

- Indoor Warning Sirens
- Intelligent Systems
- Notification Software



Warning & Mass Notification Systems

PRODUCT SELECTION GUIDE

Total Solutions for Critical Communications

TOTAL CONNECTION

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

NEW PRODUCTS

INFORMER100



High-Powered Outdoor Speaker



CommanderOne™

Cloud based Platform Desktop and Mobile App





Warning & Mass Notification Systems

| | _ | | | | | _ |
|-----------|---------|-------|-----------------------|-----|-----|--------------|
| So | C4 | | _ / | | _4. | 1 |
| SO | ΓΤΙΛ | zar | $\boldsymbol{\rho}$ (| -OI | nti | \mathbf{c} |
| | I L V 1 | v a ı | _ , | | | |

| Software Control | |
|--|------|
| Commander® On-Premises | |
| Siren Control and Messaging System | 4 |
| CommanderOne® | _ |
| Cloud-Based Control for Your Warning Systems | ხ |
| Mass Notification Dynamic Messaging Software | 10 |
| SS2000+ Local Hardware Activation Point | |
| Commander P25 Compliant Warning System | |
| Mechanical Siren Systems | |
| 508-128 High-Powered Outdoor Siren | 18 |
| 2001/Equinox High-Powered, Directional Rotating Siren | |
| Model 2 Omni-Directional Siren | 22 |
| Eclipse8 Omni-Directional Siren | 24 |
| FC Siren Controller | 26 |
| FCTBD Two-Way Control and Status Monitoring | 28 |
| DCFCTBD Two-Way Digital Controller for | |
| Electro-Mechanical Sirens | |
| Informer Tone-Alert Radio | 32 |
| Sample Ordering Configurations for Electro-Mechanical Sirens | 24 |
| TOT Electro-infectionical Silens | 34 |
| Floatronic and Ciant Voice Siron Sys | tome |
| Electronic and Giant Voice Siren Sys | |
| MOD Series Modulator® High-Powered Omni Speaker | |
| DSA Directional Speaker Array | |
| UV Ultravoice® Electronic Siren Controller | |
| UVRI UltraVoice® Remote Interface | 42 |
| Indoor/Outdoor Controller | 44 |
| UVLOC Ultravoice® Local Operating Console | |
| Speakers & Strobes Emergency Notification | |
| PVS240W-24 and PVS240W-48 Solar Power Option | |
| Sample Ordering | |
| Configurations for Electronic and Giant Voice Sirens | i 51 |
| Intelligent Systems Informer | |
| I-IP Informer-IP, Two-Way IP-enabled Intercom and | |
| Alarm Initiation Point | 52 |
| I-IP100AC and I-IP100DC Informer100 Speaker | 54 |
| I-IP2 Dual Rack Mount Informer-PA | |
| for Public Address Interface | 56 |
| Wireless Remote Broadband Kit | |







Model 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 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. From controlling 1 siren to 511, the system can expand to accommodate your changing needs. Federal Commander provides an easy to use hotkey activation screen. Administrators can program 30 hotkeys to activate all sirens, sirens in zones, or individual sirens. Hotkeys can be color coded and grouped. Each hotkey can also be programmed to include a text, email, or voice message sent to first responders, citizens or the media to alert them on the situation. In this way a single hotkey can activate sirens and send informational messages simultaneously. Predefined alerts can also be sent from the activation screen without activating the sirens.



FEATURES

- PC or Server based system
- Up to 511 sites
- Support of analog, digital (P25/Tetra), IP, cellular, satellite and landline communications
- Control of municipal, county and state siren systems
- Control of giant voice systems

- Control of Intelligent Systems
- Local and web based control using CommanderOne
- Secure communications with 128 & AES 256 encryption and time-based encryption
- Custom user interface for your specific application

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

The Commander Siren Controller System 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.

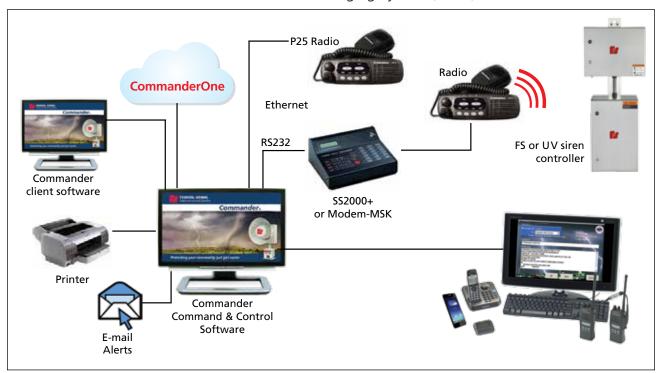
Commander has integrated networking and messaging capabilities.

- 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)



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

RTU Capacity: Up to 511 siren RTU's

Communications support of: Analog LMR radio systems Digital radio systems including P25 Cellular and satellite Wireless broadband IP networks Landline communications

Security: Time based encryption128 data communications encryption 256 AES data communications encryption User password and role based security

Hardware Activation support for: SS2000+ local activation point with hotkey activations Siren activations using Intelligent System Informers

RTU types support for: Mechanical siren systems
Ultravoice giant voice systems
Intelligent Systems using Informer product line

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

Intelligent Systems support for: Informer product line Desk / Wall / Rack / Outdoor Systems 2-way Intercom and recording Custom and specialized alert and notification systems

Zoning: Unlimited zone creation

System: Alarm logging and reporting Siren activation and monitoring using customized maps

Language: English default with ability to customize language per country

System Backup: Create and restore system back up files

HOW TO ORDER

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

Considerations for system configuration:

| 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 users | SFCD-W10 |
| Warranty, up to 25 users | SFCD-W25 |
| Warranty, up to 255 users | SFCD-W255 |
| Warranty, up to 511 users | 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-22T |
| 120V Uninterruptible Power Supply | X-UPS |
| Desktop Controller | SS2000+ |
| | |

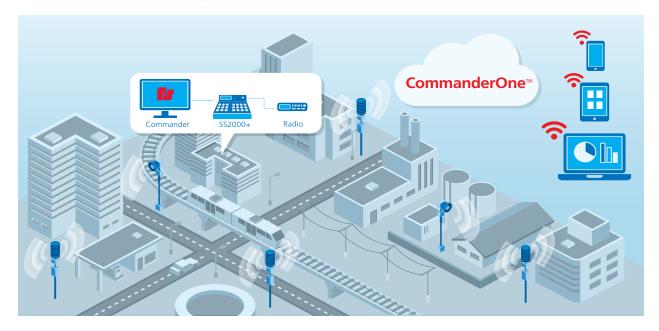


CommanderOne®

Cloud-Based Control for Your 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 semi-automatic weather based polygons siren activation is available for all CommanderOne users.



User Experience – The Intuitive Interface is simple to setup, 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 a overview of your system.

Weather – 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.

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

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

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

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

Dashboard

Dashboard Web

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. It has spatial intelligence where all siren sites are geo coded and can be searched through the search bar.



Dashboard App

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.





Activation

Hotkey

Commander hotkeys are mirrored in the web and mobile interface to give you the simple effective interface you have trusted for years.





Manual Activation

In addition to hotkeys, sirens can be activated manually. Choose the sites and the function that you want in just a few clicks from either the web or the mobile application.



Map-based Activation

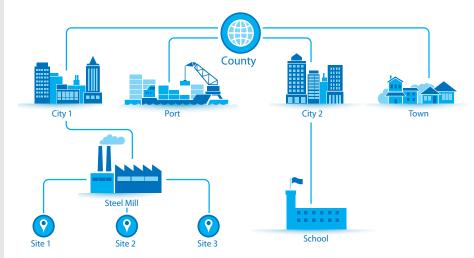
Sirens can be activated from the map. Its geo-intelligent interface allows you to activate or refresh status from the dashboard with just few clicks.





CommanderOne® Cloud-Based Control for Your Warning Systems

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.

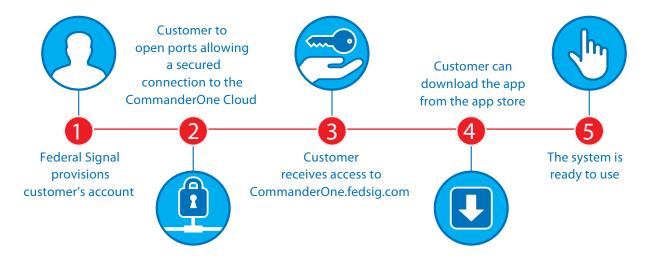
Reporting

Built-in reporting allows you to produce quick status reports. From the web console, you can download the reports in various formats including pdf, Excel, csv, etc.

Mobile app provides quick status of last activation and easy to use graphical display.



Ease of Implementation



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 Seats | 5 | 20 | Per quote |
| Smartphone App (Android and iOS) | ✓ | ✓ | ✓ |
| Tablet App (Android and iOS) | ✓ | ✓ | ✓ |
| Desktop | ✓ | ✓ | ✓ |
| Number of Organizations | 1 | 2–5 | Over 5 |
| Number of Devices (Sirens, Informers, etc) | up to 255 | 256–512 | Over 512 |
| In-release Commander Feature Upgrades and Fixes | ✓ | ✓ | ✓ |

^{*}Includes remote implementation support. For on-site support and training, contact your Federal Signal representative for a quote.

Prerequisites

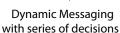
- Commander Software version 14.6 or greater
- Internet access at Central Control Unit (base station computer running Commander)
- Static IP address assigned to on-premise Commander



CommanderAssist®

Mass Notification Dynamic Messaging Software







Simplifies implementation of your Emergency Response Plan

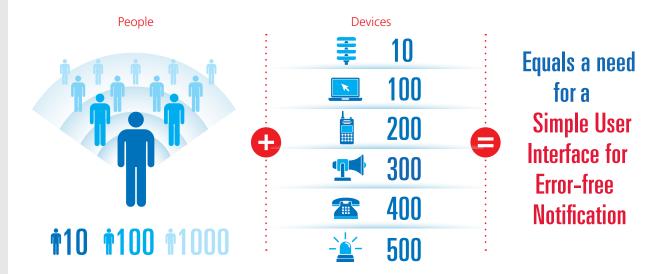


"1-click" activation screens with Hotkeys



Having an emergency notification system is important to organizations. Having the **right multi-layered emergency notification system** is critical to people's safety, protection of property, surrounding communities and your operation's continuity. With numerous disparate systems ranging from indoor public address, outdoor warning, radios, cell phones, landlines and computers, it can be a challenge to notify the right people at the right time with the right message. Federal Signal's **CommanderAssist™**, a single on-premise platform for all critical communications, can help protect life and property, meet regulatory requirements, and improve operational efficiencies.

CommanderAssistTM enables Emergency and Security Managers to send alerts that comply with their emergency response plan. CommanderAssist's simple interface walks a user through a series of activation screens for an easy dynamic message deployment. The software can be fully integrated to deploy messages with Federal Signal audible and visual signals, outdoor sirens, or computers, phones and land mobile radios.



CommanderAssist Functions and Capabilities:

Desktop Alerting



CommanderAssist distributes pop-up like messages on connected Windows® client computers. It provides confirmation of delivery and acknowledgement from the recipient. Based on the type of alert, you can customize the colors, and add sounds and messages. It automatically dissolves pop-ups for non-emergency messages and it also can take over the screen, requiring the recipient to take action for emergency messages. For ease of deployment, it is compatible with desktop management tools for unattended installs.

Text to Speech



Dynamic messaging, CommanderAssist's most popular feature, creates messages on the fly by utilizing a Text-to-Speech technology that delivers accurate and high quality voice.

5

Text Messages

Text message is an important channel to deliver emergency messages. CommanderAssist has the capability to deliver text messages utilizing your current IT infrastructure.

SIP Interface*



Session Initiation Protocol (SIP) is a protocol used to establish and manage communications session between IP endpoints, typically for voice calls. In order to maximize your current communications infrastructure, CommanderAssist can integrate with SIP enabled PBX. This enables notification via phone calls.



Custom Screen Design



Federal Signal is dedicated to creating the shortest path to value for you. Our goal is to optimize the way your organization works so you can get the job done faster, and with better results. CommanderAssist includes consulting hours to create a custom screen user interface that meets your needs.

Hosted Dialing*



If you prefer hosted dialing as primary or backup to your local telephony, CommanderAssist provides that. This feature requires access to the internet.

*Applicable for Professional and Enterprise models.

((**₹**))

Commander

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

What our customers are saying...

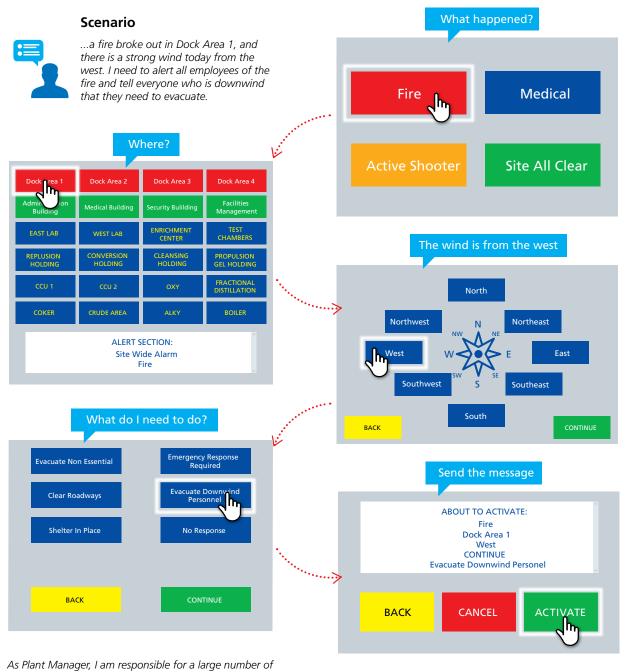


CommanderAssist enables us to react faster and effectively in an emergency situation versus our old manual way. The first few seconds in an emergency are critical. The software's intuitive dashboard is a simplified short series of event specific menu choices in comparison to the outdated cumbersome and complex process.

EHS / Environmental Health and Safety Manager (Chemical plant)



CommanderAssist® Mass Notification Dynamic Messaging Software



As Plant Manager, I am responsible for a large number of personnel, contractors and visitors who rely on me to ensure a safe environment. Not only has Federal Signal met our specific Life Safety communications needs, CommanderAssist also allowed us to reduce our operational insurance / facility underwriting costs without compromising safety.

Plant Manager (Chemical plant)

Our hazardous environment requires me to wear PPE and doesn't allow me to use a cell phone. Our old manual notification process is now replaced with voice messages on our land mobile radios; this makes me feel so much safer and secure at work.

Production Operator (Oil Refinery)

CommanderAssist® Mass Notification Dynamic Messaging Software

Specifications

| | Server Requirements | Client Requirements |
|---------------------|---|---|
| Operating 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 |

1 Select CommanderAssist Model

| | Standard | Professional | Enterprise |
|--|----------------------|----------------------|-----------------------|
| Model # | SFCD-C-S | SFCD-C-P | SFCD-C-E |
| Commander Software | Up to 25 devices* | Up to 25 devices* | Up to 255 devices* |
| Number of seats** | 25 | 50 | 500 |
| Unlimited Hosted dialing | × | ~ | ~ |
| Text to Speech engine | ~ | ~ | ~ |
| VoIP Module | X | ~ | ~ |
| Consulting hours to design the screens (remote only) | 10 | 20 | Per Quote |

^{*}FSC siren controller and Informers are accounted in devices, RIU doesn't get counted as a device

Select Annual Warranty

| | Standard | Professional | Enterprise | | |
|---|------------|--------------|------------|--|--|
| Model # | SFCD-W-C-S | SFCD-W-C-P | SFCD-W-C-E | | |
| In-release Feature Upgrades and Fixes | ~ | ~ | ~ | | |
| Unlimited Hosted Dialing | - | ~ | ~ | | |
| Consulting hours* to refresh the User Interface | 5 | 10 | Per Quote | | |

^{*}Consulting hours doesn't get carried over to next year

3 Commander Assist Optional Requirements

| Model # | Description | Notes |
|------------|---|---|
| CS-RIU | Radio Interoperability Unit – interface up to 4 radios | This allows notifications to be to sent to Land Mobile Radios. Local PC required. |
| CS-RIUPLUS | Radio Interoperability Unit with MINI PC – interface up to 4 radios | This allows notifications to be to sent to Land Mobile Radios. Local PC is not required. |
| CS-SIU | Sensor Interface Unit | It is a smart device with 16 inputs and 4 relay outputs. |
| 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. |

Watch a short video on CommanderAssist for a quick software deployment demonstration. Visit: www.alertnotification.net/news/CommanderAssist



^{**} Users who get notification via desktop alerts, emails, phone calls and text messages





SS2000+

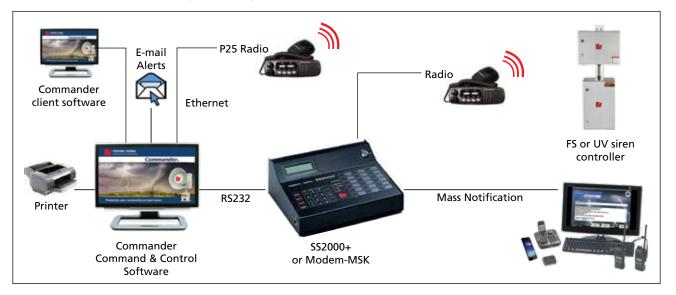
Local Hardware Activation Point

The SS2000+ local hardware activation point is Federal Signal's most advanced stand-alone control unit. The SS2000+ supports one-way communication or two-way communications, with two-way communications utilizing DTMF or FSK encoding. Command sequences are programmable and stored in non-volatile memory for retention even when electrical power is disrupted. Using the SS2000+, you can monitor and control your siren network with the SS2000+, offering 20 inputs for remote activation. The remote activation inputs can mirror the front panel push buttons or can be configured to provide 20 additional activation points.

To utilize the most advanced features of the SS2000+, connect it to a PC running Federal Signal's Commander software. Commander software and the SS2000+ can work together to monitor and control your system, with the SS2000+ providing full redundancy in the event that your PC is off line. You can stream .wav files from your PC for voice, music and text-to-speech. You can control new and legacy systems using DTMF, EAS, two-tone and AFSK encoding. You can program hotkeys for quick activation functions in various scenarios. The SS2000+ offers these capabilities in a simple, easy-to-use package for your desktop, or a 19" rack unit (SS2000+R) is also available. The SS2000+ can be configured using SSLOADER+, a simple Windows®- based program from Federal Signal.

- Redundant source of command and control should Commander PC be offline
- Desk and 19" rack mount versions available
- Available Ethernet port for network-based control
- Compatible with two-tone EAS and DTMF, AFSK encoding
- 20 remote activation inputs
- 24 command function hot keys
- Provides communication diagnostics
- Streams .wav files for voice, music and text-to-speech
- Built-in speaker and microphone jack
- Offered in 120 and 240VAC, with EU or UK versions now available

DTMF Encoder/Controller (SS2000+)



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

Operating Temperature:32° F to 140°F

Line Input 120/240VAC* wall transformer power supply

Battery Input 11.5 - 20VDC
(over voltage and reverse voltage protection)

Power Supply Input Voltage12-30VDC (12VDC typical)

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, -55 dbm to 0 dbm Audio Input Balanced 600 Ohms, -35 dbm to 0 dbm 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

Rack Mount 5.19" x 17.29"

(19" front with bracket) x 10.10"

131.8 mm x 439.2 mm

(482.6 mm front with bracket) x 256.5 mm

Shipping Weight: Desk Mount 6 lbs 3 kg Shipping Weight: Rack Mount 8 lbs 4 kg

HOW TO ORDER

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

Considerations for system configuration:

| Description | Part Number |
|--|--------------|
| Local hardware activation point, desk mount | SS2000+ |
| Local hardware activation point, 19" rack mount | SS2000+R |
| Local hardware activation point, EU, desk mount | SS2000+EU |
| Local hardware activation point, UK, desk mount | SS2000+UK |
| Noise Cancelling Microphone ² | MNC-MC |
| UL2572 Compliant Noise Cancelling Microphone | MNC-NMS |
| Software Configuration: Windows® XP, Vista, Windows®, Server 2003/2008 Compatible SSLOADER+ Oper | ating System |

REPLACEMENT PARTS

| Description | Part Number |
|------------------------------------|-------------|
| SS2000+ Power Supply with US Cable | Q-SSPWR |
| UK 240VAC Power Cable | Q17501252A |
| EU 240VAC Power Cable | Q17501253A |
| SS2000+ Vertex Radio Cable | Q17500863 |

¹ 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.

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

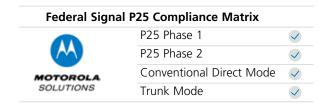
² Noise cancelling microphone model MNC-MC replaces the microphone on early revision models of SS2000+. Revision E and later models utilize microphone model MNC-NMS for compatibility with UL2572.

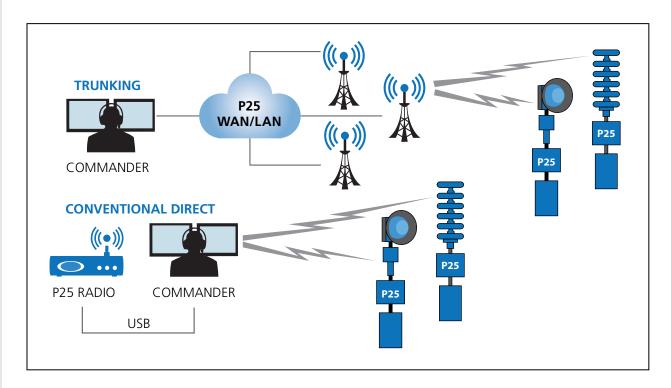


Commander® P25

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.

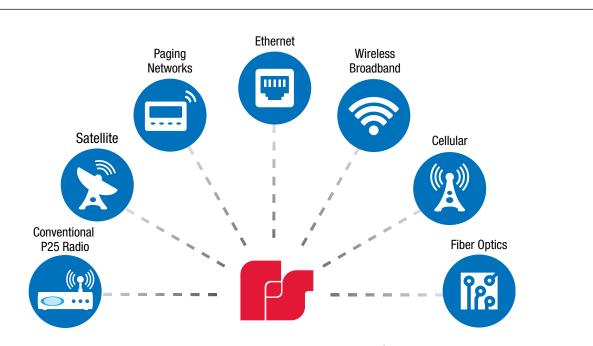




Control Point computers hosting the Commander software can now connect to a P25 trunked land mobile radio interface via an ethernet connection. Control points utilize a broadcast functionality to quickly and efficiently communicate with all remote controllers for All Call and Group activations. IP unicast 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)



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 relaibility 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 SFCD-IP

Base station P25 radios (not required for trunked P25)

BSP/BSPE¹

Federal Signal Commander software version 14.5 or greater required for P25 support

Specify Model, FC Remote Terminal Units:

FC controller P25 radio upgrade kits²

Q-FCTBDP-RADIO/Q-FCTBDE-RADIO¹

FC Controller P25 APX Radio Interface kit³

Q-APX-FCIK

FC RTU firmware version 3.2.0.5 (FCM+)/7.6.0.3 (UV) or greater needed for P25 support

Specify Model, UV Remote Terminal Units:

UV controller P25 radio upgrade kits²

Q-UVP-RADIO/Q-UVPE-RADIO1

UV Controller P25 APX Radio Interface kit³

Q-APX-IK

UV RTU firmware version 2.4.0.1 (UV+)/5.3 (FCM) or greater needed for P25 support

¹ E = Encryption capable APX Radio

 $^{^{\}rm 2}$ Radio upgrade kits include RTU controller P25 APX Radio Interface Kit

³ P25 APX Radio Interface Kit needed to connect RTU controllers to P25 radios





Model 508-128

High-Powered Outdoor Siren

Federal Signal's 508-128 siren is a high-power, rotating, uni-directional, 500 Hz outdoor warning siren that offers an anechoic chamber-certified signal strength 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.

- 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

Sirens 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' Calculated²

60 dB 14,700' Calculated²

Signal Information:3

Signal /Sweep RateFrequency RangeSweep RateSteady /Continuous500 HzN.A.Wail /10 sec.180-500 Hz10 sec.Fast Wail /3.5 sec.300-500 Hz3.5 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 -22°F to 140°F -30°C to 60°C

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)

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**Rotating electro-mechanical siren, low frequency **Equinox**

Siren Control Ordering Information:

One-way FC Controller, 120VAC operation

Two-way FC Controller, 120VAC operation

One-way FC Controller, 120VAC to battery operation

Two-way FC Controller, 120VAC to battery operation

DCFCB/H/U

DCFCTBD/H/U4

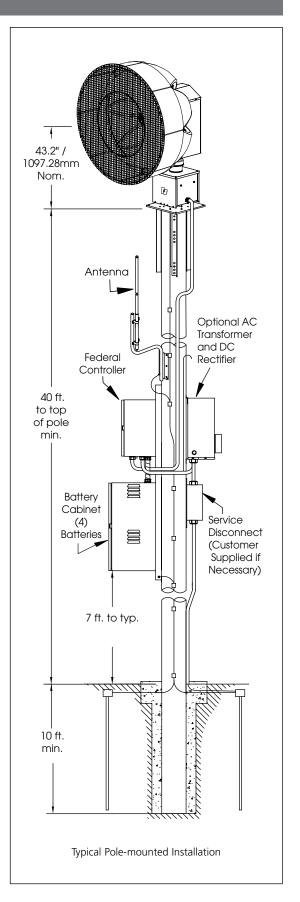
DCFCTBD/H/U4

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 SFCD⁵

- ¹ Contact Federal Signal for powering options
- 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 18°C or higher
- ⁴ Batteries not included
- ⁵ See Product Selection Guide for ordering options





Model 2001-130 and Equinox

High-Powered, Directional Rotating Siren



The Federal Signal 2001-130 and Equinox sirens is a high-powered, rotating, uni-directional 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 (490 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.

- 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-Powered, Directional Rotating Siren (2001-130/Equinox)

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

Power:1

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

| Signal Information: | <u>2001-130</u> | <u>Equinox</u> |
|------------------------|-----------------|----------------|
| Signal /Sweep Rate | Frequency Range | |
| Steady /Continuous | 790 Hz | 500 Hz |
| Wail /10 sec. | 470-790 Hz | 180-500 Hz |
| Fast Wail /3.5 sec. | 600-790 Hz | 300-500 Hz |
| Coverage: ² | <u>2001-130</u> | <u>Equinox</u> |
| 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 -22°F to 140°F -30°C to 60°C Dimensions H x W x D: 62" x 37" x 41" (157 cm x 94 cm x 104 cm)

Shipping Weight: 460 lbs 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**

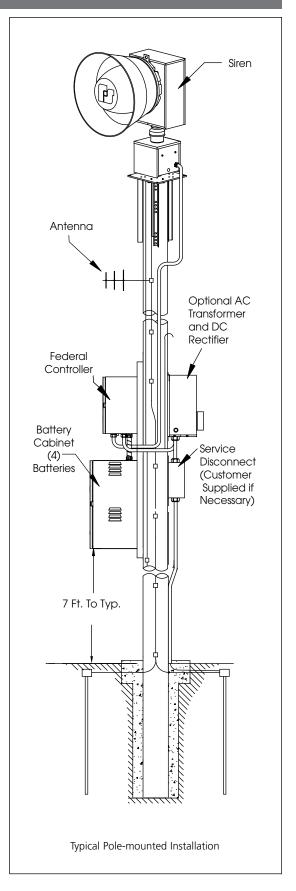
Siren Control Ordering Information:

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
Two-way FC Controller, 120VAC to battery operation
DCFCB/H/U
DCFCTBD/H/U

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 SFCD⁵

- 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 18°C or higher
- ⁴ Batteries not included
- ⁵ See product page for additional information







Model 2

Omni-Directional Siren

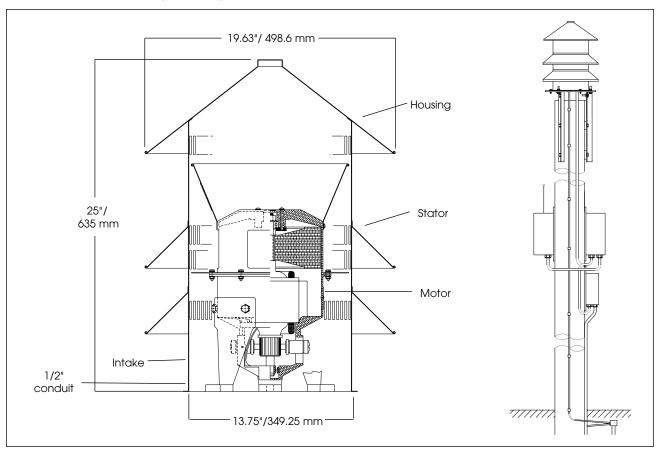
Federal Signal's Model 2 outdoor warning siren is an omni-directional siren capable of producing intense warning signals over a large area. The siren can be installed on a roof or utility pole.

Federal Signal's Model 2 is a single tone siren capable of producing 102 dBc @ 100' while making only moderate power source demands. The Model 2 has a universal motor which operates from either 120VAC/DC or 240VAC/DC. A Federal Signal Model RC2W motor starter (purchased separately) is required to operate this siren.

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.

- Available in 120VAC/DC and 240VAC/DC
- High-efficiency design requires only moderate power
- Produces 102 dBc @ 100'
- Roof mount standard and pole mount optional

Omni-Directional Siren (Model 2)



| Recommended Mounting Height: | 35-40 feet | 10.7–12.2 m |
|------------------------------|------------------------|--|
| Available Tones: | | 1 standard |
| Effective Range*: | 1,000 feet | 304.8 m |
| Power Rating: | 2 HP | 2 HP |
| Power Requirements: | 120VAC/DC 240VAC/DC | 24A, single phase 12A, single phase |
| Net Weight: | 59.0 lbs | 23.6 kg |
| Shipping Weight: | 85.0 lbs | 36.0 kg |
| Height: | 25.0" | 635.0 mm |
| Diameter: | 19.63" | 498.6 mm |

| Description | Part Number |
|---------------------------------|-------------|
| Bearing (Two Required) | Q8239A045 |
| Brush and Spring (Two Required) | Q8247A020 |
| Brush Holder (Two Required) | Q8247A021 |
| Brush Holder Cap (Two Required) | Q8247A022 |

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

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

| Description | Part Number | |
|-------------|-------------|--|
| Pole Mount | PMS | |





Model Eclipse8

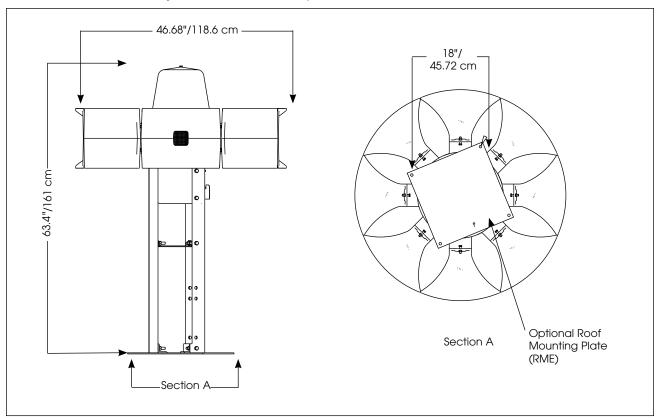
Omni-Directional Siren

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.

- 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)



| SPECIFICATIO | N S | |
|---------------------------|----------------|---------------|
| Operating Temperature: | -22°F to 140°F | -30°C to 60°C |
| Effective Range @ 70 dBc: | 2200' | |
| Net Weight: | 255 lbs | 116.0 kg |
| Shipping Weight: | 380 lbs | 173.0 kg |
| Height: | 63.4" | 161.0 cm |
| | | |

46.68"

118.6 cm

HOW TO ORDER

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

Description Part Number

Siren Ordering Information:

Width:

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.182 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



MARK CAPACITY. THE RESIDENCE OF THE PARK CAPACITY OF THE PARK CAPACITY. THE RESIDENCE OF THE PARK CAPACITY. THE

Model FC

Siren Controller

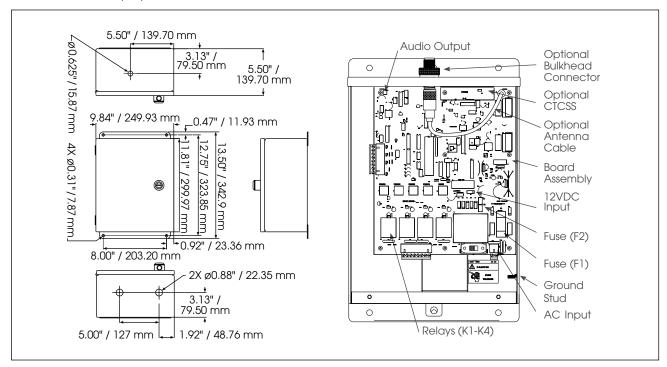
The FC Controller is a remote-control activation point for equipment control (such as electro-mechanical sirens) with relay outputs. Ideal for siren control applications and process' controlled via relay contacts. The FC Controller is equipped with a FCM Plus Controller board which can be powered from 12VDC, 48VDC, 120VAC or 220VAC. The FCM Plus Controller board is equipped with 4 relays to control devices such as siren contactors, overhead door controls, lights, beacons, sounders or railway equipment. The FCM Plus 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 FCM Plus 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 pushbuttons on the FCM Plus 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.

Other 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/AFSK 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 and networking 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.

- One-way radio control available
- 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
- UL Listed and DNV Certified

Siren Controller (FC)



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: 5A @ 120/240VAC 8A @ 24VDC

Number of remote activation inputs:

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)

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 |

| t Number | Description Par |
|----------|--|
| FSPWARE | Federal programming software (Non-digital applications) |
| FS-PL1 | Tone Coded and Digital Coded Squelch Decode |
| PBS-4 | Outdoor NEMA 4 Pushbutton Panel |
| 2001-AC | 220VAC Transformer rectifier with 48VDC, 120VAC and contactors with enclosure |
| RC2W-120 | Motor starter/cabinet NEMA 3R 120VAC |
| RC2W-240 | Motor starter/cabinet NEMA 3R 240VAC |
| 2-120 | Model 2, 120VAC/DC Omni-directional Siren |
| 2-240 | Model 2, 240VAC/DC Omni-directional Siren |
| PMS | Model 2 Pole Mount |
| | |

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

| Description | Part Number |
|--------------------------|--------------|
| FCM Plus Control Board | Q2005263C |
| Radio Receiver High-Band | Q2005240G-02 |
| Radio Receiver UHF Band | Q2005240G-03 |





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, radio cable for Vertex VX-4500 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.

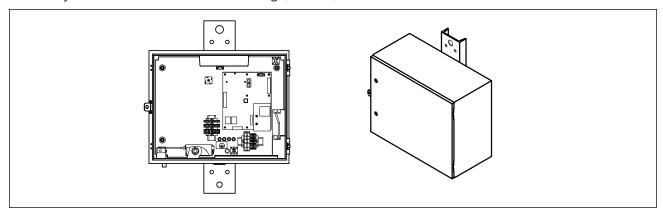
The FCTBD can also be ordered as FCTBDH and FCTBDU which includes a Vertex radio transceiver (FCTBDH = high band or FCTBDU = UHF). FSPWARE, an optional software package, enables connection to a computer to modify supplied timing or to create unique on/off patterns for control of external equipment, such as sirens. Programming options via FSPWARE include radio frequency, two-tone sequential tones/DTMF/AFSK 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 electromechanical sirens like the Federal Signal 2001-130, Equinox, 508-128, Eclipse8 and Model 2 sirens.

- 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

Two-Way Control and Status Monitoring (FCTBD)



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

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: 5A @ 120/240VAC
8A @ 24VDC

Number of remote activation inputs:

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: 19" x 23" x 11.2"

(48.3 cm x 60 cm x 28.5 cm)

Net Weight: 95 lbs 43.2 kg Shipping Weight: 155 lbs 70.3 kg Board and radio FCTBD

Part Number

Contact our Federal Signal Sales Engineers

to design a system that meets your specific

Two-way Controller with FCMPlus Control

Two-way Controller with FCMPlus Control

Board and Radio, high band 148-174 MHz FCTBDH

Two-way Controller ith FCMPlus Control

Board and Radio, UHF band 403-470 MHz FCTBDU

Two-way IP-enabled

requirements.

Description

Electro-mechanical Controller FCTBD-IP

Notes

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

Broadband radio and SmartMsg software sold separately.

REPLACEMENT PARTS

| Description | Part Number |
|-------------------|-------------|
| 12VDC Charger | Q20000288 |
| 12VDC Battery | Q155193A |
| FC+ Control Board | O2005263B |

OPTIONAL ACCESSORIES

| Description | Part Number |
|--|-------------|
| Windows Programming Software (Non-digital applications) | FSPWARE |
| Commander® Software System, *10, 25, 255, or 512 Site License | SFCD* |
| Private line tone and digital coded squelch encoder and decoder | FS-PL1 |
| Encoder and decoder (low) | FS-PL2 |
| 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





Model DCFCTBD

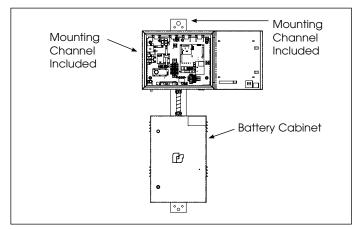
Two-Way Digital Controller for Electro-Mechanical Sirens

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.

- Two-way siren controller for 48VDC Sirens
- Two-way radio control and status monitoring
- AFSK Two-way signaling format
- Simultaneous single tone, two-tone sequential, and DTMF decoding
- 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)



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

Operating Temperature: -22°F to 149°F -30°C to 65°C AC supply voltage: 120 VAC @ 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

Serial Port Protocol: RS232C 1200, N, 8, 1

Programmable Frequency: Power Out and Private Line options.

For further details, consult the Vertex® product manual.

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 - 5A @ 240VAC Controller Dimensions H x W x D: 19.0" x 23.5" x 11.19"

482.6 mm x 596.9 mm x 284.2 mm

Shipping Weight:

DCFCTBD 300 lbs 136.36 kg 2001TRBP: 190 lbs 86.2 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

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

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

OPTIONAL ACCESSORIES

Description Part Number

Federal programming software

(Non-digital applications) FSPWARE

Commander® Software System,

10, 25, 255, or 512 Site License SFCD
240VAC operation 2001TRBP
Activation system SS2000+
Solar powered option Contact Federal Signal

Antenna Contact Federal Signal

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

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



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).

- 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)

| equency Range (MHz) arrowband: | 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 |

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

Reference Sensitivity¹: (12dB SINAD) < 0.35 microvolts Hum and Noise¹: 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

<400mA Max I-HIO/UIO

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

85 dBc I-HIO/UIO

External Control/Audio/Antenna

Dual (N.O./N.C.) relay: 5a @ 30VDC 600 Ohm output: 50mv - 2.5vpp into 600 Ohms Removable rubber duck Antenna: 50 Ohm, BNC female External Antenna Connector:

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)

> 3.2 lbs 1.45 kg

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

| 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 moui | nt 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.

| Description Pa | art 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-HIO and | |

I-UIO models (can be powered by internal power supply)

LP1-012* **Battery** 155191A

Optional Signaling Formats

Federal Signal (MSK) Digital Option 1200, N, 8, 1 Synchronous, 1200 Hz mark tone, 1800Hz space tone <20 dBc SINAD Digital Decode Sensitivity **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.

^{*}Frequency 405-420 special order requires ES-SMV. Contact factory for quote.

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).

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

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



Sample Ordering Configurations for Electro-Mechanical Sirens

ONE-WAY WITHOUT RADIO

Configuration 1: 2001 Siren with one-way controller, no radio, 240VAC Powering, no batteries

2001-130 Siren Head

2001-AC AC Transformer / Contactor Enclosure for 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 FC Controller / Timer

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 FC Controller / Timer

ONE-WAY WITH RADIO

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 / Contactor Enclosure for 2001 or 508 Sirens High band

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



Sample Ordering Configurations for Electro-Mechanical Sirens

TWO-WAY WITH RADIO

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)

TWO-WAY WITH P25 (PROJECT 25 DIGITAL) RADIO

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

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)



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.

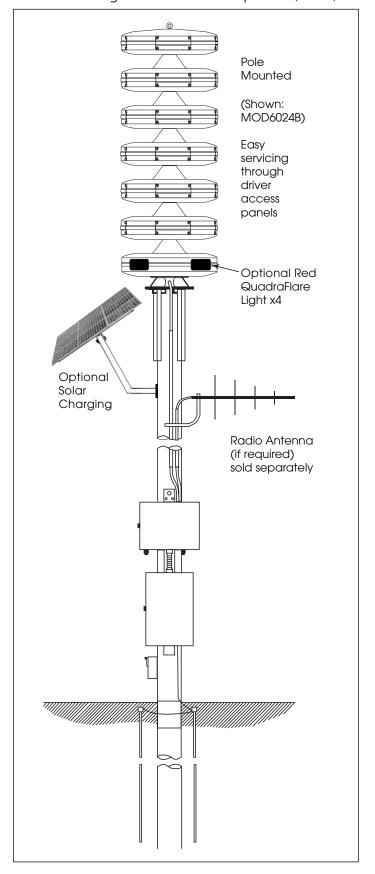
The Modulator High-Powered Speaker Array combined with the UltraVoice controller is ideal for community/municipal, industrial and military applications where immediate instruction is necessary. The MOD6032 and MOD6048 have been replaced by the MOD8032B, which is shorter, lighter and more compact.

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.

- 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 | A CTIVE MODULES | TOTAL WATT | DECIBELS @ 100'1 | EFFECTIVE RANGE @ 70 dBc | H E I G I | H T M M | NET V LBS | V E I G H T K G | S H I P P L B S | ING WT 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)



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

| Frequency Response: | 200-2000Hz ± 1dB |
|---------------------|---------------------------------|
| Color | Off-White |
| Paint Type | TGIC-polyester powder coat |
| Modulator Horn Type | Hyperbolic flare |
| Frequency Response | 200-2000 Hz |
| Horizontal Coverage | 360° +/- 1 dBc |
| Diameter | 35 "/88.9cm |
| Wind Loading @ 110r | mnh wind velocity ^{1.} |

| wind Loading & Fromph wind velocity. | |
|--------------------------------------|----------|
| 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 ORDEF

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).

Contact Customer Support for pricing regarding the optional QuadraFlare lights

See page 50 for the Solar Panel option.

R F P I A C F M F N T P A R T S

Description Part Number Driver, 100 watt K8570063A





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.

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.

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

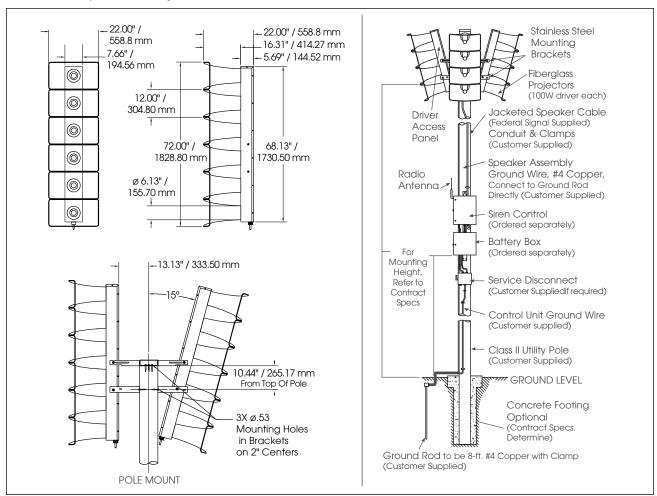
- Two mounting kits available
- UL and cUL Listed

| MODEL | N O . O F 1 O O W S P E A K E R S | T O T A L W A T T | D E C I B E L S 1 0 0 ' ² | E F F E C T I V E R A N G E | H E I I N | G H T M M | NET V LBS | V E I G H T K G | S H I P F L B S | PING WT 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 |
| DSA51 | 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)



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

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.

| 2 speaker assembly | DSA2 ¹ |
|--|---------------------------------|
| 3 speaker assembly (Special order, consult fa- | ctory) DSA3 ¹ |
| 4 speaker assembly | DSA4 ¹ |
| 5 speaker assembly (Special order, consult fa- | ctory) 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 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).

Controller and Communications – See price list for controller and powering options.

Description

Part Number





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 up to 250 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:

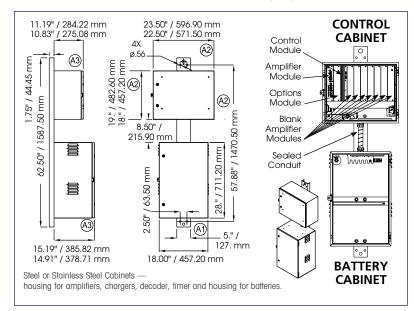
- AC power
- Battery voltage
- Charger operation
- Activation current
- Amplifier voltage and current
- Quiet test (Speakers & Amps)

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

- 7 built-in warning signals
- Up to 250 stored message, 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)



Operating Temperature **: -22°F to 149°F -30°C to 65°C 120/240VAC ±10%, 50/60Hz single-phase Input Voltage: (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 4 or 4X **Battery Cabinet:** Type 4 (vented)

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 |

[®] Vertex is a registered trademark of Motorola Trademark Holdings, LLC

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 Vertex® VX-4500.
- 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

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

UVTR Transformer/Rectifier

Battery Requirements:

Customer must provide necessary

batteries. Call for assistance with specific

system requirements.

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

^{**} The siren can operate throughout this temperature range provided the battery temperature is maintained at 0°F/-18°C or higher.



Model UVIC

UltraVoice® Indoor Controller

The Federal Signal UltraVoice® Indoor Controller, Model UVIC, is designed to deliver clean, clear, amplified audio to a network of speakers (sold separately), configured for indoor notification or evacuation. The UltraVoice Indoor Controller has been designed for high quality reproduction of live or pre-recorded voice and tone, providing the ability to automate testing and emergencies.

The UVIC is housed in a single NEMA1 style cabinet, with provisions for up to two 400 watt amplifiers (sold separately). Each controller requires 120VAC and contains two sealed lead-acid batteries, providing over 30 minutes of operation in the event power has been lost. The UVIC can be activated by land line, radio or IP from a remote location. Landline activation can initiate one of the 8 onboard functions by connecting a momentary dry contact closure (customer supplied) to the appropriate pc board mounted terminal block. These functions can contain a combination of tone and prerecorded voice or Public Address. Public Address is available from the supplied microphone located inside the controller. If Radio Control of the UVIC is desired, an optional Federal Signal Encoder Model SS2000+ and base station radio (approved radio license required at time of order) must be added to the control package and is typically located where administrative control and activation resides. In either configuration, each function will remain active for 3 minutes as standard.

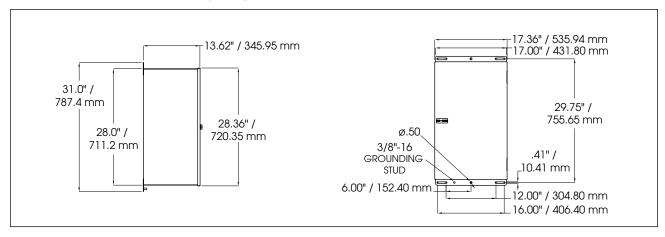
The UVIC controller is also compatible with our Commander® Software System status monitoring and activation software to "point and click" activation and local indication of alarms or fault conditions. Available functions to be displayed on a computer screen or captured to a database or printer are: AC Power, Battery Voltage, Charger Operation, Activation Current, Amplifier Status, Quiet Test, Intrusion and Local Activation.

Options: Ultravoice units may be equipped with a programmable RF receiver for remote control using MSK or DTMF protocols. Federal Commander Windows based software provides command and control for UltraVoice two way products

- Landline, Ethernet (IP) or Radio Control w/Two-way Status Monitoring
- Public Address
- Seven Standard Tones
- 70 Vrms Audio Output Standard (25 Vrms optional)
- 128-Bit Encryption
- 4 Programmable Relays, 600-Ohm, Line-level and 33-Ohm Audio Outputs (with optional UVARM)

- Type 1 Enclosure
- Up to 250 Stored Messages, 17 Hours of Available Audio
- Batteries and Local Microphone Included
- Line Supervision of Distributed Appliance Network
- Optional Windows Based Activation and Status Monitoring Software
- UL and cUL Listed

Ultravoice® Indoor Controller (UVIC)



Operating Temperature: -22°F to 149°F -30°C to 65°C Input Voltage: 120 or 240VAC (UVIC240) +/- 10%, 50/60 Hz Single-phase

Input Current: 5A AC, 45A DC Max

Operating Voltage: 24VDC

Standby Time: 3 Days (with 5 minutes full signal reserve)

Continuous Signaling Time: 30 minutes

Audio Output (UV400): 70 Vrms (nominal)

31" x 17.36" x 13.62" Dimensions H x W x D: (787.4 mm x 440.9 mm x 345.9 mm)

Net Weight: (no amplifiers) 64.55 lbs 29.28 kg Shipping Weight: 200 lbs 90.7 kg

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

| rt Number | Description Pa |
|-----------|---|
| UVIC | Indoor Controller, No Radio |
| UVICH | Indoor Controller, Two-way VHF (136-174MHz) |
| UVICU | Indoor Controller, Two-way UHF (403-474MHz) |
| UVIC-IP | Indoor Controller, IP-enabled* |
| UVIC-LL | Indoor Controller, Landline |
| UVIC240 | Indoor Controller, 240VAC, No Radio |

^{*}Requires IP Networking Software

Part Number Description Battery, Sealed, AGM, 12VDC Q155197A

| Description | Part Number |
|--|-------------|
| Digital voice mini SD card, 250 messages 17 hrs. | , DVSD |
| Amplifier, 400 watt | UV400 |
| Digital Voice Recording Fee | DVR |
| Commander® Software System, *10, 25, 255, or 512 Site License | SFCD* |
| Telco Base, Landline | TB-LL |
| UltraVoice Audio Relay Module Balanced 33-Ohm output: Adj. from 0.2-1.9 Vrms Balanced 600-Ohm output: Adj. from 0.2-3.0 Vrms or -12 to +11 dBA Single Ended Line-Level: Adj. from 0.2-3.0 Vrms Relay Outputs: 4 programmable relays rated 30VDC, 15A | UVARM |
| Step-down transformer, 70-25 Vrms (Note: 25 Vrms step down transformer | |



occupies one amplifier slot making the UVIC capable of a maximum of 400 watt

in this configuration.)

Wall mounted strobe Ceiling mounted strobe

Wall mounted speaker strobe

UVIC25ST

ENWSSPA ENWSTPA

ENCSTA





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 VX-4500 transceiver for wireless communication back to the Federal Commander Digital System. However, the UVRI all 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.

FFATURES

- 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)

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

Operating Temperature¹: 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 VX-4500 transceiver

Signaling Formats:

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.

Cabinet Dimensions H x W x D: 16" x 15" x 8-3/8"

(406 mm x 381 mm x 213mm)

Shipping Weight (including battery): 29.6 lbs 13.43 kg

HOW TO ORDER

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

| Part Number | Description |
|------------------------------|---|
| Radio UVRI | Remote Interface unit, No |
| Band UVRIH | Remote Interface unit, VH Transceiver (136-174 MHz |
| Band UVRIU | Remote Interface unit, UH Transceiver (403-470 MHz |
| dline Control UVRI-LL | Remote Interface unit, Lar |
| rnet Control UVRI-IP | Remote Interface unit, Eth |

OPTIONAL ACCESSORIES

DescriptionPart NumberCommander® Software System,
*10, 25, 255, or 512 Site LicenseSFCD*Wall mounted speaker strobeENWSSPAWall mounted strobeENWSTPACeiling mounted strobeENCSTA



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.



Model UVLOC

UltraVoice® UVLOC Local Operating Console



The Federal Signal UltraVoice® Local Operating Console (UVLOC) is an easy to use remote user interface for indoor and outdoor alert and notification systems. The UVLOC provides a system operator, building inhabitant or facility personnel, an activation point that emulates the functions and capabilities of the UltraVoice controller series. The UVLOC offers the capability to: activate seven tone or pre-recorded digital voice messages, record/play a live voice message, and conduct live public address (PA) announcements. The UltraVoice Local Operating Console is ideal for providing multiple activation points in an Indoor Mass Notification System.

The UVLOC is rated for Indoor use and can be surface or recessed mounted. Up to ten UVLOC's can be easily interfaced into an UltraVoice controller, as each UVLOC is hard-wired utilizing standard CAT5 cable and battery operated from its respective UV controller. The ability to provide up to ten remote activation points offers flexibility in large facilities while battery operation increases the system reliability by insuring operation when AC power fails.

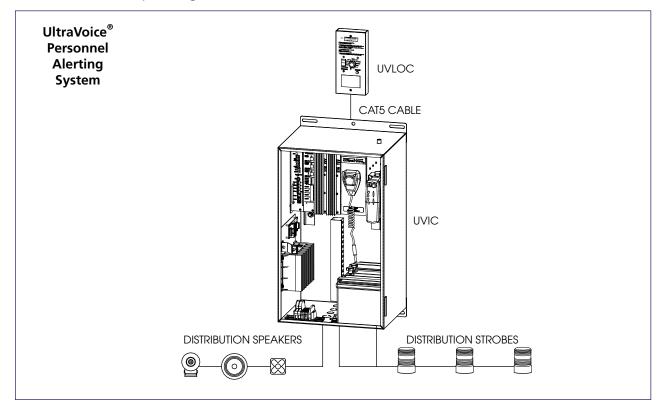
Outfitted with onboard LED's, the UVLOC indicates when the unit is armed and powered. In addition, arming the UVLOC signals the Federal Commander Digital System, alerting operators that the unit has been activated for use.

Designed to enhance "all hazard" warning capabilities, the UVLOC provides increased system flexibility, redundancy, and reliability, making it a necessary component to any alert and notification system.

- Battery operation
- On-board noise cancelling microphone

- Provides alarm status when armed
- 7 messages, plus play and record capability

Ultravoice® Local Operating Console (UVLOC)



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

Operating Temperature: Indoor use, non condensing humidity $-22^{\circ}F$ to $149^{\circ}F$ $-30^{\circ}C$ to $65^{\circ}C$

Local Operation Console Operating Voltage: 20-32 VDC

Operating Current: <25 mA
Local Operating Console-Interface Module: 20-32 VDC

Operating Current: < 50 mA

Audio Output: 600 Ohm balanced, adjustable 700mVpp to 5Vpp

Installation Specifications:

Interface Cable Type CAT5, 4 pairs

Maximum distance between UVLOC and UV Controller Approx. half mile of cable, </=200 Ohms of cable

Maximum# of UVLOC's per UV Controller

(10) (external wire management required)

Dimensions H x W x D: 10" x 4.75" x 3"

254 mm x 120.65 mm x 76.2 mm

H N W T N N R D F R

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

Description Part Number

Maximum of (10) units can be interfaced to a UltraVoice Siren Controller (UV) or

UltraVoice Indoor Controller (UVIC) **UVLOC**

One (1) Interface module must be ordered per UV or UVIC

UVLOC-IM

^{*}Cabling is not included with any mode





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)

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







EN-SMBR

EN-SMBS





► Model PVS240W-24 and PVS240W-48

Solar Power Option for Outdoor Sirens

The Federal Signal Solar option provides an all inclusive solar powering option for all outdoor sirens. Solar powering of batteries is an efficient and economical method of powering remote sirens, alerting or control equipment. Solar powering can be engineered for any application. Applications include, but are not limited to, remote tsunami sirens, muster stations and tornado sirens. The PVS240W-24 and PVS240W-48 provide 240W of power for charging of batteries in 24 or 48VDC applications. Both systems are equipped with solar regulators for accurate control, protection and monitoring of the solar panels. Both kits utilize four 60W highly efficient solar panels, each with junction boxes to allow ease of wiring. The mounting hardware is aluminum for light weight and high strength, able to withstand wind loads up to 170 mph. Thirty feet (30') of cable is provided to allow wiring from the panels to the battery cabinet. The solar regulators support gel, sealed or flooded batteries with temperature compensation to extend battery life and improve system performance. Federal Signal will determine the proper direction and tilt for each solar application based on location. Gel batteries are recommended for solar applications.

FEATURES

- Enables remote / unwired deployment of sirens
- Solar power provides continuous charging of batteries
- Radio connectivity for two-way activation and control
- Eliminates expensive trenching of power to remote sites
- Supports mechanical or electronic sirens
- Allows 25 to 60° of tilt for solar optimization
- 24 or 48VDC operation
- Wind loads up to 170 mph

HOW TO ORDER

Consult the factory for ordering details.

DescriptionPart NumberSolar Power Option UltraVoice (UV)PVS240W-24Solar Power Option Federal Controller (FC)PVS240W-48

Sample Ordering Configurations for Electronic and Giant Voice Sirens

TWO-WAY WITH RADIO

Configuration 1: 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

BSH Base Station High band Radio Package (order part no. BSU for UHF)

AMB-W Antenna Mounting Bracket, Wall

Configuration 2: Modulator, Omni-directional electronic speaker array

MOD1004B 400W Modulator Siren

UVTDH High Band UV Two-way Controller

UV400 Qty 1 – 400W Amplifier

OMNI-xx OMNI antenna, plus cable (Order OMNI antenna that matches desired frequency range)

Configuration 3: Modulator, Omni-directional electronic speaker array

MOD8032B 3200W Modulator Siren

UVTDH High Band UV Two-way Controller

UV400 Qty 8 – 400W Amplifier

OMNI-xx OMNI antenna, plus cable (Order OMNI antenna that matches desired frequency range)

Configuration 4: DSA, Directional Speaker Array

DSA4 Qty 2 – 400W High-Powered Directional Speaker Array

UVTDH High Band UV Two-way Controller

UV400 Qty 2 – 400W Amplifier

OMNI antenna, plus cable (Order OMNI antenna that matches desired frequency range)





Model I-IP

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

Federal Signal's longstanding Informer is now IP-enabled. The Informer-IP 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 Informer-IP's internal speaker and microphone provide clear two-way intercom voice communications. Incoming warnings and alerts can be live voice, pre-recorded messages or tone files. Up to six different predefined alert events can be triggered from the Informer-IP — two from the device and four from the key fob. Alert messages initiated from the Informer-IP or key fob can be sent to emergency personnel via email, SMS, computer pop-up, phone, handheld radios; and can also be used to activate other Informer units and sirens.

The Informer-IP 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.

- Two-way alerting and intercom capabilities
- Power over Ethernet (PoE) or AC powered
- Internal speaker rated at 80 dB @ 10'
- Receives live voice, text-to-speech and prerecorded voice or tone files
- Desk or wall mount models
- Panic button alarm
- US ETL Listed to UL Std 60065
- Canadian ETL Listed to UL Std 60065 for I-IPW only

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

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

Two Relay Outputs rated at 5 Amps @ 30VDC. 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.

- Tone and voice compatible with Federal Signal UltraVoice controllers
- Small size with rugged construction
- Wired Ethernet, can be powered via PoE
- Input: 115 to 230VAC, 50/60Hz, 350mA maximum (I-IPW) nominal 120VAC 60Hz (I-IP-IO)
- 80 dB speaker with adjustable volume control
- LED status indicators for Power, Alert, Test and Talk
- Local Mic for intercom use
- One direct wire input for customer supplied panic button alarm
- Wireless remote key fob triggers alarms up to 75-ft direct line of sight
- Replay button allows alerts to be replayed when the red Alert LED is flashing
- 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-IPW)
- 600 Ohm audio output ties into existing PA, or external speaker
- Alerts are IP addressable individually, in groups or all at once.
- Requires minimal network bandwidth and uses TCP/IP protocol
- Works with redundant SmartMsg network servers for reliable failsafe operation
- Complies with FCC Title 47, Part 15 and UL 60065
- I-IPW complies with CAN/CSA-C22.2 No. 60065
- Federal Commander software provides full two-way control and status monitoring of the Informer-IP.
 Commander is Windows 7, Windows Server 2008 compatible

The Informer-IP monitors PoE and AC power along with speaker output level to verify the unit sounded. If it does not detect audio or power, then the status detail window will show a Fail status and administrators can be alerted.

HOW TO ORDER

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

Informer-IP requires SmartMsg/Centerpoint Communication software and 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 |
|--|-------------------|
| Remote wireless key fob transmitter | I-KEYFOB |
| Informer-IP Setup Wizard Software & Cab | le 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) | LP1-012* |

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



External push button activation



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

® Windows is a registered trademark of Microsoft Corporation in the United States and other countries.





Model I-IP100AC and I-IP100DC

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 prerecorded 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 notification software, alert messages initiated from the Informer100 Speaker can be sent to emergency personnel via email, SMS, handheld radios; and can also be used to activate other Informer units and sirens.

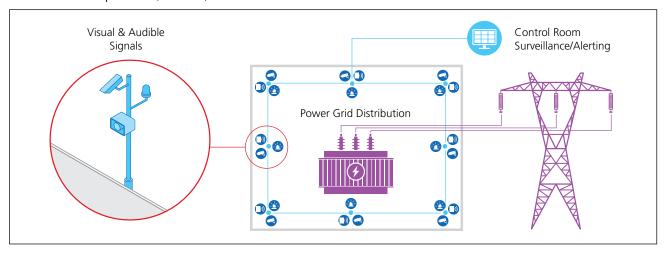
Informer100 Speaker includes two relay outputs for controlling strobes or other devices. Informer100 is designed for outdoor use or large indoor structures; and available in 24VDC or 120/240VAC. All wiring interfaces accessible via internal connectors for quick and easy installation.

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.

- 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
- 15 minute audio storage, with up to 250 .WAV files
- Fully supervised using Commander software
- Wall or pole mount available
- Four initiation inputs, i.e. Panic button alarm
- Optional visual LED or strobe alerting devices available
- NEMA 4X outdoor rated
- UL and cUL Listed (currently pending)
- UL Marine Rated (currently pending)

Informer100 Speaker (I-IP100)



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

- 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 programmed 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
- Input: 24VDC, 5A 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 twoway control and status monitoring of the Informer100

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.

SERVICE PARTS

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

O P T I O N A L A C C E S S O R I E S

| Description | Part Number |
|--|----------------------------|
| 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 |
| Outdoor 4-button push station | PBS-4 |
| 120VAC Strobe ¹ | FB2PST-120 <u>*</u> |
| 240VAC Strobe ¹ | FB2PST-240* |
| Modular Multifunctional LED Beacon | SLM200 *2 |
| Low Profile LED Status Indicator, Opaque Lens | SLM400 ² |
| Low Profile LED Status Indicator, Fresnel Lens | SLM450 ² |
| 24VDC ½" NPT Pipe Mount Base, Gray ¹ | SLMBP-012-024GY |
| 120/240VAC ½" NPT Pipe Mount Base, Gray ¹ | SLMBP-120-240GY |
| | |

^{*}Indicates color: (A) Amber, (B) Blue, (C) Clear, (G) Green, and (R) Red

¹ Powered from same source as speaker

² Must be ordered with a specified required mounting base





Model I-IP2

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 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 has two independent Informer-PA interfaces with 600 Ohm adjustable audio output. Informer-PA can store up to 250 messages / 15 minutes 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.

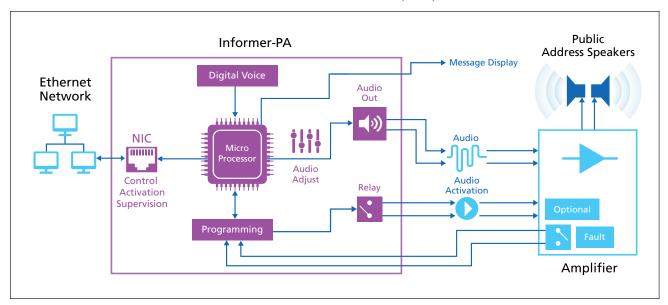
The Informer-PA communicates with the Federal Signal Commander® system for control of warning messages, live PA and pre-recorded messages. The device can be paired with outdoor and indoor units to create a wide area notification system.

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

- Dual Public Address Interface
- Power over Ethernet (PoE) or AC powered
- 15 minute audio storage, with up to 250 .WAV files
- 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

- Web or mobile based activation with CommanderOne
- 19" rack mount
- Rack, wall or desk mount
- US and Canadian ETL Listed (pending)
- Complies with UL60065 and CAN/CSA-22.2 60065 (pending)

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



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

- 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)
- 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-IP.

HOW TO ORDER

Description Part Number

Dual Rack/Wall/Desk Mount Informer PA I-IP2

Intelligent Systems Products

Description

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

Informer-IP Desk Mount
I-IP-IO
Informer-IP Wall Mount
Informer100 24VDC 100 watt speaker
Informer100 120/240VAC 100 watt
speaker
I-IP100AC

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

OPTIONAL ACCESSORIES

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

Part Number







Model IPCAM-EN4-24V-5P-POE and N-C058900P072A

Wireless Remote Broadband Kit For Informer 100 Speaker and IP Devices

Our IP-enabled wireless broadband kit provides connectivity from control rooms to IP based products; ideal for use with models I-IP100AC and I-IP100DC speakers. This kit allows secure wireless two-way communications when wired connections are not available. Kits ship pre-configured and ready to provide connectivity with a few simple steps. It includes 2 mated wireless 5GHz radios for Line of Sight links and 2 NEMA-4 communication boxes all rated for outdoor environments. The communications box comes standard with an AC surge protector, a 5 port PoE+ industrial switch and 24VDC 150W power supply. This solution provides connectivity for up to 4 IP devices on each side of the wireless link.

FEATURES

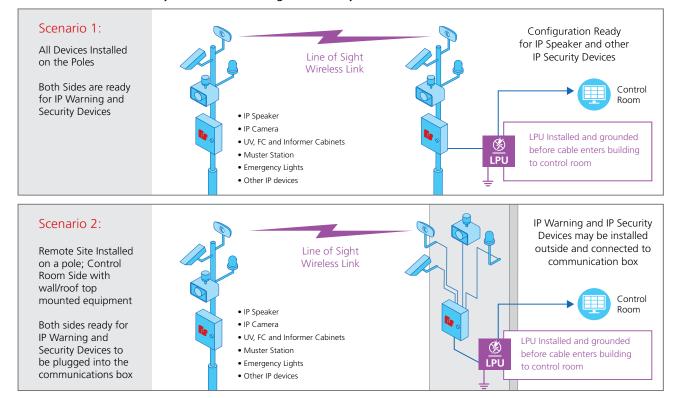
- Wireless line of sight connectivity to main facility
- NEMA 4X outdoor rated communications box
- 4 Available PoE+ ports at 30 watt each
- Wall or pole mount available
- Compatible with Federal Signal Informer, Ultravoice and mechanical siren systems

Remote ready optional add-ons

- IP video surveillance camera with analytics
- License plate recognition camera system
- Emergency status lights
- Remote muster points
- Perimeter control devices
- IP Badging Systems
- Other IP security devices

Wireless Remote Broadband Kit (IPCAM-EN4-24V-5P-POE and N-C058900P072A)

Wirelessly Connected Warning and Security IP Devices to Control Room



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

Communications NEMA-4 box with the following features:

- 100-240VAC input
- Power Supply 150W 24VDC Output
- 5 Port Industrial PoE+ IP Switch (Connectivity for 4 PoE+ IP devices)
- AC Surge protection

Wireless Radios

- Operate from 4.91 GHz to 5.97 GHz
- 5, 10, 20 or 40MHz channels
- 2x2 MIMO
- Up to 200Mbps throughput/ 10 ms latency (depending on load and spectrum quality) with LOS up to 2 miles
- IP-55 Environmental Rating
- Pre-configured by Federal Signal

HOW TO ORDEF

Specify Model and Quantity:

IPCAM-EN4-24V-5P-POE – QTY 2 Communications Box

N-C058900P072A - QTY 2 Integrated Radios

N-1101-935 - QTY 1 Lightning Protection Unit (LPU)

INSTALLATION

Easy installation steps for outdoor wireless broadband kit and integration

- Mount communication box to pole/wall
- Connect AC to communications box
- Mount integrated radio to pole/wall facing other side of link
- Connect an ethernet CAT5/6 cable between the communication box and the radio
- Align radios to achieve desired RSSI and performance (change channel on both radios if the preconfigured channel is already occupied, starting with the remote end)
- Connect other IP devices (Informer100) to switch

OPTIONAL ACCESSORIES

Description

Part Number

Radio pole mount extension on wood pole*

288939A

Radio pole mount extension on metal pole*

860500208

*If required to give 3 ft height extension for radio installation



2645 Federal Signal Drive University Park, IL 60484 Tel: +1 708.534.4756 customersupport@fedsig.com www.fedsig.com