting and audio alerts.**

The G2 Illuminated Speaker offers soft-start, ramped night lighting at the time of dispatch. Each speaker is fitted with high-intensity red LEDs, which offer exceptional luminosity without causing light blindness due to dark-to-bright transition.

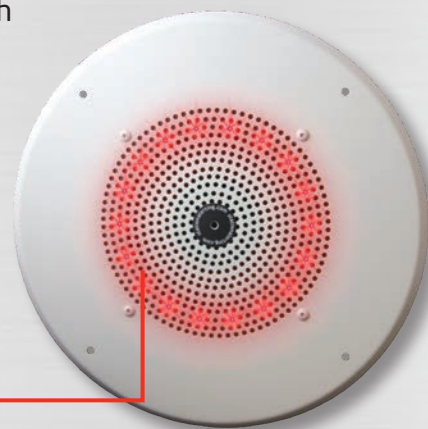
The Illuminated Speaker receives power from the ATX Station Controller, Message Remote 2 or Room Remote 2. Recommended installation locations include dorm rooms, hallways and common areas.

### SPECIFICATIONS

- » 10,000-hour LED life span
- » Surface mount or ceiling mount



High-intensity red LED lights



PERIPHERALS

[stationalerting.com/peripherals](http://stationalerting.com/peripherals)

## G2 I/O Network

### Controls station devices based on specific events or time of day.

The G2 I/O (input/output) Network enables the Station Controller to interface with external devices (e.g., station doorbells, push buttons, lighting, appliances, doors and gates) and can reset alerts, trigger walk-in alarms and monitor alarm devices. Based on specific events or time of day, the programmable Station Controller software can turn on/off outdoor speakers and lights. Additionally, dispatchers may access the I/O Network through the Communications Gateway to remotely control connected devices (e.g., door openers) as well as view station alarms.



Name	Input Type	Input	Output	Action	Edit	Remove
Front Door	Aux Input	Dorm 2 (Input 2)	Causes	Plays Tone "Doorbell: Four Chimes Down" With Text "Front Door"	Edit	Remove
Clear Alerts App Bay	Aux Input	Apparatus Bay (Input 1)	Causes	Clears Active Alerts	Edit	Remove
Back Door	Aux Input	Day Room (Input 1)	Causes	Plays Tone "Doorbell: One Chime" Looping With Text And Speech "Back Door"	Edit	Remove
Walk In	Aux Input	Dorm 2 (Input 1)	Causes	Triggers Station-Wide Alert "Walk In", Tone 22 When No Alerts Active	Edit	Remove
Strobe	All Station Alerts		Opens Output Indefinitely	On Device: Day Room (Output: 1)	Edit	Remove
Strobe ON	Aux Input	Day Room (Input 2)	Closes Output Indefinitely	On Device: Day Room (Output: 1)	Edit	Remove
Communications Link Down	Communications Link Down		Causes	Plays Tone "Doorbell: One Chime" With Text And Speech "Link Down"	Edit	Remove
Backup Alert	Aux Input	ATX Mainboard (Input 1)	Causes	Triggers Station-Wide Alert "Backup Alert", Tone 2 Always	Edit	Remove
Fire Alarm	Aux Input	IO Remote 1 (Input 3)	Causes	Plays Tone "Proximity Warning" Looping With Text "Fire Alarm"	Edit	Remove
L102 COLOR INDICATOR	Unit-Based	L102	Turns On While Input Active	Green Color Indicators	Edit	Remove
TRAINING ROOM 1 30 MIN MUTE	Aux Input	Apparatus Bay (Input 1)	Closes Output For 3600 Seconds	On Device: Apparatus Bay (Output: 1)	Edit	Remove
Unit Indicator F	Unit-Based	E102	Turns On While Input Active	Red Color Indicators	Edit	Remove
Unit Indicator L	Unit-Based	L102	Turns On While Input Active	Magenta Color Indicators	Edit	Remove

## G2 I/O Remote

### Enables the monitoring and signaling of gates, doors, etc.

The G2 I/O Remote interfaces between the ATX Station Controller and field devices. The inputs (I) can be configured to monitor switches such as doorbells, walk-in alert triggers and door open sensors. The outputs (O) can be used to signal automatic doors and gates, activate strobe lights and more. The I/O Remote may be installed up to 90 meters (295 feet) from the ATX Station Controller.

#### SPECIFICATIONS

- » Eight dry-contact inputs
- » Eight Form-A relay outputs





## About US Digital Designs

At USDD, we design, develop and customize the mission-critical Phoenix G2 Fire Station Alerting System, which plays a major role in helping save lives and reducing property losses in emergency situations. We employ sustainable manufacturing techniques in our environmentally-friendly solar-powered headquarters. Our electronic manufacturing processes are RoHS compliant<sup>1</sup>, reducing the output of lead and other hazardous substances into the environment.

- **It works.** Long before any part is manufactured, we assemble and test the product in a virtual environment. We understand the need to get it right the first time, saving you from unnecessary frustration.
- **Improves response times.** Visual alerting is the quickest way to improve response times. And by combining visual and audio alerting, you'll also increase situational awareness and readiness.
- **One size doesn't fit all.** Having worked with thousands of fire stations, we find that each location has its own unique subculture. That's why our designers will produce a custom rendering of each station's floor plan to help you visualize how the Phoenix G2 system will meet your unique needs.
- **You dream it, we'll build it.** If you envision refinement or improvements to your existing system or a completely new product, talk to us. Each part of the Phoenix G2 system was developed based on the needs and feedback of first responders around the world. We will help turn your vision into reality.
- **Don't take it from us.** Ask around. Call any of our customers and you'll find that no alerting company has a better reputation for providing a more effective solution, better value or better service. Also, view our video testimonials and see Phoenix G2's impact on communities at [stationalerting.com/impact](http://stationalerting.com/impact).

<sup>1</sup> Restriction of Hazardous Substances. RoHS is also known as Directive 2002/95/EC.



## Get Started

1. Take our quick survey at [stationalerting.com/start](http://stationalerting.com/start)
2. Email your fire station floor plans to [sales@usdd.com](mailto:sales@usdd.com)
3. Receive a quick fire station alerting system design and budgetary assessment

## Support

The Phoenix G2 comes with built-in, upgradeable features and capabilities; multi-year, 24/7 proven reliability; easy, hassle-free installation; web-based remote configuration and control; and almost no required maintenance. Telephone and email support are always available during normal business hours (Monday to Friday, 8 a.m. to 5 p.m., MST). Recurring annual service and support agreements are available, allowing you to continue the same worry-free operation and maintenance of all of your installed station alerting systems.

## Warranty

At USDD, we warrant our products to be free from defects in material and workmanship during the one-year warranty period. If a product proves to be defective in material or workmanship within one year from date of purchase, we will, at our sole option, repair or replace the product. Replacement products or parts may include re-manufactured or refurbished parts or components. The replacement unit will be covered by the balance of the time remaining on your original limited warranty.



Pricing Protection with National Procurement Contract



**US DIGITAL DESIGNS**

**stationalerting.com**

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