FEDERAL SIGNAL

WARNING & MASS NOTIFICATION

PRODUCT GUIDE

- Industrial Public Address

- Outdoor Warning Sirens

- Indoor Notification

- Messaging Solutions

TOTAL SOLUTIONS FOR CRITICAL COMMUNICATION

TOTAL SOLUTIONS

to serve and protect Federal Signal offers community leaders a portfolio of network systems to protect people, property and the environment — every day.

Campus Alerting

Cloud-based Citizen Alerting and Notification

Community and County-wide Outdoor Sirens

Military Giant Voice Notification Systems

Nuclear Power Plant Warning Systems

Industrial Plant-wide Alerting, Notification and Evacuation System

Commercial Building & Security Evacuation Systems

Warning & Mass Notification Systems

FEDERAL SIGNAL

▶ Commander® On-Premises

Siren Control and Messaging System

The Commander siren control system offers both secure activation and status monitoring of any alert and notification system. From Giant Voice to Mechanical and Intelligent siren systems, Commander is designed to control, monitor, and link your warning system.

Federal Signal Commander continues to evolve to meet the challenging demands of customers throughout the world to provide a system unmatched in its features and ease of use. Commander offers Emergency Managers and system operators complete, secure activation and status monitoring of any siren system. From siren activation to in-building alerting, this system is designed to provide your facility with complete alert and notification capability.

From controlling 1 siren to 511, the system can expand to accommodate your changing needs. Federal Commander provides an easy to use activation screen. Administrators can program 50 Hotkeys to activate all sirens, zones, or individual sirens. Each Hotkey can be programmed to include a text, email, or voice message. A single Hotkey can activate sirens and send informational messages simultaneously.

Categorize hotkeys to activate as all sirens, zones, or individual sirens.

FEATURES

- Control of municipal, county and state siren systems
- Control of Giant Voice systems
- Control of Intelligent Systems
- PC or Server based system
- Controls up to 511 sirens
- Support for analog, digital (P25/Tetra), IP, cellular, satellite and landline communications

- Modbus compatible
- App and web based control using optional CommanderOne
- Secure communications with 128 & AES 256 encryption and time-based encryption
- Custom user interface for your specific application

Commander can be integrated as a fully compliant APCO Project 25 (P25) two-way communications outdoor/indoor warning system.

Commander has integrated networking and messaging capabilities.
- Networking allows the system to operate radio systems and IP systems simultaneously.
- Messaging provides personalized alerts to devices such as cell phone, computer, pager, handheld radio, etc. Messaging provides additional information to key personnel or to citizens.

Activation of sirens based on polygons from National Weather Service is provided using the CommanderOne web based control. CommanderOne integrates automatically with your local siren activation system to provide "anywhere" activation, control and monitoring.

Siren Controllers are available for both electronic sirens, speakers, and electromechanical sirens. These controllers come equipped with over-the-air programmability via secure digital technology.

Commander® On-Premise Siren Control and Messaging System (SFCD)

Ethernet
Paging Networks
Wireless Broadband
Satellite
Cellular
Conventional P25 Radio
Fiber Optics
CommanderOne
Giant Voice
ModBus
Intelligent Systems
Municipal Sirens

SPECIFICATIONS

RTU Capacity: Up to 511 siren RTU's

Communications: Analog, Digital, P25 radio systems Cellular, satellite, IP networks, Landline communications

Security: Time based encryption,128 bit/256 bit AES encryption. User, password and role based security.

Hardware Activation: SS2000+ local activation point. Siren activations using Intelligent System Informers

RTU types: Mechanical, Ultravoice giant voice systems, and Intelligent Systems using Informer product line

Giant Voice: Live PA, Text-to-speech and WAV file broadcasts

Intelligent Systems: Informer product line Desk / Wall / Rack / Outdoor Systems Two-way Intercom and recording Custom and specialized alert and notification systems

Zoning: Unlimited zone creation

System: Alarm logging and reporting of siren activation and monitoring using customized maps

Language: English default with optional multi-language support

System Backup: Create and restore system back up files

HOW TO ORDER

Description	Part Number
Windows application software:	
for up to 10 sites	**SFCD10**
for up to 25 sites	**SFCD25**
for up to 255 sites	**SFCD255**
for up to 511 sites	**SFCD512**

OPTIONAL ACCESSORIES

Description	Part Number
Warranty, up to 10 sites	**SFCD-W10**
Warranty, up to 25 sites	**SFCD-W25**
Warranty, up to 255 sites	**SFCD-W255**
Warranty, up to 511 sites	**SFCD-W511**
Upgrade, to 25 sites	**SFCDUPI**
Upgrade, to 255 sites	**SFCDUPII**
Upgrade, to 511 sites	**SFCDUPIII**
TCP/ IP client software (5 seats)	**SFCDCLNT**
Client software extended one-year warranty	**SFCDCLNT-W**
Modem	**MODEM-MSK**
Server with Windows®, 22" flat screen monitor	**X-PCS-1**
120V Uninterruptible Power Supply	**X-UPS**
Desktop Controller	**SS2000+**

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▶ CommanderOne®

Cloud-Based Control for Warning Systems

CommanderOne® is the latest innovation that allows you to connect with your most critical asset anytime, anyplace. The CommanderOne cloud-based platform enables you to monitor and control your warning sirens from any desktop or mobile device. It offers real-time data with actionable insights, enabling you to make important decisions quickly.

We understand that replacing a legacy infrastructure with new smart devices may be cost prohibitive, therefore, CommanderOne leverages your existing Federal Signal warning system and makes it smarter. With its simple dashboard and intuitive interface, CommanderOne is designed to make your mission successful in critical moments. CommanderOne is easily integrated with your existing Commander On-premise system. CommanderOne communicates with your system through a secure network communications interface. As changes occur with the On-Premise system those changes are mirrored on the cloud-based control system. Siren activation and monitoring can occur from anywhere from virtually any device. The map interface provides status indications with manual activations or user-defined polygons. Automatic or prompted weather based polygons siren activation is available for all CommanderOne users.

User Experience – The Intuitive Interface is simple to set up, always up-to-date, and connects to your on-premise Commander control system.

Map-based Activation – Location of sirens and their status is critical. Use the geo-intelligent interface to see an overview of your system.

Desktop Freedom – Access your system from any computer connected to the internet.

Mobile – A user-friendly app for iOS and Android. It has a web-based console with a mobile responsive GUI.

Security – We understand that security is your top priority. CommanderOne utilizes IPSEC over SSL with a multi-layered authentication mechanism.

Weather Activation – All CommanderOne systems will have access to activate sirens based on weather-based polygons.

Auto-Sync Hotkeys – No need to keep multiple locations synchronized, your Hotkey activation settings are automatically created in CommanderOne.

Messaging – Keep in contact with employees and first responders via email, SMS, and voice. Create on the fly messages or templates to streamline your workflow.

Scalability – CommanderOne platform is scalable from a few devices to hundreds of devices. It leverages a global network of data centers to maintain availability while securing your data.

CommanderOne® Cloud-Based Control for Your Warning Systems

Desktop and Mobile

Desktop

The dashboard is designed to give you the status of the system in seconds. It utilizes Bing Maps, and its responsive design enables colored icons to reflect the status of each site and control point. Each status monitor is color-coded to quickly gain insight about your system.

Mobile

Native iOS and Android apps let you control and monitor your system from virtually anywhere. It shows all the alarms by a single click. Just like other apps, the system can be refreshed with a slide of a finger.
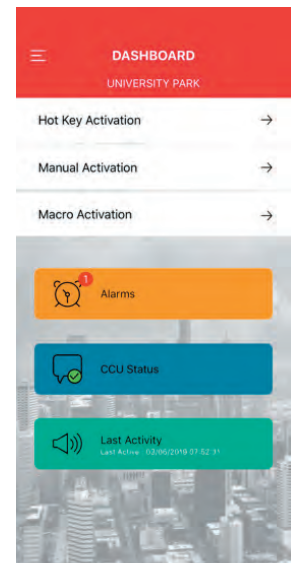
Security

CommanderOne is secure by design. We use One Time Passwords, Token-Based Security and industry standard SSL to secure your communications.

Our new Multi-User Authentication takes security to the next level by allowing you to configure Hotkeys, Macros or Functions with an authorization level, which require varying levels of authorization: from simple passwords to app-based authentication. This means that you can set-up CommanderOne so that no one activates a function without another person verifying that activation, like two people needing their keys turned at the same time to open a locked door.
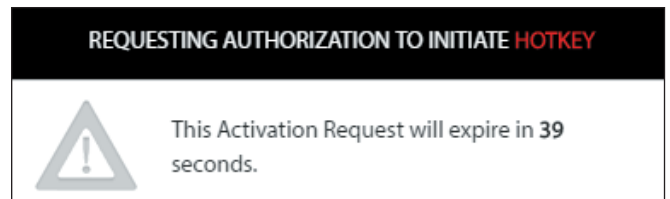
Weather

CommanderOne Accuweather® brings automatic and prompted activation based on weather events. Using a simple 'if this then that' interface, you choose them from events, such as a 911 telephone outage to a Winter Weather Advisory and the actions associated with them. From the Accuweather interface, you can send a simple message to your staff when watches are posted in surrounding counties, or activate the sirens when National Weather Service posts a Tornado Warning.

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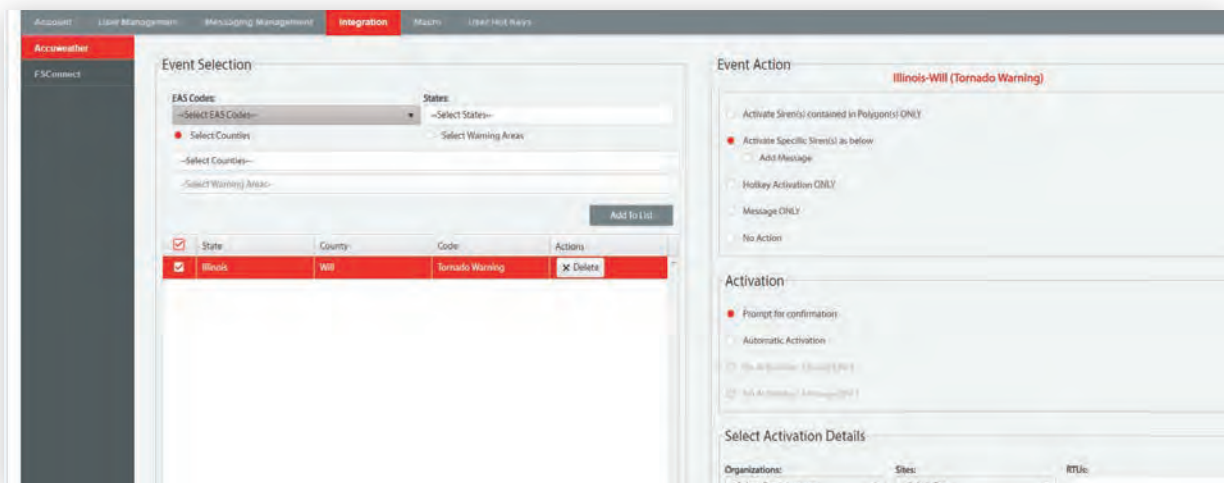
CommanderOne® Cloud-Based Control for Your Warning Systems
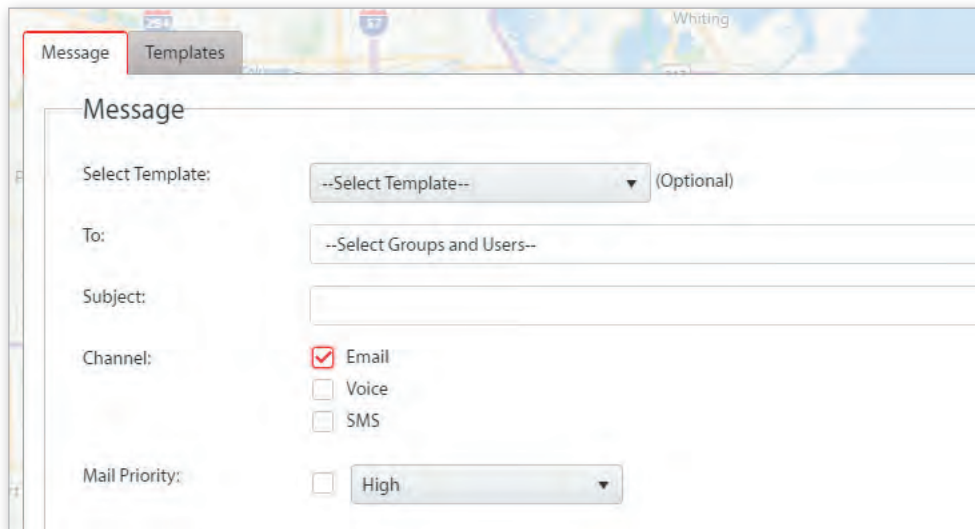
Messaging

CommanderOne Messaging is a new addition to the CommanderOne Cloud-Based Control system. Messaging adds the ability to quickly and easily contact your employees using our CommanderOne activation systems, either via the web or mobile app, on your smartphone.

Messaging allows users to create templates, ad-hoc messages and even dynamically add phone numbers or emails at the time of message creation. Utilizing CommanderOne macros, you can activate a siren Hotkey and at the same time, a messaging template. Templates allow for operators to create scenarios ahead of time, adding all users and information in a ready-to-go, one-button activation.

Messaging add-on is designed around you and your first responders, by keeping it simple and easy for you to message your crew while activating the sirens. With simple, easy to understand plans, administrators can add messaging to their existing CommanderOne systems.

Messaging builds upon the strengths of the CommanderOne platform and can allow administrators to send out operational alerts and automated messages the moment NOAA issues alerts.

Scalable Centralized Command and Control
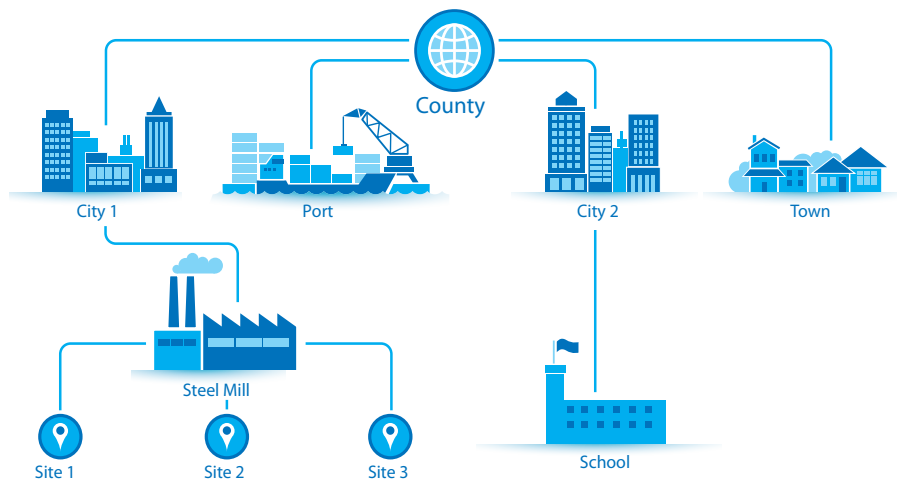
CommanderOne is designed for a centralized command and control by managing disparate systems. Whether you have one site or multiple sites, you need a single dashboard to monitor and manage your network.

CommanderOne® Cloud-Based Control for Your Warning Systems

Select CommanderOne Model for Annual Subscription

	Standard	Professional	Enterprise
Model Number*	COMMANDER1-S	COMMANDER1-P	COMMANDER1-E
Number of Users[1]	5	20	Per quote
Number of Organizations	1	2-5	5+
Accuweather included	Yes	Yes	Yes
In Release Commander Upgrade	Yes	Yes	Yes

*Includes Remote Implementation Support. For on-site support and training, contact your Federal Signal representative for a quote.

CommanderOne with Messaging Annual Subscription

	Standard
Model Number*	COMMANDER1-SM
Users[1]	5
Messaging Recipients[2]	200
Messages Per Month	500

*Includes Remote Implementation Support. For on-site support and training, contact your Federal Signal representative for a quote.

[1] Users: Users defined as full ability to activate and create messages also includes CommanderOne APP. (Admin has ability to control USER rights)

[2] Recipient: Recipient defined as having the ability to receive messages via text or email.

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▶ CommanderAssist®

Mass Notification Customized Messaging Software

Dynamic Messaging with series of decisions

Simplifies implementation of your Emergency Response Plan

"1-click" activation screens with Hotkeys

| Fire | Medical |
| Active Shooter | Site All Clear |
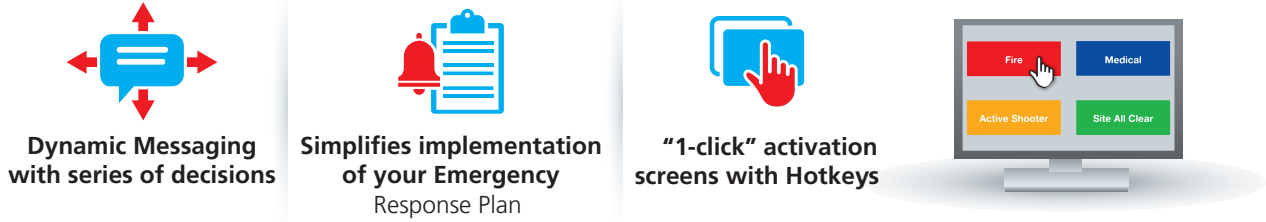
CommanderAssist® is designed to take a complicated emergency situation and make it simple to manage. CommanderAssist expands Federal Signal Commander On-Premise Siren Control and Messaging System to a customized scenario-based interface.

Federal Signal works with you and your staff to create a custom menu to guide the user thru incident-based decisions. Messages are pre-recorded in precise segments such as "Fire In" and "Admin Area"; and the custom menu guides the user thru pre-determined areas, such as plant areas or counties to deliver a clear, consistent alert.

In combination with a voice-capable speaker, CommanderAssist becomes a powerful tool in your emergency plan. Pre-recorded messages and tones are deployed over Giant Voice speaker systems including Federal Signal's Modulator siren, Informer tone-alert devices, indoor speakers, and handheld plant radios for mass notification. Messages can also be delivered over via e-mail and text messaging.

Outdoor Warning

Indoor Warning

Plant Radio

Mobile / Desktop

| Fire | Medical |
| Active Shooter | Site All Clear |

CommanderAssist® Mass Notification Dynamic Messaging Software
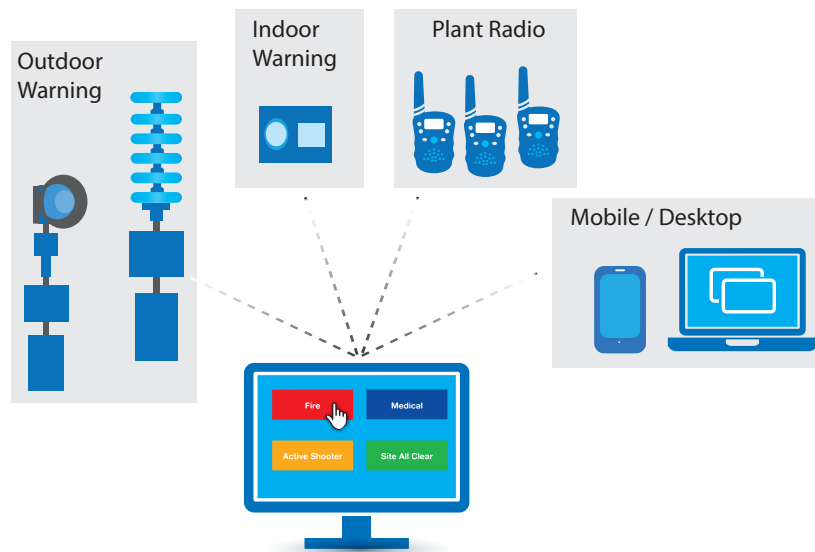
Scenario

Emergency Manager...a fire broke out in Dock Area 1, and there is a strong wind today from the west. I need to alert all employees of the fire and tell ever yone who is downwind that they need to evacuate.

1 Select the incident

- Fire
- Medical
- Active Shooter
- Site All Clear

2 Select the Affected Area

Dock Area 1	Dock Area 2	Dock Area 3	Dock Area 4
Administration Building	Medical Building	Security Building	Facilities Management
EAST LAB	WEST LAB	ENRICHMENT CENTER	TEST CHAMBERS
REPLUSION HOLDING	CONVERSION HOLDING	CLEANSING HOLDING	PROPULSION GEL HOLDING
CCU 1	CCU 2	OXY	FRACTIONAL DISTILLATION
COKER	CRUDE AREA	ALKY	BOILER

ALERT SECTION:
Site Wide Alarm
Fire

3 Choose Wind Direction

- North
- Northwest
- Northeast
- West
- East
- Southwest
- Southeast
- South

BACK   CONTINUE

4 Select the action

- Evacuate Non Essential
- Emergency Response Required
- Clear Roadways
- Evacuate Downwind Personnel
- Shelter In Place
- No Response

BACK   CONTINUE

5 Deploy the Alert

ABOUT TO ACTIVATE:
Fire
Dock Area 1
West
CONTINUE
Evacuate Downwind Personel

BACK   CANCEL   ACTIVATE

Messaging Deployed

Outdoor Warning

Plant Radio

Mobile Phone

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CommanderAssist® Mass Notification Dynamic Messaging Software

CommanderAssist Functions and Capabilities:

Custom Screen Design

Federal Signal helps you design your user interface around your emergency action plan with a custom screen design. You decide how you want to alert your employees and we work with you to make your plan a reality.

Commander

CommanderAssist runs on the Commander platform, the command and control software that is used to control Federal Signal sirens.

Customized Alerting

CommanderAssist can send alerts to who you want, when you want. Send outdoor or indoor alerts, radio alerts, or any combination. You can create the scenario and who gets alerted and we design the solution.

Radio

Add the optional I-IPSIU to play the same tones and messages to all employees over the handhelds that they already carry. Cables for many popular radio models and technologies allow easy connection.

Desktop Alerting

CommanderAssist can also distribute pop-up messages on connected Windows client computers. Your PCs can become a crucial tool in distributing messages to your entire plant. Responses show you who clicked an alert.

Email and SMS

Email and Text messages are an important channel to deliver emergency messages. CommanderAssist has the capability to deliver messages utilizing your current IT infrastructure.

CommanderAssist® Mass Notification Dynamic Messaging Software

HOW TO ORDER

Description	Part Number
Windows application software:	
for up to 10 sites	**SFCD10**
for up to 25 sites	**SFCD25**
for up to 255 sites	**SFCD255**
for up to 511 sites	**SFCD512**
CommanderAssist	**SFCD-A**

See your Sales Representative for a quote

PC Requirements

Operating	Server Requirements	Client Requirements
System	Windows® Server 2008 Release 2 Service Pack 1	Windows® 7 Service Pack 1 or newer
Software	Microsoft® NET Framework version 4 Microsoft® Visual C++ 2010 x86 Redistributable Package	Microsoft® NET Framework version 4 Microsoft® Visual C++ 2010 x86 Redistributable Package
CPU Speed	3.0 GHz or higher	2.6 GHz or higher
CPU Processor	Intel® Xeon Processor or higher	Intel®Core Duo, Xeon Processor or higher
Memory	8 GB or higher	4 GB or more
Disk Space	40 GB or higher	100 MB or more
Network Adapter	100/1000 MB TCP/IP IPv4 network card	100/1000 MB TCP/IP IPv4 network card
Sound Card	Simple stereo sound card	Simple stereo sound card
Serial Port	RS 232	232
USB	1 USB	1 USB

CommanderAssist Options

Model #	Description	Notes
I-IPSIUB	Sensor/Radio Interface Unit	19-in rack mount device that allows messages to Land Mobile Radios
X-PCS-22T	Desktop Server with 22" Flat Panel Touch Monitor	A server with a touch sceen monitor improves the user's experience when activating CommanderAssist.

CommanderAssist is a registered trademark of Federal Signal Corporation.

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▶ Commander® P25

P25 Compliant Warning System

Federal Signal offers a Warning System that is fully compliant with P25 two-way communication systems. By utilizing this technology, users can eliminate the cost to maintain a legacy communications system or additional 3rd party hardware to become compatible with a P25 network, enabling Federal Signal Outdoor/Indoor Warning users to utilize their P25 Land Mobile Radio system with the siren network.

Federal Signal P25 Compliance Matrix

MOTOROLA SOLUTIONS		
	P25 Phase 1	✓
	P25 Phase 2	✓
	Conventional Direct Mode	✓
	Trunk Mode	✓
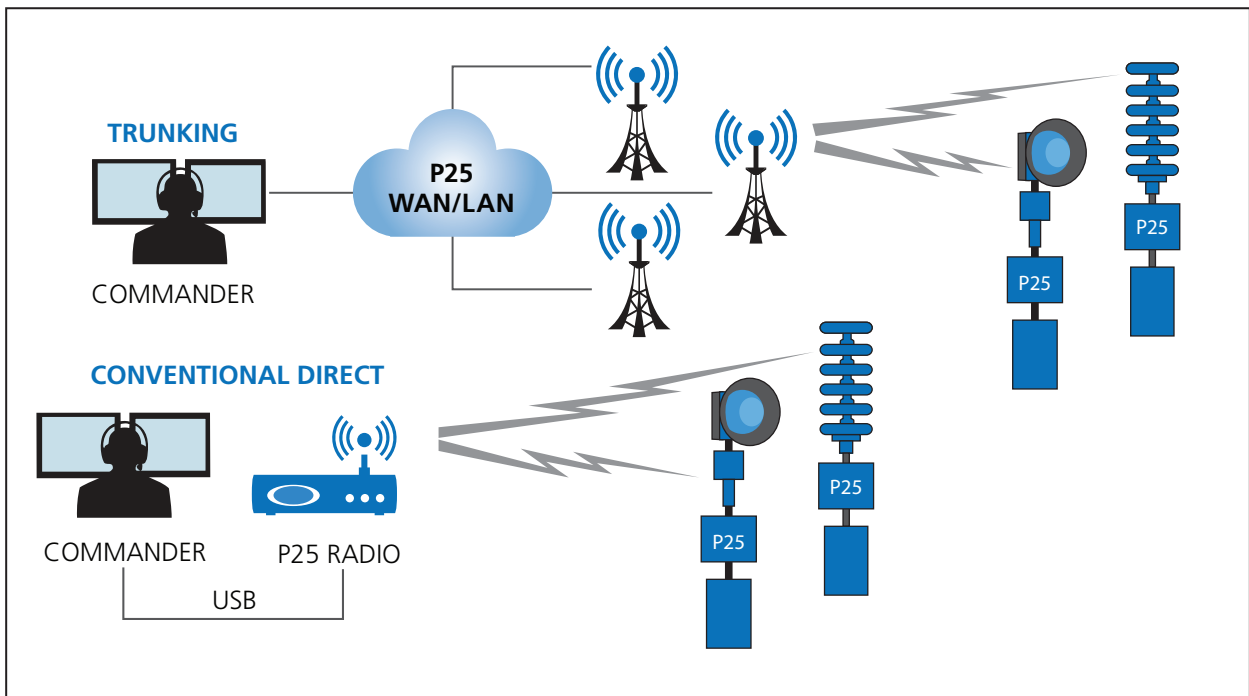
Control Point computers hosting the Commander software can now connect to a P25 trunked land mobile radio interface via an Ethernet connection. Control points utilize a broadcast functionality to quickly and efficiently communicate with all remote controllers for All Call and Group activations. IP unicast to individual remote sites is used for individual activation and polling requests to minimize radio traffic in a multi-site system.

For customers that need P25 direct mode communication with remote siren site controllers, Commander software is USB plug-and-play compatible to P25 capable radios, enabling direct radio to radio communications without the need for trunking infrastructure.

P25 Compliant Warning System (Commander® P25)

Ethernet

Paging
Networks

Wireless
Broadband

Satellite

Cellular

Conventional
P25 Radio

Fiber Optics

One Integrated Communication Platform

Our total communications solutions span virtually every aspect of safety, security and productivity for your business while providing the latest in innovation, technology and the reliability you have come to trust.

Commander Software continues to evolve in order to meet customer's changing needs and provide a system unmatched in features and ease of use. From satellite to cellular to P25, let us provide you with a single, seamless, fully integrated solution.

HOW TO ORDER

Description	Part Number
Specify Model, Command and Control System:	
P25 IP Software key (required for trunked P25)	**SFCD-IP**
Federal Signal Commander P25 software version 14.5 or greater required for P25 support	
Base station P25 radios (required for conventional-direct)	**BSP**
Radio sold separately	
Specify Model, FC Remote Terminal Units:	
FC Controller P25 APX Radio Interface kit [1]	**Q-APX-FCIK**
FC RTU firmware version 5.3 (FCM)/3.2.0.5 (FCM+) or greater needed for P25 support	
Radio sold separately	
Specify Model, UV Remote Terminal Units:	
UV Controller P25 APX Radio Interface kit [1]	**Q-APX-IK**
UV RTU firmware version 7.6.0.3 (UV)/2.4.0.1 (UV+) or greater needed for P25 support	
Radio sold separately	

[1] *P25 APX Radio Interface Kit needed to connect RTU controllers to P25 radios*

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SS2000+R

SS2000+

▶ SS2000+ Series C

Local Hardware Activation Point

The SS2000+ Series C web enabled controller is Federal Signal's most advanced stand-alone control unit. The SS2000+ typically interfaces to an analog or digital radio system to provide radio activation of sirens across a county, municipal, campus or industrial facility. The SS2000+ has 24 programmable activation button "hotkeys" secured with a keylock switch and 20 contact closure inputs for interfacing with remote control systems. The hotkeys can provide specific types of warnings or test activations to notify residents, employees or students. The 24 Hotkeys are now accessible from a variety of interfaces using a new web interface. The new web interface can provide improved redundancy allowing multiple SS2000+ units to be used as on-line back-ups. Advanced networking features enable the SS2000+ to be connected to Federal Signal's Commander® control and status monitoring software. In addition, the SS2000+ can now connect directly to Federal Signal's CommanderOne® cloud service for secure web access to hotkeys, messaging and automated activation from NOAA EAS events.

The SS2000+ can be used to as an encoder for one-way siren control. Previously using a SS2000+ allowed activation only from the front panel hotkeys, the physical interfaces or from a connected PC. The SS2000+ now provides siren activation from CommanderOne NOAA® EAS events/polygons, from a mobile app or from a web browser over the Internet.

FEATURES

- 24 command function hot keys with key-lock protection
- 20 remote activation inputs
- Dispatch console interface via URL
- Ethernet port for control over inter-company or intra-company LAN
- Interface to CommanderOne® web service for polygon and mobile activations
- MODBUS TCP Industrial Control Interface
- Microphone interface for Live PA
- Redundant source of command and control
- User Access Security with Digest Authentication
- Remote firmware update capability over LAN
- Computer Access Whitelist Feature

- SSL and AES data Encryption
- Compatible with radio two-tone EAS and DTMF, AFSK encoding
- Three Configurable Relay Outputs
- Streams WAV files from Commander® PC
- Built-in communication monitor speaker
- Radio level indicators simplify field adjustments
- Battery backed real time clock
- Back-lit LCD Display
- Desk and 19" rack mount versions available
- Offered in 120 and 240VAC, with EU or UK versions available

Web Enable Radio Controlled Sirens

The SS2000+ can be used to as an encoder for one-way siren control. Previously using a SS2000+ allowed activation only from the front panel hotkeys, the physical interfaces or from a connected PC. The SS2000+ now provides siren activation from CommanderOne NOAA EAS events / polygons, from a mobile app or from a web browser over the Internet.

Remote Desktop   Mobile

CommanderOne
Cloudbased / Web Control and Activation

SS2000+ Series C   Base Station Radio

SS2000+ Series C   Base Station Radio

NOAA issued Weather Alerts

Desktop Computer

Mechanical Sirens

Giant Voice
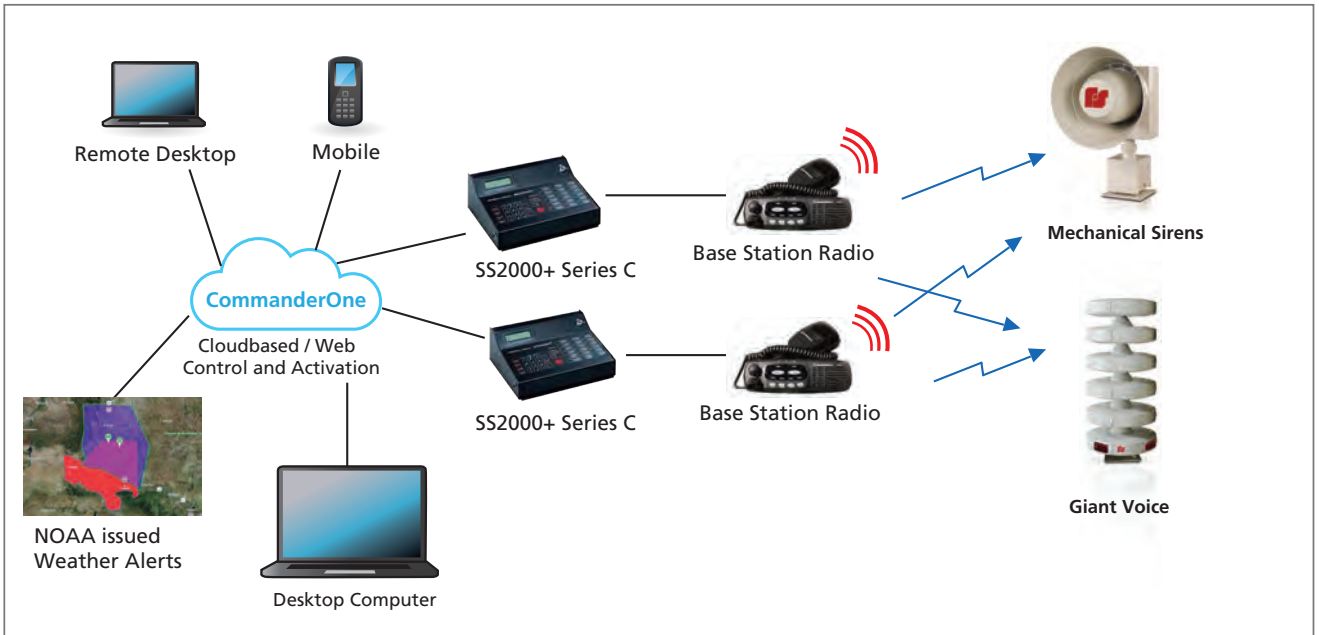
MODBUS Control

The SS2000+ has a MODBUS interface to easily interface with Industrial Control Systems. MODBUS TCP is used to provide activations into an SS2000+ for specific warning announcements across an industrial plant. Users can activate the system using the SS2000+ or industrial control systems can activate the hotkeys.

Modbus/ Factory Automation

Internal Secure Network

SS2000+ Series C

Base Station Radio

Mechanical Sirens

Giant Voice
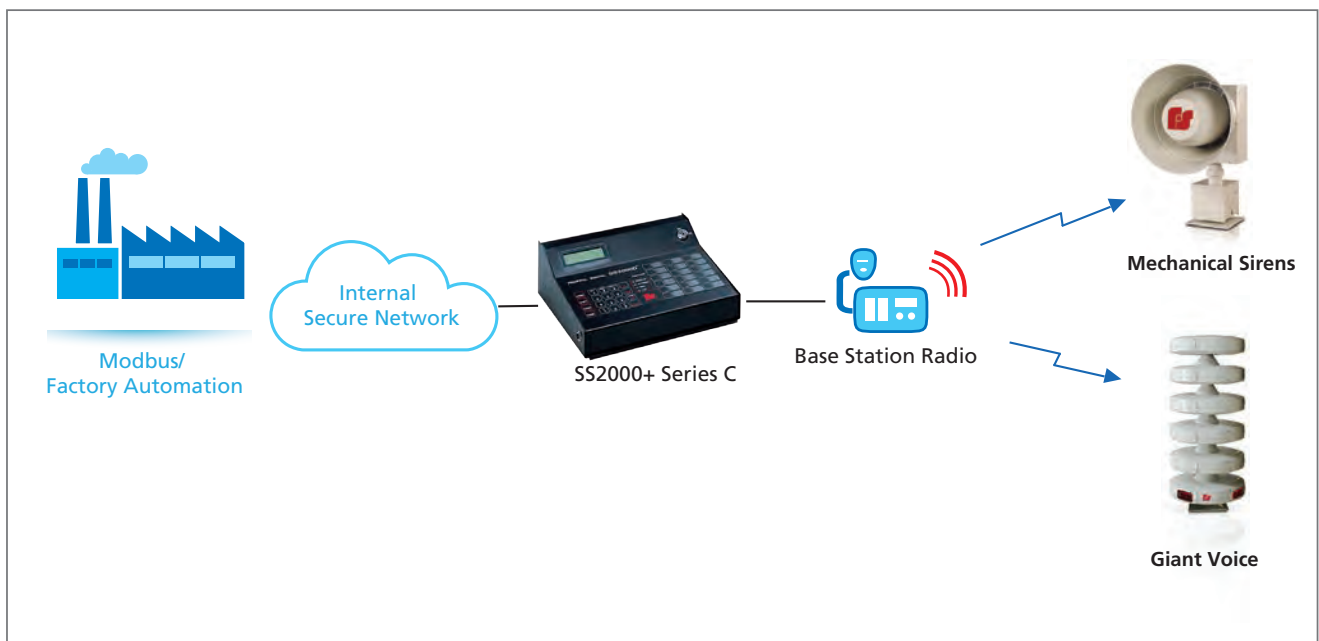
PC Freedom

Typical siren control systems rely on dedicated PC's or servers for activation. PC's can be difficult to maintain with updates and security concerns. Now you can have many of the features provided from a PC without the need to have a PC dedicated to activating your siren system. In addition, PC's can be a single point of failure within your siren control system. The SS2000+ can now interface to our CommanderOne control system and eliminate the need for a dedicated PC for siren control.

Browser   Mobile   NOAA issued Weather Alerts

CommanderOne
Cloudbased / Web Control and Activation

SS2000+ Series C   Base Station Radio

Mechanical Sirens

Giant Voice
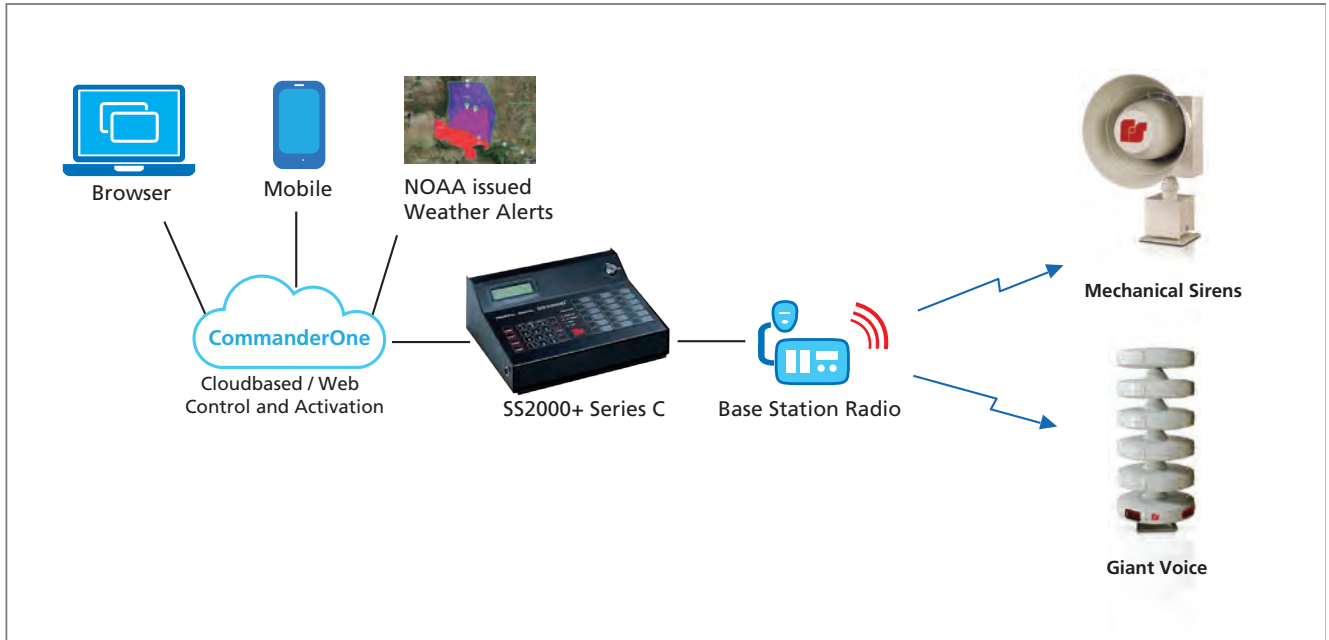
ACCESS VIA URL

Dispatch consoles can now access the SS2000+ from a new built-in web server that allows the SS2000+ to be controlled and configured over a LAN using standard web browsers. This interface can provide users within a secure company network to access the SS2000+ Hotkeys from standard web browsers (Chrome, Edge or Firefox) on the company local area network.

Dispatch

Browser

Internal Secure Network

SS2000+ Series C   Base Station Radio

Mechanical Sirens

Giant Voice
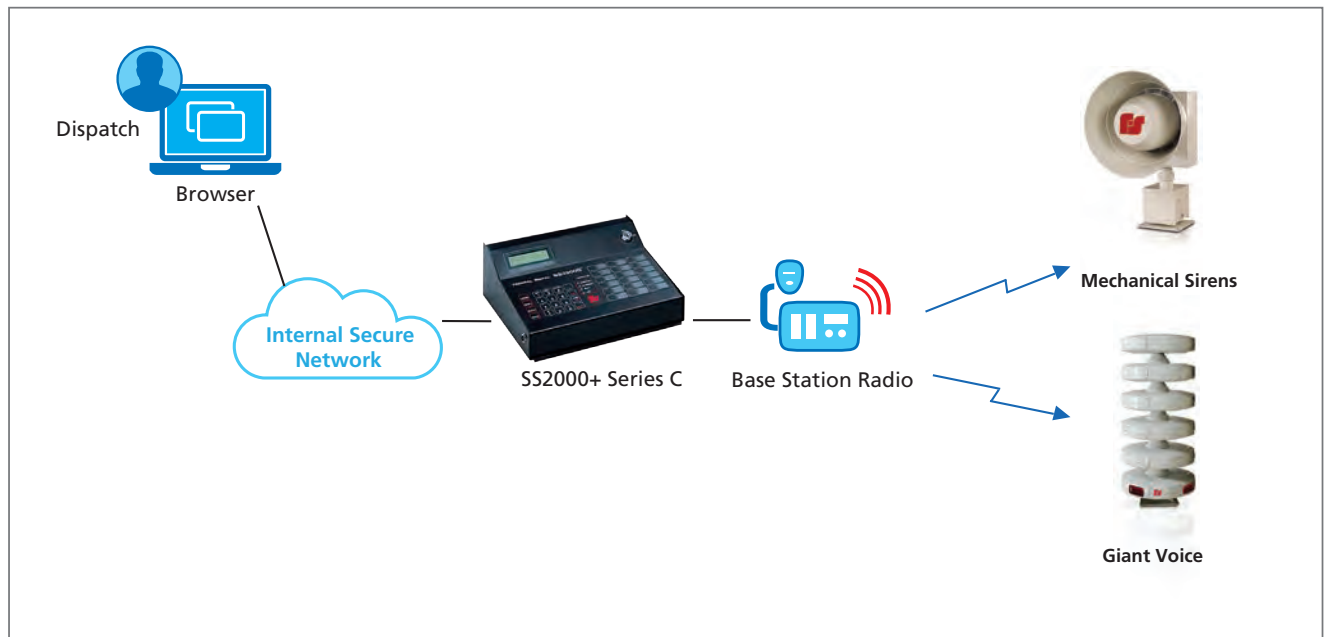
S P E C I F I C A T I O N S

Operating Temperature: 32° F to 140°F   0° to 60°C

Line Input 120/240VAC* wall transformer power supply

Power Supply Input Voltage: 12-30 VDC
(12 VDC minimum)

Input Current   300 mA (Standby 700 mA max.)

Distortion   < 3.0%

Ethernet   RJ-45 port, TCP/IP

Microphone:
  Input Level   10mV - 150mV p-p
  Input Impedance   10k Ohms
  Input Jack   XLR Male
  Type   Dynamic

Speaker:
  Power   1 watt
  Impedance   8 Ohms

Audio Interface:
  Audio Output   Balanced 600 Ohms
  Audio Input   Balanced 600 Ohms
  Decode Sensitivity   < 8-10 dBc S/N or 12 dBc SINAD
  Relay Outputs   2A at 30VDC / 0.5 at 120VAC

Dimensions H x W x D:
  Desk Mount   3.59" x 11.59" x 9.53"
                91.8 mm x 294.4 mm x 242.1 mm

  3U Rack Mount   5.19" x 19" x 10.10"
                131.8 mm x 482.6 mm x 256.5 mm

Shipping Weight: Desk Mount   6 lbs   3 kg

Shipping Weight: Rack Mount   8 lbs   4 kg

* The SS2000+ Power Supply can be ordered with a US
120VAC or UK/EU 240VAC Power Cables, see description
models.

H O W   T O   O R D E R

Contact our Federal Signal Sales Engineers to design a system that meets your specific requirements.

Considerations for system configuration:

Description	Part Number
Desk mount Local Activation Point, US	**SS2000+**
Rack Mount Local Activation Point, US	**SS2000+R**
Desk Mount Local hardware activation point, EU	**SS2000+EU**
Desk Mount Local hardware activation point, UK	**SS2000+UK**
Noise Canceling Microphone	**MNC-MNS** [1]
CommanderOne Cloud Service	**COMMANDER1LE**

R E P L A C E M E N T   P A R T S

Description	Part Number
SS2000+ Power Supply with US Cable	**Q-SSPWR**
UK 240VAC Power Cable [2]	**Q17501252A**
EU 240VAC Power Cable [2]	**Q17501253A**
SS2000+ Kenwood Radio Cable	**Q17500863-01**

[1] Noise canceling microphone model MNC-MNS replaces the microphone on early revision models of SS2000+. Model MNC-MNS is supervised for compatibility with UL2572.

[2] While there are no EU/UK rack mount models, the rack mount SS2000+R can be ordered with the appropriate replacement power cable, if needed.

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▶ Model I-IP15 Series C

15W IP-enabled Speaker

The Informer15 Speaker is a 15-watt, IP-enabled indoor and outdoor speaker. The Informer15 can be used as a warning and alert device with both audible and visual indicators. The audible capabilities include locally stored high-quality, high-powered tones and voice messages. The visual indicators include the use of message board/scrolling display sign support, strobes, lights, and beacons. The Informer15 can be equipped with up to four local initiation devices (switches) to activate the unit locally and to the Commander® controller for mass notification communications.

The Informer15 Speaker has an internal 15-watt amplifier/driver to deliver tone warnings and intelligible voice messages from Informer15 stored memory. The Informer15 also has several unique capabilities when working with the Federal Signal Commander software. Using Commander software, the Informer15 can play text-to-speech, stream WAV files or can broadcast live PA. In addition, Commander software can perform a talk/listen to individual Informer15's to allow call box type communications. The Informer15 also has remote volume control for optimizing sound levels across your alerting area. The remote volume control also includes an ambient-noise-monitoring capability to automatically adjust volume depending on external noise levels.

The Informer15 allows connection of up to four external switches to activate predefined alert events. The Informer15 can be programmed and configured as a standalone device to only use the inputs to activate the Informer15. This may be useful if the location has no network connectivity, but where voice and tone alerts from locally activated inputs is required. The Informer15 can be networked later and the activations can be brought into the Commander system for full system capability. When the Informer15 is networked using the Commander software, alerts initiated at the Informer15 can be used to activate other devices. The Commander software system can also alert emergency personnel via email, SMS, and hand-held radios using optional messaging software.

The Informer15 includes one output to control the visual indicator and output to activate external relay, which can be used to control external devices. The Informer15 has two 1/2-inch NPT opening on the bottom of the speaker for simple installation of pipe-mount devices. The openings allow access to LAN, open collector output, and activation inputs. The Commander system allows multiple configurations for activation of the open collector output or visual indicator during alerts.

The Informer15 is designed for outdoor use and large indoor structures. It is available in a PoE+(802.3 at) power via a local Ethernet model or in a 24Vdc model. All wiring interfaces are accessible via internal connectors and built-in NPT entrances for quick and easy installation.

APPLICATIONS

- Indoor and Outdoor Locations
- Loud industrial facilities
- Muster or call stations
- Weather alerting
- Campus or school alerting
- Food processing locations

- For use with video security systems
- Plant wide alerting System
- Plant wide Live-PA announcements

Modbus MEMBER

Scan to download the Informer15 Application Note

I-IP15 Series C - 15W IP-enabled Speaker

Standalone Mode

Attention this is an Alert...

Activation
Alert
Weather
Security
Maintenance

Networked

IP Network

Activation
Pushbutton

Activation
Live PA
Hotkeys

Portable Radio
Announcements

- Outdoor or indoor IP-enabled speaker for audible and visual alerts

- Speaker rated at 112 dB for tones and 107 dB for pink noise at 10 feet

- Seven standard built-in warning signals: Wail, Steady, Alternate Wail, Alternate Steady, Pulsed Wail, Pulsed Steady, Auxiliary Chime

- Broadcasts live voice, text-to-speech, and pre-recorded voice or tone files

- Deliver intelligible voice messages from locally pre-recorded files

- Pre-recorded files: up to 4000 messages with 17 hours of recording time

- Ambient-noise-level monitoring with automatic volume control

- Alerts can be sent to single devices, groups or zones, or all devices

- Wall mount

- Web interface for configuration

- Four local alarm initiation inputs, with configurable priority to activate unit locally or standalone operation Momentary mode: contact closure sounds alarm for programmed duration. Continuous mode: sounds alarm for duration of closure

- One open collector output paired with 24 Vdc for controlling an external relay

- Integrated Modbus® TCP Industrial PLC interface for control and monitoring
  Series C feature - contact FS support for update information on non-Series C

- Integrated SIP phone interface for live PA, remote .wav file and function control using standard SIP phones

- High-intensity LED light that can be activated independently or with messages

- Models available with White, Red, Amber, Blue, and Green LEDs

- Wide variety of flash patterns

- Power over Ethernet using 802.3at PoE+ 25.5 W *I-IP15 models*

- 24Vdc Power *I-IP15-024 models*

- Wide operating temperature range

- US/Canadian ETL Listed to UL Std 60065

ADDITIONAL

Network Commander only Features:

- Each device can be remotely configured for volume and noise-level adjustments

- Speaker as microphone for talk-back feature

- Federal Signal Commander software provides activation, full two-way control, and status monitoring

- Optimal CommanderOne® cloud based control with mobile app

- Allows remote software upgrades

SPECIFICATIONS

- Input Voltage: Power over Ethernet (PoE+ 802.3at) *I-IP15 models*

- Input Voltage: 24Vdc Power *I-IP15-024 models*

- Input Current Draw: PoE+ 25.5 W

- Alarm initiating inputs: Four optically Isolated Inputs

- Audio Storage: Prerecorded files—up to 4000 messages with up to 17 hours of recording time

- Operating temperature range: -30°C to +65°C/-22°F to +149°F

- 13.9 inches x 10.2 inches x 10.0 inches
  35.3 cm x 25.9 cm x 25.4 cm

- Shipping Weight: Desk Mount   6.19 lbs   2.81 kg

HOW TO ORDER

Description	Part Number
Informer15, PoE+, White LED	**I-IP15-W**
Informer15, PoE+, Red LED	**I-IP15-R**
Informer15, PoE+, Blue LED	**I-IP15-B**
Informer15, PoE+, Amber LED	**I-IP15-A**
Informer15, PoE+, Green LED	**I-IP15-G**
Informer15, 24Vdc, White LED	**I-IP15-024W**
Informer15, 24Vdc, Red LED	**I-IP15-024R**
Informer15, 24Vdc, Blue LED	**I-IP15-024B**
Informer15, 24Vdc, Amber LED	**I-IP15-024A**
Informer15, 24Vdc, Green LED	**I-IP15-024G**
Kit, I-IP15 Components	**I-IP15-KIT1**

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FEDERAL SIGNAL

▶ Model I-IP15X Series C

Informer15 IP enabled 15 W hazardous location speaker

The Informer15 Speaker is a 15-watt, IP-enabled indoor and outdoor speaker. The Informer15 can be used as a warning and alert device with both audible and visual indicators in hazardous locations. The audible capabilities include locally stored high-quality, high-powered tones and voice messages. The visual indicators include the use of external devices* such as: message board/scrolling display sign support, strobes, lights, and beacons. The Informer15 can be equipped with up to four local initiation devices (external switches*) to activate the unit locally and to the Commander® controller for mass notification communications.

The Informer15 Speaker has an internal 15-watt amplifier/driver to deliver tone warnings and intelligible voice messages from Informer15 stored memory. The Informer15 also has several unique capabilities when working with the Federal Signal Commander software. Using Commander software, the Informer15 can play text-to-speech, stream .WAV files or can broadcast live PA. In addition, Commander software can perform a talk/listen to individual Informer15's to allow call box type communications. The Informer15 also has remote volume control for optimizing sound levels across your alerting area. The remote volume control also includes an ambient-noise-monitoring capability to automatically adjust the volume depending on external noise levels.

The Informer15 allows connection of up to four external switches to activate predefined alert events. The Informer15 can be programmed and configured as a standalone device to only use the inputs to activate the Informer15. This may be useful if the location has no network connectivity, but where voice and tone alerts from locally activated inputs is required. The Informer15 can be networked later and the activations can be brought into the Commander system for full system capability. When the Informer15 is networked using the Commander software, alerts initiated at the Informer15 can be used to activate other devices. The Commander software system can also alert emergency personnel via email, SMS, and hand-held radios using optional messaging software.

The Informer15 includes one output to control the visual indicator and output to activate external relay, which can be used to control external devices. The Informer15 has two 1/2-inch NPT opening on the bottom of the speaker for simple installation of pipe-mount devices. The openings allow access to LAN, open collector output, and activation inputs. The Commander system allows multiple configurations for activation of the open collector output or visual indicator during alerts.

The Informer15 is designed for outdoor use and large indoor structures. It is available in a PoE+(802.3 at) power via a local Ethernet model or in a 24Vdc model. All wiring interfaces are accessible via internal connectors and built-in NPT entrances for quick and easy installation.

APPLICATIONS

- Indoor and Outdoor Locations
- Loud industrial facilities
- Muster or call stations
- Weather alerting
- Industrial hazardous locations

- Food processing locations
- For use with video security systems
- Plant wide alerting System
- Plant wide Live-PA announcements

HAZARDOUS LOCATION RATING:

T-CODE AT MAXIMUM AMBIENT TEMPERATURE   65°C

Hazardous Location	Constant on	5 min. Duty Cycle
Class I, Division 2, Groups A, B, C, D	T2B	T3A
Class II, Division 2, Groups F, G	T6	T6
Class III	T6	T6

Modbus MEMBER

I-IP15X Series C Hazardous Locations 15W IP-enabled Speaker

Standalone Mode

Attention this is an Alert...

Activation
Alert
Weather
Security
Maintenance

Networked

IP Network

Activation
Pushbutton

Portable Radio
Announcements

Activation
Live PA
Hotkeys

- Outdoor or indoor IP-enabled speaker for audible and visual alerts

- Speaker rated at 112 dB for tones and 107 dB for pink noise at 10 feet

- Seven standard built-in warning signals: Wail, Steady, Alternate Wail, Alternate Steady, Pulsed Wail, Pulsed Steady, Auxiliary Chime

- Broadcasts live voice, text-to-speech, and pre-recorded voice or tone files

- Deliver intelligible voice messages from locally pre-recorded files

- Pre-recorded files: up to 4000 messages with 17 hours of recording time

- Ambient-noise-level monitoring with automatic volume control

- Each device can be remotely configured for volume and noise-level adjustments

- Speaker as microphone for talk-back feature

- Alerts can be sent to single devices, groups or zones, or all devices

- Wall mount

- Web interface for configuration

- Four local alarm initiation inputs, with configurable priority to activate unit locally or standalone operation Momentary mode: contact closure sounds alarm for programmed duration. Continuous mode: sounds alarm for duration of closure

- One open collector output paired with 24 Vdc for controlling an external relay

- Integrated Modbus® TCP Industrial PLC interface for control and monitoring
  Series C feature - contact FS support for update information on non-Series C

- Integrated SIP phone interface for live PA, remote .wav file and function control using standard SIP phones

- High-intensity LED light that can be activated independently or with messages

- Models available with Amber, Blue, Green, Red, and White LEDs

- Wide variety of flash patterns

- Power over Ethernet using 802.3at PoE+ 25.5 W *I-IP15 models*

- 24Vdc Power *I-IP15-024 models*

- Wide operating temperature range

- Federal Signal Commander software provides activation, full two-way control, and status monitoring

- Allows remote software upgrades

- NEMA 4x enclosure

- UL and cUL listed for class1, Division 2; Class II, Division 2; Class III locations

- Complies with FCC Title 47, Part 15

- Input Voltage: Power over Ethernet (PoE+ 802.3at) requires 25.5W

- Input Voltage: 24Vdc Power *I-IP15-024 models*

- Alarm initiating inputs: Four optically Isolated Inputs

- Audio Storage: Prerecorded files—up to 4000 messages with up to 17 hours of recording time

- Operating temperature range: -30°C to +65°C/-22°F to +149°F

- 13.9 inches x 10.2 inches x 10.0 inches
  35.3 cm x 25.9 cm x 25.4 cm

* External devices must be rated for use in hazardous locations.

Description	Part Number
Informer15, PoE+, White LED	**I-IP15X-W**
Informer15, PoE+, Red LED	**I-IP15X-R**
Informer15, PoE+, Blue LED	**I-IP15X-B**
Informer15, PoE+, Amber LED	**I-IP15X-A**
Informer15, PoE+, Green LED	**I-IP15X-G**
Infomer15, 24Vdc, White LED	**I-IP15X-024W**
Infomer15, 24Vdc, Red LED	**I-IP15X-024R**
Infomer15, 24Vdc, Blue LED	**I-IP15X-024B**
Infomer15, 24Vdc, Amber LED	**I-IP15X-024A**
Informer15, 24Vdc, Green LED	**I-IP15X-024G**

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FEDERAL SIGNAL

▶ Model I-IP-IO & I-IPW Series B

Informer-IP, Two-Way
IP-enabled Intercom and Alarm Initiation Point

Federal Signal's long-standing Informer is now IP-enabled. The Informer-IP Series B can be used as a warning device, a two-way intercom and an alarm initiation point that connects to the Commander® On-Premise System. The B model of the Informer-IP removes support of the key fob and adds the ability to store pre-recorded messages on a removable micro SD card.

The Informer-IP's internal speaker microphone provide clear two-way intercom voice communications. Incoming warnings and alerts can be live voice, pre-recorded messages or tone files. Two different predefined alert events can be triggered from the Informer-IP Series B. Alert messages initiated from the Informer-IP Series B can be sent to emergency personnel via e-mail, text messages, phone, handheld radios; and can also be used to activate other Informer units and sirens.

The Informer-IP Series B features an audio output for connecting public address systems, two relay outputs for controlling strobes or other devices, and an RS232 port for driving a scrolling message display in order for the same message
that is heard over the speaker to simultaneously be viewed on the display. The Informer-IP provides the same tone and voice alerts available with Federal Signal's UltraVoice™ outdoor siren controllers for seamless indoor and outdoor mass notification.

The Informer-IP I-IP-IO model is designed for desktop use. Power options include an external AC transformer or PoE (Power over Ethernet). All wiring runs to accessible connectors on the back of the unit for quick and easy installation.

Also available is the Informer-IPW, which is designed to be wall mounted or recessed into the wall. All wiring is contained within an aluminum case and five pre-punched, easy-to-remove conduit holes are available to facilitate wiring connections into and out of the unit. The case has top mounting holes and is pre-wired for the LP1 strobe option.

Schools, hospitals, police and fire stations, government facilities and industrial plants will find that the Informer-IP provides an unmatched value for their indoor alerting and notification needs.

FEATURES

- Two-way alerting and intercom capabilities
- Power over Ethernet (PoE) or AC powered
- Internal speaker rated at 80 dB @ 10-ft
- Receives live voice, text-to-speech and prerecorded voice or tone files
- Up to 4000 tone/voice messages via removable micro SD card

- Can be used as activation device
- Desk or wall mount models
- Panic button alarm
- US ETL Listed to UL Std 60065
- Canadian ETL Listed to UL Std 60065 for I-IPWB only

*Support for the I-Keyfob has been discontinued.

Informer-IP, Two-Way IP-enabled Intercom and Alarm Initiation Point

Commander
Control & Activation

IP

InformerPA

Amplifier

Existing
PA System

InformerSIU

Portable Radio
Announcements

Informer IP/W

Office Alerts

Informer100
Outdoor Alerts

Informer15
Indoor / Outdoor Alerts
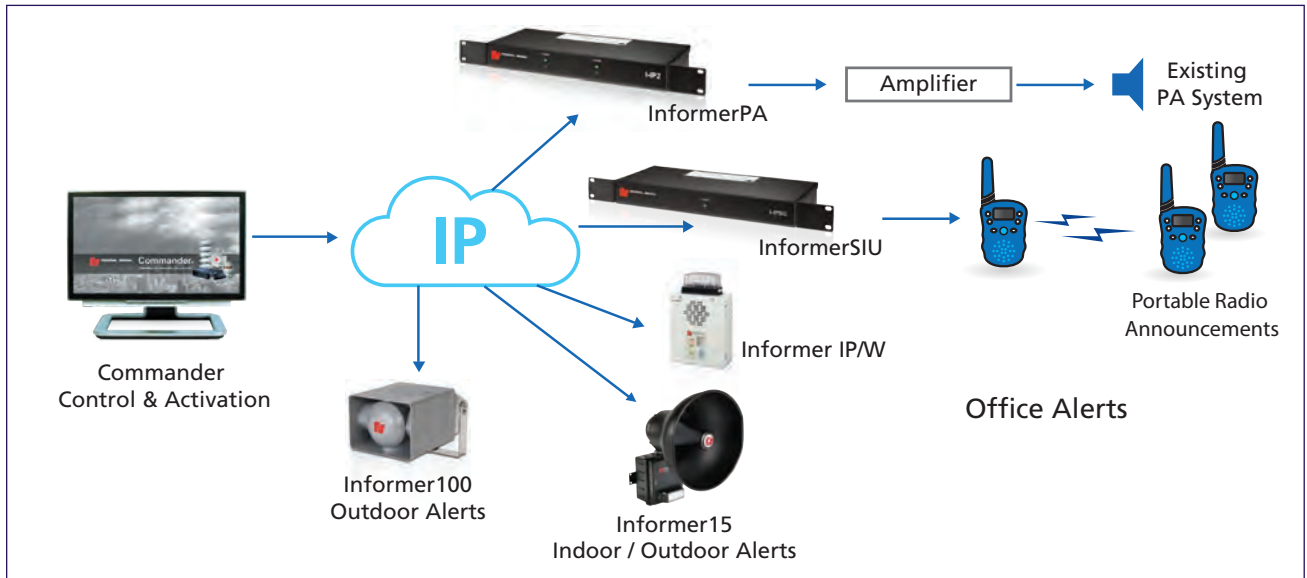
SPECIFICATIONS

- Tone and voice compatible with Federal Signal UltraVoice controllers
- Up to 4000 tone and/or voice messages via removable micro SD card
- Wired Ethernet, can be powered via PoE
- Input: 115 to 230VAC, 50/60Hz, 350mA maximum (I-IPWB) nominal 120VAC 60Hz (I-IP-IO)
- 80 dB speaker with adjustable volume control
- Speaker provides audio and microphone for two-way communications
- RS232 port for driving an optional Scrolling Message Display
- Two programmable relay outputs for controlling strobe lights or other devices (pre-wired for LP1 Strobe, I-IPWB)
- 600 Ohm audio output ties into existing PA, or external speaker
- Works with redundant Commander networking for reliable fail safe operation
- Complies with FCC Title 47, Part 15 and UL 60065
- I-IPWB complies with CAN/CSA-C22.2 No. 60065
- Commander software provides control and status monitoring of the Informer-IP.

External push button activation

A flush mount kit is included for recessed applications as shown.

HOW TO ORDER

Description	Part Number
Informer-IP Desk Mount	**I-IP-IO**
Informer-IP Wall Mount	**I-IPW**

Informer-IP requires Federal Signal Commander application software

There is a programming fee associated with Informer-IPs programmed at the factory. Contact your local representative for a quotation.

OPTIONAL ACCESSORIES

Description	Part Number
Informer-IP Setup Wizard Software & Cable	**I-IP-SW**
Yellow Station with Momentary Contact – "EVACUATION"	**PSEV-YM**
Yellow Station with Momentary Contact and Sounder Cover – "EVACUATION"	**PSEVSC-YM**
Red Station with Momentary Contact – "EMERGENCY"	**PSEM-RM**
Red Station with Momentary Contact and Sounder Cover – "EMERGENCY"	**PSEMSC-RM**
12VDC Strobe (can be powered by internal power supply for I-IPWB)	**LP1-012***

*(A) Amber, (B) Blue, (C) Clear, (G) Green or (R) Red (I-IPW only)

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FEDERAL SIGNAL

▶ Model I-IP2 Series B

Dual Rack Mount
Informer-PA for Public Address Interface

Federal Signal's Intelligent Systems now includes an interface to public address systems. Model I-IP2 Series B provides two Informer-PA modules in a single rack unit (1RU) enclosure for interfacing with public address systems. The Informer-PA creates the same alert communications provided over the outdoor systems. Informer-PA, when paired with the Commander® control system, offers the same level of security available with all Federal Signal control systems.

The Model I-IP2 Series B has two independent Informer-PA interfaces with 600 Ohm adjustable audio output. Informer-PA can store up to 4,000 messages / 17 hours of pre-recorded tone/voice alerts. In addition, each Informer-PA provides dual relay output for control of external devices; such as, zones for PA systems, or visual indicators. Additionally, I-IP2 has an RS-232 port to drive message boards for scrolling message displays.

The I-IP2 Informer-PA is a compact 19" 1RU rack mount, wall or desk mount unit. Power is supplied via PoE for each Informer-PA interface. Optional power can be supplied via wall transformer. Power indicators on the faceplate are provided for status monitoring. All wiring is via connectors on the rear of the unit for quick and easy installation.

The Informer-PA communicates with the Federal Signal Commander® system for control of warning messages, live PA and pre-recorded messages. The device can be paired with outdoor and indoor units to create a wide area notification system.

This unit is ideal for schools, hospitals, commercial buildings, police and fire stations, government facilities, ports and industrial plants intelligent system applications.

FEATURES

- Dual Public Address Interface
- Multi-functional communication capabilities featuring live voice, text to speech, and prerecorded voice or tone files
- Integrated with Federal Signal's Indoor/Outdoor Alerting Systems
- Up to 4,000 tone/voice messages via removable micro SD card
- Web or mobile based activation with CommanderOne

- 19" rack mount
- Rack, wall or desk mount
- US and Canadian ETL Listed to UL Std 60065
- CAN/CSA-C22.2 No. 60065

Dual Rack Mount Informer-PA for Public Address Interface (I-IP2 Series B)
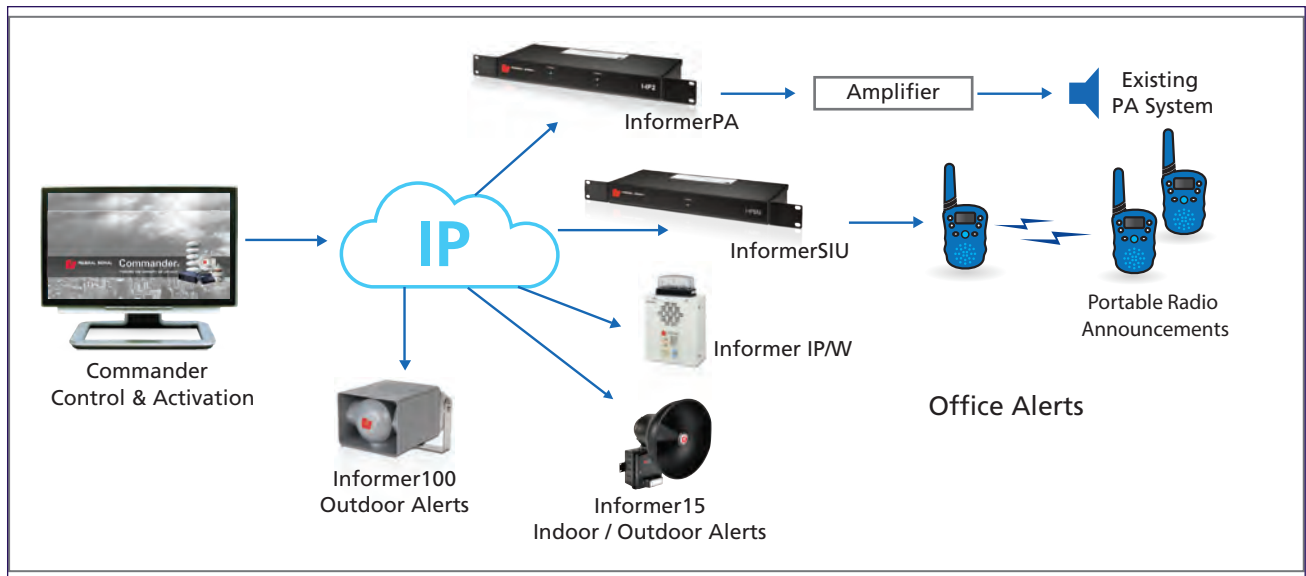
SPECIFICATIONS

- Tone and voice compatible with Federal Signal UltraVoice controllers
- Small size with rugged construction
- Wired Ethernet, powered via PoE (can also be powered with 120VAC 60Hz wall transformer)
- Up to 4,000 tones/voice messages via removable micro SD card
- LED status indicators for Power
- Input for amplifier fault alarm
- RS232 port for driving an optional Scrolling Message Display
- Two programmable relays for control of external devices
- Two Relay Outputs rated at 5 Amps @ 30VDC.
- 600 Ohm audio output ties into existing PA, or external speaker
- IP addressable, can be activated individually or zoned in groups or all-call
- Requires minimal network bandwidth and uses TCP/IP protocol
- Works with redundant network servers for reliable failsafe operation
- US and Canadian ETL Listed to UL Std 60065
- CAN/CSA-C22.2 No. 60065
- Federal Commander software provides full two-way control and status monitoring of the Informer-PA
- Shipping Weight: 4.0 lbs   1.8 kg

HOW TO ORDER

Description	Part Number
Dual Rack/Wall/Desk Mount Informer PA	I-IP2

Intelligent Systems Products

Note: Informer-I-IP2 requires Federal Signal's Commander software. Other products for an intelligent system include:

Description	Part Number
Informer-IP Desk Mount	I-IP-IO
Informer-IP Wall Mount	I-IPW
Informer100 24VDC 100-watt speaker	I-IP100DC
Informer100 120/240VAC 100-watt speaker	I-IP100AC

ACCESSORIES

Description	Part Number
Scrolling Message Display	I-SMD2-36
Rack Mount Amplifier (2 channel 120-watt/ch)	X-SPA2120
Ceiling Speaker, 6" round, 24/70V, includes tile bridge and back box	AMR6-2570K
Wall Speaker, 30 watt, swivel mount	AM300

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FEDERAL SIGNAL

▶ Model I-IPSIU Series C

Informer
Sensor Interface Unit

The Informer I-IPSIU Series C provides multiple input/output interfaces to Federal Signal's alert and notification system It can also interface to radio systems for voice message broadcast. The I-IPSIU Series C is a network device with a 10/100 LAN interface, local digital voice messages, relay outputs and inputs for initiating devices; additionally, it stores local digital messages and programming information managed by Federal Signal Commander® control software. The new Series C models of the Informer SIU adds the ability to store pre-recorded messages on a removable micro-SD card.

An Informer I-IPSIU Series C can also interface to radio systems to push digital messages over radio channels. This allows the same digital voice messages sent over giant voice systems to also be played over radio. Series C brings new features to the Informer family, MODBUS TCP PLC interface and standard SIP phone interface capabilities. MODBUS can be used to control the I-IPSIU via this industry standard protocol so you can play messages and functions. SIP phone interface allows the I-IPSIU to interface with SIP phone systems for live paging and optional siren control.

Each Informer I-IPSIU has four independent relays with normally open and normally closed contacts to control external devices such as access control systems, strobes, lights and sounders. An RS232 port allows interface with digital message displays and the I-IPSIU has 16 inputs which can be used to activate a broad range of capabilities.

The Informer I-IPSIU is an ideal solution for large industrial complexes, healthcare facilities, schools, university campuses, office buildings, municipal facilities and other intelligent system applications.

FEATURES

- Ability to add external I/O interfaces to a Federal Signal Intelligent system or alerting and notification system
- 16 contact closure inputs to allow activation of messages or pre-programmed alerts or notifications
- Four output relays to control access controls systems, locks, lights, flashers, speakers, sirens, evacuation systems, etc.
- Radio interface for digital voice messages-to-radio communications (radio sold separately)
- 19" rack mount, wall or desk mount
- Compact size supports ease of deployment
- Small size with rugged construction
- Standard SIP phone interface
- Configurable via web browser interface
- Modbus® TCP PLC interface

- 17 hours of audio storage, 400 . Wav file capacity
- Power over Ethernet (PoE) or AC Powered
- RS232 port for driving an optional Scrolling Message Display
- Units are IP addressable individually, in groups or all at once
- Requires minimal network bandwidth and uses TCP/IP protocol
- Works with redundant Commander networks for reliable fail-safe operation
- Federal Commander software provides full two-way control and status monitoring of the Informer-IP. Commander is Windows 10®, Windows® Server 2012, 2016, and 2019 compatible
- UL and cUL Listed

Informer Sensor Interface Unit (I-IPSIU)

Level Monitor

Remote Door Monitor

Fire Detection Device

Remote Strobe

Cell Phones   Computers   Landline Telephones

Outdoor Warning

Commander Control & Activation

Internet/Radio
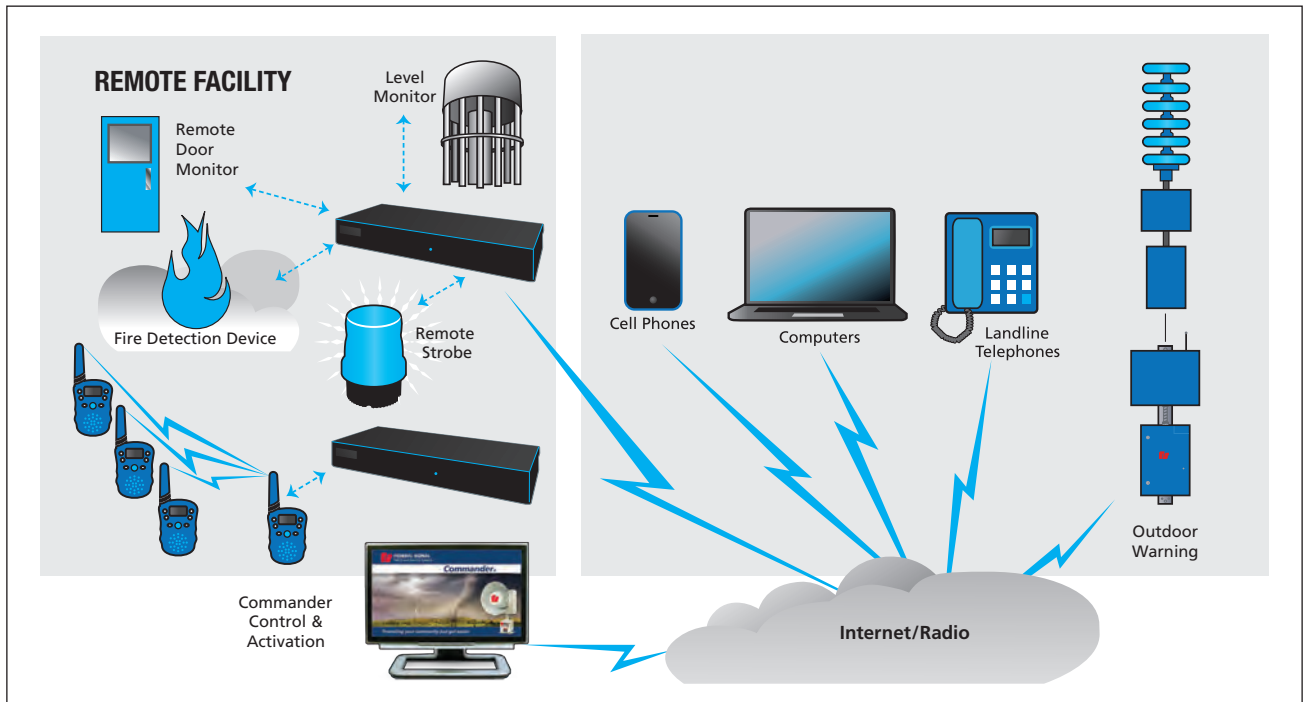
SPECIFICATIONS

Output:	4 N.O/N.C relays with Maximum Voltage 250VAC/30VDC maximum current 10A Wire size 16-26 AWG
Input:	16 – surge protected, optically-isolated inputs Wire size 16-24 AWG
Physical Dimensions:	1.7" (H) x 14.0" (W) x 6.4" (D) 43.5mm x 355.6mm x 163.6mm
Weight:	2.5 lbs / 1.1 kg
Shipping Weight:	4 lbs / 1.8 kg
Operating Temperature:	-22°F to +140°F /-30°C to +60°C
Humidity:	0 – 95%, non-condensing

HOW TO ORDER

Description	Part Number
I-IPSIU Sensor Interface Unit (Includes 19"rack mount and wall mounting)	**I-IPSIU**

OPTIONAL ACCESSORIES

Description	Part Number
Informer-IP Setup Wizard Software & Cable	**I-IP-SW**
Yellow Station with Momentary Contact – "EVACUATION"	**PSEV-YM**
Yellow Station with Momentary Contact and Sounder Cover – "EVACUATION"	**PSEVSC-YM**
Red Station with Momentary Contact – "EMERGENCY"	**PSEM-RM**
Red Station with Momentary Contact and Sounder Cover – "EMERGENCY"	**PSEMSC-RM**

Description	Part Number
Kenwood NX Cable goes direct to I-IPSIU without the need for Universal Adapter Cable (17501574A)	**17501602B**
I-IPSIU Universal Adapter Cable	**17501574A**
Available radio interface cable options (one per radio required)	
Motorola XTN/CP200/BPR40	**864700073A**
Motorola HT 1000, XTS 5000	**864700074A**
Kenwood (TK2170, TK2302V, NX-240V, NX-340U)	**864700075A**
BENDIX KING	**864700076A**
Motorola HT 1250 & Compatible	**864700077A**
Icom F11S	**864700078A**
Motorola CDM 750/1550/CM200/ CM300 LS/PM400	**864700080A**
Motorola Turbo XPR6550, APX7000 & Compatible	**864700081A**
Motorola XPR 4550, ALL XPR Mobile	**864700082A**
Motorola MCS 2000 DB25 Rear Connector	**864700083A**
MACOM M7100	**864700084A**
MACOM M7300	**864700085A**
Kenwood TK-480, TK-5320	**864700086A**
MACOM P7100 SERIES, MC-1527 PRYME	**864700087A**
Kenwood TK5810	**864700103A**
Kenwood TK790	**864700104A**
Motorola Astro XTL 1500, 2500, 5000, APX7500	**864700105A**
Hirose Plate Assy. w/male female extension	**864700136A**

FEDERAL SIGNAL

▶ Model I-IP100AC and I-IP100DC Series C

Informer100 Speaker

Federal Signal's Informer product line now includes an IP-enabled high-powered outdoor speaker. The Informer100 Speaker can be used as a notification device using tones and/or voice. Pair this model with a Federal Signal Commander® system for additional capabilities; for instance, it can be equipped with up to four local alarm initiation devices to activate the unit locally and to activate the Commander controller for mass notification communications.

The Informer100 Speaker has an internal 100 watt amplifier and driver to deliver intelligible voice messages from pre-recorded files or from the Federal Signal Commander VOIP network system. Ambient Level Monitor enables speaker to automatically adjust speaker volume in relationship to ambient noise level. It also has remote volume control for optimizing sound levels across your alerting area.

Notifications and alerts can be live voice, text-to-speech, pre-recorded messages and/or tone files. When used with optional Commander notification software, alert messages initiated from the Informer100 Speaker can be sent to emergency personnel via email, SMS, hand-held radios; and can also be used to activate other Informer units and sirens.

Informer100 Speaker includes two relay outputs for controlling strobes or other devices. It's designed for outdoor use or large indoor structures; and available in 24VDC or 120/240VAC. All wiring interfaces accessible via internal connectors for quick and easy installation.

The Informer100 Speaker is an ideal solution for existing notification systems where lack of coverage exists and the unit can be used as a call station where emergency alert buttons are required.

FEATURES

- Indoor/Outdoor IP enabled speaker with high powered voice and tone
- Available in 24VDC or 120/240VAC
- Ambient SPL monitor with automatic volume control
- Remote volume control
- Broadcasts live voice, text-to-speech and prerecorded voice or tone files
- Integral 100 watt amplifier and Ethernet interface simplifies installation
- Optional scrolling message display
- Remote firmware updates over Ethernet
- 17 hours of audio storage with up to 4000 .WAV files**
- 163 standard messages included
- Fully supervised using Commander software
- Wall or pole mount available

- Four initiation inputs, i.e. Panic button alarm or non-networked stand alone mode
- Two configurable AC/DC relay outputs
- Optional visual LED or strobe alerting devices available*
- Web interface for configuration
- Modbus® TCP Enabled interface for control and monitoring**
- SIP integrated phone interface for live PA, remote .WAV file and function control using standard SIP phones**
- NEMA 4X outdoor rated
- UL and cUL Listed
- UL Marine Rated

  * Must use visual device rated 2A or less

  ** Series C feature

Modbus MEMBER

Informer100 Speaker (I-IP100AC and I-IP100DC Series C)

Visual & Audible Signals

Control Room Surveillance/Alerting

Power Grid Distribution
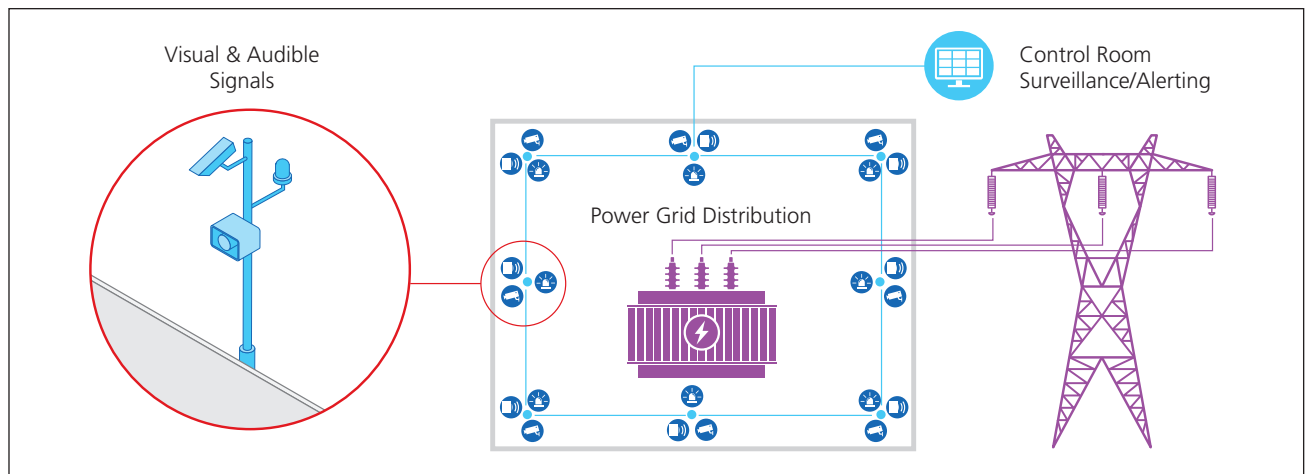
SPECIFICATIONS

- Operating Temperature: -40°F to 50°F @ 20% duty cycle/ (-40°C to 104°C)
- One mechanical relay output rated 2 A at 30 Vdc or 250 Vac, 25 A max in rush, N.O. dry contact. One DC solid-state relay output rated 5 Aat up to 28 Vdc, current limited
- One AC solid-state relay output rated 1 A at 20 to 264 Vac, zero crossing switched
- Tone and voice compatible with Federal Signal Commander and UltraVoice controllers (Requires Commander version 14.8.x or higher)
- Small size with rugged construction 7 in x 9 in 10 in (178 mm x 229 mm x 254 mm)
- Input: 24VDC, 5.15A maximum 120/240VAC, 50/60Hz, 1.5A/.78A maximum
- Maximum Sound Pressure Level 120 dB (± 2 dB) @ 10' (130 dB (± 2 dB) @ 1 m)

- Wired Ethernet
- Adjustable volume control and ambient noise monitoring with auto-level adjustment
- Wall or pole mount options
- Up to four direct wire input for customer supplied panic button alarm
- Requires minimal network bandwidth and uses TCP/IP protocol
- Works with redundant Commander network servers for reliable fail-safe operation
- Federal Signal Commander software provides full two-way control and status monitoring of the Informer100
- I-IP100DC Net Weight: 16.2 lbs 7.35 kg
- I-IP100AC Net Weight: 19.2 lbs 8.71 kg

HOW TO ORDER

Description	Part Number
24VDC 100 watt wall mount	I-IP100DC
120/240VAC 100 watt wall mount	I-IP100AC
Small (6" or less) Pole Mount Bracket	I-IP100-PM
Large (over 6") Pole Mount Bracket	I-IP100-PMW
Omni Directional Option for IP Speaker	I-IP100-OMNI

Informer100 Speaker requires Federal Signal Commander application software (sold separately)

Informer100 Speaker can be field configured or factory pre-configured to customer requirements. Contact your local representative for a quotation.

OPTIONAL ACCESSORIES

Description	Part Number
Indoor Yellow Station – Push & Turn Reset Button "EVACUATION"	PSEV-Y
Indoor Yellow Station – Push & Turn Reset Button "EVACUATION"; with Sounder Cover	PSEVSC-Y
Indoor Red Station – Push & Turn Reset button "EMERGENCY"	PSEM-R
Indoor Red Station – Push & Turn Reset button "EMERGENCY"; with Sounder Cover	PSEMSC-R
4-button push station (Indoor)	PBS-4
Hazardous Location LED Light 24VDC	225XL-024X[1,2]
Hazardous Location LED Light 120-240VAC	225XL-120-240X[1,2]

[1] "X" Indicates color: (A) Amber, (B) Blue, (C) Clear, (G) Green, and (R) Red

[2] The light is powered from the same source as the speaker

See https://www,fedsig.com/signaling-devices for other lighting options

SERVICE PARTS

Description	Part Number
IP Controller Service Part	Q-20000314
AC Speaker Service Part	Q-IP100AC
DC Speaker Service Part	Q-IP100DC

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Modbus® is a registered trademark of Schneider Electric, licensed to the Modbus Organization, Inc
Patent Pending

FEDERAL SIGNAL

▶ Model I-IP100ACX and I-IP100DCX Series C

Hazardous Location Informer100 Speaker

Federal Signal's Informer product line now includes an IP-enabled high-powered outdoor speaker. The Informer100 Speaker can be used as a notification device using tones and/or voice. Pair this model with a Federal Signal Commander® system for additional capabilities; for instance, it can be equipped with up to four local alarm initiation devices to activate the unit locally and to activate the Commander controller for mass notification communications.

The Informer100 Speaker has an internal 100 watt amplifier and driver to deliver intelligible voice messages from pre-recorded files or from the Federal Signal Commander VOIP network system. Ambient Level Monitor enables speaker to automatically adjust speaker volume in relationship to ambient noise level. It also has remote volume control for optimizing sound levels across your alerting area.

Notifications and alerts can be live voice, pre-recorded messages and/or tone files. When used with optional Commander notification software, alert messages initiated from the Informer100 Speaker can be sent to emergency personnel via email, SMS, hand-held radios; and can also be used to activate other Informer units and sirens.

Informer100 Speaker includes two relay outputs for controlling strobes or other devices. It's designed for outdoor use or large indoor structures; and available in 24VDC or 120/240VAC. All wiring interfaces accessible via internal connectors for quick and easy installation.

The Informer100 Speaker is an ideal solution for existing notification systems where lack of coverage exists and the unit can be used as a call station where emergency alert buttons are required. The AX models include an updated NIC to improve connection time, device password management and network set-up.

FEATURES

- Indoor/Outdoor IP enabled speaker with high powered voice and tone
- Available in 24VDC or 120/240VAC
- Ambient SPL monitor with automatic volume control
- Remote volume control
- Broadcasts live voice, text-to-speech and prerecorded voice or tone files
- Integral 100 watt amplifier and Ethernet interface simplifies installation
- Optional scrolling message display
- Remote firmware updates over Ethernet
- 163 standard messages included
- 17 hours of audio storage with up to 4000 .WAV files**
- Fully supervised using Commander software
- Wall or pole mount available

- Four initiation inputs, i.e. Panic button alarm or non-networked stand alone mode
- Two configurable AC/DC relay outputs
- Optional visual LED or strobe alerting devices available*
- Web interface for configuration
- Modbus® TCP Enabled interface for control and monitoring**
- SIP integrated phone interface for live PA, remote .WAV file and function control using standard SIP phones**
- NEMA 4X outdoor rated
- UL and cUL Listed
- UL Marine Rated

  * Must use visual device rated 2A or less

  ** Series C feature

HAZARDOUS LOCATION RATING: I-IP100ACX and I-IP100DCX

T-CODE AT MAXIMUM AMBIENT TEMPERATURE, ˚C	
Hazardous Location	**40˚C**
Class I, Division 2, Groups A, B, C, D	T5
Class II, Division 2, Groups F, G	T6
Class III	T6

Modbus MEMBER

Hazardous Location Informer100 Speaker (I-IP100ACX, I-IP100DCX Series C)
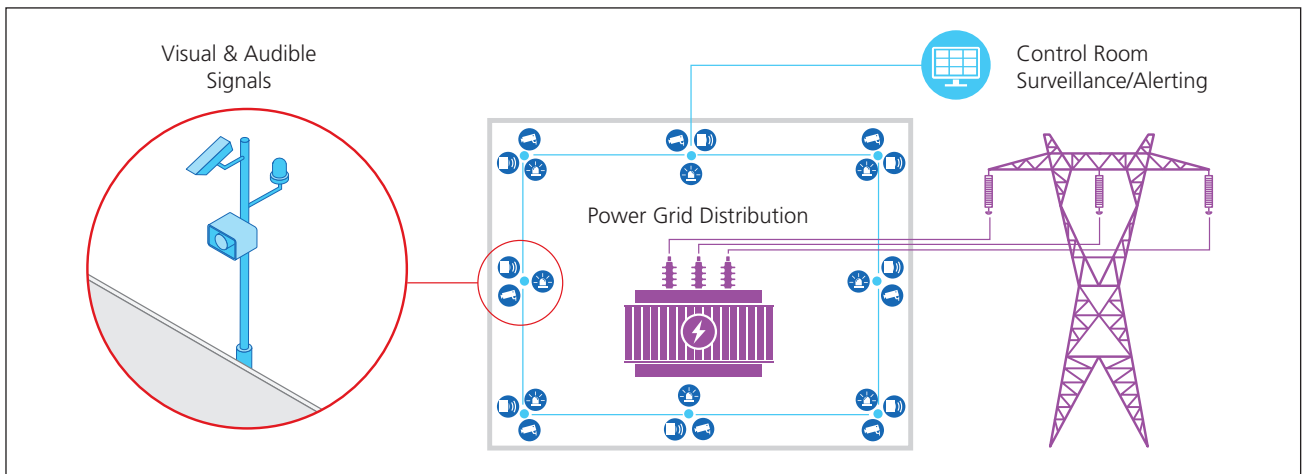
SPECIFICATIONS

- Operating Temperature: -40˚F to 104˚F / (-40˚C to 40˚C)
- Two Relay Outputs rated at 8A @ 240VAC. Relay outputs can be programmed to cycle on and off, or come on continuously with the on time, off time, and total-time being programmable. They can also be programed to control strobe lights or other devices
- Tone and voice compatible with Federal Signal Commander and UltraVoice controllers (Requires Commander version 14.8.x or higher)
- Small size with rugged construction 7 in x 9 in 10 in (178 mm x 229 mm x 254 mm)
- Input: 24VDC, 5.15A maximum 120/240VAC, 50/60Hz, 1.5A/.78A maximum
- Maximum Sound Pressure Level 120 dB (± 2 dB) @ 10' (130 dB (± 2 dB) @ 1 m)
- Wired Ethernet

- Adjustable volume control and ambient noise monitoring with auto-level adjustment
- Wall or pole mount options
- Up to four direct wire input for customer supplied panic button alarm
- Requires minimal network bandwidth and uses TCP/IP protocol
- Works with redundant Commander network servers for reliable fail-safe operation
- Federal Signal Commander software provides full two-way control and status monitoring of the Informer100
- I-IP100DCX Net Weight: 16.2 lbs 7.35 kg
- I-IP100ACX Net Weight: 19.2 lbs 8.71 kg

HOW TO ORDER

Description	Part Number
24VDC 100 watt wall mount	I-IP100DCX
120/240VAC 100 watt wall mount	I-IP100ACX
Small (6" or less) Pole Mount Bracket	I-IP100-PM
Large (over 6") Pole Mount Bracket	I-IP100-PMW
Omni Directional Option for IP Speaker	I-IP100-OMNI

Informer100 Speaker requires Federal Signal Commander application software (sold separately)

Informer100 Speaker can be field configured or factory pre-configured to customer requirements. Contact your local representative for a quotation.

OPTIONAL ACCESSORIES

Description	Part Number
Hazardous Location LED light 24 VDC	225XL-024X[1,2]
Hazardous Location LED light 24 VDC 120-240 VAC	225XL-120-240X[1,2]

[1] "X" Indicates color: (A) Amber, (B) Blue, (C) Clear, (G) Green, and (R) Red

[2] The light is powered from the same source as the speaker

SERVICE PARTS

Description	Part Number
IP Controller Service Part	Q-20000314
AC Speaker Service Part	Q-IP100AC
DC Speaker Service Part	Q-IP100DC

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FEDERAL SIGNAL

► Model RF100H and RF100U

UltraVoice® Compact Siren/Speaker

Federal Signal is introducing a new innovative compact siren/speaker system. The RF100 is an addition to our current family of outdoor and indoor warning products. These warning products can work together as an integrated system or standalone for special applications. As an integrated system, the RF100 includes an UltraVoice® control board which performs the same functions as our full line of UltraVoice products. The RF100 can deliver the same high quality voice announcements as our Modulator and DSA speaker systems. As a standalone device, the RF100 can be activated from an RF control point using 2-tone, DTMF, or Federal Signal's line of digital encoders. The RF100 includes inputs for local activation and remote activation of other warning system devices. The RF100 uses our NEMA4x siren/speaker enclosure which contains a 2-way radio for control and supervision. In addition, a high powered amplifier, power supply and UltraVoice control board are contained within the enclosure.

The RF100 is powered from 120/240 Vac or 24 Vdc. The siren/speaker can be ordered with either a VHF or UHF radio. An external antenna connection provides RF communication to our complete line of system control products including the SS2000+ web enabled controller, our Commander PC controller (Commander®), and our cloud based controller (CommanderOne®) with severe weather auto-activation capabilities. The RF100 has built-in high powered siren tones and can store digital voice or tone messages and can provide live PA. The RF100 provides outputs to drive external devices such as strobes or LED signaling devices. When powered by 24 Vdc the AC outputs are non-functional. The RF100 can be combined with DS100 amplified speakers to provide increased sound levels in one or multiple directions. The RF100 is a flexible and unique product. Contact Federal Signal sales to discuss your application.

APPLICATIONS

- Campus and schools for general notifications, active shooter and severe weather announcements
- Industrial facilities for chemical release, security and evacuation purposes
- Municipal locations where small systems may be preferred
- Park and recreation areas for severe weather announcements
- Fairgrounds for general and security announcements

- Tsunami Evacuation zones where smaller systems are required
- Construction sites for general announcements
- Notifications for locations requiring temporary announcements
- Economically extend warning coverage area to remote locations

FEATURES

- Compact self-contained siren/speaker
- Small size with rugged NEMA4x construction
- Secure communications using Commander 128/256 bit encryption
- Integrated UHF or VHF 2-way radio – requires external antenna
- Locally or remotely activated
- Supervised using Commander 2-way
- Outputs to drive external devices i.e. strobes
- Configurable volume control

- Programming over the air
- Inputs for standalone and remote pushbuttons
- Flexible mounting arrangements including:
    - Wall/ceiling mount standard
    - Small or large pole mount options
    - Omni-directional mount option
- Combine with DS100 for multi-direction system
- Powered from 120/240 Vac or 24 Vdc
- UL and cUL Listed

Compact Siren/Speaker (RF100)

Safe Zone
(Ex. Campus, Plant, School Park, etc.)
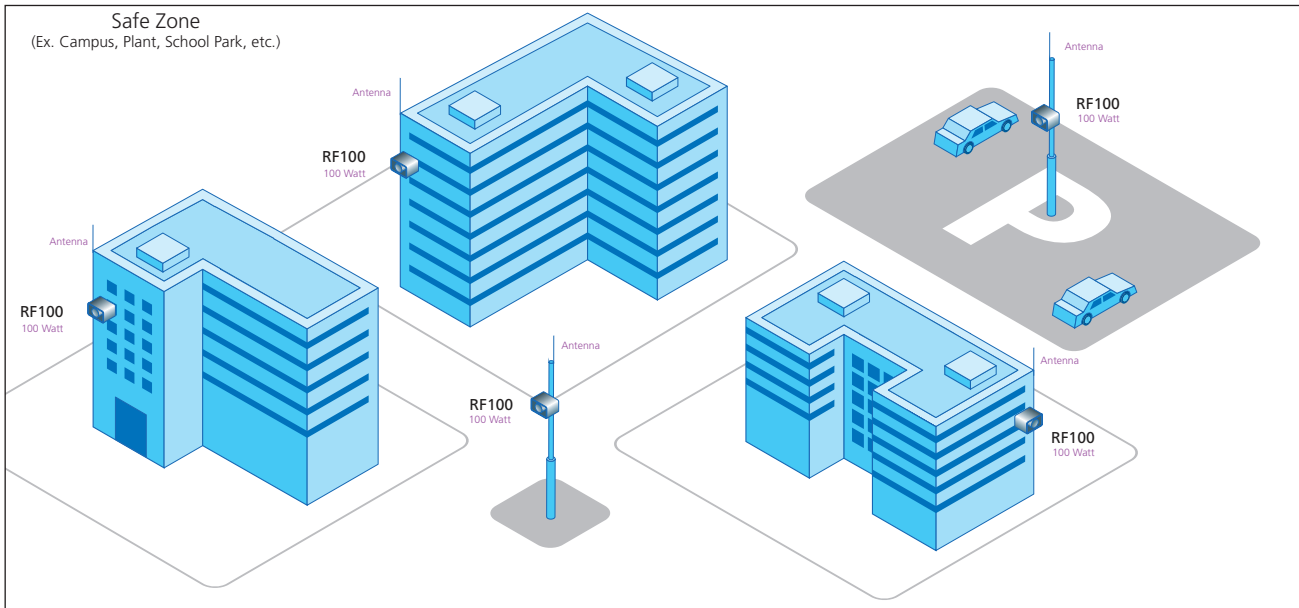
SPECIFICATIONS

- Maximum Sound Pressure Level 120 dB (± 2 dB) @ 10' (130 dB (± 2 dB) @ 1 m) @ 100 W

- Operating Temperature: -40°F to 140°F / (-40°C to 60°C)

- DTMF, MSK, 2tone or EAS decoders

- AES and time encryption

- Seven standard warning signals

- 4000+ digitally stored voice/tone messages

- Four, 1 Amp, AC powered solid state relay outputs

- One 5 Amp, DC powered solid state relay output

- Small size with rugged construction (W x L x D) 9.4 in x 8 in 12.6 in (239 mm x 203 mm x 320 mm)

- RF100 Net Weight: approx. 21 lbs
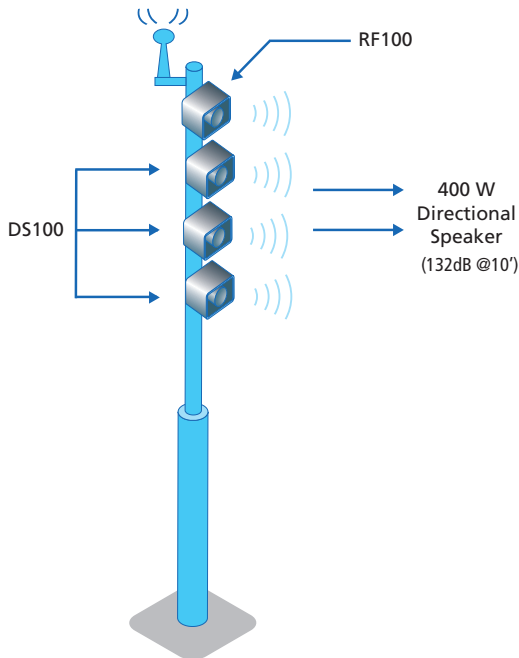
HOW TO ORDER

Description	Part Number
Radio Controlled Siren/Speaker (UHF)	**RF100U**
Radio Controlled Siren/Speaker (VHF)	**RF100H**
Omni Antenna (x = frequency dependent)	**OMNI-X**
Antenna bracket pole	**AMB-P**
Antenna bracket wall	**AMB-W**
Small (6" or less) Pole Mount Bracket	**I-IP100-PM**
Large (over 6") Pole Mount Bracket	**I-IP100-PMW**
Omni Directional option for speaker	**I-IP100-OMNI**

*Aerial view of sirens
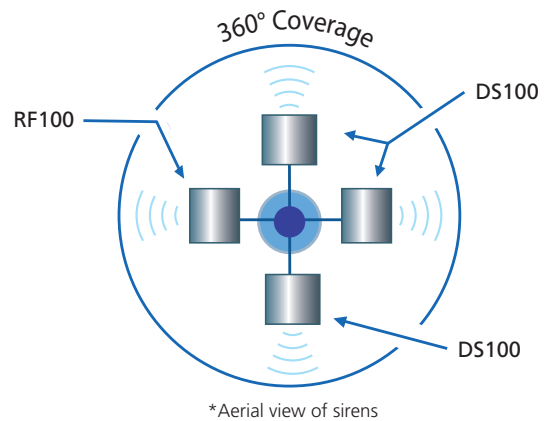
▶ Model RF100UX and RF100HX

UltraVoice® Hazardous Area Siren/Speaker

Federal Signal is introducing a new innovative compact siren/speaker system. The RF100X is an addition to our current family of outdoor and indoor warning products. These warning products can work together as an integrated system or standalone for special applications. As an integrated system, the RF100X includes an UltraVoice® control board which performs the same functions as our full line of UltraVoice products. The RF100X can deliver the same high quality voice announcements as our Modulator and DSA speaker systems. As a standalone device, the RF100X can be activated from an RF control point using 2-tone, DTMF, or Federal Signal's line of digital encoders. The RF100X includes inputs for local activation and remote activation of other warning system devices. The RF100X uses our NEMA4x siren/speaker enclosure which contains a 2-way radio for control and supervision. In addition, a high powered amplifier, power supply and UltraVoice control board are contained within the enclosure.

The RF100X is powered from 120/240 Vac or 24 Vdc. The siren/speaker can be ordered with either a VHF or UHF radio. An external antenna connection provides RF communication to our complete line of system control products including the SS2000+ web enabled controller, our Commander PC controller (Commander®), and our cloud based controller (CommanderOne®) with severe weather auto-activation capabilities. The RF100X has built-in high powered siren tones and can store digital voice or tone messages and can provide live PA. The RF100X provides outputs to drive external devices such as strobes or LED signaling devices. When powered from AC, there are (4) AC outputs and one DC output. When powered by 24 Vdc the AC outputs are non-functional. The RF100X can be combined with DS100 amplified speakers to provide increased sound levels in one or multiple directions. The RF100X is a flexible and unique product. Contact Federal Signal sales to discuss your application.

APPLICATIONS

- Industrial facilities for chemical release, security and evacuation purposes
- Water treatment facilities where hazard gases are present

- Chemical locations for warning and evacuation alerts
- Oil and gas sites for general announcements
- Gas pipeline locations for alerts

FEATURES

- Compact self-contained C1D2 siren/speaker
- Small size with rugged NEMA4x construction
- Secure communications using Commander 128/256 bit encryption
- Integrated UHF or VHF 2-way radio requires external mount
- Locally or remotely activated
- Supervised using Commander 2-way
- Outputs to drive external devices i.e. strobes
- Configurable volume control
- Programming over the air

- Inputs for standalone and remote pushbuttons
- Flexible mounting arrangements including:
    - Wall/ceiling mount standard
    - Small or large pole mount options
    - Omni-directional mount option
- Combine with DS100X for multi-direction system
- UL and cUL Listed for Class I, Division 2; Class II, Division 2; Class III
- Powered from 120/24 Vac or 24 Vdc

Hazardous Area Siren/Speaker (RF100X)
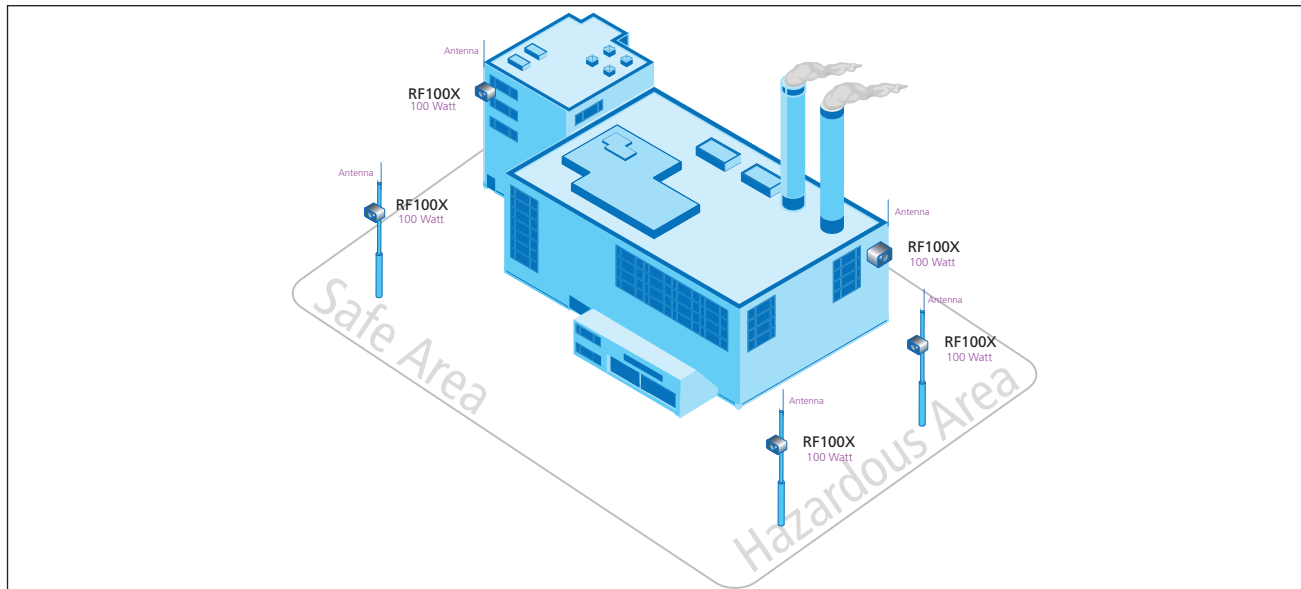
- Maximum Sound Pressure Level 120 dB (± 2 dB) @ 10' (130 dB (± 2 dB) @ 1 m) @ 100 W

- Operating Temperature: -40°F to 104°F / (-40°C to 60°C)

- DTMF, MSK, 2tone or EAS decoders

- AES and time encryption

- Seven standard warning signals

- 4000+ digitally stored voice/tone messages

- Four, 1 Amp, AC powered solid state relay outputs

- One 5 Amp, DC powered solid state relay output

- Small size with rugged construction (W x L x D) 9.4 in x 8 in 12.6 in (239 mm x 203 mm x 320 mm)

- RF100X Net Weight: approx. 21 lbs

HAZARDOUS LOCATION RATING: RF100X
T-CODE AT MAXIMUM AMBIENT TEMPERATURE, °C

- Hazardous Location: 40°C

- Class I, Division 2, Groups A, B, C, D: T5

- Class II, Division 2, Groups F, G: T6

- Class III: T6

Description	Part Number
Radio Controlled Siren/Speaker (UHF)	**RF100UX**
Radio Controlled Siren/Speaker (VHF)	**RF100HX**
Omni Antenna (x = frequency dependent)	**OMNI-X**
Antenna bracket pole	**AMB-P**
Antenna bracket wall	**AMB-W**
Small (6" or less) Pole Mount Bracket	**I-IP100-PM**
Large (over 6") Pole Mount Bracket	**I-IP100-PMW**
Omni Directional option for IP speaker	**I-IP100-OMNI**

Commander is a registered trademark of Federal Signal Corporation.

FEDERAL SIGNAL

▶ Model MOD Series

Modulator
High Powered Omni Speaker

Shown with optional QuadraFlare lights

Federal Signal's Modulator High Powered Speaker Array offers the same proven technology as the original Modulator with the exception of a smaller compact chassis. Modulator provides a flat frequency response up to 2000Hz producing intense warning signals and digital voice messaging over a large area. The Modulator design enables the siren to produce a high sound level and intelligible voice communications.

The innovative omni-directional electronic Modulator speaker array consists of modules that utilize four 100 watt drivers. It also provides clear voice communication and offers warning signals which are produced by Federal Signal's UltraVoice™ electronic controller and amplifier system. Custom tones and professionally recorded voice messages for the UltraVoice controller are available and can be purchased upon request.

The Modulator High Powered Speaker Array combined with the UltraVoice controller is ideal for community/municipal, industrial and military applications where immediate instruction is necessary.

The Modulator and UltraVoice controller can be networked via radio, IP, landline, cellular and/or satellite communications. Powering is available in AC, DC, or solar. The system typically operates from batteries which are charged from either AC or Solar. Federal Signal can also provide customized solutions to fit your special applications.

FEATURES

- Light-weight, compact design
- Utilizes Federal Signal Ultravoice™ for control and amplification
- Excellent frequency response for clear voice reproduction

- 360° coverage without sound variation in horizontal planes
- Easy servicing through convenient access panels
- Anechoic chamber-certified

MODEL	ACTIVE MODULES	TOTAL WATT	DECIBELS @ 100'[1]	EFFECTIVE RANGE @ 70 dBc	HEIGHT IN	CM	NET WEIGHT LBS	KG	SHIPPING WT LBS	KG
MOD1004B	1	400	106 dBc	1,200'	28"	71	125	56.8	264	120
MOD2008B	2	800	112 dBc	1,800'	43"	109.2	190	86.4	294	133.6
MOD3012B	3	1200	115 dBc	2,200'	57"	144.7	255	115.9	444	201.8
MOD4016B	4	1600	118 dBc	2,800'	72"	182.8	320	145.5	544	247.3
MOD5020B	5	2000	120 dBc	3,100'	86"	218.4	385	175	744	338.2
MOD6024B	6	2400	121 dBc	3,400'	101"	256.5	450	204.5	960	436.4
MOD8032B	8	3200	124 dBc	4,200'	130"	330.2	580	263.6	1392	632.7

Modulator® High Powered Omni Speaker (MOD)

Top light mounting bracket

Pole Mounted

(Shown: MOD6024B)

Easy servicing through driver access panels

Optional side-light kit x4

Optional Solar Charging

Radio Antenna (if required) sold separately

SPECIFICATIONS

Frequency Response:	200-2000Hz
Color	Off-White
Paint Type	TGIC-polyester powder coat
Modulator Horn Type	Hyperbolic flare
Horizontal Coverage	360º +/- 1 dB(C)
Diameter	35"/88.9cm

Wind Loading @ 110mph wind velocity[1]:

MOD1004B	251 lbs
MOD2008B	377 lbs
MOD3012B	503 lbs
MOD4016B	629 lbs
MOD5020B	755 lbs
MOD6024B	881 lbs
MOD8032B	1133 lbs

[1] Wind loading is the calculated force of wind at 110mph (shoreline), exposure D (flat, unobstructed coastal areas) on frontal area 4.64 ft. per American National Standards Institute A58.1 "Minimum design loads for buildings and other structures."

HOW TO ORDER

Contact our Federal Signal Sales Engineers to design a system that meets your specific requirements.

Specify speaker array model number – each speaker array model must be ordered with a specific corresponding UV and Amplifier.

Speaker	Controller[1]
MOD1004B	UV + 1 UV400
MOD2008B	UV + 2 UV400
MOD3012B	UV + 3 UV400
MOD4016B	UV + 4 UV400
MOD5020B	UV + 5 UV400
MOD6024B	UV + 6 UV400
MOD8032B	UV + 8 UV400

[1] Controllers available in Radio, IP, and Landline.

Note: 40 feet of cable is supplied with siren. Extension cable in 10 foot increments is also available. Mounting the UV controller further than 100 feet is not recommended (further mounting may decrease power output).

ACCESSORIES

Description	Part Number
Flashing light for top of MOD	191XL-024*
Red Quadraflare 4 light kit	MOD-QF-KIT
Blue Quadraflare 4 light kit	MOD-QF-KIT-B

* Indicates color: (A) Amber, (B) Blue, (C) Clear, (G) Green or (R) Red

REPLACEMENT PART

Description	Part Number
Driver, 100 watt	K8570063A

UltraVoice is a registered trademark of Federal Signal Corporation.

FEDERAL SIGNAL

▶ Model MOD6032B

Modulator
High Powered Omni Speaker

The MOD6032B is a 3200 watt version of the MOD6024B siren. The two middle modules utilize a dual driver for a smaller compact siren design.

Federal Signal's Modulator High Powered Speaker Array offers the same proven technology as the original Modulator with the exception of a smaller compact chassis. Modulator sirens provides a flat frequency response up to 2000Hz producing intense warning signals and digital voice messaging over a large area. The Modulator design enables the siren to produce a high sound level and intelligible voice communications.

The innovative omni-directional electronic Modulator speaker array consists of modules that utilize 100 watt drivers. It also provides clear voice communication and offers warning signals which are produced by Federal Signal's UltraVoice™ electronic controller and amplifier system. Custom tones and professionally recorded voice messages for the UltraVoice controller are available and can be purchased upon request.

The Modulator High Powered Speaker Array combined with the UltraVoice controller is ideal for community/municipal, industrial and military applications where immediate instruction is necessary.
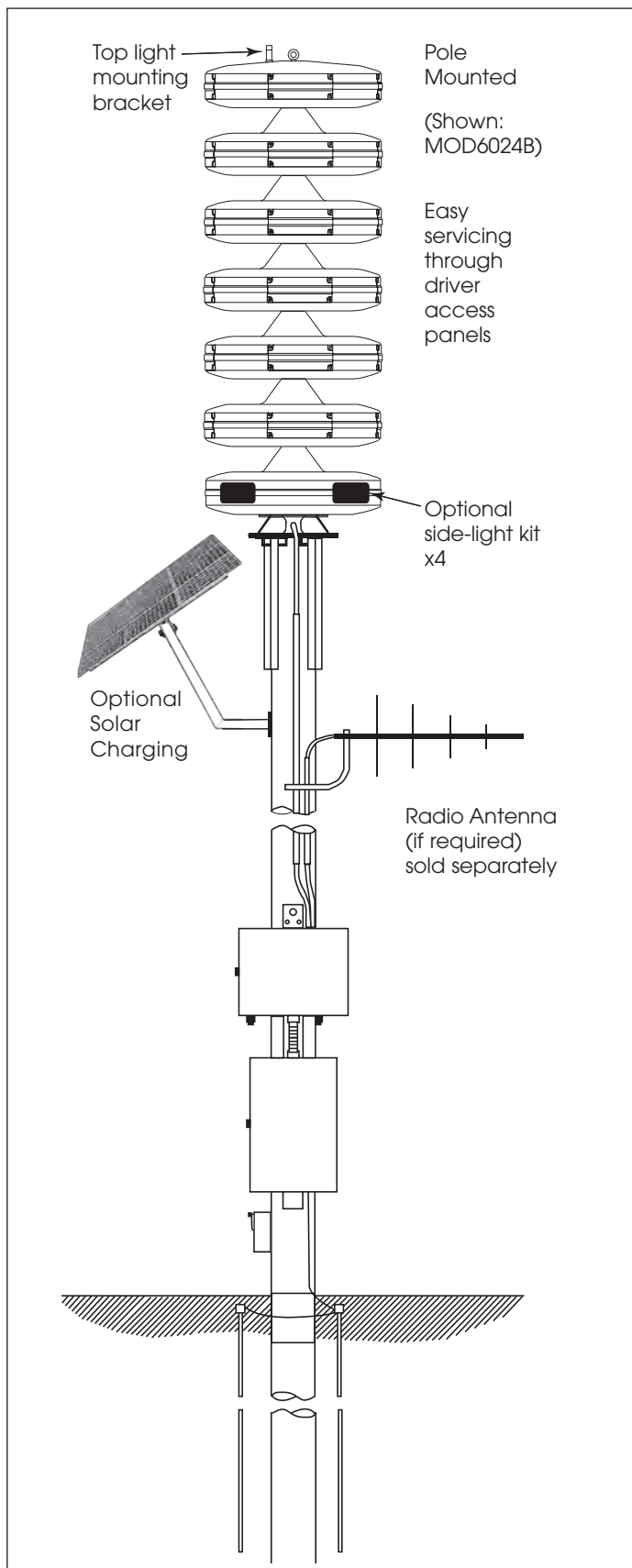
The Modulator and UltraVoice controller can be networked via radio, IP, landline, cellular and/or satellite communications. Powering is available in AC, DC, or solar. The system typically operates from batteries which are charged from either AC or Solar. Federal Signal can also provide customized solutions to fit your special applications.

FEATURES

- Light-weight, compact design
- Utilizes Federal Signal Ultravoice™ for control and amplification
- Excellent frequency response for clear voice reproduction

- Optional visual indicators
- 360° coverage without sound variation in horizontal planes
- Easy servicing through convenient access panels
- Anechoic chamber-certified

MODEL	ACTIVE MODULES	TOTAL WATT	DECIBELS @ 100'[1]	EFFECTIVE RANGE @ 70 dBc	HEIGHT IN	MM	NET WEIGHT LBS	KG	SHIPPING WT LBS	KG
MOD6032B	6	3200	123 dBc	4,000'	101"	256.5	480	218	990	450

[1]Based on farfield measurements
*Photo shown with optional visual indicators

Modulator® High Powered Omni Speaker (MOD)
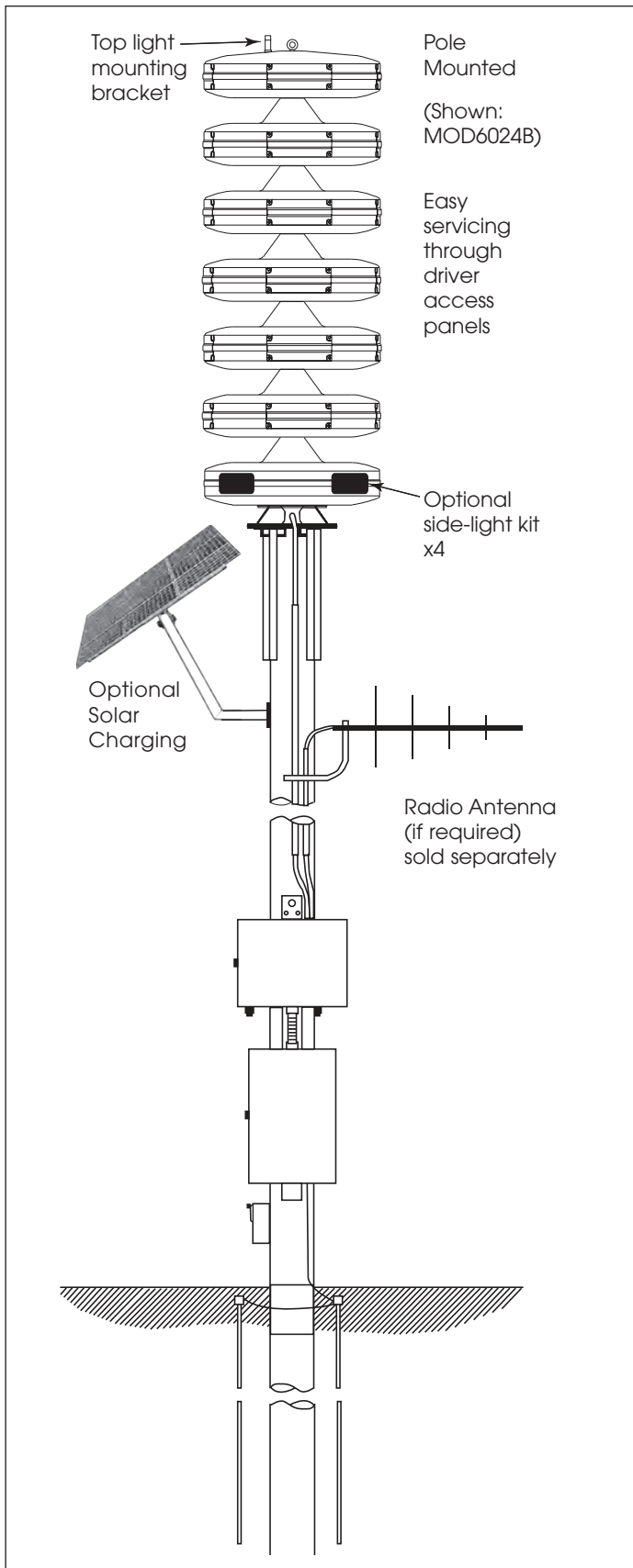
Top light mounting bracket

Pole Mounted

(Shown: MOD6024B)

Easy servicing through driver access panels

Optional side-light kit x4

Optional Solar Charging

Radio Antenna (if required) sold separately

SPECIFICATIONS

Frequency Response:	200-2000Hz
Color	Off-White
Paint Type	TGIC-polyester powder coat
Modulator Horn Type	Hyperbolic flare
Horizontal Coverage	360° +/- 1 dB(C)
Diameter	35"/88.9cm
Wind Loading @ 110mph wind velocity[2]:	
MOD6032B	881 lbs

[2] Wind loading is the calculated force of wind at 110mph (shoreline), exposure D (flat, unobstructed coastal areas) on frontal area 4.64 ft. per American National Standards Institute A58.1"Minimum design loads for buildings and other structures."

HOW TO ORDER

Contact our Federal Signal Sales Engineers to design a system that meets your specific requirements.

Specify speaker array model number – each speaker array model must be ordered with a specific corresponding UV and Amplifier.

Speaker	Controller[3]
MOD6032B	UV + 8 UV400

[3] Controllers available in Radio, IP, and Landline.

Note: 40 feet of cable is supplied with siren. Extension cable in 10 foot increments is also available. Mounting the UV controller further than 100 feet is not recommended (further mounting may decrease power output).

REPLACEMENT PART

Description	Part Number
Driver, 100 watt	**K8570063A**

FEDERAL SIGNAL

▶ Model DSA

Directional Speaker Array

Federal Signal's Model DSA Directional Speaker Array provides excellent voice and tone reproduction and is ideal for overcoming high levels of industrial noise.

Design flexibility allows the user to combine up to four speaker arrays; each array will hold from two to six re-entrant speakers. Speakers have a 70° horizontal angle of dispersion, accommodating specific sound output patterns. (When vertical stacks are placed 90° apart, a 180° horizontal coverage is possible.)

The Model DSA mounting kits allow for multiple speaker arrays to be mounted on the same pole at 90° increments. The downward tilt can be adjusted by 15°. The mounting flexibility of this system allows the speakers to be pointed directly at a targeted area for more concentrated sound output.

A DSA consists of a corrosion resistant aluminum frame with fiberglass projectors and stainless steel mounting hardware. Each speaker contains a high-efficiency 100 watt driver. DSA speakers are equipped with 45-ft UL rated PVC shielded wire. The DSAX-1 speakers are equipped with 94-ft of UL rated PVC shielded wire.

Amplification, tone generation and signal timing are provided by the Model UV controller, purchased separately.

Ideal for outdoor industrial plant warning, the Model DSA speaker array allows sound coverage to be customized to each site, preventing wasted sound in and around the plant. The Model DSA provides better speech intelligibility within a coverage zone than omni-directional speaker arrays.

FEATURES

- Overcomes ambient noise of industrial environments
- Provides maximum speech recognition and tone reproduction
- Produces 111 dBc to 121 dBc @ 100'

- Two mounting kits available
- UL and cUL Listed
- Standard models include 45-ft of cable tail, DSAx-1 models include 94-ft cable tail

MODEL	NO. OF 100W SPEAKERS	TOTAL WATT	DECIBELS 100'[2]	EFFECTIVE RANGE	HEIGHT IN	MM	NET WEIGHT LBS	KG	SHIPPING WT LBS	KG
DSA2	2	200	111 dBc	1,700'	25	635	43	19.5	127	57.6
DSA3[1]	3	300	115 dBc	2,200'	46	1168.4	80	36.2	130	59
DSA4	4	400	117 dBc	2,600'	48	1219.2	95	43.1	175	79.3
DSA5[1]	5	500	119 dBc	3,000'	70	1778	110	49.9	220	99.7
DSA6	6	600	121 dBc	3,400'	72	1828.8	125	56.7	230	104.3

[1] Special order, consult factory

[2] Based on far field measurements.

Directional Speaker Array (DSA)

POLE MOUNT

Labels in diagram:
- 22.00" / 558.8 mm
- 7.66" / 194.56 mm
- 22.00" / 558.8 mm
- 16.31" / 414.27 mm
- 5.69" / 144.52 mm
- 12.00" / 304.80 mm
- 72.00" / 1828.80 mm
- 68.13" / 1730.50 mm
- ø 6.13" / 155.70 mm
- 13.13" / 333.50 mm
- 15°
- 10.44" / 265.17 mm From Top Of Pole
- 3X ø.53 Mounting Holes in Brackets on 2" Centers
- Stainless Steel Mounting Brackets
- Fiberglass Projectors (100W driver each)
- Driver Access Panel
- Jacketed Speaker Cable (Federal Signal Supplied) Conduit & Clamps (Customer Supplied)
- Radio Antenna
- Speaker Assembly Ground Wire, #4 Copper, Connect to Ground Rod Directly (Customer Supplied)
- Siren Control (Ordered separately)
- Battery Box (Ordered separately)
- For Mounting Height, Refer to Contract Specs
- Service Disconnect (Customer Suppliedif required)
- Control Unit Ground Wire (Customer supplied)
- Class II Utility Pole (Customer Supplied)
- GROUND LEVEL
- Concrete Footing Optional (Contract Specs. Determine)
- Ground Rod to be 8-ft. #4 Copper with Clamp (Customer Supplied)

SPECIFICATIONS

Color: Black projectors with Off-White Housing
Paint:TGIC – Polyester Powder Coat,highly corrosion resistant
Frequency Response: 200-2000Hz

REPLACEMENT PARTS

Description	Part Number
Driver, 100 watt	K8570063A

Considerations for system configuration:

- The DSA speaker array is used in conjunction with the UV controller. The UV houses the amplifiers that drive the DSA speaker array. Each DSA is made up of individual 100 watt speakers. FOR EXAMPLE: A DSA4 has four 100 watt speakers.

- Multiple DSA arrays can be controlled by a single UV as long as the total wattage meets or exceeds the total wattage required by the DSAs. The total watt required is the sum of all 100 watt speakers from each DSA.

HOW TO ORDER

Contact our Federal Signal Sales Engineers to design a system that meets your specific requirements.

Description	Part Number
2 speaker assembly	DSA2[1]
3 speaker assembly (Special order, consult factory)	DSA3[1]
4 speaker assembly	DSA4[1]
5 speaker assembly (Special order, consult factory)	DSA5[1]
6 speaker assembly	DSA6[1]
Mounting Kit:	
Wall mount for one vertical support	DSAMK1
Mounting kit for one to four vertical stack(s) 90° or 180° apart	DSAMK4
Mounting kit for steel poles, one vertical stack	DSAMKSP
4.5" mounting brackets for steel pole, bracket for one vertical stack	DSAMKSPB45
2.375" mounting brackets for steel pole, bracket for one vertical stack	DSAMKSPB23

[1] Includes 45' cable tail. Order -1 after the part number for 94' cable tail. Controller and Communications – See price list for controller and powering options. Batteries not included.

FEDERAL SIGNAL

▶ Model UVRI-B

UltraVoice® Indoor Remote Interface Controller

The UltraVoice® Remote Interface Controller, Model UVRI-B, establishes a communication link between an isolated location and Federal Signal's Commander® alerting and notification system; creating a fully integrated indoor and outdoor Mass Notification System. UVRI-B's primary application is to provide a communication bridge, allowing public safety official to expand their alerting and notification capabilities. The UVRI-B can interface with an individual buildings fire alarm panel, and is designed to provide remote control status and monitoring. The UVRI-B is a direct indoor replacement for the UVRI.

Model UVRI-B can be equipped with a high capacity digital voice storage device for simple and/or complex voice messages. When paired with Federal Signal's Commander control system, UVRI-B offers the unique capability for a remote operator to record and broadcast urgent message notifications, or to activate VOIP communications. When local control and activations are required, the UVRI-B provides an easy to use local user interface with push button control for eight functions and a local microphone input for live voice announcements.

The UVRI-B has an IP interface that allows for simple high-speed two-way control and activation. Additionally, the UVRI-B can be equipped with two-way VHF/UHF radios, such as Motorola Vertex transceivers, for wireless communication to the Federal Signal Commander control system. The UVRI-B also supports cellular communication. UVRI-B utilizes secure digital data transfer methods via 128/256 bit encryption to ensure no malicious or accidental operation of the system. Status monitoring provides information on the following conditions: AC power, battery voltage, enclosure intrusion, charger, local activation, and remote system operation. It can also be configured to support Ambient Noise Monitoring utilizing an external microphone for noise level detection.

The UVRI-B provides system maintenance improvements, an integrated IP interface, ambient noise level detection for automatic sound level adjustment, integrated 12VDC charger, simplified wiring, integrated speaker and an optional 100 watt amplifier. The speaker line is supervised when using distributed speakers.

FEATURES

- Indoor use
- Flexible communications, IP standard/radio or cellular optional
- 12VDC and120/240VAC operation with 12VDC battery back up
- Seven factory installed siren tones
- Removable SD card for local storage of voice/tone messages
- Capable of storing over 4000 voice/tone messages
- Built in IP interface with downloadable voice and tone messages
- Built in 2 watt amplifier and speaker
- Optional 100 watt amplifier
- Relay outputs for control of external devices, i.e. visual, door locks

- Eight inputs for activation of announcement alerts or alarms
- Audio out for public address interface
- Fire alarm panel interface
- Self-diagnostics with reporting for major system components
- Secure 128- and 256-bit encryption options
- Local microphone access
- Can be configured for ambient noise monitoring with external microphone
- UL and cUL Listed
- CSFM Approved

UltraVoice® Remote Interface Controller (UVRI-B)
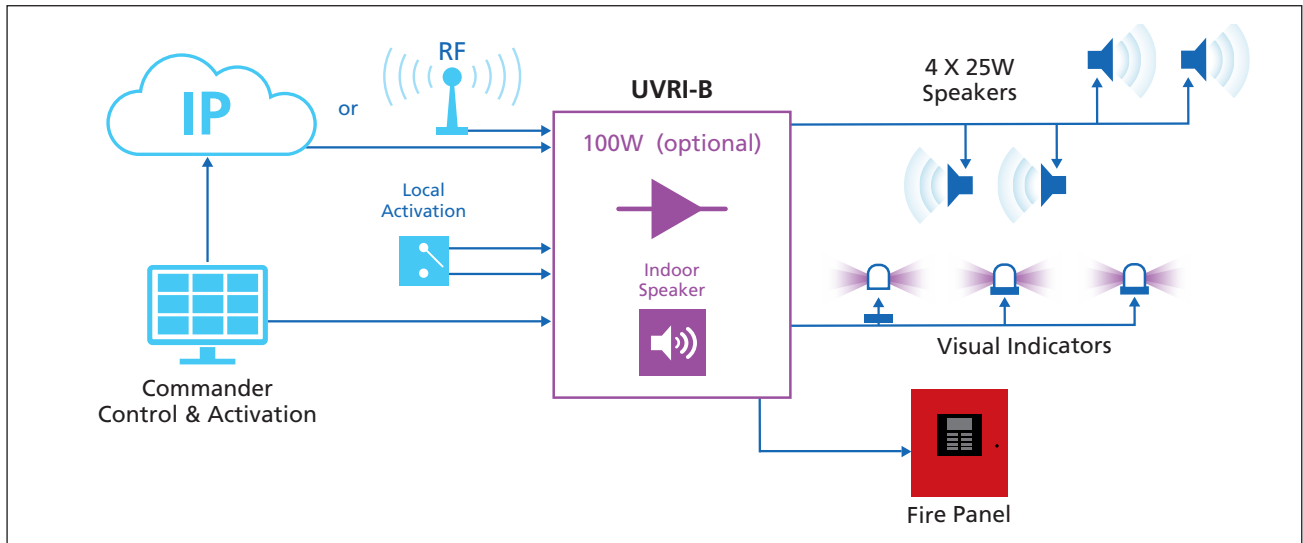
Operating Temperature[1]: -22°F to +150°F/-30°C to + 65°C

Humidity: 0-98% non-condensing

Input Voltage (nominal):   120/240 VAC

Current: See technical manual

Battery Voltage: 14VDC, 13.7 volts (nom.)

Battery Current: < 260 mA standby current
                          <300 mA during a function
                          < 7A during radio transmit

Standby Time: Up to 45 hours with
                                      Vertex transceiver

Audio output UVRI-B board (Q20000253)   10/25Vrms

Audio output optional amplifier (Q20000324)   25Vrms

Relays 1-4   30VDC/240VAC 8A max

Small size with rugged construction:
20.36 in x 16.30 in x 6.62 in (517 mm x 414 mm x 168 mm)

UVRI-B (Weight without radio)[2]

Net Weight   41.4 lb/18.8 kg

Net Shipping Weight   45.4 lb/20.6 kg

Note: [1]UVRI-B can be configured for 24VDC operation.
Contact factory for details.

[2]See the installation manual for additional model UVRI-B
shipping weights.

HOW TO ORDER

**Contact our Federal Signal Sales Engineers
to design a system that meets your specific
requirements.**

Description	Part Number
Remote Interface unit, IP Enabled with Battery Back-up	**UVRI-B**
Remote Interface unit, IP Enabled with Battery Back-up and 100 Watt Amp	**UVRI-B100**
Remote Interface with VHF Radio	**UVRI-BH**
Remote Interface with VHF Radio with 100 Watt Amp	**UVRI-BH100**
Remote Interface with UHF Radio	**UVRI-BU**
Remote Interface with UHF Radio with 100 Watt Amp	**UVRI-BU100**

Description	Part Number
Ambient Noise Microphone	**X-SM1-FS1**
Noise Canceling Push to Talk Microphone	**MNC-MC**
24 VDC power cable	**Q17501999A**

Description	Part Number
Control Board	**Q20000253**
100W Amp Board	**Q20000324**
Battery 12V. 12 Ah	**Q155193A**

®VERTEX is a trademark of Vertex Standard LMR, Inc.

FEDERAL SIGNAL

▶ Model UVIC-B

UltraVoice® Indoor Controller

The Federal Signal UltraVoice® Integrated Controller, Model UVIC-B, is a Mass Notification panel designed to deliver clean, clear, amplified audio to a network of speakers (sold separately). The UltraVoice Integrated Controller can be used in a standalone application or networked with an outdoor Mass Notification system. The controller provides high quality broadcast of live or pre-recorded voice and tones. The UVIC-B continuously monitors speaker circuits with automatic notification of system failures.

The UVIC-B is housed in an indoor NEMA1 style cabinet, with provisions for up to two 400 watt amplifiers (UV400 sold separately). Each controller requires 120 or 240 VAC and contains two sealed lead-acid batteries, providing over 30 minutes of operation in the event power has been lost. The UVIC-B can be activated via radio (UHF/VHF/P25, cellular or IP (fiber/networked) from a remote location and can also interface a UVLOC-B for remote activation. This indoor controller has up to 8 preset activation functions, and Live PA broadcasts with the addition of a Local microphone (sold separate).

The UVLOC-B is a self-contained, lockable enclosure with supervised communications to the UVIC-B. Live Public Address is also available. Activation of pre-recorded messages can be done locally, via the UVLOC-B, via Commander or via an SS2000+. An SS2000+ is a system wide activation point which is typically equipped with a base station radio (approved radio license required at time of order).

The UltraVoice Integrated controller can be activated, managed, set-up and monitored using the Federal Signal Commander® Software which allows simple "point and click" activation and indication of alarms or fault conditions. When used with Commander Assist, the Commander Control Software provides an unique and easy-to-use creation of site specific, alert specific alerting messages.

A UVIC-B can be used to power a complete line of indoor or outdoor speakers. Federal Signal's outdoor speakers include the DSA series, MOD1004B or MOD2008B. This controller can also be used with the AM300 and EN series or any 25/70V speakers when equipped with the optional UVADM. For end-of-line speaker monitoring the speakers require use of capacitively coupled devices.

The UVIC-B also incorporates 4 stand-alone relays for activation of external devices, the UV-ARM is not supported with this new system.

FEATURES

- Flexible communications via radio, Ethernet (IP), cellular with two-way status monitoring
- Live Public Address
- Standard and optional tones
- Optional voice message alerts
- Supervised 25/70Vrms Audio speaker output (UVADM)
- Secure communications with 128/256 AES-Bit Encryption
- Programmable relays for control of external equipment
- Local microphone access

- NEMA1 Indoor cabinet
- End-of-line speaker or voltage/current monitoring
- Supervised Local Operating Console for remote activations
- Built in relays for control of external devices
- Battery backup – 72 hour (400 Watt)
- UL and cUL
- CSFM approved

UltraVoice® Indoor Controller (UVIC-B)

UVIC-B

400W - 800W
8 Zones

Commander Control & Activation

RF

Local Operating Controls

(1-4)

CONTROL

1-8 Zones

Visual Indicators
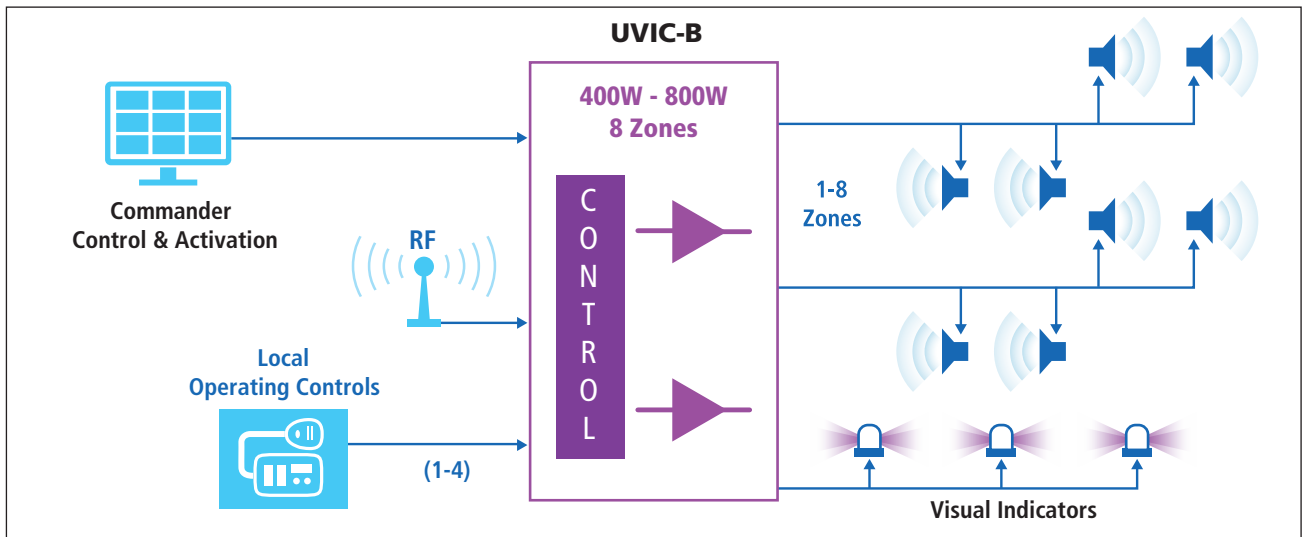
SPECIFICATIONS

Operating Temperature:	-22°F to 120°F / -30°C to 49°C
Input Voltage:	120 or 240VAC, 50/60 Hz Single-phase
Input Current:	5A AC, 45A DC Max
Internal Operating Voltage:	24 VDC
Continuous Signaling Time:	30 minutes
Relay Contact Rating:	8A at 24 Vdc or 250 Vac
Dimensions H x W x D:	27" x 20.3" x 10.7" (685.5 mm x 515.62 mm x 271.78 mm)
Net Weight: (no amplifiers)	64.55 lbs 29.28 kg
Shipping Weight:	200 lbs 90.7 kg

HOW TO ORDER

Contact our Federal Signal Sales Engineers to design a system that meets your specific requirements.

Description	Part Number
Indoor Controller, 120 VAC	**UVIC-B1**
Indoor Controller, 240 VAC	**UVIC-B2**
Indoor Controller, 120 VAC, UHF	**UVIC-B1U**
Indoor Controller, 120 VAC, VHF	**UVIC-B1H**
Indoor Controller, 120 VAC, IP-enabled*	**UVIC-B1IP**
Indoor Controller, 240 VAC, UHF	**UVIC-B2U**
Indoor Controller, 240 VAC, VHF	**UVIC-B2H**
Indoor Controller, 240 VAC, IP-enabled*	**UVIC-B2IP**

*Requires IP Networking Software

OPTIONAL ACCESSORIES

Description	Part Number
Amplifier, 400 watt	**UV400**
Audio distribution module for zone and voltage selection (25/70 V)	**UVADM**
Local operating console	**UVLOC-B**
8-port LOC Expansion	**UVLOC-B-EXP**
Telco Base, Landline	**TB-LL**
Digital voice mini SD card	**DVSD**
Digital Voice Recording Fee	**DVR**
Noise canceling push to talk microphone	**MNC-MC**
Wall mounted speaker strobe	**ENWSSPA**
Wall mounted strobe	**ENWSTPA**
Ceiling mounted strobe	**ENCSTA**
100W Tappable Speaker	**DSA1**

EN-WSSPA   EN-WSTPA   EN-CSTA

UVLOC-B

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FEDERAL SIGNAL

▶ Model UVLOC-B

UltraVoice® UVLOC-B
Local Operating Console

The new Federal Signal UltraVoice® Local Operating Console (UVLOC-B) is an easy to use remote user interface for indoor and outdoor alert and notification systems. The UVLOC-B provides a system operator, building inhabitant or facility personnel, an activation point and indicator of system faults. The UVLOC-B offers the capability to: activate up to ten tone or pre-recorded digital voice messages and conduct live public address (PA) announcements. The Local Operating Console is ideal for providing multiple activation points in an Indoor Mass Notification System. The UVLOC-B is specifically designed to work with the UVIC-B Indoor controller. Each UVIC-B provides support for up to four UVLOC-B consoles. An optional UVLOC-IM-B interface board provides interface for an additional eight UVLOC-B consoles.

The UVLOC-B is rated for Indoor use and designed for surface / wall mounting. A UVIC-B controller supports up to four UVLOC-B consoles with the UVIC-B supplying power and supervision to each unit. The ability to provide up to four (or up to 12 with optional UVLOC-IM-B) remote activation points offers flexibility in large facilities. The UVIC-B controller provides power and battery back-up operation in the case of AC power loss. All UVLOC-B consoles are supervised and can be optioned to indicate (sounder) if the main controller has a fault.

The UVLOC-B provides visual indicators for power, arm and fault status. A UVLOC-B includes a handheld microphone with push-to-talk Live PA functionality. The touch panel has ARM and Cancel functions and ten pushbuttons for activation of pre-determined messages. The UVLOC-B has a locking front door for protection against malicious activity. The UVLOC-B interfaces to the UVIC-B with a single twisted pair cable with range up to ½ mile.

Designed to enhance "all hazard" warning capabilities, the UVLOC-B provides increased system flexibility, redundancy, and reliability, making it a necessary component to any alert and notification system. A UVIC-B can also be used in a standalone mode with remote UVLOC-B's for a integrated plant-wide public address system. The UVIC-B provides up to 800W of capacity for distributed speaker operation and / or to interface outdoor speaker systems such as DSA sirens.

FEATURES

- Powered by UVIC-B Controller with battery back-up
- 10 push button console for remote activations
- Lockable front door with window

- Small and compact wall mount enclosure
- LED status indicators for Power, ARM, Fault
- Supervised two-wire interface

Ultravoice® Local Operating Console (UVLOC-B)

Stand Alone UVIC-B / UVLOC-B

UVLOC-B

UVIC-B

Distributed Speaker System

Local Activation

Zones

UVLOC-B

Up to 1/2 mile
Activation

UVLOC-B

Local Public Address

Networked UVIC-B / UVLOC-B

CommanderOne
Cloudbased Control and Activation

UVIC-B

Distributed Speaker System

Zones

Local/Onsite Network
Radio, IP, Landline, Cell Modem

Commander
Control & Activation

UVLOC-B

Local Activation

Up to 1/2 mile
Activation

Local Public Address

SPECIFICATIONS

Operating Temperature: Indoor use, non condensing humidity
-22°F to 149°F / -30°C to 65°C

Power supplied by UVIC-B cabinet

Number of activation buttons: 10

Maximum number of UVLOC-B: 4

Maximum number of UVLOC-B with expansion: 12

Dimensions H x W x D: 11.27" x 7.0" x 4.97"
286.1 mm x 180.2 mm x 126.2 mm

Installation Specifications:

Cabling between UVIC-B and UVLOC-B

Up to ½ mile twisted pair

Weight 6.0 lbs 2.72 kg

HOW TO ORDER

Contact our Federal Signal Sales Engineers to design a system that meets your specific requirements.

Description	Part Number
UltraVoice Local Operating Console	**UVLOC-B**
UltraVoice Indoor Controller*	**UVIC-B**
UltraVoice 8 port Expansion*	**UVLOC-IM-B**

*See UVIC-B for further information

*Cable not included

UltraVoice is a registered trademark of Federal Signal Corporation.

FEDERAL SIGNAL

▶ Model UV

UltraVoice® Electronic Siren Controller

The Federal Signal UltraVoice® controller combines micro-processor based system control with highly efficient amplifiers to deliver optimized tones and voice capability for electronic sirens. The UltraVoice controller can generate and amplify single or dual frequency warning tones and comes with seven pre-set warning signals. In addition, the controller has been designed specifically to reproduce high quality live or pre-recorded-voice capability.

The controller includes a NEMA 4X cabinet housing the control module, up to eight 400 watt amplifiers, and a NEMA 3R battery cabinet. The unit may be equipped with a plug-in programmable receiver module, utilizing DTMF or two-tone sequential activation protocols. A digital voice option can be added by plugging in a single mini SD card which can store over 4000 voice/tone messages.

Two-way Status System
The UltraVoice Controller can also be a two-way communication system. A transceiver allows the unit to report status back to a central control point utilizing DTMF or the Commander Software System protocol. Two transceiver ports are available for radio repeating or when using multiple frequencies.

The two-way option provides information on the following conditions:

- AC power
- Battery voltage
- Charger operation
- Activation current
- Amplifier voltage and current
- Quiet test (Speakers & Amps)

- Signal A
- Signal B
- Mode of operation
- Intrusion
- Local activation
- SD card status

FEATURES

- 7 built-in warning signals
- Capable of storing over 4000 voice/tone messages, 17 hours of available audio
- Decodes single-tone, two-tone, DTMF and AFSK digital
- Quiet test standard

- Up to 8 controller zones
- Stackable siren functions
- Distinct dual tone capacity
- Highly efficient pulse width modulated amplifiers
- Windows®-based programming software (optional)

Ultravoice® Electronic Siren Controller (UV)
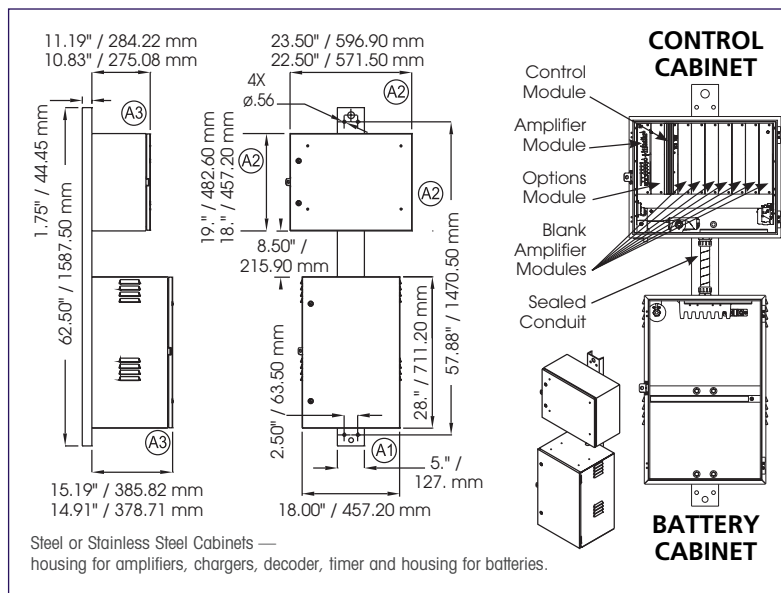
11.19" / 284.22 mm
10.83" / 275.08 mm

23.50" / 596.90 mm
22.50" / 571.50 mm

4X ø.56

19." / 482.60 mm
18." / 457.20 mm

8.50" / 215.90 mm

1.75" / 44.445 mm

62.50" / 1587.50 mm

2.50" / 63.50 mm

28." / 711.20 mm

57.88" / 1470.50 mm

15.19" / 385.82 mm
14.91" / 378.71 mm

18.00" / 457.20 mm

5." / 127. mm

CONTROL CABINET
Control Module
Amplifier Module
Options Module
Blank Amplifier Modules
Sealed Conduit

BATTERY CABINET

Steel or Stainless Steel Cabinets —
housing for amplifiers, chargers, decoder, timer and housing for batteries.

Contact our Federal Signal Sales Engineers to design a system that meets your specific requirements.

Description	Part Number
Siren control, two-way digital, no radio	**UVTD**
Siren control, two-way digital, VHF (136-174), UHF (403-470)	**UVTDH, UVTDU**
IP-enabled, two-way electronic controller (broadband radio and SmartMsg software sold separately)	**UVTD-IP**
Siren control, two-way, landline	**UVTD-LL**

- Standard receiver is Kenwood
- Standard models are 120VAC, add "240" to model for 240VAC versions
- Contact factory for low-band two-way models
- Batteries and antenna not included
- Stainless steel (S) control cabinets are also available

SPECIFICATIONS

Operating Temperature**:	-40°F to 149°F / -40°C to 65°C
Input Voltage:	120/240VAC ±10%, 50/60Hz single-phase (two separate models)
Input Current:	7 A Max.
Battery Input Voltage	24 Volts (nom.)
Operating Voltage:	24VDC
Standby Time:	> 7 days
Continuous Signaling Time:	30 min.
Control Module:	
Signal Duration (auto reset):	3 min. max
Microphone Input Impedance:	10k Ohms
Audio Distortion:	1% THD max.
Maximum Load:	600 Ohms
Contact Closure:	(min) 500ms <2k Ohms
Amplifier Module:	
Frequency Response: (300 to 3 kHz)	±3dB (ref. 1kHz)
Output Voltage (Tone and PA): (to speaker drivers)	70 Vrms (nom.)
Input Impedance: (per amplifier)	100k Ohms
Enclosures:	
Control Cabinet:	Type 4X
Battery Cabinet:	Type 3R
Net Weight:	170 lb (77.13 kg) (minus amplifiers)
UV400 Amplifiers Weight:	4.12 lb (1.9 kg)

** HTR2 or HTR4 battery heater option required for -40°C rating.

OPTIONAL ACCESSORIES

Description	Part Number
Digital voice mini SD card, 250 messages, 17 hours	**DVSD**
Windows® programming software (Two-tone & DTMF)	**FSPWARE**
Commander® Software System, *10, 25, 255, or 512 Site License	**SFCD***
400 watt amplifier, required with UV controllers	**UV400**
Telco Base, Landline	**TB-LL**
Two-way DTMF programming	**ES-PROG-DTMF**
210-264 VAC Transformer/Rectifier	**UVTR**

Battery Requirements:
Customer must provide necessary batteries. Call for assistance with specific system requirements.

Standard Tones

Tone	A/B Tone Frequency Range	Sweep Rate (seconds)
Wail	400/480-850/1020	13.0
Pulsed Wail	400/480-850/1020	1.5 /13.0
Alternate Wail	400/480-850/1020	1.5/13.0
Steady	850/1020	N/A
Pulsed Steady	850/1020	1.5
Alternate Steady	850/1020	1.5

UltraVoice is a registered trademark of Federal Signal Corporation

®Windows and Kenwood are a registered trademark of Microsoft Corporation in the United States and other countries

► Model UVRI

UltraVoice® Remote Interface Indoor/Outdoor Controller

The Federal Signal UltraVoice® Remote Interface (UVRI) unit is a remote terminal unit (RTU), specifically designed to provide remote control and status monitoring of an individual buildings fire alarm panel, mass notification panel, or public address system. The UVRI establishes a communication link between an isolated building unit and its mass notification system into our Federal Commander Digital Control System, creating a fully integrated indoor and outdoor Mass Notification System.

The UVRI's primary application is to provide a communication bridge to allow a public safety official or anti-terrorism officer the ability to expand their alerting and notification capabilities into a municipal wide, campus, wide, or base wide notification system solution. In addition, the UVRI also provides the added flexible capability to interface self amplified speakers and create additional notification directly from the UVRI unit itself.

The UVRI design is based on the field proven UltraVoice product line, which includes our UltraVoice Controller and UVIC products. As with all of our UltraVoice products, the UVRI includes as a standard feature an eight minute digital Voice chip. The UVRI also offers the unique capability for a remote operator to record and broadcast urgent message notifications. When local control and activations are required the UVRI provides an easy to use local user interface with local push button control for seven control functions and a local microphone input for live voice announcements.

The UVRI is housed in a non-metallic indoor/outdoor NEMA 4X/UL50 rated enclosure.

The UVRI is a two-way digital communication unit, which in its standard configuration includes a Motorola Vertex transceiver for wireless communication back to the Federal Commander Digital System. However, the UVRI also supports a variety of other communication mediums including: Landline, Ethernet, and Satellite. The UVRI utilizes secure digital data transfer methods via 128 bit encryption to ensure no malicious or accidental operation of the system. Our two-way status monitoring provides information on the following conditions:
AC power, battery voltage, enclosure intrusion, charger, local activation, and remote system operation.

FEATURES

- Integrates to existing fire alarm panel or public address system.
- Reliable mass notification
- Radio, Landline, Ethernet Control

- Two-way communication and status monitoring
- 128 bit Encryption
- Seven standard warning signals

UltraVoice® Remote Interface Indoor/Outdoor Controller (UVRI)

SPECIFICATIONS

Operating Temperature[1]:	-13°F to 140°F / -25°C to 60°C
Humidity:	0-98% non-condensing
Electrical Input Current:	115/230VAC 2.2/1.2 A
Battery Voltage:	10-14VDC, 13.7 volts (nom.)
Battery Current:	< 260 mA standby current

<300 mA during a function
< 7A during radio transmit

Standby Time: Greater than 24 hours with Vertex transceiver

Signaling Formats:

Number of codes   Up to 50 activation codes maximum

Number of functions allowed stacked
under each code   Up to 20

Two-Tone Sequential or Single Tone   282 Hz - 3000 Hz
0.5 sec (A) - .25 sec (B) minimum to 8 sec maximum

DTMF   3 to 12 digits standard
50 ms/50 ms timing or greater

FSK:

Baud rate	1200 bps
Modem type	MSK (minimal shift key)
Mark frequency	1200 Hz
Space frequency	1800 Hz
Error checking	16 bit CRC

EAS:

Modem Tones	AFSK, 520.83 baud
	2083.3 Hz and 1562.5 Hz

POCSAG: Supports Binary frequency shift keyed,
512 Baud numeric messages.

Dimensions H x W x D: 16" x 15" x 8-3/8"
(406 mm x 381 mm x 213mm)

Net Weight (including battery):   29.6 lbs   13.43 kg

[1] The UVRI can operate throughout this temperature range provided the battery temperature is maintained at -18°C or higher.

[2] The UVRI housing carries a NEMA 4X / UL50 rating.

HOW TO ORDER

Contact our Federal Signal Sales Engineers to design a system that meets your specific requirements.

Description	Part Number
Remote Interface unit, No Radio	**UVRI**
Remote Interface unit, VHF Band Transceiver (136-174 MHz)	**UVRIH**
Remote Interface unit, UHF Band Transceiver (403-470 MHz)	**UVRIU**
Remote Interface unit, Landline Control	**UVRI-LL**
Remote Interface unit, Ethernet Control	**UVRI-IP**

OPTIONAL ACCESSORIES

Description	Part Number
Commander® Software System, *10, 25, 255, or 512 Site License	**SFCD***
Wall mounted speaker strobe	**ENWSSPA**
Wall mounted strobe	**ENWSTPA**
Ceiling mounted strobe	**ENCSTA**

EN-WSSPA   EN-WSTPA   EN-CSTA

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FEDERAL SIGNAL

▶ Model DSA1

100W Non-amplified Speaker

Federal Signal's Directional Speaker Array (DSA) product line now includes a 100 watt non-amplified speaker, model DSA1. The DSA1 provides variable taps for 100, 55, 32 or 18 Watts for use in a variety of applications. It can also be powered from a Ultra-Voice Controller or any 25/70 V amplifier.
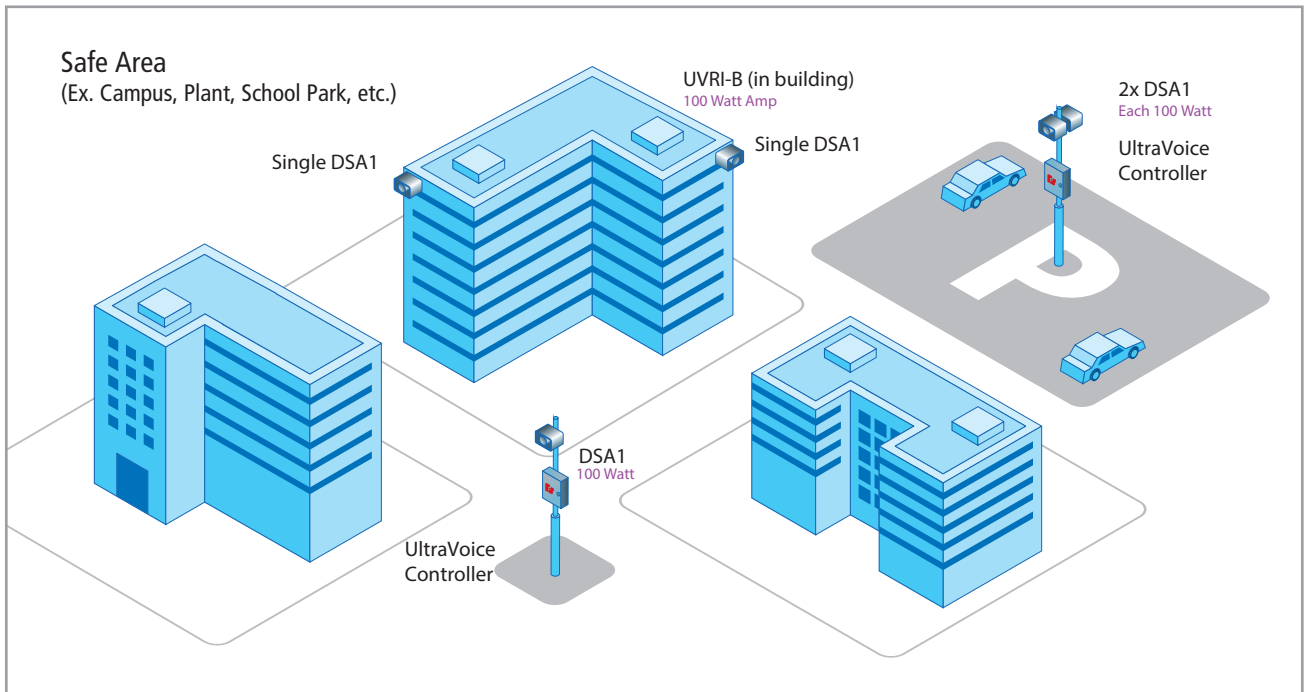
The DSA1 includes stainless steel hardware for wall or ceiling mounting; optional large or small mounting brackets and a unique omni-directional mounting bracket are also available. The DSA1 enclosure has multiple access points to allow installation of strobes, sensors or lights.

The DSA1 can be combined with the DSA 2, 4 or 6 for an integrated mass notification system. With a maximum output of 100 Watts, the DSA1 speaker addresses customer needs for a cost effective voice and/or tone speaker. This speaker is an ideal solution for existing notification systems where lack of coverage exists and doesn't require high power levels.

FEATURES

- Indoor/Outdoor 100 watt tappable speaker with high-powered voice and tone
- 25 V and 70 V input taps
- Easy to install and service design
- Flexible terminal block for daisy-chaining speaker
- 100 W, 55 W, 32 W, and 18 W output taps

- Ceiling or pole mounts available, wall mount standard
- Optional Omni-directional Accessory
- 3/4" and 1/2" NPT conduit or gland openings
- NEMA 4X outdoor rated
- UL and cUL listed
- UL marine rated

DSA1 Non-Amplified Speaker

Safe Area
(Ex. Campus, Plant, School Park, etc.)

Single DSA1

UVRI-B (in building)
100 Watt Amp

Single DSA1

2x DSA1
Each 100 Watt

UltraVoice
Controller

DSA1
100 Watt

UltraVoice
Controller

SPECIFICATIONS

- Operating Temperature: -40°F to 150°F (-40°C to 66°C)

- Small size with rugged construction
  7 in x 9 in 10 in (178 mm x 229 mm x 254 mm)

- Maximum Sound Pressure Level @ 100 W
  103 dB (± 2 dB) @ 100'
  120 dB (± 2 dB) @ 10'
  130 dB (± 2 dB) @ 1 m

- Wall or pole mount options

- 25 V and 70 V input taps

- 100 W, 55 W, 32 W, and 18 W output taps

- SPL @ 55 W   117 db @ 10'

  127 db @ 1 M

  SPL @ 32 W   114 db @ 10'

  124 db @ 1 M

  SPL @ 18 W   111 db @ 10'

  121 db @ 1 M

- Net Weight   15.6 lbs 7.08 kg

- Capacitively coupled speaker

HOW TO ORDER

Description	Part Number
100 Watt wall mount speaker	**DSA1**
Small (6" or less) Pole Mount Bracket	**I-IP100-PM**
Large (over 6") Pole Mount Bracket	**I-IP100-PMW**
Omni-Directional Option	**I-IP100-OMNI**
UltraVoice Controller	**UVRI-B, UVIC-B, UVTD**

FEDERAL SIGNAL

▶ Model DSA1X

Hazardous Location 100W Non-Amplified Speaker

Federal Signal's Directional Speaker Array (DSA) product line now includes a 100 W non-amplified speaker for hazardous locations, model DSA1X. The DSA1X provides variable taps for 100, 55, 32 or 18 W for use in a variety of applications. It can be powered from a Ultra-Voice Controller or any 25/70 V amplifier.

The DSA1X includes stainless steel hardware for wall or ceiling mount; optional large or small pole mounting brackets and a unique Omni-directional sound deflector are also available.

Combine multiple DSA1X's with a UV controller to create an integrated mass notification system within a hazardous location environment. The DSA1X can be combined with additional DSA1X speakers for a plant wide notification system. With a maximum output of 100 W, the DSA1X speaker addresses customer needs for a cost effective voice and/or tone speaker. This speaker is an ideal solution for existing notification systems where lack of coverage exists and a small compact design is required.

FEATURES

- Indoor/Outdoor 100 W tappable speaker for high-powered voice and tone
- 25 V and 70 V input taps
- Easy to install and service design
- Flexible terminal block for daisy-chaining speaker
- 100 W, 55 W, 32 W, and 18 W output taps
- Ceiling or pole mounts available, wall mount standard

- Optional Omni-directional accessory
- NEMA 4X outdoor rated
- UL and cUL listed for Class I, Division 2; Class II, Division 2; Class III
- 3/4" and 1/2" NPT conduit or gland openings
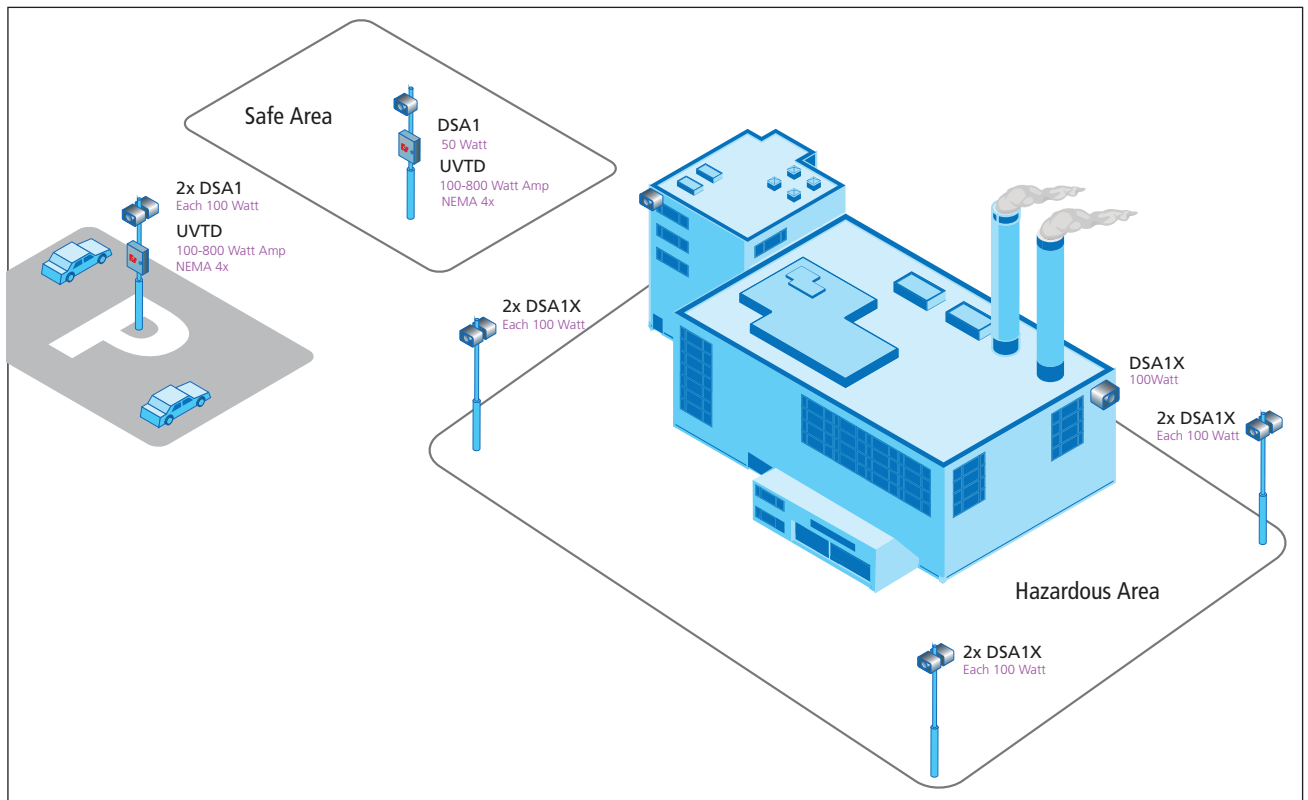
HAZARDOUS LOCATION RATING

T-CODE AT MAXIMUM AMBIENT TEMPERATURE, °C

Hazardous Location	66°C
• Class I, Division 2, Groups A, B, C, D	T4A
• Class II, Division 2, Groups F, G	T4A
• Class III	T4A

DSA1X Non-Amplified Speaker

Safe Area

DSA1
50 Watt

UVTD
100-800 Watt Amp
NEMA 4x

2x DSA1
Each 100 Watt

UVTD
100-800 Watt Amp
NEMA 4x

2x DSA1X
Each 100 Watt

DSA1X
100Watt

2x DSA1X
Each 100 Watt

Hazardous Area

2x DSA1X
Each 100 Watt

S P E C I F I C A T I O N S

- Operating Temperature: -40˚F to 150˚F (-40˚C to 66˚C)

- Small size with rugged construction:
  7 in x 9 in 10 in (178 mm x 229 mm x 254 mm)

- Maximum Sound Pressure Level @ 100 W
  103 dB (± 2 dB) @ 100'
  120 dB (± 2 dB) @ 10'
  130 dB (± 2 dB) @ 1 m

- Wall or pole mount options

- 25 V and 70 V input taps

- 100 W, 55 W, 32 W, and 18 W output taps

- SPL @ 55 W   117 db @ 10'

                      127 db @ 1 M

  SPL @ 32 W   114 db @ 10'

                      124 db @ 1 M

  SPL @ 18 W   111 db @ 10'

                      121 db @ 1 M

- Net Weight   15.6 lbs 7.08 kg

- Capacitively coupled speaker

H O W   T O   O R D E R

Description	Part Number
100 W wall mount speaker	**DSA1X**
Small (6" or less) Pole Mount Bracket	**I-IP100-PM**
Large (over 6") Pole Mount Bracket	**I-IP100-PMW**
Omni Directional Option	**I-IP100-OMNI**
UltraVoice Controller	**UVRI-B, UVIC-B, UVTD**

*See fedsig.com for more models

FEDERAL SIGNAL

▶ Models I-HIOW, I-UIOW, I-HIO and I-UIO

Informer Tone-Alert Radio

Alerting the public of an emergency situation is now easier and more reliable than ever with Federal Signal's Informer I-HIO and I-UIO radio receivers. Informer units are designed for one-way radio alerting applications.

Informer Radio receivers come in either VHF or UHF-band models. Standard units decode DTMF, single-tone, and two-tone sequential signals (optionally available are units for decoding EAS/SAME or Federal Signal digital protocols). The Informer is capable of generating four separate alarm sounds that can be accompanied by a live voice message.

Informer units include a LED panel that flashes to immediately indicate transmission of an emergency alert. Other features include a 600-Ohm audio output, dual (N.C./N.O.) relay for external control, built-in diagnostics, and an LED test indicator. The receiver can be programmed to disable the "monitor" button in order to prevent end-users or unauthorized persons from listening to local-channel activity.

The Informer I-HIO and I-UIO desktop versions feature an external AC transformer for power, as well as built-in battery backup. All wiring is routed to connectors located on the back of the unit for convenient access.

Informer I-HIOW and I-UIOW receivers are designed to be wall mounted or recessed into the wall. All wiring is contained within the aluminum case, and five pre-punched, easy-to-remove conduit holes are available to facilitate wiring connections into and out of the unit. Informer I-HIOW and I-UIOW receivers include a 115/230VAC power supply pre-wired to internal terminal blocks and a built-in battery backup. These models feature mounting holes for easy top mounting of an optional Federal Signal LP1 Strobe light. Units are pre-wired to accommodate the LP1 Strobe which operates off the Informer's internal power supply.

Informer units are factory programmed for narrow-band operation and come with a one-year warranty (see owner's manual).

FEATURES

- Instant alerting and notification for emergency situations
- Rugged metal enclosure with internal wiring
- High output speaker for tone and voice notifications
- Optional EAS/SAME or Federal Signal digital protocols
- Windows®-based software for easy programming

- DTMF and two-tone decoding – standard
- Desk or wall mounting models
- External audio and control capabilities
- US ETL Listed to UL Std 60065
- Canadian ETL Listed to UL Std 60065 for I-HIOW and I-UIOW

Informer Tone-Alert Radio (I-HIOW, I-UIOW, I-HIO and I-UIO)

SPECIFICATIONS

Frequency Range (MHz) Narrowband:	150-170	405-420* 450-470
	N	N
Intermodulation Rejection per EIA-603, part 4.1.9	>-75	>-70
Adjacent Channel Selectivity per EIA-603, part 4.1.6	>-70	>-65
Spurious Response & Image Rejection (dBm) per EIA-603, part 4.1.8	>-75	>-70

Reference Sensitivity[1]:   (12dB SINAD)   < 0.35 microvolts

Hum and Noise[1]:   Squelched   > -57 dBc

Unsquelched   > -37 dBc

AC Transformer (UL Listed)

Input: I-HIOW/UIOW 115 to 230VAC, 50/60 Hz
   I-HIO/UIO   108 to 128VAC, 60Hz

Operating Environment: -22° F to 140° F   -30 to +60°C

Operating Current: I-HIOW/UIOW   350mA Maximum
   I-HIO/UIO   <400mA Max

Standard Signaling Formats

Number of codes   Up to 6 activation codes, programmable

Two-Tone Sequential or Single Tone   300 Hz-3000 Hz, tolerance +/- 1.5%

DTMF   1-12 digits

Two-Tone and DTMF Decode Sensitivity   <20 dBc SINAD

CTCSS/CDCSS

Decode with two-tone codes >400 Hz only.
Tone frequency range 36.6 to 254.1 Hz,
Tone accuracy >.05Hz
Tone decode bandwidth +/- 1.1%

Digital, golay (23,12) 23 bit digital word
Digital data rate 134.4 Hz nominal

Decode   Turn on time <250ms., Turn off Time <1.2s.

Acoustic Output:[2]   I-HIOW/UIOW   80 dBc
   I-HIO/UIO   85 dBc

External Control/Audio/Antenna

Dual (N.O./N.C.) relay: 5a @ 30VDC

600 Ohm output: 50mv - 2.5vpp into 600 Ohms

Antenna: Removable rubber duck

External Antenna Connector: 50 Ohm, BNC female

Physical Dimensions H x W x D:

I-HIOW/UIOW   8.3" x 7" x 3.3"
210.8 mm x 177.8 mm x 83.82 mm

I-HIO/UIO   5" x 7" x 2-1/2"
127 mm x 177.8 mm x 63.5mm
(10°incline)

Weight: I-HIOW/UIOW   3.2 lbs   1.45 kg
   I-HIO/UIO   4 lbs   1.81 kg

[1] Receiver specifications referenced to TIA/EIA 603

[2] Acoustic Output measured at 10' on axis in an anechoic environment.
   User configurable soft-tones (approximately 55 dBc).

HOW TO ORDER

Description	Part Number
VHF high band, 151-174 MHz - wall mount*	**I-HIOW**
UHF band, 450-470 MHz - wall mount*	**I-UIOW**
VHF high band, 151-174 MHz - desk mount	**I-HIO**
UHF band, 450-470 MHz - desk mount	**I-UIO**

There is a programming fee associated with Informers programmed at the factory. Contact your local representative for a quotation.

*Units build prior to mid-2015 do not have battery backup.

OPTIONAL ACCESSORIES

Description	Part Number
Installed EAS	**I-EAS**
Field installable EAS kit	**I-EAS-KIT**
AFSK installed	**I-FSK**
Field installable AFSK kit	**I-FSK-Kit**
Programming software	**I-SW**
12VDC Strobe compatible with I-HIOW and I-UIOW models (can be powered by internal power supply)	**LP1-012***
Battery	**155191A**

**(A) Amber, (B) Blue, (C) Clear, (G) Green or (R) Red

Optional Signaling Formats

Federal Signal (MSK) Digital Option   1200, N, 8, 1 Synchronous,1200 Hz mark tone, 1800Hz space tone

Digital Decode Sensitivity   <20 dBc SINAD

EAS/SAME Option   User programmable to any EAS event codes and up to three (3) location codes

EAS/SAME Decode Sensitivity   <20 dBc SINAD

A flush mount kit is included for recessed applications as shown.

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FEDERAL SIGNAL

EN-WSSPA   EN-WSTPA   EN-CSTA

▶ Models EN-WSSPA, EN-WSTPA and EN-CSTA

Speakers & Strobes Emergency Notification

Wall Mounted Speaker Strobe – The wall mounted speaker strobe combo is UL 1638 and 1480 compliant and listed for the purpose of life safety and property protection. The strobe utilizes a Xenon flash tube which generates a high-intensity light visible from all sides with a fixed candela rating of 15/75. This device offers a choice of field selectable power taps of 1/8, 1/4, 1/2, 1, 2, and 4 watts for use with either 25 Vrms or 70.7 Vrms audio amplifiers. The frequency range of the speaker is 400-4000Hz. This device is suitable for line supervision. This device can be mounted to either the EN-SMBS (Surface Mounting Box, Square) or a 4" square X 2 1/8" deep metallic back box.

Wall Mounted Strobe – The wall mounted strobe with amber lens offers a dependable visual alarm for warning and emergency notification. Applications include severe weather, evacuation, emergency response, etc. This device runs on 24VDC. The candela options are 15, 30, 60, 75, and 100. These options are field selectable and tamper resistant. A die cast 4" mounting bracket is included which incorporates the popular Super-Slide™ feature that allows the installer to easily pre-wire the system and test for supervision. The product also features a locking mechanism that secures the product to the bracket without showing any screws. Installers can check the voltage drop, current draw and match it against the blue print with the included Checkmate™ Instant Voltage Verification feature. This wall strobe is UL1638 and UL464 listed and are warranted for three years from the date of purchase.

Ceiling Mounted Strobe – This ceiling mounted strobe offers dependable visual alarms for warning and emergency notification. This device runs on 24VDC. The candela options are 15, 30, 60, 75, and 100. These options are field selectable and tamper resistant. A standard 4" mounting plate is included which incorporates the popular Super-Slide™ feature that allows the installer to easily pre-wire the system and test for supervision. The product also features a locking mechanism that secures the product to the bracket without showing any screws. This wall strobe is UL1638 and UL 464 listed and are warranted for three years from the date of purchase. Mounting option: EN-SMBR (Surface Mounting Box, Round)

FEATURES

- Campus, Military and Indoor Mass Notification
- UL listed
- Amber or Clear lens

- Plain housing or with 'Alert' text for additional notification
- Synchronization of strobe lights

Speakers & Strobes Emergency Notification (EN-WSSPA, EN-WSTPA and EN-CSTA)

SPECIFICATIONS

Ceiling or Wall Mounted Speaker

This ceiling or wall mounted speaker is designed to meet code requirements for audio voice communications. This device can be mounted to either the EN-SMBS (surface mounting box, square) or a 4" square X 2 1/8" deep metallic back box. This speaker provides a 25 or 70.7 Vrms speaker with field selectable power taps of 1/8W, 1/4W, 1/2W, 1W, 2W or 4W. It offers high quality dBA output (Intelligible). The Frequency Range is 400-4000Hz.

Synchronization Module

The synchronization module is designed to provide an easy way to synchronize multiple strobe light flashes using only two wires in instances where a synchronized flash is required.

- Easy to Install

- Rated for 3 Amps continuous current and 5 Amps surge or inrush current

- Synchronizes to 1Hz Flash Rate

- Operates 1 Class 'A' circuit or 2 Class 'B' circuits at 3 Amps per circuit.

- UL 464 and UL 1971 Listed

- CAN/ULC S526-M87/S524-01 Compliant

- This module comes with its own back box and cover

HOW TO ORDER

Description	Part Number
Wall Mounted Speaker Strobe	
Wall Speaker/Strobe, Alert, Amber lens	**EN-WSSAA**
Wall Speaker/Strobe, Plain, Amber lens	**EN-WSSPA**
Outdoor Wall Speaker Strobe, Alert, Amber lens	**EN-OWSSAA**
Wall Mounted Strobe	
Wall Strobe, Plain, Amber lens	**EN-WSTPA**
Wall Strobe, Alert, Amber lens	**EN-WSTAA**
Wall Strobe, Plain, Clear lens	**EN-WSTPC**
Wall Strobe, Alert, Clear lens	**EN-WSTAC**
Synchronization Module	
Synchronization Module, 3 Amps	**EN-SM**

OPTIONAL ACCESSORIES

Description	Part Number
Surface Mounting Box, Round	**EN-SMBR**
Surface Mounting Box, Square	**EN-SMBS**
Ceiling Mounted Strobe	
Ceiling Strobe, Amber lens	**EN-CSTA**
Ceiling Strobe, Clear lens	**EN-CSTC**
Ceiling or Wall Mounted Speaker	
Ceiling/Wall Speaker, 25 Vrms or 75 Vrms	**EN-CWSP**

EN-SM   **EN-SMBR**   **EN-SMBS**

▶ Model 2001-130 and Equinox

High Power, Directional Rotating Siren

The Federal Signal 2001-130 and Equinox sirens is a high power, rotating, unidirectional outdoor warning siren. The high-decibel output provides maximum coverage with minimum installation cost. Radio/cellular/satellite or wireless IP activation can further minimize installation costs by eliminating the need for leased dedicated control lines.

The siren's projector produces a 60-degree projection of sound which rotates at 3 RPM and can produce three distinct warning signals: steady, wail and fast wail. The siren will supply a minimum of 15 minutes of full power output from its batteries after AC power loss. The siren controls are available with battery operation, solar, AC operation, and AC operation with battery back-up, one-way and two-way radio control, wired or wireless Ethernet, satellite/cellular or landline. The 2001 Series is offered in low frequency (500 Hz) or mid-range frequency (790 Hz).

Ideal applications for this warning siren include hazardous weather conditions, fires, floods, chemical spills and other types of community or facility emergencies.

FEATURES

- High-powered rotating siren for maximum coverage
- Available in low and mid-range frequency
- Three distinct warning signals
- AC or Solar powered with battery operation or back-up
- Weather-resistant coating

High Power, Directional Rotating Siren (2001-130/Equinox)

SPECIFICATIONS

Power:[1]
Sirens can be powered from 120VAC, 240VAC, with battery
back-up or battery operation. Solar powering can also be provided

Signal Information:	2001-130	Equinox
Signal /Sweep Rate	Frequency Range	500 Hz
Steady /Continuous	790 Hz	
Wail /10 sec.	470-790 Hz	180-500 Hz
Fast Wail /3.5 sec.	600-790 Hz	300-500 Hz
Coverage:[2]	2001-130	Equinox
70dB	Up to 6,500'	Up to 6,100'
60dB	Up to 13,200'	Up to 12,200'

Pole Mounts:
Wood, steel, composite or concrete poles can be provided.
Contact Federal Signal for details

Communications:
Federal Signal can supply one-way and two-way communications.
Radio, IP, Landline, Satellite and Cellular can be combined to provide
a robust alerting solution

Operating Temperature:[3]   -22ºF to 140ºF   -30ºC to 60ºC

Dimensions H x W x D: 62" x 37" x 41"
                                    (157 cm x 94 cm x 104 cm)

Net Weight:	420 lbs	190 kg
Shipping Weight:	460 lbs	205 kg
Equinox Net Weight	390 pounds	159 kg
Equinox Shipping Weight	460 pounds	205 kg

HOW TO ORDER

**Contact our Federal Signal Sales Engineers to design a system
that meets your specific requirements.**

Description	Part Number

Siren Ordering Information:

Rotating electro-mechanical siren 130 dBc +/- 1dBc
@ 100' (30.5m) 48VDC, pole mount included   **2001-130**

Rotating electro-mechanical siren, low frequency,
125 dBc +/- 1dBc @ 100' (30.5m) 48VDC,
pole mount included   **Equinox**

Siren Control Ordering Information:

One-way FC Controller, 120VAC operation	**FC/H/U**
Two-way FC Controller, 120VAC operation	**FCTBD/H/U**
One-way FC Controller, 120VAC to battery operation	**DCFCB/H/U[4]**
Two-way FC Controller, 120VAC to battery operation	**DCFCTBD/H/U[4]**

Command and Control for Multiple Siren Installation:

Console for siren activation (R for rack mount)   **SS2000+/R**

Commander software for PC based siren activation,
monitoring and control   **SFCD[5]**

[1] Contact Federal Signal for powering options

[2] Actual coverage is dependent on many factors, contact Federal Signal for sound
    analysis of your specific location

[3] The siren can operate throughout this temperature range provided that battery
    temperature is maintained at 18ºC or higher

[4] Batteries not included

[5] See product page for additional information
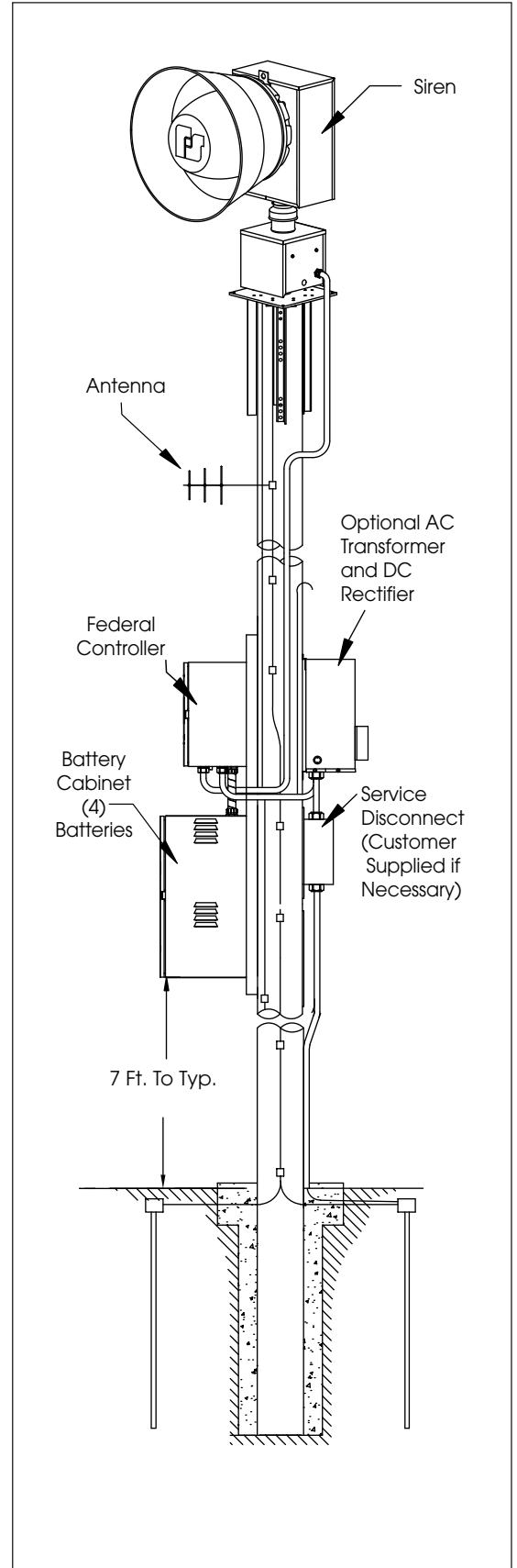
FEDERAL SIGNAL

▶ Model 508-128

High Power, Directional Rotating Siren

Federal Signal's 508-128 siren is a high power, rotating, unidirectional, 500 Hz outdoor warning siren that offers an anechoic chamber-certified of 128 dBc. The high-decibel output provides maximum coverage with minimum installation cost. Radio activation can further minimize installation costs by eliminating the need for leased dedicated control lines.

The siren rotates at 3 RPM and can produce three distinct warning signals: steady, wail and fast wail. The 508-128 siren will supply a minimum of 15 minutes of full power output from its batteries after AC power loss. The siren controls are available with battery operation, Solar AC operation, and AC operation with battery back-up, one-way and two-way radio control, wired or wireless Ethernet, satellite, cellular or landline.

Ideal applications for these warning sirens include hazardous weather conditions, fires, floods, chemical spills and other types of emergencies, the 508-128 siren is an excellent choice to protect any community.

FEATURES

- High-powered rotating siren for maximum coverage
- 500 Hz, 128 dBc output
- Three distinct warning signals
- AC or Solar powered with battery operation or back-up
- Weather-resistant coating

High Powered Outdoor Siren (508-128 Siren)

SPECIFICATIONS

Power:[1]
Siren can be powered from 120VAC, 240VAC, with battery
back-up or battery operation. Solar powering can also be provided

Coverage:[2]   70 dB   7,300' Calculated[2]
                      60 dB   14,700' Calculated[2]

Signal Information:[3]

Signal /Sweep Rate	Frequency Range	Sweep Rate
Steady /Continuous	500 Hz	N.A.
Wail /10 sec.	180-500 Hz	10 sec.
Fast Wail /3.5 sec.	300-500 Hz	3.5 sec.

Pole Mounts:
Wood, steel, composite or concrete poles can be provided.
Contact Federal Signal for details

Communications:
Federal Signal can supply one-way and two-way communications.
Radio, IP, Landline, Satellite and Cellular can be combined to provide
a robust alerting solution

Operating Temperature:[4]   -22ºF to 140ºF / -30ºC to 60ºC

Dimensions Height x Width x Depth: 70.1" x 53.4" x 43.1"
                      (1780.5mm x 1356.4mm x 1094.7mm)

Shipping Weight: 590 lbs   268 kg w/mtg. legs

Siren Weight: 430 lbs   195 kg

HOW TO ORDER

**Contact our Federal Signal Sales Engineers to design a system
that meets your specific requirements.**

Description	Part Number

Siren Ordering Information:
Rotating electro-mechanical siren 128 dBc
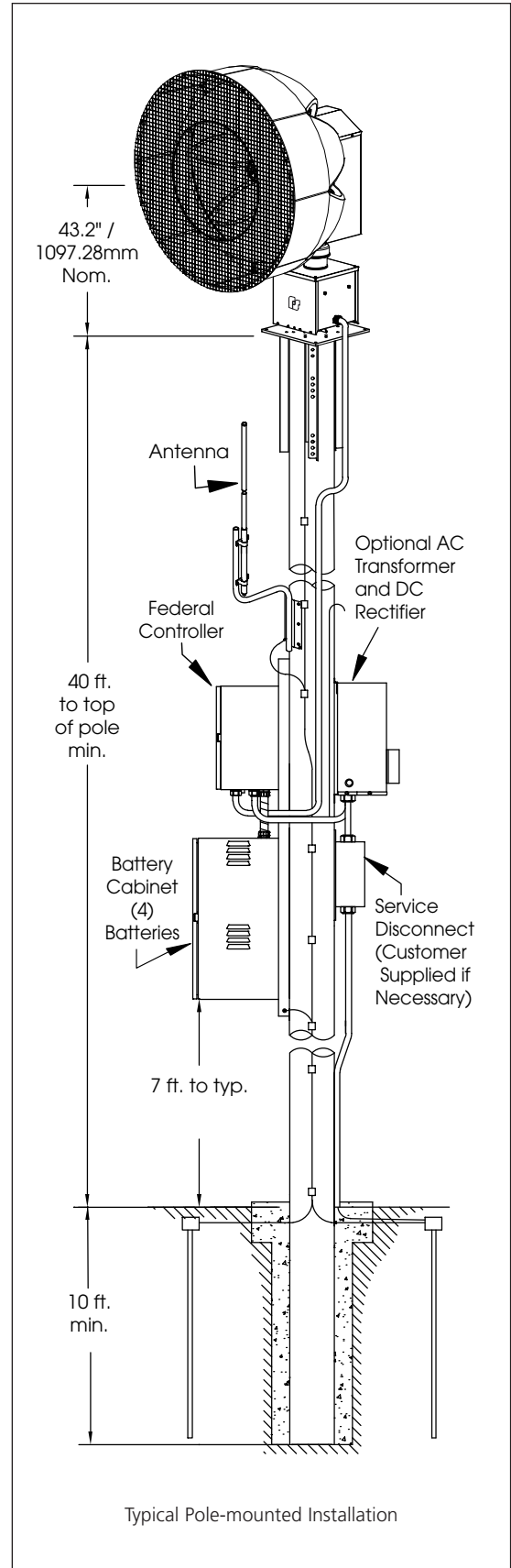+/- 1 dBc 48VDC, pole mount included   **508-128**

Siren Control Ordering Information:
One-way FC Controller, 120VAC operation   **FC/H/U**
Two-way FC Controller, 120VAC operation   **FCTBD/H/U**
One-way FC Controller, 120VAC to battery operation   **DCFCB/H/U[4]**
Two-way FC Controller, 120VAC to battery operation   **DCFCTBD/H/U[4]**

Command and Control for Multiple Siren Installation:
Console for siren activation (R for rack mount)   **SS2000+/R**
Commander software for PC based siren activation,
monitoring and control   **SFCD[5]**

[1] Contact Federal Signal for powering options

[2] Actual coverage is dependent on many factors, contact Federal Signal for sound
     analysis of your specific location

[3] The siren can operate throughout this temperature range provided that battery
     temperature is maintained at 18ºC or higher

[4] Batteries not included

[5] See Product Selection Guide for ordering options

43.2" /
1097.28mm
Nom.

Antenna

Optional AC
Transformer
and DC
Rectifier

Federal
Controller

40 ft.
to top
of pole
min.

Battery
Cabinet
(4)
Batteries

Service
Disconnect
(Customer
 Supplied if
Necessary)

7 ft. to typ.

10 ft.
min.

Typical Pole-mounted Installation

FEDERAL SIGNAL

▶ Model 2

Omni-Directional Siren

Federal Signal's Model 2 siren is the most commonly used siren for fire station and industrial plant alerting. The siren is an outdoor warning siren providing omni-directional coverage capable of producing intense warning signals over a large area. The siren is typically installed on a roof or on a standard utility pole.

The Model 2 is a mechanical single tone siren capable of producing 102 dBc @ 100' while making only moderate power source demands. The Model 2 has a high powered AC motor which operates from either 120VAC/DC or 240VAC/DC. A Federal Signal Model RC2W-120 or -240 motor starter (purchased separately) is required to operate this siren. The Federal Signal motor starter is recommended due to the ability to handle the specific requirements of the Model 2 siren.

The Model 2 siren and motor starter can be used with the FC controller for further control of the Model 2 siren. The FC provides relay contact closures to activate the RC2W-XXX motor starter. The FC controller can be programmed to activate the siren for a per-determined interval, can be activated thru radio control or through remote push-buttons.

Federal Signal's Model 2 can serve as an outdoor plant-wide warning system where volume is needed to contrast with high ambient industrial sounds. It is ideal for use in the large, wide open areas found in industrial facilities such as refineries, steel mills and manufacturing plants. The Model 2 can be used for start/stop work signaling, plant evacuation or other emergency situations.

FEATURES

- Available in 120VAC/DC and 240VAC/DC
- High-efficiency design requires only moderate power
- Small compact design
- Powder coating for long life
- Use with RC2W-120/240 motor starter
- Use with FC controller for ease of operation

- Use with FCU/H for remote radio activation
- Produces 102 dBc @ 100'
- Roof mount standard and pole mount optional
- Pole mount with PMS kit

Omni-Directional Siren (Model 2)
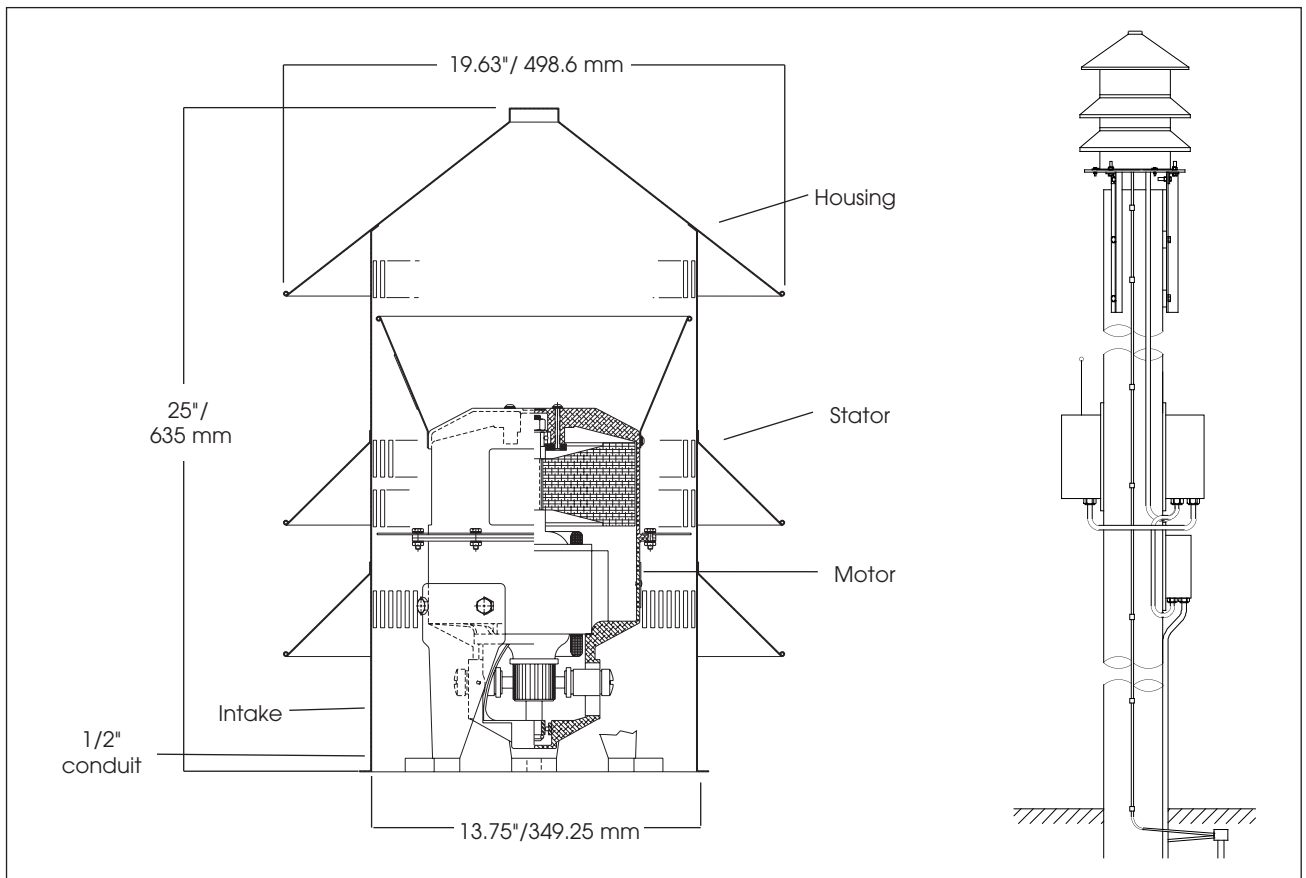
SPECIFICATIONS

Recommended Mounting Height:	35-40 feet	10.7–12.2 m
Effective Range*:	1,000 feet	304.8 m
Power Rating:	2 HP	2 HP
Power Requirements:	120VAC/DC	24A, single phase
	240VAC/DC	12A, single phase
Height:	25.5"	65 cm
Diameter:	19.6"	50 cm
Net Weight:	59 lbs	27 kg
Shipping Weight:	85 lbs	36 kg

HOW TO ORDER

Contact our Federal Signal Sales Engineers to design a system that meets your specific requirements.

Description	Part Number
120VAC/DC, 102 dBc, Roof mount standard	**2-120**
240VAC/DC, 102 dBc, Roof mount standard	**2-240**
120V Motor Starter	**RC2W-120**
240V Motor Starter	**RC2W-240**

REPLACEMENT PARTS

Description	Part Number
Bearing (Two Required)	**Q8239A045**
Brush and Spring (Two Required)	**Q8247A020**
Brush Holder (Two Required)	**Q8247A021**

OPTIONAL ACCESSORIES

Description	Part Number
Pole Mount	**PMS**
Controller, No radio	**FC**
Controller, VHF radio	**FCH**
Controller, UHF radio	**FCU**

FEDERAL SIGNAL

▶ Model Eclipse8

Omni-Directional Siren

The Eclipse8 is a mid-sized DC-powered omni-directional siren for outdoor warning that produces high intensity warning signals. This powerful and lightweight outdoor siren provides coverage with a maximum sound pressure level of 115 dBc at 100 feet. The high decibel output provides maximum coverage with minimum installation costs. Operating from 48VDC, the siren utilizes the DC motor of our 2001 siren series for proven reliability.

The siren's eight projector horns covers a 360° omni-directional area, with the capability of producing three signal options: steady, wail and fast wail. The Eclipse8 will supply a minimum of 15 minutes of siren operation from its batteries even after 24 hours without AC power. The siren controls are available with battery operation, AC operation and AC operation with battery back-up. One-way and two-way radio control or landline options are available.

FEATURES

- Omni-directional for 360° coverage
- Three distinct warning signals
- Can operate from batteries directly, or using optional AC with battery back-up
- Full battery operation or battery back-up option

- High efficiency design produces 115 dBc @ 100' while making moderate power demands
- Optional roof mount stand
- 100% aluminum design

Omni-Directional Battery Powered Siren (Eclipse8)

46.68"/118.6 cm

63.4"/161 cm

18"/45.72 cm

Section A

Optional Roof Mounting Plate (RME)

Section A
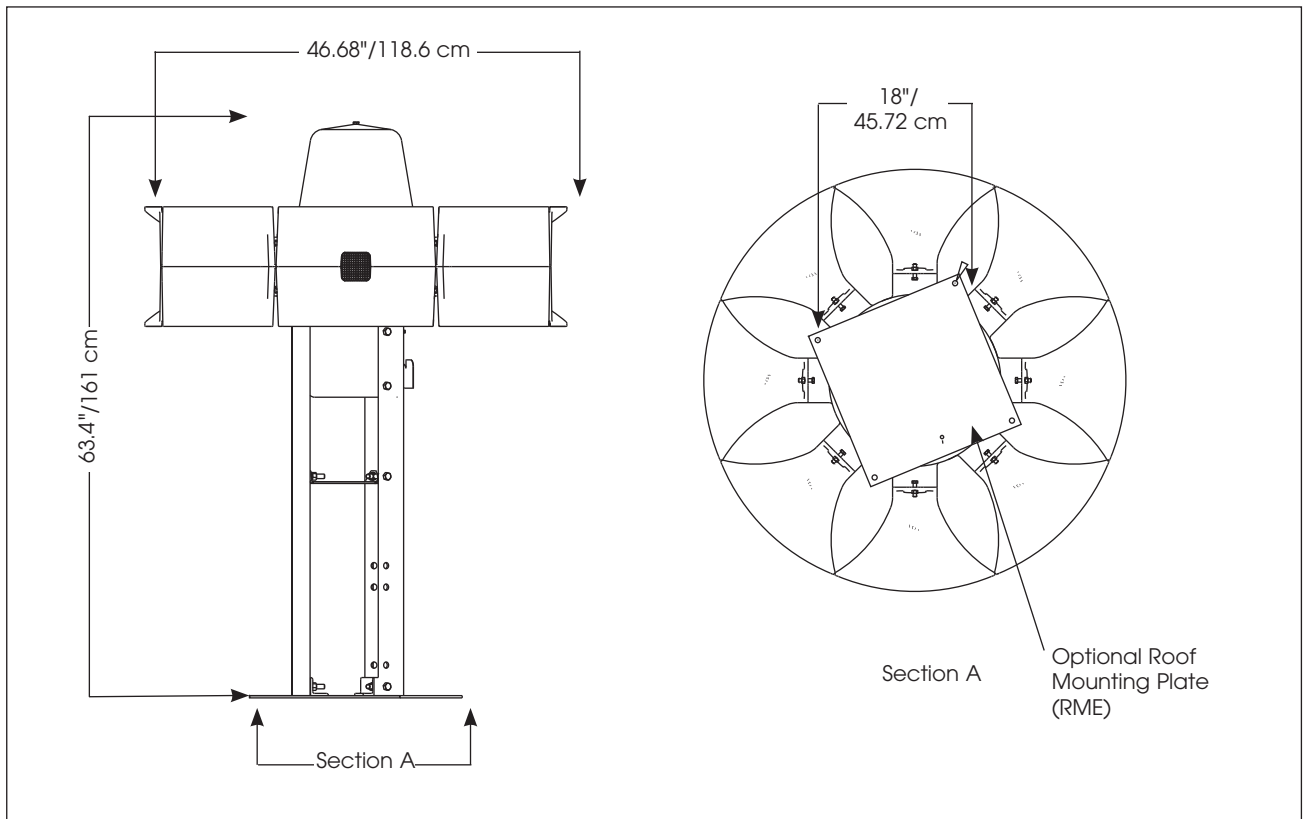
Operating Temperature:	-22°F to 140°F	-30°C to 60°C
Effective Range @ 70 dBc:	2200'	
Height:	63.4"	161.0 cm
Width:	46.68"	118.6 cm
Net Weight:	255 lbs	116.0 kg
Shipping Weight:	380 lbs	173.0 kg

HOW TO ORDER

Contact our Federal Signal Sales Engineers to design a system that meets your specific requirements.

Description	Part Number
Siren Ordering Information:	
Omni-directional siren, includes wood pole mount hardware	**Eclipse8**
Mounting Ordering Information:	
Roof Mount Equipment (optional)	**RME**
Siren Control Ordering Information:	
Eclipse8 Siren Control AC operated, 208 or 220/240VAC (specify voltage). NEMA 4X aluminum control cabinet, (2) 48VDC contactors, and transformer/rectifier 117 lbs / 53kg	**2001-AC**
Federal Controller 120VAC NEMA 4X aluminum control cabinet, (4) chargers (2) 48VDC contactors, and NEMA 3R aluminum battery cabinet. (4) preset siren functions. Radio not included. 224 lbs / 102Kg	**DCFCB**

FEDERAL SIGNAL

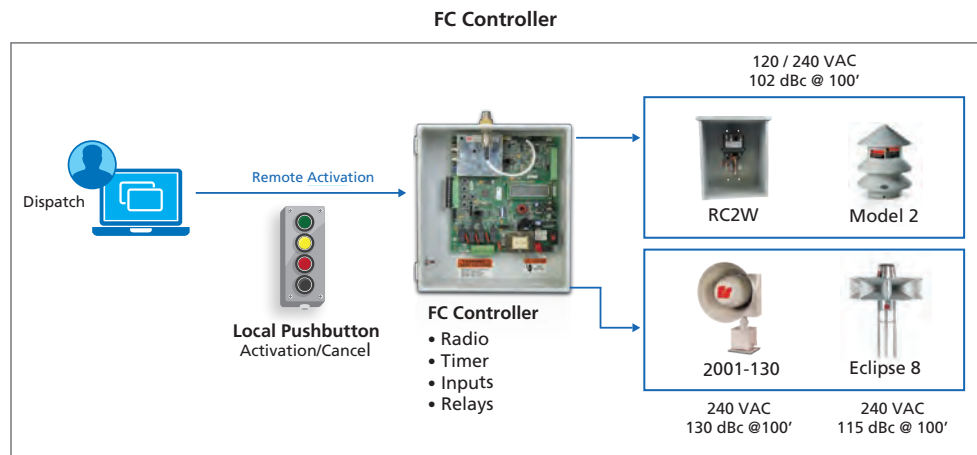▶ Model FC

Siren Controller

The FC Controller is a remote-control activation point for equipment control (such as electro-mechanical sirens) with relay outputs. Ideal for siren control applications and process' controlled via relay contacts. The FC Controller is equipped with a FCX Controller board which can be powered from 12VDC, 48VDC, 120VAC or 220VAC. The FCX Controller board is equipped with 4 relays to control devices such as siren contractors, overhead door controls, lights, beacons, sounders or railway equipment. The FCX Controller board has 4 inputs for use with external switches or contact closures, and can be programmed to activate the onboard relays and/or the audio from the FCM Plus Control board. The FCX Controller board has built-in siren tones that interface to PA or intercom systems. The audio can be activated through physical inputs or the built-in push buttons on the FCX Controller board. The FC is a compact NEMA 4 metal enclosure equipped with a latching and locking mechanism, removable lock not included. The enclosure has a ground stud and three pre-drilled holes for ease of use, and is equipped with a plug for the top RF hole and an AC lightning surge arrester.

Radios models available are FCH (high-band) and FCU (UHF) which include a synthesized radio receiver. Also available is FSPWARE, a software package that enables computer connection to modify supplied timing or to create unique on/off patterns for control of external equipment. Programming options via FSPWARE include radio receiver frequency, two-tone sequential tones/DTMF decoding digits for security, custom audible signal tones and independent control of output relays and timing patterns for electro-mechanical sirens. Up to six control codes may be programmed and activated through any combination of two-tone sequential, DTMF, EAS, POCSAG, or digital AFSK. Four of the timing sequences can be initiated using local push buttons or remotely through dry contact closures. The use of SFCD Software and SS2000+ allows remote control activation of multiple FC Controllers.

The Federal Controller is an ideal choice to control Eclipse8 and Model 2 siren series, radio activation of indoor PA systems, warning lights or various warning equipment, and fire house alerting applications.

FEATURES

- One-way radio control available
- Simultaneous two-tone sequential, DTMF, EAS, POCSAG, and digital AFSK decoding for security
- Four individually programmable output relays
- Six built in siren tone signals for PA / Intercom
- External inputs / push buttons for local activation

FC Controller

FC Controller diagram:
- Dispatch — Remote Activation
- Local Pushbutton Activation/Cancel
- FC Controller: • Radio • Timer • Inputs • Relays
- 120 / 240 VAC, 102 dBc @ 100': RC2W, Model 2
- 240 VAC, 130 dBc @100': 2001-130; 240 VAC, 115 dBc @ 100': Eclipse 8

Siren Controller (FC)

Diagram labels:
- 5.50" / 139.70 mm
- 3.13" / 79.50 mm
- 5.50" / 139.70 mm
- ø0.625" / 15.87 mm
- 9.84" / 249.93 mm
- 0.47" / 11.93 mm
- 4X ø0.31" / 7.87 mm
- 11.81" / 299.97 mm
- 12.75" / 323.85 mm
- 13.50" / 342.9 mm
- 0.92" / 23.36 mm
- 8.00" / 203.20 mm
- 2X ø0.88" / 22.35 mm
- 3.13" / 79.50 mm
- 5.00" / 127 mm
- 1.92" / 48.76 mm
- Audio Output
- Optional Bulkhead Connector
- Optional CTCSS
- Optional Antenna Cable
- Board Assembly
- 12VDC Input
- Fuse (F2)
- Fuse (F1)
- Ground Stud
- AC Input
- Relays (K1-K4)

SPECIFICATIONS

AC Input Voltage:	120 or 240VAC ±10%, 60Hz
DC Input Voltage:	15-75VDC, 400mA max @ 48VDC or 11-15VDC, 400mA max @ 12VDC
4 Relays, contact rating:	8A @ 120/240VAC 5A @ 24VDC
Number of remote activation inputs:	4
Audio Output:	0-2V peak to peak, maximum load 8 ohms
Environmental: Temperature	-22°F to 149°F / -30°C to 65°C
Humidity	0-98% non-condensing
Dimensions H x W x D:	13.5" x 10" x 6" (34.3 cm x 25.4 cm x 15.3 cm)
Net Weight:	12 lbs 5.4 kg
Shipping Weight:	13 lbs 5.9 kg

HOW TO ORDER

Contact our Federal Signal Sales Engineers to design a system that meets your specific requirements.

Description	Part Number
Controller with FC Controller Board	FC
Controller with one-way high-band (150 - 174 MHz) radio receiver	FCH
Controller with one-way UHF band (450 - 470MHz) radio receiver	FCU

OPTIONAL ACCESSORIES

Description	Part Number
Federal programming software (Non-digital applications)	FSPWARE
Tone Coded and Digital Coded Squelch Decode	FS-PL1
Outdoor NEMA 4 Push-button Panel	PBS-4
208-240VAC Transformer rectifier with 48VDC, 120VAC and contactors with enclosure	2001-AC
Motor starter/cabinet NEMA 3R 120VAC	RC2W-120
Motor starter/cabinet NEMA 3R 240VAC	RC2W-240
Model 2, 120VAC/DC Omni-directional Siren	2-120
Model 2, 240VAC/DC Omni-directional Siren	2-240
Model 2 Pole Mount	PMS

See Project 25 product on page 248 for optional P25 configuration accessories if desired

REPLACEMENT PARTS

Description	Part Number
FC Control Board	Q20000200D
Radio Receiver High-Band	Q2005240G-02
Radio Receiver UHF Band	Q2005240G-03
Controller board only with one-way high-band (150 - 174 MHz) radio receiver	Q-FCMH
Q-FCMU Controller board only with one-way UHF band (450 - 470MHz) radio receiver	Q-FCMU

FEDERAL SIGNAL

▶ Model FCTBD

Two-way control and status monitoring

The FCTBD controller can control and monitor any electro-mechanical siren, and may be used in conjunction with the SS2000+ or Commander PC based software located at a central command point. The FCTBD will automatically report change in status back to the central command point through radio, IP, cellular, satellite or landline connections. The central command point can also poll the FCTBD for current status conditions. Status indictors are provided for intrusion alerts, activations and power issues. The FCTBD offers the ability to monitor six remote sensor inputs, such as: AC power, low battery and up to three additional sensors to monitor siren operation. The FCTBD is packaged in a NEMA 4 aluminum weatherproof cabinet and comes equipped with DIN rail for 120 or 240VAC power connections, 120/240VAC to 12VDC power supply, gel battery, FCM Plus control board, and AC power surge protection. Power wiring is fuse protected, with replaceable fuses. Standard features include intrusion switch for detection of door opening. Battery backup for FCM Control board and radio communications.

The FCTBD can also be ordered as FCTBDH and FCTBDU which includes a Vertex radio transceiver (FCTBDH = high band or FCTBDU = UHF). FSPWARE, an optional software package, enables connection to a computer to modify supplied timing or to create unique on/off patterns for control of external equipment, such as sirens. Programming options via FSPWARE include radio frequency, two-tone sequential tones/DTMF decoding digits for security, custom audible signal tones and independent control of output relays and timing patterns for electro-mechanical sirens. Up to six control codes may be programmed and activated by any combination of two-tone sequential, DTMF, EAS, POCSAG, and digital AFSK. Four of the timing sequences can be initiated using local push buttons or remotely through dry contact closures. The use of Commander Software and SS2000+ allows remote control activation, monitoring and networking of multiple FCTBD Controllers.

The FCTBD can also be equipped with an IP interface to allow high speed connections to the siren controller. Federal Signal recommends use of Commander software to create a fully redundant siren control system. The FCTBD is an ideal choice for upgrading or retrofitting one-way controls to two-way status monitoring for use with existing electro-mechanical sirens like the Federal Signal 2001-130, Equinox, 508-128, Eclipse8 and Model 2 sirens.

FEATURES

- Two-way control, activation and status monitoring
- Four individually programmable output relays
- Six built in siren tone signals for PA/Intercom
- External inputs for sensors and activation
- Push buttons for local activation

- Internal battery back-up
- 120 or 240VAC power
- UL and cUL listed, and DNV certified
- Simultaneous two-tone sequential, DTMF, EAS, POCSAG, and digital AFSK decoding for security

Two-Way Control and Status Monitoring (FCTBD)
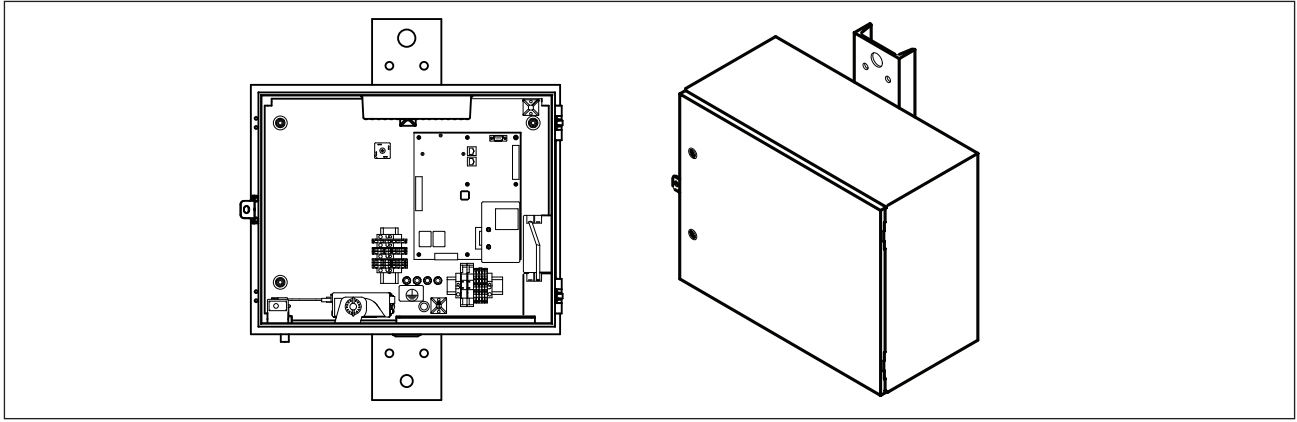
SPECIFICATIONS

AC Input Voltage: 120 or 240VAC ±10%, 60Hz 3A

DC charger/radio power: 120 or 240VAC switch selectable

Battery: Sealed Lead Acid/12A Hr

4 Relays, contact rating: 8A @ 120/240VAC
5A @ 24VDC

Number of remote activation inputs: 4

Audio Output: 0-2V peak to peak, maximum load 8 ohms

Environmental:
Temperature -22°F to 149°F / -30°C to 65°C
Humidity 0-98% non-condensing

Net Weight 95 lbs 43.2 kg

Shipping Weight 155 lbs 7 0.5 kg

Dimensions H x W x D: 19" x 23" x 11.2"
(48.3 cm x 60 cm x 28.5 cm)

Shipping Weight: 155 lbs 70.3 kg

HOW TO ORDER

Contact our Federal Signal Sales Engineers to design a system that meets your specific requirements.

Description	Part Number
Two-way Controller with FCMPlus Control Board and radio	**FCTBD**
Two-way Controller with FCMPlus Control Board and Radio, high band 148-174 MHz	**FCTBDH**
Two-way Controller with FCMPlus Control Board and Radio, UHF band 403-470 MHz	**FCTBDU**
Two-way IP-enabled Electro-mechanical Controller	**FCTBD-IP**

Notes:
Antenna and cable are not included with radio activation control and must be ordered separately.

Broadband radio and Commander software sold separately.

REPLACEMENT PARTS

Description	Part Number
12VDC Charger	**Q20000288**
12VDC Battery	**Q155193A**
FC+ Control Board	**Q2000200C**

OPTIONAL ACCESSORIES

Description	Part Number
Windows Programming Software (Non-digital applications)	**FSPWARE**
Commander® Software System, *10, 25, 255, or 512 Site License	**SFCD***
Hardware Controller	**SS2000+**
Telco Base, Landline	**TB-LL**
Single motor AC current sensor	**SK-SM**
Three motor AC current sensor	**SK-3M**
Single phase, 120VAC voltage sensor	**SK1-120**
Single phase, 240VAC voltage sensor	**SK1-240**
3-phase, 240VAC voltage sensor	**SK3-240**
3-phase, 480VAC voltage sensor	**SK3-480**

See Project 25 product on page 248 for optional P25 configuration accessories if desired
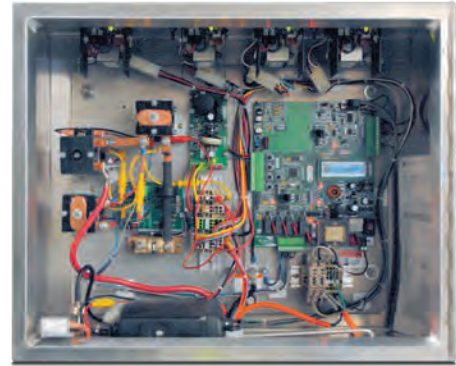
FEDERAL SIGNAL

▶ Model DCFCTBD

# Two-Way Digital Controller for Electro-Mechanical Sirens

Federal Signal DCFCTBD siren controllers are two-way digital, battery-operated/back-up and status monitoring systems for use with the Federal Signal 2001-130, Equinox, 508-128 and Eclipse8 sirens. The DCFCTBD siren controller typically interfaces with off-the-shelf two-way radio transceivers and communicates to a base controller. DCFCTBD siren controllers can be used with radios utilizing single-tone, two-tone sequential, DTMF, POCSAG, AFSK, EAS and digital formats such as P25 and Tetra. The DCFCTBD controllers can be equipped with optional communications such as landline, IP, fiber, satellite, and cellular. This makes DCFCTBD siren controllers compatible with virtually any existing siren control system or communication method. There are four local inputs and four local push buttons for activation, plus a reset option.

DCFCTBD models come equipped with four independent relay outputs that can be programmed to activate with local inputs, local pushbuttons or via the communications channels. Activation codes, relay timing, and optional warning sounds are programmed into the unit through a standard RS232 serial port or over-the-air from the central control point. The DCFCTBD siren controller offers six user programmable functions in addition to the five pre-set functions (arm, disarm, report, growl test and master reset). These controllers include sensors to supply information on the following areas of operation: AC power status, communications status, low battery status, intrusion, siren activation, current intrusion, siren rotation and local activation.

FEATURES

- Two-way siren controller for 48VDC Sirens
- Two-way radio control and status monitoring
- Simultaneous two-tone sequential, DTMF, EAS, POCSAG, and digital AFSK decoding for security
- Able to utilize multiple communication paths for redundancy
- Controls mechanical sirens, including models 2001-130, Equinox, 508-128 and Eclipse8

- Solar options available
- Push buttons for local activation
- Landline, Ethernet (IP) or radio control
- UL Listed for general signaling
- DNV Certified

Two-Way Digital Controller for Electro-Mechanical Sirens (DCFCTBD)
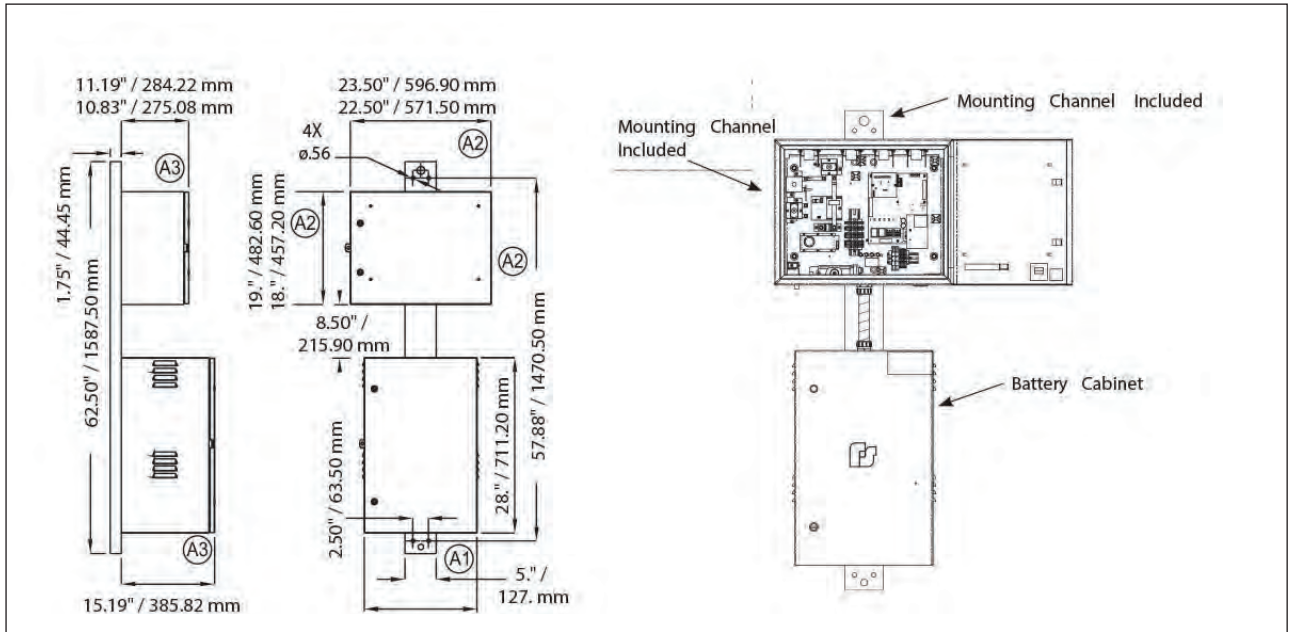
Operating Temperature: -22°F to 149°F / -30°C to 65°C
AC supply voltage: 120VAC @ 4.0 Amps
                                                   240VAC @ 2.0 Amps
Battery Backup: 48VDC
Current Draw: +/- 10%, 50/60 Hz, maximum standby current
DCFCTBD Power Supply: 6A @ 13.3VDC
Battery Backup: 48VDC
Current Draw: < 0.2 amps in standby
Programmable Frequency: Federal Signal can program your radio
                                          to your specific requirements
EAS: Supports standard EAS codes and wildcards
POCSAG: Supports binary AFSK 512 Baud numeric messages.
4 relay outputs: SPST
Contact Rating:(4 relays standard) 5A @ 28VDC – 8A @ 240VAC
Shipping Weight:
   DCFCTB Total Weight (including batteries)   364 lbs   165 kg
   Shipping Weight (excluding batteries)   300 lbs   136 kg
   2001TRBP Net Weight   150 lbs   68 kg
   2001TRBP Shipping Weight   190 lbs   86.2 kg

Description	Part Number
Federal programming software (Non-digital applications)	**FSPWARE**
Commander® Software System, *10, 25, 255, or 512 Site License	**SFCD***
208-240VAC operation	**2001TRBP**
Activation system	**SS2000+**
Solar powered option	**Contact Federal Signal**
Antenna	**Contact Federal Signal**

Contact our Federal Signal Sales Engineers to design a system that meets your specific requirements.

Description	Part Number
Two-way Controller DC Powered, no radio	**DCFCTBD**
Two-way Controller, Radio Controlled, DC Powered (H=high band, U=UHF)	**DCFCTBDH/U**
Two-way Controller, IP-enabled, DC Powered	**DCFCTBD-IP**
Two-Way Federal Controller, UHF Band, 450470 MHz, DC Powered with Radio Faceplate	**DCFCTBDU-FP**
Two-Way Federal Controller, High Band, 136-174 MHz, DC Powered with Radio Faceplate	**DCFCTBDH-FP**

Note:

Antenna and cable are not included with radio activation control and must be ordered separately

Batteries required. Call for assistance with specific system requirements

FEDERAL SIGNAL

Sample Ordering Configurations for Electro-Mechanical Sirens

Identify the components needed when ordering

O N E - W A Y   W I T H O U T   R A D I O

Configuration 1:   2001 Siren with one-way controller, no radio, 240VAC Powering, no batteries
2001-130	Siren Head
2001-AC	AC Transformer and Contractor Enclosure for Eclipse8, 2001 or 508 Sirens
FC	Federal Controller/Timer

Configuration 2:   2001 Siren with one-way controller, no radio, battery operation
2001-130	Siren Head
DCFCB	Federal Controller/Timer
15500007A-02	Qty 4 - Battery sealed AGM 105Ah (MK Battery 8A31)

Configuration 3:   2001 Siren with one-way controller, no radio, battery operation
2001-130	Siren Head
2001TRBP	Nominal 240VAC to 48VDC/120VAC Power Converter
DCFCB	Federal Controller/Timer
15500007A-02	Qty 4 - Battery sealed AGM 105Ah (MK Battery 8A31)

O N E - W A Y   W I T H   R A D I O

Configuration 4:   Activation Control Point
SS2000+	Digital and DTMF Control Station, Desk Mount
BSH	Base Station High band Radio Package (order part no. BSU for UHF)

Configuration 5:   508 Siren with one-way control, radio, 240VAC Powering, no batteries
508-128	Siren Head
2001-AC	AC Transformer and Contractor Enclosure for Eclipse8, 2001 or 508 Sirens
FCH	Federal Controller/Timer (order part no. FCU for UHF)
RP164	Antenna
AMB-RP164	Antenna mounting bracket for RP164
10A3	25 ft. Cable

Configuration 6: 2001 Siren with one-way control, radio, 120VAC to battery operation
2001-130	Siren Head
DCFCBH	High band Federal Controller/Timer (order part no. DCFCBU for UHF)
15500007A-02	Qty 4 - Battery sealed AGM 105Ah (MK Battery 8A31) Antenna
RP164	Antenna mounting bracket for RP164
AMB-RP164	Antenna mounting bracket for RP164
10A3	25 ft. Cable

Configuration 7: 2001 Siren with one-way control, radio, 240VAC to Battery Operation
2001-130	Siren Head
2001TRBP	Nominal 240VAC to 48VDC/120VAC Power Converter
DCFCBH	High band Federal Controller/Timer (order part no. DCFCBU for UHF)
15500007A-02	Qty 4 - Battery sealed AGM 105Ah (MK Battery 8A31) Antenna
RP164	Antenna mounting bracket for RP164
AMB-RP164	Antenna mounting bracket for RP164
10A3	25 ft. Cable

FEDERAL SIGNAL

Sample Ordering Configurations for Electro-Mechanical Sirens

Identify the components needed when ordering

Configuration 8: **Activation Control Point with GUI/PC and Base Radio**

X-PC-22	PC with 22 inch monitor
SFCD255	Federal Commander Software (255 RTU's)
SS2000+	Digital and DTMF Control Station, Desk Mount Base
BSH	Base Station High band Radio Package (order part no. BSU for UHF)
AMB-W	Antenna Mounting Bracket, Wall

Configuration 9: **2001 Siren with two-way control, radio, 120VAC to battery operation**

2001-130	Siren Head
DCFCTBDH	Two-Way Digital Controller/Decoder/Sensors (High band)
2001TRBP	Nominal 240VAC to 48VDC/120VAC Power Converter
15500007A-02	Qty 4 - Battery sealed AGM 105Ah (MK Battery 8A31)
OMNI-xx	3dB gain Omni antenna, plus cable (Order OMNI antenna that matches desired frequency range)

Configuration 10: **2001 Siren with two-way control, radio, 240VAC to battery operation**

2001-130	Siren Head
DCFCTBDH	Two-Way Digital Controller/Decoder/Sensors (High band)
2001TRBP	Nominal 240VAC to 48VDC/120VAC Power Converter
15500007A-02	Qty 4 - Battery sealed AGM 105Ah (MK Battery 8A31)
OMNI-xx	3dB gain Omni antenna, plus cable (Order OMNI antenna that matches desired frequency range)

Configuration 11: **Configuration 8: Activation Control Point with GUI/PC and P25 Base Radio**
(SS2000+ not required)

X-PC-22	PC with 22 inch monitor
SFCD255	Federal Commander Software (255 RTU's, minimum software version 14.5)
SFCD-IP	Federal Commander IP Software key (Cellular/P25)
BSP	P25 Station Radio Package (BSPE if digital encryption desired)

Configuration 12: **2001 Siren with two-way control, radio, 120VAC to battery operation**

2001-130	Siren Head
DCFCTBDH	Two-Way Digital Controller/Decoder/Sensors (High band)
Q-FCTBDP-RADIO	APX P25 Radio Upgrade (if radio purchase not required, must purchase Q-APX-FCIK, FC
15500007A-02	Qty 4 - Battery sealed AGM 105Ah (MK Battery 8A31)
OMNI-xx	3dB gain Omni antenna, plus cable (Order OMNI antenna that matches desired frequency range)

Configuration 13: **2001 Siren with two-way control, radio, 240VAC to battery operation**

2001-130	Siren Head
DCFCTBDH	Two-Way Digital Controller/Decoder/Sensors (High band)
2001TRBP	Nominal 240VAC to 48VDC/120VAC Power Converter
15500007A-02	Qty 4 - Battery sealed AGM 105Ah (MK Battery 8A31)
OMNI-xx	3dB gain Omni antenna, plus cable (Order OMNI antenna that matches desired frequency range)

Notes:

Notes:

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